TARIFF ORDER

APR REVIEW FOR FY 2021-22

AND

DETERMINATION OF AGGREGATE REVENUE REQUIREMENT

&

RETAIL TARIFF FOR FY 2022-23

FOR

MANIPUR STATE POWER DISTRIBUTION COMPANY LIMITED

Petition (ARR & Tariff) No. 2 of 2022

JOINT ELECTRICITY REGULATORY COMMISSION

FOR MANIPUR AND MIZORAM

CONTENTS

LIST OF TABLES

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
RE	Revised Estimate
REC	Renewable Energy Certificate

R&M	Repair and Maintenance
RoE	Return on Equity
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. 2 of 2022

In the matter of

Limited (Provisional) Trueing up for FY 2020-21, Annual Performance Review for FY 2021-22 and determination of Aggregate Revenue Requirement (ARR) and Retail Tariff for FY 2022-23 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

Mr. Lalchharliana Pachuau
Member

ORDER

1. The Manipur State Power Distribution Company Limited (hereinafter referred to as MSPDCL) is a deemed 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 petition for determination of ARR and retail tariffs

for FY 2022-23 along with Annual Performance Review for FY2021-22 and provisional true up petition for FY 2020-21 on **Dt. 24th December 2021** vide its letter No. 2/84/MSPDCL-ARR/4014-17, Dated: 24.12.2021

3. **ARR & Tariff Petition**

As per the directive of the Commission, the MSPDCL has filed the Petition for True-up for FY 2020-21 and APR for FY 2021-22 and determination of Aggregate Revenue Requirement (ARR) and Retail Tariff for FY 2022-23. In the petition MSPDCL has estimated ARR of Rs.994.67 Crores for FY 2022-233 and Revenue from existing tariff is at Rs. 546.22 Crore, the revenue from Outside State sale is at Rs.21.68 Crs and assuming a tariff related subsidy support of Rs.301.38 Crores is expected from the Govt. of Manipur for FY 2022-23 and accordingly indicated a corrected unmet revenue gap of **Rs.124.55 Crore**, which the MSPDCL now proposes to recover it through revision of tariff to an extent of 22.8% hike over prevailing rates.

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 submit the required information vide Commission letters **No.H.20013/34/20-JERC, dated 18.01.2022.** Pending receipt of additional information, the tariff Petition **was admitted on 12.01.2022** and marked as **petition (ARR and Tariff) No. 2 of 2022** to avoid loss of time avoid delay in processing of ARR submissions. The Additional information sought from MSPDCL vide Commission's letter No.H.20013/34/20-JERC, dated 21.02.2022, Dt.03.02.2022 and Dt.18.02.2022.

The MSPDCL has submitted some data/information/clarifications etc. vide its letters *No.2/84/2021/MSPDCL-ARR/4963-65, dt 18.02.2022, No.2/84/2021/MSPDCL-ARR/ 4966 -68, dt 18.02.2022 and No.2/84/2021/MSPDCL-ARR/4969-71, dt 18.02.2022.*

5. **Provisional True up of ARR for FY 2020-21**

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 along with Audited Annual Accounts.

MSPDCL has submitted provisional true up petition along with ARR petition for FY 2022-23 without submission of audited annual accounts for FY 2020-21. For that matter the MSPDCL had not so far submitted any of it audited balance sheets from its inception The MSPDCL for FY 2020-21 has furnished the net ARR of Rs.695.23 Crore and shown an unmet deficit of Rs. 31.36 Crores after a category wise revenue receipt of Rs.406.00Crs and the government tariff subsidy amount of Rs.257.87 Crore. Elaborate details of revenue realised from the Outside State sales amounting to Rs.24.65Crs were not furnished for scrutiny and this amount was preferred by it to reduce it from power purchase cost of FY2020-21 in their ARR true-up filings. The true-up for FY 2020-21 could not be taken up in the absence of full-fledged details to be supported by audited Balance Sheet and relevant other background details needed. The True-up is not admitted as there is no Regulatory provision to honour the provisional true-up initially and it is also for another good reason that Commission shall not revisit any true-up once finalised.

6. **Annual Performance Review for FY 2021-22**

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 2021-22 was carried out by MSPDCL which resulted in revised net **APR** (Annual Performance Review) of Rs.800.00 Crs with an estimated uncovered revenue gap (Deficit) of Rs.28.15Crs after considering category wise revenue realisable amount of Rs.526.76 crs and the Govt subsidy amount of Rs.301.38 Crs.

7. **Aggregate Revenue Requirement & Retail Tariff for FY 2022-23**

The MSPDCL have submitted ARR petition for FY 2022-23 for an ARR amount of Rs.994.67Crs and with net revenue gap of Rs. 426.77 Crs after adjusting for projected revenue realisation from all sources of Rs.567.90Crs before adjusting the Government tariff subsidy amount of Rs.301.38Crs and after such adjustment the proposed unmet gap was Rs.125.39Crs to be recovered through tariff revision. The Commission after detailed examination and analysis arrived at the net revenue gap of **Rs.309.26Crs** considering the revenue realisation at prevailing tariff rates and Outside State sales income and before making revision in Retail supply Tariff and also without considering of the Manipur Government subsidy as stated in their letter No.9/14/2021-Power, Dt.16.03.2022 placed at **Annexure-VII** at the end for reference.

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.20013/34/20-JERC, dated 12.01.2022 to publish the ARR and Tariff Petition for the FY 2022-23 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 **10th February 2022.**

Sl. No.	Name of newspaper	Language	Date of publication
1.	The Sangai Express	English	20th and 21st January, 2022
2.	Poknapham	Manipuri	19th and 20th February, 2022

The Commission have received one objection/suggestion from All Manipur Power Consumers' Association (AMPCA) on the ARR petition filed by the MSPDCL for FY2022-23. 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 20013/34/20-JERC dated 9th February 2022**.**

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 **Imphal on 15.03.2022**.

Sl. No	Name of the news paper	Language	Date of Publication
1	Poknapham	Manipuri	11th & 12th March 2022.
2	The Imphal Free Press	English	11th & 12th March 2022.

10. **Public Hearing**

The Public hearing was held as scheduled on 15.03.2022 at Hotel Classic North AOC, Royale Hall, Imphal from 10:30 AM to 12:30 PM. During the public hearing, each 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 objectors during the public hearing and corresponding response of the MSDPCL are briefly narrated in **Chapter - 4**.

11. The proposal of MSPDCL was also placed before the **State Advisory Committee** in its meeting held on 14.03.2022 at Hotel Classic North AOC, Royale Hall, Imphal from 11.00 AM and various aspects of the Petition were discussed by the Committee.

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 2022-23.

13. The Commission has reviewed the directives issued earlier in the Tariff orders for FY 2010-11 to FY 2021-22 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 supply of electricity in the state of Manipur.

15. This order is in Eleven chapters as detailed below:

- Chapter 1: Introduction.
- Chapter 2: Summary of ARR and Tariff Petition for FY 2022-23
- Chapter 3: Power Sector in Manipur - An Overview.
- Chapter 4: Public Hearing process.
- Chapter 5: Provisional True up for FY 2020-21
- Chapter 6: Annual Performance Review for FY 2021-22.
- Chapter 7: Analysis of ARR for FY 2022-23 and Commission’s decisions.
- Chapter 8: Tariff Principles and Design.
- Chapter 9: Wheeling charges for FY 2022-23.
- Chapter 10: Directives.
- Chapter 11: 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 **1st April, 2022** and shall remain in force until the issue of next Tariff Order by the Commission.

LALCHHARLIANA PACHUAU	**R .THANGA**
MEMBER	**CHAIRPERSON**

Place: Aizawl

Date: **23/03/2022**

1.Introduction

1.1JERC 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 (or 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.

2.Summary of ARR and Tariff Petition for FY 2022-23

2.1 Aggregate Revenue Requirement (ARR)

The MSPDCL in its petition filing has submitted the Petitions relating to Limited Provisional True up of FY 2020-21, Annual Performance Review for FY 2021-22 and the determination of ARR and Tariff for FY 2022-23.

Table 2. 1: Aggregate Revenue Requirement for FY 2022-23

(Rs. Cr)

Sl. No	Particulars	MYT Order 12/03/18 Approved	As per ARR filing
1	Fuel Cost		
2	Power Purchase Cost	556.98	602.37
3	Inter-State Transmission Charges	70.76	93.80
4	Intra-State Transmission Charges	112.43	93.82
5	SLDC & NRLDC Charges	0.87	1.48
6	Employee Cost	126.06	113.09
7	R&M Expenses	9.09	19.25
8	Administration and General Expenses	11.17	16.44
9	Depreciation	0.51	13.06
10	Interest and Finance Charges	1.86	33.10
11	Interest on Working Capital	8.95	10.11
12	Write off of Bad debts	3.00	3.00
13	Return on Equity	1.95	1.95
14	Add: Income Tax	0	0
15	Less: Non-Tariff Income	0.47	6.80
16	**Net ARR**	**903.16**	**994.67**

Prayer

MSPDCL requests the Hon'ble Commission to:

a. Admit the Petition for Limited Provisional True-up for FY 2020-21, Annual Performance Review for FY 2021-22 and ARR &Tariff Determination for FY 2022-23;

b. Approve the amounts claimed in the ARR for FY 2022-23;

c. Approve the category-wise tariffs proposed by MSPDCL for FY 2022-23;

d. Approve the Miscellaneous charges as proposed by MSPDCL with a request to modify the execution charges for replacement of cable and wire of HT three **phase** ***connection from Rs.900.00 per 100 meters of the HT line to Rs.900.00 per HT connection;***

e. 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;
f. Permit submission of any additional information required by the Commission during the processing of this Petition;
g. 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 **391.14**MW However, currently MSPDCL's share is around 254.38 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 2022-23.

b) Power Purchase from 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 254.38 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

Sl. No	Station	Installed Capacity MVA	FY 2020-21 (true-up filed)	
			MSPDCL Share (%)	MSPDCL Share (MW)
A	**NEEPCO(Hydro)**			
1	Kopili I HEP	200	7.39%	14.78
2	Kopili II HEP	25	6.95%	1.74
3	Khandong HEP	50	6.56%	3.28
4	Ranganadi HEP	405	8.37%	33.90
5	Doyang HEP	75	7.87%	5.90
	Sub total	**755**		**59.60**
B	**NEEPCO (Gas Based)**			
1	Assam Gas based Power Project	291	8.11%	23.60
2	Agartala Gas Turbine Power Project	130	8.23%	10.70
	Sub total	**421**		**34.30**
C	**NHPC (Loktak HEP)**			
1	Purchased	105	42.50%	44.625
	Sub total	**105**		**44.63**
D	**NTPC – New Plants**			
1	Bongaigoan Unit-I	250	7.50%	18.750
2	Bongaigoan Unit-II	250	7.51%	18.775
3	Bongaigoan Unit-III	250	7.51%	18.775
	Sub total	**750**		**56.30**
E	**TRIPURA**			
1	Baramura (Gas Based) (Unit IV)	21	25%	5.25
2	Baramura(Gas Based) (Unit V)	21	25%	5.25
	Sub total	**42**		**10.56**
F	**OTPC**			
1	(Pallatana-Unit I)	363.3	5.79%	21.03
2	Pallatana-Unit II)	363.3	5.79%	21.00
	Sub Total	**726**		**42.00**

Sl. No	Station	Installed Capacity MVA	FY 2020-21 (true-up filed)	
			MSPDCL Share (%)	MSPDCL Share (MW)
G	**Others**			
1	**Pare HEP**	**300**	2.33%	**6.99**
	Grand Total	**3099.6**		**254.38**

MSPDCL has been allocated power from various Central Generating Stations in North Eastern Region, viz., NEEPCO, NHPC, Tripura-Baramura and OTPC-Palatana, and NTPC Bongaigaon 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 2020-21 are as detailed in the Table below:

Table3. 2: Energy Purchase for FY 2020-21 (MU)

(All in MU)

Sl. No.	Source of Power	(APR Approved Dt.26.04.21)	2020-21 Actuals
A	**CGS - NEEPCO**	**335.74**	**312.39**
1	Kopili -I HEP	58.00	0.00
2	Kopili-II HEP	7.02	0.00
3	Khandong HEP	14.50	4.23
4	Ranganadi HEP	102.22	116.10
5	Doyang HEP	13.00	15.52
6	Assam GBPP	88.00	105.72
7	AGTPP	53.00	70.82
B	**CGS – NHPC**	**220.20**	**257.86**
1	Loktak HEP Purchased Power	165.00	185.08
2	Loktak HEP- Free Power	55.20	72.78
C	**NTPC - New Plants**	**158.20**	**149.66**
1	NTPC Bongaigaon Unit I to III	158.20	149.66
D	**Others**	**337.86**	**369.05**
1	Baramura GBPP Unit IV and V	62.20	46.67
2	OTPC Palatana	236.85	279.09
3	Para HEP	38.81	43.29
4	Renewable – Solar	0.000	-
5	Renewable – Non-Solar	0.00	-
	Total CGS & other purchases	**1052.00**	**1088.95**
	IEX & Banking transaction	**0.00**	**-90.40**
6	IEX Purchases	52.60	82.22
7	Banked mode Purchase	160.90	100.09
8	Banking mode Sales	-153.33	-161.30
9	IEX Sales	-176.60	-111.41
	Overall Net Purchases (MU)	**935.57**	**998.55**

As can be seen from the above Table, the actual power purchase quantum from CGS in FY 2020-21 was 1088.95 MU, which is lower than the approved quantum of 1052.00 MU. The reason for this deviation is due to non-availability of power from CGS stations or deviation in load requirement due to seasonal variation. 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. Actually, MSPDCL banked available power in summer months to use it in winter months when availability is low. 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 (for detailed monthly trend of IEX and banking sale / purchase please refer Format F1a). The detailed energy purchase is given below:

Table 3.3: Energy Purchase from other sources and deviation for FY 2020-21 (MU)

Sl. No.	Source of Power	APR Order 26/04/21	2020-21 Actuals
1	**Total Purchase from CGS**	**1052.00**	**1088.95**
	IEX Purchase		82.22
	Return of Banked Energy (purchase)		100.09
	Banking to outside utilities (Sales)		-161.30
	Energy Sold to IEX		-111.41
	Overall Net Purchases (MU)	**1052.00**	**998.55**
2	NER Pool losses (%)	2.57%	2.842%*
3	NER Pool losses (MU)	27.04	28.38
4	**Net Power Purchase**	**1024.96**	**970.17**
5	IEX Purchase	52.60	
6	Return of Banked Energy + (i/c Prev.Year)	160.90	
7	Banking to outside utilities	-153.33	
8	Energy Sold to IEX	-176.60	
9	**Net Available Energy**	**908.53**	**970.17**
10	UI Underdrawl		-11.46
11	UI Overdrawl		12.96
12	**Net Power Available at State Periphery**	**908.53**	**971.67**

*derived based on CGS monthly schedule figure

From above it can be seen that the net power purchase from all sources for FY 2020-21 is 970.17 MU after NER losses. After considering the UI transaction, the net electricity available at the state periphery is 971.665 MU.

MSPDCL requests Hon'ble Commission to approve the actual power purchase quantum from CGPs and other sources for Limited provisional truing up for FY 2020-21.

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 31.03.2021, are given in Table below.

Table-3. 4: Distribution Network as on 31.3.2021

Sl. No.	Voltage	Units	2019-20	2020-21
1	33kV Lines	Ckt KMs		1753.201
2	11kV lines	Ckt KMs	7482	7885
3	LT lines	CKT KMS	18678	19406
4	33kV Substations	No.s		93
5	Power Transformers	No.s		191
6	- Do -	MVA		822.15
7	Distribution transformers	MVA	7904	8205
8	Metered Consumers (**LT**)	Nos	499859	501756
9	Metered Consumers (**HT**)	Nos	1401	1716

Commission Analysis:

The above distribution network data pertains to this year filings (FY 2020-21) which they have provided in the **format-P4 (Details of Physical Statistics of the network)** after having insisted upon submitting the same.

3.3 Distribution Loss

The actual Distribution Losses of 21.86% achieved by MSPDCL in FY 2020-21 is slightly higher than 21.19% approved by Hon'ble Commission in its APR order dated 26.04.2021. 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, complete (100%) electrification at household level has been completed by MSPDCL. 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 has no role in this peculiar situation of high technical losses. It is just because of addition of new consumers in remote areas and difficult geographical condition. 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 slightly higher than the Commission approved distribution losses as given in its APR order.

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

3.4 Consumer Profile

The category wise consumers and corresponding energy sales during the year 2020-21 are given in Table below:

Table3.5: Number of consumers and connected load of MSPDCL for FY 2020-21

Sl. No	Consumer Category	Pertains to FY 2020-21		
		Energy sale (MU)	No. of Consumers	Connected Load (KW)
1	Kutir Jyoti	4.05	14906	6967
2	Domestic (General)	449.11	458859	705846
3	Commercial-LT	62.32	25392	88222
4	Public lighting-LT	3.62	392	1199
5	Public waterworks LT	1.27	35	442
6	Agriculture & Irrigation LT	1.14	46	326
7	Cottage and Small industry-LT	21.63	2126	20233
	L.T Supply - Total	**543.14**	**501756**	**223235**
8	Commercial-HT	21.12	916	19886
9	PWS HT	22.37	186	15495
10	Agriculture HT	0.74	26	712
11	Medium Industry-HT	4.36	170	4198
12	Large industry-HT	9.67	39	12171
13	Bulk supply-HT	90.33	379	48640
	H.T Supply - Total	**148.58**	**1716**	**101102**
14	**Grand Total LT & HT**	**691.72**	**503472**	**924337**

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 during FY 2020-21 is 998.55 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 has stated in compliance to directive 10 & 11 that unauthorized connections and connected load are being taken care under the prepaid metering plan. MSPDCL has already achieved 100 % prepaid metering for EC-I. AB Cables are being used in LT Supply to avoid the power theft. In EC-I around 90% LT lines are using AB Cables.

For EC-II & EC-III 100 % prepaid metering which was supposed to be achieved by end of FY 2021-22. The Physical verification drive shall be conducted in near future district /circle wise.

4.Public Hearing Process

4.1 Introduction

On admitting the ARR and Tariff Petition for FY 2022-23, 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 Hotel Classic North AOC, Royale Hall, Imphal on 15.03.2022 from 10:30 A.M. to 12:30 P.M. During the Public Hearing the participants from general public were given an opportunity to offer their views in respect of the ARR and Tariff Petition for FY 2022-23 of MSPDCL. The list of stakeholders 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 objectors.

4.3 Proceedings of Public Hearing

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

Objection:

The flinty wind of extremism reached in the Regulatory Commission by not listening the Public (Power Consumers) Grievances in the previous petition as per our Ref No.3/AMPCA/ARR-TRP/2021, the 16th March, 2021.

In the previous hearing of 2021-22 tariff Revision filed by the Power Companies of Manipur, you have not shown any patient hearing from the representatives of the Public (Consumers) as that of the other preceding hearing prior to 2021-22.

Instead, the Commission (JERC-MM) abruptly increased and passed the Tariff Order in favour of Power Companies without any Change and faced all possible Hardship by the Consumers during Pandemic Covid-19 in the State of Manipur, as if you have enjoyed a kickback and decided.

Under the same Commission (JERC-MM), you have punished Manipur state heavily and Mizoram State has been Rewarded promptly.

No Office/Part Office of the Commission (JERC-MM) is also available in any part of Manipur, complicating further for the Consumers of Manipur State.

b) In the previous hearing for calculating and fixing of the tariff rate of Manipur for the FY 2021-22, no Commission member was present from Manipur and cooked up the tariff rate and fixed the rate in absentia (Member of Manipur) at the mercy of the other member pleading for Manipur, that too representing from Outside the Manipur state.

c) Further, we found no legal member in the Commission (JERC-MM) till today in spite of our repeated request every year as a result the final Tariff Order became improper and unjustified (one sided) mostly favouring to the Petitioners (MSPCL & MSPDCL).

This factual position will be reporting to the concern/relevant authority very soon just after the hearing.

d) While calculating / Fixing any a new Tariff rates, Fixed Charges, Energy Charges at different level of the consumers etc., no proper inputs have been incorporated by the Power Companies and the same got approved by the Commission (JERC-MM) in the last Tariff Order for the financial year FY 2021-22 & before, and it seems to be a laymen Services presenting from Manipur, recalling back there was no Official member representing Manipur. Fantastic Decisions of the Commission (JERC-MM).

Citing an example, we understand Power Companies of Manipur enjoying free Energy of the tune of 60MU to 70MU per annum from NHPC (Loktak), but you never brought for levelised tariff for the benefit of the Consumers of Manipur.

Lastly as a protest we are neither commenting any comment anymore about the tariff Petitions of the Power Companies of Manipur nor not ready to reply for the Current Year (FY 2022-23) proposed Tariff.

Clarification from Commission:

To Para (a):

1) The Commission heard the objection raised from All Manipur Power Consumers' Association patiently. However, the objection should always be directed towards the figures and data in the Tariff Petition filed by MSPDCL after careful study of the petition not only on the resultant tariff rate, but the causes that leads to the need of revision of tariff.
2) For Tariff 2021-22, in the hearing representation of Consumers' were heard through. However, the final tariff depends on Govt. subsidy for subsidized tariff. The petitioner MSPDCL, claimed a subsidy of Rs. 301.38 crore but there was no letter from Govt. of Manipur specifying the quantum of subsidy and for which category of consumer subsidy should be provided as per Section 65 of the Electricity Act, 2003.

   The distribution licensee (MSPDCL) gave copy of Budgetary allocation for FY 2020-21 in respect of MSPDCL which are as follows:

   (a) Grant in Aid-Rs. 155.38 crore
   (b) Subsidy-Rs. 120 crore
   (c) Grant for creation of Capital assets -Rs. 16 crore
   (d) Grant in Aid (Non-Salary)-Rs. 10 crore

   Out of the above, Rs.16 crore was for creation of Capital assets and not subsidy grand to the MSPDCL toward tariff component leaving the above, the actual subsidy considered as Rs. 385.38 crore. Therefore, this effect the hike in tariff.

3) In the previous hearing for calculating and fixing of the tariff rate of Manipur for the **FY 2021-22**, no *Commission member* was present *from Manipur* and cooked up *the tariff rate* and fixed the rate *in* a*bsentia* (Member of Manipur) at the mercy of the other member pleading for Manipur, that too representing from Outside the Manipur state.

4) Further, we found no legal member in the Commission (JERC(M-M) till today in spite of our repeated request every year as a result the final Tariff Order became improper and unjustified (one sided) mostly favouring to the petitioners (MSPCL & MSPDCL).

This factual position will be reporting to the concern/relevant authority very soon just after the hearing.

Clarification to Para (b & c):-

Appointment of Member of the Commission is not in the hand of JERC for Manipur & Mizoram but lies with Ministry of Power.

As per Section 93 of The Electricity Act, 2003 which is reproduced below for information of the concerned:

"**Vacancies, etc., not to invalidate proceedings. – No act or proceedings of the Appropriate Commission shall be questioned or shall be invalidated merely on the ground of existence of any vacancy or defect in the constitution of the Appropriate Commission".**

For clarity sake, the objectors are hereby informed that the earlier representative of Mizoram state retired on 28.02.2015. The appointment of new member from Mizoram was on 21.01.2019.

During the gap, Mrs. R.K.Kishore Singh represent Manipur from 09.04.2015 till 28.02.2017 and Mr. Ng. Sarat Singh represent Manipur from 23.01.2017 till 20.11.2020 demised (due to Covid-19). The representative of Manipur legal Member was sworn in on 19.01.2022.

Tariff order for the year 2016-17, 2017-18 and 2018-19 was issued by JERC for Manipur & Mizoram both for Manipur State and Mizoram State separately in the absence of representative of Mizoram State due to the provision of Section 93 of The Electricity Act, 2003 above.

- While calculating/ fixing any a new Tariff rates, Fixed Charges, Energy Charges at different level of the consumers etc., *no proper inputs* have been incorporated by the Power Companies and the same got approved by the Commission (JERC-MM) in the last Tariff Order for the financial year ***FY-2021-22 & before***, and it seems to be a laymen Services presenting from Manipur, recalling back there was no Official member representing from Manipur. Fantastic Decisions of the Commission (JERC-MM).

Citing an example, we understand Power Companies of Manipur enjoying *free Energy* of the tune of *60 MU per annum* from NHPC (Loktak), but you never brought for *levellised* tariff for the benefit of the Consumers of Manipur.

Lastly as a protest we are neither commenting any comment anymore about the tariff Petition of the Power Companies of Manipur nor not ready to reply for the Current Year (FY 2022-23) proposed Tariff.

Reply from MSPDCL:

To Para(d): MSPDCL has provided in details the logic, rationale considered for calculating the power purchase cost. Additionally, for better understating all the recent power purchase bills were submitted which can be considered as input for power purchase cost for FY 2022-23. All the relevant inputs are specified in the Petition.

Further, on the issue of LOKTAK free power, it is our earnest request to check the power purchase quantum and cost tables provided by MSPDCL corresponding to FY 2020-21, FY 2021-22 and projected for FY 2022-23. In case of LOKTAK, free power quantum with zero cost has been added separately. So, due to considering this free power, available power quantum has increased; but power cost has no impact. Therefore, the per unit cost (Rs/kWh) is actually decreased due to availability of this free power.

5.Limited Provisional True up for FY 2020-21

5.1 Background

MSPDCL is a Distribution Licensee, which fulfils the need for electricity of the consumers in the State of Manipur. As explained earlier, MSPDCL is hereby submitting a limited provisional true-up of FY 2020-21 based on the actual sales, power purchase quantum and costs, capitalisation, O&M expenses, and other expenditure for FY 2020-21. As only limited provisional True up for FY 2020-21 is being claimed, MSPDCL has not requested for pass through of the provisional Revenue Gap of FY 2020-21 and consequent sharing of gains and losses for FY 2020-21 along with this Petition, and the same shall be claimed at the time of seeking final true-up for FY 2020-21 based on audited accounts, if any. The main objective of this limited provisional true-up Petition is to update the Commission regarding the Revenue Gap for FY 2020-21 based on the actual expenses and revenue after considering the subsidy. It may be noted that the present true-up Petition is not based on the comparison of the actual expenses and revenue for FY 2020-21 with the expenses and revenue considered by the Hon'ble Commission in the Annual Performance Review (APR) of FY 2020-21 as decided in the JERC tariff Order dated 26 April 2021; as in that Order, the Hon'ble Commission has not passed any of the impact (gap/surplus) of the APR, and has reviewed only the values related to components of APR. Therefore, ARR for FY 2020-21 as approved in the Tariff order for FY 2020-21 (in case of Petition (ARR & Tariff) No. 2 of 2020) has been referred as 'Approved' in the subsequent section.

5.2 Energy Sales

MSPDCL caters to a diverse consumer mix comprising LT domestic, LT commercial, HT commercial, LT Industry, HT Industry, Public Street Lighting, Public Water Works and Agriculture consumers. LT Domestic category is the largest consumer category and comprises around 65% 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, Saubhagya, etc. The actual category-wise energy sales as compared to the energy sales approved by the Hon'ble Commission (in ARR order and APR order dated 26.04.2021) for FY 2020-21 is given in the Table below:

Table 5.1: Category-wise Energy Sales (MU) for FY 2020-21

Sl. No.	Category	Approved (T.O Dt: 20.03.2020)	Approved (APR Order 26.04.2021)	Actual (2020-21)
A	**LT Supply**			
1	KutirJyoti	3.88	3.98	4.05
2	LT Domestic	417.37	425.05	449.11
3	Commercial LT	61.18	56.77	62.32
4	Cottage and Small Industry	21.49	18.90	21.63
5	Public Lighting	3.96	3.62	3.62
6	Public Water-works	1.37	1.27	1.27
7	Irrigation and Agriculture	1.25	1.14	1.14
	LT Supply - Total	**510.50**	**510.73**	**543.14**
B	**HT Supply**			
1	Commercial	20.55	19.05	21.12
2	Medium Industry	4.36	3.81	4.36
3	Large Industry	8.12	7.91	9.67
4	Bulk Supply	85.41	87.75	90.33
5	Public Water-works	22.15	22.37	22.37
6	Irrigation and Agriculture	0.81	0.74	0.74
	HT Supply - Total	**141.40**	**141.62**	**148.58**
TOTAL (LT & HT)		**651.91**	**652.32**	**691.72**

The actual energy sold by MSPDCL in FY 2020-21 is 691.72 MU, which is slightly higher than the approved sales of 652.32 MU in APR Order for FY2020-21. In the FY 2018-19, several Kutir Jyoti consumers have been shifted to the normal domestic category consumers and therefore, the consumption is stable in this category compared to earlier years. Further due to increase in consumer number in domestic category, the sales to this category have been increased. Consumption in the public lighting has slightly reduced compared to approve due to replacement of sodium / mercury vapour street lights to LED based street lights. Overall LT sales have been 543.14 MU as against the approved sales of 510.73 MU in APR Order for FY 2020-21.

In the case of HT category, the sales to HT commercial, bulk supply and large industries has been slightly higher than the approved figures whereas the irrigation and agriculture sales is slightly lower than approved sales for FY 2020-21. Overall HT sales were 148.58 MU as against the approved figures of 141.40 MU.

The MSPDCL requests the Hon'ble Commission to approve the actual category-wise sales of 691.72 MU, as shown in the Table above.

COMMISSION ANALYSIS:

Commission has provisionally approved the category wise actual sales at 691.72

MU for FY 2020-21 subject to verification of their reflection in the audited annual accounts upon their submission along with true-up petition in due course.

5.3 Distribution Loss & Energy Balance

Petitioner's Submission:

The computation of actual Distribution losses for FY 2020-21 is shown in the Table below:

Table 5.2: Energy balance & Distribution Losses by MSPDCL

Sl. No.	Particulars (FY2020-21)	Unit	Actuals
1	Total Power Purchase	MU	1088.95
2	IEX Energy Purchase	MU	82.22
3	Return of Banked Energy (Import)	MU	100.09
4	Banking to outside utilities (export)	MU	-161.30
5	Energy Sold to IEX	MU	-111.41
6	**Total Purchases**	**MU**	**998.55**
7	Inter-State transmission loss @ 2.842% (**NER Loss)**	MU	28.38
8	**Net Available Energy (6-7)**	**MU**	**970.17**
9	UI Over drawal	MU	12.96
10	UI Under drawal	MU	-11.46
11	Net power available at State periphery	MU	971.66
12	Intra State Transmission Loss %	%	8.894%
13	Intra State Transmission Loss (MU)	MU	86.42
14	Net Energy available for sale at DISCOM periphery	MU	885.25
15	Energy sale within state	MU	691.72
16	Distribution Loss	MU	193.52
17	**Distribution Losses w.r.t Energy Input at DISCOM Periphery**	**%**	**21.86%**

The actual Distribution Losses of 21.86% achieved by MSPDCL in FY 2020-21 is slightly higher than 21.19% approved by Hon'ble Commission in its APR order dated 26.04.2021.

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, complete (100%) electrification at household level has been completed by MSPDCL. 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 has no role in this peculiar situation of high technical losses. It is just because of addition of new consumers in remote areas and difficult geographical condition. 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 slightly higher than the Commission approved distribution losses as given in its APR order.

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

Commission's Analysis

While, the losses percentage for North Eastern Region (NER) was adopted by MSPDCL at 2.842% in FY 2020-21 **but adopted higher losses for the same in subsequent years filing figures without any logical explanation for such higher values**. It is noted from the MIZORAM filing that the NER losses were considered at 2.54% only, this appears quite abnormal to note the different values, though both are procuring the energy from same sources. The Intra-state transmission losses adopted for FY 2019-20 (previous year) were at 8.50%, but for FY2020-21 transmission losses now claimed by MSPDCL is at 8.894% which is far higher than the losses indicated at 8.706% by MSPCL in its filing for 2020-21 now besides there is no reasoning offered by MSPDCL for such higher loss percentage adopted. The actual distribution losses now claimed was 21.86% by MSPDCL as against their last year filing figure of 21.50% is an indication of their poor performance in 2020-21 itself and tariff Order approved losses were set at 21.19%. This kind of underperformance is frowned by the Commission as they achieved higher losses over their own filed figures. In addition, there is hidden suppressive quantum impact on account of the arrival of Outside State sales units due to adoption of higher NER losses (2.842%) & State transmission losses (8.894%). This aspect could not be checked now and it will have to be scrutinised thoroughly by Commission upon submission of audited accounts of 2020-21 in due course.

The Energy Balance during FY 2020-21 is re-worked as detailed in the table below.

Table 5.3: Distribution loss & Energy Balance approved by Commission

Sl. No	Particulars (FY2020-21)	Unit	As per APR Tariff Order 26.04.2021	Actuals Units Now Approved
1	**CGS Energy purchased in NE Region**	MU	**1052.00**	**1088.95**
2	UI – Over drawl	MU	x	12.96
3	Add: IEX Purchase made	MU	x	82.22
4	Add: Returned Banking energy	MU	x	100.09
5	**Gross energy handled at NER**	**MU**	**1052.00**	**1284.22**
6	Pool loss in N.E Region	%	**2.57%**	**2.54%**
7	Energy Losses at N.E Region	MU	27.04	32.62

Sl. No	Particulars (FY2020-21)	Unit	As per APR Tariff Order 26.04.2021	Actuals Units Now Approved
8	**Net available energy after NER Losses**	MU	**1024.96**	**1251.60**
9	Add: IEX Purchase made	MU	**52.60**	**x**
10	Add: Returned Banking energy	MU	**160.90**	**x**
11	Less: IEX sales (Outside State Sales)	MU	**-176.60**	-111.41
12	Less: Banking mode sales	MU	**-153.33**	-161.30
13	UI Over Drawls		0	x
14	UI Under Drawls		0	x
15	**Gross Energy at State Periphery [8 - (9 to14)]**	**MU**	**908.53**	**978.89**
16	**Intra-State losses (STU) %**		**8.894%**	**8.50%**
	Less: Intra state (MSPCL) losses @ **8.50%**	MU	**80.80**	**83.21**
17	**Net Input energy at Distribution for sale**	**MU**	**827.73**	**895.68**
18	Retail Sales (LT & HT)	MU	652.36	691.72
19	Distribution Losses (17 – 18)	MU	175.37	203.96
20	Distribution Loss %	%	**21.19%**	**22.77%**
	Total T&D Losses - (16 + 19)	MU	**256.17**	**287.17**
21	**% of T&D Losses on State Input of FY2020-21**	%	**28.196%**	**29.34%**

Note: - (X – indicates not applied for due to irrelevance)

<u>Issues needing attention from MSPDCL while deriving Energy Balance:</u>

a) *The reduction of **Under drawl (notional energy) quantum** of from the **overall purchases is a fallacy**. Doing so would only falsify the factual energy purchased quantum and results in undermining losses quantum.*

b) *The **Over drawal quantity** is now right considered before applying NER Losses, while earlier these were considered after applying the NER related losses. **Note the change in treatment method.***

c) *The losses on **IEX Sales and Banked energy sales** quantities must not be taken at NER supply Level but it needs to adopt only Intra-State transmission losses thereby depicts the true and realistic energy transmission scenario happening in the State. Otherwise, the presentation amounts to misleading status and also undermines T&D Losses altogether. **This issue was also vehemently pointed out by MSPCL this year through their additional information replies.***

d) *The treatment for **IEX & Banking units purchases** were modified in this true-up filing by MSPDCL. This signifies that IEX & Banking purchases are occurring at NER region level but not on State Transmission lines and hence procedure is modified by MSPDCL on its own this time.*

The reasons for NIL own generation was not elaborated by MSPDCL. Thus, Commission provisionally considers nil own generation for FY 2020-21 for True-Up purpose. Even the NER losses were adopted at 2.54% by Commission instead of 2.842% as per the Mizoram petition adopted values for 2020-21 as both are procuring power from same sources. As the overall T&D Losses were noted to be 29.34% of the total input at State periphery level after considering distribution Losses at 22.77% and the transmission losses at 8.50% keeping in view the MSPCL last year ARR submission figures. The present MSPCL filing value now submitted at 8.706% for 2020-21 is ignored due to glaring data inconsistency.

It can therefore be inferred that only 70.66% (i.e.,691.72/978.89) of the entire energy purchased is being billed to consumers for revenue realisation indicates close to 30% distribution losses. As such, this is not a healthy status and unwarranted. It is high time a thorough revamp is needed in entire T&D network system strengthening within Manipur State and chalk-out an action plan so as to clinch the reasonable/healthy loss levels of 17% to 18% T&D Losses as early as possible in near future to off-load the burden of higher tariffs to Consumers each year due to higher quantum of losses resulting in lesser energy availability for Retail sales and also to obviate State Government bearing higher Subsidy/Grants amount yearly.

The situation can't entirely be imputed to network itself but there could be various means of prevailing commercial losses such as theft, pilferage, unbilled/ unauthorised consumption, meter stuck-up cases and Coffee Shop readings contributing to major chunk of distribution losses which are to be curtailed in shortest possible of time by implementing swift and dedicated action from MSPDCL which doesn't need any investment but requires foresightedness of the Electricity department staff and conduct diligent vigilance on theft & pilferage throughout the year to yield fruitful results.

As seen from the break-up of Non-Tariff Income at Form-F11 only collected Rs.0.82 Crs from consumers, miscellaneous receipts are only Rs.0.39 Crs and delayed payment surcharges from consumers is Nil. There seems no discernible action appears to have been though-off till date in decimating such distribution losses and pending arrears collection for which it is only the MSPDCL alone to be blamed for such inaction & ignorance of reality.

To comment on the Outstanding dues on sale of power by the end of 31.03.2021 the Form-S2 (Balance Sheet) & S4 (Current Assets and Liabilities) were not submitted in the ARR filings which implies the licensee is preventing Commission to know reality. It is a fact that Forms (S1 to S5) were unilaterally

skipped from submission despite pointed out in the last year tariff Order. Therefore, the commission construes that present revenue collection system in place is very weak, ineffective to an undesirable level and not robust.

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.

