TARIFF ORDER

TRUE UP FOR FY 2018-19

REVIEW FOR FY 2019-20

AND

DETERMINATION OF AGGREGATE REVENUE REQUIREMENT &

RETAIL TARIFF FOR FY 2020-21

FOR

MANIPUR STATE POWER DISTRIBUTION COMPANY LIMITED

Petition (ARR & Tariff) No. 2 of 2020

JOINT ELECTRICITY REGULATORY COMMISSION
FOR MANIPUR AND MIZORAM

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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
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

Abbreviation	Description
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
Peter street, E-18, Khatla,
Aizawl, Mizoram – 796001

Petition (ARR & Tariff) No. 2 of 2020

In the matter of

True up for FY 2018-19, Annual Performance Review for FY 2019-20 and determination of Aggregate Revenue Requirement (ARR) and retail Tariff for FY 2020-21 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. Ngangom Sarat Singh
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 2020-21

along with Annual Performance Review for FY2019-20 and true up petition for FY 2018-19 on Dt.**31.12.2019**.

3. **ARR & Tariff Petition**

As per the directive of the Commission, the MSPDCL has filed the Petition for True-up for FY 2018-19 and APR for FY 2019-20 and determination of Aggregate Revenue Requirement (ARR) and Retail Tariff for FY 2020-21. In the petition MSPDCL has estimated ARR of Rs.800.22 Crores for FY 2020-21 and Revenue from existing tariff is at Rs. 391.34 Crore, the revenue from Outside State sale is at Rs.65.60Crs and considered a tariff support of Rs.216 Crore from the Govt. of Manipur for FY 2020-21 thereby showing a revenue gap of Rs.343.19 Crore, which the MSPDCL now proposes to recover it through proposed tariff.

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.20013/28/19-JERC, dated 10.01.2020 & 21.01.2020.

Pending receipt of additional information, the Petition was admitted on 31.12.2019 and marked as petition (ARR and Tariff) No. 2 of 2019 to avoid delay in processing of ARR.

The MSPDCL has submitted some data/information/clarifications etc. vide its letters No. 2/78/2019/MSPDCL-ARR/3366-69, dated 30.01.2020.and 2/78/2019/MSPDCL-ARR/ 3363-65, dated.28.01.2020

5. **Provisional True up of ARR for FY 2018-19**

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 true up petition along with ARR petition for FY 2020-21 without audited annual accounts for FY 2018-19. The MSPDCL for FY 2020-21 has furnished the net ARR of Rs.800.22 Crore and shown an unmet gap of Rs. 127.19 Crore after government subsidy 216.00 Crore. After detailed analysis the Commission provisionally arrived at the ARR of Rs.605.76 Crore with a revenue gap of Rs.27.53 Crore after Government subsidy of Rs.172.48 Crore for FY 2020-21.

6. **Annual Performance Review for FY 2019-20**

The JERC M&M (MYT) Regulations 2014 had issued an amendment Dt 27th March 2019 which mandates the licensee to submit the annual performance review to the Commission for the current year ARR with reference to Revised Estimates. Accordingly, review for FY 2019-20 is carried out which resulted in revised net ARR of Rs.628.62 Crs with a revenue gap of Rs.17.49 Cr upon considering the govt subsidy of only 219.55 crs as against Rs. 91.05 Crs of gap estimated by MSPDCL.

7. **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.20013/28/19-JERC dated: 29.01.2020 to publish the ARR and Tariff Petition for the FY 2020-21 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 of suggestions/objections was fixed on 10th February 2020.

Sl. No.	Name of the Newspaper	Language	Date of Publication
1	The Sangai Express	English	1st & 3rd February 2020
2	Poknapham	Manipuri	1st & 2nd February 2020

The Commission received one objection / suggestion from all Manipur Power Consumers' Association on the petition filed by the MSPDCL. The Commission passed on the objection received to MSPDCL for communicating their response on the objections raised.

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

8. **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 25.02.2020.

Sl. No	Name of the news paper	Language	Date of Publication
1	Poknapham	Manipuri	18th & 19th February 2020
2	Imphal Free Press	English	18th & 19th February 2020

9. **Public Hearing**

The Public hearing was held as scheduled on 25.02.2020-at Hotel Classic, Regency Hall, Imphal from 10:30 AM to 1:00 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.

10. The proposal of MSPDCL was also placed before the State Advisory Committee in its meeting held on 24.02.2020 at Hotel Classic, Regency Hall, Imphal from 11.00 AM and various aspects of the Petition were discussed by the Committee.

11. The Commission took 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 2020-21.

12. The Commission has reviewed the directives issued earlier in the Tariff orders for FY 2010-11 to FY 2019-20 and noted that some of the directives are compiled and some are partially attended. The Commission has dropped the directives which are complied fully and the remaining directives are consolidated and fresh directives are issued for further necessary action by MSPDCL.

13. 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.

14. This order is in Eleven chapters as detailed below;

- Chapter 1: Introduction.
- Chapter 2: Summary of ARR AND Tariff Petition for FY 2020-21
- Chapter 3: Power Sector in Manipur - An overview.
- Chapter 4: Public Hearing process.
- Chapter 5: True up for FY 2018-19
- Chapter 6: Annual Performance Review for FY 2019-20.
- Chapter 7: Analysis of ARR for FY 2020-21 and Commission's decisions.
- Chapter 8: Tariff Principles and Design.
- Chapter 9: Wheeling charges for FY 2020-21.
- Chapter 10: Directives.
- Chapter 11: Fuel and Power Purchase Cost Adjustment.

15. 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 visible in two local daily newspapers having wide circulation in the state within a week and compliance of the same shall be submitted to the Commission by the MSPDCL.

16. This order shall be effective from 1st April, 2020 and shall remain in force till the issue of next Tariff Order of the Commission.

(LALCHHARLIANA PACHUAU)	**(NGANGOM SARAT SINGH)**
Member	**Chairperson**

Place : Aizawl

Date : 20 /03/2020

1. Introduction

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

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

a) In accordance with the Act, the Commission discharges the following functions:

i. Determine the tariff for generation, transmission, distribution and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State: Provided that where open access has been permitted to a category of consumers under Section 42 of the Act, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;

ii. Regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;

iii. Facilitate intra-State transmission and wheeling of electricity

iv. Issue licenses to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;

v. Promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;

vi. Adjudicate upon the disputes between the licensees and generating companies; and to refer any dispute for arbitration;

vii. Levy fee for the purposes of this Act;

viii. Specify State Grid Code consistent with the Central Grid Code specified under Clause (h) of sub-section (1) of Section 79 of the Act;

ix. Specify or enforce standards with respect to quality, continuity and reliability of service by licensees;

x. Fix the trading margin in the intra-State trading of electricity, if considered, necessary;

xi. Discharge such other functions as may be assigned to it under the Act.

b) Further, the Commission also advises the State Government on all or any of the following matters namely:

i. Promotion of competition, efficiency and economy in activities of the electricity industry;

ii. Promotion of investment in electricity industry;

iii. Reorganization and restructuring of electricity industry in the State;

iv. Matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by the State Government.

c) The State Commission ensures transparency while exercising its powers and in discharging its functions.

d) In discharge of its functions, the State Commission is guided by the national Tariff Policy (NTP) as 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 at a voltage level of 11kv and below. All the existing generation assets of about 45 MW 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 2020-21

2.1 Aggregate Revenue Requirement (ARR)

The MSPDCL in its petition filing has submitted the Petitions relating to Limited Provisional True up of FY 2018-19, Annual Performance Review for FY 2019-20 and the determination of ARR and Tariff for FY 2020-21.

Table 2. 3: Aggregate Revenue Requirement for FY 2020-21

(Rs. Cr)

Sl. No	Particulars	**Approved** (MYT Order 12.03.18)	2020-21 ARR filing
1	Fuel Cost		
2	Power Purchase Cost	490.73	490.73
3	Inter-State Transmission Charges	64.18	61.53
4	Intra-State Transmission Charges	97.30	91.34
5	SLDC & NRLDC Charges	0.79	7.86
6	Employee Cost	112.78	113.48
7	R&M Expenses	8.13	13.07
8	Administration and General Expenses	9.99	9.71
9	Depreciation	0.38	2.93
10	Interest and Finance Charges	4.24	6.14
11	Interest on Working Capital	7.35	5.25
12	Write off of bad debts	3.00	3.00
13	Return on Equity	1.95	1.95
14	Add: Income Tax		
15	Less: Non-Tariff Income	0.43	6.76
16	**Net ARR**	**800.39**	**800.22**

Prayer

MSPDCL requests the Hon'ble Commission to:

a. Admit the Petition for Limited Provisional True-up for FY 2018-19, Annual Performance Review for FY 2019-20 and ARR &Tariff Determination for FY 2020-21 in accordance with the principles specified in JERC (Multi Year Tariff) Regulations 2014 notified by the Hon'ble Commission;

b. Approve the amounts claimed in the Limited Provisional True-up for FY 2018-19;

c. Approve the category-wise tariffs proposed by MSPDCL for FY 2020-21;

d. 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;

e. Permit submission of any additional information required by the Commission during the processing of this Petition;

f. 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 dependent upon outside sources for meeting majority of its energy requirement. It is currently getting power from NHPC, NEEPCO, ONGC Tripura Power Corporation (OTPC) Unit I and Unit II, and Baramura Gas Turbine Power Project (BGTPP). The scheduled allocated firm share from the 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 391.14MW. During the years from 1984 to 1996, a number of Central Sector Power Projects, mostly hydel projects, were commissioned in the North Eastern Region. Manipur State has a share of about 7-8% in every project. Because of the power availability from such projects, the peak demand of the State has increased gradually and in FY 2019-20, it has increased to more than 200 MW.

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 utilised. The existing intra-state transformation capacity of 132 kV Substations in Manipur is 417 MVA and the length of the 132 kV lines is 472.7 km of single circuit lines and 87.9 km of double circuit lines.

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 Own generation contribution shown from these stations from FY 2018-19 onwards to FY 2020-21.

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 of NEEPCO and NHPC and Tripura is 174.30 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 2018-19 (Actuals)	
			% Share in Allocation	Manipur Allocation (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	18.75
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	5.79%	21.03
2	Pallatana-Unit II)	363	5.79%	21.00
	Sub Total	**726**		**42.00**
G				
1	**Tuirial HEP**	**300**	2.33%	**6.99**
	Grand Total	**3099**		**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 FY 2018-19 in the Tariff Order for FY 2018-19, are as detailed in the Table below:

Table3. 2: Energy Purchase for FY 2018-19 (MU)

(Units in MU)

Sl. No.	Source of Power	Approved (MYT Order 12.03.18)	2018*19 Actuals
A	**CGS - NEEPCO**		
1	Kopili -I HEP	62.82	74.32
2	Kopili-II HEP	6.93	6.40
3	Khandong HEP	12.85	12.86
4	Ranganadi HEP	109.18	86.73
5	Doyang HEP	17.10	17.38
6	Assam GBPP	127.62	106.01
7	AGTPP	62.67	49.87
B	**CGS – NHPC**		-
1	Loktak HEP Purchased Power	188.49	176.69
2	Loktak HEP- Free Power	74.16	69.47
C	**NTPC - New Plants**		-
1	NTPC Bongaigaon Unit I	45.56	103.25
2	NTPC Bongaigaon Unit II	45.56	-
3	NTPC Bongaigaon Unit III	22.78	-
D	**Others**		
1	Baramura GBPP Unit IV and V	75.47	41.57
2	OTPC Palatana	214.06	249.20
3	Para HEP	30.59	28.11
4	Monarchak Gas Based PP (NEEPCO)	NA	-
5	Kameng HEP Stage I	NA	-
6	Kameng HEP Stage II	NA	-
7	Tuirial HEP	NA	-
8	Lower Subansiri Stage I	NA	-
9	Lower Subansiri Stage II	NA	-
10	Renewable – Solar	0	-
11	Renewable – Non-Solar	0	-
	Sub -Total	1067.95	1,021.85
	Total Purchase	1067.95	1,021.85

As can be seen from the above Table, the actual power purchase quantum in FY 2018-19 was 1021.85 MU, which is slightly lower than the approved quantum of 1067.95 MU. The reason for this deviation is due to non-availability of power or deviation in load requirement. This deviation is managed by MSPDCL by way of purchase/sell of surplus power from IEX or by availing the banking facility with other traders. Due to such deviations the actual purchase by DISCOM is slightly different as projected below:

Table 3.3: Energy Purchase from other sources and deviation for FY 2018-19 (MU)

Sl. No.	Source of Power	Approved	Actuals
1	Total Purchase	1067.95	1,021.85
2	NER Pool losses		2.72%
3	NER Pool losses		27.77
4	Net Power Purchase		994.08
5	IEX Purchase		10.81
6	Return of Banked Energy + (i/c previous year)		165.26
7	Banking to Outside utilities		122.04
8	Energy Sold to IEX		130.28
9	Net Available Energy		917.830
10	UI Underdrawl		39.64
11	UI Overdrawl		16.57
12	**Net Power available at State Periphery**		**894.760**

From above it can be seen that the net power purchase from the CGS for FY 2018-19 is 1021.85 MU. The purchase from IEX is 10.81 MU and sales is 130.28MU. After considering the IEX, UI and banking the net electricity available at the state periphery is 894.760 MU. MSPDCL requests the Hon'ble Commission to approve the actual power purchase quantum of 1021.85 MU from CGPs for Limited provisional truing up for FY 2018-19.

For the purpose of drawing power from the Central Sector generating stations and other sources in the North Eastern Region, the MSPDCL has utilized 1 no. of 400 kV D/C line presently charged at 132 kV and 4 No's single circuit 132kV interstate transmission lines, 3 (three) being owned by PGCIL and two by MSPCL, as detailed below.

Owned by MSPCL

- Leimatak-Ningthoukhong-Karong-Kohima-132 kV line.
- Leimatak-Jiribam-132 kV line

Owned by PGCIL

- Silchar – Imphal – 400 kV D/C line charged at 132 kV
- Leimatak – Imphal - Dimapur – 132 kV line.

- Leimatak - Jiribam – 132 kV line.

Manipur, being a hilly state with its population unevenly dispersed and spread over remote corners, it is having large network of Sub-Transmission and Distribution system. The details of Distribution network, owned & operated by MSPDCL as on 31.03.2018, are given in Table below.

Table3. 4: Distribution Network as on 31.3.2018

Sl. No	Voltage	Distribution lines (Ckt. Km)		Sub-stations (nos.)	Sub- station/ transformer MVA
		Double Ckt. Km	Single Ckt. Km		
1	11kV lines	16.090	7055.88		
2	LT lines		11888.679		
3	Distribution transformers			5522	408.5
4	11 kV (UG)		0.010		
5	LT cable (UG)		44.43		

Commission Analysis:

The above distribution network data pertains to earlier filings and in this year filings (FY 2020-21) they have provided a blank **format-P4 (Details of Physical characteristics of the network)** in spite of insisting to submit the same through additional data. However, for the benefit of readers the old information is reproduced here instead of suppressing the network data. This kind of attitude by the Licensee is unexpected by the Commission and this will be the last chance to rectify this indifferent attitude and concealing the facts before the Commission and it is viewed very seriously and any repetition of such one occurrence in future will be suitably dealt by Commission with heavy penalties and disobedience of this nature cannot be allowed to continue unabated any more. The prescribed formats are not made available to the Commission in the normal excel format file but they are pasted as objects in a font size not really readable to the data user. This unfairly submissions cannot be entertained and would end up with rejection with no recourse in future. The Licensee shall print the formats in its actual form and size and also give the original excel file soft copy without suppressing the in-built formulas for the consumption of the Commission.

3.3 Distribution Loss

The Distribution loss of MSPDCL system is 25.87% during the year 2018-19. The technical and commercial losses are not segregated.

3.4 Consumer Profile

The category wise consumers and corresponding energy sales during the year 2018-19 are given in Table below:

Table3.5: Number of consumers and connected load of MSPDCL for FY 2018-19

Sl. No	Consumer Category	FY		2018-19
		Energy sold (MU)	No. of Consumers	Connected Load (KW)
1	Kutir Jyoti	3.56	15907	7367
2	Domestic	382.20	454095	707073
3	Commercial-LT	56.02	23637	88649
4	Public lighting-LT	3.62	441	1144
5	Public waterworks LT	1.25	26	329
6	Agriculture & Irrigation LT	1.14	39	301
7	Small and cottage industry-LT	19.68	2317	18845
8	Commercial-HT	18.82	491	14222
8	Medium industry-HT	3.99	44	2325
9	PWS HT	20.29	175	15594
10	Agriculture HT	0.74	27	729
11	Large industry-HT	7.43	27	8573
12	Bulk supply-HT	78.21	430	54122
13	**Grant Total**	**596.97**	**497656**	**919272**

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 annual energy requirement during FY 2018-19 is 894.76 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 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. For EC-II & EC-III 100 % prepaid metering which was supposed to be achieved by end of FY 2018-19 is postponed to end of FY2020-21 in reply to the directive. The Physical verification drive is still pending and replied to complete it by FY 2020-21. But there is no confirmation regarding the regularization of about 33,384 nos. of unauthorized connections.

Details of providing meters & consumers under Soubhagya project is not reported so far. Details of pre-paid meters purchased and installed to consumers in the last three years was not submitted. While, as per regulations no connection is to be sanctioned and given without installation of a working meter. MSPDCL is violating this regulation.

4. Public Hearing Process

4.1 Introduction

On admitting the ARR and Tariff Petition for FY 2020-21, 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, Conference Hall, Imphal on 25.02.2020 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 2020-21 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

Objection 1:

As per one of the verdicts from our Hon'ble Supreme Court of India, one of the members of the regulatory Commission must be from the legal fraternity and the Hon’ble Supreme Court of India notably ordered as below:

“One of the members of Electricity Regulatory Commissions should be a person of judicial background, quashing orders of Various High Courts that the Chairperson of such bodies in States should be a High Court judge. The top Court also said the judicial member should be part of the quorum in adjudicatory matters."

Now the functioning of JERC(M&M) is questionable as per the above verdict leaving aside giving the approval of ARR and Tariff Revision FY-2020-27 for Manipur State. The same was also intimated during ARR and Tariff Revision FY 2019-20.

Reply of MSPDCL:

As there was no comment from MSPDCL, Chairperson of the Commission mentioned that the above verdict is for the Commission having at least a minimum of three members including the Chairperson and it is not enforced in this Commission having two members representing Manipur and Mizoram respectively.

Objection 2:

Inspite of several Instructions from the Ministry of Power, Government of India' for “Reduction of cost of power due to prepayment by end consumers", nothing is moving in this direction instead proposal is coming up for higher tariff. MoP’s letters were submitted.

Why the instructions of the Ministry of Power, Government of India not followed by the Power ComPanies?

Reply of MSPDCL:

As per Ministry of Power notification dated 16.01.2020, MoP has stated that the States may request the State Electricity Regulatory Commission to consider reduction in power retail tariff to the consumer for the power purchase through pre-payment meters. As per Hon'ble JERC M&M tariff schedule for the state of Manipur under general conditions of - supply rebate for advance payment @ 1% is allowed to the consumer having prepaid meter, MSPDCL is implementing the order of JERC in the state of Manipur.

Objection 3:.

Under the same roof of JERC(M&M), why two tariff rates one for Manipur state and another for Mizoram State? If not possible single Tariff, then separate the commission one for Manipur State and another for Mizoram State. Finally it will happen one day as that of other states.

Reply of MSPDCL:

As there was no comments from MSPDCL, the Assistant Chief (Engg.) of the Commission clarified the reason of fixing separate tariff, one for Manipur and the other for Mizoram mentioning that single tariff is not applicable for both the states as they are having different ARR which is the main basis in determination of retail Electricity Tariff.

Objection 4:

Energy Losses ' First, let us staff Inter and Intra - State Loss;

a) NER Losses, 27.77 MU i.e. 2.72% *Very High must brought down below 2%.*
b) MSPCDL Losses, 89.48 MU i.e. 10% *Too high must brought down below 2%.*

Second, Distribution Losses (MSPDCL), 208.32 MU i.e. 25.87% *Too High must brought down below 10%*

Total losses comes to 38.59% (2.72% + 10% + 25.87%) most undesirable one, it must brought down below 15% ever lower in International Level. Unit Tariff rate will come down if the Power companies are Efficient enough.

Please do not change tariff rate at all without checking, such leakages.

Reply of MSPDCL:

MSPDCL has proposed distribution loss of 24.50% in the ARR and tariff proposal for FY 2O2O-21. The distribution loss as per actual for FY 2018-19 was25.87%, proposed to be reduced to 25.40% during FY 2019-20 as per provisional accounts. Considering the high LT network (78% LT sale) and low consumer density in Manipur, the proposed distribution loss is justifiable.

Objection 5:

O&M Expenses: This High Expenditure Zone includes:

a) Employee Expenses = Rs. 113.48 Crore

b) R&M Expense = Rs. 13.07 Crore

c) A &G Expense = Rs. 9.71 Crore

Total Rs. 136.26 Crore i.e. 17.02% of total ARR, too high, please limit to 4-5% initially or otherwise as per CERC norm.

If this high rate of O&M expenses is brought down to the desire level, the tariff rate will come down certainly.

Please do not change tariff rate at all without any change of expenses

Reply of MSPDCL:

MSPDCL has projected the O&M expenses for FY 2020-21 as per the provision under JERC (M&M) MYT Regulations 2014. The employee cost for FY 2020-21 is calculated by considering 5.72% increase over the employee cost for FY 2019-20. Additional employee cost is considered towards additional manpower to be deployed in FY 2020-21 (10% increase over 2019-20) and 7th pay arrear payable in FY 2020-21 (21% increase over 2019-20). In case of R&M and A&G expenses, the projections are made considering 5.72 escalation over expense incurred in FY 2019-20. Additional A&G expense to the tune of Rs 2 cr have been considered for additional A&G cost like metering software, franchisee fee, energy audit vigilance, flying squad etc.

Objection 6:

Others, there are many areas for reducing the tariff rate, viz

a) Reduction of GFA

b) Identification of NPA and its disposal.

c) Introduction of LVR Schemes for reducing unnecessary expenditures on employees & others of having no output, etc.

No Audit report is available for the Power Companies

Reply of MSPDCL:

Gross fixed asset determined based on capitalization incurred in particular year. The Capex scheme taken up by MSPDCL is essential for supplying electricity to consumers therefore GFA cannot be reduced. MSPDCL shall assess the feasibility of identification of NPA, introduction of LVR schemes as suggested by the objectors. MSPDCL has taken the necessary steps for preparation audited financial accounts for FY 2016-17 onwards and submit the same.

Objection 7:

Tariff Comparison- NCR Delhi is able to supply 200 units of energy freely to its consumers irrespective of any cast/class/creed within his boundaly for the last 2/3 years. But Manipur, while filing the petition for ARR and Tariff Petition for FY2020-21, a comparison was presented to the Commission for the States of Manipur with Himachal Pradesh (2019-2020), Jharkhand (2019-20), Meghalaya (2018-19) and Assam (2019-2020), without the State of Mizoram, the most important State, having the same Joint Electricity Regulatory Commission with Manipur.

At 5 kW connected load and 200kWh/month, a comparative monthly bill of domestic (rural) consumer of the above states with Mizoram (2019-20) are given below:

(Figures in Rs)

	Manipur (19-20)	Mizoram (19-20)	Himachal Pr (19-20)	Jharkhand (19-20)	Meghalaya (18-19)	Assam (19-20)
1.Fixed charge	300.00	250.00	350.00	375.00	250.00	200.00
2.1st slab charge	390.00	340.00	493.75	1250.00	370.00	648.00
3.2nd slab	520.00	490.00	363.75	...	420.00	532.00
Total	1210.00	1080.00	1207.50	1625.00	1040.00	1380.00

Calculation of bill for the above connected Load with the proposed new Manipur Tariff (2020-21)	
1. Fixed Charges 2. 1st Slab Charges 3. 2nd Slab Charges Total Charges	Rs.300.00 Rs.590.00 Rs.720.00 Rs.1610.00
Old billed value	Rs. 1210.00
Difference of billed value (New-Old)	Rs. 400.00

This increase in billed value is due to increase of unit Tariff rate viz., in 1st slab, from Rs. 3.90 to Rs. Rs. 5.90 (151%) similar to other slab too. This is not reasonable; please stop such Practice for the sake of Prepayment by end Consumers.