5.4 Energy Requirement

The actual energy requirement for FY 2020-21 as compared to the energy requirement approved by the Hon'ble Commission in the Tariff Order for FY 2020-21 is shown in the Table below:

Table 5.4 Energy Requirement for FY 2020-21 (MU)

Sl. No.	Particulars	Approved in ARR	APR (T.O) 26.04.2021	2020-21 Actuals
1	Energy Sales	651.91	652.36	691.72
2	Distribution Loss	25.40%	21.19%	21.86%
3	Distribution loss Quantum	211.55	175.37	193.53
4	**Energy Requirement at Distribution Periphery for sale in the State**	**863.46**	**827.73**	**885.25**

MSPDCL respectfully submits that the actual energy requirement was 885.25 MU, which is slightly higher than the 863.46 approved by the Hon'ble Commission in its ARR Order for FY 2020-21. However, in the APR Order for FY 2020-21 dated 20.03.2021, the energy requirement at distribution periphery as approved by the Hon'ble Commission was 908.53 MU. It is important to mention here that the data available from North Eastern Region Power Committee (NERPC), the availability at state periphery (schedule and actual), are considered from the DSM bill prepared by NERPC (please refer Format F1d for month wise details). So, the actual availability at state periphery of 885.25MU is finalised and firm figure as per bills received by MSPDCL. **The energy requirement at distribution periphery can be contested because of not having proper metering at transmission (MSPCL) and distribution (MSPDCL) intersection point. MSPDCL has considered the intra-state transmission loss as per approved figure for FY 2020-21 as given in APR.**

Commission's Analysis

Commission provisionally accepts the actual category wise sales at 691.72 MU and

energy requirement at Discom Input is 895.68MU for FY 2020-21 at a distribution loss of 22.77% as against the filed figure of 21.86% subject to their verification with the factual reflections in the audited annual accounts upon their submission along with true-up petition in due course. The comments with regard to distribution losses were already made at the relevant item. As seen from the submission of MSPDCL the Discom input is also subjected to vary at a later date and it is too early to draw any conclusions now.

5.4.1 Energy Purchase

MSPDCL has been allocated power from various Central Generating Stations in North Eastern Region, viz., NEEPCO, NHPC, Tripura-Baramura and OTPC-Palatana, and NTPC Bongaigaon for power purchase under long term PPAs. The actual power purchase quantum and energy availability as compared to quantum approved for FY 2020-21 in the ARR and Tariff Order for FY 2020-21, are as detailed in the Table below:

Table 5.5 Energy Purchase for FY 2020-21 (MU)

Sl. No.	Source of Power	APR Order 26.04.2021	(2020-21) Actuals
A	**CGS – NEEPCO**		
1	Kopili -I HEP	58.00	0
2	Kopili-II HEP	7.02	0
3	Khandong HEP	14.50	4.23
4	Ranganadi HEP	102.22	116.10
5	Doyang HEP	13.00	15.52
6	Assam GBPP	88.00	105.72
7	AGTPP	53.00	70.82
B	**CGS – NHPC**		
1	Loktak HEP Purchased Power	165.00	185.08
2	Loktak HEP- Free Power	55.20	72.98
C	**Others**		-
1	Baramura GBPP Unit IV and V	62.20	46.67
2	OTPC Palatana	236.85	279.09
D	**New Plants**		-
1	NTPC Bongaigaon Unit I to III	158.20	149.66
5	Para HEP	38.81	43.29
6	Renewable – Solar	0	-
7	Renewable – Non-Solar	0	-
	Sub -Total	**1052.00**	**1088.95**
	Total Purchase from CGS	**1052.00**	**1088.95**

As can be seen from the above Table, the actual power purchase quantum from

CGS in FY 2020-21 was 1088.95 MU, which is lower than the approved quantum of 1052.00 MU. The reason for this deviation is due to non-availability of power from CGS stations or deviation in load requirement due to seasonal variation. 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. Actually, MSPDCL banked available power in summer months to use it in winter months when availability is low. 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 (for detailed monthly trend of IEX and banking sale / purchase please refer Format F1a). The detailed energy purchase is given below:

Table 5.6 Energy Purchase from other sources and deviation by MSPDCL (MU)

Sl. No.	Source of Power (FY2020-21)	APR by MSPDCL	APR Order 26.4.2021	(2020-21) Actuals
1	**Total Purchase**	**1052.00**	**1052.00**	**1088.95**
2	IEX Purchase	X	X	82.22
3	Return of Banked Energy	X	X	100.09
4	Banking to outside utilities	X	X	-161.30
5	Energy Sold to IEX	X	X	-111.41
6	**Total Purchases**	**1052.00**	**1052.00**	**998.55**
7	NER Pool losses	2.60%	2.57%	2.842% *
8	NER Pool losses	27.35	27.04	28.38
9	**Net Power Purchase**	**1024.65**	**1024.96**	**970.17**
5	IEX Purchase	52.60	52.60	X
6	Banked Energy returned	160.90	160.90	X
7	Banking to Outside utilities	-153.33	-153.33	X
8	Energy Sold to IEX	-176.60	-176.60	X
9	Net Available Energy	**908.22**	**908.53**	**970.17**
10	UI Under drawl	0		-11.46
11	UI Over drawl	0		12.96
12	**Net Power at State Periphery**	**908.22**	**908.53**	**971.665**

Note: - (X – indicates not applied for and irrelevant)

From above it can be seen that the net power purchase from all sources for FY 2020-21 is 970.17 MU after NER losses. After considering the UI transaction, the net electricity available at the state periphery is 971.665 MU. MSPDCL requests Hon'ble

Commission to approve the actual power purchase quantum from CGPs and other sources for Limited provisional truing up for FY 2020-21.

Commission Analysis

The purchase of energy requirement could have been lower still, had the Licensee properly availed the banked energy balance at the year beginning and had not resorted to Over-drawl of 12.96 MU. MSPDCL could have averted the Outside State surplus sale at 111.41MU if they curtailed their needless IEX Purchases to the extent of 82.22MU. *Unfortunately, this is in addition to 161.30 MU of net banked energy sold during the year*. The subtle inference of Outside State sales break-up from Licensee's ARR submission as understood by the Commission is indicated below:

Table 5.7 Break-up summary of OSS as per the ARR submission for 2020-21

Sl. No	Particulars	Energy (MU)	Cost (Rs.Crs)
1.	**Energy sold at IEX (received)**	**111.41**	**24.65**
2.	IEX purchases made (paid)	-82.22	-22.16
	Net revenue realised from IEX trade	29.19	2.49
3.	Net withdrawal of banked energy (sale 161.30MU less 100.09MU Re-banked out of CGS purchases qty only @ 4.16/kWh)	61.21	-25.46
4.	**Sub-Total**	**90.40**	**-22.97**
5.	**Quantum of UI over drawl of energy** (Overdrawn 12.96MU)	-12.96	0.54 (gain)
6.	**Net financial commitment (on account of IEX & Banking)**	**77.56 (MU)**	**22.37crs (loss)**

As a result of all the IEX & banking energy transactions made by MSPDCL during the FY2020-21, it had procured excess quantum of energy more than its needs by 77.56MU and the associated cost spent for this whole issue is Rs.22.37Crs of left unrecovered, but getting passed on to the retail consumers for reason unnecessarily. These above calculations made duly subtracting the revenues if any received also. Hence, the additional financial burden thrusted on consumers in the overall ARR amount is to the extent of Rs.22.37Crs. For this reason, the Commission every time advises the MSPDCL to desist for doing the IEX & banking energy related transactions without any compelling purpose.

This amount of Rs.22.37Crs will be disallowed in the true-up amount when Commission takes up the matter in due course.

5.5 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 2020-21 is shown in the Table below:

Table 5.8 Actual Power Purchase Cost for FY 2020-21

Sl. No.	Source of Power	APR Order 26.4.2021		Actual 2020-21	
		Total Cost (Rs Cr)	Avg Rate (Rs/kWh)	Total Cost (Rs Cr)	Avg Rate (Rs/kWh)
A	**CGS – NEEPCO**				
1	Kopili -I HEP	6.67	1.15	0.04	0
2	Kopili-II HEP	1.00	1.42	0.00	0
3	Khandong HEP	2.47	1.70	1.13	2.68
4	Ranganadi HEP	24.80	2.43	25.57	2.20
5	Doyang HEP	6.51	5.01	8.32	5.36
6	Assam GBPP	36.78	4.18	36.96	3.50
7	AGTPP	25.18	4.75	24.59	3.47
B	**CGS – NHPC**				
1	Loktak HEP Purchased Power	58.58	3.55	58.97	3.19
2	Loktak HEP- Free Power	0.00	0.00	0.00	0.00
C	**Others**				
1	Baramura GBPP Unit IV and V	18.35	2.95	18.03	3.86
2	OTPC Palatana	75.21	3.18	100.76	3.61
D	**New Plants**				
1	NTPC Bongaigaon Unit I to III	131.11	8.30	156.43	10.45
2	Para HEP	12.85	3.31	21.67	0.00
3	Renewable – Solar				
4	Renewable – Non-Solar				
	Sub -Total	**397.43**	**3.78**	**452.48**	**4.16**
5	IEX Sale	**-49.47**		-24.65	2.21
6	IEX purchase	**16.30**		22.16	2.70
7	UI Overdrawl			3.55	2.74
8	UI Underdrawl			-4.09	3.57
9	Supplementary bills	20.00			
10	Late payment surcharge				
	Total	**384.27**	**4.11**	**454.32**	**4.54**

The total actual power purchase cost including UI over-drawal and under-drawal charges, purchase cost from IEX etc. is Rs 454.23 Cr for FY 2020-21 as against the commission's approval of Rs 384.27 Cr. However, the above cost also includes outside sale income through IEX of Rs 24.65 Cr (negative sign in the above table means income).

MSPDCL requests the Hon'ble Commission to approve the actual power purchase costs for FY 2020-21, as shown in the table above.

Commission Analysis:

As already explained, the excess amount incurred for power purchase more than the need will be disallowed while approving the True-up for FY 2020-21 upon submission of the true-up petition along with Audited Financial Accounts in due course.

5.6 Transmission Charges

Petitioner's Submission

The transmission charges include the charges paid to PGCIL, MSPCL and SLDC. The summary of transmission charges approved by the Commission and the actual charges paid by MSPDCL for FY 2020-21 is as follows:

Table 5.9 Transmission Charges for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	Tariff Order 26.4.2021	2020-21 Actual
1	PGCIL Charges	79.11	71.47
2	MSPCL Charges	76.39	65.25*
3	SLDC Charges	0.78	0.70
4	NERLDC Charges	0.67	0.64
	Total	**156.95**	**138.06**

* Considering MSPCL charges as paid by MSPDCL before reconciliation with MSPCL.

MSPDCL requests the Hon'ble Commission to approve the actual Transmission Charges of Rs. 138.06 for FY 2020-21, as shown in the Table above.

Commission Analysis:

The approved MSPCL charges in the APR order Dt 26th April 2021 were at Rs.76.38 crs and the same was revised to Rs.60.00Crs towards their True-up figure now. As against this MSPDCL is now claiming at **Rs.65.25 Crs** instead of Rs.60Crs only, thereby the excess claim of Rs.5.25crs is more in this element now. Hence, the MSPCL charges should have been only Rs.60Crs. The charges paid to PGCIL & NRLDC will be allowed on actual payments effected to them on verification of Audited financial figure when made available to Commission. The payment of SLDC charges is a disputable amount as there is no order from Commission on this aspect and hence will be disallowed after taking suitable clarification on this element.

As the true-up has to be made only once based on actuals incurred and

revisiting of the same is not permissible, therefore true-up on provisional basis cannot be taken-up by the Commission. In this regard, the licensee is directed to file the true-up petition separately for FY2020-21 once Audited Annual Accounts are ready in full shape.

5.7 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 2020-21, MSPDCL has incurred the O&M expenses detailed below:

5.8 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 staff etc. The actual employee expenses incurred by MSPDCL in FY 2020-21 as compared with the approval in the Tariff Order for FY 2020-21 are shown in the Table below:

Table 5.10 Employee Expenses for FY 2020-21

(Rs. Crore)

Sl. No	Employee Category	Tariff Order 20.03.20	Tariff Order 26.4.2021	2020-21 Actuals
1	Total Employee Expenses	99.69	73.38	63.15

The actual employee expenses are lower than the employee expenses approved by the Hon'ble Commission for FY 2020-21. Actual recruitment of employee as envisaged earlier was not possible during the previous year. Also, payment of arrears as estimated earlier due to seventh pay commission was not implemented during the year under review. MSPDCL requests the Hon'ble Commission to approve the actual Employee Expenses of Rs. 63.15 Crore for FY 2020-21.

Commission Analysis:

The employees cost comprises of Regular Employees, Work Charged, Muster Roll and Contract employees also. There is no detailed calculation break-up in respect of each cadre in the ARR filing submission in support of the above figure for Commission's scrutiny. **Therefore, the approval of employee cost of Rs.63.15 Crs will be subjected to verification after the submission of the statutory auditor certified audited annual accounts along with true up petition separately.**

5.8.1 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 incurred in FY 2020-21 as compared to the approved expenses are as follows:

Table 5.11 R&M Expenses for FY 2020-21

(Rs. Crore)

Particulars	Tariff Order Dt.20.3.2020	APR Approved Dt.26.4.21	Actuals 2020-21
R&M Expenses	13.07	14.61	10.91

The actual R&M expenses are lower than the approved values by the Hon'ble Commission for FY 2020-21. MSPDCL therefore, requests the Hon'ble Commission to approve the actual R&M expenses of Rs. 10.91 Crore for FY 2020-21.

Commission Analysis:

Since, the cost now incurred is lower than it was approved in APR previously and no detailed explanation in support of the break-up is provided anywhere in the ARR filing submission, therefore this cost will be approved later on verification with actual data. The approval of R&M cost will be subject to verification with the statutory auditor certified audited annual accounts after its submission along with true up.

5.8.2 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 2020-21 is as follows:

Table 5.12: - A&G Expenses for FY 2020-21

(Rs. Crore)

Sl. No	Particulars	Tariff Order 20.3.2020	APR (Apprv) 26.04.21	Actual 2020-21
1	Advertisement			0.48
2	Auditors Fee			0.01
3	Consultancy charges & Technical Fees			0.16
4	Conveyance and Travels			0.01
5	JERC License Fee			0.20
6	Ex-Gratia			0.16
7	Hiring of Vehicle			1.54
8	Insurance			
9	Legal Charges			0.05
10	License and Registration fee			0.01
11	Miscellaneous Expenses			2.91
12	Oil DG set & Transformer			1.12
13	Printing and Stationary			0.06
14	Rent, Rate and Taxes			0.47
15	Telephone			0.24
16	Training Expenses			
17	Vehicle running expenses			
18	Outsourced Manpower - Quess			
	Total	**9.71**	**9.55**	**7.40**

The actual A&G expenses in FY 2020-21 are lower than the expenses approved in ARR for FY 2020-21. MSPDCL, therefore, requests the Hon'ble Commission to approve the actual A&G expenses of Rs. 7.40 Crore for FY 2020-21.

Commission Analysis:

The approval of A&G Expenses will be subject to verification with the statutory auditor certified audited annual accounts after its submission along with true up. The Out sourced Manpower - Quess should have been included in employee cost under contract employee amount and how can it be again included in A&G Expenses.

The total O&M expenses incurred by MSPDCL in FY 2020-21 are shown in the Table below:

Table 5.13 Actual O&M Expenses for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	Approved in Tariff Order	Approved APR Order	Actual
1	Employee Expenses	99.69	73.38	63.15
2	R&M Expense	13.07	14.61	10.91
3	A&G Expense	9.71	9.55	7.40
	Total	**122.47**	**97.54**	**81.46**

The actual O&M expenses are thus, lower than the O&M expenses approved by the Hon'ble Commission in the Tariff Order for FY 2020-21. Reduction in Employee expenses is the main reason for this difference. MSPDCL requests the Hon'ble Commission to approve the actual O&M expenses of Rs. 81.46 Crore for FY 2020-21.

Commission Analysis:

The Approval of these costs cannot be made at this juncture by the Commission pending submission of the Statutory auditors certified annual accounts for FY2020-21.

5.9 Capitalisation

Petitioner's Submission

MSPDCL undertakes capital expenditure to meet the growing demand for electricity in the State and for system augmentation and strengthening. MSPDCL receives significant grant from the Central /State Government for creation of capital asset, with the balance funding sourced from loans. Hon'ble Commission approved the capitalization of Rs 32.22 Crore in the ARR order. Details of actual capitalization achieved in FY 2020-21 vis-à-vis the capitalisation approved by the Hon'ble Commission is shown in the Table below:

Table-5.14: Capitalisation for FY 2020-21 (Rs. Crore)

Sl. No	Name of the Scheme	Approved	Actuals
1	Miscellaneous items		12.19
	Total	**32.22**	

MSPDCL requests the Hon'ble Commission to kindly approve the actual capitalization of Rs. 12.19 Crore for FY 2020-21. MSPDCL has continuing execution of old projects and among them as per completion of the schemes, claiming the capitalization. So, the Petitioner humbly requests the Commission to approve the capitalization of the said projects, which are old and ongoing schemes only.

Commission's Analysis

The MSPDCL has not yet submitted audited annual accounts from 2016-17 to 2020-21. Unless all the audited annual accounts are submitted up to FY2020-21 the approval of capitalization of assets cannot be approved. Audited Annual accounts from FY 2016-17 onwards are not yet finalized and hence it is pre-matured stage to approve anything without knowing any back ground expenditure incurred till date.

The MSPDCL is therefore directed to reconcile all the capital investment from FY 2015-16 onwards and furnish correct data along with the true-up filing in due course for approval of investment incurred.

5.10 Interest on Working Capital

Petitioner's Submission

The interest on working capital is calculated as interest incurred on operation and maintenance expenses for one month, Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation, Receivables equivalent to one (1) month of the expected revenue from charges for use of Distribution Wires at the prevailing tariffs and Amount, if any, held as security deposits under clause (b) of sub- section (1) of Section 47 of the Act from Distribution System Users except the security deposits held in the form of Bank Guarantees.

The computation of normative Interest on Working Capital (IoWC) for MSPDCL for FY 2020-21, is shown in the Table below:

Table 5.15: Interest on Working Capital for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	Approved in ARR Order	Approved in APR Order	Actuals
1	O&M expenses for 1 month	**Rs. 5.25 Crs** of IWC Disallowed by the Hon'ble Commission	**Rs. 6.26 Crs** of IWC Disallowed by the Hon'ble Commission	6.79
2	Maintenance spares @ 1% of GFA			7.56
3	Receivables equivalent to one month of expected revenue at prevailing tariffs			33.83
4	Consumer Security Deposit			14.88

Sl. No.	Particulars	Approved in ARR Order	Approved in APR Order	Actuals
	Total			**33.31**
	SBAR as approved			13.45%
	Interest on Working Capital			**4.48**

MSPDCL requests the Hon'ble Commission to approve the IoWC of **Rs. 4.48 Crore** for FY 2020-21.

Commission's Analysis:

Unless the audited annual accounts are submitted for FY2020-21 the approval of Interest on working capital cannot be approved and it will be decided upon submission of true-up with audited accounts in due course. The admissibility of these charges would depend upon actually availing of short-term borrowings for working capital needs by the Licensee and also to reduce the unnecessary financial burden on the retail consumers keeping in view the continuous government financial support for revenue expenditure and no compelling need to draw any short-term loans for working capital needs.

5.11 Gross Fixed Assets and Depreciation

Petitioner's Submission

The opening balance of Gross Fixed Asset (GFA) for FY 2020-21 has been considered along with capitalization. The depreciation has been computed under straight-line Method, at the rates specified in the JERC (MYT) Regulations, 2014, on the GFA in use at the beginning of the year and addition in assets during FY 2020-21.

The Depreciation expenses for FY 2020-21 are shown in the Table below:

Table 5.16: Depreciation for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	Approved in APR Order	Actual
1	Opening GFA	762.28	744.31
2	Addition during the Year	0	12.19
3	Retirement	0	
4	Closing GFA	762.28	756.50

Sl. No.	Particulars	Approved in APR Order	Actual
5	Average GFA	762.28	750.40
6	Average Rate of Depreciation	2.42	
7	Depreciation	18.45	
8	**10% of Gross Depreciation**	**1.84**	**13.06 (asset wise calculated)**

MSPDCL respectfully submits that the depreciation as calculated above, is based on actual GFA and GFA addition during the year. Actual calculated depreciation is considered on assets which are not funded through grants and consumer contribution, if any.

MSPDCL requests the Hon'ble Commission to approve the Depreciation of **Rs. 13.06 Crore**, as sought by MSPDCL.

Commission's analysis

The Approval of depreciation cannot be made at this juncture by the Commission pending submission of the Statutory auditors certified annual accounts. As per this filing, it is construed that the funds utilized for creation are drawn from Grants from government only. The depreciation amount now provisionally be allowed to Tariff Order approved amount of Rs.1.84Crs only.

5.12 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 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 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 5.17 Interest on Loan for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	REC 1	REC 2	Total
1	Opening Loan	31.904	12.3003	44.20
2	Addition during the year	0	0	0.00

Sl. No.	Particulars	REC 1	REC 2	Total
3	Repayment during the year	3.988	2.9049	6.89
4	Closing Loan	27.916	9.3954	37.31
5	Average Loan	29.91	10.84785	40.76
6	Rate of Interest	11.70%	10.20%	0.22
7	Interest & Finance Charges	3.652	1.70	5.36
8	Interest on CSD			0.00
	Total Interest	**3.652**	**1.70**	5.36

Additionally, MSPDCL has availed loan from PFC and REC for *"COVID loan under Aatma Nirbhar Bharat"*, for which interest paid is of Rs. 2.72 Crore against approved values of 2.67 Crores in APR Order for FY 2020-21. The table below shows the details for interest on loan based on actuals for FY 2020-21.

Table 5.18: Interest on Loan for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	Approved in APR Order	Actual
1	PFC/REC loan on ongoing projects	4.84	5.36
2	COVID loan under Aatma Nirbhar Bharat	2.65	2.72
3	Loan for purchase of Prepaid meters	2.39	-
4	Loan for LED street light & High Mast	0.291	-
	Total Interest	**10.09**	**8.07**

MSPDCL requests the Hon'ble Commission to kindly approve the interest on loan of **Rs. 8.07 Crore** for FY 2020-21. The interest calculation would be finalised in the time of preparation of annual account and can be incorporated in the final true-up petition

Commission Analysis:

The Approval of interest on Loans availed depends upon the various issues such as the need & purpose of drawal and its prior approval, amount of loan drawn, their convertibility to grants on complying certain conditions, terms & conditions of repayment and its rate of interest. Without providing any such details for verification of those aspects and their reflection in Annual accounts, approval cannot be made at this juncture by the Commission pending submission of the Statutory auditors certified audited annual accounts. However, as the Covid Loan obtained by MSPDCL was well aware by the Commission, hence the interest amount of 2.72 Crs on this loan alone is now admissible until submission of Audited accunts.

5.13 Return on Equity

As there is no fresh equity infusion by MSPDCL in the FY 2020-21, the Return on Equity (RoE) for FY 2020-21 is considered same as submitted by MSPDCL in earlier petitions. The RoE for FY 2020-21 is shown in the Table below:

Table 5.19 Return on Equity for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	Tariff Order 26.04.2021	Actual 2020-21
1	Return on Equity	1.56	1.95

MSPDCL requests the Hon'ble Commission to approve the Return on Equity of **Rs.1.95** Crore for FY 2020-21.

Commission Analysis:

The Commission provisionally 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 in the ARR submission and its verification could not be made in the absence of audited financial accounts for this year.**

5.14 Write-Off of Bad Debts

MSPDCL has considered "Nil" Write-off of Bad Debts for FY 2020-21, as annual account is not yet finalised and requests this Hon'ble Commission to consider the actual bad debts figure after finalization of annual account in its true-up petition.

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 dues accumulated to the tune of above Rs.431 Crs to the end of 31.03.2021 as was submitted in the reply to additional information. Bad debts withdrawal can be allowed only 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. **Out of the Trade Receivables Rs 43,112.43 lakh pertains to amount of Legacy Debtors transferred from Electricity Dept, Govtt of Manipur as on 1st February 2014 and Debts recoverable from govt**

department/State PSU/Subordinate officer and local bodies amount pending is not known as on 31st March 2021

5.15 Non-Tari ff Income

The Hon’ble Commission approved Non-Tariff Income of Rs. 7.25 Crore in the Tariff Order for FY 2020-21 and had revised and approved Rs. 6.48 Crores in APR Order for FY 2020-21. The actual Non-Tariff Income earned by MSPDCL in FY 2020-21 was Rs. 6.17 Crore, as shown in the Table below:

Table 5.20: Non-Tariff Income for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	Tariff Order 26.4.2021	2020-21 Actuals
1	Interest from Bank		4.84
2	3.75% Agency Charge		0.39
3	Miscellaneous Receipt		
4	Fees from Tender forms		0.12
	Total	**6.48**	**6.17**

MSPDCL requests the Hon’ble Commission to approve the actual Non-Tariff Income of Rs. 6.17 Crore for FY 2020-21.

Commission’s analysis

The Approval of this costs cannot be made at this juncture by the Commission pending submission of the Statutory auditors certified annual accounts. However, the Commission approved the APR amount at Rs.6.48 Crs but the same was not depicted in the above tabulation by licensee. The Commission however feels that the NTI amount appears at lesser magnitude than expected for MSPDCL and it should be a higher amount than now claimed. However, the amount will be approved after submission of Audited Annual financial accounts for 2020-21.

5.16 Aggregate Revenue Requirement

Based on the above component-wise expenses, the Aggregate Revenue Requirement computed for FY 2020-21 by MSPDCL against the figures approved by the Commission in the Tariff Order for FY 2020-21, is given in the Table below:

Table 5.21 Aggregate Revenue Requirement for FY 2020-21 (Rs. Crore)

Sl. No	Particulars	Tariff Order Approved	Approved in ARR Order	Actuals
1	Fuel Cost			
2	Power Purchase Cost	376.51	384.27	454.32*
3	Inter-State Transmission Charges	61.53	79.11	71.47
4	Intra-State Transmission Charges	77.01	76.39	65.25
5	SLDC & NRLDC Charges	7.86	1.45	1.34
6	Employee Cost	99.69	73.38	63.15
7	R&M Expenses	13.07	14.61	10.91
8	Administration & General Expns	9.71	9.55	7.40
9	Depreciation	1.84	1.84	13.06
10	Interest and Finance Charges	4.24	10.09	8.07
11	Interest on Working Capital	-	-	4.14
12	Write off of bad debts	-	-	-
13	Return on Equity	1.56	1.56	1.95
14	Add: Income Tax			
14	Less: Non-Tariff Income	7.25	6.48	6.17
15	Less: Efficiency Gains	40.00	40.00	
16	**Net ARR**	**605.76**	**605.77**	**695.23**

* Net power purchase cost after reducing the gross power purchase cost by Rs 24.65 Crore of outside sale (IEX) income

The ARR for FY 2020-21 is Rs. 695.23 Crore, which is higher than the ARR approved by the Hon'ble Commission for FY 2020-21 in its Tariff Order. MSPDCL therefore, humbly requests the Hon'ble Commission to approve the same.

Commission's analysis

As explained at each element of the ARR items, the approval of the ARR cannot be made at this juncture by the Commission pending submission of the Statutory auditors certified annual accounts. The MSPDCL exceeded the APR approved value of Rs.605.77 Crs and the actual amount now claimed Rs.695.23 Crs is apparently high and needs scrutiny. The MSPDCL is advised to submit the true-up petition later upon finalisation of the audited annual accounts of this FY 2020-21separately.

5.17 Revenue from Sale of Power

Petitioner's Submission:

The revenue from sale of power to consumers for FY 2020-21 was Rs. 423.46 Crore

as approved by Hon'ble Commission in its APR order for FY 2020-21. The actual revenue from sale of power to consumers in FY 2020-21 is Rs. 406 Crore.
MSPDCL requests the Hon'ble Commission to approve the same and the same will be finalised after the annual account of MSPDCL gets audited.

Commission's Analysis:

From the basic data such as Consumers, contract load and energy sales made available in the formats-R1 for FY 2020-21, the revenue that would have been realised was assessed by Commission applying FY2020-21 at prevailing tariff rates had yielded an amount of Rs.442.86 Crs from retail sales. But the licensee has indicated the revenue amount to be only Rs.406.00Crs leaving a large difference in revenue of about Rs.36.86Crs under stated by licensee and the break-up details for Rs.406 Crs kept undisclosed in the relevant format specially designed in formats filing for it.
The revenue details as per the Commission is tabulated below in support of the above figure.

MSPDCL - Actual Revenue realisation estimation at extisting tariff for FY 2020-21										
S.N	Category of Consumers	No. of Consumers	Connected Load (kW)	Energy Sales (MU)	Fixed Charges/ PM	Energy Charges (Rs/kWh)	Fixed Charges Revenue (Rs. Crs)	Energy Charges Revenue (Rs. Crs)	Total Revenue (Rs. Crs)	Avg Rev. (Rs/kWh)
	LT Supply				**Rs/kW/month**					
	Categories									
	LT Supply									
1	**Domestic (Kutir Jyoti)**				Rs. /connection					
	All Units	14906	6967	4.05	25.00	2.00	0.45	0.81	1.26	3.10
	Sub Total (a)		**6967**	**4.05**			**0.45**	**0.81**	**1.26**	**3.10**
2	**Domestic (General)**				**Rs/kW/month**					
	First 100 kWh	406920	580256	394.37	60.00	4.20	41.78	165.64	207.42	5.26
	Next 100 kWh	37789	84278	39.65	60.00	5.50	6.07	21.81	27.88	7.03
	Balance>200 kWh	14150	41312	15.08	60.00	6.40	2.97	9.65	12.63	8.37
	Sub Total (b)	**458859**	**705846**	**449.11**			**50.82**	**197.10**	**247.92**	**5.52**
	Total Domestic (a+b)	**458859**	**712813**	**453.16**			**51.27**	**197.91**	**249.17**	**5.50**
3	**Commercial**									
	First 100 kWh	18215	42241	29.81	80.00	5.85	4.06	17.44	21.50	7.21
	Next 100 kWh	2821	9412	8.54	80.00	6.90	0.90	5.90	6.80	7.96
	Balance>200 kWh	4356	36569	23.96	80.00	7.45	3.51	17.85	21.36	8.91
	Total Commercial (LT)	**25392**	**88222**	**62.32**			**8.47**	**41.19**	**49.66**	**7.97**
4	Public Lighting - LT	392	1199	3.62	65.00	8.50	0.09	3.08	3.17	8.76
5	Public Water Supply-LT	35	442	1.27	100.00	8.70	0.05	1.11	1.16	9.12
6	Agri & Irrigation-LT	46	326	1.14	60.00	4.20	0.02	0.48	0.50	4.41
7	Small Industry-LT	2126	20233	21.63	65.00	4.40	1.58	9.52	11.09	5.13
	L.T Other Total	**2599**	**22200**	**27.66**			**1.75**	**14.18**	**15.93**	**5.76**
	H.T Supply				**Rs/kVA/PM**	**Rs/kVAh/PM**				
8	Commercial-HT	916	19886	21.12	100.00	8.10	2.65	19.00	21.66	10.26
9	Public Water Supply-HT	186	15495	22.37	100.00	8.30	2.07	20.63	22.70	10.15
10	Agri & Irrigation-HT	26	712	0.74	100.00	4.40	0.09	0.36	0.46	6.17
11	Medium Industry-HT	170	4198	4.36	100.00	5.70	0.56	2.76	3.32	7.62
12	Large Industry-HT	39	12171	9.67	100.00	7.10	1.62	7.63	9.25	9.57
13	Bulk Supply-HT	379	48640	90.33	100.00	6.40	6.49	64.24	70.72	7.83
	Total of all HT	**1716**	**101102**	**148.58**			**13.48**	**114.62**	**128.10**	**8.62**
	Grand Total (L.T & H.T)	**503472**	**924337**	**691.72**			**74.97**	**367.90**	**442.86**	6.40

The full break-up details of the revenue realised from the retail consumers as well as the amount received from Outside State Sales along with invoices issued were asked for submission and the same was not submitted for verification and scrutiny.

Under these circumstances, the revenue indicated cannot be considered and hence, the information called for shall have to be submitted in full shape to the Commission for taking a decision to approve actual revenue realised.

5.18 Revenue Gap

The Revenue Gap of MSPDCL for FY 2020-21 as against the Revenue Gap approved by the Hon'ble Commission in the APR Order for FY 2020-21 is shown in the Table below:

Table 5.22 Revenue Gap for FY 2020-21 (Rs. Crore) by MSPDCL

Sl. No.	Particulars	APR approved	Actuals
1	Net ARR after considering Outside Sale Income	605.77	695.23
2	Total Revenue from Consumer Tariff	423.46	406.00
3	**Revenue gap before Govt. Subsidy (1-2)**	**182.31**	**289.23**
4	State Government Revenue Subsidy	216.00	257.87
5	**Unmet Revenue Gap (4-3)**	**+33.69**	**-31.36**

As can be seen from the above Table, the Unmet Revenue Gap for FY 2020-21 is Rs.31.36 Crore after considering state Government subsidy of Rs 257.87 Crore. The final figures will be considered after reconciliation at the time of annual audit of accounts. The actual revenue gap can only be finalized during the final Truing up process for FY 2020-21, and MSPDCL shall seek pass through of such amounts with associated carrying cost and sharing of efficiency gains and losses at that time.

Commission Analysis:

The unmet gap was conspicuously due to suppressed revenue of Rs.406Crs as earned and undisclosed status of actual expenditure considered in audited accounts. The assessment of revenue calculation method appears to be erroneous based on the all other paraments furnished to Commission for verification. Based on which the revenue yield should have been Rs.442.86Crs considering the Power Factor conversion at 0.90. *This matter is flagged as an important issue to be examined thoroughly under submission of Audited Annual accounts for FY 2020-21*.

The Carrying cost cannot be entertained even at the time of truing up of this ARR as the delay in submission is from MSPDCL side due to non-finalisation of audit of the annual accounts on time and any further delay or non-furnishing of the called for information will be dealt seriously by the Commission with suitable penalties depends upon the gravity at the time of truing up.

The True-up for FY 2020-21 will be taken up afresh upon filing the separate petition along with statutory auditor certified audited accounts in full shape with adequate supportive details for the claims made therein. There is no regulation provision for provisional & final true-up for the same period. Any true-up once made will not be revisited. Hence the concept of provisional & final true-up by licensee may not be expected hereafter.

6.Annual Performance Review for FY 2021-22

6.1 Background

The Petitioner humbly submits that the present APR is based on actual provisional expenses of FY 2020-21 and first six-month data available for FY 2021-22. 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 2021-22 as approved in the JERC tariff Order in Petition (ARR & Tariff) No. 3 of 2021 dated 26 April 2021 (henceforth referred as 'Approved' order with reference to FY 2021-22). However, the Petitioner requests Hon'ble Commission to review the expenses and revenue for FY 2021-22 based on the trend observed as per actual data.

6.2 Energy sales

MSPDCL caters to a diverse consumer mix comprising LT domestic, LT commercial, HT commercial, LT Industry, HT Industry, public lighting, public water works and agriculture consumers. LT Domestic category is the largest consumer category and comprises around 65% - 68% 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, Saubhagya, etc. 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 2021-22 is given in the Table below:

Table 6.1: Category-wise Energy Sales (MU) for FY 2021-22

		FY 2021-22		
Sl. No.	**Category**	**Approved in ARR Order**	**6 Months Actual**	**Revised Projection**
A	**LT Supply**			
1	Kutir Jyoti	4.10	1.95	4.13
2	LT Domestic	441.28	222.88	462.22
3	Commercial LT	59.00	19. 40	63.57
4	Cottage & Small Industry	19.47	11.12	22.28
5	Public Lighting	3.86	1.99	3.66
6	Public Water-works	1.29	0.69	1.28
7	Irrigation and Agriculture	1.15	0.60	1.15
	LT Supply Sub Total	**530.15**	**258.63**	**554.16**

		FY 2021-22		
Sl. No.	Category	Approved in ARR Order	6 Months Actual	Revised Projection
B	**HT Supply**			
1	Commercial	19.98	10.92	21.54
2	Medium Industry	3.92	2.35	4.49
3	Large Industry	8.15	4.98	10.15
4	Bulk Supply	90.19	45.50	92.14
5	Public Water-works	23.99	12.66	23.49
6	Irrigation & Agriculture	0.75	0.38	0.75
	HT Supply Sub Total	**146.98**	**76.79**	**152.55**
	Total (LT & HT)	**677.13**	**335.42**	**706.71**

The Commission has approved the energy sales of 677.13 MU for FY 2021-22. Based on the actual sales of first six months (i.e. up to 30 September), the revised projection of energy sales by MSPDCL for FY 2021-22 is 706.71 MU. In present year, the effect of COVID-19 pandemic, which resulted in a lockdown including in the state of Manipur during second wave, is reducing and economy is slowly returning to its normal level. It is therefore, well understood that commercial and industrial establishment faced severe problem due to lockdown and several units remained closed during the lockdown period in the previous year. As a result, the energy consumption is increasing but the pace is very low. In this condition, it is expected that the whole year consumption will be almost similar to past year's consumption; without much difference. It is expected that the impact will not be much and will be higher than last year's figure.

Considering the above consequences and past growth rates across the different consumer categories, assumptions are made for projecting the energy sales for FY 2021-22. Based on the same, energy sales growth rates have been assumed over the actual sales in FY 2020-21. The estimated consumer category wise growth rates are given below:

Consumer category	Growth rate
Kutir Jyoti	2%
Domestic	2%
Commercial	2%
Public lighting LT	1%
Public waterworks LT	0.08%
Agriculture and irrigation LT	1%

Consumer category	Growth rate
Cottage and small industry	3%
Commercial HT	2%
Public waterworks HT	5%
Agriculture HT	1%
Medium Industry HT	3%
Large Industry HT	5%
Bulk Supply HT	2%

Accordingly, MSPDCL requests the Hon'ble Commission to approve the revised energy sales of **706.71 MU** for FY 2021-22

Commission Analysis:

The energy projections for FY 2021-22 furnished now is provisionally accepted at this level itself, **since, it is almost at the fag-end of the year of 2021-22 now**, we may even await the actual sales figures and hence commission makes no change in the sales projected and approves with a dissatisfaction on the energy projection submitted for FY 2021-22 as the growth trend is very nominal over 2020-21 sales.