Reply of MSPDCL:

Government of Delhi is providing equivalent subsidy to DISCOM for providing 200 units electricity free of cost to consumer. Based on the limited subsidy received from Government of Manipur, MSPDCL is supplying electricity to all consumers at subsidized rate far below than the average cost of supply.

MSPDCL has provided tariff comparison of Manipur with some of the state in north east region having similar characteristics in terms of consumer mix, distribution network, topography etc. Few other states having similar characteristics have also been considered for fair comparison, In case of Mizoram the average cost of supply for FY2019-20 approved by Hon'ble Commission was Rs 7.68/unit, whereas for Manipur the Commission has approved the same as Rs 9.32/unit considering the total ARR and sale. The power purchase cost is different for the two states similarly, there is difference in Average revenue realization among the two states, in case of Mizoram it is Rs 4.96 /unit and for Manipur same is Rs 5.83/unit for FY 2019-20. The tariff structure and design is approved by the Hon’ble Commission by considering above aspects.

5. Provisional True up for FY 2018-19

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 required to submit the request for true-up for FY 2018-19 in this Petition, but since the audited financial accounts of FY 2018-19 are not ready at the time of filing this Petition, MSPDCL is unable to submit the final true up Petition. Hence, MSPDCL hereby submits a limited provisional true-up of FY 2018-19 based on the actual sales, power purchase quantum and costs, O&M expenses and capitalization for FY 2018-19. As and when the accounts of FY 2018-19 are audited, MSPDCL shall file its final true up Petition. As only limited provisional True up for FY 2018-19 is being claimed, MSPDCL has not requested for pass through of the provisional Revenue Gap of FY 2018-19 and consequent sharing of gains and losses for FY 2018-19 along with this Petition, and the same shall be claimed at the time of seeking final true-up for FY 2018- 19 based on audited accounts. The main objective of this limited provisional true-up Petition is to update the Commission regarding the Revenue Gap for FY 2018-19 based on the actual expenses and revenue after considering the subsidy. It may be noted that the true-up Petition is not based on the comparison of the actual expenses and revenue for FY 2018-19 with the expenses and revenue considered by the Hon'ble Commission in the Annual Performance Review (APR) of FY 2018-19 in the JERC tariff Order 20 of 2019 dated 26 March 2019, as in this Order, the Hon'ble Commission has not passed through the impact of the APR, and has captured the values as they are the base values.

5.2 Energy Sales

MSPDCL caters to a diverse consumer mix comprising LT domestic, LT commercial, HT commercial, LT Industry, HT Industry 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 for FY 2018-19 is given in the Table below:

Table 5.1: Category-wise Energy Sales (MU) for FY 2018-19

Sl. No.	Category	Approved	Actual
A	**LT Supply**		
1	Kutir Jyoti	20.96	3.56
2	LT Domestic	386.83	**382.20**
3	Commercial LT	44	**56.02**
4	Cottage and Small Industry	19.62	19.68
5	Public Lighting	5	3.62
6	Public Water-works	3.6	1.25
7	Irrigation and Agriculture	1.2	1.14
	LT Supply Sub Total	**481.21**	**467.48**
B	**HT Supply**		
1	Commercial	7.89	18.82
2	Public Water-works	17.34	20.29
3	Irrigation and Agriculture	0.92	0.74
4	Medium Industry	4.1	3.99
5	Large Industry	5	7.43
6	Bulk Supply	110.21	78.21
	HT Supply Sub Total	**145.46**	**129.49**
GRAND TOTAL		**626.67**	**596.97**

The actual energy sold by MSPDCL in FY 2018-19 was 579.97 MU, which is slightly lower than the approved sales of 626.67 MU. In the FY 2018-19, the Kutir Jyoti consumers have been shifted to the normal domestic category consumers. Further due to increase in domestic category consumers the sales to this category has been increased. Consumption in the public lighting has slightly reduced due to replacement of sodium / mercury vapour street lights to LED based street lights. Overall LT sales has been 467.48MU as against the approved sales of 481.21MU.

In the case of HT category sales, the bulk HT supply consumers have been shifted to commercial. The sales to HT commercial and large industries is slightly higher than the approved figures whereas the irrigation and agriculture sales is slightly lower than approved sales for FY 2018-19. Overall HT sales have been 129.49MU as against the approved figures of 145.46 MU.

The MSPDCL requests the Hon'ble Commission to approve the actual category-wise sales of 596.97 MU, as shown in the Table above.

COMMISSION ANALYSIS

Commission has provisinally approved the actual category wise sales at 596.97 MU for FY 2018-19 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

Petitioner's Submission:

The computation of actual Distribution losses for FY 2018-19 is shown in the Table below:

Table 5.2: Actual Distribution Losses for FY 2018-19

Sl. No.	Particulars	Unit	Actuals
1	Total Power Purchase	MU	1,021.85
2	Inter-State transmission loss in NER for FY 2017-18	MU	27.77
3	Net Power Purchase (1-2)	MU	994.08
4	IEX Purchase	MU	10.81
5	Return of Banked Energy	MU	165.26
6	Banking to outside utilities	MU	122.04
7	Energy Sold to IEX	MU	130.28
8	Net Available Energy	MU	917.83
9	UI Overdrawal	MU	16.57
10	UI Underdrawal	MU	39.64
11	Net power available at State periphery	MU	894.76
12	Intra State Transmission Loss %	%	10.00%
13	Intra State Transmission Loss (MU)	MU	89.48
14	Net Energy requirement at DISCOM periphery for sale within state	MU	805.28
15	Energy sale within state	MU	596.97
16	Distribution Loss	MU	208.32
17	**Distribution Losses w.r.t Energy Input at DISCOM Periphery**	**%**	25.87%

The actual Distribution Losses of 25.87% achieved by MSPDCL in FY 2018-19 is slightly higher than the normative Distribution Losses of 17.715% approved by the Hon'ble Commission in the Tariff Order for FY 2018-19, as shown in the Table above. The higher distribution losses are primarily due to the higher LT lengths and the hilly/ complex terrain. The long LT distribution lines and distribution at 11 kV are leading to higher distribution losses in the state.

The Distribution losses in Manipur are bound to be higher than that of the neighbouring state Mizoram (which has the approved distribution loss of 22.98% in 2017-18.) due to more LT distribution line length. With the present state of complex terrain, long LT distribution lines, spread LT domestic consumers the actual LT distribution losses in Manipur are higher than the commission approved distribution losses.

Hence, MSPDCL requests the Hon'ble Commission to approve the actual distribution loss of 25.87%, as shown in the Table above.

Commission's Analysis

The distribution loss calculation done by MSPDCL is not in order. The Eastern Region (ER) pool losses @1.95% were ignored as there is no energy purchased from ER stationed. While, the losses percentage for North Eastern Region (NER) was adopted at 2.74% in FY 2018-19 based on NERLDC Losses from website, and again these losses were enhanced to 2.85% for later years without any explanation and cannot be acceptable as the drop-in network capability cannot occur immediately in following years conveniently. Intra state transmission losses are however adopted at 10%, but as indicated in the additional information replies it was taken as 9.02% for 2018-19 and the distribution loss is at 25.87% as per MSPDCL. On adopting the above, the Outside State Sales should be 139.69MU but not 130.28MU as reported for 2018-19. Had the Licensee, availed the banked energy balance of 165.26MU at the beginning of FY 2018-19, there was no need to purchased energy from various outside state sources to such an extent that they are left with a surplus energy to be sold at outside state market at a price much lower than the Average procurement cost and also incurring huge loss for not selling them within state. All these transactions have their own silent impact on the financials of the utility drastically.

The Energy Balance during FY 2018-19 is recalculated as detailed in the table below.

Table 5.3: Distribution loss and Energy balance approved by the Commission

Sl. No	Particulars	Unit	Approved (FY 2018-19)
A	Own Generation	MU	-
B	Power purchase from CGS in ER	MU	0
C	Pool loss in ER	%	1.95%
D	Energy Losses at ER	MU	--

Sl. No	Particulars	Unit	Approved (FY 2018-19)
E	Net available energy after ER Losses	MU	0
F	Energy purchased from CGS in NER	MU	1021.85
G	Gross energy handled at NER	MU	1021.85
H	Pool loss in NER	%	2.74%
I	Energy Losses at NER	MU	28.00
J	Net available energy after NER Losses	MU	993.85
K	ADD: IEX Purchases	MU	10.81
L	ADD: Net adjusted energy in Banked Energy	MU	43.22
M	ADD: Adjusted UI (Over draw – Under draw)	MU	-23.07
N	Less: Energy sold at IEX (Outside State Sales)	MU	139.69
O	**Energy available at State Periphery [J - (K to N)]**	**MU**	**885.12**
P	Less: Intra state (MSPCL) losses @ 9.02%	MU	**79.84**
Q	Net energy available at Distribution Input	MU	805.28
R	Retail Energy sales (LT&HT)	MU	596.97
S	Distribution Losses (Q – R)	MU	208.31
T	Distribution Loss %	%	**25.87%**

The reasons for NIL own generation is not furnished by MSPDCL. The Commission however provisionally approves own generation also at NIL MU for FY 2018-19 for the purpose of true up.

As the overall T&D Losses are at 32.55% of State periphery total input and it signifies out of the entire energy purchased only 67.45% is being billed on consumer for revenue realisation. As such, this is not a healthy status and unwarranted, it is high time a thorough revamp is needed to entire T&D network within Manipur State and chalk-out an action plan so as to reach a reasonable level of 17% to 18% T&D Losses as early as possible to off-load the burden of higher tariffs to Consumers and also to State Government in Subsidy amount. The situation can't entirely be imputed to network 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 occupying the major portion of distribution losses which are to be curtailed in shortest possible time by swift and dedicated action from MSPDCL which doesn't need any investment but requires foresightedness of the Electricity department and diligent vigilance.

As seen from the break-up of Non-Tariff Income the miscellaneous receipts are only at 0.593Crs and there seems no discernible action appears to have been though-off till date in decimating such distribution losses and it is only the MSPDCL to be blamed for such an inaction.

The Outstanding dues on sale of power by the end of 31.03.2019 is far above Rs.400 Crs, implies the present revenue collection system in place is weak, slackened to undesirable levels and not effective any longer.

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***.

5.4 Energy Requirement

The actual energy requirement for FY 2018-19 as compared to the energy requirement approved by the Hon'ble Commission in the Tariff Order for FY 2018-19, is shown in the Table below:

Table 5.4 Energy Requirement for FY 2018-19 (MU)

Sl. No.	Particulars	Approved	Actuals
1	Energy Sales	626.87	596.97
2	Distribution Loss	17.72%	25.87%
3	Distribution loss Quantum	134.96	208.32
4	**Energy Requirement at Distribution Periphery for sale within the State**	**761.83**	**805.28**

MSPDCL respectfully submits that the actual energy requirement was 805.28 MU, which is slightly higher than the 761.83 MU approved by the Hon'ble Commission in its Order dated 26 March, 2019.

Commission's Analysis

Commission approves the actual category wise sales at 596.97 MU and energy requirement at 805.28MU for FY 2018-19 subject to their verification with the reflection in the audited annual accounts upon their submission along with true-up petition in due course. The comments with regard to distribution losses are already made at the relevant item.

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 2018-19 in the Tariff Order for FY 2018-19 are as detailed in the Table below:

Table 5.5 Energy Purchase for FY 2018-19 (MU)

Sl. No.	Source of Power	Approved	Actuals
A	**CGS – NEEPCO**		
1	Kopili -I HEP	62.82	74.32
2	Kopili-II HEP	6.93	6.40
3	Khandong HEP	12.85	12.86
4	Ranganadi HEP	109.18	86.73
5	Doyang HEP	17.1	17.38
6	Assam GBPP	127.62	106.01
7	AGTPP	62.67	49.87
B	**CGS – NHPC**		-
1	Loktak HEP Purchased Power	188.49	176.69
2	Loktak HEP- Free Power	74.16	69.47
C	**Others**		-
1	Baramura GBPP Unit IV and V	75.47	41.57
2	OTPC Palatana	214.06	249.20
D	**New Plants**		-
1	NTPC Bongaigaon Unit I	45.56	103.25
2	NTPC Bongaigaon Unit II	45.56	-
3	NTPC Bongaigaon Unit III	22.78	-
4	Monarchak Gas Based PP (NEEPCO)	NA	-
5	Kameng HEP Stage I	NA	-
6	Kameng HEP Stage II	NA	-
7	Para HEP	30.59	28.11
8	Tuirial HEP	NA	-
9	Lower Subansiri Stage I	NA	-
10	Lower Subansiri Stage II	NA	-
11	Renewable – Solar	0	-
12	Renewable – Non Solar	0	-
	Sub -Total	**1067.95**	**1,021.85**
	Total Purchase	**1067.95**	**1,021.85**

As can be seen from the above Table, the actual power purchase quantum in FY 2018-19 was 1021.85 MU, which is slightly lower than the approved quantum of 1067.95 MU. The reason for this deviation is due to non-availability of power or deviation in load requirement. This deviation is managed by MSPDCL by way of purchase/sell of surplus power from IEX or by availing the banking facility with other traders. Due to such deviations the actual purchase by DISCOM is slightly different as projected below:

Table 5.6 Energy Purchase from other sources and deviation for FY 2018-19 (MU)

Sl. No.	Source of Power	Approved	Actuals
1	**Total Purchase**	**1067.95**	**1,021.85**
2	NER Pool losses		2.72%
3	NER Pool losses		27.77
4	**Net Power Purchase**		**994.08**
5	**IEX Purchase**		**10.81**
6	Return of Banked Energy + (i/c prev.year)		165.26
7	Banking to outside utilities		122.04
8	Energy Sold to IEX		130.28
9	Net Available Energy		917.830
10	UI Under drawl		16.57
11	UI Over drawl		39.64
12	**Net Power Available at State Periphery**		**894.760**

From above it can be seen that the net power purchase from the CGP for FY 2018-19 is 1021.85 MU. The purchase from IEX is 10.81 MU and IEX sales is 130.28MU. After considering the IEX, UI and banking the net electricity available at the state periphery is 894.760 MU.

MSPDCL requests the Hon'ble Commission to approve the actual power purchase quantum of 1021.85 MU from CGPs for Limited provisional truing up for FY 2018-19.

Commission Analysis

The energy needed to purchase would have been still lower, had the Licensee properly availed the banked energy balance at the year beginning and had not resorted to Overdrawl of 39.64MU. MSPDCL could have averted the Outside State surplus sale at 130.28MU. *Unfortunately, this is inclusive of selling the banked energy of 43.22MU and the needless IEX purchase of 10.81MU during the year in Outside state sale (OSS) quantity*. 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 in 2018-19

Sl.No	Particulars	Energy (MU)
1.	Grossed up Surplus power sold at Outside State	99.32
2.	IEX purchases made in 2018-19	10.81
3.	Net withdrawal of banked energy (165.26MU less 122.04MU Re-banked this year)	43.22
4.	**Sub-Total**	**153.35**
5.	Net effect of UI drawal (Excess of underdrawn upon Overdrawn)	-23.07

Sl.No	Particulars	Energy (MU)
6.	**Deduced Outside State Sales as per ARR filing**	**130.28**

Does this what Licensee is meant by managing "***Load Deviation Management***" by selling the IEX purchases and the Banked energy at a cheaper rate than refraining from dealing the crisis wrongly. The Commission is deeply upset with the kind of energy management strategy adopted in power purchases besides highlighting it in their favour in above paras.

5.5 Power Purchase Cost

Petitioner's submission

The actual Power Purchase cost as against the power purchase cost approved in the Tariff Order for FY 2018-19 is shown in the Table below:

Table 5.8 Actual Power Purchase Cost for FY 2018-19

Sl. N o.	Source of Power	Approved 2018-19		Actual 2018-19	
		Total Cost (Rs Cr)	Avg Rate (Rs/kWh)	Total Cost (Rs Cr)	Avg Rate (Rs/kWh)
A	**CGS – NEEPCO**				
1	Kopili -I HEP	12.38	1.97	9.87	1.33
2	Kopili-II HEP	1.39	2.006	1.05	1.64
3	Khandong HEP	3.73	2.903	2.72	2.11
4	Ranganadi HEP	36.5	3.343	21.54	2.48
5	Doyang HEP	13.74	8.035	8.72	5.02
6	Assam GBPP	46.39	3.635	44.27	4.18
7	AGTPP	16.96	2.706	18.7	3.75
B	**CGS – NHPC**				
1	Loktak HEP Purchased Power	89.75	4.762	59.87	3.39
2	Loktak HEP- Free Power	0	0		-
C	**Others**				
1	Baramura GBPP Unit IV and V	13.21	1.75	12.52	3.01
2	OTPC Palatana	81.67	3.815	79.08	3.17
D	**New Plants**				
1	NTPC Bongaigaon Unit I	24.67	5.41	97.65	9.46
2	NTPC Bongaigaon Unit II	24.67	5.41		
3	NTPC Bongaigaon Unit III	12.33	5.41		
4	Para HEP	16.05	5.25	14.06	5.00
5	Renewable – Solar	20.71			
6	Renewable – Non-Solar	1.73			
	Sub -Total	**415.88**		**370.02**	
7	UI Over/Under drawl			-3.47	
8	IEX purchase			3.04	
9	Supplementary bills			14.83	
10	Late payment surcharge			2.81	

Sl. N o.	Source of Power	Approved 2018-19		Actual 2018-19	
		Total Cost (Rs Cr)	Avg Rate (Rs/kWh)	Total Cost (Rs Cr)	Avg Rate (Rs/kWh)
11	Open access charges paid for banking			8.81	
	Total	**415.88**	**3.80**	**396.05**	**3.88**

The total actual power purchase cost including UI over-drawal and under-drawal, Purchase from IEX, OA charges paid for availing banking facility etc. is around 396.05 Cr for FY 2018-19 as against the commission's approval of 415.88 Cr.

MSPDCL requests the Hon'ble Commission to approve the actual power purchase costs for FY 2018-19, as shown above.

Commission Analysis:

The Late payment surcharges of Rs.2.81 Crs can't be passed on to the consumers. It shall be adjusted from the Govt subsidy received. The payment of Open Access charges of Rs.8.81 crs for the own energy banked is unreasonable and the details called for is not furnished till now and hence they cannot be allowed in the truing-up. The IEX purchases of 10.81MU at a cost of Rs.3.04 Crs were in no way useful but for selling them in Outside State Sales altogether also can't be allowed to be passed on in FY2018-19. The allowability of the supplementary bills amounting to Rs.14.83 Crs will be considered for truing-up upon submitting the detailed break-up for the entire amount at the time of submitting the true-up petition along with the statutory audited accounts annexed to it. It is also noted that the Licensee has ignored and not attempted to comply with RPPO obligation as per the Regulation issued and shall have to produce the RPO certificates to the tune it is required at the time of truing up. Eventually, the power purchase cost now provisionally be considered only to the tune of Rs.366.56Crs only duly disallowing each of the item detailed above from the total power purchase cost of Rs.396.05Crs.

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 2018-19 is as follows:

Table 5.9 Transmission Charges for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	Approved	Actual
1	PGCIL Charges	58.21	42.80
2	MSPCL Charges	71.57	74.97
3	SLDC Charges	0.71	0.74
4	NRLDC Charges		6.30
	Total	**130.49**	**124.82**

MSPDCL requests the Hon'ble Commission to approve the actual Transmission Charges of Rs. 124.82 for FY 2018-19, as shown in the Table above.

Commission Analysis:

The charges shown against the MSPCL should be Rs.71.24 Crs based on Transmission ARR filings and not at Rs.74.97 Crs. Does this mean that MSPCL has received an excess of Rs.3.63 Crs and thereby it amounts that MSPCL is due & payable to MSPDCL in FY2018-19? But, on verification, it is noted that the MSPDCL has received Rs.74.97Crs of subsidy from Govt of Manipur towards employee cost, O&M expenses and Office Expenses on behalf of MSPCL. If in case, the entire subsidy was retained by the Licensee without passing it to the intended MSPCL, then it is the MSPDCL who would be payable to MSPCL towards their Transmission charges to the tune of Rs.71.24 crs plus the subsidy amount of Rs.74.97 Crs and this issue was questioned in additional replies and it is not yet responded and left unresolved.

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 2018-19, 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 2018-19 as compared with the approval in the Tariff Order for FY 2018-19 is shown in the Table below:

Table 5.10 Employee Expenses for FY 2018-19

(Rs. Crore)

Sl. No	Employee Category	Approved	Actuals
1	Total Employee Expenses	98.78	83.86

The actual employee expenses are lower than the employee expenses approved by the Hon'ble Commission for FY 2018-19. MSPDCL requests the Hon'ble Commission to approve the actual Employee Expenses of Rs. 83.86 Crore for FY 2018-19.

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 submitted ARR filing in support of the above figure for scrutiny of the Commission. Therefore, the approval of this cost will be subject to verification with the statutory auditor certified audited annual accounts after its submission along with true up.

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 2018-19 as compared to the approved expenses are as follows:

Table 5.11 R&M Expenses for FY 2018-19

(Rs. Crore)

Particulars	Approved	Actuals
R&M Expenses	7.27	11.70

MSPDCL requests the Hon'ble Commission to approve the actual R&M expenses of Rs. 11.70 Crore for FY 2018-19.

Commission Analysis:

Since, the cost now claimed is higher than it was approved in APR previously and no detailed explanation in support of increase is provided anywhere in the ARR filing submission, therefore this cost cannot be approved now. 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 2018-19 is as follows:

Table 5.12 A&G Expenses for FY 2018-19

(Rs. Crore)

Sl. No	Particulars	Approved	Actual
1	Advertisement		0.40
2	Auditors Fee		0.01
3	Consultancy charges & Technical Fees		0.40
4	Conveyance and Travels		0.22
5	JERC License Fee		0.17
6	Ex-Gratia		0.19
7	Hiring of Vehicle		0.26
8	Insurance		0.00
9	Legal Charges		0.12
10	License and Registration fee		0.00
11	Miscellaneous Expanses		1.02
12	Petrol & Oil - Vehicle		0.41
13	Oil DG set & Transformer		0.80
14	Printing and Stationary		0.06
15	Rent, Rate and Taxes		0.05
16	Telephone		0.27
17	Training Expenses		0.20
18	Vehicle running expenses		0.06
19	Outsourced Manpower - Quess		2.24
	Total	**8.94**	**6.89**

The actual A&G expenses in FY 2018-19 are significantly lower than the expenses approved in APR for FY 2018-19. MSPDCL requests the Hon'ble Commission to approve the actual A&G expenses of Rs. 6.89 Crore for FY 2018-19.

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 Outsourced Manpower – Quess for an amount of Rs.2.24 Crs should have been included in employee cost but not in A&G Expenses, The total O&M expenses incurred in FY 2018-19 are shown in the Table below:

Table 5.13 Actual O&M Expenses for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	Approved	Actual
1	Employee Expenses	98.78	83.86
2	R&M Expense	7.27	11.70
3	A&G Expense	8.94	6.89
	Total	**114.99**	**102.45**

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 2018-19. MSPDCL requests the Hon'ble Commission to approve the actual O&M expenses of **Rs. 102.45 Crore** for FY 2018-19.

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.

5.9 Capital Investment & 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 State Government for creation of capital asset, as well as consumer contribution for capital works, with the balance funding sourced from loans*. Details of actual capitalization achieved in FY 2018-19 vis-à-vis the capitalisation approved by the Hon'ble Commission is shown in the Table below:

Table 5.14 Capitalisation for FY 2018-19 (Rs. Crore)

Sl. No	Name of the Scheme	Approved	Actuals
1	RAPDRP		49.50
Total		**304.33**	49.50

MSPDCL requests the Hon'ble Commission to kindly approve the actual capitalization of Rs. 49.50 Crore for FY 2018-19.

Commission's Analysis

The MSPDCL has to submit audited annual accounts from 2015-16 to 2018-19. However, MSPDCL has furnished audited annual accounts for FY 2015-16 only. Unless all the audited annual accounts are submitted up to FY2018-19 the approval of capitalization of assets cannot be approved. Audited Annual accounts from FY

2016-17 to 2018-19 are not yet finalized in full shape and it is pre-matured to approve anything.

As per the present filing the licensee has neither proposed for any investment approval in FY 2018-19 nor indicated any proposed works to be taken up for execution. Hence, it is construed that no fresh capital expenditure is allowed now and it is assumed to be not from the funds of MSPDCL and if any shall have to be from any grants from outside. Therefore, the capitalization of the assets worth Rs.49.50 Crs created now would not be allowed for claiming depreciation charge.

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

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 2018-19, is shown in the Table below:

Table 5.15 Interest on Working Capital for FY 2018-19

(Rs. Crore)

Sl. No.	Particulars	Approved	Actuals
1	O&M expenses for 1 month	9.58	8.54
2	Maintenance spares @ 1% of GFA	7.87	7.62
3	Receivables equivalent to one month of expected revenue at prevailing tariffs	25.61	20.25
4	Consumer Security Deposit		14.07
	Total	**43.06**	**22.35**
	SBAR as on 01.04.2017	13.45%	13.45%
	Interest on Working Capital	**5.79**	**3.01**

MSPDCL requests the Hon'ble Commission to approve the IoWC of **Rs 3.01 Crore** for FY 2018-19.

Commission's Analysis:

Unless all the audited annual accounts are submitted for FY2018-19 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.

5.11 Gross Fixed Assets and Depreciation

Petitioner's Submission

The closing balance of Gross Fixed Asset (GFA) for FY 2017-18 has been considered as the opening balance of GFA for FY 2018-19. 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 2018-19. The Depreciation expenses for FY 2018-19 is shown in the Table below:

Table 5.16 Depreciation for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	Approved	Actual
1	Opening GFA	832.66	762.28
2	Addition during the Year	304.33	49.50
3	Retirement	0	0.00
4	Closing GFA	1136.99	811.78
5	Average GFA	984.86	787.03
6	Average Rate of Depreciation	2.42%	2.42%
7	Depreciation	23.83	19.05
8	**10% of Gross Depreciation**	**0.24**	1.90

MSPDCL respectfully submits that since 10% of the capital cost of every scheme is financed by MSPDCL, either through loan or equity, depreciation has been claimed equal to 10% of Gross Depreciation, as depreciation cannot be claimed on assets funded by Government Grants and Consumer Contribution.

MSPDCL requests the Hon'ble Commission to approve the Depreciation of Rs. 1.90 Crore, as sought by MSPDCL.

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 additions to GFA of Rs.49.50 Crs shown during the year are not eligible for depreciation. As per this filing, it is construed that the funds utilized for creation are from grants from government 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 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 depreciation claimed for the year, 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 is shown in the Table below:

Table 5.17 Interest on Loan for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	REC 1	REC 2	Total
1	Opening Loan	38.58	14.67	53.25
2	Addition during the year	0	0	0.00
3	Repayment during the year	3.98	0	3.99
4	Closing Loan	34.59	14.67	49.26
5	Average Loan	36.58	14.67	51.26
6	Rate of Interest	11.70%	10.20%	
7	Interest & Finance Charges	4.66	1.66	6.33
8	Interest on CSD			0.00
	Total Interest	**4.66**	**1.67**	**6.33**

MSPDCL requests the Hon'ble Commission to kindly approve the actual interest on loan of **Rs. 6.33 Crore** for FY 2018-19.

Commission Analysis:

The Approval of interest on Loans availed depends upon the various issues such as the need & purpose of drawal and its approval, amount drawn, terms & conditions of repayment and its rate of interest. Without providing any such details for verification of those issues and their reflection in Annual accounts approval cannot be made at this juncture by the Commission pending submission of the Statutory auditors certified annual accounts.

5.13 Return on Equity

As there is no fresh equity infusion by MSPDCL in the FY 2018-19, the Return on Equity (RoE) for FY 2018-19 is considered same as that approved by the Hon'ble Commission in its Tariff Order for FY 2017-18. The RoE for FY 2018-19 is shown in the Table below:

Table 5.18 Return on Equity for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	Approved	Actual
1	Return on Equity	1.95	1.95

MSPDCL requests the Hon'ble Commission to approve the Return on Equity of **Rs.1.95** Crore for FY 2018-19.

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.

5.14 Write Off of Bad Debts

MSPDCL has considered Nil Write-off of Bad Debts for FY 2018-19, and requests the Hon'ble Commission to approve the same.

5.15 Non-Tariff Income

The Hon'ble Commission approved Non-Tariff Income of Rs. 5.40 Crore in the Tariff Order for FY 2018-19. The actual Non-Tariff Income earned by MSPDCL in FY 2018-19 was **Rs. 6.1303 Crore**, as shown in the Table below:

Table 5.19: Non-Tariff Income for FY 2018-19 (Rs. Crore)

Sl. No	Particulars	Approved	Actuals
1	Interest from Bank		4.7421
2	3.75% Agency Charge		0.6952
3	Miscellaneous Receipt		0.5930
4	Fees from Tender forms		0.1000
Total		**5.40**	**6.1303**

MSPDCL requests the Hon'ble Commission to approve the actual Non-Tariff Income of **Rs. 6.1303** Crore for FY 2018-19.

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.

5.16 Aggregate Revenue Requirement

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

Requirement computed for FY 2018-19 by MSPDCL against the figures approved by the Commission in the Tariff Order for FY 2018-19, is given in the Table below:

Table 5.20 Aggregate Revenue Requirement for FY 2018-19 (Rs. Crore)

Sl. No	Particulars	Approved	Actuals
1	Fuel Cost		
2	Power Purchase Cost	415.88	396.05
3	Inter-State Transmission Charges	58.21	42.80
4	Intra-State Transmission Charges	71.57	74.97
5	SLDC & NRLDC Charges	0.71	7.04
6	Employee Cost	98.78	83.86
7	R&M Expenses	7.27	11.70
8	Administration and General Expenses	8.94	6.89
9	Depreciation	0.24	1.90
10	Interest and Finance Charges	5.94	6.33
11	Interest on Working Capital	5.79	3.01
12	Write off of bad debts		0.00
13	Return on Equity	1.95	1.95
14	Add: Income Tax		
14	Less: Non-Tariff Income	5.40	6.13
15	(Surplus)/Deficit on true up for FY 2014-15		
16	**Net ARR**	**669.89**	**630.37**

The ARR for FY 2018-19 is **Rs. 630.37** Crore, which is very close to the ARR of Rs. 669.89 Crore approved by the Hon'ble Commission for FY 2018-19 in its Tariff Order dated 26 March, 2019. MSPDCL 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 is advised to submit the true-up petition later upon finalisation of the audited annual accounts of this FY 2018-19 separately.

5.17 Revenue from Sale of Power

Petitioner's Submission:

The revenue from sale of power to consumers approved after review for FY 2018-19 was Rs. 369.76 crore. The actual revenue from sale of power to consumers in FY 2018-19 was Rs. 243.01 crore and the revenue from sale of surplus power was Rs.

54.96 crore. Thus, the total revenue earned by MSPDCL in FY 2018-19 was **Rs. 297.97** crore, and MSPDCL requests the Hon'ble Commission to approve the same.

Commission's Analysis:

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 is still not submitted for verification and scrutiny. Under these circumstances, the revenue indicated cannot taken without proper verification and hence, the information called for shall have to be submitted in full shape to the Commission for taking a decision to approve in this matter

5.18 Revenue Gap

The Revenue Gap of MSPDCL for FY 2018-19 as against the Revenue Gap approved by the Hon'ble Commission in the Tariff Order for FY 2018-19 is shown in the Table below:

Table 5.21 Revenue Gap for FY 2018-19 (Rs. Crore)

Sl. No	Particulars	Approved	Actuals
1	Net ARR	669.89	630.37
2	Total Revenue	-	297.97
3	State Government Revenue Subsidy	-	220.12
4	Unmet Revenue Gap	-	**112.29**

As can be seen from the above Table, the Unmet Revenue Gap for FY 2018-19 is Rs.112.29 Crore after considering state Government subsidy of Rs 220.12 Crore. Apart from Rs. 220.12 Cr State Govt Subsidy, Rs. 54.29 Cr has been received as state government subsidy by MSPDCL for further passing on to MSPCL towards their employee cost.

The actual revenue gap can only be finalized during the actual Truing up process for FY 2018-19, and MSPDCL shall seek pass through of such amounts with associated carrying cost and sharing of efficiency gains and losses at that time.

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.

6. Annual Performance Review for FY 2019-20

6.1 Background

The Petitioner humbly submits that the present APR based on actual expenses of FY 2018-19 and first six-month data available for FY 2019-20. The comparison of the projected expenses and revenue with the expenses and revenue considered by the Hon'ble Commission in the ARR of FY 2019-20 in the JERC tariff Order 20 of 2019 dated 26 March 2019 (henceforth referred as 'Approved' order with reference to FY 2019-20. However, the Petitioner requests the Hon'ble Commission to review the expenses and revenue for FY 2019-20 based on the trend observed as per actual data. *The values presented in those past ARR orders were based on old data and may not capture the present condition of the Petitioner.*

6.2 Energy sales

MSPDCL caters to a diverse consumer mix comprising LT domestic, LT commercial, HT commercial, LT Industry, HT Industry 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 for FY 2019-20 is given in the Table below:

Table 6.1: Category-wise Energy Sales (MU) for FY 2019-20

Sl. No.	Category	FY 2019-20		
		App.	Six Months Actual	Revised Proj.
A	**LT Supply**			
1	Kutir Jyoti	20.96	2.02	3.72
2	LT Domestic	386.83	196.05	399.40
3	Commercial LT	45.43	32.37	58.54
4	Cottage and Small Industry	20.00	11.18	20.57
5	Public Lighting	5.08	2.06	3.79
6	Public Water-works	2.20	0.71	1.31
7	Irrigation and Agriculture	1.27	0.65	1.20
	LT Supply Sub Total	**481.77**	**245.04**	**488.52**

Sl. No.	Category	FY 2019-20		
		App.	Six Months Actual	Revised Proj.
B	**HT Supply**			
1	Commercial	6.06	16.62	19.67
2	Medium Industry	4.10	4.44	4.17
3	Large Industry	6.00	4.49	7.77
4	Bulk Supply	114.00	41.63	81.73
5	Public Water-works	18.66	12.28	21.20
6	Irrigation and Agriculture	0.85	0.42	0.78
	HT Supply Sub Total	**149.67**	**79.88**	**135.31**
	Total	**631.44**	**324.92**	**623.83**

The actual energy sold by MSPDCL in FY 2018-19 was 596.97 MU. The commission has approved the energy sales of 631.44 MU for FY 2019-20. Based on the actual sales of first six months (i.e. up to 31 September 2019) the revised projection of energy sales by MSPDCL for FY 2019-20 is 623.83 MU. As there is no major increase foreseen in any of the consumer category, it is assumed that the growth in energy sales for FY 2019-20 will be stable with 4.5% increase over the actual sales in FY 2018-19. The lower rate of sales increase will also be due to the adoption of LED lighting and solar power. Accordingly, MSPDCL requests the Hon'ble Commission to approve the total energy sales of **623.83 MU** for FY 2019-20.

Commission Analysis:

The energy projections for FY 2019-20 is observed to have been made simply by adopting each category as a proportion to the total sales that existed in FY2018-19. It is not having any individual category wise trend related estimation. Hence, it is done on a very crude and simple proportionate percentage basis and the projection so adopted may not be of any practical use and it may give undesired revenue estimation and finally the misleading gap arrival. Though the issue was raised and asked to furnish in additional information but the reply was inapt. Since, it is almost at the fag-end of the year of 2019-20 by now, we may even wait for the actual sales figures and hence commission makes no change in the sales projected.

6.3 Distribution loss and Energy Balance

Projected distribution loss for FY 2019-20 is estimated based on the actual distribution loss achieved for FY 2018-19, and the losses trajectory approved by the Hon. Commission for the MYT control period. Based on the estimated sales for the current and ensuing financial years, 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 and ensuing financial year is as follows:

Table 6.2: Proposed Distribution Loss and Energy Balance for FY 2019-20

Particulars	Unit	Actual for 2018-19 Prop true up	Approved for FY 2019-20	Proposed for FY 2019-20
Total Sales to Consumers	MU	596.97	631.44	623.83
Distribution Loss	%	25.87%	15.00%	25.40%
Distribution loss	MU	208.32	111.43	212.40
Total energy requirement at distribution periphery	MU	805.28	742.87	836.24
Intra state transmission losses	%	10.00%	8.50%	10.00%
Intra state transmission losses	MU	89.48	69.01	92.92
Energy Requirement at state periphery after grossing us intrastate loss	MU	894.76	811.88	929.15
Interstate transmission loss	%	2.72%	2.85%	2.85%
	MU	25.00	23.82	27.26
Energy Requirement after grossing up interstate losses	MU	919.76	835.70	956.41
Estimated power purchase	MU	1021.85	1131.37	1025.73
Surplus Power available for sale after grossing up interstate loss	MU	**99.32**	**287.25**	**67.35**

MSPDCL has achieved the distribution loss of 25.87% in FY 2018-19. For the FY 2019-20, Hon. Commission has approved the distribution loss of 15.00%. MSPDCL proposed the distribution loss of 25.40% for FY 2019-20. MSPDCL requests Hon. 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, inter-state and intra-state losses, projected power purchases the energy balance is calculated and the surplus power available for banking / surplus sale is estimated and MSPDCL request the Hon. Commission to approve the same.

Commission analysis

The Licensee didn't explain the basis for arriving the reduction in losses from 25.87% to 25.40% and the action plan as to how the network efficiency would be improved to achieve the loss reduction by 0.47% in FY 2019-20. Though, the Commission is in no way convinced by the casual reduction as proposed, keeping in view the slackness in handling the losses and faltering noted in the revenue billing collection by the MSPDCL, had to approve distribution losses at the level of 25.40% proposed for FY 2019-20 with a hope to make at least this small loss reduction, though it appears very meagre. It looks like that there have been no constructive plan to explain in curtailing losses and hence could not reflect it in the filing submission. However, if the Licensee fails achieve this proposed loss level by the end of FY 2019-20, they will have to bear the penalty for the under performance in the true-up finalization.

The energy balance based on quantum of power purchase considered by the Commission is as follows:

Sl. No.	Energy Balance of MSPDCL for FY 2019-20	MU
1	Energy from Eastern Region	0
2	Inter-State Loss on ER Energy (@ 1.95%)	0
3	ER Enregy after Losses (1-2)	0
4	Energy from NER stations (incl. Loktak Free power)	**985.76**
5	Grossed up Energy handled - (3+4)	**985.76**
6	Inter-State Loss on NER Energy (@ 2.74%)	27.01
7	**Net energy at NERLDC (5 - 6)**	**958.75**
8	IEX Purchases	0
9	Net Banked Energy adjustment	0
10	UI adjust (Overdrawn-Underdrawn)	0
11	Less: Energy sold at IEX - (Outside State sale)	-44.84
12	Net Solar Energy Injected to Grid (other than RTS)	0
13	Total generation injected to Grid from RTS	0
14	Net energy from State Own Small HEPs	0
15	**Total energy at State Periphery - (7 to 14)**	**913.91**
16	**Intra-State Losses (State Losses) @ 8.50%**	**77.68**
17	**Gross Circle-wise Distribution Input (from meter recorded input)**	**836.23**
18	**Distribution Loss (MU) @ 25.40%**	**212.40**
19	Retail Sales (LT & HT)	**623.83**

The Status of overall losses within Manipur State as a ratio to state input is given below:

	Overall Losses with in Manipur State	2019-20	Loss (%)
1	State Transmission Loss	77.68	**8.50%**

	Overall Losses with in Manipur State	2019-20	Loss (%)
2	Distribution Loss	212.40	**23.24%**
3	**T & D Losses Total**	**290.08**	**31.74%**
4	**Total Energy at State Periphery**	**913.91**	**100%**
5	Overall State Loss % on energy input	**31.74%**	

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 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."

6.4 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 proposed power purchase for FY 2019-20 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.

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 2019-20, 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 2018-19, year on year growth has been considered based on the planned allocation for projecting the power purchase for current and ensuing financial year. Accordingly, the revised energy purchase has been proposed. The approved and proposed energy purchase for FY 2019-20 is detailed in the Table below:

Table 6.3: Energy Purchase for FY 2019-20 (MU) by MSPCL

Sl. No.	Source of Power	FY 2018-19 Actual	FY 2019-20 App.	Six months	Prop.
A	**CGS – NEEPCO**				
1	Kopili -I HEP	74.32	65.41	50.594	76.66
2	Kopili-II HEP	6.40	7.24	5.296	6.38
3	Khandong HEP	12.86	13.42	9.396	12.87
4	Ranganadi HEP	86.73	115.12	76.453	99.29
5	Doyang HEP	17.38	18.13	7.079	8.14
6	Assam GBPP	106.01	131.75	44.38	87.02
7	AGTPP	49.87	64.55	24.209	53.80
B	**CGS – NHPC**				
1	Loktak H E P Purchased Power	176.69	194.1	59.84	90.67
2	Loktak HEP- Free Power	69.47	76.37	23.512	35.62
C	**Others**				
1	Baramura GBPP Unit IV and V	41.57	77.31	32.814	76.31
2	OTPC Palatana	249.20	221.42	125.425	256.68
D	**New Plants**				
1	NTPC Bongaigaon Unit I	103.25	48.85	96.338	185.27
2	NTPC Bongaigaon Unit II		48.85		
3	NTPC Bongaigaon Unit III		48.85		
4	Monarchak Gas Based PP (NEEPCO)		0		
5	Kameng HEP Stage I		0		
6	Kameng HEP Stage II		0		
7	Para HEP	8.11	0	27.047	37.05
8	Tuirial HEP		0		
9	Lower Subansiri Stage I		0		
10	Lower Subansiri Stage II		0		
11	Renewable – Solar		0		
12	Renewable – Non-Solar		0		
	Sub -Total	**1,021.85**	**1131.37**	**582.365**	**1025.73**
	Total Purchase	**1,021.85**	**1131.37**	**582.37**	**1,025.73**

Apart from the above proposed sources for power procurement, MSPDCL requires to 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 CGPs hence such deviations cannot be estimated for current and ensuing financial year at this time. The MSPDCL proposed to manage such deviations within the available surplus power.

MSPDCL requests the Hon'ble Commission to approve the proposed power purchase quantum of 1025.73 MU for FY 2019-20.

Commission Analysis:

The Commission feels that the power procurement from costly stations are to be reduced to the contracted minimum quantity and to buy more from cheaper power stations to minimise the major component of ARR which is the power purchase cost. Accordingly, the Commission has deduced the required quantity at 985.76MU in such a way the surplus power available would be at the minimum possible level instead of the 67.5 MU proposed in the APR filing submission. The detailed power purchase cost so arrived by the commission is also provided at Table-6.5 below.

6.5 Power purchase cost

The power purchase cost has been estimated and allowed in the Hon. Commissions MYT tariff order. The cost of power purchase from CGPs includes the fix and variable cost. The fix 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 MYT approved figures. Hence, in order to estimate the Power Purchase cost for current and ensuing financial year, 3% escalation in the effective tariff arrived from the actual purchase for FY 2018-19 is taken to estimate the power purchase cost for FY 2019-20. In the case of NTPC Bongaigaon the proposed cost was worked out on the basis of fix and variable cost based on planned power procurement. The proposed power purchase cost is shown in the Table 6.4 below:

Table 6.4: Power Purchase Cost for FY 2019-20 (Total Cost in Rs. Cr, Avg. Tariff/rate in Rs./kWh)

Sl. No.	Source of Power	2018-19 Actual		Approved 19-20		Six Months 19-20		Proposed 19-20	
		Total Cost	Avg. rate	**Total Cost**	Avg. rate	**Total Cost**	Avg. rate	**Total Cost**	Avg. rate
A	**CGS – NEEPCO**								
1	Kopili -I HEP	9.87	1.33	7.97	1.22	5.93	1.17	10.49	1.37
2	Kopili-II HEP	1.05	1.64	1.06	1.46	0.73	1.38	1.08	1.69
3	Khandong HEP	2.72	2.11	2.41	1.8	1.68	1.79	2.8	2.18
4	Ranganadi HEP	21.54	2.48	25.22	2.19	14.36	1.88	25.4	2.56
5	Doyang HEP	8.72	5.02	8.01	4.42	3.88	5.48	4.2	5.17
6	Assam GBPP	44.27	4.18	49.74	3.77	22.87	5.15	37.43	4.3
7	AGTPP	18.7	3.75	22.99	3.56	11.16	4.61	20.78	3.86
B	**CGS – NHPC**							0	0
1	Loktak HEP Purchased Power	59.87	3.39	64.89	3.34	24.29	4.06	31.64	3.49
2	Loktak HEP- Free Power		-	0	0	0	0	0	0
C	**Others**							0	0
1	Baramura GBPP Unit IV and V	12.52	3.01	14.2	1.84	9.88	3.01	23.67	3.1
2	OTPC Palatana	79.08	3.17	72.65	3.28	40.75	3.25	83.9	3.27
D	**New Plants**							0	0
1	NTPC Bongaigaon Unit I	97.65	9.46	27.77	5.68	76.36	7.93	180.48	9.74
2	NTPC Bongaigaon Unit II			27.77	5.68			0	0
3	NTPC Bongaigaon Unit III			27.77	5.68			0	0
4	Monarchak Gas Based PP (NEEPCO)			0				0	0
5	Kameng HEP Stage I			0				0	0
6	Kameng HEP Stage II			0				0	0
7	Para HEP	14.06	5	0		13.52	5	19.09	5.15
8	Tuirial HEP			0				0	0
9	Lower Subansiri Stage I			0				0	0
10	Lower Subansiri Stage II			0				0	0
11	Renewable – Solar			23.12				0	0
12	Renewable – Non Solar			2.81				0	0

Sl. No.	Source of Power	2018-19 Actual		Approved 19-20		Six Months 19-20		Proposed 19-20	
		Total Cost	Avg. rate	**Total Cost**	Avg. rate	**Total Cost**	Avg. rate	**Total Cost**	Avg. rate
	Total Purchase	370.02	3.62	378.36	3.34	225.4	3.87	440.94	3.34
13	UI Over/Under drawl	-3.47							
14	IEX purchase	3.04							
15	Supplementary bills	14.83						15.28	
16	Late payment surcharge	2.81							
17	Open access charges paid for banking	8.81							
	Total	**396.05**	**3.84**	**378.36**	**3.34**	**225.4**	**3.87**	**456.21**	**4.45**

Commission Analysis:

The Commission has recalculated the power requirement and the power purchase cost during the FY 2019-20 is as follows:

Table 6.5 – Commission approved Power purchase cost in FY2019-20

Sl. No.	FY 2019-20 Source of Power	Energy MU	Total Cost (Rs Cr)	Avg Rate (Rs/kWh)
A	**CGS – NEEPCO**	**344.16**	**101.57**	**2.95**
1	Kopili -I HEP	76.66	10.49	1.37
2	Kopili-II HEP	6.38	1.08	1.69
3	Khandong HEP	12.87	2.80	2.18
4	Ranganadi HEP	99.29	24.80	2.50
5	Doyang HEP	8.14	4.19	5.15
6	Assam GBPP	87.02	37.43	4.30
7	AGTPP	53.80	20.78	3.86
B	**CGS – NHPC**	**126.29**	**31.64**	**2.51**
1	Loktak HEP Purchased Power	90.67	31.64	3.49
2	Loktak HEP- Free Power	35.62	0	-
C	**Others**	**332.99**	**107.29**	**3.22**
1	Baramura GBPP Unit IV and V	76.31	23.39	3.07
2	OTPC Palatana	256.68	83.90	3.27
D	**New Plants**	**182.32**	**143.94**	**7.89**
1	NTPC Bongaigaon Unit I	150.27	103.20	3.86
2	NTPC Bongaigaon Unit II			
3	NTPC Bongaigaon Unit III			
4	**Para HEP**	32.05	16.51	5.15
5	Renewable – Solar	-	10.14	
6	Renewable – Non-Solar	-	14.09	
	Sub -Total	**985.76**	**384.44**	**3.90**
7	UI Over/Under drawl			
8	IEX purchase			
9	Supplementary bills		15.28	
10	Late payment surcharge			
11	O.A charges for energy banking			
	Total	**985.76**	**399.72**	**4.05**

The Commission had also considered the Renewable Power Purchase Obligation (RPPO) into account as per the Regulation in vogue. Accordingly, the MSPDCL shall purchase certificates amounting to Rs.24.23Crs to the extent indicated against each of Solar and Non-solar sources in order to comply with their RPPO obligation arrived at based on their various sources of power purchase assumed during FY 2019-20. Since there is no proposal made to utilize the banked energy in 2019-20, the quantum of 122.04MU energy re-banked in FY 2018-19 shall invariably be utilized during the FY 2020-21 in order to minimize the cost of power and pass the cost savings to the consumers in the form of low revision in tariff.