6.3 Distribution loss and Energy Balance for FY 2021-22

Projected distribution loss for FY 2021-22 is estimated based on the actual distribution loss achieved for FY 2020-21, and the loss trajectory approved by the Hon. Commission for the MYT control period as well as approved in last year's ARR order. Based on the estimated sales for the current financial year, estimated interstate and intra states losses, power purchase requirement and surplus sales have been projected. The estimation of power procurement is done in the subsequent section. The estimated distribution loss and energy balance for current financial year is as follows:

Table 6.2: Proposed Distribution Loss and Energy Balance for FY 2021-22

	Particulars	Calculation	FY 2021-22 Approved in ARR		FY 2021-22 Revised projection	
			%	MU	%	MU
1	**Energy Sales**					
	a) LT Sales	A1		530.15		**554.16**
	b) HT Sales at 11kV	A2		146.98		152.55
	c) HT Sales at 33kV	A3				
	c) EHT Sales	A4				
	Total Energy Sales	**A**		**677.13**		**706.71**
2	**Distribution Losses**					
	a) Distribution losses at	B1				

	Particulars	Calculation	FY 2021-22 Approved in ARR		FY 2021-22 Revised projection	
			%	MU	%	MU
	33kV level					
	b) Distribution losses in HT 11kV and LT system combined	B2	20.50%	174.60	**21.30%**	191.27
	Total Distribution Losses	**B**		174.60		191.27
3	**Energy requirement at T-D boundary**					
	a) 11kV and LT energy requirement combined	C1 = (A1+A2)/(1-B)		851.73		897.98
	b) HT 33kV energy requirement	C2 = A3/(1-B1)				
	Total energy requirement at T-D boundary	**C = C1 + C2**		851.73		897.98
4	**Intra-State Transmission Losses**	**D**	8.895%	83.16	**8.50%**	83.42
5	Energy requirement of EHT consumers	E = A4/(1-D)				
6	Energy Requirement of Distribution system consumers after grossing up for Intra-State Transmission losses	F = C/(1-D)		943.88		981.40
	Outside sale/(Purchase)			50.13		-23.83
7	**Energy Requirement at state periphery**	**G = E + F**		985.01		957.57
8	**Inter-State Transmission Losses**	**H**	**2.57%**	25.98	**3.20%**	31.66
9	**Total Energy requirement**	**I = G/(1 - H)**		1011.01		989.22
	Additional Purchase / (Sales)					
10	**Total Energy available**	**J**		**1011.01**		**989.22**
11	**Surplus / (Deficit)**	**J - I**		0.0		0.00

MSPDCL has achieved the distribution loss of 21.86% in FY 2020-21. For the FY 2021-22, Hon. Commission has approved the distribution loss of 20.50%. MSPDCL currently proposes the distribution loss of 21.30% for FY 2021-22. MSPDCL requests Hon'ble Commission to consider the proposed distribution loss considering the high LT network and low density of consumers. The detailed reasoning is already given in the previous chapter.

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. Considering the present six months' figure of banking and power exchange sale / purchase data, the same has been projected for the whole year. It is again important to mention that banking sale to other utilities have been made in summer months which will be used in winter months to meet the higher demand of the state's consumers.

Commission analysis

The Licensee didn't explain the basis in which the reduction of distribution losses from 21.86% (2020-21) to 21.30% (2021-22) is possible and what were its action plan as to how the network efficiency improvement have been planned to achieve at the meagre loss reduction by 0.56% in FY 2020-21. If the distribution loss reduction was purely on account of higher Commercial losses, then there should have been drastic improvement in either sales quantum or perceptible raise in revenue collections and also visible increased Non-Tariff income needs to be seen as a thumb-rule check of the licensee's performance. But none of such parameter values are convincible to watch by the Commission and needs to corroborate this loss reduction as proposed with the final documentary proof in future. With the detailed discussion on MSPCL losses in SAC meeting, Commission feels it appropriate to keep transmission losses at 8.25% only instead of proposed 8.50%.

As the Commission had already approved the distribution losses at the level of 20.50% for FY 2021-22 in the Tariff Order Dt.26.04.2021 with a hope that this small loss reduction if achieved is a very encouraging trend in the last leg of the FY2021-22. But, from the data now submitted in the APR, the distribution losses might shoot up 21.64% as per the calculations tabulated below. However, if the Licensee fails achieve this proposed loss level by the end of FY 2021-22 and make a poor performance at the end of year 2021-22 the MSPDCL will have to bear the penalty for the under performance in the true-up finalization for 2021-22 in any case.

The energy balance based on quantum of power purchase now adopted **by the Commission** is based on the sales and other details MSPDCL provided:

Sl. No.	Energy Balance for FY 2021-22	MSPDCL (MU)	Commission (MU)
1	Energy from all NER allocated stations (incl. Loktak Free power also)	**989.22**	**989.22**
2	IEX Purchases	**X**	**80.00**
3	Return of Banking Energy	**X**	**115.83**

Sl. No.	Energy Balance for FY 2021-22	MSPDCL (MU)	Commission (MU)
4	Grossed up Energy handled - (1 to 3)	**989.22**	**1185.05**
5	Inter-State (NER) Losses - (%)	**3.20%**	**2.54%**
6	Inter-State Loss on NER Energy - MU	31.66	30.10
7	**Net energy at NERLDC (4 - 6)**	**957.56**	**1154.95**
8	IEX Purchases	80.00	X
9	Return of Banking Energy	115.83	X
10	Banked Energy sales to O/s utilities	-82.00	-82.00
11	Less: Outside State SALES at IEX (OSS)	-90.00	-90.00
12	UI adjust (Over drawn)	nil	nil
13	**Total energy at State Periphery - (7 to 12)**	**981.39**	**982.95**
14	**State Transmission Loss (%)**	**8.50%**	**8.25%**
15	Intra-State Losses (State Losses) (MU)	**85.42**	**81.09**
16	**Gross Circle-wise Distribution Input (13-15)**	**897.98**	**901.86**
17	**Distribution Loss (%)**	**21.30%**	**21.64%**
18	**Distribution Loss (MU)**	**191.27**	**195.15**
19	**Retail Sales (LT & HT) (16-18)**	**706.71**	**706.71**

The Status of overall losses approved by the Commission within Manipur State as a ratio of state input:

Sl. No.	Overall Losses of Manipur State (2021-22)	Unit	Now Approved	Loss (%)
1	State Transmission Loss	MU	81.09	**8.25%**
2	Distribution Loss	MU	195.15	**21.64%**
3	**T & D Losses Total on Gross Input**	**MU**	**276.24**	**28.103%**
4	**Total Energy at State Periphery**	**MU**	**982.95**	**100%**
5	**Overall MSPDCL T&D Loss on Input energy**	**%**	**28.103%**	

The variation in losses quantum from MSPDCL filing is that due to ignoring adoption of NER Losses on IEX & Banking purchase quantity totally, might have done by MSPDCL with an intention to suppress the losses. What is observed is that the procedure of arriving energy balance is not standard in nature and keeps varying year to year to suit their convenient depends upon requirement at the time of filing. On account of this, the energy availability at state periphery is assessed wrongly by Licensee.

As seen from the above, it can be inferred that MSPDCL distribution losses would be certainly more than 20.50% (Approved) and also with the filed figure of 21.30% now projected.

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

MSPDCL receives allocated power from various Central Generating Stations in North Eastern Region, viz., NEEPCO, NHPC, Tripura-Baramura and OTPC-Palatana, and NTPC Bongaigaon for power purchase under long term PPAs. The proposed power purchase for FY 2021-22 has been projected in the MYT order based on the annual allocation of different power projects. MSPDCL is required to purchase the contracted quantum of power from different sources as projected in MYT order. Due to dam related problem in Kopili-I HEP, no power was available from the project. Recently, power supply from Kopili-II HEP has been started. So, small quantum has been considered from the same during FY 2021-22.

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 2021-22, actual power purchase during the first six months is considered along with the availability of plants in next six months. Further, based on the actual power procurement for FY 2020-21, year on year growth has been considered based on the planned allocation for projecting the power purchase for current financial year. Accordingly, the revised energy purchase has been proposed. The approved and proposed energy purchase for FY 2021-22 is detailed in the Table below:

Table 6.3: Energy Purchase for FY 2021-22 (MU) by MSPDCL

Sl. No.	Source of Power	FY 2021-22		
		Approved in ARR Order	Six Months Actuals	Revised projections
A	**CGS – NEEPCO**			
1	Kopili -I HEP	69.82	-	-
2	Kopili-II HEP	6.90	-	3.00
3	Khandong HEP	12.50	12.93	15.00
4	Ranganadi HEP	105.25	70.48	100.22
5	Doyang HEP	11.35	5.24	10.00
6	Assam GBPP	100.97	71.22	100.00
7	AGTPP	48.28	39.33	72.00
B	**CGS – NHPC**			
1	Loktak HEP Purchased Power	188.00	79.36	160.00
2	Loktak HEP- Free Power	55.90	31.19	58.00
C	**Others**			
1	Baramura GBPP Unit IV and V	55.40	18.41	36.00
2	OTPC Palatana	232.60	97.44	230.00
D	**New Plants**			
1	NTPC Bongaigaon Unit I to III	96.08	147.36	160.00
2	Pare HEP	25.45	25.88	45.00
3	Renewable – Solar	1.50		
4	Renewable – Non-Solar	1.00		
	Sub -Total	**1011.00**	**598.84**	**989.22**
5	**IEX Purchase**			**80.00**
6	**IEX Sale**			**-90.00**
7	**Banking Energy sale /Injected**			**-82.00**
8	**Banking Energy Drawn**			**115.83**
	Total Purchase	**1011.00**	**598.84**	**1013.05**

Apart from the above proposed CGS sources for power procurement, MSPDCL requires purchase/sell surplus power from IEX or required to use the banking facility to manage the deviation in power availability due to non-availability of power from hydro power plant due to hydrology failure or deviation in load requirement. Such deviations are real-time based on the demand and supply situations of DISCOM and CGSs; hence such deviations cannot be estimated precisely for current financial year at this time. MSPDCL proposes the above purchase/ sale based on current year's situation.

MSPDCL requests the Hon'ble Commission to approve the proposed net power purchase quantum of **1013.05 MU** for FY 2021-22 after considering the outside sale quantum.

Commission Analysis:

The Licensee's explanation for the purchases/sell at IEX are due to non-availability of Hydel Power Plant, is not really convincing to the Commission as the licensee had sold more power in the form of IEX sales in 2020-21(i.e.,111.41MU) compared to the 2019-20 (95.97MU) despite the shortage of hydro power is not acceptable. If there was shortage, they could have limited their Purchases to the state consumers' needs itself and should have not procure more power to the tune of 111.41MU and then resorted to sale at known loss of Rs.2.21 per each unit sold relevant to FY 2020-21 while the per unit procurement cost is at 4.54/kwh. The loss so sustained 2.33/kWh (4.54-2.21) by the Licensee will not be allowed for true-up when it is taken up. It is also noticed that there are no details with regard to UI Under/Over energy drawals indicated in the purchases. Hence, the Licensee shall not claim such transaction related cost in the next while providing the actuals.

6.5 Power purchase cost

The power purchase cost has been estimated based on current billing data as received by MSPDCL from various stations. The cost of power purchase from CGSs includes the fixed and variable cost. The fixed cost component is fixed irrespective of the energy drawl. The variable cost component depends on the approved tariff by CERC, actual energy drawl and the additional cost permitted due to change in fuel cost. The effective tariff of these sources is slightly varying from the approved figures as per submission made by CGSs. Hence, in order to estimate the Power Purchase cost for current financial year, appropriate station wise escalation in the effective tariff for FY 2020-21 is considered to estimate the power purchase cost for FY 2021-22. The escalation figures are used to obtain the required cost figure for FY 2021-22 as per current billing (soft copies of Power purchase bills of October 2021 are attached as Annexure 2). The proposed power purchase cost is shown in the Table below:

Table 6.4: Power Purchase Cost for FY 2021-22 (Total Cost in Rs. Cr, Avg. Tariff/rate in Rs./kWh)

Sl. No.	Source of Power	Approved in ARR Order	Revised projection

		Total Cost	Avg. Rate	Total Cost	Avg. Rate
A	**CGS – NEEPCO**	**116.26**	**3.27**		
1	Kopili -I HEP	7.60	1.09	0.04	0
2	Kopili-II HEP	1.02	1.48	1.34	4.46
3	Khandong HEP	2.37	1.90	3.52	2.34
4	Ranganadi HEP	25.87	2.46	26.54	2.65
5	Doyang HEP	6.549	5.77	8.89	8.89
6	Assam GBPP	48.466	4.80	44.99	4.50
7	AGTPP	24.381	5.05	30.06	4.18
B	**CGS – NHPC**	**66.78**	**2.74**		
1	Loktak HEP Purchased Power	66.78	3.55	59.55	3.72
2	Loktak HEP- Free Power	-	0.00	0.00	0.00
C	**Others**	**93.66**	**3.25**		
1	Baramura GBPP Unit IV and V	17.396	3.14	19.91	5.53
2	OTPC Palatana	76.71	3.30	93.55	4.07
D	**New Plants**	**123.03**	**9.92**		
1	NTPC Bongaigaon Unit I to III	108.95	11.34	165.72	10.36
2	Monarchak Gas Based PP (NEEPCO)	-	-	-	-
3	Kameng HEP Stage I	-	-	-	-
4	Kameng HEP Stage II	-	-	-	-
5	Pare HEP	12.85	5.05	22.53	5.01
6	Tuirial HEP	-	-	-	-
7	Lower Subansiri Stage I	-	-	-	-
8	Lower Subansiri Stage II	-	-	-	-
9	Renewable – Solar	0.676	4.50		
10	Renewable – Non Solar	0.546	5.46		
	Total Purchase	**437.87**	**4.33**	**476.63**	**4.82**
11	IEX purchase			22.40	2.80
12	IEX sale			-21.60	2.40
13	Supplementary bills			20.00	
14	Late payment surcharge				
15	REC (Certificates)	24.93		**0.00**	
	Total	**462.83**	**4.58**	**497.43**	**4.91**

Apart from the power purchase cost of generators, MSPDCL is required to pay charges towards UI over-drawal and under-drawal, purchase from IEX, supplementary bills etc. Such charges cannot be estimated now, as it will be based on bills to be produced by the generators. However, MSPDCL considers supplementary bills around 20.00 Cr for FY 2021-22. Hence, MSPDCL has proposed the net total power purchase cost of Rs. 497.43 Cr for FY 2021-22, after considering the surplus energy sales. MSPDCL, therefore, requests the Hon'ble Commission to approve the proposed power purchase costs for FY 2021-22.

Commission Analysis:

The Commission has approved the power requirement and the power purchase cost during the FY 2021-22 is as follows:

Table-6.5: – Commission approved Power purchase cost for FY2021-22

Sl. No.	FY 2021-22 Source of Power	Energy MU	Total Cost (Rs Cr)	Avg Rate (Rs/kWh)
A	**CGS – NEEPCO**	**300.22**	**115.38**	**3.84**
1	Kopili -I HEP	-	0.04	0
2	Kopili-II HEP	3.00	1.34	4.47
3	Khandong HEP	15.00	3.52	2.35
4	Ranganadi HEP	100.22	26.54	2.65
5	Doyang HEP	10.00	8.89	8.89
6	Assam GBPP	100.00	44.99	4.50
7	AGTPP	72.00	30.06	4.18
B	**CGS – NHPC**	**218.00**	**59.55**	**2.73**
1	Loktak HEP Purchased Power	160.00	59.55	3.72
2	Loktak HEP- Free Power	58.00	-	0.00
C	**Others**	**266.00**	**113.46**	**4.27**
1	Baramura GBPP Unit IV and V	36.00	19.91	5.53
2	OTPC Palatana	230.00	93.55	4.07
D	**New Plants**	**205.00**	**188.25**	**9.18**
1	NTPC Bongaigaon Unit I to III	160.00	165.72	10.36
2	Para HEP	45.00	22.53	5.01
3	Renewable – Solar	-	-	
4	Renewable – Non-Solar	-	-	
	CGS Plants Energy Total	**989.22**	**476.64**	**4.82**
5	IEX purchase	80.00	22.40	2.80
6	Banking energy returned	115.83	--	--
7	**Energy from all CGS & Others**	**1185.05**	**499.04**	**4.21**
8	**Inter -State Losses at NER @ 2.54%**	**30.10**	**0**	**0**
9	**CGS & Other Energy after Losses**	**1154.95**	**499.04**	**4.32**
10	IEX sales	-90.00	-21.60	2.40
11	Banking sale to Outsiders	-82.00	-	--
12	Supplementary bills		20.00	
13	Late payment surcharge			
14	**REC Certificates (RPO Obligation)**	**0**	**28.33**	
15	**Total Purchase cost approved**	**982.95**	**525.77**	**5.35**

The Commission had not considered any Renewable Power Purchase Obligation (RPPO) while approving the above provisional power purchase cost as the period is almost coming to an end by the time the order is issued. As per the above energy purchases, MSPDCL had acquired about 172MU (i.e.,82+90) of surplus quantity from various stations costing about Rs.52.704 Crs [(172*4.32)-21.60], besides the IEX purchases of 80.00MU for an amount of Rs.22.40 Crs and reasons for such excess procurement was not explained. The revenue received from Outside State sales has been adjusted against the cost of power purchase so preferred by the Licensee instead of conventionally showing it under the revenue realization.

In the Purchase cost by MSPDCL, it had ignored to incorporate a value towards RPO Certificate amount totally. **However, the MSPDCL shall purchase requisite REC certificates worth Rs.28.33 Crs against Solar as well as Non-solar sources RPO obligation (towards the assessed quantity of 113.13MU) in order to comply with their RPPO based on their various sources of power purchase proposed to transact during FY2021-22 based on present filing. This amount was factored in before deriving power purchase cost by the Commission.**

6.6 Transmission cost

The transmission charges include the charges paid to PGCIL, NERLDC, MSPCL and SLDC charges. The summary of transmission charges approved by Hon'ble Commission for current year along with the proposed charges is presented in the following table. PGCIL charges are consisting of different types of bills produced by PGCIL like POC bill 1, POC bill 3 etc. The charges have been increased significantly from FY 2019-20. Therefore, considering the same, PGCIL charges have been estimated as 5% more than previous year's actual figure. However, this is very conservative estimate and likely to be more in case CERC approves the charges as per CERC Tariff Regulations for 2019-24 period. MSPCL charges have been considered as per approved figure for FY 2021-22. The same would be revised after finalization of annual account. The SLDC and NRLDC charges are considered as 5% higher on year-on-year basis on the actual charges for FY 2019-20.

Table 6.6: Transmission Charges for FY 2021-22 (Rs. Crore)

Sl. No.	Particulars	Approved in ARR Order	Revised projection	Commission Approved
1	PGCIL Charges	83.06	75.04	75.04
2	MSPCL Charges	96.27	96.27	70.96
3	SLDC Charges	0.815	0.74	0
4	NERLDC Charges	0.705	0.67	0.67
	Total	**180.85**	**172.72**	**146.67**

MSPDCL requests the Hon'ble Commission to approve the proposed Transmission Charges of **Rs. 172.72 Crore** for FY 2021-22.

Commission Analysis:

It is surprising to find an altogether different figure from that was proposed in the MSPCL ARR submission for their transmission charges, though it is stated that the figures are adopted from the MSPCL ARR proposal. Since MSPCL ARR is examined and revised by Commission for FY2021-22 to be Rs.70.96Crs. Hence, all the transmission charges put together should be as Rs.146.67 Crs only (as indicated in Table above) after correcting the MSPCL revised Transmission charges and disallowing the SLDC charges proposed. However, the Commission prefers to show Inter-State and Intra-State transmission charges separately and the same may be adopted by MSPDCL from next filing.

6.7 Operation & 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.

For the purpose of APR for FY 2021-22, MSPDCL has proposed the O&M Expenses as follows:

Table 6.7: O&M Expenses for FY 2021-22 (Rs. Crore)

Sl. No	O&M Expenses	Approved (T.O 26.4.21)	Revised for APR
1	Employee Expenses	116.43	67.84
2	R&M Expense	19.44	12.53
3	A&G Expense	10.10	10.82
	Total O&M Expn	**145.97**	**91.19**

The employee cost for FY 2021-22 has been proposed based on the actual expenses for FY 2020-21. The employee cost for 2021-22 has been considered based on actual data of FY 2021-22 up to Oct 2021 in old pay scale and estimated expenses for remaining period with new pay scale (7th pay). The employee cost includes staff expenses plus part payment to be made for arrears towards 7th pay commission wage revision.

Details of Employee Cost for FY 2021-22

Sl. No.	Details	Amount (Crs)
1.	Staffs salaries	65.49
2.	NEPLE (Work Charged) & PLS (Muster Roll)	

Sl. No.	Details	Amount (Crs)
3.	Daily wages	
4.	NPS Contribution	1.68
5.	Pay Arrear	0.36
6.	Medical Reimbursement	0.30
7.	New Recruitment	0.00
Grand Total		**67.84**

In the case of R&M expenses, the projections have made with 5.72% escalation on the actual expenses incurred in FY 2020-21. Considering the growth of network, additional Rs 1 Crore has been projected under R&M expenses. For A&G expenses, escalation of 5.72% has been considered on expenses of FY 2020-21. Additionally, Rs 3 Crore is considered as special A&G expenses. The need for special A&G expenses is already recognized and approved by Hon'ble Commission in its earlier orders.

Accordingly, MSPDCL submits Hon'ble Commission to approve the proposed O&M costs of Rs. 91.19 Crore for FY 2021-22.

Commission Analysis:

In case of Employee cost, the narration does not indicate any new recruitment of staff and hence the employee cost projected from 63.15 crs to Rs.65.49Crs is only considered for FY2021-22 but not at Rs.67.84 crs as claimed in the APR. The R&M expenses are approved at Rs.11.25 Crs and A&G Expenses at 8.45crs are allowed at the level as proposed by the Licensee.

Table: 6.8 - O&M Expenses approved by the Commission for FY2020-21

Sl. No.	Details of O&M Expenses	Now Approved (Rs.Crs)
1.	Employee Cost	**65.49**
2.	R&M Expenses	**11.25**
3.	A&G Expenses	**8.45**
4.	**Total O&M Expenses**	**85.19**

Thus, the total O&M Expenses provisionally approved for FY2021-22 is at Rs.85.19Crs as against Rs.91.91Crs after Commission review.

6.8 Capitalisation

MSPDCL undertakes capital expenditure to meet the growing demand for electricity in the State and for system augmentation and strengthening. MSPDCL receives significant grant from the Central / State Government for creation of capital asset, with the balance funding sourced from different loans. The capitalization is estimated based on status of various ongoing projects which have started in the past. These projects are Central Government projects which have been implemented in various states including Manipur.

The details of actual capitalization achieved in FY 2020-21 and proposed capitalisation for FY 2021-22, is shown in the Table below:

Table 6.9: Capitalisation for FY 2021-22 (Rs. Crore)

Particulars	Actual FY 2020-21	projection FY 2021-22
Opening Balance of CWIP (A)	1520.82	1533.33
Fresh Investment during the year (B)	24.71	292.55
Investment capitalised out of opening CWIP (C)		
Investment capitalised out of fresh investment (D)		
Total Capitalisation during the year (C+D)	12.19	1409.50
Closing Balance of CWIP (A + B - C - D)	1533.33	416.38

Details of fresh invest proposed to be made during the year is given below:

Name of the Project / Scheme	Amount in Rs Crore
RAPDRP - A (13 town)	**1.00**
RAPDRP - B (2 town)	**0.00**
IPDS	**34.34**
RGGVY X	**7.30**
RGGVY XI	**19.35**
RGGVY XII Programme	**58.56**
DDUGJY new	**22.84**
DDUGJY Additional	**59.49**
Prepaid meter	**74.00**
High mast	**15.67**
TOTAL	**292.55**

Proposed capitalization for FY 2021-22 is detailed below.

Name of the Project / Scheme	Amount in Rs Crore
RAPDRP - A (13 town)	408.72
RAPDRP - B (2 town)	31.55
IPDS	133.43
RGGVY X	84.21
RGGVY XI	332.18
RGGVY XII Programme	204.73
DDUGJY new	54.96
DDUGJY Additional	70.05
Prepaid meter	74.00
High mast	**15.67**
TOTAL	**1409.50**

As most of the schemes have to be completed during the present year, the same has been assumed to be capitalized during FY 2021-22. MSPDCL requests the Hon'ble Commission to kindly approve the proposed capitalization of Rs. 1409.50 Crore for FY 2021-22.

Commission Analysis:

In the present filing, the licensee had simply provided brief details of investments without indicating the Scheme-wise in-depth details of the schemes being undertaken to assess the need for their execution during FY 2021-22. Of the above details in fresh investments as well as in asset Capitalisation, the Prepaid meter work of Rs.74Crs and High Mast light work of Rs.15.67Crs is common which is fully financed by REC Loan. There is no clarity as to why only Rs.74Crs were reflected for prepaid meter work, when the loan proposal was made for R.178Crs in 2021-22 ARR filing itself. If so, is that only Rs.74Crs of loan amount only drawn from REC for prepaid meters during FY 2021-22 instead of Rs.178Crs and the interest on such is preferred accordingly.

Since the Investments of 15.67CRs now planned for High-Mast Lights pertains to **MAHUD** (Department of Municipal Administration, Housing & Urban Development, Govt of Manipur) and hence these investments are not relevant for Electricity sector. The Same thing is reiterated in the Supply code of this commission. The relevant provision of the supply code is appended at the end as annexure-VIII.

None of the above investment schemes were submitted to the Commission for approval for the said investment plan in the past before their execution was taken up by MSPDCL. *Hence, it is presumed that if at all anything is needed for investments would be met from those grants acquired from Central/State Govt of Manipur but not from own resources of MSPDCL.*

Consequently, the asset capitalization amounting to Rs.1409.50 Crs now proposed reduced by Rs.15.67Crs pertaining to High-Mast Lights amounting to Rs.1393.83 crs would not be allowed to claim for depreciation charge under Regulatory principles, as it is construed that these assets are being created purely with the Capital Grants only. The ambitious capitalisation of Rs.1409.50 Crs in FY 2021-22 appears to be unbelievable considering the past capitalisation tack and without any reasonable documentary proof in support of technical and financial closures of such projects for commission scrutiny. Hence, the same will not be considered for allowing depreciation as projected by the Licensee without verification of the relevant year audited actuals.

6.9 Interest on Working Capital

Interest on the working capital has been projected for FY 2021-22 as follows:

Table 6.10: Interest on Working Capital for FY 2021-22 (Rs. Crore)

Sl. No.	Particulars	Approved for FY 2021-22	Revised projection for FY21-22
1	O&M expenses for 1 month	Rs. 8.31 Crore claimed as IoWC disallowed by Commission in ARR Order	7.60
2	Maintenance spares @ 1% of GFA		21.66
3	Receivables equivalent to one month of expected revenue at prevailing tariffs		40.75
4	Consumer Security Deposit		15.63
	Total		**54.38**
	SBAR as on 01.04.2018		13.45%
	Interest on Working Capital		**7.31**

While estimating the interest on working capital the proposed O&M expenses of one month, 1% of proposed GFA as maintenance spares, one month's receivable at existing tariff and accrued security deposit as on 1 April of respective year has been considered. Approved SBAR has been considered. MSPDCL requests the Hon'ble Commission to approve the IoWC of Rs 7.31 Crore for FY 2021-22..

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 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. It is also a fact that REC is providing a financial assistance to the tine of Rs.178CRs for installation of prepaid meters in order to bring down the AT&C Losses to 15% from the present level. As per the DPR submitted by MSPDCL, with the installation of prepaid meters, there accrues an additional revenue of Rs.5Crs in each month to the entity.

Thus, the Commission fully disapproves interest on working capital claim of Rs.7.31 Cr for FY 2021-22 preferred by MSPDCL.

6.10 Gross Fixed Assets and Depreciation

The closing balance of Gross Fixed Asset (GFA) for FY 2020-21 has been considered as the opening balance of GFA for FY 2021-22. The depreciation should be computed under straight-line Method, at the rates specified in the JERC (MYT) Regulations, 2014, on the GFA in use at the beginning of the year and addition in assets during FY 2021-22. As the projects are capitalised almost through grant, the actual depreciation for FY 2020-21 is considered as depreciation for FY 2021-22 also. The depreciation is applicable for non-grant assets only. The Expenses towards depreciation for FY 2021-22 is shown in the Table below:

Table 6.11: Depreciation for FY 2021-22 (Rs. Crore)

Sl. No.	Particulars	Approved in ARR Order	Revised projections
1	**Opening GFA**	**762.28**	**756.50**
2	**Addition during the Year**	**0.00**	**1409.50**
3	**Retirement**		
4	**Closing GFA**	**762.28**	**2166.00**
5	**Average GFA**	**762.28**	**1461.25**
6	**Average Rate of Depreciation**	**2.42%**	
7	**Depreciation**	**18.45**	
8	**10% of Gross Depreciation**	**1.84**	**13.06 (actual calculated for past year)**

MSPDCL requests the Hon'ble Commission to approve the Depreciation of Rs. 13.06 Cr for FY 2021-22.

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.1409.50 Crs as shown for the year is not eligible for depreciation under the regulatory accounting ambit.

The reduction of opening GFA from Rs.762.28Crs to Rs.756.50Crs has not be explained at all in the ARR submission. This indicates, the figures are being adopted quiet arbitrarily for the sake of ARR filing and not with due diligence. The depreciation amount now approved by the Commission for FY 2021-22 without considering the capitalised addition made with the govt subsidy and in the absence of audited actuals figures is indicted below:

Table 6.12 – Depreciation for FY 2021-22 by the Commission

Sl.No.	Particulars (2021-22)	Commission Approved
1	Opening GFA	756.50
2	Addition during the Year	0
3	Retirement	0
4	Closing GFA	756.50
5	Average GFA	756.50
6	Average Rate of Depreciation	2.42%
7	Depreciation	18.31
8	**10% of Gross Depreciation**	**1.83**

The Commission approves the nominal depreciation of **Rs.1.83 Crs** calculated at 10% of the Regulatory accounting based allowable depreciation for FY 2021-22. The actual depreciation allowable will be decided later upon submission of Audited Accounts up to FY 2021-22.

6.11 Interest on Loan

The major part of capital expenditure undertaken by MSPDCL is funded by the 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 equal to the actual repayment, in accordance with the JERC (MYT) Regulations, 2014, 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:

Interest on Loan on ongoing projects for FY 2021-22 (Rs. Crore)

Sl. No.	Particulars	REC 1	REC 2	Total
1	Opening Loan	27.916	9.3954	37.31
2	Addition during the year	0	0	0.00
3	Repayment during the year	3.988	2.9049	6.89
4	Closing Loan	23.928	14.67	38.60
5	Average Loan	25.922	12.0327	37.95
6	Rate of Interest	11.70%	11.00%	0.23
7	Interest & Finance Charges	4.140	2	6.14
8	Interest on CSD			0.00
	Total Interest	**4.140**	**2.00**	**6.14**

Additionally, under the Aatma Nirbhar Bharat scheme, MSPDCL has availed loan from PFC and REC. The interest for the same has been considered as Rs. 10.59 Crore. MSPDCL got government approval of government guarantee to avail loan from REC for purchase of 2 lakh prepaid meter (Rs 178 Crore) and 130 WLED streetlight and 20 m high mast for district headquarters (Rs 15.67 Crore). The loan repayment period is 13 years with 3 years' moratorium and rate of interest is 10.75%. The interest to be paid during the current year has been considered for FY 2021-22. As moratorium period is availed by MSPDCL as per loan terms, principal repayment is not considered. The same will be added in the respective year's interest when MSPDCL has to pay the same as per the loan repayment schedule.

Total interest on loan is given below.

Table 6.13: Interest on Loan for FY 2021-22

(Rs. Crore)

Sl. No.	Particulars	Tariff Order 26.4.2021	Revised for APR	Commission approved
1	PFC/REC loan on-going projects	4.38	6.14	Not allowed
2	COVID loan under Aatma Nirbhar Bharat	10.59	10.59	10.59
3	Loan for purchase of Prepaid meters	19.58	2.36	1.17
4	Loan for LED street light & High Mast	1.72	0.72	Not allowed
	Grand Total	**36.27**	**19.81**	**11.76**

Commission Analysis:

The entire ARR filing submission is silent about the details of the amounts drawn against the above of two loans from REC and the purpose for which it is being utilised and from which specific cut-off date is not furnished. In the absence of non-furnishing of this vital information, the revised interest amount projected by the Licensee without making any comparison to that was already approved in the Tariff Order is not acceptable by the Commission and hence the interest on these loan as was approved at Rs.4.84 Crs against REC- & REC-2 Loans for FY 2021-22 is disallowed for the reason, these loans are eligible for conversion to grants and that aspect needs to be examined by the Commission. In addition, the interest of Rs.0.72Crs on High-Mast lights is allowed disallowed. Duly considering the other new loans obtained, the overall interest on Loan provisionally allowed for **Rs.11.76crs.** The actuals incurred will be considered at the time of truing up of the expenditure of FY 2021-22 later, upon their submission of true-up based on audited actuals.

6.12 Return on Equity

MSPDCL has considered the Return on Equity (RoE) for FY 2021-22 same as projected by MSPDCL earlier. MSPDCL requests the Hon'ble Commission to approve the Return on Equity of Rs. 1.95 Crore for FY 2021-22.

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.

6.13 Write-off of Bad Debts

MSPDCL has considered nominal amount of Rs 3 crore as Write-off of Bad Debts for

FY 2021-22 and requests the Hon'ble Commission to approve the same. The actual would be submitted after annual account has been prepared.

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 dues accumulated to the tune of above Rs.567.40 Crs to the end of 31.03.2020 as was submitted in reply in SAC meeting held. This can be allowed only when Commission is thoroughly satisfied that despite the best of efforts the dues are proved to be non-recoverable and the onus of such proving rests with the MSPDCL.

6.14 Non-Tariff income

The Non-Tariff Income for FY 2020-21 has been 6.17 Crore. An escalation of 5% has been considered over and above the NTI for FY 2020-21 and accordingly the non-tariff income has been proposed as shown in the table below:

Table 6.14: Non-Tariff Income for FY 2021-22 (Rs. Crore)

Sl. No.	Particulars	Approved (T.O 26.04.2021)	Revised For 2021-22
1	Non-Tariff Income	6.80	6.48

MSPDCL requests the Hon'ble Commission to approve the actual Non-Tariff Income of **Rs. 6.48 Crore** for FY 2021-22.

Commission's analysis

Keeping in view of the 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 above Rs.6.48 Crs as projected. The projection of NTI on a percentage escalation is not correct approach and it shall be based on the outstanding dues and the need for enhancing the revenue collections. Therefore, the Commission prefers to enhance it to Rs.8.55 Crs for FY 2021-22 but the licensee cannot make abnormal improvement in this juncture of ending of this financial year. **The projection should have been more at the time of filing itself.**

6.15 Aggregate Revenue Requirement

Based on the above component-wise expenses, the Aggregate Revenue Requirement computed for FY 2021-22 by MSPDCL against the figures approved by the Commission in the Tariff Order for FY 2021-22, is given in the Table below:

Table 6.15: Aggregate Revenue Requirement for FY 2021-21 (Rs. Crore)

Sl.No.	Particulars	Approved in ARR Order	Revised projection
1	**Power Purchase or Energy Available (MU)**	1011.00	989.22
2	**Sale of Power (MU)**	677.13	706.71
3	**Distribution Loss (%)**	20.50%	21.30%
A	**Expenditure**		
1	Cost of power purchase	462.83	497.43
2	Inter-State Transmission charges	83.06	75.04
3	Intra-state Transmission charges	96.27	96.27
4	SLDC & NERLDC Charges	1.52	1.41
5	Wheeling charges payable to other DLs		-
6	O&M Expenses	**145.97**	**91.19**
	Employee Expenses	*116.43*	*67.84*
	R&M Expense	*19.44*	*12.53*
	A&G Expense	*10.10*	*10.82*
7	Depreciation	1.84	13.06
8	Advance against depreciation	--	--
9	Interest on Loan	35.79	19.81
10	Interest on Working Capital	--	7.31
11	Bad Debt	--	3.00
	A: Total Cost	**827.08**	**804.52**
B	Add: RoE	1.56	1.95
	Add: Income Tax	0	-
	B: Total	1.56	1.95
	Total ARR: A+B	**828.84**	**806.47**
C	Less: Non-Tariff Income	6.80	6.48
D	Less: Efficiency Gains	16.00	-
	Income from other business allocated to Licensed business		-
	C&D Total deductions	22.80	6.48
D: Aggregate Revenue Requirement (A+B-C-D)		**806.04**	**800.00**

The ARR approved for FY 2021-22 is Rs. 806.04 Crore. The proposed ARR for FY 2021-22 is Rs. 800.00 Crore. MSPDCL requests this Hon'ble Commission to approve the same.

Commission Analysis:

The details of the ARR as has been approved by the Commission after thorough scrutiny of all the cost elements for FY 2021-22 is as follows:

Table 6.16: Aggregate Revenue Requirement for FY 2021-22 (Rs. Crore)

Sl.No.	Energy Particulars	MU
1	**Gross Energy Purchases**	1185.05
2	**Less: Inter State Transmission Losses @ 2.54%**	30.10
3	**Less: Outside State Sales& Banking Sale**	172.00
4	**Less: State Transmission Losses @ 8.25%**	81.09
5	**Less: Distribution Losses @ 21.64%**	195.15
6	**Retail Sale of Power**	706.71
A	**Approved Expenditure**	**Rs.Crs**
1	Cost of power purchase	497.44
2	**REC Certificate towards RPO Obligation**	**28.33**
3	Inter-State Transmission charges	75.04
4	Intra-state Transmission charges	70.96
5	SLDC & NERLDC Charges	0.67
6	**O&M Expenses**	85.19
	a) Employee Expenses	65.49
	b) R&M Expense	11.25
	c) A&G Expense	8.45
7	Depreciation	1.83
8	Interest on Loan (excl. High Mast Loan Interest)	11.76
9	Interest on Working Capital	0
10	Bad Debt	0
11	Return on Equity	1.56
	Gross ARR - approved	**772.78**
B	**Deductions**	
12	Less: Non-Tariff Income	8.55
13	Less: Efficiency Gains	0
	B: Total deductions	**8.55**
14	**Aggregate Revenue Requirement (A-B)**	**764.23**

6.16 Revenue from Sale of Power

The revenue from sale of power to consumers at the existing tariff is estimated as Rs. **526.76** Crore for FY 2021-22. The category-wise revenue realisation projection is as follows:

Table 6.17: Consumer Category-wise revenue projection for 2021-22 at existing tariff

Sl. No.	Category of Consumers (FY 2021-22)	Approved Sales	Proposed Revenue
	I. LT Supply	**(MU)**	**(Rs.Crs)**
1.	**Domestic (KutirJyoti)**		
	All Units	4.13	1.30
	Sub Total (a)	**4.13**	**1.30**
2.	**Domestic (General)**		
	First 100 kWh	400.66	246.53
	Next 100 kWh	41.11	30.88
	Balance>200 kWh	16.32	14.18
	Sub Total (b)	**458.09**	**291.59**
	Total Domestic (I=a+b)	**462.22**	**292.89**
3.	Commercial		
	First 100 kWh	31.33	24.86
	Next 100 kWh	8.89	7.39
	Balance>200 kWh	23.35	21.57
	Total Commercial LT (II)	**63.57**	**53.83**
4.	Public Lighting - LT	3.66	3.56
5.	Public Water Supply-LT	1.28	1.30
6.	Agri& Irrigation-LT	1.15	0.55
7.	Small Industry-LT	22.28	12.42
	Sub Total Other LT (III=4+5+6+7)	**28.37**	**17.83**
	II. H.T Supply		
8.	Commercial-HT	21.54	24.26
9.	Public Water Supply-HT	23.49	26.97
10.	Agriculture & Irrigation-HT	0.75	0.49
11.	Medium Industry-HT	4.49	4.15
12.	Large Industry-HT	10.15	11.50
13.	Bulk Supply-HT	92.14	94.85
	Sub Total Other HT (IV=8+9+10+11+12+13)	**152.55**	**162.23**
	Grand Total(I+II+III+IV)	**706.71**	**526.76**

Apart from the revenue from sales to the consumers, MSPDCL receives revenue from sale of surplus power. The same has been already considered in the power purchase cost. Gross power purchase cost has been reduced by income of sale of surplus power to get the net power purchase cost. The rate of the sale/purchase has been considered as per existing rate realised to MSPDCL.