6.6 Transmission cost

The transmission charges include the charges paid to PGCIL, MSPCL and SLDC charges. The summary of transmission charges paid by MSPDCL for FY 2018-19, charges approved by Hon. Commission for current and ensuing financial years along with the proposed charges are presented in the following table. The PGCIL charges for current and ensuing FY are projected as 49.22 Cr for FY 2019-20 which are 15% higher on year on year basis. **MSPCL charges for current and ensuing year has been considered based on their draft ARR proposal**. The SLDC and NRLDC charges are considered as 5% and 5.72% higher on year on year basis on the actual charges for FY 2018-19.

Table 6.6: Transmission Charges for FY 2019-20 (Rs. Crore)

Sl. No.	Particulars	2018-19		2019-20	
		App.	Actual	App.	Proposed
1	PGCIL Charges	58.21	42.80	61.12	49.22
2	MSPCL Charges	71.57	74.97	85.68	85.68
3	SLDC Charges	0.71	0.74	0.71	0.78
4	NERLDC Charges		6.30		6.66
	Total	**58.92**	**124.82**	**147.51**	**142.34**

MSPDCL requests the Hon'ble Commission to approve the proposed Transmission Charges of **Rs. 142.34 Crore** for FY 2019-20.

Commission Analysis:

It is surprising to find an altogether different figure from that was proposed in the MSPCL ARR submission for their charges, though it is stated that the figures are adopted from the MSPCL ARR proposal. Therefore, the above submission in this regard is a wrong presentation of facts since MSPCL proposed its ARR at Rs.70.13Crs only and the figure indicated for MYT approved value.is also Rs.87.87Crs but not Rs.85.68Crs. Finally, all the transmission charges put together amounts to Rs.126.79 Crs only after correcting the MSPCL charges.

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 and ARR for FY 2019-20, MSPDCL has proposed the O&M

Expenses as follows:

Table 6.7: O&M Expenses for FY 2019-20 (Rs. Crore)

Sr. No	O&M Expenses	Actual for 2018-19	Approved for 2019-20	Six Months 2019-20	Proposed 2019-20
1	Employee	83.86	106.68	35.90	83.00
2	R&M Expense	11.70	7.69	8.20	12.36
3	A&G Expense	6.89	9.45	3.64	7.29
	Total	**102.45**	**123.82**	**47.74**	**102.65**

The employee cost for FY 2019-20 has been proposed based on the actual expenses incurred in the first six months. The employee cost for 2019-20 has been considered as 83 Cr which is lesser than the actual for 2018-19 due to reduction in the manpower.

In the case of R&M and A&G expenses, the projections have made with 5.72% escalation on the actual expenses incurred in FY 2018-19. Accordingly, MSPDCL submits Hon'ble Commission to approve the proposed O&M costs of **Rs. 102.65 Crore** for FY 2019-20.

Commission Analysis:

In case of Employee cost, it was observed that there was a total reduction in number of employees by 151 and out of which the retirement of regular employees is 127 numbers. By giving due weightage to the reduced employees strength besides considering their hike in the salary over 2018-19 pay the total amount felt needed to be at Rs.77.99 crs which includes some cushion for terminal benefits to retirees also. The R&M Expenses are approved at Rs.12.00 Crs and A&G Expense were allowed at the same level proposed by the Licensee.

Table: 6.8 - O&M Expenses now approved by the Commission for 2019-20

Sl. No.	Details of O&M Expenses	Approved (Rs.Crs)
1.	Employee Cost	77.99
2.	R&M Expenses	12.00
3.	A&G Expenses	7.29
4.	**Total O&M Expenses**	**97.28**

Thus, the total O&M Expenses approved for 2019-20 is Rs.97.28 Crs only on scrutiny

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 State Government for creation of capital asset, as well as consumer contribution for capital works, with the balance funding sourced from loans.

The details of actual capitalization achieved in FY 2018-19 and proposed capitalisation for FY 2019-20, is shown in the Table below:

Table 6.9: Capitalisation for FY 2019-20 (Rs. Crore)

Particulars	2018-19	2019-20
Opening balance of CWIP	1033.72	1115.17
Addition of CWIP	130.95	80.57
Capitalization during the year	**49.50**	**257.20**
Closing balance of CWIP	1115.17	938.54

MSPDCL requests the Hon'ble Commission to kindly approve the proposed capitalization of **Rs. 257.20 Crore** for FY 2019-20.

Commission Analysis:

As per the content of the present filing, the licensee had neither proposed for any work-wise details of investments for approval in FY 2019-20 nor indicated any proposed new works to be taken up for execution. 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 outside/Govt of Manipur but not the funds of MSPDCL.

Consequently, the capitalization of the assets worth Rs.257.20 Crs proposed now would not be allowed for claiming depreciation charge under Regulatory principles.

The details of amount collected from consumer contributions possessed by the MSPDCL from the inception of the corporation in 2014 may be submitted to the Commission each year wise.

6.9 Interest on Working Capital

Interest on the working capital has been projected for FY 2019-20 as follows:

Table 6.10: Interest on Working Capital for FY 2019-20 (Rs. Crore)

Sl. No.	Particulars	Actual for FY 2018-19	Proposed for FY 2019-20
1	O&M expenses for 1 month	8.54	8.55
2	Maintenance spares @ 1% of GFA	7.62	8.12
3	Receivables equivalent to one month of expected revenue at	20.25	31.37

Sl. No.	Particulars	Actual for FY 2018-19	Proposed for FY 2019-20
	prevailing tariffs		
4	Consumer Security Deposit	14.07	14.88
	Total	**22.35**	**33.16**
	SBAR as on 01.04.2018	13.45%	13.45%
	Interest on Working Capital	**3.01**	**4.46**

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 rear has been considered. MSPDCL requests the Hon'ble Commission to approve the IoWC of **Rs 4.46 Crore** for FY 2019-20.

Commission's Analysis

As seen from the submission, there were no reference as to the actual drawal of the short-term loans for the purpose of working capital needs. The very purpose of allowing the interest on working capital is to reimburse the interest cost involved for running the day to day business of the utility. But, the MSPDCL is dependent upon the Government for its day to day funding in the form of grant-in-Aid towards meeting salaries and other expenses. Therefore, allowing of interest on working capital on notional basis would only burden the consumers and it has no actual financial impact on MSPDCL. For having allowed this element already in the earlier Tariff Order, the Commission wishes to allow a nominal amount of Rs.3.01 crs (as preferred in FY 2018-19) only for this year 2019-20 as a matter of principle and it will be disallowed from the claim for not availing the short-term loans in any financial year henceforth. <u>More so, the MSPDCL is having more of pre-paid meter consumers only and thereby there is no delay in revenue realization from them.</u>

Thus, the Commission approves interest on working capital at Rs.3.01 Cr for FY 2019-20 as against the projected Rs.4.46Crs by MSPDCL.

6.10 Gross Fixed Assets and Depreciation

The closing balance of Gross Fixed Asset (GFA) for FY 2018-19 has been considered as the opening balance of GFA for FY 2019-20. 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 2019-20. The Expenses towards depreciation for FY 2019-20 is shown in the table below;

Table 6.11: Depreciation for FY 2019-20 (Rs. Crore)

Sl. No.	Particulars	Actual 2018-19	Projected for 2019-20
1	Opening GFA	762.28	811.78
2	Addition during the Year	49.50	257.20
3	Retirement		
4	Closing GFA	811.78	1068.98
5	Average GFA	787.03	940.38
6	Average Rate of Depreciation	2.42%	2.42%
7	Depreciation	19.05	22.76
8	**10% of Gross Depreciation**	**1.90**	**2.28**

MSPDCL respectfully submits that since 10% of the capital cost of every scheme is financed by MSPDCL, either through loan or equity, depreciation has been claimed equal to 10% of Gross Depreciation.

MSPDCL requests the Hon'ble Commission to approve the Depreciation of **Rs. 2.28** for FY 2019-20.

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 Rs257.20 Crs as shown during the year is not eligible for depreciation under the regulatory accounting ambit.

The depreciation amount now approved by the Commission for FY 2019-20 without considering the capitalised addition made with the govt subsidy as follows:

Table 6.12 – Depreciation for FY 2019-20 by the Commission

Sl. No.	Particulars	2019-20
1	Opening GFA	762.28
2	Addition during the Year	0
3	Retirement	
4	Closing GFA	762.28
5	Average GFA	762.28
6	Average Rate of Depreciation	2.42%
7	Depreciation	18.45
8	**10% of Gross Depreciation**	**1.84**

The Commission approves the nominal depreciation of Rs.1.84 Crs calculated at

10% of the Regulatory accounting based allowable depreciation for FY 2019-20.

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 depreciation claimed for the year, 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 is shown in the Table below:

Table 6.13: Interest on Loan for FY 2019-20

(Rs. Crore)

Sl. No.	Particulars	REC 1	REC 2	Total
1	Opening Loan	34.592	14.67	49.26
2	Addition during the year	0	0	0.00
3	Repayment during the year	3.988	0	3.99
4	Closing Loan	30.604	14.67	45.27
5	Average Loan	32.598	14.67	47.27
6	Rate of Interest	11.70%	10.20%	
7	Interest & Finance Charges	4.252	1.83	6.08
8	Interest on CSD			0.00
	Total Interest	**4.252**	**1.83**	**6.08**

MSPDCL requests the Hon'ble Commission to kindly approve the interest on loan as **Rs 6.08 Crore** for FY 2019-20.

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 on Loan now submitted by the Licensee without making any comparison to that was already approved in the Tariff Order Dt.26th march 2019 is not acceptable by the Commission and hence the interest on loan as was approved in the above cited Tariff Order amounting to **Rs.5.17 Crs** is now approved for FY 2019-20. The actuals will be taken into consideration at the time of truing up of the expenditure for FY 2019-20 later upon their submission based on audited actuals.

6.12 Return on equity

MSPDCL has considered the Return on Equity (RoE) for FY 2019-20 same as approved by the Hon'ble Commission in its Tariff Order. MSPDCL requests the Hon'ble Commission to approve the Return on Equity of **Rs. 1.95 Crore** for FY 2019-20.

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 Rs 3 crore as Write-off of Bad Debts for FY 2019-20 and requests the Hon'ble Commission to approve the same.

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.400Crs to the end of 31.03.2019 as was submitted in reply to additional information. 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 2018-19 has been 6.13 Crore. Over and above this 5% growth has been considered for FY 2019-20 and accordingly the non-tariff income has been proposed as shown in the table below:

Table 6.14: Non-Tariff Income for FY 2019-20 (Rs. Crore)

Sr.No.	Particulars	Actual for 2018-19	Proposed for 2019- 20
1	Non-Tariff Income	6.13	6.44

MSPDCL requests the Hon'ble Commission to approve the actual Non-Tariff Income of **Rs. 6.44 Crore** for FY 2019-20.

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.6.44 Crs as projected. However, the Commission prefers to enhance it to Rs.6.75 Crs for FY 2019-20 as the licensee cannot make abnormal improvement in this last phase 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 2019-20 by MSPDCL against the figures approved by the Commission in the Tariff Order for FY 2018-19, is given in the Table below:

Table 6.15: Aggregate Revenue Requirement for FY 2019-20 (Rs. Crore)

Sl. No.	Particulars	Actual 2018-19	App. 2019-20	APR 2019-20
1	**Power Purchase or Energy Available (MU)**	1021.85	1099.13	1025.73
2	**Sale of Power (MU)**	596.97	631.44	623.83
3	**Distribution Loss (%)**	25.87%	15.00%	25.40%
A	**Expenditure**			
1	Cost of power purchase	396.05	378.36	456.21
2	Inter-State Transmission charges	42.80	61.12	49.22
3	Intra-state Transmission charges	74.97	85.68	85.68
4	SLDC & NERLDC Charges	7.04	0.71	7.44
5	Wheeling charges payable to other distribution licensee	0.00	0.00	0.00
6	O&M Expenses	102.45	123.82	102.65
	Employee Expenses	*83.86*	*106.68*	*83.00*
	R&M Expense	*11.70*	*7.69*	*12.36*
	A&G Expense	*6.89*	*9.45*	*7.29*
7	Depreciation	1.90	0.31	2.28
8	Advance against depreciation	0.00	0.00	0.00
9	Interest on Loan	6.33	5.17	6.08
10	Interest on Working Capital	3.01	9.01	4.46
11	Bad Debt		3	**3**
	A: Total Cost	**634.55**	**667.17**	**717.02**
B	Add: RoE	**1.95**	**1.95**	**1.95**
	Add: Income Tax	**0**	**0**	**0**
	B: Total	**1.95**	**1.95**	**1.95**
	Total ARR : A+B	**636.50**	**669.12**	**718.97**
C	Less: Non-Tariff Income	6.13	5.40	6.44
	Income from other business allocated to Licensed business	0.00	0.00	0.00
	C: Total	6.13	5.40	6.44
	D: Aggregate Revenue Requirement (A+B-C)	**630.37**	**663.72**	**712.53**

The ARR approved for FY 2019-20 is Rs. 663.72 Crore. The proposed ARR for FY 2019-20 is Rs. 712.53 Crore. MSPDCL requests the 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 2019-20 is as follows:

Table 6.16: Aggregate Revenue Requirement for FY 2019-20 (Rs. Crore)

Sl.No.	Energy Particulars	MU
1	**Gross Energy Purchases**	985.76
2	**Less: Inter State Transmission Losses**	30.94
3	**Less: Outside State Sales**	40.91
4	**Less: State Transmission Losses**	77.68
5	**Less: Distribution Losses**	212.40
6	**Retail Sale of Power**	623.83
7	**Distribution Loss (%)**	25.40%
A	**Approved Expenditure (FY 2019-20)**	**Rs.Crs**
1	Cost of power purchase	399.72
2	Inter-State Transmission charges	49.22
3	Intra-state Transmission charges	70.13
4	SLDC & NERLDC Charges	7.44
5	**O&M Expenses**	**97.28**
	a) Employee Expenses	*77.99*
	b) R&M Expense	*12.00*
	c) A&G Expense	*7.29*
6	Depreciation	1.84
7	Interest on Loan	5.17
8	Interest on Working Capital	3.01
9	Bad Debt	0
10	Return on Equity	1.56
	Gross ARR approved	**635.37**
B	Less: Non-Tariff Income	6.75
	B: Total NTI	**6.75**
	Aggregate Revenue Requirement (A-B)	**628.62**

6.16 Revenue from Sale of Power

The revenue from sale of power to consumers at the existing tariff is estimated as Rs.376.41 Crore for FY 2019-20. The category-wise revenue realisation projection is as follows:

Table 6.17: Consumer Category-wise revenue for 2019-20 at existing tariff

Category of Consumers	Proposed Sales in MU	Proposed Revenue (Rs. Crs)
LT Supply		
Kutir Jyoti - All Units	3.72	1.16

Sub Total (a)	**3.72**	**1.16**
Domestic (General)		
First 100 kWh	331.14	171.36
Next 100 kWh	45.83	29.91
Balance>200 kWh	22.43	16.43
Sub Total (b)	**399.40**	**217.69**
Total Domestic (I=a+b)	403.12	218.86
Commercial		
First 100 kWh	29.49	20.16
Next 100 kWh	7.06	5.49
Balance>200 kWh	21.99	20.32
Total Commercial LT (II)	**58.54**	**45.96**
Public Lighting - LT	3.79	2.74
Public Water Supply-LT	1.31	0.99
Agri & Irrigation-LT	1.20	0.49
Small Industry-LT	20.57	9.90
Sub Total Other LT (III)	**26.86**	**14.12**
Commercial-HT	19.67	17.52
Public Water Supply-HT	21.20	16.30
Agri & Irrigation-HT	0.78	0.37
Medium Industry-HT	4.17	2.75
Large Industry-HT	7.77	6.22
Bulk Supply-HT	81.73	54.30
Sub Total Other HT (IV)	**135.31**	**97.47**
Grand Total(I+II+III+IV)	**623.83**	**376.41**

Apart from the revenue from sales to the consumers, MSPDCL received revenue from sale of surplus power. The revenue received from sale of surplus power in 2018-19 and projections for current and ensuing year is as follows:

Table 6.18: Revenue from surplus sale and total projected revenue for 2019-20 by MSPDCL (Rs.Crores)

Item	Approved for 2019-20	Proposed For 2019-20
Sale of Surplus Power (MU)	287.25	67.35
Average Tariff for Sale of Surplus Power	2.65	3.80
Revenue from sale of surplus power (Rs. Crore)	76.05	25.59
Revenue for Sale to Consumers (Rs Crore)	368	376.41
Total Revenue from Sales (Rs Crore)	444.05	**402.00**

Further, the revenue from sale of surplus power is estimated as Rs. 25.59 Crore for FY 2019-20. Accordingly, MSPDCL requests the Hon'ble Commission to approve the total revenue of **Rs 402 Crore** for FY 2019-20.

Commission's Analysis

Since the Outside State Sales are reduced from 67.35 MU to 40.91 MU, accordingly the revenue realization has been revised as detailed in the table below.

Table 6.19: Commission approved Revenue from energy sales for FY 2019-20

Sl. No	Consumer Category (2019-20)	Sales (MU)	Rate (Rs./ kWh)	Revenue (Rs.Crs)
A	**LT Supply**			
1	Kutir Jyoti	3.72	3.14	1.17
2	Domestic	399.4	5.22	208.62
3	Commercial-LT	58.54	7.51	43.93
4	Public lighting-LT	3.79	6.92	2.62
5	Public waterworks LT	1.31	7.55	0.99
6	Agriculture & Irrigation LT	1.20	4.08	0.49
7	Small and cottage industry-LT	20.57	4.81	9.90
	LT Supply Sub Total	**488.52**	**5.48**	**267.72**
B	**HT Supply**			
8	Commercial-HT	19.67	9.90	19.47
8	Medium industry-HT	4.17	7.34	3.06
9	PWS HT	21.2	8.54	18.11
10	Agriculture HT	0.78	5.25	0.41
11	Large industry-HT	7.77	8.90	6.91
12	Bulk supply-HT	81.73	7.38	60.34
	HT Supply Sub Total	**135.31**	**8.00**	**108.31**
13	**Grant Total (LT & HT)**	**623.83**	**6.03**	**376.03**
14	Outside State Sales	40.91	**3.80**	15.55
15	**Total Sale of energy**	**664.74**	**5.89**	**391.58**

The Commission approves revenue from sale of power at Rs. 391.58 Cr for FY 2019-20 after review.

6.17 Revenue Gap

The Revenue Gap proposed by MSPDCL for FY 2019-20 is shown in the Table below:

Table 6.20: Revenue Gap by MSPDCL for FY 2019-20 (Rs. Crore)

Sl. No	Particulars	FY 2019-20
1	Net ARR	712.53 Crs
2	Total Revenue	402.00 Crs
3	State Government Revenue Subsidy	219.48 Crs
4	**Unmet Revenue Gap**	**91.05 Crs**

As can be seen from the above Table, the Unmet Revenue Gap for FY 2019-20 is Rs 91.05 Crore. This gap has been estimated with the Government subsidy of Rs. 219.48 Crore for FY 2019-20. Out of the committed Government Subsidy of Rs. 219.48 Crore for FY 2019-20, MSPDCL was received Rs. 141.62 Cr. till Nov 2019. Also, MSPDCL has received the state Government subsidy of Rs. 38.80 Cr till Nov

2019, for further passing on to MSPCL towards their salary. However, the government subsidy and ARR may change and accordingly the GAP will vary. MSPDCL had proposed for approval of the gap at Rs. 91.05 Crore for FY 2019-20.

Commission Analysis:

Upon review all the cost element by the Commission for FY 2019-20 the final unmet-revenue gap arrived at after considering the Government Subsidy amount as reflected in the Tariff Order Dt 26.03.2019 is indicated in detail which works-out to Rs.17.49 Crs.

Table 6.21 : Revenue Gap as per the Commission for FY 2019-20

Sl. No	Particulars	FY 2019-20
1	Net ARR	628.62 Crs
2	Total Revenue incl. surplus energy	391.58 Crs
3	State Government Revenue Subsidy	219.55 Crs
4	**Unmet Revenue Gap**	**17.49 Crs**

However, the actual revenue gap dependents upon (a) the amount of revenue that is going to be realized, which again depends upon (b) different category wise sales mix in quantity of 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 2019-20. Thus, the real revenue gap going to occur would be known at a later date which will be dealt with suitably at the time of truing up of the expenditure based upon the finalized audited annual accounts statements.

7. Analysis of Aggregate Revenue Requirement for FY 2020-21

7.1 Background

The Petitioner humbly submits that the present ARR projections is based on actual expenses of FY 2018-19 and first six-month data available for FY 2019-20. The comparison of the projected expenses and revenue with the expenses and revenue considered by the Hon'ble Commission in the ARR of FY 2019-20 in the JERC tariff Order 20 of 2019 dated 26 March 2019 (henceforth referred as 'Approved' order with reference to FY 2019-20), and ARR for FY 2020-21 in the JERC tariff Order 1 of 2018 dated 12 March 2018 (henceforth referred as 'Approved' order with reference to FY 2020-21) has been presented. However, the Petitioner requests the Hon'ble Commission to review the expenses and revenue for FY 2020-21 based on the trend observed as per actual data. The values presented in those past ARR orders were based on old data and may not capture the present condition of the Petitioner.

7.2 Energy Sales

MSPDCL caters to a diverse consumer mix comprising LT domestic, LT commercial, HT commercial, LT Industry, HT Industry 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 for FY 2018-19 is given in the Table below:

Table 7.1: Category-wise Energy Sales (MU) for FY 2020-21

Sl. No.	Category	FY 2019-20			FY 2020-21	
		App.	Six Months Actual	Revised Proj.	App.	Revised Proj.
A	**LT Supply**					
1	Kutir Jyoti	20.96	2.02	3.72	17	3.88
2	LT Domestic	386.83	196.05	399.40	391	417.37
3	Commercial LT	45.43	32.37	58.54	48	61.18
4	Cottage and Small Industry	20	11.18	20.57	21	21.49
5	Public Lighting	5.08	2.06	3.79	5	3.96

Sl. No.	Category	FY 2019-20			FY 2020-21	
		App.	**Six Months Actual**	**Revised Proj.**	**App.**	**Revised Proj.**
6	Public Water-works	2.2	0.71	1.31	2	1.37
7	Irrigation and Agriculture	1.27	0.65	1.20	1.25	1.25
	LT Supply Sub Total	**481.77**	**245.04**	**488.52**	**485.25**	**510.50**
B	**HT Supply**					
1	Commercial	6.06	16.62	19.67	7	20.55
2	Medium Industry	4.1	4.44	4.17	4	4.36
3	Large Industry	6	4.49	7.77	6	8.12
4	Bulk Supply	114	41.63	81.73	123	85.41
5	Public Water-works	18.66	12.28	21.20	18	22.15
6	Irrigation and Agriculture	0.85	0.42	0.78	0.8	0.81
	HT Supply Sub Total	**149.67**	**79.88**	**135.31**	**158.8**	**141.40**
	Total	**631.44**	**324.92**	**623.83**	**644.05**	**651.91**

The actual energy sold by MSPDCL in FY 2018-19 was 596.97 MU. The commission has approved the energy sales of 631.44 MU for FY 2019-20. Based on the actual sales of first six months (i.e. up to 31 September 2019) the revised projection of energy sales by MSPDCL for FY 2019-20 is 623.83 MU. As there is no major increase foreseen in any of the consumer category, it is assumed that the growth in energy sales for FY 2019-20 and 2020-21 will be stable with 4.5% increase over the actual sales in FY 2018-19. The lower rate of sales increase will also be due to the adoption of LED lighting and solar power.

Accordingly, MSPDCL requests the Hon'ble Commission to approve the total energy sales of **651.91 MU** for FY 2020-21.

Commission Analysis:

The energy projections for FY 2020-21 is noted to have been made simply by adopting a crude method of each category as a proportion to total sale existed in that FY2018-19 and it was not having any individual category wise trend analysis related estimation. Hence, it was done on a very crude and on simple percentage basis and the projection so adopted may not be of any practical use and this may give undesired revenue estimation and finally derives unbelievable revenue gap. Though the issue was raised in additional information but it was inaptly replied. Since, there is no historical actual data readily available to modify, the commission approves the sales quantum projected by the Licensee without any change and await the actuals achieved in FY 2019-20 to adopt in APR review possibly.

7.3 Distribution loss and Energy Balance

Petitioner's submission

Projected distribution loss for FY 2020-21 is estimated based on the actual distribution loss achieved for FY 2018-19, and the losses trajectory approved by the Hon. Commission for the MYT control period. Based on the estimated sales for the current and ensuing financial years, 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 and ensuing financial year is as follows:

Table 7.2: Proposed Distribution Loss and Energy Balance for FY 2020-21

Particulars	Unit	Actual for 2018-19 Prop true up	Approved for FY 2019-20	Proposed for FY 2019-20	Approved for FY 2020-21	Proposed for FY 2020-21
Total Sales to Consumers	MU	596.97	631.44	623.83	644.05	651.91
Distribution Loss	%	25.87%	15.00%	25.40%	14.20%	24.50%
Distribution loss	MU	208.32	111.43	212.40	106.59	211.55
Total energy requirement at distribution periphery	MU	805.28	742.87	836.24	750.64	863.45
Intra state transmission losses	%	10.00%	8.50%	10.00%	2.80%	10.00%
	MU	89.48	69.01	92.92	21.62	95.94
State Energy Requirement periphery after grossing us intrastate loss	MU	894.76	811.88	929.15	772.26	959.39
Interstate transmission loss	%	2.72%	2.85%	2.85%	2.60%	2.85%
	MU	25.00	23.82	27.26	20.61	28.14
Energy Requirement after grossing up interstate losses	MU	919.76	835.70	956.41	792.88	987.53
Estimated power purchase	MU	1021.85	1131.37	1025.73	1163.82	1165.24
Surplus Power available for sale after grossing up interstate loss	MU	99.32	287.25	67.35	361.30	172.64

MSPDCL has achieved the distribution loss of 25.87% in FY 2018-19. For the FY 2019-20, Hon. Commission has approved the distribution loss of 15.00%. MSPDCL proposed the distribution loss of 25.40% for FY 2019-20. Also, in the MYT tariff order Hon. Commission has approved the distribution loss of 14.20% for FY 2020-21. MSPDCL proposed the distribution loss of 24.5% for FY 2020-21. MSPDCL requests Hon. Commission to consider the proposed distribution considering the high LT network and low density of consumers.

Based on the projected sales to consumers, projected distribution, interstate and intra state losses, projected power purchases the energy balance is calculated and the surplus power available for banking / surplus sale is estimated and MSPDCL request the Hon. Commission to approve the same.

Commission analysis

The Licensee didn't explain the basis for arriving the reduction in losses from 25.87% in 2018-19 to 24.50% in FY2020-21 and their action plan as to how the network efficiency would be improved to achieve the loss reduction by 1.37% only as compared to FY 2018-19 loss level., It is evident that the MSPDCL failed to achieve the targets earlier set by the Commission. Keeping in view the slackness in handling the losses and faltering noted in the revenue billing and arrear collection by the MSPDCL, the Commission don't wants to interfere and now it is the duty of MSPDCL to achieve the distribution losses target now proposed on their own at the level of 24.50% for FY 2020-21 It is necessary that the Licensee should have to chalk out a constructive & strategic plan to curtail losses in 2020-21 and submit such action plan to the Commission with an assurance to achieve before end of 31st May 2020 and shall adhere to the same and show the desired results. However, If the Licensee fails achieve this proposed loss level by the end of FY 2020-21, they will have to bear the penalty for the under performance in the true-up finalization. The loss reduction could be anything like arresting all kinds of Commercial losses for instant results or identify and prevent technical losses sadly there is no such proposal is included in ARR by Licensee. The losses adopted for NERLDC is at 2.74% instead of 2.85% loss percentage according to the data obtained from their website for FY 2018-19.

The energy balance basing on quantum of power purchase adopted by the Commission is as follows:

Sl. No.	Energy Balance of MSPDCL for FY 2020-21	MU
1	Energy from Eastern Region	0
2	Inter-State Loss on ER Energy (@ 1.95%)	0
3	ER Energy after Losses (1-2)	0
4	Energy from NER stations (incl. Loktak Free power)	**1009.01**

5	Grossed up Energy handled - (3+4)	**1009.01**
6	Inter-State Loss on NER Energy (@ 2.74%)	227.65
7	**Net energy at NERLDC (5 - 6)**	**981.36**
8	IEX Purchases	0
9	Net Banked Energy adjustment	0
10	UI adjust (Overdrawn-Underdrawn)	0
11	Less: Energy sold at IEX - (Outside State sale)	-37.69
12	Net Solar Energy Injected to Grid (other than RTS)	
13	Total generation injected to Grid from RTS	
14	Net energy from State Own Small HEPs	
15	**Total energy at State Periphery - (7 to 14)**	**943.67**
16	**Intra-State Losses (State Losses) @ 8.50%**	**80.21**
17	**Gross Circle-wise Distribution Input (from meter recorded input)**	**863.46**
18	**Distribution Loss (MU) @ 25.40%**	**211.55**
19	Retail Sales (LT & HT)	**651.91**

The Status of overall losses within Manipur State as a ratio to total state input is given below for FY 2020-21:

	Overall Losses with in Manipur State	**2020-21**	**Loss (%)**
1	State Transmission Loss	80.21	**8.50%**
2	Distribution Loss	211.55	**22.42%**
3	**T & D Losses Total**	**291.76**	**30.92%**
4	**Total Energy at State Periphery**	**943.67**	**100%**
5	Overall State Loss % on energy input	**30.92%**	

The above losses are the celling limits and it should be lower than that in reality as the MSPDCL has the banked energy of 122.04MU to be utilized thereby it can avoid the ER Losses fully as that much energy need not use ER network and incidentally avoiding the purchase of power for various other sources according to the situation to the tune of 122MU, if adopted, can reduced to cost also to a greater extent.

"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 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 proposed power purchase for FY 2020-21 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.

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 2019-20, 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 2018-19, year on year growth has been considered based on the planned allocation for projecting the power purchase for current and ensuing financial year. Accordingly, the revised energy purchase has been proposed. The approved and proposed energy purchase for FY 2020-21 is detailed in the Table below:

Table 7.3: Energy Purchase for FY 2020-21 by P&ED (MU)

Sl. No.	Source of Power	2018-19	FY 2019-20			FY 2020-21	
		Actual	App.	6 months	Prop.	App.	Prop.
A	**CGS – NEEPCO**						
1	Kopili -I HEP	74.32	65.41	50.594	76.66	67.35	78.88
2	Kopili-II HEP	6.40	7.24	5.296	6.38	7.47	6.82
3	Khandong HEP	12.86	13.42	9.396	12.87	13.85	13.24
4	Ranganadi HEP	86.73	115.12	76.453	99.29	119.58	102.17
5	Doyang HEP	17.38	18.13	7.079	8.14	18.9	18.90
6	Assam GBPP	106.01	131.75	44.38	87.02	134.85	89.54
7	AGTPP	49.87	64.55	24.209	53.80	65.95	55.36
B	**CGS – NHPC**						0.00
1	Loktak HEP	176.69	194.1	59.84	90.67	198.31	198.31
2	Loktak HEP Free Power	69.47	76.37	23.512	35.62	78.02	78.02
C	**Others**						0.00
1	Baramura GBPP Unit	41.57	77.31	32.814	76.31	78.69	78.52
2	OTPC Palatana	249.20	221.42	125.425	256.68	226.94	249.20
D	**New Plants**						

Sl. No.	Source of Power	2018-19	FY 2019-20			FY 2020-21	
		Actual	**App.**	**6 months**	**Prop.**	**App.**	**Prop.**
1	NTPC Bongaigaon Unit I	103.25	48.85	96.338	185.27	51.31	153.93
2	NTPC Bongaigaon Unit II		48.85			51.31	0.00
3	NTPC Bongaigaon Unit III		48.85			51.31	0.00
4	Monarchak Gas Based PP (NEEPCO)		0				0.00
5	Kameng HEP Stage I		0				0.00
6	Kameng HEP Stage II		0				0.00
7	Para HEP	8.11	0	27.047	37.05		38.13
8	Tuirial HEP		0				0.00
9	Lower Subansiri Stage I		0				0.00
10	Lower Subansiri Stage II		0				0.00
11	Renewable – Solar		0				1.42
12	Renewable Non-Solar						
	Sub -Total	**1,021.85**	**1131.37**	**582.365**	**1025.73**	**1163.82**	**1165.24**
	Total Purchase	**1,021.85**	**1131.37**	**582.37**	**1,025.73**	**1,163.82**	**1,165.24**

Apart from the above proposed sources for power procurement, MSPDCL requires to 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 CGPs hence such deviations cannot be estimated for current and ensuing financial year at this time. The MSPDCL proposed to manage such deviations within the available surplus power.

MSPDCL requests the Hon'ble Commission to approve the proposed power purchase quantum of 1165.24 MU for FY 2020-21.

Commission Analysis:

The Commission feels that the power procurement from costly stations are to be reduced to the bare contracted minimum quantity and to buy more from cheaper power stations for minimising the major expenditure component of ARR which is the power purchase cost. Accordingly, the Commission has deduced the required quantity at 1009.01MU in such a way the surplus power available would be at the minimum level of 34.61MU instead of 172.64MU proposed by MSPDCL despite the 122MU of banked energy already in store and ignored fully.

During this year, the MSPDCL shall endeavour to fully utilise the banked energy of 122MU to minimise the purchase quantity from outside sources and reduce the cost of power to a level lower than the total cost now decided by the Commission as the it wants to give freehand to MSPDCL in procurement. Incidentally, upon choosing the banked energy, the overall losses & power costs will tend to fall. The detailed power purchase cost so arrived by the Commission is also provided below.

7.5 Power Purchase Cost

The power purchase cost has been estimated and allowed in the Hon. Commissions MYT tariff order. The cost of power purchase from CGPs includes the fix and variable cost. The fix cost component is fixed irrespective of the energy drawal. The variable cost component depends on the approved tariff by CERC, actual energy drawal and the additional cost permitted due to change in fuel cost. The effective tariff of these sources is slightly varying from the MYT approved figures. Hence, in order to estimate the Power Purchase cost for current and ensuing financial year, 3% escalation in the effective tariff arrived from the actual purchase for FY 2018-19 is taken to estimate the power purchase cost for FY 2019-20 and FY 2020-21. The proposed power purchase cost is shown in the Table-7.5 below:

Table 7.4: Power Purchase Cost for FY 2020-21 (Total Cost in Rs. Cr, Avg. Tariff /rate in Rs/kWh)

Sl. No.	Source of Power	2018-19 Actual		Approved 19-20		Six Months 19-20		Proposed 19-20		Approved 20-21		Proposed 20-21	
		Total Cost	Avg. Rate	Total Cost	Avg. Rate	Total Cost	Avg. Rate	Total Cost	Avg. Rate	Total Cost	Avg. Rate	Total Cost	Avg. Rate
A	**CGS – NEEPCO**												
1	Kopili -I HEP	9.87	1.33	7.97	1.22	5.93	1.17	10.49	1.37	14.64	2.17	11.11	1.41
2	Kopili-II HEP	1.05	1.64	1.06	1.46	0.73	1.38	1.08	1.69	1.65	2.21	1.19	1.74
3	Khandong HEP	2.72	2.11	2.41	1.8	1.68	1.79	2.80	2.18	4.43	3.2	2.97	2.24
4	Ranganadi HEP	21.54	2.48	25.22	2.19	14.36	1.88	25.40	2.56	44.07	3.69	26.92	2.63
5	Doyang HEP	8.72	5.02	8.01	4.42	3.88	5.48	4.20	5.17	16.75	8.86	10.06	5.32
6	Assam GBPP	44.27	4.18	49.74	3.77	22.87	5.15	37.43	4.30	54.05	4.01	39.67	4.43
7	AGTPP	18.7	3.75	22.99	3.56	11.16	4.61	20.78	3.86	19.67	2.98	22.02	3.98
B	**CGS – NHPC**							0.00	0.00			0.00	0.00
1	Loktak HEP Purchased Power	59.87	3.39	64.89	3.34	24.29	4.06	31.64	3.49	104.1	5.25	71.29	3.59
2	Loktak HEP- Free Power		-	0	0	0.00	0.00	0.00	0.00			0.00	0.00
C	**Others**							0.00	0.00			0.00	0.00
1	Baramura GBPP Unit IV and V	12.52	3.01	14.2	1.84	9.88	3.01	23.67	3.10	15.18	1.93	25.09	3.20
2	OTPC Palatana	79.08	3.17	72.65	3.28	40.75	3.25	83.90	3.27	95.46	4.21	83.90	3.37
D	**New Plants**							0.00	0.00			0.00	0.00
1	NTPC Bongaigaon Unit I	97.65	9.46	27.77	5.68	76.36	7.93	180.48	9.74	30.63	5.97	140.72	9.14
2	NTPC Bongaigaon Unit II			27.77	5.68			0.00	0.00	30.63	5.97	0.00	0.00
3	NTPC Bongaigaon Unit III			27.77	5.68			0.00	0.00	32.16	6.27	0.00	0.00
4	Monarchak Gas Based PP (NEEPCO)			0				0.00	0.00			0.00	0.00
5	Kameng HEP Stage I			0				0.00	0.00			0.00	0.00
6	Kameng HEP Stage II			0				0.00	0.00			0.00	0.00
7	Para HEP	14.06	5.00	0		13.52	5.00	19.09	5.15			20.23	5.31
8	Tuirial HEP			0				0.00	0.00			0.00	0.00
9	Lower Subansiri Stage I			0				0.00	0.00			0.00	0.00

10	Lower Subansiri Stage II			0				0.00	0.00			0.00	0.00
11	Renewable – Solar			23.12				0.00	0.00	25.12		0.26	0.00
12	Renewable – Non-Solar			2.81				0.00	0.00	2.19		1.63	0.00
	Total Purchase	370.02	3.62	378.36	3.34	225.40	3.87	440.94	3.34	490.73	4.22	457.06	3.92
13	UI Over/Under drawl	-3.47											
14	IEX purchase	3.04											
15	Supplementary bills	14.83						15.28				33.67	
16	Late payment surcharge	2.81											
17	Open access charges paid for banking	8.81											
	Total	**396.05**	**3.84**	**378.36**	**3.34**	**225.40**	**3.87**	**456.21**	**4.45**			**490.73**	**4.21**

Apart from the total power purchase cost, MSPDCL is required to pay charges towards UI over-drawal and under-drawal, Purchase from IEX, OA charges paid for availing banking facility, supplementary bills etc. Such charges were 26.03 Cr for FY 2018-19. The charges for UI over-drawal and under-drawal, Purchase from IEX, OA charges paid for availing banking facility, supplementary bills are considered as 33.67 Cr for FY 2020-21. The Hence MSPDCL has proposed the total power purchase cost of Rs 490.73 Cr for FY 2020-21.

MSPDCL requests the Hon'ble Commission to approve the proposed power purchase costs of **Rs 490.73 Cr** for FY 2020-21.

Commission Analysis:

The Commission has reworked the power requirement and its cost during the FY 2020-21 as follows:

Table 7.5 – Commission approved Power purchase cost in FY2020-21

Sl. No.	For FY 2020-21 Source of Power	Energy MU	Total Cost (Rs Cr)	Avg Rate (Rs/kWh)
A	**CGS – NEEPCO**	**311.40**	**89.94**	**2.89**
1	Kopili -I HEP	78.88	11.11	1.41
2	Kopili-II HEP	6.82	1.19	1.74
3	Khandong HEP	13.24	2.97	2.24
4	Ranganadi HEP	102.17	26.82	2.63
5	Doyang HEP	11.40	6.04	5.30
6	Assam GBPP	54.53	24.16	4.43
7	AGTPP	44.36	17.65	3.98
B	**CGS – NHPC**	**276.33**	**71.29**	**2.58**
1	Loktak HEP Purchased Power	198.31	71.29	3.59
2	Loktak HEP- Free Power	78.02	0	-
C	**Others**	**291.22**	**96.31**	**3.31**
1	Baramura GBPP Unit IV and V	78.52	24.70	3.15
2	OTPC Palatana	212.70	71.61	3.37
D	**New Plants**	**130.06**	**105.13**	**8.08**
1	NTPC Bongaigaon Unit I	103.93	73.49	7.07
2	NTPC Bongaigaon Unit II			
3	NTPC Bongaigaon Unit III			
4	**Para HEP**	26.13	13.87	5.31
5	Renewable – Solar		7.90	
6	Renewable – Non-Solar		9.87	
	Sub -Total	**985.76**	**384.44**	**3.90**
7	UI Over/Under drawl			

Sl. No.	For FY 2020-21	Energy	Total Cost	Avg Rate
	Source of Power	MU	(Rs Cr)	(Rs/kWh)
8	Supplementary bills		13.835	
9	Late payment surcharge			
10	O.A charges for energy banking			
	Total	**1009.01**	**376.50**	**3.73**

The Commission had also considered the Renewable Power Purchase Obligation (RPO) into account as per the regulation in vogue. Accordingly, the MSPDCL shall purchase certificates amounting to Rs.17.77Crs to the extent indicated against each of Solar and Non-solar sources in order to comply with their RPO obligation arrived at based on their various sources of power purchase assumed during FY 2020-21. Since there is no proposal contemplated to utilize the banked energy even in 2019-20, the quantum of 122.04MU energy re-banked in FY 2018-19 shall invariably be utilized during the FY 2020-21 in order to minimize the cost of power and pass on the cost savings to the consumers in the form of low revision in tariff. ***Therefore, the final power cost shall be lower than what has been stated above an indicative figure arrived without the banked quantity of 122MU.***

7.6 Transmission Charges

The transmission charges include the charges paid to PGCIL, MSPCL and SLDC charges. The summary of transmission charges paid by MSPDCL for FY 2018-19, charges approved by Hon. Commission for current and ensuing financial years along with the proposed charges are presented in the following table. The PGCIL charges are projected as Rs. 61.525 Cr for FY 2020-21 which is 25% higher on year on year basis. MSPCL charges for FY 2020 has been considered based on their draft ARR proposal. The SLDC and NRLDC charges are considered as 5% and 5.72% higher on year on year basis on the actual charges for FY 2018-19.

Table 7.6: Transmission Charges for FY FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	2018-19		2019-20		2020-21	
		App.	**Actual**	**App.**	**Proposed**	**App.**	**Proposed**
1	PGCIL Charges	58.21	42.80	61.12	49.22	64.18	61.53
2	MSPCL Charges	71.57	74.97	85.68	85.68	97.30	91.34
3	SLDC Charges	0.71	0.74	0.71	0.78	0.79	0.82
4	NERLDC Charges		6.30		6.66		7.04
	Total	**58.92**	**124.82**	**147.51**	**142.34**	**162.27**	**160.72**

MSPDCL requests the Hon'ble Commission to approve the proposed

Transmission Charges of **Rs. 160.72 Crore** for FY FY 2020-21.

Commission Analysis:

The Commission feels that the PGCIL charges projected were on the higher side for FY2020-21 comparing to the trend in the past two year and hence considered it to be at 61.53Crs same as the projected Rs.61.53 Crs. At the same time, the MSPCL charges are replaced with the value as was approved for in their ARR by the Commission with the amount Rs.77.01 Crs instead of Rs.91.34Crs projected in their ARR submission. Accordingly, the revised & approved transmission charges by the Commission is as follows:

Table 7.7: Transmission Charges approved by Commission for 2020-21(Rs.Crs)

Sl. No.	Particulars	FY 2020-21	
		ARR Proposed	Commission approved
1	PGCIL Charges	61.53	61.53
2	MSPCL Charges	91.34	77.01
3	SLDC Charges	0.82	0.82
4	NERLDC Charges	7.04	7.04
	Total	**160.72**	**146.40**

7.7 Operation and Maintenance Expenses

Petitioner's submission

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

For the purpose of ARR for FY 2020-21, MSPDCL has proposed the O&M Expenses as follows:

Table 7.8: O&M Expenses for FY 2020-21 (Rs. Crore)

Sr. No	O&M Expenses	Actual 2018-19	Approved 19-20	Six Months 2019-20	Proposed 19-20	Approved 20-21	Proposed 20-21
1	Employee Expenses	83.86	106.68	35.90	83.00	112.78	113.48
2	R&M Expense	11.70	7.69	8.20	12.36	8.13	13.07
3	A&G Expense	6.89	9.45	3.64	7.29	9.99	9.71
	Total	**102.45**	**123.82**	**47.74**	**102.65**	**130.90**	**136.26**

The employee cost for FY 2019-20 has been proposed based on the actual expenses incurred in the first six months. The employee expenses for FY2020-21 has been projected at 5.72 % more than the revised estimates for the current financial year. Further, there is likely addition of manpower in FY 2020-21 and hence 10% of the current financial years cost has been considered towards the additional manpower. Over and above, MSPDCL will have to pay the 7th pay arrears which are in the range of 21% of employee cost incurred in FY 2019-20.

In the case of R&M and A&G expenses, the projections have made with 5.72% escalation on the actual expenses incurred in FY 2018-19. Further for FY 2020-21, **additional A&G expenses of 2Cr have been considered for the additional A&G costs like prepaid metering software expenses, franchisee fees, Energy Audit, Vigilance, flying squad, consumer verification, energy police stations, SIM card, Modem, DCDR Server maintenance charges, Online vending charges, VPN Communication Charges etc.**

Accordingly, MSPDCL submits Hon'ble Commission to approve the proposed O&M costs of **Rs. 136.26 Crore** for FY 2020-21.

Commission Analysis:

On analysis, in the case of Employee cost, it is observed there was an increase of 622 number of regular employees with no details of whatsoever about cadre wise recruitment break-up among regular staff and in addition no retirement details were mentioned in 2020-21. In the absence of these details, giving due weightage for the increase in number of employees and their salary at a lower level than their seniors pay and on considering the hike for existing employees in their salary over FY2019-20 the total amount estimated at Rs.99.69 Crs in all possible ways but it cannot be at the level of Rs.113.48 Crs as proposed by MSPDCL. The R&M Expenses are approved at Rs.13.07 Crs and A&G Expense were allowed at the same level proposed by the Licensee which includes the additional Rs.2 Crs also.

Table: 7.9 : O&M Expenses approved by the Commission for 2020-21

Sl. No.	Details of O&M Expenses	Approved (Rs.Crs)
1.	Employee Cost	99.69
2.	R&M Expenses	13.07
3.	A&G Expenses	9.71
4.	**Total O&M Expenses**	**122.47**

Thus, the O&M Expenses approved by the Commission after the scrutiny are at

Rs.122.47 Crs for the FY 2020-21.

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 State Government for creation of capital asset, as well as consumer contribution for capital works, with the balance funding sourced from loans.

The details of actual capitalization achieved in FY 2018-19 and proposed capitalisation for FY 2019-20 and FY 2020-21, is shown in the Table below:

Table 7.10: Capitalization for FY 2020-21 (Rs. Crore)

Particulars	**2018-19**	**2019-20**	**2020-21**
Opening balance of CWIP	1033.72	1115.17	938.54
Addition of CWIP	130.95	80.57	71.10
Capitalization during the year	**49.50**	**257.20**	**32.22**
Closing balance of CWIP	**1115.17**	**938.54**	**977.42**

MSPDCL requests the Hon'ble Commission to kindly approve the proposed capitalization of **Rs 32.22 Crore** for FY 2020-21.

Commission Analysis:

As per the content of present filing, the licensee had neither proposed for any work-wise details of investments for approval in FY 2020-21 nor indicated any proposed new works to be taken up for execution. 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 the assets worth Rs.32.22 Crs out of the fresh works undertaken will not be allowed for charging depreciation element under regulatory accounting.

Besides, the details of amount collected from consumer contributions possessed by the MSPDCL from the inception of the corporation in 2014 may be submitted to the Commission each year wise.

7.9 Interest on Working Capital

Interest on the working capital has been projected for FY 2020-21 as follows:

Table 7.11: Interest on Working Capital for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	Actual for FY 2018-19	Proposed for FY 2019-20	Proposed for FY 2020-21
1	O&M expenses for 1 month	8.54	8.55	11.35
2	Maintenance spares @ 1% of GFA.	7.62	8.12	10.69
3	Receivables equivalent to one month of expected revenue at prevailing tariffs	20.25	31.37	32.62
4	Consumer Security Deposit	14.07	14.88	15.63
	Total	**22.35**	**33.16**	**39.04**
	SBAR as on 01.04.2018	13.45%	13.45%	13.45%
	Interest on Working Capital	**3.01**	**4.46**	**5.25**

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 rear has been considered. The Security deposit for FY 2020-21 has been estimated as 5% higher than that of FY 201-20.