Accordingly, MSPDCL requests Hon'ble Commission to approve the total revenue for FY 2021-22 as given above.

Commission Analysis:

The Commission wishes to adopt the same amount of revenue realization as has been projected by MSDPCL for the FY 2021-22 at the existing Tariff without any change in the figures or values and the brief details are as follows:

Table 6.18: Commission approved Revenue from Retail Sale for FY 2021-22

Sl. No.	Consumer Category (2021-22)	Sales (MU)	CPU (Rs./kWh)	Revenue (Rs.Crs)
A	**LT Supply**			
1	Kutir Jyoti	4.13	3.15	1.30
2	Domestic	458.09	6.37	291.59
3	Commercial-LT	63.57	8.47	53.83
4	Small & Cottage Industry	22.28	5.57	12.42
5	Public Lighting-LT	3.66	9.73	3.56
6	Public Water Works LT	1.28	10.16	1.30
7	Agriculture & Irrigation LT	1.15	4.78	0.55
	LT Supply - Sub Total	**554.16**	**6.58**	**364.55**
B	**HT Supply**			
8	Commercial-HT	21.54	11.26	24.26
8	Medium industry-HT	4.49	9.24	4.15
9	Large industry-HT	10.15	11.34	11.50
10	Bulk supply-HT	92.14	10.29	94.85
11	PWS HT	23.49	11.48	26.97
12	Agriculture HT	0.75	6.40	0.48
	HT Supply - Sub Total	**152.55**	**10.63**	**162.21**
13	**Grant Total (LT & HT)**	**706.71**	**7.45**	**526.76**

6.17 Revenue Gap

The Revenue Gap as proposed by MSPDCL for FY 2021-21 is shown in the Table below:

Table 6.19: Revenue Gap by MSPDCL for FY 2021-22 (Rs. Crore)

Sl. No	Particulars	FY 2021-22
1	Net ARR	800.00
2	Total Revenue	526.76
3	**Revenue Gap before Govt Subsidy**	**273.33**
4	State Government Revenue Subsidy	301.38
5	**Unmet Revenue Gap**	**-28.15**

As can be seen from the above Table, the Revenue surplus for FY 2021-22 is Rs 28.15 Crore. This has been estimated with the Government subsidy of Rs. 301.38 Crore for FY 2021-22, as per present estimate available with MSPDCL. However, actual payment towards government subsidy will get finalised after completion of the year and as per subsidy actually released by Govt. Therefore, the same is beyond control of MSPDCL. So, MSPDCL proposes to approve the revenue gap/surplus as indicated above for FY 2021-22, as per present estimation about government subsidy.

Commission Analysis:

Upon review all the cost element by the Commission for FY 2021-22 the final revenue gap is arrived at after considering the Government Subsidy amount as reflected in the Tariff Order Dt 26.04.2021 is indicated in detail which works-out to **Rs.78.15 Crs of surplus** has been deduced as per the now approved APR values.

Table 6.20: Revenue Gap derived by the Commission for FY 2021-22

Sl. No	Details of elements (FY2021-22)	Amount Rs.Crs
1	Net Aggr. Revenue Requirement	764.23
2	Total Retail sales Revenue proposed **(Excl. IEX units sale yield of Rs.21.60Crs)**	526.76
3	**Revenue Gap before Govtt. subsidy**	**237.47**
4	State Government Revenue Subsidy (now proposed in APR filing for FY21-22)	301.38
5	**Revenue Surplus → (4-3)**	**+63.91crs**

However, the actual revenue surplus or deficit gap dependents upon:

(a) the amount of revenue that is going to be realized, which again depends upon;

(b) different category wise sales-mix quantity of units actually sold including Outside state sales and it also revolves on;

(c) amount of Government subsidy to be received by the end of the financial year FY 2021-22.

(d) actual amount of REC Certificates procurement needed to comply with RPO obligation latest order issued by GOI, **MOP vide its order No.23/03/2016-R&R, Dt:29th January 2021.**

Thus, the real revenue & financial surplus/gap occurring to MSPDCL would be known at a later date which will be dealt with suitably during truing-up of the expenditure based on the finalized audited annual accounts statements for FY 2021-22.

7.ARR & Retail Tariff proposal for FY 2022-23

7.1 Background

The Petitioner humbly submits that the present ARR projections are based on actual expenses of FY 2020-21 and first six-month data available for FY 2021-22. The comparison of the projected expenses and revenue with the expenses and revenue considered by the Hon'ble Commission in the ARR for FY 2022-23 in the JERC tariff Order 1 of 2018 dated 12 March 2018 (henceforth referred as 'Approved' order with reference to FY 2022-23) has been presented. However, the Petitioner requests the Hon'ble Commission to review the expenses and revenue for FY 2022-23 based on the trend observed as per actual data of previous years. The values presented in the approved ARR order of 2018 were based on data correspond to FY 2017-18 and its earlier years and may not capture the present situation of the Petitioner. The ARR values as approved in Order 1 of 2018 have been revised appropriately by Hon'ble Commission in its corresponding orders passed post 2018. Therefore, the ARR figures have been projected based on actual figures of past years which can rightly indicate the trend and hence, the estimation made here would be optimal for FY 2022-23.

7.2 Energy Sales

MSPDCL caters to a diverse consumer mix comprising LT domestic, LT commercial, HT commercial, LT Industry, HT Industry, public lighting, public water works and agriculture consumers. LT Domestic category is the largest consumer category and comprises around 65% to 68% 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, Saubhagya, etc. Based on current year's projection, the sales for FY 2022-23 have been projected. Due to large scale installation of pre-paid meters across the State, consumer numbers have been increased in various categories (basically domestic), which have been captured while projecting the consumer numbers. The category-wise energy sales as compared to the energy sales approved by the Hon'ble Commission for FY 2022-23 are given in the Table below:

Table 7.1: Category-wise Energy Sales (MU) for FY 2022-23

Sl. No.	Consumer Category	Approved in MYT Order	2022-23 Projected
A	**LT Supply**		
1	Kutir Jyoti	18	4.23
2	LT Domestic	454	470.70
3	Commercial LT	56	65.16
4	Cottage and Small Industry	23	22.95
5	Public Lighting	5	3.69
6	Public Water-works	2	1.29
7	Irrigation and Agriculture	1.30	0
	LT Supply Sub Total	**559.30**	**568.03**
B	**HT Supply**		
1	Commercial	8	21.97
2	Medium Industry	5	4.62
3	Large Industry	7	10.66
4	Bulk Supply	143	93.98
5	Public Water-works	19	24.66
6	Irrigation and Agriculture	0.85	0.75
	HT Supply Sub Total	**182.85**	**156.65**
	Total LT & HT	**742.15**	**724.68**

The Commission has approved the energy sales of 742.15 MU for FY 2022-23. Based on the actual sales of FY 2020-21 and projection for FY 2021-22, the petitioner now submits the revised projection of energy sales for FY 2022-23 which is 724.68 MU. Historical sales of last six years (FY 2015-16 to FY 2020-21) have been reviewed. The growth rate (CAGR basis) of various time periods has been calculated. The same is given below.

Category-wise Energy Sales growth rate (CAGR basis) (FY 2015-16 to FY 2020-21)

Consumer category	5 Year CAGR	3 Year CAGR	2 Year CAGR	1 Year growth
KutirJyoti	-23.612%	-39.370%	6.655%	4.752%
Domestic	9.655%	10.093%	8.400%	9.006%
Commercial LT	9.362%	9.607%	5.476%	1.102%
Public lighting LT	-2.604%	-0.460%	-0.005%	0.990%
Public waterworks LT	-40.235%	0.869%	0.900%	1.008%
Agriculture and irrigation LT	-8.528%	-4.040%	-0.005%	0.990%
Cottage and small industry	5.950%	3.960%	4.834%	3.201%
Commercial HT			5.925%	2.200%
Public waterworks HT		4.099%	5.000%	5.250%
Agriculture HT		-3.757%	-0.005%	0.990%

Consumer category	5 Year CAGR	3 Year CAGR	2 Year CAGR	1 Year growth
Medium Industry HT	6.767%	5.310%	4.489%	3.180%
Large Industry HT	16.632%	22.112%	14.075%	11.830%
Bulk Supply HT	0.129%	-5.379%	7.471%	5.500%

Considering the present sale position and pre-paid metering growth trend, appropriate growth rate over projected sales of FY 2021-22 has been assumed to find out sales for FY 2022-23. There is no major increase / decrease foreseen in any of the consumer category; it is assumed that the growth in energy sales for FY 2021-22 and 2022-23 will be stable. As in the initial period of operation of MSPDCL the consumer growth was substantial, which is not increasing rapidly, the historic growth rate may not be applicable, especially in domestic category. Hence, with consideration of present condition, the consumer category wise growth rate assumed for FY 2022-23 is given below.

Consumer category	Growth rate
KutirJyoti	2.5%
Domestic	2.5%
Commercial	2.5%
Public lighting LT	1%
Public waterworks LT	0.08%
Cottage and small industry	3%
Commercial HT	2%
Public waterworks HT	5%
Agriculture HT	1%
Medium Industry HT	3%
Large Industry HT	5%
Bulk Supply HT	2%

MSPDCL has reviewed the connection given to LT -irrigation and agriculture consumers and found that the consumers are using the connection for domestic purpose and therefore, re-classified them as domestic category. So, considering the present trend, ***projected sale is nil under LT -irrigation and agriculture category.***

Accordingly, MSPDCL requests the Hon'ble Commission to approve the total energy sales of **724.68 MU** for FY 2022-23.

Commission Analysis:

The Energy sales projection appears realistic and Commission approves the figures indicated in the ARR filings for FY 2022-23 and the approved sales volume values are tabulated below:

Sl. No.	Category Sales (MSPDCL)	FY 2021-22		FY 2022-23	
		(MU)	(%)	(MU)	(%)
1	Kutir Jyothi	4.13	0.58%	4.23	0.58%
2	Domestic	458.09	64.82%	470.70	64.95%
3	LT Commercial (*)	63.57	9.00%	65.16	8.99%
4	Cottage & Small Industrial	22.28	3.15%	22.95	3.17%
5	Public Lighting	3.66	0.52%	3.69	0.51%
6	LT – Public Water Works	1.28	0.18%	1.29	0.18%
7	Irrigation & Agriculture	1.15	0.16%	0	0%
	LT Total	**554.16**	**78.41%**	**568.03**	**78.38%**
8	HT Commercial (*)	21.54	3.05%	21.97	3.03%
9	HT Medium Industrl	4.49	0.64%	4.62	0.64%
10	HT Large Industrl	10.145	1.44%	10.66	1.47%
11	HT -Bulk Supply (*)	92.135	13.04%	93.98	12.97%
12	HT - PWWorks	23.49	3.32%	24.66	3.40%
13	HT- Irrigation & Agriculture (*)	0.75	0.11%	0.75	0.10%
	HT Total	**152.55**	**21.59%**	**156.65**	**21.62%**
	LT & HT Total	**706.71**	**100%**	**724.68**	**100%**

As seen from the comparative table between 2021-22 and 2022-23, the only significate improvement shown is the increased HT consumer mix over the LT consumers in 2022-23 over last year values. If the HT mix is predominant over LT consumption in the overall mix indicates the improvement in the loss reduction aspect and better revenue collection progress. Therefore, utility shall endeavour to push-up the HT consumption more in the overall mix to see better financial position and also achieves desirable AT&C loss levels and it also provides some cushion in the tariff revision aspect with more of HT consumption. As of now, the entity is supplying about 79% of its sales volume to LT consumers and compromising with 21% of HT usage. This Scenario must be changed to the advantage of the utility for better prospects financially by pushing up HT sales within the State.

It is also observed that though, 2022-23 HT-Commercial, HT Bulk Supply and HT Irrigation consumption figures are apparently higher over last year but in terms of percentage they are not upto the mark in the projection indicated. Same is the case with LT Commercial projection also. At the Same time, the ambitious projection faraway from achievable volume shall not be considered, because revenue realisation projection based on them will give a misleading picture leads to revenue deficit to organisation. For this sole reason, the Commission had accepted the projection of MSPDCL without tinkering and to watch the end results on completion of FY2022-23.

7.3 Distribution loss and Energy Balance

Petitioner's submission

Projected distribution loss for FY 2022-23 is estimated based on the distribution loss achieved for FY 2020-21, and the losses trajectory approved by the Hon'ble Commission for the MYT control period. Based on the estimated sales for the ensuing financial year, estimated interstate and intra states losses, power purchase requirement and surplus sales have been projected. The estimation of power procurement from different sources is done in the subsequent section. The estimated distribution loss and energy balance for ensuing financial year is as follows:

Table 7.2: Proposed Distribution Loss and Energy Balance for FY 2022-23

Sl. No.	Particulars	Calculation	Approved in MYT Order		Projected for FY22-23	
1	**Energy Sales**					
	a) LT Sales	A1		567.30		**568.03**
	b) HT Sales at 11kV	A2		174.85		156.65
	c) HT Sales at 33kV	A3				
	d) EHT Sales	A4				
	Total Energy Sales	A		**742.15**		**724.68**
2	**Distribution Losses**					
	a) Distribution losses at 33kV level	B1				
	b) Distribution losses in HT 11kV and LT system combined	B2	13.00%	110.89	20.50 %	186.87
	Total Distribution Losses	B		110.89		186.87
3	**Energy requirement at**					

Sl. No.	Particulars	Calculation	Approved in MYT Order		Projected for FY22-23	
	T-D boundary					
	a) 11kV and LT energy requirement combined	C1 = (A1+A2)/(1-B)		853.05		911.54
	b) HT 33kV energy requirement	C2 = A3/(1-B1)				
	Total energy requirement at T-D boundary	**C = C1 + C2**		853.05		911.54
4	**Intra-State Transmission Losses**	**D**	2.60%	22.77	8.50%	84.68
5	Energy requirement of EHT consumers	E = A4/(1-D)				
6	Energy Requirement of Distribution system consumers after grossing up for Intra-State Transmission losses	F = C/(1-D)		875.82		996.22
	Outside sale/(Purchase)					
7	**Energy Requirement at state periphery**	**G = E + F**		875.82		996.22
8	**Inter-State Transmission Losses**	**H**	2.60%	23.38	3.20%	32.93
9	**Total Energy requirement**	**I = G/(1 - H)**		**899.20**		**1029.15**
10	**Total Energy available**	**J**		**1207.19**		**1124.46**
11	**Surplus / (Deficit) @ state periphery**	**J*(1-H%) - G**		299.99		92.26

MSPDCL has achieved the distribution loss of 21.86% in FY 2020-21. For the FY 2021-22, Hon'ble Commission has approved the distribution loss of 20.50%. MSPDCL currently proposes the same distribution loss of 20.50% for FY 2022-23. In the MYT tariff order of 2018, Hon'ble Commission has approved the distribution loss of 13.00% for FY 2022-23. The current constraint situation of MSPDCL in reduction of distribution losses has been explained in the previous chapters. MSPDCL requests Hon'ble Commission to consider the proposed distribution loss considering the high LT network and low density of consumers.

Based on the projected sales to consumers, projected distribution, interstate and intra state losses (as approved), and projected power purchase, the energy balance is calculated and the surplus power available for banking / surplus sale is estimated and MSPDCL requests Hon'ble Commission to approve the same.

Further, as per NLDC website, National Loss has been declared by NLDC in the following link <https://posoco.in/side-menu-pages/applicable-transmission-losses/>". Hon'ble CERC has notified CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2020 on 04th May, 2020; w.e.f. 1st November, 2020. As per clause (10) of these regulations, transmission losses for ISTS shall be calculated on all India average basis for each week, from Monday to Sunday. Recent data for FY 2021-22 is given below.

Loss for the period	All India transmission Loss (in %)
22-11-2021 to 28-11-2021	3.68
15-11-2021 to 21-11-2021	3.43
08-11-2021 to 14-11-2021	3.19
01-11-2021 to 07-11-2021	3.28
25-10-2021 to 31-10-2021	3.33
18-10-2021 to 24-10-2021	3.19
11-10-2021 to 17-10-2021	3.24
04-10-2021 to 10-10-2021	3.05
27-09-2021 to 03-10-2021	3.41
20-09-2021 to 26-09-2021	3.21
13-09-2021 to 19-09-2021	3.2
06-09-2021 to 12-09-2021	2.88
30-08-2021 to 05-09-2021	3.31
23-08-2021 to 29-08-2021	3.02
16-08-2021 to 22-08-2021	3.12
09-08-2021 to 15-08-2021	3.48
02-08-2021 to 08-08-2021	3.64
26-07-2021 to 01-08-2021	3.15
19-07-2021 to 25-07-2021	3.05
12-07-2021 to 18-07-2021	2.81
05-07-2021 to 11-07-2021	2.98
28-06-2021 to 04-07-2021	3.29
21-06-2021 to 27-06-2021	3.08
14-06-2021 to 20-06-2021	3.06
07-06-2021 to 13-06-2021	3.19
31-05-2021 to 06-06-2021	3.13
24-05-2021 to 30-05-2021	3.57
17-05-2021 to 23-05-2021	3.64
10-05-2021 to 16-05-2021	3.39
03-05-2021 to 09-05-2021	3.4
26-04-2021 to 02-05-2021	3.46

Loss for the period	All India transmission Loss (in %)
19-04-2021 to 25-04-2021	3.44
12-04-2021 to 18-04-2021	3.32
05-04-2021 to 11-04-2021	3.16

MSPDCL requests Hon'ble Commission to approve the inter-state loss level, as assumed, based on the above data. Intra-state loss is considered as per latest approved figure

Commission analysis:

The Licensee didn't explain with reason for the 0.80% reduction shown in the distribution losses from 21.30% for 2021-22 to 2022-23 at 20.50%. While, the yearly reduction was only 0.56% in their distribution losses from 2020-21 to 2021-22. The reason for such higher reduction in 2022-23 is still not reasonable to approve. Does this signify that there is scope for loss reduction in 2022-23 (in ensuing year) but no scope in 2021-22 in their hands to bringing down the distribution losses in the present situation?

Even about the filed losses were also derived with no uniformity or any logical treatment in the case of IEX & Banking purchases, IEX & Banking sales and for not ignoring the under-drawl units it being a notional value and shall not reduce it from the power purchase quantity.

Usually IEX & banking purchases will occur only at N.E region level and hence these purchased units be initially subjected to NER Losses (ISTS Loss), but in the case of IEX Sales & Banking Sales quantum must be subjected to State level (MSPCL) transmission Losses only as these IEX & Banking Sales must not subject to NER Losses as this kind of transactions are first happens at MSPCL Transmission network initially.

In the year 2020-21 and 2022-23 these IEX & Banking unit sales were initially considered at NER level only and surprisingly in 2021-22 they were considered initially at MSPCL level losses and in FY2022-23 these were wrongly treated.

It is unpleasant to note that there is no uniform procedure being adopted in derive losses and varies yearly according to convenience to suit their desired objective. *For this reason, Commission had pointed out these variant procedures in each years Energy Balance derivation table so that there shall not be any mistake in future filings.*

In the year 2021-22 the Commission had set the distribution losses target at 20.50% to achieve by making a suitable action plan and to adhere it strictly with a copy submission to the Commission by 30th June 2021. But as seen in the APR filing for 2021-22, the Distribution losses were shown at 21.30% derived with some errors and with rectification those losses would be around 21.64%. However, the Licensee appears failed to achieve this proposed loss level by the end of FY 2021-22, they will have to bear the penalty for the under performance in the true-up finalization for 2021-22. Now the same level losses of 20.50% were again set for 2022-23 to achieve without fail.

It is also noted that the Transmission Losses as proposed by MSPCL were not considered in MSPDCL energy balance derivation and in addition there shown no reduction in transmission losses from 2021-22 onwards by keeping them at 8.50% level constantly. While MSPCL in its ARR filings had indicated 7.5% losses for 2022-23, which is 1% lesser than what has been adopted by MSPDCL. It is very much astonishing to note the attitude of MSPDCL in ignoring the MSPCL filed figures for the reasons known well by MSPDCL.

Let the losses adopted for NERLDC be at 2.54% loss percentage according to the data obtained from their website for FY 2020-21 upto 1st November 2020 and the subsequent loss data is being prepared on all India level and hence combined losses of all regions would be at higher value due to aggregation of all other Regions performance. The NER region performance at 2.54% in 2020, cannot go worse all of a sudden to 3.20% and such assumptions will be miss leading and it would help the licensee to shroud their underperformances to some extent. Hence, the

NER Losses shall not be taken at 3.20% conveniently but shall be taken at acceptable level of 2.54%. In other way, the licensee must keep a track of the energy billed from CGS station and compare it with the energy received at state periphery level to arrive losses at practical reality.

Table 7.3: Commission adopted Energy balance for quantum of purchase in 2022-23

Sl. No.	Energy Balance of MSPDCL for FY 2022-23	MU
1	Energy from NER stations (incl. Loktak Free power)	**1022.01**
2	Ui Over Drawls	0
3	IEX Purchases	31.45
4	Banked energy returned	80.00
5	Gross energy handled at NER Level - **(1 to 4)**	**1132.46**
6	Inter-State Loss on NER Energy **(@ 2.54%)**	28.76
7	**Net energy at NERLDC (5 - 6)**	**1103.70**
8	Banking energy sales	-80.00
9	Less: Energy sold at IEX - (Outside State sale)	-35.00
10	Net Solar Energy Injected to Grid (other than RTS)	0
11	Total generation injected to Grid from RTS	0
12	Net energy from State Own Small HEPs	0
13	**Total energy at State Periphery - (7 to 14)**	**988.70**
14	**Intra-State Losses (State Losses) @ 7.80%**	**77.12**
15	**Gross Circle-wise Distribution Input - (1-14)**	**911.58**
16	**Distribution Loss (MU) @ 20.50% of Item-15**	**186.90**
17	Retail Sales (LT & HT) -- (15-16)	**724.68**

The Status of overall losses within Manipur State as a ratio to total energy input at state periphery Commission adopted for FY 2021-22:

	Overall Losses on Manipur State Input	2022-23	Loss (%)
1	State Transmission Loss	77.12	**7.80%**
2	Distribution Loss (on 4-1)	186.90	**20.50%**
3	**Total T & D Losses (1+2)**	**264.02**	**26.70%**
4	**Total Energy at State input periphery**	**988.70**	**100%**
5	Inter State Transmission Losses (on row-8)	**28.76**	**2.54%**
6	Overall total Losses incurred (3+5)	**292.78**	**25.85%**
7	Add: IEX & Banking Sales	**115.00**	
8	**Overall purchases from all source (4 to 7)**	**1132.46**	

The above losses shall be the celling limits and actuals shall be endeavored to be lower in reality by MSPDCL. The surplus energy as per MSPDCL filing was at 95.31MU was reduced to 35MU and this can still be kept lower to reduce the power purchase cost.

"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."

7.4 Energy Purchases

MSPDCL has been allocated power from various Central Generating Stations in North Eastern Region, viz., NEEPCO, NHPC, Tripura-Baramura and OTPC-Palatana, and NTPC Bongaigaon for power purchase under long term PPAs. The power purchase for FY 2022-23 was approved in the MYT order based on the annual allocation of different power projects. MSPDCL is required to purchase the contracted quantum of power from different sources as per present allocation.

However, the actual power purchase quantum is likely to vary based on the energy availability, hydrology, operational conditions of the plants etc. Based on the power procurement for FY 2020-21, and FY 2021-22, power project wise planned allocations have been considered for projecting the power purchase for ensuing financial year. Kopili HEP was not generating power as its dam was affected. Only Kopili -II is presently suppling power and hence, only marginal purchase has been considered for FY 2022-23. The approved and proposed energy purchase for FY 2022-23 is detailed in the Table below:

Table 7.4: Projected energy purchases for FY 2022-23 by MSPDCL (MU)

Sl. No.	Source of Power	FY 2022-23	
		Approved in MYT Order	Proposed
A	**CGS – NEEPCO**		
1	Kopili -I HEP	69.94	1.00
2	Kopili-II HEP	7.77	3.00
3	Khandong HEP	14.43	15.00
4	Ranganadi HEP	125.52	110.00
5	Doyang HEP	19.94	15.00

Sl. No.	Source of Power	FY 2022-23	
		Approved in MYT Order	Proposed
6	Assam GBPP	138.98	105.00
7	AGTPP	67.82	70.00
B	**CGS – NHPC**		
1	Loktak HEP Purchased Power	203.92	180.00
2	Loktak HEP- Free Power	80.23	62.00
C	**Others**		
1	Baramura GBPP Unit IV and V	80.53	32.00
2	OTPC Palatana	234.31	225.00
D	**New Plants**		
1	NTPC Bongaigaon Unit I to III	163.80	158.00
2	Monarchak Gas Based PP (NEEPCO)	-	-
3	Kameng HEP Stage I	-	-
4	Kameng HEP Stage II	-	-
5	Pare HEP	-	40.00
6	Tuirial HEP	-	-
7	Lower Subansiri Stage I	-	-
8	Lower Subansiri Stage II	-	-
9	Renewable – Solar	-	0.75
10	Renewable – Non-Solar	-	5.26
	Sub -Total	**1207.19**	**1022.01**
	IEX Purchase		20.00
	IEX Purchase (GREEN POWER)		82.46
	Banking Sale		-80.00
	Banking purchase		80.00
	Total Purchase	**1207.19**	**1124.46**

Note: Approved data as per Table 7.11 of approved ARR order

Apart from the long term proposed sources for power procurement, MSPDCL requires purchase/sell surplus power from/to power exchange in real time basis or required to use the banking facility to manage the deviation in power availability due to non-availability of power from hydro power plant due to hydrology failure or deviation in load requirement. Such deviations are real-time phenomenon and based on the demand and supply situations of DISCOM and CGSs; hence, such deviations cannot be precisely estimated for ensuing financial year at this moment. MSPDCL proposes certain purchase / sale under such transaction as per details given above, as per actual data available for past years. The requirement of banking has been already explained and monthly variation of availability as per actual data for FY 2020-21 is given in the previous chapter for reference.

Renewable Purchase Obligation (RPO): As per Notification dated 22nd February, 2021 (Notification number H.13011/5/17-JERC), Hon'ble Commission decided the RPO as follows: Solar -10.5%, Non-solar RPO- 10.5% and HPO – 0.18%.

It was mentioned that RPO shall be calculated in energy terms as percentage of total consumption of electricity excluding consumption met from large hydro projects. Accordingly, RPO target and possible sources to meet the RPO target is given below.

RPO Target and RE purchase table for FY 2022-23 (MU) by MSPDCL

Sl No	Particulars	Quantum (MU)	Remarks
1	Total Energy consumption proposed	724.68	
2	Energy consumption excluding hydro	455.69	Hydro consumption is derived based on Hydro purchase reduced by inter-state, intra-state and Distribution losses
3a	Solar RPO Target @10.5%	47.85	
3b	Solar generation in the state from 4967 kW	5.80	Assumed average generation 3.2 units /kW
3c = (3a -3b)	Solar RPO deficit	42.05	
4a	HPO target @0.18%	0.82	
4b	HPO purchase	3.00	Purchase from SHP
4c = (4a – 4b)	HPO deficit / (surplus)	(2.18)	
5a	Non-solar RPO target @10.5%	47.85	
5b	Non-solar RPO purchase	5.26	Purchase from 1 MW solid waste to energy project
5c = (5a-5b-4c)	Non-solar RPO deficit after adjusting HPO surplus	40.41	Adjusting HPO surplus as it is more than target
6 = 3c+5c	**Purchase from IEX through GTAM / GDAM for meeting remaining RPO target**	**82.46**	

Commission Analysis on Power quantum and RPO Obligation:

The Commission feels that the power procurement from costly stations are to be reduced to the bare minimum of contracted obligated quantities only and to buy more energy from power stations whose variable cost is cheaper for minimising this major expenditure component of ARR which is the power purchase cost. Accordingly, the Commission had deduced the required quantity by limiting only the IEX Purchases quantity to 30.45MU instead of 102.46MU (20+82.46) and also limited the IEX sales only to 35MU instead of 95.31MU. That means avoiding transaction involves loss component for each unit sold in IEX. Besides, instead of planning for Green power of 82.46MU at the rate of 4500/MWh, the MSPDCL shall resort to purchase REC Certificates at a cheaper rate of Rs.2400/MWh for Solar and at Rs.3000/MWh for Non-solar. The advantage is that Certificates can be disposed-off in market at a later date if wishes to cash them which has a financial advantage.

During this year 2022-23, the MSPDCL shall endeavour to fully utilise the banked energy stock of 127.47MU accumulated upto the end of FY2021-22 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 decided by the Commission as it wants to give freehand to MSPDCL in its procurement process. Incidentally, upon choosing the banked energy, the overall losses & power costs will tend to fall.

The detailed power purchase quantity requirement so arrived by the Commission is also provided below.

Table 7.5: Commission approved energy purchases for FY 2022-23 (MU)

Sl. No.	Source of Power	FY 2022-23 (in MU)	
		Proposed by MSPDCL	Commission Approved
A	**CGS – NEEPCO**		
1	Kopili -I HEP	1.00	1.00
2	Kopili-II HEP	3.00	3.00
3	Khandong HEP	15.00	15.00
4	Ranganadi HEP	110.00	110.00
5	Doyang HEP	15.00	15.00
6	Assam GBPP	105.00	105.00
7	AGTPP	70.00	70.00
B	**CGS – NHPC**		
1	Loktak HEP Purchased Power	180.00	180.00
2	Loktak HEP- Free Power	62.00	62.00
C	**Others**		
1	Baramura GBPP Unit IV and V	32.00	32.00
2	OTPC Palatana	225.00	225.00

Sl. No.	Source of Power	FY 2022-23 (in MU)	
		Proposed by MSPDCL	Commission Approved
D	**New Plants**		
1	NTPC Bongaigaon Unit I to III	158.00	158.00
2	Monarchak Gas Based PP (NEEPCO)	-	-
3	Kameng HEP Stage I	-	-
4	Kameng HEP Stage II	-	-
5	Pare HEP	40.00	40.00
6	Tuirial HEP	-	-
7	Lower Subansiri Stage I	-	-
8	Lower Subansiri Stage II	-	-
9	Renewable – Solar	0.75	0.75
10	Renewable – Non-Solar	5.26	5.26
	Sub -Total	**1022.01**	**1022.01**
11	IEX Purchase	20.00	30.45
12	IEX Purchase (GREEN POWER)	82.46	**0.00**
13	**Banking Sale**	**-80.00**	**-80.00**
14	Banking purchase	80.00	80.00
15	**IEX sale (Outside State)**	**-95.31**	**-35.00**
16	**Total Purchase quantity (MU)**	**1029.16**	**1017.46**

The analysis of the Commission on the RPO Obligation with reference to the methodology submitted by the Licensee afresh in this filing is dealt below with some suggestions and modifications to their derivation:

RPO - Solar Obligation (2022-23)	MSPDCL	Approved	Remarks
Sales (Excluding Outside State Sale)	724.68	724.68	
T & D Loss	-	264.02	
ISTL Losses (Proportionate)	-	28.76	
Overall Energy Requirement for state sales MU)	**724.68**	**1,017.46**	
Unit received from all Hydro Sources	??	426.00	
Energy Consumed excluding Hydro	**455.69**	**591.46**	
Solar RPPO obligated units @ 10.5% (MU)	47.85	62.10	
existing Rooftop Solar consumption (In MU)	-5.80	**-0.75 (&&)**	Shown only 0.75 in purchases.
Net Unit (In MU)	**42.05**	**61.36**	
Solar units to be bought In Mwh	42,047.45	61,358.30	
Price for RPO Obligation adopted (Rs./MWh)	4,500	**2,400**	CERC rate
RPO Obligation (4500/ Mwh)	189,213,525	147,259,920	
Solar RPO Obligation (In Crores)	**18.92**	**14.73**	

(&&)- In Solar Roof Top purchases were shown only upto 0.75MU but in MSPDCLRPO calculation, it is claiming a higher value of 5.80MU which is not acceptable.

RPO – Non Solar Obligation (2022-23)	MSPDCL	Approved	Remarks
Energy Consumed excluding Hydro	**455.69**	**591.46**	As above
Non-Solar RPPO obligated units @ 10.5% (MU)	**47.85**	**62.10**	
Existing Non-Solar usage (MU)	-5.26	5.26	Okay
RPO fulfilment needed MU - (A)	**42.59**	**56.85**	
HPO target @ 0.18%	**0.82**	**1.06**	
HPO Purchases made	(3.00)	**0 ($)**	.
HPO fulfilment MU - (B)	**(2.18)**	**1.06**	
Total Non-Solar RPO fulfilment (A+B) - MU	**40.41**	**57.91**	
expressed In MWh	40,407.69	57,912.93	
Price for RPO Obligation adopted (Rs./MWh)	4500	**3000**	**CERC Rates**
Non-Solar RPO Obligation amount (in Rs.)	181,834,614	173,738,784	
Non-Solar RPO Obligation (In Crores)	**18.18**	**17.37**	
Net RPPO Obligation (Solar & Non-Solar) Rs.Crs	**37.10**	**32.10**	**Less Costly**
Overall RPO Unit Purchases needed	**82.46**	**119.27**	**But Qty more**

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7.5 Power Purchase Cost

The cost of power purchase from CGSs includes the fixed and variable cost. The fixed cost component is fixed irrespective of the energy drawl. The variable cost component depends on the approved tariff by CERC, actual energy drawl and the additional cost permitted due to change in fuel cost. In order to estimate the Power Purchase cost for ensuing financial year, 10% escalation in the effective tariff arrived from the purchase for FY 2021-22 is taken to estimate the power purchase cost for FY 2022-23. It may be noted that 10% escalation has been assumed for fixed cost component expressed in Rs Crore terms and for variable energy charges and other charges, 5% and 3% increase, respectively, on effective tariff expressed in Rs / kWh has been considered. The solid waste to energy project of 1 MW installed in the state under non-solar category is assumed to be purchased at the rate of Rs 3.17/ kWh. The remaining amount would be paid to the generators by the State Government. So, in present analysis, MSPDCL has only considered the rate of Rs 3.17/kWh, which MSPDCL pays to the generator.

As explained above, MSPDCL would like to purchase 82.46 MU of green power from exchange to meet its RPO. The Petitioner will explore the options available under the scheme of "Green Term Ahead Market (G-TAM)". As a first step towards Greening the Indian short-term power market, Pan-India Green Term Ahead Market (GTAM) was introduced. The new market segment features contracts such as Green-Intraday, Green-Day-ahead Contingency (DAC), Green-Daily and Green-Weekly. GTAM contracts will be segregated into Solar RPO & Non-Solar RPO as RPO targets are also segregated. The operations to be carried out in accordance with the Procedure for Scheduling Bilateral Transactions through Power Exchange issued by

Power System Operation Corporation Ltd and other allied regulations as amended from time to time and the Bye-Laws, Rules and Business Rules of the Exchange. Recently, commenced on 26 October 2021, the Green Day ahead Market (G-DAM) allows anonymous & double-sided closed collective auction in renewable energy on the day-ahead. The power exchanges now invite bids for conventional and renewable in an integrated way through separate bidding windows. The clearing takes place in a sequential manner – first in the renewable segment having the must-run status, considering the availability of the transmission corridor, followed by conventional segment. The Petitioner will participate in GTAM and G-DAM transaction operational in power exchanges. The proposed power purchase cost is shown in the Table below:

Table 7.6: Power Purchase Cost for FY 2022-23 by MSPDCL

Sl. No.	Source of Power	Approved in MYT Order		Proposed for FY 22-23	
		Total Cost	Avg. Rate	Total Cost	Avg. Rate
A	**CGS – NEEPCO**				
1	Kopili -I HEP	16.76	2.40	0.82	8.23
2	Kopili-II HEP	1.89	2.43	1.46	4.86
3	Khandong HEP	5.09	3.53	3.80	2.53
4	Ranganadi HEP	51.00	4.06	29.82	2.71
5	Doyang HEP	19.47	9.76	11.06	7.38
6	Assam GBPP	61.41	4.42	49.54	4.72
7	AGTPP	22.30	3.29	31.71	4.53
B	**CGS – NHPC**				
1	Loktak HEP Purchased Power	118.02	5.79	68.03	3.78
2	Loktak HEP- Free Power	-	-		
C	**Others**				
1	Baramura GBPP Unit IV and V	17.13	2.13	19.91	6.22
2	OTPC Palatana	108.66	4.64	99.00	4.40
D	**New Plants**				
1	NTPC Bongaigaon Unit I to III	107.79	6.58	177.48	11.23
2	Monarchak Gas Based PP (NEEPCO)	-	-	-	-
3	Kameng HEP Stage I	-	-	-	-
4	Kameng HEP Stage II	-	-	-	-
5	Pare HEP	-	-	20.02	5.01
6	Tuirial HEP	-	-	-	-
7	Lower Subansiri Stage I	-	-	-	-
8	Lower Subansiri Stage II	-	-	-	-
9	Renewable – Solar	25.39		0.34	4.50

Sl. No.	Source of Power	Approved in MYT Order		Proposed for FY 22-23	
		Total Cost	Avg. Rate	Total Cost	Avg. Rate
10	Renewable – Non Solar	2.07		1.67	3.17
	Total Purchase	**556.98**	**4.61**	**514.66**	**5.04**
11	IEX purchase	-	-	5.60	2.80
12	IEX purchase (green power)	-	-	37.11	4.50
13	Supplementary bills	-	-	45.00	-
14	Late payment surcharge	-	-	-	-
15	REC	-	-	-	-
	Total	**556.98**	**4.61**	**602.37**	**5.36**

Apart from the total power purchase cost, MSPDCL is required to pay charges towards UI over-drawal and under-drawal, Purchase from IEX, supplementary bills etc. The charges for supplementary bills are considered as Rs 45.00 crore for FY 2022-23. It is important to mention that for all CGS stations, tariff according to current tariff regime (FY 2019-20 to FY 2023-24) has not been finalised by CERC and billing is based on old tariff rate. There is a possibility to get the revised bill as per revised CERC tariff orders after pronouncement of order by Hon'ble CERC for respective CGS stations. The implications of the same as per supplementary bill would be huge if we review the previous trend.