MSPDCL requests the Hon'ble Commission to approve the IoWC of **Rs 5.25 Crore** for FY 2020-21.

Commission's Analysis

As seen from the submission, there were no mention as to the actual drawal of the short-term loans for working capital needs. The very purpose of allowing the interest on working capital is to reimburse the interest cost involved for running the day to day business of the utility. But, the MSPDCL is dependent upon the Government for its day to day funding in the form of grant-in-Aid towards meeting salaries and other expenses. Therefore, allowing interest on working capital on a notional basis would only burden the consumers and its withdrawal has no actual financial impact on MSPDCL. As a matter of principle, it will be disallowed from the claim for not availing the short-term loans in any financial year henceforward. In Manipur, there are more in number of pre-paid meters, whose revenue will be collected in advance and there is no pressing need for borrowing short-term loans for utility to run.

Thus, the Commission totally disapproves interest on working capital projected at an amount of Rs.5.25Crs in FY 2020-21 by MSPDCL.

7.10 Gross Fixed Assets & Depreciation

The closing balance of Gross Fixed Asset (GFA) for FY 2018-19 has been considered as the opening balance of GFA for FY 2019-20. 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 2019-20 and FY 2020-21. The Expenses towards depreciation for FY 2020-21 is shown in the Table below:

Table 7.12: Depreciation for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	Actual 2018-19	Projected for 2019-20	Projected for 2020-21
1	Opening GFA	762.28	811.78	1068.98
2	Addition during the Year	49.50	257.20	281.83
3	Retirement			
4	Closing GFA	811.78	1068.98	1350.81
5	Average GFA	787.03	940.38	1209.90
6	Average Rate of Depreciation	2.42%	2.42%	2.42%
7	Depreciation	19.05	22.76	29.28
8	**10% of Gross Depreciation**	**1.90**	**2.28**	**2.93**

MSPDCL respectfully submits that since 10% of the capital cost of every scheme is financed by MSPDCL, either through loan or equity, depreciation has been claimed equal to 10% of Gross Depreciation.

MSPDCL requests the Hon'ble Commission to approve the Depreciation of **Rs. 2.93 Crore**, for FY 2020-21.

Commission Analysis:

As per the content of this filing, it is construed that the funds utilized for creation are fully spent from grants of government only. Therefore, the proposed transfer to GFA amounting to Rs.281.83 Crs shown during the year is not eligible for depreciation charge under regulatory accounting ambit.

The depreciation amount now approved by the Commission for FY 2020-21 is without considering the capital addition made with the govt subsidy as follows:

Table 7.13 – Depreciation for FY 2020-21 by the Commission

Sl.No.	Particulars	2020-21
1	Opening GFA	762.28
2	Addition during the Year	0
3	Retirement	0
4	Closing GFA	762.28
5	Average GFA	762.28
6	Average Rate of Depreciation	2.42%
7	Depreciation	18.45
8	**10% of Gross Depreciation**	**1.84**

The Commission approves the nominal depreciation of Rs.1.84 Crs calculated at 10% of the Regulatory accounting based allowable depreciation for FY 2020-21.

7.11 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 depreciation claimed for the year, 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 is shown in the Table below:

Table 7.14: Interest on Loan for FY 2020-21

Sl. No.	Particulars	REC 1	REC 2	Total
1	Opening Loan	30.604	14.67	45.27
2	Addition during the year	0	0	0.00
3	Repayment during the year	3.988	0	3.99
4	Closing Loan	26.616	14.67	41.29
5	Average Loan	28.61	14.67	43.28
6	Rate of Interest	11.70%	10.20%	
7	Interest & Finance Charges	4.140	2	6.14
8	Interest on CSD			0.00
	Total Interest	**4.140**	**2.00**	**6.14**

MSPDCL requests the Hon'ble Commission to kindly approve the interest on loan as **Rs. 6.14 Crore** for FY 2020-21.

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 the utilisation started is not furnished. In the absence of non-furnishing of this vital information, the revised amount of interest on Loan now submitted by the Licensee without making any comparison to that was already approved in the Tariff Order Dt.13th March 2018 is not acceptable by the Commission and hence the interest on loan as was approved in the above cited Tariff Order earlier amounting to **Rs.4.24 Crs** is now approved for FY 2020-21. The actuals will be taken into considered at the time of truing-up of the expenditure for this year later on their submission based on audited actuals in full shape.

7.12 Return on Equity

MSPDCL has considered the Return on Equity (RoE) for FY 2019-20 and FY 2020-21 same as approved by the Hon'ble Commission in its Tariff Order. 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 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 2020-21, and requests the Hon'ble Commission to approve the same.

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.400Crs to the end of 31.03.2019 as was submitted in reply to additional information. This can be allowed only when Commission is thoroughly satisfied that despite the best of efforts the dues are proved to be non-recoverable in future. The onus of proving rests with the Licensee.

7.14 Non-Tariff Income

Petitioner's submission

The Non-Tariff Income for FY 2018-19 has been 6.13 Crore. Over and above this 5% growth has been considered for FY 2019-20 and 2020-21 and accordingly the non-tariff income has been proposed as shown in the table below:

Table 7.15: Non-Tariff Income for FY 2020-21 (Rs. Crore)

Sr.No.	Particulars	Actual for 2018-19	Proposed for 2019-20	Proposed for 2020-21
1	Non-Tariff Income	6.13	6.44	6.76

MSPDCL requests the Hon'ble Commission to approve the actual Non-Tariff Income of **Rs 6.76 Crore** for FY 2020-21.

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.6.76 Crs as projected. However, the Commission prefers to enhance it to Rs.7.25 Crs for FY 2020-21 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.7.25. Crore for FY 2020-21

7.15 Aggregate Revenue Requirement

Petitioner's Submission:

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 2018-19, is given in the Table below:

Table 7.16: Aggregate Revenue Requirement for FY 2020-21

(Rs. Crore)

Sl. No.	Particulars	Actual 2018-19	App. 2019-20	APR 2019-20	App. 2020-21	ARR 2020-21
1	**Power Purchase or Energy (MU)**	1021.85	1099.13	1025.73	1163.82	1165.24
2	**Sale of Power (MU)**	596.97	631.44	623.83	644.05	651.91
3	**Distribution Loss (%)**	25.87%	15.00%	25.40%	14.20%	24.50%
A	**Expenditure**					
1	Cost of power purchase	396.05	378.36	456.21	490.73	490.73
2	Inter-State Transmission charges	42.80	61.12	49.22	64.18	61.53
3	Intra-state Transmission charges	74.97	85.68	85.68	97.30	91.34
4	SLDC & NERLDC Charges	7.04	0.71	7.44	0.79	7.86
5	Wheeling charges payable to others	0.00	0.00	0.00	0.00	0.00
6	O&M Expenses	102.45	123.82	102.65	130.90	136.26
	Employee Expenses	*83.86*	*106.68*	*83.00*	*112.78*	*113.48*
	R&M Expense	*11.70*	*7.69*	*12.36*	*8.13*	*13.07*
	A&G Expense	*6.89*	*9.45*	*7.29*	*9.99*	*9.71*
7	Depreciation	1.90	0.31	2.28	0.38	2.93
8	Advance against depreciation	0.00	0.00	0.00	0.00	0.00
9	Interest on Loan	6.33	5.17	6.08	4.24	6.14
10	Interest on Working Capital	3.01	9.01	4.46	7.35	5.25
11	Bad Debt		3	**3**	**3**	3
	A: Total Cost	**634.55**	**667.17**	**717.02**	**798.87**	**805.03**
B	Add: Return on Equity	**1.95**	**1.95**	**1.95**	**1.95**	1.95
	Add: Income Tax	**0**	**0**	**0**	**0**	0
	B: Total	**1.95**	**1.95**	**1.95**	**1.95**	1.95
	Total ARR : A+B	**636.50**	**669.12**	**718.97**	**800.82**	**806.98**
C	Less: Non-Tariff Income	6.13	5.40	6.44	0.43	6.76
	Income from other business if any	0.00	0.00	0.00	0.00	0.00
	C: Total	6.13	5.40	6.44	0.43	6.76
	D: Aggregate Revenue Requirement (A+B-C)	**630.37**	**663.72**	**712.53**	**800.39**	**800.22**

The ARR approved for FY 2020-21 is Rs. 800.39 Crore. The proposed ARR for FY 2020-21 is Rs 800.22 Crore. MSPDCL requests the Hon'ble Commission to approve the same.

Commission's Analysis

Based on the approved costs Aggregate Revenue Requirement for FY 2020-21 is approved as detailed below:

Table 7.16: Aggregate Revenue Requirement approved by the Commission for FY 2020-21

Sl.No	Energy Particulars	MU

1	**Gross Energy Purchases**	1009.01
2	**Less: Inter State Transmission Losses**	30.73
3	**Less: Outside State Sales**	34.61
4	**Less: State Transmission Losses**	80.21
5	**Less: Distribution Losses**	211.55
6	**Retail Sale of Power**	651.91
7	**Distribution Loss (%)**	24.50%
A	**Approved Expenditure (FY 2020-21)**	**Rs.Crs**
1	Cost of power purchase	376.51
2	Inter-State Transmission charges	61.53
3	Intra-state Transmission charges	77.01
4	SLDC & NERLDC Charges	7.86
5	**O&M Expenses**	**122.47**
	Employee Expenses	*99.69*
	R&M Expense	*13.07*
	A&G Expense	*9.71*
6	Depreciation	1.84
7	Interest on Loan	4.24
8	Interest on Working Capital	--
9	Bad Debt	--
10	Return on Equity	1.56
	Gross ARR approved	**653.01**
B	Less: Non-Tariff Income	7.25
	Less: Efficiency Gains	40.00
	Total of B	**47.25**
	Aggregate Revenue Requirement (A-B)	**605.76**

Commission approves net ARR at Rs.605.76 Crore for FY 2020-21 as against Rs.800.22 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.391.43 Crore for FY 2020-21**. The category-wise revenue realization projection is as follows:

Table 7.18: Category-wise revenue projection at existing tariff for 2020-21 (Rs.Crs)

Category of Consumers	Proposed Sales (MU)	Proposed Revenue (Rs. Crs)
LT Supply		
a) Domestic (Kutir Jyoti)		
For All Units	3.88	1.20
Sub Total (a)	**3.88**	**1.19**

b) Domestic (General)		
First 100 kWh	346.04	177.16
Next 100 kWh	47.89	30.98
Balance>200 kWh	23.44	17.03
Sub Total (b)	**417.37**	**225.17**
Total of all Domestic (a+b)	421.26	**226.37**
Commercial		
First 100 kWh	30.82	20.95
Next 100 kWh	7.38	5.73
Balance>200 kWh	22.98	21.08
Total of Commercial LT (II)	**61.18**	**47.76**
Public Lighting - LT	3.96	2.86
Public Water Supply-LT	1.37	1.03
Agri & Irrigation-LT	1.25	0.51
Small Industry-LT	21.49	10.28
Sub Total under LT (III) Others	**28.07**	**14.68**
H.T Supply		
Commercial-HT	20.55	19.06
Public Water Supply-HT	22.15	17.07
Agri & Irrigation-HT	0.81	0.38
Medium Industry-HT	4.36	3.12
Large Industry-HT	8.12	6.52
Bulk Supply-HT	85.41	56.47
Sub Total Others HT (IV)	**141.40**	**102.62**
Grand Total (I+II+III+IV)	**651.91**	**391.43**

Apart from the revenue from sales to the consumers, MSPDCL received revenue from outside state sale of surplus power. The revenue from sale of surplus power FY 2020-21 is as follows:

Table 7.17: Revenue from surplus energy sale projection FY 2020-21 by MSPDCL

(Rs. Crore)

Item	Approved for 2020-21	Proposed for 2020-21
Sale of Surplus Power (MU)	351.20	172.64
Average Tariff for Sale of Surplus Power	NA	3.80
Revenue from sale of surplus power (Rs. Crs)	NA	65.60
Sales Revenue existing tariff (LT &HT) (Rs Crs)	NA	391.43
Total Revenue from Sales (Rs Crore)	**NA**	**457.03**

Further, the revenue from sale of surplus power is estimated as Rs. 65.60 Crore for FY 2020-21. Accordingly, MSPDCL requests the Hon'ble Commission to approve the total revenue of **Rs 457.03 Crore** for FY 2020-21.

Commission's Analysis

Revenue Gap for FY 2020-21 with existing tariff

Table 7.18: Revenue Gap approved by the Commission for FY 2020-21

Particulars	Unit	Projected by MSPDCL	Approved by Commission
Revenue requirement	Rs. Crs	800.22	605.76
Revenue from existing tariff	Rs. Crs	391.43	391.43
Sale of surplus power	Rs. Crs	65.60	14.32
Total revenue from sale of energy	Rs. Crs	457.03	405.75
Revenue gap	**Rs. Crs**	**343.19**	**200.01**
Energy sales	MU	651.91	651.91
Surplus power to be sold	MU	172.64	37.69
Total Sales	**MU**	**824.55**	**689.60**

7.17 Revenue Gap

The Revenue Gap proposed by MSPDCL for FY 2020-21 is shown in the Table below:

Table 7.19: Revenue Gap for FY 2020-21 by MSPDCL (Rs. Crore)

Sl. No	Particulars	FY 2020-21
1	Net ARR	800.22
2	Total Revenue	457.03
3	State Government Revenue Subsidy	216.00
4	**Unmet Revenue Gap**	**127.19**

For FY2020-21, the unmet revenue Gap is estimated at Rs. 127.19 Crore at existing tariffs with Government subsidy support of Rs. 216.00 Crore. Apart from the proposed State Govt. subsidy of Rs. 216.00 Cr, MSPDCL will be receiving the subsidy for onward submission to MSPCL towards their employee cost from Govt of Manipur.

Commission Analysis:

The Revenue Gap as per the Commission for FY 2020-21 is shown in the Table below:

Table 7.20: Revenue Gap for FY 2020-21 by the Commission (Rs. Crore)

Sl. No	Particulars	FY 2020-21
1	Net ARR	605.76
2	Revenue from existing tariff	391.43
3	Revenue from sale of surplus power	14.32
4	Total expected Revenue (2+3)	405.75
5	State Government Revenue Subsidy proposed	172.48
6	**Unmet Revenue Gap (1-4-5)**	**27.53**

With the hike in the existing Tariff of FY2019-20 which is made at a reasonable level in the normal course on considering the inflationary rate prevailing, the need for the subsidy from the State Government of Manipur would come down depending upon the additional amount of tariff yield expected. However, the Licensee has made certain proposal for enhancement in each category of the tariff and those details are extracted from their filing is provided in the in the relevant chapter-8.

7.18 MSPDCL proposal for Tariff Hike to recover the Gap of FY 2020-21.

Thus, MSPDCL has estimated that it will face a Revenue Gap of Rs. 343.19 Cr in FY 2020-21 for the proposed ARR with recovery as per existing tariff.

The projected Average Cost of Supply and Average realization from sale of power for FY 2020-21 by the MSPDCL is as shown in the Table Below:

Table 7.21: Avg. Cost of Supply and Avg. revenue realisation for FY 2020-21 by the MSPDCL (Rs. Crore)

Sl.No.	Particulars	Units	FY 2020-21
1	Net Revenue Requirement	Rs. Crs	800.22
2	Revenue from existing tariff	Rs. Crs	391.43
3	Revenue from sale of surplus power	Rs. Crs	65.60
4	Total Revenue - (2+3)	Rs. Crs	457.03
5	**Revenue Gap (1-4)**	**Rs. Crs**	**343.19**
6	Energy Sales	MU	651.91
7	Surplus Power sales	MU	172.64
8	**Total Sales (6+7)**	MU	**824.54**
9	Average Cost of Supply - [(1-3)*10]/6	Rs/kWh	11.27
10	Avg Revenue from Retail Sale - (2*10)/6	Rs/kWh	6.00
11	Avg Rate for Surplus power Sale - (3*10)/7	Rs/kWh	3.80
12	Avg Rate from all energy Sale - (4*10)/8	Rs/kWh	5.54
13	Avg rate for Unmet Revenue Gap (5*10)/8	Rs/kWh	4.16
14	Government subsidy proposed	Rs.Crs	216.00
15	**Unmet Revenue Gap (5-14)**	**Rs.Crs**	**127.19**

Commission Analysis:

The projected Average Cost of Supply and Average realization from sale of power for FY 2020-21 as per the Commission is as shown in the Table Below:

Table 7.22: Avg.Cost of Supply and Avg. revenue realisation at existing tariff for FY 2020-21 by Commission (Rs. Crore)

Sl.No.	Particulars	Units	FY 2020-21
1	Net Revenue Requirement	Rs. Crs	605.76
2	Revenue from existing tariff	Rs. Crs	391.43
3	Revenue from sale of surplus power	Rs. Crs	14.32

4	Total Revenue - (2+3)	Rs. Crs	405.75
5	**Revenue Gap (1-4)**	**Rs. Crs**	**200.01**
6	Energy Sales	MU	651.91
7	Surplus Power sales	MU	37.69
8	**Total Sales (6+7)**	**MU**	**689.60**
9	Average Cost of Supply [(1-3)*10]/6	Rs/kWh	9.07
10	Avg rate from Retail Sales (2*10)/6	Rs/kWh	6.00
11	Avg Sale Rate for Surplus power (3*10)/7	Rs/kWh	3.80
12	Avg Rate from all energy Sale (4*10)/8	Rs/kWh	5.88
13	Avg rate from Revenue Gap (5*10)/8	Rs/kWh	3.07
14	Government subsidy proposed	Rs.Crs	172.48
15	**Unmet Revenue Gap (5-14)**	**Rs.Crs**	**27.53**

7.19 Recovery of Revenue Gap for FY 2020-21 as proposed by MSPDCL

Petitioner's Submission

Further, the Hon'ble Commission will appreciate that MSPDCL's own contribution to its ARR is only Rs. 149.17 crore, after excluding cost of power purchase and transmission charges, which are payable to other agencies based on regulated tariffs, and are hence, uncontrollable for MSPDCL. Thus, MSPDCL's contribution is only 19.23% of the proposed ARR of Rs. 800.63 crore, which works out to Rs. 1.81 per kWh, considering the total energy handled by MSPDCL.

Thus, it needs to be appreciated that the estimated Revenue Gap of Rs. 343.60 crore is lower than the Revenue from sale of power at existing tariff, i.e., Rs. 391.34 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 87.78%, which is very high and would amount to a 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 2020-21 to the extent of Rs. 216.00 crore, in addition to any Grants for creation of capital assets. <u>The balance Revenue Gap of Rs. 127.19 crore would thus, have to be recovered from the consumers through an average tariff hike of 32.58%, as shown in the Table below:</u>

Table: 7.23 - Average Tariff Increase proposed by MSPDCL for FY2020-21

Sl.	Particulars	Units	FY 2020-21

1	Net ARR	Rs.Crs	800.22
2	Revenue from Existing Tariff	Rs.Crs	391.34
3	Sale of Surplus Power	Rs.Crs	65.60
4	Total Sales Proceeds	Rs.Crs	457.03
5	Revenue Gap	Rs.Crs	343.19
6	State Government Revenue Subsidy	Rs.Crs	216.00
7	**Net Un-met GAP**	**Rs.Crs**	**127.19**
8	Revenue from sale of power at proposed tariff	Rs.Crs	518.97
9	**Average Tariff hike required = (7/2) x100**	**%**	**32.58%**

Table: 7.24 -Average Tariff Increase Approved by Commission for FY2020-21

Sl.No	Particular for FY 2020-21	Units	Existing	Approved
1	Net ARR	Rs.Crs	605.76	605.76
2	**Revenue from Tariff approved**	**Rs.Crs**	**391.34**	**418.96**
3	Sale of Surplus Power	Rs.Crs	14.32	14.32
4	Total Sales Proceeds	Rs.Crs	405.75	433.28
5	**Revenue Gap**	Rs.Crs	**200.01**	172.48
6	State Government Revenue Subsidy	Rs.Crs	172.48	172.48
7	Net Un-met GAP	Rs.Crs	27.53	0
8	Revenue from sale at proposed tariff - (2+7)	Rs.Crs	418.96	418.96
9	**Average Tariff hike required = (7/2) x100**	**%**	**7.03%**	**0**

7.20 Revenue with Approved Tariff of FY 2020-21

Table 7.25: Revenue from approved Tariff of FY 2020-21

Sl. No	Category	Energy Sales (MU)	CPU (Rs/kWh)	Revenue (Rs. Crore)
A	**LT Supply**			
1	Kutir Jyoti	3.88	3.23	1.254
2	Domestic	417.37	5.46	228.69
3	Commercial	61.18	7.92	48.422
4	Public Lighting	3.96	8.72	3.455
5	Public Water Works	1.37	8.99	1.231
6	Agriculture	1.25	4.38	0.547
7	Small Industries	21.49	5.08	10.926
8	**Total LT**	**510.50**	5.77	**294.526**
B	**HT Supply**			
9	Commercial	20.55	10.86	22.316
10	Public Water Works	22.15	10.28	22.778
11	Agriculture	0.81	6.09	0.493
12	Medium Industries	4.36	8.39	3.658
13	Large Industries	8.12	9.48	7.695
14	Bulk Supply	85.41	7.90	67.497
15	**Total HT**	**141.40**	**8.80**	**124.44**

Sl. No	Category	Energy Sales (MU)	CPU (Rs/kWh)	Revenue (Rs. Crore)
16	**Grand Total (LT+HT)**	**651.91**	**6.43**	**418.963**
17	UI Sales	37.69	3.80	14.32
18	**Total Sales**	**686.52**	**6.31**	**433.28**

Note: Detailed calculation is shown in Annexure - IV

As seen from Table 7.24 supra there is a revenue gap of 200.01 Crore which is about 4.65% of Net ARR approved for FY 2020-21 after Outside state sale revenue. The existing tariffs are effective from 01.04.2019. As such, the Commission considers it imperative to revise the tariffs by an average increase of 7.03% over existing revenue amount under telescopic billing as against 32.58% proposed by MSPDCL without giving tariff shock to consumers and to bridge the noted gap of Rs.27.53 Crs. Owing to revision of tariffs the MSPDCL is expected to get additional revenue of Rs.27.53 Crore (i.e Rs. Twenty-seven crores five-three lakhs only), thereby the revenue gap has decreased to Rs.172.48 Crore from Rs.216 Crs proposed and the MSPDCL shall meet it from Government subsidy besides **improving internal efficiency by collecting long pending dues to the tune of Rs.40 Crs which is being 10% of the total outstanding dues accumulated over years and still uncollected.**

7.21 Government Subsidy/ Support

The MSPDCL proposed budgetary support of Rs. 216 Crore for FY 2020-21 from Government of Manipur. As seen from the above it is clear that the revenue from sale of power is not sufficient to meet the expenditure of MSPDCL. As a result of this the MSPDCL shall continue to depend upon the subsidy/ support from Government of Manipur. The net revenue gap of Rs.343.19 Crore arrived in **Para 7.23** supra shall be met from Government subsidy/support of Rs.216 Crores proposed by MSPDCL.

To achieve the objective of year on year tariffs progressively reflects the cost of electricity supply, the grant of subsidy shall have to be reduced every year in decrementing fashion and ultimately make the power utility to manage without Government subsidy support. Keeping this in view, the Commission consciously considers the overall subsidy requirement to the extent of **Rs.172.48 crore (Rupees One hundred and seventy two crores and forty-eight lakhs only)** for FY 2020-21 upon suitably revising the prevailing tariffs of FY 2019-20 at an average rate of increase at 7.04% (seven point zero four percent) over the existing tariff revenue yield and at the same time the overall recovery of additional revenue over net ARR is 4.54% only in order not to cause much burden to the consumers.

The Section 65 of the Electricity Act 2003 mandates that the State Government shall release subsidy amount due to the licensee in advance so as to enable the licensee to implement the subsidized tariffs to their consumers as per Revised Subsidized Tariff schedule at **Table-7.25** & detailed calculation is at **Annexure-III**. The State Government should release the above stated subsidy amount in Twelve (12) equal monthly installment amounting to **Rs.14.37 (Rupees fourteen crore and thirty-seven lakhs only)** per month. Besides, the amount of Rs.40 crores shall be met by MSPDCL through internal efficiency improvement. However, in the event of non-receipt of subsidy in any month from the Government, the licensee can adopt the applicable **Full Cost Tariff (FCT**) at **Table-8.3**, while issuing the monthly energy bill for that month (detail revenue calculation is placed at **Annexure-IV).** A brief summary of revenue amount of Rs.591.44Crs being Full Cost Tariff amount from sale of Retail sales & Outsides sale of Rs.14.32 crs are tabulated below for reference.

Table: 7.26. Revenue details of MSPDCL at Full Cost Tariff for FY 2020-21

Sl. No.	Category	Energy Sales (MU)	Average Rate (Rs/kWh)	Revenue (Rs.Crs)
A	**LT Supply**			
1	Kutir Jyoti	3.88	**7.32**	2.84
2	Domestic	417.37	**8.27**	345.31
3	Commercial	61.18	**10.85**	66.35
4	Public Lighting	3.96	**10.18**	4.03
5	Public Water Works	1.37	**10.04**	1.38
6	Agriculture	1.25	**8.98**	1.12
7	Small Industries	21.49	**8.48**	18.23
8	**Total Low Tension**	**510.50**	**8.60**	**439.26**
B	**HT Supply**			
9	Commercial	20.55	**10.80**	22.20
10	Public Water Works	22.15	**10.28**	23.52
11	Agriculture	0.81	**10.03**	0.81
12	Medium Industries	4.36	**10.78**	4.70
13	Large Industries	8.12	**10.81**	8.78
14	Bulk Supply	85.41	**10.79**	92.17
15	**Total High Tension**	**141.40**	**10.76**	**152.18**

16	**Grand Total (LT+HT)**	**651.91**	**9.07**	**591.44**
17	UI Sales	37.69	3.80	14.32
18	**Total Sales**	**689.60**	**8.58**	**605.76**

There can be a situation where the outstanding subsidy was released by the government after passage of much time and thereby if consumers were billed at full cost tariffs (FCT) in any relevant month or months. 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 consumers soon after receiving such subsidy pertaining to the past. If the rebate amount is exceeding the monthly bill amount to be adjusted, then such excess amount may have to be carried forward and be adjusted in the following monthly bills to be issued to the consumer until full settlement is made.

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

Table 7.27: Details of Average Cost of supply - Projected Vs. Approved

Sl. No	Particulars	Units	MSPDCL Projected	Commission Approved
1	Net overall ARR	Rs. Cr	800.22	605.76
2	Sale of surplus power	Rs. Cr	65.60	14.32
3	Net ARR within the state (1-2)	Rs. Cr	734.62	591.44
4	Govt. subsidy/ Support	Rs. Cr	216.00	172.48
5	Net ARR after Govt. subsidy (3-4)	Rs. Cr	518.62	418.96
	a) Revenue from existing Tariff	Rs.Cr	391.43	391.43
	b) Additional revenue from Hike	Rs.Cr	127.19	27.53
6	Energy sale within the state	MU	651.91	651.91
7	**Average cost of supply (3/6)**	Rs/KWH	**11.27**	**9.07**
8	Avg. Revn. realisation (If subsidy paid)- (5/6)	Rs/KWH	7.96	6.43
9	**Avg. Subsidy per unit - (7-8)**	Rs/kWh	**3.31**	**2.64**

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 32.58%

Table 8.10: Existing and Proposed Tariff for FY 2020-21 by MSPDCL

Sl. No.	Category	Existing Tariff (2019-20)		Proposed Tariff (2020-21)	
		Fixed Charges	Energy Charges	Fixed Charges	Energy Charges
	LT Supply	(Rs./kW/PM)	Rs/kWh/PM	(Rs./kW/pm)	Rs/kWh/PM
1	**Kutir Jyothi**				
i	All units (15 kWh/month)	25 (Connection)	1.85	25 (Connection)	3.00
2	Domestic				
i	0-100 kWh/month	60	3.90	60	5.90
ii	101-200 kWh/month	60	5.20	60	7.20
iii	Above 200 kWh/month	60	6.00	60	7.90
3	**Commercial**				
i	1-100 kWh/month	80	5.40	80	7.70
ii	101-200 kWh/month	80	6.50	80	8.20
iii	Above 200 kWh/month	80	7.65	80	8.80
4	**Public Lighting System**	65	7.00	65	8.50
5	**Public Water works**	100	7.25	100	8.70
6	**Irrigation & Agriculture**	60	3.90	60	5.90
7	**Small Industry**	65	4.10	65	6.60
	HT Supply	**Rs/kVA/mth**	**Rs/kWh**	**Rs/kVA/mth**	**Rs/kWh**
8	Commercial	100	7.60	100	8.90
9	Public Water works	100	6.75	100	8.40
10	Irrigation & Agriculture	100	3.60	100	5.50
11	Medium Industry	100	5.30	100	6.80
12	Large Industry	100	6.60	100	8.30
13	Bulk Supply	100	5.90	100	8.00

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 2019-20 also.**

c) Revised Tariff approved for FY 2020-21 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. 418.96 Crore vide Para 7.26 supra the Commission considers to revise the tariffs under Telescopic billing/with an average increase by 7.04%, as against 32.58% projected by MSPDCL detailed in table below.

The Commission has not agreed to increase the fixed charges proposed by MSPDCL

Table 8.10: Category wise subsidised Tariffs Approved by the Commission for FY 2020-21

Sl. No	Category & Consumption Slab	Fixed Charges (Rs./Per month)	Variable Charges (Rs./kWh or kVAh)
	LT SUPPLY		
1	**Kutir Jyoti**		
	All units (Upto 45 kWh/ 3 Months)	25/Connection	2.00
2	**Domestic**		
	(i) First - 100 kWh/Month	60/kW	4.20
	(ii) Next 100 kWh/Month	60/kW	5.50
	(iiI) Above 200 kWh/Month	60/kW	6.40
3	**Non-Domestic/Commercial**		
	(i) First - 100 kWh/Month	80/kW	5.85
	(ii) Next 100 kWh/Month	80/kW	6.90
	(iii) Above 200 kWh/Month	80/kW	7.45
4	Public Lighting	65/kW	8.50
5	Public Water Works	100/kW	8.70
6	Irrigation & Agriculture	60/kW	4.20
7	Small Industry	65/kW	4.40
	HT SUPPLY		
8	Commercial	100/kVA	8.10
9	Public Water Works	100/kVA	8.30
10	Irrigation & Agriculture	100/kVA	4.40
11	Medium Industry	100/kVA	5.70
12	Large Industry	100/kVA	7.10
13	Bulk Supply	100/kVA	6.40

Note: The above table depicts fixed and energy charge only. Detailed Charges are given in the tariff schedule Appended.

d) Approved Full Cost Tariff

With the approved ARR for FY 2020-21, the Commission also works out the average revenue realisation is at Rs.6.43/kWh. In the event of non-receipt of subsidy in advance in any month from the State Government, the Commission considers to make full cost tariff for charging the consumer is tabulated below:

Table 8.3: Category wise full cost Tariff (i.e., Without Subsidy) approved by the Commission for FY 2020-21

Sl. No	Category & Consumption Slab	Fixed Charges (Rs./Per month)	Variable Charges (Rs./kWh or kVAh)
	Low Tension Supply		
1	**Kutir Jyoti**		
	All units (Upto 45 kWh/ 3 Months)	25/Connection	6.85
2	**Domestic**		
	a) First - 100 kWh/Month	60/kW	7.00
	b) Next 100 kWh/Month	60/kW	8.20
	c) Above 200 kWh/Month	60/kW	8.55
3	**Non-Domestic/Commercial**		
	a) First - 100 kWh/Month	80/kW	9.10
	b) Next 100 kWh/Month	80/kW	9.70
	c) Above 200 kWh/Month	80/kW	9.85
4	Public Lighting	65/kW	9.95
5	Public Water Works	100/kW	9.75
6	Irrigation & Agriculture	60/kW	8.80
7	Small Industry	65/kW	7.80
	High Tension Supply		
1	Commercial	100/kVA	8.05
2	Public Water Works	100/kVA	8.60
3	Irrigation & Agriculture	100/kVA	7.95
4	Medium Industry	100/kVA	7.85
5	Large Industry	100/kVA	8.30
6	Bulk Supply	100/kVA	9.00

*** **Fixed charge is per kW of contracted load for LT supply except kJ and 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 LT high value services provided with MDI meters.**

Note: The above table depicts fixed and energy charge only. However, Tariff Charges in detail are given in the Tariff Schedule Appended.

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. Yet the MSPDCL releasing new connections without meters which is very serious deviation. In next tariff order no unmetered tariff will be allowed.

Wheeling Charges for FY 2020-21

9.1 Background

MSPDCL has proposed wheeling charges at 1.09/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 9.11 Allocation matrix

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

9.2 ARR for wheeling business projected by MSPDCL

Table 9.11: ARR for Wires Business for FY 2020-21 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	490.73	0%	100%	0	490.73
2	Inter-State Transmission Charges	61.53	0%	100%	0	61.53
3	Intra-State Transmission charges	91.34	0%	100%	0	91.34
4	NERLDC & SLDC Charges	7.86	0%	100%	0	7.86
5	**O&M Expenses**	**136.25**			**84.70**	**51.55**
	Employee Expenses	113.48	60%	40%	68.09	45.39
	Repair & Maintenance expn.	13.07	90%	10%	11.76	1.31
	Administrative & General Expn	9.71	50%	50%	4.85	4.85
6	Depreciation	2.93	90%	10%	2.64	0.29
7	Interest on Loan	6.14	90%	10%	5.53	0.61
8	Interest on Working Capital	5.25	10%	90%	0.53	4.73
9	Provision for bad debts	3.00	0%	100%	0.00	3.00
	Sub Total- A	**805.03**			**93.39**	**711.64**
B	Add: Return on Equity	1.95	90%	10%	1.76	0.20

Sl. No.	Particulars	Total ARR	Wires Business	Retail Supply business	Wires ARR	Supply ARR
	Add: Income Tax	0.00	90%	10%	0.00	0.00
	Sub Total - B	**1.95**			**1.76**	**0.20**
C	**C: Total Gross ARR: (A+B)**	**806.98**			**95.14**	**711.84**
D	Less: Non-Tariff Income	6.76	10%	90%	0.68	6.08
	Sub-total - D	**6.76**			**0.68**	**6.08**
	Net Aggregate Revenue Requirement (C-D)	**800.22**			**94.47**	**705.75**

The proposed Wheeling Charges for FY 2020-21 have been computed based on the methodology adopted by the Hon'ble Commission for determining the Wheeling Charges for FY 2018-19 in the MYT Order dated March 12, 2018, as shown in the Table below:

Table 9.11: ARR for Wires Business for FY 2020-21 projected by MSPDCL

Sl.	Particulars	Units	Amount
1	ARR for Wires Business	Rs. Crore	94.47
2	Energy available at Distribution periphery	MU	863.45
3	**Wheeling Charges**	**Rs/kWh**	**1.09**

Thus, MSPDCL proposes Wheeling Charges of Rs. 1.09 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 9.11: ARR of wheeling business approved by the Commission for FY 2020-21

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	376.505	0%	100%	0	376.51
2	Inter-State Transmission Charges	61.53	0%	100%	0	61.53
3	Intra-State Transmission charges	77.01	0%	100%	0	77.01
4	NERLDC & SLDC Charges	7.86	0%	100%	0	7.86
5	**O&M Expenses**	**122.47**			**76.43**	**46.04**
	Employee Expenses	99.69	60%	40%	59.81	39.88
	Repair & Maintenance expn.	13.07	90%	10%	11.76	1.31
	Administrative & General Expn	9.71	50%	50%	4.85	4.85
6	Depreciation	1.84	90%	10%	1.66	0.18

Sl. No.	Particulars	Total ARR	Wires Business	Retail Supply business	Wires ARR	Supply ARR
7	Interest on Loan	4.24	90%	10%	3.82	0.42
8	Interest on Working Capital	0	10%	90%	0.00	0.00
9	Provision for bad debts	0.00	0%	100%	0.00	0.00
	Sub Total- A	**651.46**			**81.90**	**569.56**
B	Add: Return on Equity	1.56	90%	10%	1.40	0.16
	Add: Income Tax	0.00	90%	10%	0.00	0.00
	Sub Total - B	**1.56**			**1.40**	**0.16**
C	**C: Total Gross ARR: (A+B)**	**653.02**			**83.30**	**569.72**
D	Less: Non-Tariff Income	7.25	10%	90%	0.73	6.53
	Sub-total - D	**7.25**			**0.73**	**6.53**
	Net Aggregate Revenue Requirement (C-D)	**645.77**			**82.57**	**563.19**

9.3 Wheeling Tariff

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

Table 9.11: Wheeling Tariff approved by the Commission for FY 2020-21

Sl. No.	Particulars	Unit	Amount
1	ARR for wheeling function	Rs/Crore	82.57
2	Energy available at Distribution periphery	MU	863.46
3	Wheeling tariff	Rs/kWh	0.956

The Commission approves wheeling charge at Rs. 0.96/kWh for FY 2020-21 as against Rs.1.09 projected by MSPDCL.

9. Directives

10.1 General

While examining the information and data contained in the Tariff Petition for FY 2020-21, 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 2020-21. 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 is in the process of finalizing the financial statements of FY 2015-16, FY 2016-17, FY 2017-18 and FY 2018-19 and will submit the same to the Hon'ble Commission once it is finalized.

Comment of the Commission

MSPDCL should explain the reason/difficulty why annual accounts cannot be audited. For such a long period. This directive is treated as not complied

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 FY 2015-16, FY 2016-17, FY 2017- 18 are ready for submission. The same shall be submitted at the earliest possible.

Commission's Comments

Why the registers are still pending for submission to Commission, if they are ready. The same may be explained and it should be submitted by May 2020.

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 date of operation full of the system may be reported by May 2020.

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
As on 31.03.2014	425.72 Cr
As on 31.03.2015	437.43 Cr
As on 31.03.2016	446.48 Cr
As on 31.03.2017	470.59 Cr
AS on 31.03.2018	495.66 Cr

Commission's Comments

The MSPDCL installed pre-paid meters with post-paid meters in some areas. The Outstanding arrears are in increasing trend, which is cause of concern. The MSPDCL shall launch stringent revenue collection drive. In the FY 2020-21 net ARR is deduce after adopting an amount of Rs.40Crs of Internal improvement efficiency gain component, which the MSPDCL shall endeavour to collect the same amount during the FY 2020-21 for financial improvement of the organisation and report the amount collected for each quarter of 2020-21 to the Commission in the next 15 days of the completion of each such quarter.

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 FY2017-18 and 16.57 MU in 2018-19. Under UI mechanism the company has sold 39.64 MU of surplus energy available in 2018-19. Further, sale of surplus power on IEX has been reduced from 207.74 MU in FY 2017-18 to 130 MU in 2018-19.

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 state's 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 bank energy is used. MSPDCL has planned to slowly reduce the surplus sales to IEX.

Commission's Comments

The average power purchase cost is Rs.6.1685/kWh during FY 2018-19. While the Outside State Sales units of 139.69MU were sold at 4.2186/kWh and thereby causing loss of Rs.1.9503/kWh per units sold during the year which amounts to Rs.27.24 Crs of avoidable loss but sustained due to improper planning. As the above sold units also included the banked energy drawn, the purpose of banked energy is also vitiated altogether. This kind of loss-making transactions will no longer be considered for true-up in future.

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 by the end of FY 2020-21. Physical verification drive shall be conducted in the FY 2020-21. 100% physical verification shall be completed by 2021-22.

Commission's Comments

All unauthorized connections should be identified and regularized with penalties as per Supply Code provisions. A vigorous drive should be pursued in this manner.

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

It seems that no action is taken up in this matter so far. A report should be submitted by MSPDCL.

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 at the earliest possible.

Commission's Comments

A detailed up to date report as directed be submitted by May 2020.

Directive 14: Interest on Security Deposit

MSPDCL was directed to furnish up to-date position of interest on security deposit as per Regulation 6.10(5) of JERC (Supply Code) Regulations 2010. The above rule may be followed scrupulously.

The licensee shall intimate the amount of Security deposit amount being received every year to the Commission. Besides, this amount shall be taken into the tariff submissions while arriving at interest on working capital amount as per the provisions of the MYT Regulation 2014 as it is noticed that Licensee is not indicating this amount in their ARR calculations.

Compliances

The security deposits of pre-paid consumers who have been converted to post- paid have already been paid. However, for the post-paid consumers the security deposit is collected by MSPDCL. The interest earned on security deposit is considered in the ARR filing for FY 2020-21. The summary of security deposit is as follows:

Particulars	Amount (Rs Cr)
Opening balance as on 01.04.2018	14.066
SD received during 2018-19	0.749
Opening balance as on 01.04.2019	14.815
SD received during 2019-20 till Sept 2019	0.408
Balance as on 30.09.19	15.223

Commission's Comments

The directive is complied with and hence dropped.

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 from 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 by May 2020.

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.

Commission's Comments

Details of High Value consumers with MDI may be submitted by July 2020.

Directive 18:

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

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

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

Compliance Report:

In this regard it is submitted that MSPDCL is not allotting any new connection without installation 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 in FY 2020-21 and the 100% LT metering by 2021-22.

Commission's Comments

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

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.

Commission's Comments

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.

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 HT cell of MSPDCL is undertaking the necessary steps towards installation of the program and it is expected to complete it in FY 2020-21.

Commission's Comments

MSPDCL is taking a long time in this matter and the IT Cell should complete this within 6 (six) months' time to reap its benefits.

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 shall be completed in FY 2020-21.

Commission's Comments

The details of 11kV feeders, where the meters are installed may be reported along with monthly energy transmitted through the feeder for any consecutive period of 3 (three) months may be submitted by June 2020.

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 FY 2015-16, FY 2016-17, FY 2017-18 and FY 2018-19 are being prepared and will be made available soon. After finalization of audited accounts MSPDCL will submit the same for final true-up.

Commission's Comments

Audited -Annual Accounts for FY 2016-17 to FY 2017-18 along with true-up petition is pending. MSPDCL is directed to submit the same soon.

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 tariff petition for FY 2020-21 shows it is irregularly prepared and don't capture all the prescribed information stipulated in the proformas prescribed in Regulations. The required formats as envisaged in JERC for M&M (MYT) Regulation are not submitted. In full shape and the softcopy files were not made available, instead only the PDF file format is given. In future all the formats are to be given to the

Commission the original files in soft form along with built in formulas for commission analysis without fail. The MSPDCL is advised to be careful in future so that this irregularity don't recur.

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 trivector/MDI meters for such connections without fail.

Compliance status

No reply is given in the ARR petition submission for this directive.

Commission's Comments:

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

Directive 26: Accounting of non-tariff income As per Form No.11 of JERC (M&M) (MYT) regulations, 2014, non-tariff income comprises:

	Particulars
A	**Income from Investments, Fixed and Call Deposit**
1	Interest Income from Investments other Contingency Reserves
2	Interest on Fixed Deposits
3	Interest from banks other than Fixed Deposits
4	Interest on (any Other items)
	Sub-total
B	Other Non Tariff Income
1	Interest on loan and advances to staff
2	Interest on loans and Advances to other licensees.
3	Interest on loan and advances to lessors.
4	Interest on Loans and advances to Suppliers/Contractors
5	Gain on sale Fixed Assets
6	Income/Fee/Collection against staff welfare activities
7	Miscellaneous receipts
8	Meter Rent
9	Recovery from theft of energy.
10	Surcharge and Additional Surcharge.

	Particulars
11	Incentive due to Securitisation of CPSU Dues.
12	Misc. charges from consumers.
13	Delayed payment surcharge from consumers.
14	Any other subsidies/ grants other than u/s 65
15	Commission on collection of Electricity Duty for MCD
	Sub-Total
Total (A+B)	

MSPDCL is directed to account for the income relating to above heads in the respective heads and furnish the information in the format without omissions from next ARR.

Compliances:

MSPDCL has segregated the Non-Tariff income component as per the directive of the Hon'ble Commission and it has submitted the details accordingly in Provisional True-up Petition for FY 2018-19.

Commission's Comments

The Directive has been complied with and hence it is dropped.

Directive 27

MSPDCL is directed to fill up judiciously all Forms relevant to MYT Regulations viz. Appendix C,D and also submit year wise slab wise consumers, slab wise energy consumed and category wise total contracted load while submitting Tariff Petition for control period FY 2018-19 to 2022-23 to avoid additional information queries after submission of petition.

Compliances:

MSPDCL has filed up all the forms relevant to MYT Regulations along with year wise, slab wise consumers, slab wise energy consumed. MSPDCL has furnished all the data available as per the Directive along with the MYT Petition. The APR for FY 2019-20 and ARR for 2020-21 has been prepared and submitted in the present petition.

Commission's Comments

The Directive has been complied with and hence it is dropped.

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.

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 wise 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 detailed report is to be submitted by June 2020. The recurring charges for the installed systems can be included in the ARR.

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

Latest Status report may be submitted by May 2020.

Directive 33

MSPDCL was directed to submit reliable average slab-wise monthly energy consumption per consumer and number of consumer in each slab during the FY 2017-18 (Actual), FY 2018-19 (Revised Estimate based on last 6 months) and FY 2019-20 (Projection) along with the Petition for determination of ARR & Tariff for FY 2019-20 positively in respect of Kutir Jyoti, Domestic and Non-Domestic/Commercial under LT Categories. The Hon'ble Commission also directed to take necessary action immediately to make available the requisite data at the time of the Petition mentioned above.

The Licensee shall sincerely submit the above data with full details in the future submissions. In the FY 2019-20, due to the data inadequacy, Commission had to make lots of assumptions in estimating the consumer related data and the quantum of consumption and the contracted loads in the process of tariff design for the FY 2019-20.

Compliances:

MSPDCL has submitted the slab-wise consumption for Domestic and Commercial / non-Domestic categories for FY 2020-21 in the ARR Petition.

Commission's Comments:

The Directive has been complied with and dropped.

New Directives

Directive 34: Reduction of consumption slabs in Domestic and Commercial Categories of consumers:

The Licensee shall reduce the number of consumption slabs in the following categories in the next year tariff filing proposals:

(a) LT domestic from three slabs to two slabs.

(b) LT Commercial from three slabs to two slabs.

Compliance of Directives:

There are only three existing tariff slabs for LT domestic/LT commercial category. It aptly captures the sales and the consumer details of all the LT domestic/commercial consumers. Further reduction of tariff slabs may not facilitate the utility to envisage the slab wise consumption for future projections. Moreover, most state DISCOM in the country has minimum three tariff slabs in LT domestic/commercial category and followed telescopic tariff, like MSPDCL. Therefore, we humbly request the Hon'ble Commission to allow us to continue with three tariff slab of LT domestic/commercial category.

Commission Comments:

The request of MSPDCL is allowed and this directive is dropped.

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

Commissions Comments:

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

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

Commission's Comments

This Information should be submitted by April 2020.

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

Commission's Comments

The latest status should be submitted by May 2020.

<u>Fresh Directives in FY 2020-21 based on ARR Submission</u>

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."

i. **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.

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.

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.

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.

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***.

10. Fuel and Power Purchase Cost Adjustment

11.1 Background

Section 62 sub-section 4 of the Electricity Act, 2003 provides that no tariff or part of any tariff may ordinarily be amended, more frequently than once in every financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified. This provision of the Act requires the Commission to specify the formula for fuel surcharge.

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:

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

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 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).

1.5 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.

1.6 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.

1.7 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.

1.8 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:

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 paya surcharge in addition to his normal tariff, at the following rate:

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 :

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

1.9 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 :

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

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.

* *Note:- In case of un-metered supply, consumed energy computed as per clause 5(1) of this tariff schedule shall be taken as recorded energy consumption.*

1.10 Rounding of Contracted Load/billing demand: For the purpose of calculation of fixed/ demand charge in the monthly billing, the contracted load/billing demand shall be taken on actual basis (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. 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 as per clause 1.10 of this tariff schedule and load below 0.5 kW is rounded to 0.5 kW as per clause 1.9 of this tariff schedule.*

1.11 Rounding of Rupees: Each components of bill, such as energy charge, fixed/demand charge, meter rent, surcharge, rebate of any kind, etc, including interest, involving fraction of a rupee should be 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.