Hence, MSPDCL has proposed the total power purchase cost of Rs 602.37 Cr for FY 2022-23 and requests the Hon'ble Commission to approve the same.

Commission Analysis:

The Commission has re-worked the power requirement and its cost during the FY 2022-23 which is as follows:

Table – 7.7 – Commission approved Power purchase Qty & Cost in FY2022-23

Sl. No.	FY 2022-23	Share	Energy	Total Cost	Avg Rate
	Source of Power	MWs	MU	(Rs Cr)	(Rs/kWh)
A	**CGS – NEEPCO**	**93.90**	**319.00**	**115.21**	**3.61**
1	Kopili -I HEP	14.78	1.00	0.44	4.40
2	Kopili-II HEP	1.74	3.00	1.46	4.87
3	Khandong HEP	3.28	15.00	2.625	1.75
4	Ranganadi HEP	33.90	110.00	24.64	2.24
5	Doyang HEP	5.90	15.00	10.61	7.07
6	Assam GBPP	23.60	105.00	43.73	4.17

Sl. No.	FY 2022-23	Share	Energy	Total Cost	Avg Rate
	Source of Power	MWs	MU	(Rs Cr)	(Rs/kWh)
7	AGTPP	10.70	70.00	31.71	4.53
B	**CGS – NHPC**	**44.62**	**242.00**	**66.24**	**2.74**
1	Loktak HEP Purchased Power	22.31	180.00	66.24	2.74
2	Loktak HEP- Free Power	22.31	62.00	-	0.00
C	**Others**	**52.57**	**257.00**	**15.767**	**4.57**
1	Baramura GBPP Unit IV and V	10.50	32.00	19.497	6.09
2	OTPC Palatana	42.07	225.00	98.07	4.36
D	**New Plants**	**63.24**	**204.01**	**190.14**	**9.32**
1	NTPC Bongaigaon Unit I to III	56.25	158.00	168.11	10.64
2	Para HEP	6.99	40.00	20.02	5.01
3	Renewable – Solar		0.75	0.34	4.56
4	Renewable – Non-Solar		5.26	1.67	3.18
	Sub -Total	**254.33**	**1022.00**	**489.16**	**4.79**
6	**IEX Purchases**		**30.45**	**8.53**	**2.80**
7	**Banking Purchase (returns)**		**80.00**	**--**	
	CGS Energy from all source		**1132.45**	**497.69**	**4.39**
	Inter-State Trans Losses (NER) @ 2.54%		**28.76**		
Input Energy at State periphery after losses (MU)			**1103.69**	**497.69**	**4.51**
8	**Banking Sale (Outside utility)**		**-80.00**		
9	**IEX Sales (Exchange)**		**-35.00**		
10	Supplementary bills		--	**40.00**	
11	**REC (Certificates)**		N.A	**32.10**	
	Grand Total	**254.33**	**988.69**	**569.79**	**5.76**

The Power purchase cost was derived by the Commission to be Rs.569.79Crs at a per unit cost of Rs.5.76/kWh for procuring net quantum of 988.69MU after NER Losses instead of 1029.16MU before NER Losses as projected in ARR. The Commission had also considered the Renewable Power Purchase Obligation (RPO) into account as per the regulation in vogue to the tune of 32.10Crs for acquiring Certificates. Accordingly, the MSPDCL shall purchase certificates amounting to Rs.32.10Crs after due consideration of procurements being made from Solar and Non-solar sources in order to comply with their RPO obligation at 10.5% each and 0.18% for HPO is arrived at during FY 2022-23. This amount is comparatively lower than the Rs.37.11Crs deduced by MSPDCL against Green Power procurement of 82.46MU shown in their RPO Obligation calculation tabulated above. From the above energy quantum, the Licensee is left with 35MU of surplus energy instead of 95.31MU projected, provided they maintain their Distribution losses at 20.50% itself. <u>It is quite surprising to note as to why no proposal was contemplated by MSPDCL to reutilize the accumulated banked</u>

energy quantum of 127.47MU to the end of FY2021-22. ***The Commission feels it appropriate to invariably utilized the same during the FY 2022-23 without going for any additional purchases so as to minimize the power purchase cost to the above derived amount and thereby pass on the cost savings benefit to the consumers in the form of lower tariff instead of burdening them.*** ***Therefore, it shall be the endeavor that final actual power cost shall have to be lower than what has been stated above which is an indicative figure arrived at without considering the banked quantity of 127.47MU and the surplus power availability is also kept at a minimum level instead of projected 95.31MU.***

7.6 Transmission Charges

The transmission charges include the charges paid to PGCIL, NERLDC, MSPCL and SLDC charges. The summary of transmission charges approved by Hon'ble Commission for ensuing financial year along with the proposed charges is presented in the following table. The PGCIL charges are projected with 25% escalation over FY 2021-22 projected figure. As explained earlier, recent PGCIL charges have increased substantially and so, appropriate escalation rate is considered. MSPCL charges for FY 2022-23 have been considered as proposed by MSPCL for ensuring year. The SLDC and NERLDC charges are considered as 5% higher on year-on-year basis on the revised projected charges for FY 2021-22.

Table 7.8: Transmission Charges for FY 2022-23 (Rs. Crore)

Sl. No.	Particulars	Approved in MYT Order	Proposed
1	PGCIL Charges	70.76	93.80
2	MSPCL Charges	112.43	93.82
3	SLDC Charges	0.87	0.77
4	NERLDC Charges	-	0.71
	Total Transmission charges	**184.06**	**189.10**

MSPDCL requests Hon'ble Commission to approve the proposed Transmission Charges of **Rs. 189.10 Crore** for FY 2022-23.

Commission Analysis:

The Commission had now replaced the MSPCL charges with the approved MSPCL transmission ARR in their ARR for FY 2022-23 which is Rs.93.86Crs instead of

Rs.93.82Crs as projected in their ARR submission and the SLDC charges are disallowed as they shall be based on SLDC order but not based on CERC orders. Accordingly, the revised & approved Inter & intra transmission charges by the Commission is as follows:

Table 7.9: Transmission Charges approved by Commission for 2022-23

(Rs.Crs)

Sl. No.	Particulars	Now Proposed in ARR	Commission approved
1	PGCIL Charges	93.80	93.80
2	MSPCL Charges	93.82	93.86
3	SLDC Charges	0.87	0.00
4	NERLDC Charges	0.71	0.71
	Total	**189.10**	**188.37**

7.7Operation 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.

For the purpose of ARR for FY 2022-23, MSPDCL has proposed the O&M Expenses as follows:

Table 7.10: O&M Expenses for FY 2022-23 (Rs. Crore)

Sl. No	O&M Expenses	MYT Approved	Proposed
1	Employee Expenses	126.06	113.09
2	R&M Expense	9.09	19.25
3	A&G Expense	11.17	16.44
	Total	**146.32**	**148.78**

The employee expenses for 2022-23 have been projected based on the revised estimates of salary component as per new pay scale for all employee with yearly increment in salary. As seventh pay scale is assumed to be implemented from November, 2021, employee expenses with new pay scale has been considered. Further, additional salary for 600 new recruited staff has been considered in FY 2022-23. Hence, the impact of newly added manpower in FY 2022-23 is considered. Over and above, MSPDCL will have to pay the 7th pay wage revision arrears, which are also added to the employee expense. NPS contribution and medical reimbursement, to be given in FY

2022-23, are also projected. The details are given below.

Employee Expenses for FY 2022-23 (in Rs.) by MSPDCL

Sl. No.	Details	Amount (Crs)
1.	Salary Staffs	83.54
2.	NPS Contribution	1.76
3.	Pay Arrear	0.50
4.	Medical Reimbursement	0.30
5.	New Recruitment (600 staff)	27.00
	Grand Total	**113.09**

In the case of R&M and A&G expenses, the projections have made with 5.72% escalation on the expenses projected for FY 2021-22. Further as explained earlier, additional R&M expenses of Rs. 6.00 Crore have been considered for maintaining the lines, substations etc. considering the infrastructure growth happening in MSPDCL area. Only incremental R&M cost will not cover the expenses required to maintain the huge infrastructure. Additionally, A&G costs is required for prepaid metering software expenses, franchisee fees, Vigilance, flying squad, consumer verification, energy police stations, SIM card, Modem, DCDR Server maintenance charges, Online vending charges, VPN Communication Charges etc. Additional Rs 5 Crore is assumed for A&G expenses. The prepaid vending machines related charges were Rs 2.76 crore in FY 2020-21. Considering these facts, A&G and R&M cost have been projected.

Accordingly, MSPDCL submits Hon'ble Commission to approve the proposed O&M costs of **Rs. 148.78 Crore** for FY 2022-23.

Commission Analysis:

On analysis, in the case of Employee cost, it is observed there was an increase of 625 number of regular employees with no details of cadre wise recruitment break-up among Regular staff but in the break up details shown only 600 new recruitment for a surprise. No change in Muster Roll and Work-charge employees and contract employees as indicated for 2022-23. It is glaringly observed that every time the employees in the ensuing year will go up by more than 600 above just to boost up the employee cost and in reality, there is not even 50 employees added. It is also learnt that the existing employees working in

MSPDCL have not given their willingness for absorption and still prefer to work on deputation from Government of Manipur. Besides, there are no reduction in staff due to retirements noted for the past three years in a row. However, the employee cost approved at Rs.77.15Crs for 2022-23. The R&M expenses are approved at Rs.8.25 Crs and A&G expense were allowed at 6.12Crs on observing the past trend noted by the Commission.

Table: 7.11 - O&M Expenses approved by the Commission for 2022-23

Sl. No.	Details of O&M Expenses	Approved (Rs.Crs)
1.	Employee Cost	77.15
2.	R&M Expenses	8.25
3.	A&G Expenses	6.12
4.	**Total O&M Expenses**	**91.52**

Thus, the O&M Expenses approved by the Commission after the scrutiny are at **Rs.91.52 Crs for FY 2022-23.**

7.8 Capitalisation

MSPDCL undertakes capital expenditure to meet the growing demand for electricity in the State and for system augmentation and strengthening. MSPDCL receives significant grant from the Central /State Government for creation of capital asset, with the balance funding sourced from loans.

The details of actual capitalization achieved in FY 2020-21 and proposed capitalisation for FY 2021-22 and FY 2022-23, is shown in the Table below:

Table 7.12: Capitalization for FY 2022-23 (Rs. Crore)

Particulars	2020-21	2021-22	2022-23
Opening Balance of CWIP (A)	1520.82	1533.33	416.38
Fresh Investment during the year (B)	24.71	292.55	104.00
Investment capitalised out of opening CWIP (C)			
Investment capitalised out of fresh investment (D)			
Total Capitalisation during the year (C+D)	12.19	1409.50	104.00

Closing Balance of CWIP (A + B - C - D)	1533.33	416.38	416.38

MSPDCL requests Hon'ble Commission to kindly approve the proposed capitalization of **Rs 104.00 Crore** for FY 2022-23. The capitalization is **due to remaining amount of pre-paid metering scheme**, to be implemented in FY 2022-23.

Commission Analysis:

As per the content of present filing, the licensee had proposed 104Crs of investments in FY 2022-23 for installing the pre-paid meters by borrowing loan from REC. and briefly indicated this work be capitalisation in FY 2022-23. Hence, it is construed that no fresh capital expenditure is required now and it is presumed that if at all anything is needed would be to be spent from those grants acquired from grant source/Govtt of Manipur but not the funds of MSPDCL.

Consequently, the capitalization of assets worth Rs.104.00 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 borrowed funds by MSPDCL. If this above amount includes the High Mast Lights cost, then the same may be ignored fully to the extent added.

Besides, the details of amount collected from consumer contributions possessed by the MSPDCL from the inception of the corporation in 2014 shall be submitted to the Commission each year-wise by end of June 2022. However, this kind of direction was also given in 2021-22 with deadline by 30th June 2021 seems not complied with.

7.9 Interest on Working Capital

Interest on the working capital has been projected for FY 2022-23 as follows:

Table 7.13: Interest on Working Capital for FY 2022-23 (Rs. Crore)

Sl. No.	Particulars	Approved in MYT Order	Proposed
1	O&M expenses for 1 month	12.19	12.40
2	Maintenance spares @ 1% of GFA	21.09	22.70
3	Receivables equivalent to one month of expected revenue at	30.43	55.90

Sl. No.	Particulars	Approved in MYT Order	Proposed
	prevailing tariffs		
4	Consumer Security Deposit		15.80
	Total Working Capital	**63.71**	75.20
	SBAR as approved	14.05%	13.45%
	Interest on Working Capital	**8.95**	**10.11**

While estimating the interest on working capital the proposed O&M expenses of one month, 1% of proposed GFA as maintenance spares, one month's receivable at existing tariff as on 1 April of respective year has been considered.

MSPDCL requests Hon'ble Commission to approve the IoWC of **Rs 10.11 Crore** for FY 2022-23.

Commission's Analysis

As seen from the submission, there were no mention as to the actually availing of any short-term loans for working capital needs. The very purpose of allowing the interest on working capital as a normative is only to reimburse the interest cost involved for running the day to day business of the utility on normative basis instead of going deeper into actuals. But, the MSPDCL is fully dependent upon the Government of Manipur for its day to day funding needs in the form of Grant-in-Aid towards meeting salaries and any other relevant expenses. 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 will be disallowed from the claim for having not availing any short-term loans in the financial year henceforward. In Manipur, there are more in number of pre-paid meters, whose revenue will be collected in advance in reality and there is no compelling/pressing need for borrowing short-term loans for utility to run during currency of financial year.

Thus, the Commission totally disallows Interest on working capital amount claimed by MSPDCL for FY 2022-23.

7.10 Gross Fixed Assets & Depreciation

The closing balance of Gross Fixed Asset (GFA) for FY 2021-22, as derived in earlier chapter, has been considered as the opening balance of GFA for FY 2022-23. The depreciation is computed under straight-line Method, at the rates specified in the JERC (MYT) Regulations, 2014, on the GFA in use at the beginning of the year and addition in assets during FY 2022-23. However, considering the actual depreciation for non-grant project in FY 2020-21, the same is considered for FY 2022-23. As major projects are capitalised through grant, so latest available calculated non-grant depreciation has been considered. The Expenses towards depreciation for FY 2022-23 is shown in the Table below:

Table 7.14: Depreciation for FY 2022-23 (Rs. Crore)

Sl. No.	Particulars	Approved in MYT Order	Projected
1	Opening GFA	1989.98	2166.00
2	Addition during the Year	207.17	104.00
3	Retirement		
4	Closing GFA	2197.15	2270.00
5	Average GFA	2093.56	2218.00
6	Average Rate of Depreciation	2.42%	
7	Depreciation	50.66	
8	**10 % of Gross Depreciation**	0.51	**13.06 (non-grant depreciation as determined in FY 20-21)**

MSPDCL requests the Hon'ble Commission to approve the Depreciation of **Rs. 13.06 Crore**, for FY 2022-23.

Commission Analysis:

As per the content of this filing, it is construed that the funds utilized for creation are fully spent from borrowed loans from REC. Therefore, the proposed transfer to GFA amounting to Rs.104.00 Crs shown during the year is eligible for depreciation charge under regulatory accounting ambit.

The depreciation amount now approved by the Commission for FY 2022-23 is with considering the capital addition made with the loan fund as follows:

Table 7.15 – Depreciation for FY 2022-23 approved by the Commission

Sl.No.	Particulars (2022-23)	Amount (Crs)
1	Opening GFA	756.50
2	Addition during the Year	104.00
3	Retirement	0
4	Closing GFA	860.50
5	Average GFA	808.50
6	Average Rate of Depreciation	2.42%
7	Depreciation	19.57
8	**10% of Gross Depreciation**	**1.96**

The Commission approves the nominal depreciation of Rs.1.84 Crs calculated at 10% of the Regulatory accounting based allowable depreciation for FY 2021-22.

7.11 Interest on Loan

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 7.16: Interest on ongoing Loan for FY 2022-23 (Rs.Crs)

Sl. No.	Particulars	REC 1	REC 2	Total
1	Opening Loan	23.928	14.67	38.60
2	Addition during the year	0	0	0.00
3	Repayment during the year	3.988	2.9049	6.89
4	Closing Loan	19.94	14.67	34.61
5	Average Loan	21.934	14.67	36.60
6	Rate of Interest	11.70%	10.20%	0.22
7	Interest & Finance Charges	2.566	1.496	4.06
8	Interest on CSD			0.00
	Total Interest	2.566	1.50	4.06

MSPDCL respectfully submits that, recently MSPDCL got sanction for some additional loan (under Atmanirvar Bharat package- COVID loan) from financial institutions, PFC an REC. The scheme name is "**Special Long-Term Translation loans to Discoms for COVID-19**". <u>It is one-time opportunity to avail loans for clearance of outstanding dues as on 31 March</u>

2020 to CPSUs GENCO / RE GENCOs/IPPs /CPSU TRANCOs. MSPDCL vide its letter no. 2/84/2020/MSPDCL-COVID/636-37dated: 24.06.2020 made an application to the Lenders requesting a loan of INR 111.48 Crore. The same was granted by PFC and REC in 50:50 proportions (REC sanction letter number RECG/2020/Manipur/COV-026/35 dated: 03.07.2020, PFC Sanction number 04:15: SPG: MTL: MSPDCL dated 29.6.2020).

The period of moratorium for repayment of principal shall be 36 months from the date of disbursement of first instatement of loan but the entire loan shall be repaid by within a period of 120 months from the first disbursement. Present rate of interest is 9.5%, payable monthly. MSPDCL has considered the interest payment for the same.

Additionally, another two projects of purchase of 2 lakh pre-paid meter and high mast lights in district headquarters have received government approval for government guarantee for loan. The interest payment for the same has been also considered for FY 2022-23, as per amount disbursed. The details are given below.

Table-7.17: Interest on Loan for FY 2022-23 (Rs. Crore)

Sl. No.	Particulars	Total
1	PFC/REC loan on ongoing projects	4.06
2	COVID loan under Atmanirvar Bharat	10.59
3	Loan for purchase of Prepaid meters	16.72
4	Loan for LED street light & High Mast	1.72
	Total	**33.10**

MSPDCL requests Hon'ble Commission to kindly approve the interest on loan as **Rs. 33.10 Crore** for FY 2022-23.

Commission Analysis:

The MSPDCL has obtained various loans in addition to the existing REC Loan-1 & 2 which was existing from 2018-19 onwards. But these loans are eligible for conversion to grants and the stage of its status will only be known on verification with audited accounts submission in due course. Until such time the interest on these loans will be kept in abeyance in ARR. Again, it had obtained three (3) other FRESH loans for various purposes for which it has enclosed the relevant loan agreement documents for verification. Of the Loans, 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. Once the property is charged for usage it will become the assets of MAHUD but not MSPDCL. The responsibility of MSPDCL shall be only to execute the work due to their technical know-how. In view of the above, MSPDCL shall make local arrangement of meeting such loan & interest obligation by MAHUD only. The relevant provision categorically stated in the Electricity Supply Code issued by this Commission is appended at the end of this order as Annexure-VIII for reference.

Considering all those loans and their applicable interest rates the interest amounts approved without considering Tax component (in the absence of those details) by the Commission for FY 2022-23 is as follows:

Table 7.18: Interest on Loan for FY 2022-23 by Commission (Rs.Crs)

Sl. No.	Particulars	Total
1	PFC/REC loan on ongoing projects	0.00
2	COVID loan under Aatma Nirbhar Bharat	10.59
3	Loan for purchase of Prepaid meters	7.03
4	Loan for LED street light & High Mast	Nil
	Total (Rs.Crs)	**17.62**

However, the above interest amount will be scrutinised with the actuals to be incurred based on their audited accounts for FY2022-23 in due course.

7.12 Return on Equity

MSPDCL has considered the Return on Equity (RoE) for FY 2022-23 same as considered earlier. MSPDCL requests the Hon'ble Commission to approve the Return on Equity of Rs. 1.95 Crore for FY 2022-23.

Commission Analysis:

The Commission provisionally approves the return on equity at Rs.1.56 crs for FY 2022-23 without considering the Income tax component and the same will be admitted depends upon the incidence of tax on actual basis.

7.13 Write-Off of Bad Debts

MSPDCL has considered Rs. 3 Crore as Write-off of Bad Debts for FY 2022-23, and requests the Hon'ble Commission to approve the same. This is assumed figure and actual amount would be reflected after annual audit conducted. The actual amount will be presented after audit is conducted.

Commission's analysis

The writing-off the bad debts is unacceptable to the Commission, for the reason that the Licensee had not made any assiduous efforts so far in recovery of the huge pending dues accumulated to the tune of above Rs.490Crs to the end of 31.03.2018 as was submitted in reply to Directive No.5. Besides, the licensee appears to be tight lipped to disclose any detailed constructive in response on this and Commission is still in dark about their latest revenue arrears status.

Moreover, the Commission has specifically made a cut of Rs.40Crs under Internal Efficiency from their Gross ARR keeping in view the Arrears accumulation to undesired level. Knowing this fact, the licensee shall not prefer to suggest for writing-off Rs.3crs out of the huge outstanding of Rs.495 Crs as on 31.03.2018 is quite surprising and unexpected by the Commission.

Under these circumstances, this claim cannot be allowed now and it will be permitted only when Commission is thoroughly satisfied that despite the best of efforts the dues were proved to be irrecoverable in future. The onus of proving this rests with the Licensee.

7.14 Non-Tariff Income

Petitioner's submission

The Non-Tariff Income for FY 2022-23 has been considered and escalated by 5% for ensuing years. Accordingly, the non-tariff income has been proposed as shown in the table below:

Table 7.19: Non-Tariff Income for FY 2022-23 (Rs. Crore)

Sr.No.	Particulars	MYT Approved	Proposed
1	Non-Tariff Income	0.47	6.80

MSPDCL requests the Hon'ble Commission to approve the **actual** Non-Tariff Income of **Rs 6.80 Crore** for FY 2022-23.

Commission's Analysis

Keeping in view of the 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 at Rs.6.80 Crs as projected. However, the Commission prefers to enhance it higher figure for FY 2022-23 but 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.

Thus, the Commission approves the Non-tariff income of Rs.8.00 Crore for FY 2022-23 though licensee prematurely claims it as actual NTI for the ensuing year.

7.15 Aggregate Revenue Requirement

Petitioner's Submission:

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 of 2018, is given in the Table below:

Table 7.20: Aggregate Revenue Requirement for FY 2022-23 by MSPDCL

(Rs. Crore)

	Particulars	**Approved in MYT Order**	**Proposed**
1	**Power Purchase or Energy Available (MU)**	1207.19	1124.46
2	**Sale of Power (MU)**	742.15	724.68
3	**Distribution Loss (%)**	13.00%	20.50%
A	**Expenditure**		
1	Cost of power purchase	556.98	602.37
2	Inter-State Transmission charges	70.76	93.80
3	Intra-state Transmission charges	112.43	93.82
4	SLDC & NERLDC Charges	0.87	1.48
5	Wheeling charges payable to other distribution licensee		0.00
6	O&M Expenses	146.32	148.78
	Employee Expenses	*119.24*	*113.09*
	R&M Expense	*8.59*	*19.25*
	A&G Expense	*10.57*	*16.44*
7	Depreciation	0.51	13.06
8	Advance against depreciation	0.00	0.00
9	Interest on Loan	1.86	33.10

	Particulars	Approved in MYT Order	Proposed
10	Interest on Working Capital	8.95	10.11
11	Bad Debt	3.00	3.00
	A: Total Cost	**901.68**	**999.53**
B	Add: RoE	**1.95**	1.95
	Add: Income Tax	**0**	0
	B: Total	**1.95**	1.95
	Total ARR : A+B	**903.63**	**1001.48**
C	Less: Non-Tariff Income	0.47	6.80
	Income from other business allocated to Licensed business	0.00	0.00
	C: Total	0.47	6.80
	D: Aggregate Revenue Requirement (A+B-C)	**903.16**	**994.67**

The ARR approved by the Commission for FY 2022-23 is Rs. 903.16 Crore. The proposed ARR for FY 2022-23 is Rs 994.67 Crore. MSPDCL humbly requests Hon'ble Commission to approve the same

Commission's Analysis

Based on the approved costs Aggregate Revenue Requirement for FY 2022-23 is approved as detailed below:

Table 7.21: Energy balance & Approved ARR by the Commission for 2022-23

Sl.No	Energy Particulars for 2022-23	MU
1	**Gross Energy Purchases**	1052.46
2	**Less: Inter State Transmission Losses @ 2.54%**	28.76
3	**Less: Outside State Sales**	35.00
4	**Less: State Transmission Losses @ 7.80%**	77.12
5	**Less: Distribution Losses**	186.90
6	**Retail Sale of Power**	724.68
7	**Distribution Loss (%)**	20.50%
A	**Approved Expenditure (FY 2022-23)**	**Rs.Crs**
1	Cost of power purchase	569.79
2	Inter-State Transmission charges	91.50
3	Intra-state Transmission charges	93.86
4	SLDC & NERLDC Charges	0.71
5	**O&M Expenses**	**91.52**
	i) Employee Expenses	*77.15*
	ii) R&M Expense	*8.25*
	iii) A&G Expense	*6.12*
6	Depreciation	1.96
7	Interest on Loan	17.62

A	Approved Expenditure (FY 2022-23)	Rs.Crs
8	Interest on Working Capital	--
9	Bad Debt	--
10	Return on Equity	1.56
	Gross ARR approved - (A)	**868.51**
B	Less: Non-Tariff Income	8.00
	Less: Efficiency Gains	0
	Total Deductions - (B)	**8.00**
	Net Aggregate Revenue Requirement (A-B)	**860.51**

Commission approves net ARR at **Rs.860.51 Crore for FY 2022-23** as against Rs.994.67 Crore projected by MSPDCL.

7.16 Revenue from sale of Power

Petitioner's submission

The revenue from sale of power to consumers at the existing tariff is estimated as Rs 546.22 Crore for FY 2022-23. The category-wise revenue realisation projection is as follows:

Category-wise revenue projection at existing tariff for 2022-23 (Rs.Crs)

Sl. No.	Category of Consumers	Proposed Sales (MU)	Proposed Revenue (Rs.Crs)
	LT Supply		
1	**Domestic (KutirJyoti)**		
	All Units	4.23	1.32
	Sub Total (a)	4.23	1.32
2	**Domestic (General)**		
	First 100 kWh	409.98	254.93
	Next 100 kWh	41.47	31.29
	Balance>200 kWh	19.25	16.23
	Sub Total (b)	470.70	302.45
	Total Domestic (I=a+b)	474.94	303.77
3	**Commercial**		
	First 100 kWh	31.51	25.20
	Next 100 kWh	8.92	7.45
	Balance>200 kWh	24.73	22.69
	Total Commercial LT (II)	65.16	55.35
4	Public Lighting – LT	3.69	3.63
5	Public Water Supply-LT	1.29	1.32
6	Agri& Irrigation-LT	0.00	0.00
7	Small Industry-LT	22.95	12.83
	Sub Total of Other LT (III=4+5+6+7)	27.93	17.79
8	Commercial-HT	21.97	25.03
9	Public Water Supply-HT	24.66	28.50
10	Agri& Irrigation-HT	0.75	0.51

Sl. No.	Category of Consumers	Proposed Sales (MU)	Proposed Revenue (Rs.Crs)
11	Medium Industry-HT	4.62	4.34
12	Large Industry-HT	10.66	12.17
13	Bulk Supply-HT	93.98	98.78
	Total of all HT (IV=8+9+10+11+12+13)	156.65	169.32
	Grand Total(I+II+III+IV)	724.68	546.22

Apart from the revenue from sales to the consumers, MSPDCL received revenue from sale of surplus power. The revenue from sale of surplus power FY 2022-23 is as follows:

Total Revenue from sales including surplus energy by MSPDCL in 2022-23

(Rs. Crs)

Item	Approved	Proposed
Sale of Surplus Power (MU)	332.17	92.26
Average Tariff for Sale of Surplus Power	NA	2.35
Revenue from sale of surplus power (Rs. Crore)	NA	21.68
Revenue for Sale to Consumers (Rs Crore)	NA	546.22
Total Revenue from Sales (Rs Crore)	**NA**	**567.90**

The revenue from sale of surplus power is estimated as Rs. 21.68 Crore for FY 2022-23. The rate of sale of surplus power has been considered as per present rate of IEX sale. Due to present situation, the rate is comparatively low (present year rate is given in the previous chapter). Accordingly, MSPDCL requests the Hon'ble Commission to approve the total revenue of Rs. 567.90 Crore for FY 2022-23.

Commission's Analysis

Revenue realization estimated for FY 2022-23 by Commission at existing tariff

Table 7.22: Revenue at existing tariff as per Commission in FY 2022-23

Sl. No.	MSPDCL Category (2022-23)	Energy Sales	Revenue (Existing Tariff)	(CPU) Avg.Rev
A	**LT Supply**	**MU**	**Rs.Crs**	**Rs./Unit**
1	Kutir Jyoti	4.23	1.32	3.12
2	LT Domestic	470.70	301.45	6.40
3	Commercial LT	65.16	53.44	8.20
4	LT Industries Micro/ Small	22.95	12.83	5.59
5	Public Lighting	3.69	3.63	9.83
6	Public Water-Works	1.29	1.32	10.24
7	Irrigation and Agriculture	-	-	-
	LT Supply Sub Total	**568.03**	**373.99**	**6.58**

Sl. No.	MSPDCL Category (2022-23)	Energy Sales	Revenue (Existing Tariff)	(CPU) Avg.Rev
B	**HT Supply**			
1	Commercial	21.97	25.03	11.39
2	Medium Industry	4.62	4.34	9.40
3	Large Industry	10.66	12.17	11.42
4	Bulk Supply	93.98	98.78	10.51
5	Public Water-Works	24.66	28.50	11.56
6	Irrigation and Agriculture	0.75	0.51	6.69
	HT Supply Sub Total	**156.65**	**169.33**	**10.81**
	TOTAL (LT & HT)	**724.68**	**543.32**	7.50
7	Outside State Sales	35.00	7.93	2.27
8	**Total Revenue from all sources**	**759.68**	**551.25**	7.26

The Detailed Calculation of Revenue at Existing Tariff is placed at **Annexure-III**

7.17 Revenue Gap

The Revenue Gap proposed by MSPDCL for FY 2022-23 is shown in the Table below:

Table 7.23: Final Revenue Gap for FY 2022-23 after subsidy by MSPDCL

(Rs. Crore)

Sl. No	Particulars	FY 2022-23
1	Net ARR	994.67
2	Total Revenue from retail sale	546.22
3	Revenue from surplus sales	21.68
4	**Revenue from all sources (2+3)**	**567.90**
5	**Revenue Gap before govt subsidy**	**426.77**
5	State Government Revenue Subsidy	301.38
6	**Unmet Revenue Gap (5-6)**	**125.39**

For FY 2022-23, the unmet revenue Gap is estimated at Rs. 125.39 Crore with Government subsidy support of Rs. 301.38 Crore. MSPDCL proposes to recover the GAP by way of tariff hike for FY 2022-23.

Commission Analysis:

As per the Commission, the Revenue Gap for FY 2022-23 after considering the possible revenue subsidy from Government is shown below:

Table 7.24: Revenue Gap after subsidy for FY 2022-23 by the Commission

Rs. Crores

Sl. No	Particulars	FY 2022-23
1	Net Aggregate Revenue Requirement	860.514
2	Revenue expected from existing tariff	543.327

3	Revenue from sale of surplus power quantum	7.932
4	Total expected Revenue (2+3)	551.259
5	**Unmet Revenue Gap (1-4)**	**309.256**
6	**Government Revenue Subsidy (Assured)**	**301.379**
7	**Gap to be covered by Revision of Tariff (5-6)**	**7.877**

7.18 MSPDCL proposal for Tariff Hike to recover the Gap of FY 2022-23.

Thus, MSPDCL has estimated that it will face a Revenue Gap of Rs. 426.77 Cr in FY 2022-23 for the proposed ARR with recovery as per existing tariff. Projected Average Cost of Supply and Average realization from sale of power for FY 2022-23 is as shown in the Table Below:

Table 7.25: Avg. Cost of Supply & Avg. Billing Revenue for FY 2022-23 by MSPDCL

Sl.No.	Particulars	Units	FY2022-23
1	Net Revenue Requirement	Rs. Crs	994.67
2	Revenue from existing tariff	Rs. Crs	546.22
3	Revenue from sale of surplus power	Rs. Crs	21.68
4	Total Revenue - (2+3)	Rs. Crs	567.90
5	**Revenue Gap (1-4)**	**Rs. Crs**	**426.77**
6	Energy Sales	MU	724.68
7	Surplus Power sales	MU	92.26
8	**Total Sales (6+7)**	MU	**816.94**
9	Average Cost of Supply - [(1-3)*10]/6	Rs/kWh	13.43
10	Avg Revenue from Retail Sale - (2*10)/6	Rs/kWh	7.54
11	Avg Rate for Surplus power Sale - (3*10)/7	Rs/kWh	2.35
12	Avg Rate from all energy Sale - (4*10)/8	Rs/kWh	6.95
13	Avg rate for Unmet Revenue Gap (5*10)/8	Rs/kWh	5.22
14	Government subsidy proposed	Rs.Crs	301.38
15	**Unmet Revenue Gap (5-14)**	**Rs.Crs**	**125.39**

Commission Analysis:

The projected Average Cost of Supply (ACS) and Average billing realization (ABR) from sale of power for FY 2021-22 as per the Commission is as shown Below:

Table 7.26: Avg. Cost of Supply & Avg. Billing revenue at existing tariff for FY 2022-23 by Commission

Sl.No.	Particulars (FY 2022-23)	Units	Amount
1	Net Revenue Requirement	Rs. Crs	860.514
2	Revenue from existing tariff	Rs. Crs	543.327
3	Revenue from sale of surplus power	Rs. Crs	7.932
4	Total Revenue - (2+3)	Rs. Crs	551.259

Sl.No.	Particulars (FY 2022-23)	Units	Amount
5	**Revenue Gap (1-4)**	**Rs. Crs**	**309.255**
6	Energy Sales	MU	724.68
7	Surplus Power sales	MU	35.00
8	**Total Sales (6+7)**	MU	**759.68**
9	**Average Cost of Supply [(1-3) ×10]/6**	**Rs/kWh**	**11.7649**
10	**Avg rate of billing revenue (2×10)/6**	**Rs/kWh**	**7.50**
11	Avg Sale Rate for Surplus power (3×10)/7	Rs/kWh	2.266
12	Avg Rate from all energy Sales (2×10)/6	Rs/kWh	7.497
13	Avg rate from Revenue Gap (5×10)/6	Rs/kWh	4.267
14	Government subsidy Proposed	Rs.Crs	301.38
15	**Unmet Revenue Gap (5-14)**	**Rs.Crs**	**7.877**

7.19 Recovery of Revenue Gap for FY 2022-23 as proposed by MSPDCL

Petitioner's Submission

Further, Hon'ble Commission, while approving the ARR of MSPDCL, has already factored in the desired efficiency improvements and approves only the expenses that are considered to be legitimately recoverable from the consumers, in the opinion of Hon'ble Commission. Hon'ble Commission is well aware that the actual Distribution Losses and intra-State Transmission Losses of MSPCL are significantly higher than that being approved by Hon'ble Commission on normative basis. Thus, there is no further scope for meeting any part of the approved ARR through efficiency improvements, and the entire approved ARR has to be met through tariff payable by the consumers.

It is pertinent to mention that, the revenue of MSPDCL is considered as per actual sales and billing basis at the time of truing up. Hence, the due amount to be recovered from consumer (i.e. billing – collection) would not be considered by Hon'ble Commission while trueing up in regulatory practice. Therefore, the additional income in terms of dues to be recovered from consumers should not be part of income of ensuring year. Otherwise, actual income received (collected) during the year can be considered while trueing up without considering the amount billed. Therefore, MSPDCL requests to consider the above submission and efficiency improvement (income through recovery of dues) should not be considered in the ARR for ensuring year.

Further, it needs to be appreciated that the existing revenue from sale of electricity does not even meet the power purchase cost from different sources, without even considering cost of inter-state and intra-state Transmission Charges. The Revenue from sale of power at existing tariff for FY 2022-23 is estimated at Rs. 546.228 crore, whereas the proposed cost of power purchase without inter-state and intra-state Transmission Charges for FY 2022-23 is itself Rs. 602.37 crore, i.e., Revenue from sale of electricity can meet only 90.67% of the power purchase cost excluding inter-State and intra-State Transmission Charges. The remaining of the power purchase cost, inter-state and intra-state transmission cost and other expenses, viz., O&M expenses, interest expenses, etc., have to be met through some other sources.

It may be noted that generally, some of the categories are subsidising consumers, i.e., their Average Billing Rate (ABR) is higher than the ACoS, and such subsidising consumers cross-subsidise the subsidised consumers, whose ABR is lower than the ACoS. However, in case of MSPDCL, as the ABR of all categories is lower than the ACoS, all the categories are subsidised, and there is no subsidising consumer category. This highlights the fact that the tariff of MSPDCL is at very low levels, which is unsustainable, and there is an urgent need to rationalise the tariffs of all consumer categories. There is no scope for further reduction of ACoS, as major component is power purchase cost and it is external to the licensee, and MSPDCL has no control on it. MSPDCL's own cost, which can be controlled by MSPDCL, is very minimum compared to the whole ARR.

Further, in the MYT Order, the Hon'ble Commission has relied upon the trajectory of technical performance parameters agreed in the tri-partite UDAY MoU signed between MSPDCL, Government of Manipur, and Government of India. The UDAY MoU had proposed the tariff hikes up to Rs 6/kWh by FY 2020-21. However, the tariff hikes approved are lower than the proposal agreed under UDAY MoU. The financial aspects of the UDAY MoU cannot be separated from the technical aspects, and in the absence of adequate tariff increases, MSPDCL cannot be expected to achieve the technical performance parameters. Hence, adequate tariff increase is essential and MSPDCL requests Hon'ble Commission to approve the appropriate and adequate tariff increase.

Further, the Hon'ble Commission will appreciate that MSPDCL's own contribution to its ARR is only Rs. 208.05 crore, after excluding cost of power purchase and transmission charges. Power purchase and transmission charges are payable to other agencies based on regulated tariffs, and hence, they are uncontrollable for MSPDCL. Thus, MSPDCL's contribution is only 20.92% of the proposed ARR, which works out to Rs. 2.28 per kWh, considering the total energy injected in MSPDCL's periphery.

Thus, it needs to be appreciated that the estimated Revenue Gap is Rs. 426.77 crore and Revenue from sale of power at existing tariff is Rs. 546.22 crore. In other words, if the entire Revenue Gap has to be recovered from the revised tariff, then the average tariff rise required will be 78.07%, which is very high and would amount to a huge tariff shock. Hence, for some years at least, the dependence on revenue subsidy support from the State Government would have to continue. At the same time, there is an urgent need to increase the category-wise tariffs to be charged by MSPDCL, so that the recovery of the ARR through tariffs can be met. In view of above, MSPDCL has considered that the State Government would provide revenue subsidy support in FY 2022-23 to the extent of Rs. 301.38 crore. The copy of the **Government letter Dt 16.03.2022 is assurance of the Tariff subsidy** is placed as **Annexure-VI** at the end of this Order. The balance Revenue Gap of Rs. 125.39 crore would thus, have to be recovered from the consumers through an average tariff hike of 22.80%, as shown in the Table below:

Table: 7.27 - Average Tariff Increase proposed by MSPDCL for FY2022-23

Sl. No.	Particulars	Units	Without Subsidy	With Subsidy
1	Net ARR	Rs.Crs	994.67	994.67
2	Revenue from Existing Tariff	Rs.Crs	546.22	546.22
3	Sale of Surplus Power	Rs.Crs	21.68	21.68
4	Total Sales Proceeds	Rs.Crs	567.90	567.90
5	Revenue Gap	Rs.Crs	426.77	426.77
6	State Government Revenue Subsidy	Rs.Crs		301.38
7	Net Un-met GAP	Rs.Crs	426.77	125.39

Sl. No.	Particulars	Units	Without Subsidy	With Subsidy
8	Revenue from sale at proposed tariff	Rs.Crs	972.99	670.77
9	**Unit realisation at the Proposed tariff**	**Rs./kWh**	**13.43**	**9.26**
10	**Average Tariff hike required = (7/2) x100**	**%**	**78.07%**	**22.80%**

Commission's Analysis:

Table: 7.28 -Average Tariff Increase approved by Commission for FY2022-23

Sl. No	Particular for FY 2022-23	Units	Existing	Post Revision
1	Net ARR	Rs.Crs	837.658	860.514
2	Revenue from existing tariff	Rs.Crs	545.11	543.327
3	Sale of Surplus Power	Rs.Crs	7.93	7.932
4	Total Sales Proceeds (2+3)	Rs.Crs	553.04	551.259
5	**Revenue Gap**	**Rs.Crs**	**284.62**	**309.255**
6	State Government Tariff Subsidy (*)	Rs.Crs	--	301.38
7	Net Unmet GAP	Rs.Crs	284.62	7.877
8	Total Revenue after tariff revision - (2+7)	Rs.Crs	--	551.203
9	**Average Tariff hike made = (7/2) x 100**	**%**	--	**1.44%**

(*) – As per Govt. subsidy letter Dt 16.03.2022 for 2022-23.

7.20Revenue after approved Tariff enhancement by Commission for FY 2022-23

Table 7.29: Expected revenue from Existing & Revised Tariff as per Commission

Sl. No.	MSPDCL Category (2022-23)	Energy Sales	Revenue (Existing Tariff)	(CPU) Avg.Rev	Revised Revenue	CPU (ABR)
A	**LT Supply**	**MU**	**Rs.Crs**	**Rs./Unit**	**Rs.Crs**	**Rs./Unit**
1	Kutir Jyoti	4.23	1.32	3.12	1.32	3.12
2	LT Domestic	470.70	301.45	6.40	301.45	6.40
3	Commercial LT	65.16	53.44	8.20	53.44	8.20
4	LT Industries Micro/ Small	22.95	12.83	5.59	14.55	6.34
5	Public Lighting	3.69	3.63	9.83	3.65	9.88
6	Public Water-Works	1.29	1.32	10.24	1.32	10.24
7	Irrigation and Agriculture	-	-	-	-	-
	LT Supply Sub Total	**568.03**	**373.99**	**6.58**	**375.74**	**6.61**
B	**HT Supply**					
1	Commercial	21.97	25.03	11.39	25.39	11.56
2	Medium Industry	4.62	4.34	9.40	4.75	10.28
3	Large Industry	10.66	12.17	11.42	12.53	11.75
4	Bulk Supply	93.98	98.78	10.51	103.48	11.01
5	Public Water-Works	24.66	28.50	11.56	28.77	11.67

Sl. No.	MSPDCL Category (2022-23)	Energy Sales	Revenue (Existing Tariff)	(CPU) Avg.Rev	Revised Revenue	CPU (ABR)
6	Irrigation and Agriculture	0.75	0.51	6.69	0.54	7.14
	HT Supply Sub Total	**156.65**	**169.33**	**10.81**	**175.46**	**11.20**
	TOTAL (LT & HT)	**724.68**	**543.32**	7.50	**551.20**	7.61
7	Outside State Sales	35.00	7.93	2.27	7.93	2.27
8	**All Sources Revenue Total**	**759.68**	**551.25**	7.26	**559.13**	**7.36**

Note: Detailed calculation for revised tariff is given at Annexure – IV.

The revision in tariff is made effective from 1st April 2022 itself. The revenue assessment in case of all H.T category revenue assessment made upon adoption of **0.90 Power factor** as was stipulated in the Electricity Supply Code for all practical purposes. Otherwise this aspect has the impact of undermined H.T revenue. Besides, the Sales projection of 724.68MU indicated in ARR filing has been adopted by Commission as the sales projection for FY2022-23.

As seen from **Table-7.26** supra the revenue gap noted was at **Rs.309.255 Crore** before considering the Govt subsidy amount which is about **36.27%%** of **Net ARR approved** of **Rs.852.582Crs** (i.e., 860.514-7.932) in FY 2022-23 after due adjustment of the expected revenue realisable from Outside State sale. When it comes to revenue subsidy from Govt of Manipur**, a letter was received recently on 16th March 2022** after public hearing that budgetary support of Rs.301.38Crs had been approved already. **The copy of the letter is placed as an annexure-VII** at the end of this Order. Thus, the revenue gap to be covered by tariff hike is to the tune of **Rs.7.877crs**

The Commission thus considers it imperative to revise the existing tariffs up to **1.44%** increase under telescopic billing as against 22.955% proposed by MSPDCL **(22.80% as filed in the petition by licensee had to be revised)** in order to obviate huge tariff revision experience to retail consumers of the State and also to finally bridge the noted revenue gap. The commission approved tariff would provide an additional revenue of Rs.**7.877Crore** (**Rupees Seven point eight seven seven Crores only**) to MSPDCL during FY2022-23. **The revenue gap of Rs.125.39 Crs as proposed by the MSPDCL got decreased to Rs.7.877 Crs with various costs judiciously approved by the Commission.**

In addition, during the public hearing in the interaction MSPDCL has provided the following dues data with an assurance that those dues will be fully recovered from both the Government and Non-Governmental organisation to the tune of Rs.119.10Crs. The details are as follows:

Outstanding dues as on 31.03.2021 to MSPDCL as per audited Accounts

Sl. No.	Details of dues	Amount (Crores)	Remarks
1.	Outstanding dues for FY2020-21	**544.83**	As per audited Annual accounts
2.	The Legacy dues (1.02.2014) transferred by Elecy Deptt of Manipur (EDM)	**425.73**	Dues transferred to MSPDCL upon Restructuring
3.	The accumulated dues after MSPDCL formation.	**119.10**	Which includes Rs.71.08Crs from government Departments as on 31st March 2021.
4.	Collection of Govt. Deptt dues during 2022-23	**71.08**	**Promised to Collection 100% dues.**
5.	Collection of Non-Governmental consumer dues	**48.02**	**Promised to collect the entire dues from defaulting consumers during FY 2022-23.**

Since, the MSPDCL on their volition informed the Commission to consider their efforts to collect the above said dues of Rs.119.10Crs fully during FY 2022-23, the Commission had not factored any efficiency gains component in their Aggregate Revenue Requirement amount for FY 2022-23, which otherwise would have been adopted some portion of it in the tariff determination process. As a leeway, this time, the Commission would be watchfully of these collections and their performance and any failure to recover those dues as promised would be viewed very much seriously and would impose a severe cut in the ARR amount in future with appropriate penal charges depends upon the situation then assessed.

7.21 Government Subsidy/ Support

The Tariff Subsidy support amount to MSPDCL from Government of Manipur is now fixed at **Rs. 301.38 Crs** Crore as indicated in the ARR. As seen from the above, it is clear that the revenue from sale of power at existing Tariff and Government subsidy together leaves an unmet gap of Rs.7.877 Crs to be recovered through fresh revision of Tariff in order to meet the approved net ARR to the tune of **852.582 Crs.** Consequently, the MSPDCL shall make assiduous efforts to get the tariff subsidy/ support promptly from Government of Manipur on monthly basis to even out the heralding financial crunch due to huge noted revenue gap.

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 implement the subsidized tariffs to their consumers as per Revised Subsidized Tariff Schedule placed at **Table-8.2** and the broad revenue amount realizable is shown at **Table-7.29.** The element-wise detailed calculations of expected revenue from approved (subsidized) tariff are placed at **Annexure-IV** for guidance and reference.

Hence, the State Government should release the above stated annual subsidy amount of Rs.301.38Crs in Twelve (12) equal monthly installments amounting to **Rs.25.115 Crs** (Rupees Twenty-Five crore and eleven point five lakhs only) per month which shall also include April 2022 month onwards. However, in the event of non-receipt of subsidy in any month from the Government, the licensee shall adopt the applicable **full cost tariff schedule (FCTS**) placed at **Table-8.3**, while issuing the monthly energy bill for that relevant month (detail revenue calculation from FCT is indicated at **(Annexure-V).**

A brief summary of revenue amount of Rs.852.58Crs being the Full Cost Tariff (FCT) amount after adjusting revenues expected from Outsides sale of Rs.7.93crs is tabulated below for reference.

Table: 7.30. MSPDCL Revenue details at Full Cost Tariff for FY 2022-23

Sl. No	Category	Sales (MU)	CPU (Rs/kWh)	Revenue (Rs. Crs)
A	**LT Supply**			
1	Kutir Jyoti	4.23	10.03	4.246
2	Domestic	470.7	10.94	515.059
3	Commercial	65.16	12.96	84.445
4	Small Industry	22.95	12.03	27.594
5	Public Lighting	3.69	13.67	5.048

Sl. No	Category	Sales (MU)	CPU (Rs/kWh)	Revenue (Rs. Crs)
6	Public Water Works	1.29	13.60	1.758
7	Irrigation & Agriculture	0	0	0
8	**Total Low Tension**	**568.03**	**11.23**	**638.150**
B	**HT Supply**			
9	Commercial	21.97	13.65	29.992
10	Public Water Works	24.66	13.85	34.165
11	Irrigation & Agriculture	0.75	11.72	0.884
12	Medium Industry	4.62	13.04	6.026
13	Large Industry	10.66	13.86	14.778
14	Bulk Supply	93.98	13.68	128.588
15	**Total High Tension**	**156.65**		**214.433**
16	**Grand Total (LT+HT)**	**724.68**	**11.77**	**852.583**
17	Outside State Sales	35.00	2.27	7.932
18	**Total overall Sales**	**759.68**	**11.33**	**860.515**

There can 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 of 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 hike in comparison to the MSPDCL ARR filing is tabulated below:

Table 7.31: Average Cost of Electricity Supply MSPDCL Vs. Commission for FY2022-23

Sl. No	Particulars	Units	MSPDCL Projected	Commission Approved
1	Net overall ARR	Rs. Cr	994.67	860.514
2	Sale of surplus power	Rs. Cr	21.68	7.932
3	**Net ARR within the state (1-2)**	**Rs. Cr**	**972.99**	**852.582**
4	Govt. subsidy/ Support	Rs. Cr	301.38	301.38

5	**Net ARR after Govt. subsidy (3 - 4)**	**Rs. Cr**	**671.61**	**551.204**
	a)Revenue from existing Tariff	Rs.Cr	546.22	543.327
	b)Additional revenue from Hike	Rs.Cr	125.39	7.877
6	Energy sale within the state	MU	724.68	**724.68**
7	**Average cost of supply (3/6)**	Rs/KWH	**13.426**	**11.765**
8	Avg. Revn. realisation (subsidy if paid)- (5/6)	Rs/KWH	9.267	7.61
9	**Avg. Subsidy per unit - (7-8)**	Rs/kWh	**4.159**	**4.155**

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8.Tariff Principles and Design

8.1 Background

a.The Commission, in determining the revenue requirement of MSPDCL for the year 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.

e.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 tariff petition for FY 2020-21 has proposed for revision of the existing retail tariffs to various categories of consumers to earn additional revenue to meet the expenses partly.

The MSPDCL has proposed tariff revision as indicated in table - 8.1 below. The proposed increase in tariff by the MSPDCL would result in an overall increase in revenue is about **22.80%**

Table 8.1: Existing and Proposed Tariff for FY 2022-23 by MSPDCL

Sl. No.	Consumer Category	Existing Tariff (2021-22)		Proposed Tariff (2022-23)	
		Fixed Charges	Energy charge	Fixed Charge	Energy Charge
	LT Supply	**(Rs./kW/PM)**	**Rs/kWh/PM**	**(Rs./kW/PM)**	**Rs/kWh/PM**
1	**Kutir Jyothi**				
i	All units (15kWh/ month)	25 (Connection)	2.10	25 (Connection)	2.10

Sl. No.	Consumer Category	Existing Tariff (2021-22)		Proposed Tariff (2022-23)	
		Fixed Charges	Energy charge	Fixed Charge	Energy Charge
	LT Supply	**(Rs./kW/PM)**	**Rs/kWh/PM**	**(Rs./kW/PM)**	**Rs/kWh/PM**
2	**Domestic**				
i	0-100 kWh/month	60	5.10	75	6.70
ii	101-200 kWh/month	60	5.95	75	7.85
iii	Above 200 kWh/month	60	6.75	75	8.90
3	**Commercial**				
i	1-100 kWh/month	85	6.55	95	8.50
ii	101-200 kWh/month	85	7.25	95	9.45
iii	Above 200 kWh/month	85	7.65	95	10.00
4	Public Lighting System	70	9.55	80	9.95
5	Public Water works	105	9.80	115	10.00
6	a)Agriculture	65	4.55	75	6.50
	b)Irrigation (others)	65	4.55	75	6.50
7	Small Industry	70	4.85	80	6.20
	HT Supply	**Rs/kVA/PM**	**Rs/kVAh/PM**	**Rs/kVA/PM**	**Rs/kVAh/PM**
1	Commercial	105	8.75	115	9.95
2	Public Water works	105	9.50	115	9.90
3	a) Agriculture	105	4.75	115	6.50
	b) Irrigation (others)	105	4.75	115	6.50
4	Medium Industry	105	7.20	115	8.30
5	Large Industry	105	8.80	115	9.70
6	Bulk Supply	105	8.80	105	10.00

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, though the licensee has ignored such indication in the energy charges which was existing in the last year FY 2021-22 also.**

c)Revised Tariff approved for FY 2022-23 by the Commission

Having considered the Petition (ARR & Tariff) of MSPDCL for approval of Aggregate Revenue Requirement (ARR) and determination of Retail Tariff for sale of energy and having approved the Aggregate Revenue Requirement (ARR) with a revenue gap of **Rs. 309.255 Crore** vide Table-7.26 supra the Commission considers to revise the tariffs under Telescopic billing/with an average increase by **1.449**%, as against 22.80% projected by MSPDCL detailed in table below.

The Commission has not agreed to increase the fixed charges as proposed by MSPDCL but the Energy charges were revised at the following rates making it effective 1st April 2022 onwards only.

Table 8.2: Category wise Tariffs Approved by the Commission for FY 2022-23

Sl. No	Category & Consumption Slab	Fixed Charges (Rs./kW/Kva/PM)	Energy Charges (Rs./kWh or kVAh)
	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	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	a)Agriculture (Individual)	65	4.55
	b)Irrigation (others)	65	4.55
7	Small Industry	70	5.60
	HT SUPPLY	**(Rs./kVA)**	**(Rs./kVAh)**
1	Commercial	105	8.90
2	Public Water Works	105	9.60
3	a) Agriculture (Individual)	105	5.15
	b) 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 only. Detailed Charges description are given in the tariff schedule Appended.

d)Approved Full Cost Tariff

With the approved ARR for FY 2022-23, the Commission also works out the average revenue realization is at **Rs.7.61/kWh based on revised tariff**. In the event of non-receipt of monthly subsidy in advance in any month from the State Government, the Commission directs to adopt charging full cost tariff (FCT) to all those consumers for whom the subsidy not received is tabulated below:

Table 8.3: Category wise full cost tariff (Without Subsidy) for FY 2022-23 as approved by the Commission

Sl. No	Category & Consumption Slab	Fixed Charges (Rs./kW/kVA/pm)	Energy Charges (Rs./kWh or kVAh)
	LT SUPPLY (FCT)		
1	**Kutir Jyoti**	**Rs./Connection**	**Rs./kWh**
	All units (Upto 45 kWh/ 3 Months)	25/Connection	9.01
2	**Domestic**	**Rs./kW**	**Rs./kWh**
	(iii)First - 100 kWh/Month	65	9.73
	(iv)Next 100 kWh/Month	65	9.57
	(iiI) Above 200 kWh/Month	65	11.76
3	**Non-Domestic/Commercial**	**Rs./kW**	**Rs./kWh**
	(iv)First - 100 kWh/Month	85	11.04
	(v)Next 100 kWh/Month	85	12.59
	(vi)Above 200 kWh/Month	85	13.47
4	Public Lighting	70	13.39
5	Public Water Works	105	13.16
6	a) Agriculture (Individual)	65	0.00
	b) Irrigation (Others)	65	0.00
7	Small Industry	70	11.28
	HT SUPPLY (FCT)	**(Rs./kVA)**	**(Rs./kVAh)**
1	Commercial	105	10.78
2	Public Water Works	105	11.57
3	a) Agriculture (Individual)	105	9.27
	b) Irrigation (Others)	105	9.27
4	Medium Industry	105	10.48
5	Large Industry	105	11.00
6	Bulk Supply	105	11.65

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-VI** 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.

9.Wheeling Charges for FY 2021-22

9.1Background

MSPDCL has proposed its wheeling charges at **1.50/kwh**. 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 9.1 Allocation matrix

Sl. 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%

9.2 ARR for wheeling business projected by MSPDCL

Table 9.2: ARR for Wires Business for FY 2022-23 projected by MSPDCL

Sl. No.	Particulars	Total ARR	Wires Business	Retail Supply Business	Wires ARR	Supply ARR
A	**Expenditure**	**Rs.Crs**	**(%)**	**(%)**	**Rs.Crs**	**Rs.Crs**
1	Cost of power purchase	602.37	0%	100%	0	602.37
2	Inter-State Transmission charges	93.80	0%	100%	0	93.80
3	Intra-State Transmission charges	93.82	0%	100%	0	93.82
4	NERLDC Charges	1.48	0%	100%	0	1.48
5	O&M Expenses	**148.78**			**93.40**	**55.38**
	Employee Expenses	113.09	60%	40%	67.85	45.24
	Repair & Maintenance Expenses	19.25	90%	10%	17.33	1.93
	Administrative & General Expenses	16.44	50%	50%	8.22	8.22
6	Depreciation	13.06	90%	10%	11.76	1.31

Sl. No.	Particulars	Total ARR	Wires Business	Retail Supply Business	Wires ARR	Supply ARR
7	Interest on Loan	33.10	90%	10%	29.79	3.31
8	Interest on Working Capital	10.11	10%	90%	1.01	9.10
9	Provision for bad debts	3.00	0%	100%	-	3.00
	Total Cost	**999.53**			**135.96**	**863.57**
B	Add: Return on Equity	1.95	90%	10%	1.76	0.20
	Add: Income Tax	0	90%	10%	-	-
	B: Total	1.95			**1.76**	**0.20**
C	**Total ARR: A+B**	**1001.48**			**137.72**	**863.76**
D	**Less (Non-Tariff Income)**	6.80	10%	90%	0.68	6.12
	Sub-total (D)	6.80			**0.68**	**6.12**
	Net Aggregate Revenue Requirement (C-D)	**994.67**			**137.03**	**857.65**

The proposed Wheeling Charges for FY 2022-23 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 below:

Table 9.3: ARR for Wires Business for FY 2022-23 projected by MSPDCL

Sl.	Particulars	Units	Amount
1	ARR for Wires Business	Rs. Crore	137.03
2	Energy available at Distribution periphery	MU	911.54
3	**Wheeling Charges**	**Rs/kWh**	**1.50**

Thus, MSPDCL proposes Wheeling Charges of Rs. **1.50 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 9.1 supra is as detailed in table below.

Table 9.4: ARR of wheeling business approved by the Commission for FY 2022-23

Sl. No.	Particulars	Total ARR	Wires Business	Retail Supply Business	Wires ARR	Supply ARR
A	**Expenditure**	**Rs.Crs**	**(%)**	**(%)**	**Rs.Crs**	**Rs.Crs**
1	Cost of power purchase	569.78	0%	100%	0	569.78
2	Inter-State Transmission charges	91.50	0%	100%	0	91.50
3	Intra-State Transmission charges	93.86	0%	100%	0	93.86
4	NERLDC Charges	0.71	0%	100%	0	0.71

Sl. No.	Particulars	Total ARR	Wires Business	Retail Supply Business	Wires ARR	Supply ARR
5	O&M Expenses	**148.78**			**56.78**	**34.75**
	Employee Expenses	77.15	60%	40%	46.29	30.86
	Repair & Maintenance Expenses	8.25	90%	10%	7.43	0.83
	Administrative & General Expenses	6.12	50%	50%	3.06	3.06
6	Depreciation	1.96	90%	10%	1.76	0.20
7	Interest on Loan	17.62	90%	10%	15.86	1.76
8	Interest on Working Capital	0	10%	90%	0.00	0.00
9	Provision for bad debts	0.00	0%	100%	-	0.00
	Total Cost	**866.95**			**74.40**	**792.56**
B	Add: Return on Equity	1.56	90%	10%	1.40	0.16
	Add: Income Tax	0	90%	10%	-	-
	B: Total	1.56			**1.40**	**0.16**
C	**Total ARR: A+B**	**868.51**			**75.80**	**792.71**
D	**Less (Non-Tariff Income)**	8.00	10%	90%	0.80	7.20
	Sub-total (D)	**8.00**			**0.80**	**7.20**
	Net Aggregate Revenue Requirement (C-D)	**860.51**			**75.00**	**785.51**

9.3Wheeling 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 9.5: Wheeling Tariff approved by the Commission for FY 2022-23

Sl. No.	Particulars	Unit	Amount
1	ARR for wheeling function	Rs/Crore	75.00
2	Energy available at Distribution periphery	MU	911.58
3	Wheeling tariff	Rs/kWh	0.8227

The Commission approves wheeling charge at Rs. 0.8227/kWh for FY 2022-23 as against Rs.1.50 projected by MSPDCL.

10.Directives

10.1 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 2: Annual Statement of Accounts

MSPDCL was directed to prepare separate annual accounts statements such as balance sheet, profit and loss Account and relevant schedules and statements every year for regulatory purpose and submit to the Commission after duly getting them audited. MSPDCL should file next ARR tariff petition along with true up petition base on audited annual accounts figure for the years from 2015-16, 2016-17 and 2017-18. Their commission shall no longer entertain provisional true up.

Commission will no longer entertain provisional true up in the next tariff petition without the submission of the Audited annual accounts in full shape. The delay in submission of true-up will cost the Licensee to forego the entitlement to claim for additional period cost due to inflation for the true-up delay.

Compliance Status

MSPDCL has completed the annual account auditing through its chartered accountant. MSPDCL is in the process of preparation of true-up petition and will submit the same to the Hon'ble Commission after completion of present tariff process.

Comment of the Commission

Directive is treated as not complied with and awaits reply.

Directive 3:

Maintenance of Asset & Depreciation Registers

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

Compliances:

Asset and depreciation registers for previous financial years are ready for submission. The same shall be submitted at the earliest possible.

Commission's Comments

The Commission observes the above reply to be a stock reply, as the same reply with verbatim was given during 2020-21 Tariff Order finalisation also. Why the registers are still pending for submission to Commission, if they are ready. For this reason, the Investment CAPEX, fresh Capitalisation and Depreciation & Return on Equity claims will not be considered from the ongoing ARR finalisation till such time this information which is ready in full shape is kept in abeyance intentionally by Licensee.

This action of Commission is now in implementation from this Tariff order itself and also in all true-up claims being preferred*. 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:

The MIS system is under progress and the database is being prepared. The online payment portal for pre-paid recharge is already active, where payments can be done through electronic wallets.

Commission's Comments

The above compliance reply is the facsimile of last year's reply and no progress seems to have been achieved even after elapse of one full year time. There seems, the licensee is very much casual in his attentiveness to Commission directives.

The directive is treated as uncompiled.

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:

A summary of consumer bill outstanding is as follows:

Opening as on 01.02.2014	431.12 Cr
31.03.2014	425.72 Cr

31.03.2015	437.47
31.03.2016	403.37
31.03.2017	427.48
31.03.2018	452.32

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 and 2020-21 needs to be submitted to the Commission without fail or any plausible reason on or before 30th June 2022.

This directive is not dropped and it is still to comply.

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 and 12.96 MU in FY 20-21 (UI overdrawal).

Further, sale of surplus power on IEX has been reduced from 207.74 MU in FY 2017-18 to 130 MU in 2018-19 and 111.41 MU in FY 20-21.

As MSPDCL has signed the long term PPA with CGPs for purchase of power, MSPDCL has to pay the fix charges for total quantum and variable charges for quantum of energy drawl.

Due to increase in domestic consumers and hence sales, the surplus available energy is reducing. Further, the availability of power from CGPs is varying based its availability and hydrology. Also, the states consumption is varying which is more in winter than other seasons. 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. MSPDCL has planned to slowly reduce the surplus sales to IEX.

Commission's Comments

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.

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:

The unauthorized connections and connected load are being taken care of under the pre-paid metering plan. MSPDCL has already achieved 100% pre-paid metering for EC-I. AB Cables are being used in LT supply to avoid the power theft. In EC-I around 90% LT lines are using AB cables.

For EC-II and EC-III, 100% per-paid metering will be achieved.

Physical verification drive shall be conducted and MSPDCL will intimate the same to the Commission.

Commission's Comments

All unauthorized connections should be identified and regularized with appropriate penalties as per the provisions of Electricity Supply Code in vogue. A vigorous drive should be pursued in this manner and progress achieved status shall invariably intimated to the Commission for each quarter within 15 days from such quarter completion. ***The non-compliance of this directive is continued for very long.***

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:

It is submitted that MSPDCL is allotting the New connection to the consumer only after installation of the Meter. List of Replacement of Defective Meters and installation of Meters to Un-Metered Connection is under consideration & will be submitted once finalized. Based on the availability of new energy meters, 100% replacement of defective meters shall be completed.

Commission's Comments

The reply is a stock reply (same as last year reply). It appears no action seems to have taken up in this matter so far since last year 2020-21 Tariff

Order finalisation. **A report in this regard should be submitted by MSPDCL soon after the issue of this order without any delay in May 2022.**

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

The details of Physical and financial status of RAPDRP & RGGVY Schemes shall be submitted <u>at the earliest possible</u> after completion of preparation of closure report in this regard.

Commission's Comments

The above compliance reply is a repetition reply similar to last year. Though, the Directive was issued to submit a status reply by May 2020. Explain, why this kind of disorientation on the part of MSPDCL be treated as dis-obedience and Commission awaits your explanation in this matter for taking further suitable action.

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:

No Such Capital Investment Plan has been proposed form MSPDCL own funds in the FY 2019-20 and FY 2020-21.

Commission's Comments

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 is to be submitted immediately.

Directive 17:

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

Compliances:

The energy meters are 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. (This is a replica of the last years reply without any change in verbatim)

Commission's Comments

The above reply is a replica of the last years reply without any change in verbatim and the Compliance of Directive can't be a ritual by nature and casual in attitude. Where is the detailed reply on HVC with MDI which was due on July 2020 and the reply has no relevance, what has been directed and MSPDCL behaviour is very much deplorable and testing the patience of the Commission lenient view. Details of High Value consumers with MDI may be submitted by 15th may 2022.

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:

Connection without installation respective meters. Further it is submitted that due to non-availability of energy meters the 100% energy metering could not be completed. MSPDCL shall put all its efforts to complete the 100% HT metering and the 100% LT metering.

Commission's Comments

The above compliance report is a facsimile of last year reply without any iota of change in words. This kind of replying by MSPDCL shall be eschewed forthwith and this may be treated as advance warning for avoidance of Commission action for this derisory 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.

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

MSPDCL would like to inform the Hon'ble Commission that there has been progress in the in-house development of IT enabled system in the last one year. Some in-house developed IT platforms are already in operation to improve administrative processes. A few notable accomplishments are listed below.

→powernodue.com: It is a domain which has a database of all the employees along with their connection status. It incorporates a hassle free fast and efficient process of getting no-dues certificate.

→Indent: It is an IT enabled platform which facilitates and streamlines the approval process for despatch from store to field.

→ Online prepaid recharge with e-wallets like NPCI Bharat Bill Payment System.

Furthermore, MSPDCL would like to state that it has bought Virtual Private Network and it is being planned to set up a physical server in one year to go digital with all the files available on one electronic platform. All these steps are guided towards making MSPDCL independent with its IT team and reducing dependency on consultants.

The entire software related to billing, payment and collection is now maintained in-house. 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.

Commission's Comments

The above compliance report is a facsimile of last year reply without any iota of change in words. This kind of replying by MSPDCL shall be eschewed forthwith and this may be treated as advance warning for avoidance of Commission action for this derisory replying.

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.** The Status reply with reasons for delay in not sending earlier reply is expected by Commission on or before 15th June 2022.

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

The computerised billing program for power factor rebate/surcharge is under progress. The IT cell of MSPDCL is undertaking the necessary steps towards installation of the program.

Power factor Rebate/Surcharge has been incorporated in postpaid billing system. MSPDCL is trying to incorporate the same for prepaid meters in consultation with prepaid meter manufacturers.

Commission's Comments

The above compliance report is a facsimile of last year reply without any iota of change in words except FY 2020-21 to 2021-22. This kind of replying by MSPDCL shall be eschewed forthwith and this may be treated as advance warning for avoidance of Commission action for this derisory replying.

MSPDCL is taking pretty long time to accomplish in this matter and the IT Cell should complete this within 6 (six) months' time to reap its benefits but not for years to pass on.

The status report on this matter is still awaited by the Commission to know the progress achieved in the field ground reality.

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

It is submitted that under RAPDRP Part-A 72 nos. of 11KV Feeder meters and 925 nos. of DT meters were installed.

100% DTC metering could not be completed due to non-availability of energy meters and the same will be updated once closure report is prepared for various central government sponsored scheme.

Commission's Comments

The above compliance report is a facsimile of last year reply without any iota of change in words except FY 2020-21 **to near future**. What's meant by **near future** without any deadline does it mean the MSPDCL is sceptic about the task accomplishment. This kind of replying by MSPDCL shall be eschewed forthwith and this may be treated as advance warning for avoidance of Commission action for this derisory replying.

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 may 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 23

As per Regulations 2 (19) of JERC (M&M) (MYT) Regulations, 2014 the Second Control Period shall be five years from 01.04.2018. The MSPDCL is directed to submit the next ARR for Control Period from FY 2018-19 to FY 2022-23 and Tariff Petition for FY 2018-19 and true up petitions for FY 2015-16 and FY 2016-17 along with audited annual accounts for FY 2015-16 and FY 2016-17 invariably. Audited Annual Accounts for FY 2015-16 to FY 2015- 16 to FY 2017-18 along with revised true up petitions be submitted soon.

Compliance status

The audited balance sheet of MSPDCL for previous financial years are being prepared and will be made submitted soon. After finalization of audited accounts MSPDCL will submit the same for final true-up.

Commission’s Comments

Audited -Annual Accounts from FY 2016-17 onwards along with true-up petition is pending. MSPDCL is directed to submit the same soon.

The Directive is treated as not complied with.

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 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.

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 trivesctor / MDI meters.

Commission's Comments:

The MSPDCL is directed once again to provide details of all HT consumers with required trivector/MDI meters.

New 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:

It is submitted that MSPCL & MSPDCL to nominate nodal officers with minimum rank of DGM and co-ordinate the exercise of joint feeder meter reading, every month and compile feeder wise energy sent out / received by MSPCL / MSPDCL for energy audit.

The joint meter readings are to be counter signed by the nodal officers. The

Nodal Officer for joint metering from MSPDCL is nominated.
At present provisional meter readings, subject to correction, are taken in the presence of the Substation Staff using CMRI.

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 on or before 30th June 2022 without fail and the non-compliance will be considered seriously.

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:

The monthly feeder wise energy report is required to be reconciled with MSPCL and SLDC report.

At present, energy accounting through DT metering could not be done due to the below reasons

- 100% DTR metering was not done under the scheme.
- Deactivation of GPRS connectivity for the installed modems attached to DTs due to unstable network.
- The exorbitant recurring charges for the installed systems

MSPDCL has been installing 11 KV feeder meters on priority basis.

Due to not availability of meters the 100% metering could not be completed. MSPDCL shall submit the complete status of metering **at the earliest possible.**

Commission's Comments

The above compliance report is a facsimile of last year reply without any iota of change in words except **earliest possible**. This kind of replying by MSPDCL shall be eschewed forthwith and this may be treated as advance warning for avoidance of Commission action for this derisory replying and for not being attentive.

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 30th June 2022 without fail and the non-compliance will be considered seriously.

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:

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.

The LT three phase consumers above 20 kW are having prepaid meters. They are being billed on kWh basis.

Commission's Comments

The above compliance report is a facsimile of last year reply without any iota of change in words. This kind of replying by MSPDCL shall be eschewed forthwith and this may be treated as advance warning for avoidance of

Commission action for this derisory replying and for not being attentive.

Latest Status report to be submitted by May 2020 is still awaited by the Commission.

The Licensee is once again directed to submit the latest available status report immediately without fail and the non-compliance will be considered seriously.

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:

MSPDCL is collecting the data and shall submit the same at the earliest possible.

The cumulative installation data is given below:

Year	Prepaid Metering
2015-16	1.80 Lakh
2016-17	3.01 Lakh
2017-18	3.20 Lakh

2018-19	3.27 Lakh
2019-20	3.27 Lakh
2020-21	3.27 Lakh
2021-22	3.62 Lakh

Commissions Comments:

The above compliance report is a facsimile of last year reply. This kind of replying by MSPDCL shall be eschewed forthwith and this may be treated as advance warning for avoidance of Commission action for **not being attentive.**

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 Licensee is once again directed to submit the latest available detailed report circle wise status report on or before 30th June 2022 **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:

MSPDCL has considered the data as per recharge information available with MSPDCL. Based on the recharge amount, monthly consumption, number of consumers in each slab etc has been derived. Based upon that data for three financial years have been submitted.

Commission's Comments

The data base Information so gathered pertaining to FY 2020-21 and 2021-22 should be submitted by 1st June 2022 as the same reply is still awaited by the Commission.

Directive 37

MSPDCL should vigorously take up consumer metering either in Postpaid/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 un-accounted energy and Distribution losses of the DISCOM.

Compliances:

MSPDCL is implementing extensive pre-paid metering scheme and for that 2 lakh prepaid meter scheme has been launched. The details of the scheme are already submitted before the Hon'ble Commission. MSPDCL has awarded the LOA on 19 December 2020 on Turn-key Firm(TKF) mode to M/s Shyama Power in this regard. The district wise target is given below:

Districts	LT Metering (Target)
	Pre Paid Energy Meters (nos)
Bishnupur	9,121
Chandel	20,765
Churachandpur	16,711
Imphal West	11,964
Imphal East	47,777
Senapati	35,690
Thoubal	25,207
Tamenglong	19,873
Ukhrul	12,892
Total	**2,00,000**

Commission's Comments

The status report on the target achievement on the above LT metering in various districtsbe updated every six months. This Directive is still in force.

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:

MSPDCL is currently undergoing the work of 2 lakh Prepaid Meter installation. Also Power Reforms of brining down the AT&C Loss to national average of 12.50% by FY 2024-25 and ACS-ARR Gap of Rs 0.00/kwh by FY 2024-25 is currently under evaluation in RDSS scheme.

Commission's Comments

The incapability expressed as above by the MSPDCL by giving a stock reply on a matter needing high priority is very pathetic. Circle wise sales and energy input data would clearly depict the category-wise sales and distribution losses projection for FY 2021-22 and its reflections in FY 2022-23 are not having any basis and the projections being made in ARR submission is a kind of ritual and not with due diligence. Accuracy on the filed figure can't be relied upon as they are not the true reflection of Licensees performance anymore even after attained the Corporate status in 2014.

Under these circumstances, how would the licensee fulfil the REC-Tranche-II pre-condition of "***A plan, endorsed by the State Government in consultation with Ministry of Power, to bring down their AT&C losses and ACS-ARR gap over the next three to four years***". Explain?

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

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:

Late payment surcharge is added in the bills prepared by MSPDCL as per order in force. The same is reflected in consumer bills. For adjustment of arrears, in case of pre-paid payment, some amount (20% of the recharge amount) is adjusted first with older dues and remaining is considered as amount available for present consumption. However, the share of old dues, available at the time of company formation, is significant in total arrear. The same may be written-off and MSPDCL is pursuing the same with State Government. Proposal has been submitted before State Government

Commission's Comments

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 without fail before 30th June 2022. 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:

It is respectfully submitted that MSPDCL is strictly following the Merit Order Despatch technique. MSPDCL regularly submits the merit order to SLDC considering the power purchase cost of each project. As per availability submitted by the generators, the schedule is prepared accordingly, as per merit order. When cheaper sources are not available, due to any reason, MSPDCL has to schedule power from next available sources. As per demand characteristics, higher procurement is required in the summer months, when state demand is low, to banked the energy with other utilities. In winter months, i.e. high demand season for Manipur, the same can be utilised through import of banked energy from utilities. The same fact can be checked from actual monthly data for FY 2020-21 as submitted with this Petition. The outside state sales, through power exchange (not banking), occurs due to sudden reduction of state demand, which is difficult to estimate. MSPDCL tries to optimize the power purchase cost to pass the benefits to the consumers.

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:

MSPDCL following the directives given by Hon'ble Commission and working as per the direction. MSPDCL prepares the bills according to consumer category.

Commission's Comments

Report the number of cases detected during FY 2020-21 & 2021-22 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 June 2022 and same thing is seriously awaited.

5 **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:

MSPDCL noted that billing shall be made strictly as per the clause 1.1 as stipulated under general conditions of supply in Tariff Schedule and following the same.

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 & 2021-22 and any additional revenues realised if any.

6 Conducting of Energy Audit & keeping proper metering system in place

The MSPDCL shall also conduct system studies and energy audit after proper assessing of metering systems kept into 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 September 2020***.

Compliances:

MSPDCL respectfully submits that without proper metering the energy audit cannot be conducted. Consumer side meter is available but DT/ sub-station level metering is not adequate to do the energy audit. Under various ongoing schemes, MSPCDL has installed some DT / feeder meters. MSPDCL will try to complete this exercise after getting sufficient fund in this regard. Also, sub-station level status will be cleared once various central government projects complete.

Commission's Comments

The kind routine reply on this matter from Licensee is unexpected at this juncture even after it has become Corporate company since 2014 and the basic problem left unattended. The Licensee shall submit the action plan being made to resolve this fundamental issue and also specify as to how it is going to manage the financial fund crunch without leaving the problem to perpetuation by 1st May 2022 on top priority.

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 **Special Long-Term Transition Loans to DISCOMS for COVID-19 is being availed for an amount of Rs.111.48Crs.**

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:

a) The Special Long-Term Transition Loans to DISCOMS for COVID-19 is based on the total arrear outstanding as on 31-03-2020. MSPDCL has a total due of Rs.111.48Crs. **The attached table is the break-up.**

Organisation	Dues Periodicity	Amount of due (Rs./Crs)	Remarks
NEEPCO	6/19 to 2/20	38.6737	
NTPC	12/19 to 2/20	28.0084	
OTPC	11/19 to 2/20	15.8873	
NHPC	1/20 & 2/20	6.2708	Includes Late payment surcharge amount for both the months.
PGCIL	7/19 to 9/19, 12/19, 1/20 and 2/20.	22.6426	Feb'2020 bill includes supplementary bills.
	Grand Total (Crs)	**111.4830**	

b) Each Tranche is for Rs.55.74 Crore divided equally between PFC and REC Ltd. **Details of the disbursement request for each tranche is tabulated below:**

REC Loan: Hill

Sl.NO	Drawl Date	Particular	**Amount**
1	02-08-2021	1st Tranche	15,00,00,000
2	17-11-2021	2nd Tranche	4,09,50,000
3	25-01-2022	3rd tranche	3,23,21,790
4	17-03-2022	4th Tranche	4,85,25,750
5	**Sub-Total (A)**		**27,17,97,540**

REC loan: Valley

Sl.NO	Drawl Date	Particular	**Amount**
1	17-11-2021	1st Tranche	5,85,00,000
2	21-01-2022	2nd Tranche	3,08,88,000
3	25-01-2022	3rd tranche	8,33,96,830
4	17-03-2022	4th Tranche	11,63,03,850
5	**Sub-Total (B)**		**28,90,88,680**
Grant Total (A+B)			**56,08,86,220**

c) Cabinet approval for the Covid-19 along with the **amortization schedule is attached in PDF soft copy for perusal.**

Commissions Comments:

The details of late payment surcharge amount involved for two months shall be provided for Commissions reference.

Directive No.2

Availing of REC Loan amount obtained for procurement of 2 lakhs prepaid meters: 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)Is the repayment of interest being on monthly resting or annually?

ii)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.

Compliance:

Loan amortisation schedule & Loan Drawal details are attached herewith

i)Monthly resting.

✓**Rate of interest:**

- 11% during moratorium
- 11.15 % after moratorium payable on 365 days basis.

Commission's Comments:

The directive is fully complied with and will be treated as dropped.

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
2. drawn on 25th January 2022: `1,75,65,833
3. 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:

It is very deplorable, that the reply furnished is not precise and data is provided in bits and pieces in Excel and PDF format leaving the burden on the Commission to assess the factuality from the sketchy information and draw a conclusion as to status on Directive. This is a very much crude way of providing the reply to Directive issued by the Hon'ble Commission. This is not the decorum expected from a Distribution Corporation.

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.

Directive no.4:

Kutir Jyoti: Provide the details of number of consumers who exceeded 45 kWh in the last 3 months were actually converted to L.T Domestic consumers during the FY 2020-21 and 2021-22.

Compliance:

During the FY 2020-21 no new consumers have been registered under Kutir Jyoti Category. During FY 2021-22 XXX no. of consumers have been registered under the Kutir Jyoti category after due process of verification by field officials of MSPDCL. Till now, no such instances have been reported where a consumer registered under Kutir Jyoti was found to consume more than 45 kWh in a month and hence none have been upgraded to LT Domestic category.

Commission's Comments:

The vigilance by the Department staff must be made on continuous basis and it is the bounden duty of the MSPDCL to have a continuous monitoring of the issue and slacken is not desired.

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:

Since FY 2019-20 1,42,751 consumers of electricity have been identified as unmetered consumers. They all have been registered into MSPDCL post-paid billing system and are being continuously served electricity bills on a monthly basis. They are billed as per the tariff approved by JERC and as per field reports of power supply. **Revenue collected from these consumers since 2019-20 till Feb 2022 stands at Rs 156,61,81,030**.

Due to unavailability of electric meters and to avoid long period without serving electric bills, MSPDCL have been continuing to serve electric bills to these unmetered consumers. As a part of corrective measure, MSPDCL is currently undergoing mass prepaid installation by procuring 200000 meters which is estimated to be completed by July 2022.

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 metered to record their consumption. Moreover, it is also not clear from the reply whether the above number of consumers are falling under mixed load consumption or do they belong to all kinds of consumer category. 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.

Directive No.6

Consumer Contribution accumulated amount: Besides, the details of amount collected from consumer contributions possessed by the MSPDCL ever since the inception of the corporation in 2014 shall be submitted to the Commission each year-wise by end of June 2021.

Compliance:

MSPDCL since its inception in 2014 has not collected any amount from its consumers as contribution towards any funds/works. Hence, amount possessed by MSPDCL in this regard may be treated as NIL.

Commission's Comments:

The commission taken your reply into cognizance and the directive is dropped.

Directive No.7

The MSPDCL is directed to file at least three true-up petitions in chronological sequence of those financial years which are pending for submission along with full-fledged audited Accounts before filing next tariff petition for FY 2022-23 without any further delay.

Compliance:

Audited account has been completed, henceforth, True-up petition will be filed during FY 2022-23.

Commission's Comment:

This directive will be in force until all the pending true-ups are filed with the Commission.

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:

MSPDCL will comply on that.

Commission's Comment:

What does it mean by **will comply with**. 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.

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:

No reply was given in this matter.

Commission's Comments:

This kind of response clearly shows the indifferent attitude of the licensee and exhibits his very uncourteous behavior conspicuously seen by the

Commission and it is most intolerable response. You must make a detailed reply for this matter on or before 2nd week of June 2022 invariably.

11.Fuel and Power Purchase Cost Adjustment

11.1Background

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.

Accordingly, the Commission has specified the formula for working out the Fuel and Power Purchase Cost Adjustment (FPPCA) charges and other terms and conditions of FPPCA allowed the distribution licensee to recover the FPPCA charges from the consumers.

Accordingly, the amount of Fuel and Power Purchase Cost Adjustment (FPPCA) charges shall be computed as under:

$$\text{FAC (Rs./kWh)} = \frac{Q_c(RC_2-RC_1)+Q_0(RO_2-RO_1)+Q_{pp}(R_{Pp2}-R_{pp1})+V_z+A}{(QP_{g1}+Q_{pp1}+Q_{pp2}) \text{ X } [1-\frac{L}{100}]\text{-PSE}} \text{ X } 100$$

Where,

Q_c	=	Quantity of coal consumed during the adjustment period in Metric Tons (MT).
	=	(SHR X Q_{pg}) (1+TSL) X 1000/GCV, or actual whichever is less.
R_{c1}	=	Weighted average base rate of coal supplied ex-power station coal yard as approved by the Commission for the adjustment period in Rs./MT
R_{c2}	=	Weighted average base rate of coal supplied ex-power station coal yard for the adjustment period in Rs./MT
Q_o	=	Actual Quantity of oil (in KL) consumed during the adjustment period or normative oil consumption as per Tariff order whichever is less.
R_{o1}	=	Weighted average base rate of oil ex-power station (Rs./KL) approved by the Commission for the adjustment period.
R_{o2}	=	Weighted average actual rate of oil ex-power station supplied (Rs.

/ KL) during the adjustment period.

Q_{pp} = Total power purchased from different sources (kWh) = Qpp2+Qpp3

Q_{pp1} = $Q_{pp3}\left[1-\frac{TL}{100}\right]$ in kWh

TL = Transmission loss (CTU) (in percentage terms).

Q_{pp2} = Power Purchase from sources with delivery point within the state transmission or distribution system (in kWh)

Q_{pp3} = Power Purchase from sources on which CTU transmission loss is applicable (in kWh)

R_{pp1} = Average rate of Power Purchase as approved by the Commission (Rs./kWh)

R_{pp2} = Average rate of Power Purchase during the adjustment period (Rs./kWh)

Q_{pg} = Own power generation (kWh)

Q_{pg1} = Own Power generation (kWh) at generator terminal – approved auxiliary consumption

L = Percentage T&D loss as approved by the Commission or actual, whichever is lower.

SHR = Station Heat Rate as approved by the Commission (Kcal / kWh)

TSL = Percentage Transit and Stacking Loss as approved by the Commission

GCV = Weighted average gross calorific value of coal as fired basis during the adjustment period (Kcal / Kg)

V_Z = Amount of variable charges on account of change of cost of unknown factors like water charges, taxes or any other unpredictable and unknown factors not envisaged at the time of Tariff fixation subject to prior approval of the Commission (Rs.)

A = Adjustment, if any, to be made in the current period to account for any excess / shortfall in recovery of fuel of Power Purchase cost in the past adjustment period, subject to the approval of the Commission (Rs.)

PSE = Power sold to exempted categories (presently agriculture and BPL-Kutir Jyoti consumers)

If there are more than one power station owned by the Licensee Qc, Rc1, Rc2, Qo, Ro1, Ro2, Qpg and Qpg1 will be computed separately for each power station and sum of the increase/decrease of cost of all power stations shall be taken into consideration.

In case of the two distribution companies, there is no generation of their own. Therefore, Qc, Qo and Qpg1 will be zero in this case.

The Generating Company can levy FPPCA charges with the prior approval of the Commission.

Terms and conditions for application of the FPPCA formula

1)The basic nature of FPPCA is 'adjustment' i.e. passing on the increase or decrease in the fuel costs and power purchase cost, as the case may be, compared to the approved fuel costs and power purchase costs in this Tariff Order.

2)The operational parameters/norms fixed by the Commission in the Tariff Regulations/Tariff Order shall be the basis of calculating FPPCA charges.

3)The FPPCA will be recovered every month in the form of an incremental energy charge (Rs/kWh) in proportion to the energy consumption and shall not exceed 10% of the approved avg. cost of supply in the Tariff order and balance amount, if any, in the FPPCA over and above this ceiling shall be carried forward to be billed in subsequent month.

4)Incremental cost of power purchase due to deviation in respect of generation mix or power purchase at higher rate shall be allowed only if it is justified to the satisfaction of the Commission.

5)Any cost increase by the licensee by way of penalty, interest due to delayed payments, etc. and due to operational inefficiencies shall not be allowed.

6)FPPCA charges shall be levied on all categories of consumers.

7)Distribution licensee shall file detailed computation of actual fuel cost in Rs./kWh for each month for each of power stations of the state generators as well as cost of power purchase (Fixed and Variable) from each source/station and a separate set of calculations with reference to permitted level of these costs.

8)The data in support of the FPPCA claims shall be duly authenticated by an officer of the licensee, not below the rank of Chief Engineer on an affidavit supported with the certified copy of energy bills of power purchase, transmission and RLDC charges, bill for coal purchase and its transportation cost, oil purchase bill and the quantity of coal and oil consumed during the month.

9)Levy of FPPCA charge will be allowed only when it is ten (10) paise or more per unit. If it is less than 10 (ten) paise/unit, the same may be carried forward for adjustment in the next month.

The incremental cost per kWh due to this FPPCA arrived for a quarter shall be recovered in the energy bill of the month subsequent to the order of the Commission approving FPPCA with full details of rate and unit(s) on which FPPCA charges have been billed. The Generating Company and the Distribution Companies shall provide along with the proposal of FPPCA (as applicable to them) for a quarter, a compliance report of the previous order of the commission in respect of FPPCA.

TARIFF SCHEDULE

Appendix

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 all consumers provided with prepaid energy meters.

1.2 Rebate/Surcharge for availing supply at voltage higher/lower than base voltage: Those who avail supply at higher voltage than the classified supply voltage for corresponding load as per clause 3.2 of the JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013, shall be allowed rebate and those availing at lower voltage than the specified voltage shall be levied surcharge as detailed below:

(i) For consumers having contracted load up to 50 kW – If the supply is given at HV/EHV, a rebate of 5 % would be admissible on the rate of energy charge and fixed charge of the applicable tariff.

(ii) For consumers having contracted load above 50 kW – If supply is given at 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 % 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 JERC for Manipur & Mizoram (Electricity Supply Code) Regulations, 2013.

1.3 Payment: All payments shall be made by way of Cash (up to the amount as acceptable to the licensee), Banker's Cheque, Demand Draft or Money Order or e-transfer on line. 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: For a consumer with prepaid meter who has purchased voucher prior to the effective date of new Tariff, the existing voucher shall continue till such voucher amount is fully exhausted. The Licensee shall cautiously issue voucher such that the existing voucher validity is for a minimum number of days beyond the effective date of new tariff.

1.5 Due Date: Due date for payment of monthly bill through cheques shall be **three** (**3) days** 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).

1.6 Surcharge for late payment of bills: If payment is not received within due date surcharge @ 2% at simple interest on the outstanding principal amount for each 30 days successive period or part thereof will be charged, until the amount is paid in full.

1.7 Single Point Delivery: This tariff is based on the supply being given through a single point of delivery and metering at one voltage. Supply at other points at other voltage 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 the JERC for Manipur & Mizoram (Electricity Supply Code) Regulations, 2013.

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 which his average monthly power factor is above 95%, up to unity power factor	**One percent (1%) of the total amount of the bill under the head 'energy charge'.**

b) 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 average monthly power factor falls below 90% up to 85%	**One percent (1%) of the total amount of the bill under the head 'energy charge'.**

c) If average monthly power factor of the 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 average monthly power factor falls below 85%	**Two percent (2%) of the total amount of the bill under the head 'energy charge'.**

d) If the average monthly power factor of the 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 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 being 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 connection, and if he maintains the average monthly power factor in subsequent three 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

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 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:

$$\textbf{Average transformer loss} = \frac{730 \times 1.0 \times C}{100} = \text{kVAh per month}$$

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 used.

(2) The transformer loss arrived at by the above formula shall be added to the energy consumption, even when the recorded energy consumption is 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 of Contracted Load/Billing demand: For the purpose of calculation of fixed/demand charge in the monthly billing, the contracted load/billing demand shall be taken on actual basis (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 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.

Sample 1: - Fixed charge = 1.24 x 60 = Rs 74.40 = 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.

1.12Rounding of Rupees: Each components of bill, such as energy charge, fixed/demand charge, meter rent, surcharge, rebate of any kind, etc, including interest, involving fraction of a rupee should be individually round off to nearest rupee (fraction of 50 paise and above to be round off to the next higher rupee and fraction less than 50 paise 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 to next bill as credit and shall not earn interest whatsoever.

1.13Mixed Load: - Any part of the connection given for one specific category should not be utilized for any other purpose, involving higher rate of charge in the tariff. A separate connection shall have to be taken invariably for such 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 that corresponding category at higher applicable tariff for which any part of that connection is utilised.

1.14 System of supply:

1.14.1 LT Supply:

i) Alternating current, 50 Hz, single phase 230 Volts up to 8kW

ii) Alternating current, three phase, 400 Volts for loads above 8 kW **up to**50 kW. wherever 3-phase connection is required for load less than or equal to 8 kW,

iii)Alternating current, three phase, 400 Volts for loads above 8 kW **up to** 50 kW. Wherever 3-phase connection is required for load less than or equal to 8 kW, necessary justification shall be provided along with such request for consideration of licensee for extending such supply.

1.14.2 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**.

1.14.3The 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: -

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 the grant of any subsidy to any consumer or class of consumers in the tariff determined by the State Commission under section 62, the State Government shall, notwithstanding any direction which may be given under section 108, pay, in advance and in such manner as may be specified, the amount to compensate the person affected by the grant of subsidy in the manner the State Commission may direct, as a condition for the licence or any other person concerned to implement the subsidy provided for by the State Government:***

Provided that no such direction of the State Government shall be operative if the payment is not made in accordance with the provisions contained in this section and the tariff fixed by the State Commission shall be applicable from the date of issue of orders by the Commission in this regard.”

Therefore, if the government subsidy is 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 in those relevant month or months when subsidy was not paid in advance. Given the situation, the entire excess amount so charged to all consumers on account of full cost tariff adoption shall have to be refunded as deduction by treating such excess amount laying with Licensee **as advance payment** by the licensee **at one time** in the immediate monthly billing cycle where bills are being issued to respective consumers soon after receipt of such subsidy relating to the past month/months. If in case, the excess amount so refundable is 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.

1.14.6Applicable 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.

1.14.7Contingency: - In case of any inconsistency between this Tariff schedule and the prevailing JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013, the provision, meaning and contents of the said Code shall prevail.

2. Subsidised Tariff for LT Supply: -

2.1 LT Category -1: - KutirJyoti/ 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 supersedes by other new norms of KJS, if the total consumption in the last three months exceeds 45 kWh, 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:

All Unit	@ Rs 2.10 per kWh

Note: 1- if the total consumption of any consecutive three months is more than 45 kWh, the consumer shall be re-categorised/converted under normal domestic category permanently from the very 1st/2nd/3rd month of that consecutive three months, if the total unit consumed exceed the specified limit of 45 kWh from that instance and the bill be served as domestic category. (clause 4.90 of the JERC for Manipur and Mizoram (Electricity

Supply Code) Regulations, 2013 with latest amendments may be referred to.)

Note 2: In case a Kutir Jyoti /BPL consumer gets converted to a domestic consumer, the re–categorised/converted consumer shall be required to deposit load security/meter security as applicable for domestic consumers but should not contradict clause 5.9 of the JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 with latest amendments.

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.** 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

B) Energy charge per month: -

Metered Supply:

First 100 kWh	@ Rs.5.10 per kWh
Next 100 kWh	@ Rs 5.95 per kWh
>200 kWh	@ Rs 6.75 per kWh

Note: If any part of the domestic connection is utilized for any usage other than for dwelling purpose such as commercial, industrial, etc., a separate connection should be taken for such loads under appropriate category, failing which the entire consumption made shall be treated as the case may be, in the corresponding category with higher applicable tariff.

2.3 LT Category-3:- **Non Domestic / Commercial:**

Applicability: This tariff is applicable to all lights, all types of fans, heating devices, Television, VCR/VCP, Radio, Refrigerator, Air Conditioner, lift motors, pump 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.

B) Energy charge per month: -

Metered Supply:

First 100 kWh	Rs. 6.55 per kWh
Next 100 kWh	Rs. 7.25 per kWh
> 200 kWh	Rs. 7.65 per kWh

2.4 LT Category-4: - Public Lighting

Applicability: Applicable to Public Street Lighting System in municipality, Town, Committee, Sub-Town/Village, etc. including Signal system and Road & Park lighting 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.

B) Energy charge per month: -

Metered Supply:

All units	@ 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.

B) Energy charge per month: -

Metered Supply:

All units	Rs 9.80 per kWh

2.6 LT Category-6:- Irrigation & Agricultural

6a. Agriculture Category (LT):

Applicability: This tariff is applicable to pumping for Agricultural purpose by individual farmers only.

Tariff Rates:

A) Fixed Charge: Rs 65.00 per month per kW of contracted load.

B) Energy charge per month: -

Metered Supply:

All units	Rs 4.55 per kWh

6b. Irrigation Category (LT):

Applicability: This tariff is applicable to farmers pumping for Irrigation/Agricultural purpose by those other than individual farmers only.

Tariff Rates:

A) Fixed Charge: Rs 65.00 per month per kW of contracted load.

B) Energy charge per month: -

Metered Supply:

All units	Rs 4.55 per kWh

2.7 LT Category-7:- Small/Micro Industry

Applicability: Applicable to all Industrial power consumers with demand of power upto 50 kW which are not covered by Category No.-3 (Supply of Non-Domestic/Commercial Purposes), such as steel fabrications, motor body builders, power handloom industry, poultry farming, pisciculture, prawn culture, floriculture in green houses, mushroom production, cold storage 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, etc. This will include domestic or commercial 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:

All units	@ Rs 5.60 per kWh

3. Subsidized Tariff for HT Supply: -

The tariffs are applicable for Consumer availing supply at voltage above 400 V irrespective of connected load/contracted demand. It is mandatory to supply with voltage above 400 V, 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 Category-3 Supply for Commercial Purposes.

Tariff Rates:

A) Demand Charge: Rs. 105.00 per month per kVA of Billing Demand.

B) Energy charge per month:

Metered Supply:

All units	@ Rs.8.90 per kWh

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:

All units	@ Rs 9.60 per kWh

3.3 H.T. Category - 3: Irrigation & Agriculture

3a. HT – Agriculture Category:

Applicability: This Tariff is applicable to pumping for agricultural purposes by individual farmer only.

Tariff Rates:

A) **Demand Charge:** Rs 105.00 per month per kVA of Billing Demand.

B) **Energy charge per month: -**

Metered Supply:

All units	@ Rs 5.15 per kWh

3b. HT – Irrigation Category:

Applicability: This tariff is applicable to farmers pumping for Irrigation/Agricultural purpose by those other than individual farmers only.

Tariff Rates:

A) **Demand Charge:** Rs 105.00 per month per kVA of Billing Demand.

B) **Energy charge per month: -**

Metered Supply:

All units	@ Rs 5.15 per kWh

3.4 H.T. Category - 4: Medium Industry

Applicability: This Tariff is applicable to similar purpose defined in LT Category-7 for Small industry with Contract Demand up to 125 kVA or Contracted Load up to 100 kW.

Tariff Rates:

A) Demand Charge: Rs 105.00 per month per kVA of Billing Demand.

B) Energy charge per month: -

Metered Supply:

All units	@ Rs 8.00 per kWh

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 or Contracted Load above 100 kW.

Tariff Rates:

A) Demand Charge: Rs 105.00 per month per kVA of Billing Demand.

B) Energy charge per month: -

Metered Supply:

All units	@ Rs 9.10 per kWh

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 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:

All units	@ Rs 9.25 per kWh

4. Full Cost Tariff (i.e., Without Govt Subsidy) for FY 2022-23

Sl. No	Category & Consumption Slab	Fixed Charges (Rs./kW/kVA/pm)	Energy Charges (Rs./kWh or kVAh)
	LT SUPPLY (FCT)		
1	**Kutir Jyoti**	**Rs./Connection**	**Rs./kWh**
	All units (Upto 45 kWh/ 3 Months)	25/Connection	9.01
2	**Domestic**	**Rs./kW**	**Rs./kWh**
	(i)First - 100 kWh/Month	65	9.73
	(ii)Next 100 kWh/Month	65	9.57
	(iiI) Above 200 kWh/Month	65	11.76
3	**Non-Domestic/Commercial**	**Rs./kW**	**Rs./kWh**
	(vii)First - 100 kWh/Month	85	11.04
	(viii)Next 100 kWh/Month	85	12.59
	(ix)Above 200 kWh/Month	85	13.47
4	Public Lighting	70	13.39
5	Public Water Works	105	13.16
6	a) Agriculture (Individual)	65	0.00
	b) Irrigation (Others)	65	0.00
7	Small Industry	70	11.28
	HT SUPPLY (FCT)	**(Rs./kVA)**	**(Rs./kVAh)**
1	Commercial	105	10.78
2	Public Water Works	105	11.57
3	a) Agriculture (Individual)	105	9.27
	b) Irrigation (Others)	105	9.27
4	Medium Industry	105	10.48
5	Large Industry	105	11.00
6	Bulk Supply	105	11.65

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 appropriate and correct meter. Therefore, after the lapse of many more years from the effective date of the EA 2003 and after lapse of several years from effective date of the said 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 0f the JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 along with upto 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 utilized.

(2) **Second and subsequent instance:** - Six (6) times of the rate of the applicable tariff (fixed and variable charges) for which the stolen energy was utilized.

(**b) Load exceeding 10 kW**

(1) First instance: - Three (3)) times of the rate of the applicable tariff (fixed and variable charges) for which the stolen energy was utilized.

(2) Second and subsequent instance: - Six (6) times of the rate of the applicable tariff (fixed and variable charges) for which the stolen energy was 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 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 current	**Rs. 20.00 per month**
b)	AC, Three phase PP, Energy meter, whole current	**Rs. 40.00 per month**

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.

(2) Free of cost if shifting is done in the interest to licensee. Required material to be borne by licensee.

Meter shifting shall be carried out as per Chapter – 5 of the 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 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 manufacturing defect or fault of licensee then, it shall be 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).

Sl.No	Type of Meter for testing	Charges payable
i)	For AC, Single phase LT energy meter	Rs.50.00 per meter per testing.
ii)	For AC, Three phase LT energy meter **whole current**	Rs.75.00 per meter per testing.
iii)	For AC, Three phase LT energy meter, CT operated	Rs.100.00 per meter per testing.
iv)	For Energy meter, AC Three Phase, CT & PT operated	Rs.150.00 per meter per testing.
v)	For any other type of meter, HT supply	Rs.200.00 per meter per testing.

In case the meter supplied by the Licensee fitted to the consumer premises is found to be defective from initial fitting, testing and replacement of meter shall be carried out as per clause 5.31 to 5.50 of the 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: -

Sl.No	Description	Reconnection charge
(i)	For AC single phase LT supply	**Rs.80.00**
(ii)	For AC three phase LT supply	**Rs.150.00**

Sl.No	Description	Reconnection charge
(iii)	For AC HT supply	**Rs.400.00**

Note: - Extra material required will be chargeable.

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 given below:

(1) For Cable and wire-:

Sl.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)

a) Single Phase: Rs.40/-	**b) Three Phase: Rs.60/-**
c) CT operated: Rs.80/-	**d) CT & PT operated: Rs.80/-**

Works shall be executed only on production of payment receipt from concerned office.

Note: If Licensee is providing 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 for meter security shall normally be the price of the meter as fixed by the licensee from time to time in line with **Section 55 of Electricity Act 2003.**

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.

ANNEXURES

ANNEXURE - I

MINUTES OF THE 22nd MEETING OF THE STATE ADVISORY COMMITTEE OF MANIPUR

Venue: Royale Hall, Hotel Classic, North AOC, Imphal, Manipur
Date & Time: 14th March 2021, 11:30 AM

The Chairman of the Committee, Mr. R.Thanga, Chairperson of the Joint Commission for Manipur & Mizoram chaired the Meeting, the Meeting started at 11:30 AM. The Chairman welcomed all the Committee Members and Special Invitees. He made a self-introduction and informed the Committee that he has long association with the Manipur state and informed them that he is a Member representing the Manipur State and also was Member with legal background being retired District of Sessions Judge. Then agenda wise discussion was started. The list of Members and Special Invitees who attended the Meeting are appended.

Agenda No.1. Confirmation on the Minutes of the 21st Meeting of the SAC, Manipur held on 15.04.2021.

The Chairman requested the Members on the observations made on the Minutes and after affirmations obtained from all the Members, the Minutes was declared as confirmed.

Agenda No. 2. Action taken report on the minutes of the 21st Meeting of SAC Manipur on the following items.

Mr. Lalchharliana Pachuau, Member of the Commission clarified that auditing of Annual Accounts is very much important so as to know the fiscal health of the Companies that if the Companies are healthy 1/3 of their profit has to be passed on to the consumers. Likewise, 1/3 of their losses will also be passed on to the consumers if the Company is going on a loss. That is why, trueing up of accounts is very necessary to check the health conditions of the Companies. The Managing Director, MSPCL Mr. Ng.Sarat Singh informed the Committee that audited statement could not be done on time due to the time taken by the auditors and has assured the Committee that from now onwards auditing of accounts would be done regularly. Mr. R. Thanga, Chairman of the Committee also informed the 2 (two) Companies to made earnest effort on this matter and the Committee fixed June, 2022 to clear up all matters pertaining to auditing of accounts.

i) MSPCL and MSPDCL have not filed True-up petitions for the FY 2015-16 onwards for want of audited annual accounts.

MSPDCL replied that the audited financial statements starting from FY 2016-17 to FY 2020-21 have been published on 14.2.2022.
MSPCL also replied that the accounts for the financial years 2016-17, 2017-18, 2018-19 and 2019-20 had already been finalized and approved in the Board of Directors Meeting held in 17/08/2021. Likewise, the Account for the financial year 2020 – 2021 had already been finalized and approved in the Board of Directors Meeting held on 12/11/2021. Further, Statutory auditor had already submitted the Accounts to Accountant General, Manipur and requested the AG office for conducting the supplementary audit.

Accordingly, the supplementary audit is at present, being conducted for financial years 2016 – 17, 2017 – 18, 2018 – 19, 2019 – 20 and 2020 – 2021 by Audit team, AG office Manipur. It is therefore not possible to file actual true up petitions until the ongoing supplementary audit is completed and the financial statements are approved by the AG, Manipur. **Therefore, the Company requested to allow them to file the actual true up petitions after finalization of the audit.**

(ii)MSPDCL has not implemented the Franchisee system in rural areas due to non-availability of Agencies in those areas. However, MSPDCL is currently installing Prepaid Meters and Vending Counters in those rural areas to address the issue.

(iii)Accurate loss derivation is not possible at present due to the lack of complete and precise metering. After full implementation SAMAST scheme losses at various voltage levels may be ascertained. As of now, LOA of the SAMAST Scheme have been placed by NERCP on 23/09/2021 and works have been started. And as per LOA, work will be completed by March, 2023. Based on the limited data available at their disposal, few transmission and sub-transmission lines as well as few 132/33kV and 33/11kV substations are identified as sample element for loss estimation for the respective voltage level. Using these sample elements, total loss of 132kV and 33kV system is calculated as 7.8% for the FY 2021-22. The details of arriving the estimated total loss percentage of 7.8% is as below:

PERCENTAGE LOSS ESTIMATION FOR MSPCL 2021-22

SL NO.	NAME OF SAMPLE 33/11 KV STATION	LOSS (in%)
(A)SAMPLE 33/11KV TRANSFORMATION LOSS		
1	KANGLA	1.27
	AVERAGE	1.27
(B)SAMPLE 132/33 KV TRANSFORMATION LOSS		
	NAME OF SAMPLE 132/33 KV STATION	LINE LOSS (in %)
1	YUREMBAM	1.21
	AVERAGE	1.21
(C)SAMPLE 132 KV LINE LOSS		

SL NO.	NAME OF SAMPLE 33/11 KV STATION	LOSS (in%)
	NAME OF SAMPLE 132 KV LINE	LOSS (in %)
1	YAINGANGPOKPI-HUNDUNG	1.04%
	AVERAGE	1.04%
(D)SAMPLE 33 KV LINE LOSS		
	NAME OF SAMPLE 33 KV LINE	LOSS (in %)
1	MANTRIPUKHI-NILAKUTHI	4.23
	AVERAGE	4.23
Total Loss of 132kV and 33kV System (Estimated) in %	132kV line loss+33kV line loss+ 132/33kV transformation loss + 33/11 kV transformation loss	7.80

ESTIMATION FOR SAMPLE TRANSORMATION LOSS FOR FY 21-22

SAMPLE LOSS ESTIMATION FOR 132/33 KV TRANSFORMER

132/33/11KV YUREMBAM SUBSTATION						
Month	**132 kV**		**33kV**		**132/33kV Total trans formation**	**Loss%**
	Total Incoming	Energy MU	Total Outgoing	Energy (MU)		
Jul-21	31.5 MVA TFR-1	6.0182	33 KV INC-I	6.15865116	0.238106	1.166548268
	31.5 MVA TFR-2	7.1966	33 KV INC-II	7.0872843		
	31.5 MVA TFR-3	7.1964	33 KV INC-III	6.92715804		
	Total	**20.4112**	**Total**	**20.1730935**		
Aug-21	31.5 MVA TFR-1	6.8923	33 KV INC-I	6.86059458	0.230729	1.107376893
	31.5 MVA TFR-2	6.96	33 KV INC-II	6.85150128		
	31.5 MVA TFR-3	6.9833	33 KV INC-III	6.89277552		
	Total	**20.8356**	**Total**	**20.60487138**		
Sep-21	31.5 MVA	6.9443	33 KV INC-I	7.15647114	0.281529	1.34655924

132/33/11KV YUREMBAM SUBSTATION						
	TFR-1					
	31.5 MVA TFR-2	6.964	33 KV INC-II	7.03811772		
	31.5 MVA TFR-3	6.999	33 KV INC-III	6.43118196		
	Total	**20.9073**	**Total**			
AVERAGE						1.206828134

SAMPLE LOSS ESTIMATION FOR 33/11 KV TRANSFORMER

33/11 kV Kangla Substation					
Month	**Kangla Input**	**Total 11kV outgoing**		**Transformation loss**	**Loss%**
Sep-21	1.51638	ASSEMBLY-2	0.60836	0.01922	1.27
		STATION	0.21872		
		THANGAL BAZAR	0.67008		
		TOTAL	**1.49716**		

SAMPLE LOSS CALCULATION FOR 132KV AND 33KV SUB-TRANSMISSION LINES FOR FY 21-22

LOSS ESTIMATION FOR 132KV YAINGANGPOKPI-HUNGDUNG LINE				
Month	**Sending end**	**Receiving end**	**Transformation Loss (MU) (3)=(1)-(2)**	**Loss%**
Apr-21	2.66	2.64	0.02	0.58
May-21	2.99	2.93	0.05	1.82
June-21	1.76	1.75	0.01	0.74
				1.04
LOSS ESTIMATION FOR 33KV MANTRIPUKHRI-NILAKUTHI LINE				
Month	**Sending end**	**Receiving end**	**Transformation Loss (MU) (3)=(1)-(2)**	**Loss%**
May 21	1.04	1.00	0.04	4.23
				4.23

Mr. Lalchharliana Pachuau, Member of JERC (M&M) informed the Committee that once all feeders are metered a precise and comprehensive information could be obtained on this matter and it is very essential to check the health conditions of the Companies and for energy accounting etc.

Agenda 3: Determination of ARR & Retail Tariff of MSPDCL for FY 2022-23 and ARR & Transmission Tariff of MSPCL for FY 2022-23.

The Chairman requested the MSPDCL to give Power Point Presentation on the tariff petition and accordingly the Company gave detailed power point presentation explaining the highlights of their petition. The MSPDCL stated that based on the principles enumerated by the JERC MYT 2014, MSPDCL has filed MYT petition in the FY 2018-19 for five consecutive year till FY 2022-23. MSPDCL have tried to the maximum extend to provide the actual data in every tariff petition. The reason being the inconsistency and asymmetry in the data is due to the non-filing of true-up petition starting from FY 2015-16 till this year. Here MSPDCL stated that all the Audited account for FY 2015-16 to FY 2021-22 has been completed and MSPDCL will start to file its True-up petition from FY 2022-23.

Highlights on the petition submitted by MSPDCL for FY 2022-23

- The ARR petition of MSPDC includes the tariff petition for FY 2022-23, Annual Performance Review of FY 2021-22 & the limited provisional True-up of FY 2022-23.
- The proposed ARR for FY 2022-23 works out to Rs. 994.67 crs. Further, the total revenue from sale of power at existing tariff and surplus power sale works out to Rs. 567.90 crs. As such, the uncovered gap for FY2022-23 works out ton Rs. 426.77 crs.
- The tariff petition includes the tariff proposal for FY 2022-23 and as such the proposal for covering then above-mentioned gap for FY 2022-23 included in the petition. The uncovered gap is proposed to be covered through increase in tariff and subsidy support from the State Government.

Mr. R.Thanga, Chairman enquired whether there is a designated special court for electricity, enquired whether the tribunal has been set up and informed the MSPDCL to look into this matter carefully and take remedial legal steps for recovery of their debts and urgently request the State Government to set up such court and should approach the Government accordingly. Mr. Lalchharliana Pachuau also informed the Committee that the fixed charge in Manipur is very high and that this should not be increased and enquired why MSPDCL is taking loan for purchase of street lights as the matter should be taken up by MAHUDS / Local bodies. Professor Ch.Ibohal Meitei also stated that a percentage increase on tariff rate is quiet reasonable but rising to about 30% will be a shock to the consumers as nearly 81% of the consumers are domestic. The Members agreed after discussion that the tariff hike should not be too steep and that it should commensurate with the rising rates of commodities.

<u>Agenda 4 Increasing trend of Closing Debtor.</u>

Mr. Ng. Subashchandra Singh, MD, MSPDCL informed the committee that the accumulation of the closing debtor as given in the MSPDCL audited statements is as given below:

Financial Year	Opening Debtor	Closing Debtor	Increase (+)/ Decreased (-) (3-2)
(1)	(2)	(3)	(4)
2016-17	403.37	427.48	24.11
2017-18	427.48	452.32	24.84
2018-19	452.32	472.41	20.09
2019-20	472.41	494.65	22.24
2020-21	494.65	544.83	50.18

Description	As on Sept 2021 (Rs.Crs)	As on Dec 2021 (Rs.Crs)
Against Govt of Manipur Deptt.	66.29	75.65
Against General Public	353.91	385.14
Against Non-Govt. Organisation	13.69	15.56
Grand Total	**434.52**	**476.35**

Number of Consumers as on March, 2021 ending			
Consumers with prepaid meter	**Consumers with post-paid meter**	**Consumers without meter**	**Total consumers**
3,34,232	**3,915**	**1,63,595**	**5,01,742**

Out of the Rs. 544.83 crore outstanding dues at the end of FY 2020-21, a legacy debt of Rs. 425.73 crore from FY 2013-14 during the time of Electricity Department, Govt. of Manipur is included.

LEGACY DEBT UPTO 2013 – 14

1. Prior to 2014-15, there were serious issues, which were not addressed leading to accumulation of outstanding dues. The issues are as follows:

   A. Erratic Power Supply during the period of 2007 to Mid 2014: Power Supply in Manipur was very erratic till mid 2014, following the unbundling of the erstwhile Electricity Department, Government of Manipur into Manipur State Power Distribution Company Limited (MSPDCL) and Manipur State Power Company Limited (MSPCL) in February, 2014, power supply starts improving from the latter half of 2014.

   During the period of starting 2007 till 2013, the actual power supply available to consumers was just about 4-5 hrs/day. Over and above this, there were instances of only alternate days of power supply in the outskirt areas of Imphal and the hill Districts of Manipur.

B.Inaccurate Billing:

I.The tariff of consumption of electricity since 2002 to 2010 was largely based on flat billing and as per the Manipur Gazette No. 150 dated 16th August, 2002 (Friday) since extensive Post-Paid metering could not be done due to insufficient budgetary provision and man-power shortages.

II.As all data were entered manually there was inaccuracy in the actual sale and billing of energy. Even though post-paid meters were installed at the premises of the consumers, 50% - 60% of these meters were defective. This led to flat billing of consumers though they were metered consumers.

III.The higher rate based on the flat electrical tariff of that time coupled with the erratic power supply highly de-motivated consumers to pay their electrical dues leading to slow accumulation of outstanding dues.

C.**No improvement in Power Supply till end of FY 2014-15:**

Joint Electricity Regulatory Commission, Manipur and Mizoram published the Tariff Order along with a new Tariff Structure for Manipur starting FY 2010-11 but as the power supply in the State could not be improved, collection of outstanding dues fr9m defaulting consumers could not be effective till the later period of FY 2014—15.

D.**Irregular Distribution of Bills:**

Distribution of bills was also a huge issue during the period mentioned in point no. A. Due to low manpower of the Electricity Department, bills were not prepared timely which led to non-issuance of bills in proper billing cycle. However, surcharges were always carried forward to the next billing cycle even though bills were not issued on time. This led to huge accumulation in the outstanding dues.

2.To ease the accumulated burden, Committee on Public Undertaking (COPU), Manipur Legislative Assembly has recommended the following in the 14th report of the Comptroller and Auditor General of India for the year ended 31st March, 2017.

Recommendations of the Committee

In light of the above facts/ explanation and to properly account the efficiently of the company, the committee considers a one-time waiver of outstanding legacy dues of Rs. 425.72 crore applicable as in the below statement. This one-time waiver will ease the undue financial burden of the public and enable MSPDCL in improving the revenue billing and collection efficiency.

CATEGORY WISE OVERALL OUTSTANDING DUES AS ON 31ST MARCH 2014						
Sl No.	Consumer Category	Accumulated Surcharge(in Rs.)	%	Principal Energy Charges (in Rs.)	%	Total Due (in Rs.)
1	Domestic	92,86,17,190	78.52	2,07,13,63,953	67.37	2,99,99,81,143
2	Industry	5,74,51,970	4.86	29,07,61,549	9.46	34,82,13,519
3	Commercial	4,78,73,167	4.05	18,38,33,355	5.98	23,17,06,522
4	State Govt.	4,04,54,352	3.42	15,55,25,660	5.06	19,59,80,012
5	Bulk	10,83,10565	9.16	37,30,64,933	12.13	48,13,75,498
	TOTAL	**1,18,27,07,244**	**100%**	**3,07,45,49,450**	**100%**	**4,25,72,56,694**

Mode of Recovery:

CATEGORY WISE OVERALL OUTSTANDING DUES AS ON 31ST MARCH 2014						
Sl No.	Consumer Category	Accumulated Surcharge (in Rs.)	% Recovery	Principal Energy Charges (in Rs.)	% Recovery	Total (in Rs.)
1	Domestic	Full Waiver	0.00	62,14,09,186	30.00	62,14,09,186
2	Industry	Full Waiver	0.00	8,72,28,465	30.00	8,72,28,465
3	Commercial	Full Waiver	0.00	5,51,50,007	30.00	5,51,50,007
4	State Govt.	4,04,54,352	100.00	15,55,25,660	100.00	19,59,80,012
5	Bulk	Full Waiver	0.00	11,19,19,480	30.00	11,19,19,480
	TOTAL	**4,04,54,352**		**1,03,12,32,797**		**1,07,16,87,149**

With the condition that:

a)Waiver of the Surcharge for all consumers except State Government consumers will be admissible only after full recovery of all the 30% Principal Energy Charges within the window period of 3 month.

b)All consumers except State Govt. consumers will pay the 30% of the outstanding Principal Energy Charges.

c)The Waiver scheme will be a one-time arrangement and any Electricity outstanding dues arising after 01-04-2014 would be as per normal tariff rules and regulations and shall not be covered under this scheme.

d)Recovery of State Govt. outstanding electricity charges of Rs. 19,59,80,012 should be done in a phased manner within a period of 6 months by allocation of additional Budget provisions of the respective State Govt. Departments.

MEASURES TAKEN BY MSPDCL TO REDUCE OUTSTANDING DEBTS AFTER 2013-14

1.For accumulation of dues after 2013-14, MSPDCL is deducting 20% against the prepaid recharge amount adjustment for the outstanding arrear dues starting December, 2015. However, this deduction is done for only secured make Meters using SAP migration managed by TCS. This system, is dependent on the Data Server of TCS and as such the accounting of the collection and division of current and arrear dues is difficult.

2. To address this issue, MSPDCL developed and installed its own in-house billing system as www.billing.mspdcl.info starting 6th August, 2019 and started handling of post-paid billing and collection on 19th August, 2019. Online prepaid recharge facilities were added to the portal during March 2020 alongside SAP system. By 1st April 2021, all prepaid transactions including vending counter started being processed through this portal. Adjustment of 20% prepaid recharge against arrear before prepaid metering started from December 2021.

Mr. R.Thanga, Chairman informed MSPDCL that they should take a real effort to clear the bad debts which is putting the Companies' profit taking. Professor Dr. Ch. Ibohal Meitei, Member, SAC also stated that this is a long pending issue and a legacy of the Power Department, before it was corporatized and suggested that the Government should include the bad debts in the coming budget and further recommended that the MSPDCL should put the list of defaulting Departments etc. in the public domain. Mr. Subash chandra Singh, Managing Director, MSPDCL informed the Committee that the list of particular of debt will be given to the Commission so as the Commission can inform the State Government to clear up the bad dues.

The Meeting ended at 2:30 pm with a vote of thanks from the chair.

Sd/- R.Thanga
Chairperson

Memo No. H. 11019/26/18-JERCDated Aizawl, the 21st March, 2022

Copy to:

1. Secretary to Hon'ble Chief Minister, Govt. of Manipur for kind information to the Hon'ble Chief Minister.
2. P.S. to Hon'ble Power Minister Govt. of Manipur for kind information to the Hon'ble Power Minister.
3. P.P.S. to Chief Secretary, Govt. of Manipur for kind information to the Chief Secretary, Govt. of Manipur.
4. Secretary, Power Department, Govt. of Manipur for kind information and for taking necessary action on the Minutes of the Meeting.
5. All Members / Invitees of the State Advisory Committee for kind information and for taking necessary action on the Minutes of the Meeting.
6. Guard File.

List of Members and Participants attended the 22nd Meeting of State Advisory Committee of Manipur

Date & Time:14th March, 2022 (Monday) 11:30 a.m.
Venue:Hotel Classic, North AOC Royale Hall, Imphal.

Sl. No.	Name of the Participant	Designation
1	Mr. R.Thanga	Chairperson, JERC(M&M)
2	Mr. Lalchharliana Pachuau	Member, JERC (M&M)
3	Mr. Richard Zothankima	Assistant Secretary, JERC(M&M)
4	Mr. H.Thanthianga	Assistant Chief Engineering, JERC (M&M)
5	Dr. Ch. Ibohal Meitei	Professor, Manipur Institute of Management Studies, Manipur University
6	Mr. Nobert Khayi	Social Worker, West Phungreitang, Ukhrul
7	Mr. S.Rishikumar Singh	President, All Manipur Entrepreneurs Associations
8	Mr. M.Brojen Singh	Kakching Wairi Thongam Leikai, Manipur
9	Dr. S. Birendra Singh	Rtd. Director, NIT Imphal, Nambol, Bazar, Bishnupur District
10	Miss H.Lalthomawi	Advocate, Tipaimukh Road, Hiangtam, Lamka
11	Mr. N. Sarat Singh	M.D., MSPCL
12	Mr. Ng. Subhachandra Singh	M.D., MSPDCL
13	Mrs. Bhagyashree Laishram	Exe. Director, HR/IT/Admn, MSPDCL
14	Mrs. N. Purnima	Dy. Manager, MSPDCL
15	Mr. Satadru Chakraborty	Consultant, MSPDCL
16	Mr. Th. Satyajeet Singh	DM, MSPDCL
17	Mr. M.Rabi Singh	Gen. Manager, MSPDCL
18	Mr. H.Romi Singh	Manager (Comml)
19	Mr. Madhu Dalal	Consultant, MSPCL
20	Mr. Ranjan Wahengbam	Manager, Ed (Tech) MSPCL
21	Mr. Kh. Umakanta	Dy. Manager (Electrical)
22	Mr. M.Ashalata	Dy. Gen. Manager (Tech)
23	Mrs. Irom Roji Devi	DM (Electrical) MSPCL
24	Ms. Khoisnam Steela	DGM, (Comml) SLDC, MSPCL
25	Ms. Hanna Rangnamei	Manager, SLDC, MSPDCL
26	Mr. Ng. Birjit Singh	OSD (Planning), MSPCL
27	Mr. H.Shantikumar Singh	ED (Tech) MSPCL/MSPDCL
28	Mr. M.Budha Chandra Sharma	Gen. Manager, MSPCL
29	Mr. B.Bikram Sharma	DM (IT)
30	Mr. Usham Rocky	DGM (Comml)
31	Mr. Chetanjit Thokhom	AM (F&A), MSPDCL

Sl. No.	Name of the Participant	Designation
32	Mr. R.K. Robert	D.M., Reinforcement
33	Mr. Kami Gaikulung	GM-EC-II, MSPDCL
34	Mr. P.Shamungou	GM-EC-III, MSPDCL
35	Mr. A.Ibotomba	GM- Planning&Project
36	Mr. Orinam Kartik Singh	GM,E/Circle No. 1
37	Mr. H.Debeswar	DGM/TD/I
38	Mr. A Satyabrata Singh	DGM / TD – IV
39	Mr. Khumkholal	Manager / TD – III
40	Mr. Hijam Manimukta	DGM / CSO-I
41	Mr. N. Jasobanta Singh	GM / SLDC
42	Mr. S. Priyananda Singh	GM (T)

ANNEXURE - II

LIST OF PERSONS ATTENDED PUBLIC HEARING ON TARIFF PETITION FOR FY 2022-23 IN RESPECT OF MSPDCL, MANIPUR

Venue: **Hotel Classic, North AOC, Royal Hall, Imphal, Manipur.**
Date & Time: **15th March, 2022 (Tuesday) from 10:30 a.m. to 12:30 p.m.**

Sl.No.	PARTICIPANT NAME	DESIGNATION / PROFESSION
1.	R. THANGA	Chairperson, JERC (M&M)
2.	ER. LALCHHARLIANA PACHUAU	Member, JERC (M&M)
3.	NG. SUBHASHCHANDRA SINGH	Managing Director, MSPDCL
4.	RICHARD ZOTHANKIMA	Assistant Secretary, JERC (M&M)
5.	S. CHAOBA SINGH	President, AMPCA
6.	Y. RANAPRATAP	Member, AMPCA
7.	H. THANTHIANGA	Assistant Chief (Engg.), JERC (M&M)
8.	K. HARI PRASAD	Consultant, JERC (M&M)
9.	NARUSH AGARWAL	Financial Consultant, MSPDCL
10.	SATADRU CHAKRABORTY	Consultant, MSPDCL
11.	TH. SATYAJEET SINGH	DM, MSPDCL
12.	N. PURNIMA	Dy. Mgr., MSPDCL
13.	M. RABI SINGH	G.M. (Comml), MSPDCL
14.	H. ROMEN SINGH	Manager (Comml), MSPDCL
15.	O. KARTIK SINGH	General manager, MSPDCL
16.	P. SHAMUNGOU	G.M. / EC-III, MSPDCL
17.	Y. CHAOBA SINGH	DGM, Thoubal
18.	PH. RAMESHCHANDRA	Manager, Leimakhong
19.	TH. UMA SINGH	Manager, YPK SD
20.	Y. KULLABIDHU MEITEI	Manager, Lamlai SD
21.	TH. SHYAMANANDA SINGH	Manager, KSD-II
22.	R.K. ROBINSON SINGH	Manager, BPRSD
23.	K. THONGLEN SINGH	Manager, Sagolmang
24.	N. PRITAM SINGH	Manager, Tpl SD
25.	SH. SANTOSH SHARMA	Manager, LSD-I
26.	NINGSHOK NINGSHEN	Manager, Litan SD
27.	K.S. SOTHING	Manager, Ukhrul SD
28.	A. PRIYOBARLA	Manager, Wangkhei SD
29.	VICTOR DUIDANG	D.G.M., Kamjong
30.	R.K. SANTOSH	Manager, Kassom Khullen &
31.	M. BIRJIT SINGH	Manager, Moirang
32.	PURNAJEET L.	Deputy Manager, IEP-II, Takyul SD
33.	L. HANGSHING	Deputy manager, LSD-II, IED-II
34.	H. SHANTI SUMAR SINGH	ED (tech), MSPCL/MSPDCL
35.	N. KHAGEMBA	GM (Finance)
36.	A. IBOTOMBA	GM (Planning)
37.	TH. IBOMCHA MEITEI	DGM (Kakching)
38.	KAMEI GAIKULUNG	GM-EC-II, MSPDCL
39.	GANGMEI AKIMMEI	Manager
40.	N. BIRJIT	DGM, IED-III
41.	N. ASHAPURNA	CCO, JERC (M&M)

Sl.No.	PARTICIPANT NAME	DESIGNATION / PROFESSION
42.	UMABATI L.	Manager
43.	THANGLALSAM	DGM, KPI
44.	NGAMBOI BAITE	MGR, UPI
45.	MD. NASIMUDDIN SINGH	Manager, Wangjing SD
46.	L. SONANANDA SINGH	Manager, Lamlong-II SD
47.	TH. LAMNUNLIAN	Manager Churachandpur
48.	H. LUNLALBIAK	Manager, Churachandpur
49.	BHAGYASHREE LAISHRAM	Executive Director (HR)
50.	BIKRAM SHARMA	Deputy Manager, IT
51.	USHAM ROCHY	DGM (Comml)
52.	CHANDRAMANI M.	DGM/IED 2
53.	SANJITKUMAR KH.	Manager (Thoubal S/D)
54.	L. SHYAMSON SINGH	Manager, Kakching SD
55.	SUNDAR	Manager, KSD-I, IED-I
56.	K. NABAKANTA SINGH	DGM, Store
57.	FARUKSUL KHAN	Manager, Store

ANNEXURE – III

MSPDCL - Manipur - Expected Revenue in FY 2022-23 at Existing Tariffs													
						Existing Tariff		Revenue /month					
Sl. No.	Category	Consumers	Contracted Load (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 (in Rs lac)	Energy charge /Consr (in Rs.)	Total energy charge (in Rs lakh)	Total Revenue (in Rs lakhs)	Annual Revenue (in Rs lakh)	Average realisation (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 connection**							
	All units	**14406**	**6967**	**4.23**		**25**	**2.10**	**3.60**		**7.41**	**11.01**	**132.11**	**3.12**
2)	**Normal Domestic**												
i)	0 - 100 kWh	410190	**587636**	357.98	72.73	65	5.10	381.96	370.92	1521.48	1903.44	22841.32	6.38
ii)	101 - 200 kWh	34920	**84828**	75.47	180.10	65	5.95	55.14	986.60	344.52	399.66	4795.90	6.35
iii)	Balance >200 kWh	11212	**41451**	37.25	276.87	65	6.75	26.94	1623.87	182.07	209.01	2508.16	6.73
	Sub Total (2)	**456322**	**713915**	**470.70**	**85.96**	**65**		**464.04**	**2981.39**	**2048.07**	**2512.11**	**30145.32**	**6.40**
	Total Domestic LT	**470728**	**720882**	**474.94**				**467.64**		**2055.48**	**2523.12**	**30277.43**	**6.38**
2	**Non-Domestic/Commercial**												
a)	**Low Tension**												
i)	0 - 100 kWh	27244	**44791**	29.51	90.26	85	6.55	38.07	591.20	161.07	199.14	2389.71	**8.10**
ii)	101 - 200 kWh	9774	**9636**	20.42	174.10	85	7.25	8.19	1192.23	116.53	124.72	1496.65	**7.33**
iii)	Balance >200 kWh	4688	**36960**	15.23	270.73	85	7.65	31.42	1921.08	90.06	121.48	1457.71	**9.57**
	Commrl- LT	**41706**	**91387**	**65.16**	**130.20**	**85**		**77.68**	**3704.51**	**367.66**	**445.34**	**5344.08**	**8.20**
b)	Commercial HT	1025	26200	21.97	1786.11	**105**	8.75	30.57	17364.96	177.99	**208.56**	2502.69	**11.39**
	Commercial (LT&HT)	**42731**	**117587**	**87.13**	**169.92**			**108.25**	**21069.47**	**545.65**	**653.90**	**7846.77**	**9.01**
3	**Public Lighting**	**397**	**1222**	**3.69**	**775.06**	**70**	**9.55**	**0.86**	**7401.82**	**29.39**	**30.25**	**363.00**	**9.83**
4	**Public Water Works**												
a)	Low Tension - PWW	37	452	1.29	2912.26	105	9.80	0.47	28540.15	10.56	**11.03**	132.36	**10.24**
b)	**High Tension - PWW**	192	17608	24.66	10704.26	105	9.50	20.54	112989.41	216.94	**237.48**	2849.81	**11.56**
	Total PWW	**229**	**18060**	**25.96**	**9445.29**			**21.01**	**141529.56**	**227.50**	**248.51**	**2982.17**	**11.49**
5	**Irrigation & Agri**												
a)	Low Tension - Irr & Agl	-	-	-	-	65	4.55	0.00	0.00	0.00	**0.00**	0.00	**#DIV/0!**
b)	**High Tension - Irr & Agl**	27	764	0.75	2329.63	105	4.75	0.89	12295.27	3.32	**4.21**	50.51	**6.69**
	Total Irr. & Agl LT	**27**	**764**	**0.75**	**2329.63**			**0.89**	**12295.27**	**3.32**	**4.21**	**50.51**	**6.69**
6	**Industrial**												
a)	LT - Small/Micro	**2135**	20299	22.95	895.62	70	4.85	14.21	4343.76	92.74	**106.95**	1283.40	**5.59**
b)	HT - Medium Indst	**178**	4605	4.62	2163.66	105	7.20	5.38	17309.28	30.81	**36.19**	434.25	**9.40**
c)	HT - Large Indst	**41**	12488	10.66	21666.05	105	8.80	14.57	211845.82	86.86	**101.43**	1217.12	**11.42**
	Total Industrial	**2354**	**37392**	**38.23**	**1353.26**			**34.15**	**233498.86**	**210.41**	**244.56**	**2934.77**	**7.68**
7	**Bulk Supply HT**	**389**	**49190**	**93.98**	**20133.24**	**105**	**8.80**	**57.39**	**196858.34**	**765.78**	**823.17**	**9878.03**	**10.51**
	Grand Total	**516855**	**945097**	**724.68**	**116.84**			**690.19**	**612653.32**	**3837.53**	**4527.72**	**54332.68**	**7.50**

ANNEXURE – IV

MSPDCL - Expected Revenue in FY 2022-23 at approved Subsidised Tariffs (As per Commission)													
						Subsidised Tariff		Revenue /month					
Sl. No.	Category	Consumers	Contracted Load (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 (in Rs lac)	Energy charge /Consr (in Rs.)	Total energy charge (in Rs lakh)	Total Revenue (in Rs lakhs)	Annual Revenue (in Rs lakh)	Average realisation (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 connection**							
	All units	**14406**	**6967**	**4.23**		**25**	**2.10**	**3.60**	**0.00**	**7.41**	**11.01**	**132.12**	**3.12**
2)	**Normal Domestic**												
i)	0 - 100 kWh	410190	**587636**	357.98	72.73	65	5.10	381.96	370.92	1521.48	1903.44	22841.28	6.38
ii)	101 - 200 kWh	34920	**84828**	75.47	180.10	65	5.95	55.14	986.60	344.52	399.66	4795.92	6.35
iii)	Balance >200 kWh	11212	**41451**	37.25	276.87	65	6.75	26.94	1623.87	182.07	209.01	2508.12	6.73
	Sub Total (2)	**456322**	**713915**	**470.70**	**85.96**	**65**		**464.04**	**2981.39**	**2048.07**	**2512.11**	**30145.32**	**6.40**
	Total Domestic LT	**470728**	**720882**	**474.94**	**84.08**			**467.64**	**2981.39**	**2055.48**	**2523.12**	**30277.44**	**6.38**
2	**Non-Domestic/Commercial**												
a)	**Low Tension**												
i)	0 - 100 kWh	27244	**44791**	29.51	90.26	85	6.55	38.07	591.20	161.07	199.14	2389.68	8.10
ii)	101 - 200 kWh	9774	**9636**	20.42	174.10	85	7.25	8.19	1192.23	116.53	124.72	1496.64	7.33
iii)	Balance >200 kWh	4688	**36960**	15.23	270.73	85	7.65	31.42	1921.08	90.06	121.48	1457.76	9.57
	Commrl- LT	**41706**	**91387**	**65.16**	**130.20**	**85**		**77.68**	**3704.51**	**367.66**	**445.34**	**5344.08**	**8.20**
b)	Commercial HT	1025	26200	21.97	1786.11	**105**	8.90	30.57	17662.64	181.04	**211.61**	2539.28	**11.56**
	Commercial (LT&HT)	**42731**	**117587**	**87.13**	**169.92**			**108.25**	**21367.1544**	**548.70**	**656.95**	**7883.36**	**9.05**
3	**Public Lighting**	**397**	**1222**	**3.69**	**775.06**	**70**	**9.60**	**0.86**	**7440.58**	**29.54**	**30.40**	**364.80**	**9.88**
4	**Public Water Works**												
a)	Low Tension - PWW	37	452	1.29	2912.26	105	9.80	0.47	28540.15	10.56	**11.03**	132.36	**10.24**
b)	**High Tension - PWW**	192	17608	24.66	10704.26	105	9.60	20.54	114178.78	219.22	**239.76**	2877.17	**11.67**
	Total PWW	**229**	**18060**	**25.96**	**9445.29**			**21.01**	**142718.93**	**229.78**	**250.79**	**3009.53**	**11.59**
5	**Irrigation & Agri**												
a)	Low Tension - Irr & Agl	-	-	-	-	65	4.55	0.00	0.00	0.00	**0.00**	0.00	**#DIV/0!**
b)	**High Tension - Irr & Agl**	27	764	0.75	2329.63	105	5.15	0.89	13330.66	3.60	**4.49**	53.87	**7.14**
	Total Irr. & Agl LT	**27**	**764**	**0.75**	**2329.63**			**0.89**	**13330.66**	**3.60**	**4.49**	**53.87**	**7.14**
6	**Industrial**												
a)	LT - Small/Micro	**2135**	20299	22.95	895.62	70	5.60	14.21	5015.47	107.08	**121.29**	1455.48	**6.34**
b)	HT - Medium Indst	**178**	4605	4.62	2163.66	105	8.00	5.38	19232.53	34.23	**39.61**	475.29	**10.28**
c)	HT - Large Indst	**41**	12488	10.66	21666.05	105	9.10	14.57	219067.84	89.82	**104.39**	1252.64	**11.75**
	Total Industrial	**2354**	**37392**	**38.23**	**1353.26**			**34.15**	**243315.85**	**231.13**	**265.28**	**3183.41**	**8.33**
7	**Bulk Supply HT**	**389**	**49190**	**93.98**	**20133.24**	**105**	**9.25**	**57.39**	**206924.97**	**804.94**	**862.33**	**10347.95**	**11.01**
	Grand Total	**516855**	**945097**	**724.68**								**55120.36**	**7.61**

Annexure-V

MSPDCL - Expected Revenue in FY 2022-23 at Full Cost Tariffs (w.e.f 1.04.2022) - as approved by Commission

Sl. No.	Category	Consumers	Contracted Load (in kW)	Annual energy Sales (in MU)	Sales/ Consumer /Month (in kWh)	Full Cost Tariff		Revenue /month				Annual Revenue (in Rs lakh)	Average realisation (Rs/kWh)
						Fixed Charge (Rs/kW/ kVA)	Energy charge (Rs./kWh/ kVAh)	Total Fixed Charges (in Rs lac)	Energy charge /Consr (in Rs.)	Total energy charge (in Rs lakh)	Total Revenue (in Rs lakhs)		
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 connection**							
	All units	**14406**	**6967**	**4.23**	**24.49**	**25**	**9.01**	**3.60**	**0.00**	**31.78**	**35.38**	**424.56**	**10.03**
2)	**Normal Domestic**												
i)	0 - 100 kWh	410190	**587636**	357.98	72.73	65	9.73	381.96	707.69	2902.87	3284.83	39417.96	11.01
ii)	101 - 200 kWh	34920	**84828**	75.47	180.10	65	9.57	55.14	1739.75	607.52	662.66	7951.92	10.54
iii)	Balance >200 kWh	11212	**41451**	37.25	276.87	65	11.76	26.94	2833.86	317.73	344.67	4136.04	11.10
	Sub Total (2)	**456322**	**713915**	**470.70**	**85.96**	**65**	**9.76**	**464.04**	**5281.30**	**3828.12**	**4292.16**	**51505.92**	**10.94**
	Total Domestic LT	**470728**	**720882**	**474.94**	**84.08**			**467.64**	**5281.30**	**3859.90**	**4327.54**	**51930.48**	**10.93**
2	**Non-Domestic/Commercial**												
a)	**Low Tension**												
i)	0 - 100 kWh	27244	**44791**	29.51	90.26	85	11.04	38.07	996.57	271.51	309.58	3714.96	12.59
ii)	101 - 200 kWh	9774	**9636**	20.42	174.10	85	12.59	8.19	2036.79	199.08	207.27	2487.24	12.18
iii)	Balance >200 kWh	4688	**36960**	15.23	270.73	85	13.47	31.42	3315.73	155.44	186.86	2242.32	14.72
	Commrl- LT	**41706**	**91387**	**65.16**	**130.20**	**85**		**77.68**	**6349.09**	**626.03**	**703.71**	**8444.52**	**12.96**
b)	Commercial HT	1025	26200	21.97	1786.11	**105**	10.78	30.57		219.37	**249.94**	2999.24	**13.65**
	Commercial (LT&HT)	**42731**	**117587**	**87.13**	**169.92**			**108.25**	**6349.09**	**845.40**	**953.65**	**11443.76**	**13.13**
3	**Public Lighting**	**397**	**1222**	**3.69**	**775.06**	**70**	**13.39**	**0.86**	**10380.21**	**41.21**	**42.07**	**504.84**	**13.67**
4	**Public Water Works**												
a)	Low Tension - PWW	37	452	1.29	2912.26	105	13.16	0.47	38313.07	14.18	**14.65**	175.80	**13.60**
b)	**High Tension - PWW**	192	17608	24.66	10704.26	105	11.57	20.54	137585.51	264.16	**284.70**	3416.45	**13.85**
	Total PWW	**229**	**18060**	**25.96**	**9445.29**			**21.01**	**175898.58**	**278.34**	**299.35**	**3592.25**	**13.84**
5	**Irrigation & Agri**												
a)	Low Tension - Irr & Agl	-	-	-	-	65	0.00	0.00	0.00	0.00	**0.00**	0.00	**#DIV/0!**
b)	**High Tension - Irr & Agl**	27	764	0.75	2329.63	105	9.27	0.89	23998.93	6.48	**7.37**	88.43	**11.72**
	Total Irr. & Agl LT	**27**	**764**	**0.75**	**2329.63**			**0.89**	**23998.93**	**6.48**	**7.37**	**88.43**	**11.72**
6	**Industrial**												..
a)	LT - Small/Micro	**2135**	20299	22.95	895.62	70	11.28	14.21	10105.13	215.74	**229.95**	2759.40	**12.03**
b)	HT - Medium Indst	**178**	4605	4.62	2163.66	105	10.48	5.38	25192.59	44.84	**50.22**	602.61	**13.04**
c)	HT - Large Indst	**41**	12488	10.66	21666.05	105	11.00	14.57	264828.07	108.58	**123.15**	1477.76	**13.86**
	Total Industrial	**2354**	**37392**	**38.23**	**1353.26**			**34.15**	**300125.79**	**369.16**	**403.31**	**4839.77**	**12.66**
7	**Bulk Supply HT**	**389**	**49190**	**93.98**	**20133.24**	**105**	**11.65**	**57.39**	**260715.61**	**1014.18**	**1071.57**	**12858.83**	**13.68**
	Grand Total	**516855**	**945097**	**724.6779**	**116.84**			**690.19**	**782749.51**	**6414.67**	**7104.86**	**85258.23**	**11.76**

Annexure-VI

Abstract of Full Cost Tariff, Subsidised Tariff and each Category-wise allocated subsidy for FY2022-23												
MSPDCL (FY 2022-23)		Energy	Full Cost Tariff (No subsidy)				Subsidised Retail Tariff				Govt. Subsidy	
		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	4.23	25	**9.01**	4.25	10.03	25	**2.10**	1.32	3.12	2.92	6.91
2	**Domestic**		(` /CL/kW)	(` /kWh)			(` /CL/kW)	(` /kWh)				
i)	First 100 kWh	357.98	65	**9.73**	394.18	11.01	65	**5.10**	228.41	6.38	165.77	4.63
ii)	101 - 200 kWh	75.47	65	**9.57**	79.52	10.54	65	**5.95**	47.96	6.35	31.56	4.18
iii)	Above 200 kWh	37.25	65	**11.76**	41.36	11.10	65	**6.75**	25.08	6.73	16.28	4.37
	Total Domestic	**470.70**			**515.06**	**10.94**			**301.45**	**6.40**	**213.61**	**4.54**
3	**Commercial & Non-Domestic**		(` /CL/kW)	(` /kWh)			(` /CL/kW)	(` /kWh)				
i)	First 100 kWh	29.51	85	**11.04**	37.15	12.59	85	**6.55**	23.90	8.10	13.25	4.49
ii)	101 - 200 kWh	20.42	85	**12.59**	24.87	12.18	85	**7.25**	14.97	7.33	9.91	4.85
iii)	Above 200 kWh	15.23	85	**13.47**	22.42	14.72	85	**7.65**	14.58	9.57	7.85	5.15
	Sub Total	**65.16**			**84.45**	**12.96**			**53.44**	**8.20**	**31.00**	**4.76**
4	**Commercial/ND HT**	**21.97**	**105**	**10.78**	29.99	13.65	**105**	**8.90**	25.39	11.56	4.60	2.09
			(` /CL/kW)	(` /kWh)			(` /CL/kW)	(` /kWh)				
5	Public Lighting	3.69	**70**	**13.39**	5.05	13.67	**70**	**9.60**	3.65	9.88	1.40	3.80
6	Public Water Supply LT	1.29	**105**	**13.16**	1.76	13.60	**105**	**9.80**	1.32	10.24	0.43	3.37
7	Agriculture-LT	0.00	**65**	**0.00**	0.00	0.00	**65**	**4.55**	0.00	0.00	0.00	#DIV/0!
			(` /kVA/BD)	(` /kVAh)			(` /kVA/BD)	(` /kVAh)				
8	Public Water Supply HT	24.66	**105**	**11.57**	**34.16**	**13.85**	**105**	**9.60**	28.77	11.67	5.39	2.19
9	Irrigation-HT	0.75	**105**	**9.27**	**0.88**	**11.72**	**105**	**5.15**	0.54	7.14	0.35	4.61
10	**Industrial**		(` /CL/kW)	(` /kWh)			(` /CL/kW)	(` /kWh)				
i)	LT - Small/Micro	22.95	70	**11.28**	27.59	12.03	70	**5.60**	14.55	6.34	13.04	5.68
			(` /kVA/BD)	(` /kVAh)			(` /kVA/BD)	(` /kVAh)				
ii)	HT-Medium Industries	4.62	105	**10.48**	6.03	13.04	105	**8.00**	4.75	10.28	1.27	2.76
iii)	Large Industrial - HT	10.66	**105**	**11.00**	14.78	13.86	**105**	**9.10**	12.53	11.75	2.25	2.11
15	Bulk Supply HT	93.98	**105**	**11.65**	128.59	13.68	**105**	**9.25**	103.48	11.01	25.11	2.67
		724.67			**852.58**	**11.77**			**551.20**	**7.61**	**301.38**	**4.16**

CL- denotes Contracted Load	**BD- denotes Billng Demand**

Annexure-VII

No. 9/14/2021-Power
GOVERNMENT OF MANIPUR
SECRETARIAT: POWER DEPARTMENT

Imphal, the 16th March 2022

To

The Chairman,
Joint Electricity Regulatory Commission (JERC) for Manipur and Mizoram,
TBL, Bhawan, 2nd – 5th Floor,
E-18, Peter Street, Khatla,
Aizawl, Mizoram - 796001

Subject: Fixation of Government Subsidy for various categories of consumer under MSPDCL — Regarding

Ref: JERC Letter vide no. H.20013/33/20-JERC dated 15-03-2022

Sir,

With reference to your letter no. H.20013/33/20-JERC dated 15th March 2022 on the above subject I am to inform and confirm that:

1. The ARR and Tariff Petition for FY 2022-2023 was presented before the State Cabinet for approval with a Budgetary support of Rs. 301.38 Crore from the Government of Manipur on 22-12-2021. The same was approved by the State Cabinet on 23-12-2022.

2. The views and comments of the Finance Department is
"The proposal was examined In FD's file no. 11/32/2020-FR and FD's comments are as follows:

   Finance Department supports the proposal of the Department. The Department is requested to take all necessary measures to Improve revenue collection in order to make the Power Companies Financially viable"

3. It is therefore requested to take into account the Budgetary support of Rs. 301.38 Crore as approved by Rate Finance Department in file no 11/32/2020-FR dated 22.12.2021 in the Issuance of the Tariff order for FY 2022-23 for MSPDCL

Yours faithfully,

(Dr. Shailesh Kumar Chourasia)

Secretary (Power), Government of Manipur

Annexure-VIII

Extract of Supply Code Regulation on Public Street Lightings (High-Mast Lights Erection)

4.48 Application for supply of electricity to public street lights shall be submitted in the prescribed form (Annexure-1) to the local office of the licensee by the Municipal Corporation or Municipality or Nagar Panchayat or Gram Panchayat or local body or any Government Department or any other organization made responsible by the State Government to maintain public street lights (which shall herein after be called by the generic term 'local body').

4.49 The requisition for public lights shall be accompanied by resolution of the local body and the sketch indicating the number of poles, existing or new, where streetlights are required. Except otherwise directed by the Commission, the licensee may not provide a new street light connection if the local body, applying for new street light connection, has any electricity dues against it.

4.50 The fittings, brackets or any special fittings shall be in accordance with the relevant BIS specifications or its equivalent, and shall require clearances as per prevailing rules and regulations. The local body shall bear the full cost of arranging of power supply to public streetlights including complete fittings and brackets. In case, any special fittings are to be provided, the local body shall arrange for it. (ref clause 4.5 of supply code 2013).

4.51 The licensee shall intimate the cost of extension in writing, within 15 days in urban areas and within 30 days in rural areas from the date of inspection of the site. The applicant shall pay the estimated cost of the supply including the cost of the security within two months of intimation. The work shall be taken up only after deposit of the amount and execution of agreement by the local body. The work shall be completed within 30 days of receipt of payment or the date of execution of the agreement, whichever is later. The applicant shall execute an agreement in the prescribed form.

4.52 A suitable metal waterproof box with glass window and locking/sealing arrangement to house the energy meter, street light controller, MCB, timer, light sensitive timer, etc. as approved by the licensee shall be provided by the local body.at his own cost. This box shall be installed at the point of commencement of street light line (say DT substation) or any convenient location mutually agreed between local body and the licensee. The responsibility of the safety of the same shall be shared equally by local body and the licensee. **If the local body fails to provide the suitable metal water proof box, the control equipment's and energy meter, etc., the licensee is at liberty to install them at its own expense and charge monthly rent*** ***or recover the full cost from local body by including the amount in the monthly public lighting bill at one time*******.**

4.53*****(1)**It shall be the responsibility of the local body to maintain and replace streetlight fittings and also switch on and switch off the streetlight. However, the licensee may carry out the maintenance of streetlight fixtures on payment basis and shall arrange to switch on fifteen minutes before sunset and switch off the streetlights fifteen minutes before sunrise as per local sunset/ sunrise timings or any other timings agreed upon between the Licensee and the local body. The licensee shall also carry out replacement of fixtures / bulbs (of same wattage) etc on the poles on request by the local body. The fixtures, bulbs etc. shall be supplied by the local body and replaced by the licensee within 7 days of receipt. All such services shall be chargeable. Such maintenance charges shall be included in the schedule of miscellaneous charges.

(2) Installation and maintenance can be handed over to local body on mutual agreement, provided the works on street light can be executed safely by the local body or its employees without disturbance to general power supply to public/public/another consumer.

4.54 All connections shall be serviced through 400V, 50 Hz, Three Phase Supply or 230 V, 50 Hz. Single Phase Supply depending upon the load. **Power supply to street lighting should be given through separate Distribution transformer of suitable rating wherever feasible***.**

4.55 New connection for public street line be preferably with suitable timer, **tripping facility, energy meter and suitable water proof metal housing*** ***as per Clause 4.52 of this code*****.

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