1.12 Mixed 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.

1.13 System of supply:

1.13.1 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 **upto**50 kW.

Wherever 3-phase connection is required for load less than or equal to 8 kW,

ii) Alternating current, three phase, 400 Volts for loads above 8 kW **upto**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.

1.13.2 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**.

1.13.3 The maximum demand means the highest load measured in average kVA or kW at the point of supply of a consumer during any consecutive period of 30 (thirty) minutes during the month or the maximum demand recorded by the MDI during the month.

1.13.4 Billing demand: The billing demand shall be the maximum recorded demand or 75% of the contracted demand whichever is higher.

1.13.5 Tax or Duty

The tariff does not include any tax or duty, etc, on electrical energy that may be payable at any time in accordance with any law / State Government Rules in force. Such charges, if any, shall be payable by the consumer in addition to tariff charges.

1.13.6 Contingency:- 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 KutirJyoti 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 exceed 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 :-

1) Metered Supply:

All Unit : @ Rs.2.00 per kWh

2) Unmetered Supply:

The energy (kWh) so computed as per clause 5(1) of this tariff schedule shall be charged at the same rate for metered tariff given above to arrive at the cost of energy consumed.

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 KutirJyoti /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.60.00 per month per kW of contracted load

B) Energy charge per month: -

1) Metered Supply:

First 100 kWh	:	@ Rs.4.20 per kWh
Next 100 kWh	:	@ Rs.5.50 per kWh
>200 kWh	:	@ Rs.6.40 per kWh

2) Un-metered Supply:

The energy (kWh) so computed as clause 5(1) of this tariff schedule shall be charged at the same rate for metered tariff given above to arrive at the cost of energy consumed.

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

2.3 LT Category-3:- **Non 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.80.00 per month per kW of contracted load.

B) Energy charge per month: -

1) Metered Supply:

First 100 kWh	:	@ Rs.5.85 per kWh
Next 100 kWh	:	@Rs.6.90 per kWh
> 200 kWh	:	@ Rs.7.45 per kWh

2) Un-metered Supply:

The energy (kWh) so computed as clause 5(1) of this tariff schedule shall be charged at the same rate for metered tariff given above to arrive at the cost of energy consumed.

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.65.00 per month per kW of contracted load.

B) Energy charge per month:-

1) Metered Supply:

All units : @ Rs.8.50 per kWh

2) Unmetered Supply:

The energy (kWh) so computed as clause 5(1) of this tariff schedule shall be charged at the same rate for metered tariff given above to arrive at the cost of energy consumed.

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.100.00 per month per kW of contracted load.

B) Energy charge per month:-

1) Metered Supply:

All units : @ Rs 8.70 per kWh

2) Un-metered Supply:

The energy (kWh) so computed as per section 5(1) shall be charged at the same rate for metered tariff given above to arrive at the cost of energy consumed.

2.6 LT Category-6:- Irrigation& Agricultural

Applicability: This tariff is applicable to irrigation/pumping for Agricultural purpose only.

Tariff Rates:

A) Fixed Charge : Rs.60.00 per month per kW of contracted load.

B) Energy charge per month:-

1) Metered Supply:

All units : @ Rs.4.20 per kWh

2) Un-metered Supply:

The energy (kWh) so computed as per clause 5(1) of this tariff schedule shall be charged at the same rate for metered tariff given above to arrive at the cost of energy consumed.

2.7 LT Category-7:- Small 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.65.00 per month per kW of contracted load.

B) Energy charge per month: -

1) Metered Supply:

All units : @ Rs 4.40 per kWh

2) Un-metered Supply:

The energy (kWh) so computed as per clause 5(1) of this tariff schedule shall be charged at the same rate for metered tariff given above to arrive at the cost of energy consumed.

3. Subsidised 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 59 kVA, as per clause 3.2 of JERC for M&M (Electricity Supply Code) Regulations, 2013

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.100.00 per month per kVA of Billing Demand.

B) Energy charge per month: -

1) Metered Supply:

All units : @ Rs.8.10 per kWh

2) Un-metered Supply:

The energy (kWh) so computed as per clause 5(1) of this tariff schedule shall be charged at the same rate for metered tariff given above to arrive at the cost of energy consumed.

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.100.00 per month per kVA of Billing Demand.

B) Energy charge per month:-

1) Metered Supply:

All units : @ Rs.8.30 per kWh

2) Un-metered Supply:

The energy (kWh) so computed as per clause 5(1) of this tariff schedule shall be charged at the same rate for metered tariff given above to arrive at the cost of energy consumed.

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

Applicability: This Tariff is applicable to irrigation / pumping for agricultural purposes only.

Tariff Rates:

A) Demand Charge : Rs.100.00 per month per kVA of Billing Demand.

B) Energy charge per month:-

1) Metered Supply:

All units : @ Rs.4.40 per kWh

2) Un-metered Supply:

The energy (kWh) so computed as per clause 5(1) of this tariff schedule shall be charged at the same rate for metered tariff given above to arrive at the cost of energy consumed.

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 upto 125 kVA or Contracted Load upto 100kW.

Tariff Rates:

A) Demand Charge : Rs.100.00 per month per kVA of Billing Demand.

B) Energy charge per month:-

1) Metered Supply:

All units : @ Rs.5.70 per kWh

2) Un-metered Supply:

The energy (kWh) so computed as per clause 5(1) of this tariff schedule shall be charged at the same rate for metered tariff given above to arrive at the cost of energy consumed.

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 100.00 per month per kVA of Billing Demand.

B) Energy charge per month:-

1) Metered Supply:

All units : @ Rs 7.10 per kWh

2) Un-metered Supply:

The energy (kWh) so computed as per clause 5(1) of this tariff schedule shall be charged at the same rate for metered tariff given above to arrive at the cost of energy consumed.

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 100.00 per month per kVA of Billing Demand.

B) Energy charge per month:-

1) Metered Supply:

All units : @ Rs 6.40 per kWh

2) Un-metered Supply:

The energy (kWh) so computed as per clause 5(1) of this tariff schedule shall be charged at the same rate for metered tariff given above to arrive at the cost of **energy consumed.**

4. Full Cost Tariff (i.e., Without Subsidy) for FY 2020-21

Sl. No	Category & Consumption Slab	Fixed Charges (Rs./Per month)	Variable Charges (Rs./kWh or kVAh)
	LT SUPPLY	**Rs./PM**	**Rs./kWh/PM**
1	**Kutir Jyoti**		
	All units (Upto 45 kWh/ 3 Months)	25/Connection	6.85
2	**Domestic**		
	i. First - 100 kWh/Month	60/kW	7.00
	ii. Next 100 kWh/Month	60/kW	8.20
	(iiI) Above 200 kWh/Month	60/kW	8.55
3	**Non-Domestic/Commercial**		
	(iv) First - 100 kWh/Month	80/kW	9.10
	(v) Next 100 kWh/Month	80/kW	9.70
	(vi) Above 200 kWh/Month	80/kW	9.85
4	Public Lighting	65/kW	9.95
5	Public Water Works	100/kW	9.75
6	Irrigation & Agriculture	60/kW	8.80
7	Small Industry	65/kW	7.80
	HT SUPPLY	**(Rs./kVA/PM)**	**(Rs./kVAh/PM)**
1	Commercial	100/kVA	8.05
2	Public Water Works	100/kVA	8.60
3	Irrigation & Agriculture	100/kVA	7.95
4	Medium Industry	100/kVA	7.85
5	Large Industry	100/kVA	8.30
6	Bulk Supply	100/kVA	9.00

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, 2013with 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/Discom desired to delegated to power to various level of officers, it may be done through an executive order within the licensee/Discom**. **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. 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:

(1) This shall be applicable to consumer (inclusive of street lightings) without meter from initial connection and have not been covered under any of the metering schemes. The monthly energy consumption shall be computed as below: -

Energy Consumption = L x H X F x D

Where L = Contracted load in kW or Billing Demand in kVA, (as per clause 1.9 of this tariff schedule)

H = (a) **For consumer in general: -** Total number of hours in a month during which power is actually supplied to that consumer through that feeder / through that DT concerned, whichever is less, (after taking into account all interruptions of power feeding that) or (730 minus total hours interruptions of power feeding that consumer). where 730 is average number of hours in a month in a non-leap year. (Note:- Interruption shall mean breakdowns of

Feeders, Part of feeder, Distribution Transformer, load shedding, all types of shut downs which should be recorded and informed to concerned billing station)

(b) **For Street Lights:-**Total number of hours in a month during which power is actually supplied to street lights through that feeder / through that DT concerned.(12 Hrs per day in Gregorian calendar month or 365 hrs per month on average basis. However, number of hours where power supply is not made due to interruptions available shall be deducted.

(Note:- Interruption shall mean breakdowns of Feeders, Part of feeder, Distribution Transformer, load shedding , all types of shut downs which occurs between dawn to dusk,. which should be recorded and informed to concerned billing station)

F = Load Factor shall be as stipulated for theft cases in ANNEXURE 11.19 of the Joint Electricity Regulatory Commission for Manipur & Mizoram (Electricity Supply Code) Regulations, 2013. Which is reproduced for convenience sake:-

S. No	Particulars	Load factor
1.	Domestic (LT/HT)	40%
2.	Non-domestic/Commercial (LT/HT)	50%
3.	Industrial (LT/HT)	75%
4.	Public Water supply(LT/HT)	50%
5.	Bulk supply	50%
6.	Agriculture/Irrigation(LT/HT)	50%
7.	Street light	50%
8.	Direct theft– All categories	100%

D = Demand factor which shall be taken as (1) 100 % in case of street lighting and (2) 45 % in case of other consumption.

(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 0f the JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013.

(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. 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.

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. 500.00 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 **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.

(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.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 as under 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. However, when the cause leading to subsequent replacement is either manufacturing defect or fault of licensee then, it shall be free of cost.

7.3 Charges for testing of Meters at the request of consumers: :(Testing charge is inclusive of costs of meter re-sealing materials/equipment).

(i) For AC single phase LT energy meter: Rs.50.00per meter per testing.

(ii) For AC three phase LT energy meter, whole current: Rs.75.00per meter per testing.

(iii) For AC three phase LT energy meter, CT operated: Rs.100.00per meter per testing.

(iii) For AC three phase LT energy meter, CT operated: Rs.100.00per meter per testing.

(iv) For energy meter AC three phase, CT & PT operated: Rs.150.00per 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.

7.4 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. Should any further test or inspection is 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.

7.5 Disconnection and Reconnection

Disconnection: Disconnection of an installation in all cases will be free of charges.

Reconnection:

(i) For AC single phase LT supply: Rs. 80.00

(ii) For AC three phase LT supply : Rs.150.00

(iii) For AC HT supply : Rs .400.00

Note: - Extra material required will be chargeable.

7.6 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.

7.7 Charges for Replacement of Connection Wire, Cut-out, Fuse, etc.:

Cost of replacement after initial fixation of connection wire, cut-out, fuses, 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-:-

i) Single phase connection: Rs.400.00 per connection.

ii) LT three phase connection: Rs.600.00 per connection.

iii) HT three phase connection: Rs.900.00 per 100meters of the HT line

2. For Cut out & Fuse:-

(i) Rs 15.00 per cut out.

(ii) Rs 5.00 per fuse

7.8 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.

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.*

7.9 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.**

7.10 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.

7.11 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.

7.12 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.

7.13 **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.

7.14 **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 20TH MEETING OF THE STATE ADVISORY COMMITTEE OF MANIPUR

Venue : Conference Hall, Hotel Classic, Imphal, Manipur
Date & Time : 24th February 2020, 11:00 AM

Er. Ng Sarat Singh, Chairperson and Chairman of the committee welcomed the members and participants who attended the meeting. The list of the members and participants attending the meeting is appended. After welcoming the members and participants, the Chairman initiated agenda wise discussion as below:

The list of members and participants attending the meeting is appended.
The Chairman initiated the agenda-wise discussion as below:

Agenda No.1.Confirmation of the minutes of the 19th Meeting of SA, Manipur held on 5th March, 2019 at Annexure –'A'

After obtaining nods from the Members, the Chairman declares that the minutes of the 19th meeting as confirmed.

Agenda No.2. Action taken Report on the minutes of 19th Meeting of SAC, Manipur.

i) The up-to-date status of audit of annual accounts at least upto FY 2016-17 which has been assured to be made available in the coming Tariff Petition (vide Agenda 4 of the Minutes of the 19th SAC Meeting):-

The MSPDCL has stated that they got audited balance sheet for FY 2014-15 & FY 2015-16 from the CAG. The audited balance sheet for FY 2014-15 has been submitted to Hon'ble Commission. The Annual Financial Statement for FY 2016-17 has been submitted to Chartered Accounts for conducting statutory audit. The Annual Financial Statement for FY 2017-18 will be completed by March 2020 and Annual Financial Statement for FY 2018-19 & FY 2019-20 will be completed at the earliest. Er. Ng Sarat Singh, Chairman stated that due to the delay caused by the MSPDCL, the Commission has faced lots of difficulty for taking up Truing Up and that this lead to poor performance of the company. The committee recommends that the up-to-date of audit of annual accounts of the pending years should be completed by June, 2020.

ii) The up-to-date status of opening more payment counters and operation of franchisee system in rural areas (vide Agenda 5 of the minutes of the 19th SAC Meeting):

The MSPDCL gave the up-to-date status as below. The existing and upcoming status of Payment counters for both prepaid and postpaid consumers are shown in the table below:

Sl. No.	Regions	No. of MSPDCL Divisions	Prepaid Payment Counter		Post-paid Payment
			Existing	Upcoming	Counter Existing
1	Valley Regions	7	28	1 (Kumbi)	25
2	Hilly Regions	11	21	3(Tadubi, Senapati, Pallel)	22

Instead of operation of franchisee system in rural areas, MSPDCL has launched an IT integrated billing System "billing.mspdcl.info" exclusively for postpaid consumers since *August, 2019*. The utility has developed Mobile App "MSPDCL e-pay" to facilitate online payment of bills by the postpaid consumers of rural areas. It is reported that this system will enable the postpaid consumers to view their monthly electricity bill, billing & payment history and unit consumption. Mr. Nobert Khayi reported in the meeting that the people around Ukhrul area very much willing for the franchisee system and a proposal has been submitted to MSPDCL. But so far no fruitful outcome has been seen. Er. Lalchharliana Pachuau, Member of the Commission informed the MSPDCL in the meeting to seriously pursue this issue as lots of revenue are lost by simply not billing and collecting. Ms. H.Lalthomawi informed the committee that in Churachandpur area, in far flung remote areas payment through IT integrated billing system may not work well. And further stated that the company/MSPDCL is simply not caring to bill the consumers and not making any effort for collection of revenues. Mr. E.Dolendra Singh also supplemented that irrespective of area people are willing to pay but formal modalities are not there. He also told the MSPDCL to submit copy of modality adopted for single point metering franchisee system to JERC within 3 months.

The committee recommended that the MSPDCL should quickly workout various modalities for billing and collection of revenues. And since, they are a company they need not approach the government. But, obtain the approval of the Board of Directors.

iii) The up-to-date status of the proposal submitted to the State Govt. regarding subsidy payment for a specific category of consumers (vide Agenda 6 of the minutes of the 10th SAC Meeting):-

The Committee recommends that it is high time now that blanket subsidy coverage by the state government is brought to a stop and that the MSPDCL should workout modalities to give subsidy to specific categories of consumers and accordingly submit to the government. MSPDCL is to note that the state government is required to frame policy directions under sub-section (1) of section 108 of Electricity Act 2003 regarding the payment of subsidy to agriculture, industry and other weaker section of society. The Government of Manipur has not yet framed such policy guidelines for the state. MSPDCL is at present studying this aspect carefully by reviewing the state government policy guidelines framed in other states.

iv) The up-to-date status of calibrating different prepaid machines with the tariff for FY 2019-20 (vide Agenda 7 of the minutes of the 19th SAC Meeting:-

Calibration of different prepaid meters with the tariff for FY 2019-20 has been already completed on the 1st day of the April of Fiscal year 2019-20.

The MSPDCL stated that the integration process of different prepaid meters viz. Secure, Genus, HPL in a single platform is delayed due to multiple failures of hardware of Data Centre at Guwahati. In addition to this, server at the Data Centre became very slow due to the saturation of utilization for storage and application server which are also shared by all North-eastern states.

Due to these factors, an alternate system has been considered for the integration of different prepaid meters. A separate dedicated server exclusively for MSPDCL is being developed by IT Engineers of MSPDCL. The Integration of different prepaid

meters in a single platform is still in progress under this system and expected to complete by the end of June, 2020.
The committee recommended that the MSPDCL should write and pursue to the concerned authorities for immediate functioning of these Data Centre at Guwahati.

Agenda No.3. Determination of Retail Tariff of MSPDCL for FY 2020-21 and Transmission Tariff of MSPDCL for FY 2020-21.

PowerPoint Presentation was made by the MSPDCL highlighting all the important areas and their proposed hike in the tariff. Mr. L. Sadananda Singh commented that moderate hike in tariff is agreed but it has been observed that the MSPDCL is not taking a serious interest in billing and collection of revenues. There are lots of consumers who are using electricity but not paying the bills. The company has to take this issue vigorously. Mr. E. Dolendra Singh also states that he is against hike of tariff as the present rate is also quite enormous and has become a burden to the people. Company should give more stress on improving their system of operation. Mr. Lalchharliana Pachuau, Member of the Commission also stated that simply hiking the tariff and not making serious efforts to plug the loop holes in the management of the company is not going to improve the efficiency but it is simply hiking the bills to the good consumers and saving the bad consumers. Dr. S.B Singh also stated that it is high time now that the MSPDCL should take concrete steps for more revenue collection and improving the functioning of the company.

After a detailed discussion, it was agreed that nominal hike in tariff was agreed and the hike should not give shock to the consumers.

Agenda No.4. Losses in Power Purchase Management.

Er. Ng Sarat Singh, Chairman initiated the agenda by saying that on information obtained from the MSPDCL it is observed that there is a huge loss due to poor power purchase management by the company in Manipur. Power is procured at a high rate and it is again sold below the purchased rate. This management system needs to be reviewed including long term and short term PPAs and informed the company that they have to obtain approval of the Commission before signing of any power purchase agreements, which they have never done before. Mr. E.Dolendra Singh also stated that the company has to take serious interest in this matter as Manipur is every day losing huge amount of money due to this system and the company should take immediate and serious interest to plug this loop hole or at least try to minimize the loss.

The committee recommends that the MSPDCL should set up a Study Team on this issue and should submit a report to be discussed in the next SAC Meeting along with recommendations on the matter. The SAC Meeting will be held within the next 2 to 3 months.

Agenda No.5.Increased of annual closing outstanding dues (closing debtors) and collection of the outstanding dues thereof.

The opening outstanding (opening debtor for MSPDCL as on 2016-17 is Rs.396.68 cr. It is increased from year to year as pointed out below:

FY 2016-17 (1) Opening debtor:- Rs.396.68 cr

(2) Closing debtor:- Rs.424.72 cr Outstanding Increase during the Year:- Rs.28.04 cr

FY 2017-18 (1) Opening debtor :- Rs.424.72 cr

(2) Closing debtor :- Rs.430.11 cr Outstanding Increase during the Year:- Rs.5.39 cr

FY 2018-19 (1) Opening debtor :- Rs.430.11 cr

(2) Closing debtor :- Rs.463.69 cr Outstanding Increase during the year 2018-19 is Rs.33.58 cr

The outstanding dues/debt goes on increasing every year and MSPDCL is not able to collect the annual billed amounts from the consumers but creating outstanding arrears amounting to Rs.67.01 (28.04+5.39+33.58) crs in the last three years 2016-17 to 2018-19.

If MSPDCL do not take serious action to realize the outstanding dues and if the outstanding dues/arrears to consumers keep on increasing, it is felt that MSPDCL will not survive for long but will collapse financially in near future along with the holding company MSPCL.

After long deliberation it was decided that the concerned officials of the MSPDCL should immediately launch an intensive revenue collection drive throughout the year in all revenue circles and also seek the help of State government to realize the outstanding dues. And realization of the outstanding amount will reduce Tariff hike of the consumers and burden of subsidy to Government.

It was also decided that MSPDCL should take action in default of payment of electricity dues duly adhering to the provisions stipulated in Section 56 of the Electricity Act, 2003 read with Clause 6.32 and 8 of the JERC for Manipur and Mizoram (Electricity Supply Code) Regulations, 2013 along with subsequent amendments. Compliance of action taken report should be submitted to the Commission quarterly.

<u>Agenda No.6. Outstanding Pending bills on Power purchase Bills</u>.

The committee discussed on the huge outstanding Pending bills on Power purchase bills. Due to late Payment of Power Purchase bills, surcharge bills are served, which is to be finally paid by the DISCOM. This increased the overall payment toward Power Purchase cost which adversely affect the ARR of the DISCOM and increase of Tariff become imminent. This is avoidable with timely payment of Power Purchase bills. The meeting recommends that the MSPDCL should take timely and immediate action for payment of huge pending bills on Purchase of Power which has caused unnecessary and avoidable expenses by the company in the past.

<u>Agenda No.7.Case study of losses at 132 kV level and 32 kV level</u>

Er. Ng Sarat Singh informed the committee that due to non availability of reliable metering system under MSPCL, Transmission and Sub-transmission loss are assumed since the beginning of Tariff Petition by MSPCL and MSPDCL.

MSPDCL claimed the loss under MSPCL is 10% and the MSPCL has claimed that it is 3%, leading to argument between the two companies. While Transmission loss (132kV and above) in the Eastern Region (ER) varies from 2.2 to 2.8% and that in the North Eastern Region (NER) it varies from 2.8 to 3.2%.

It was decided that the MSPCL should select normally loaded line of 132kv and connected 132/33kV substation for case study and arrived at an acceptable loss based on working system meters.
Further, MSPCL should select 33kV lines and connected transformation substation to arrive at base data upon record of proper metering.

It was agreed that after a lapse of 10 years, it is high time to know base data for 132kV level and 33kV level losses.

It was decided that the finding should be reported to the Commission for official use till full-fledged metering is completed and the report be placed in the next SAC Meeting.

The meeting ended at 3:30 pm with the vote of thanks from the chair.

Sd/- NG SARAT SINGH

Chairperson

Memo No.H.11019/26/18-JERC **Dated Aizawl, the 17th March, 2020**

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, Gov.t of Manipur for kind information to the Hon'ble Power Minister.
3. Secretary, Power Department, Govt. of Manipur for kind information and for taking necessary action on the Minutes of the Meeting.
4. All Members / Invitees of the State Advisory Committee for kind information and for taking necessary action on the Minutes of the Meeting.
5. Guard File.

LIST OF PARTICIPANTS ATTENDED FOR
THE 20th MEETING OF STATE ADVISORY COMMITTEE OF MANIPUR

Date & Time : 24th February, 2020 (Monday), 11:00 a.m.
Venue : Hotel Classic, Conference Hall, Imphal, Manipur

Sl No.	Participant Name	Designation & Organisation
1	Ng Sarat Singh	Chairperson, JERC (M&M)
2	Lalchharliana Pachuau	Member, JERC (M&M)
3	Basant Ningthoujam	For, Director, Industries Department
4	Manglem Singh	Director, MANIREDA
5	L. Sadananda Singh	General Secretary, Senior Citizens for Society
6	Elangbam Dolendra Singh	Advisor, All Manipur Consumers' Association
7	Nobert Khayi	Social Worker, West Phungreitang, Ukhrul
8	M. Brojen Singh	Kakching Wairi Thongam Leikai, Mannipur
9	Dr. S. Birendra Singh	Member, SAC, Nambol Bazar, Bishenpur, Moirankhom
10	H. Lalthomawi	Advocate, Tipaimukh Road, Hiangtam Lamka
11	R.S. Daikho	Reikhumai Taphou
12	N. Sarat Singh	Managing Director, MSPCL
13	H. Thanthianga	Asst. Chief (Engineering), JERC (M&M)
14	K. Hari Prasad	Consultant, ASCI, Hyderabad
15	N. Jasobanta Singh	DGM, MSPCL
16	S. Priyananda Singh	DGM, MSPDCL
17	Th. Bimol Singh	DGM, MSPCL
18	N.Purnima	Dy. Manager, MSPDCL
19	Th. Satyajeet	Dy. Manager, MSPDCL
20	Arvind Tiwari	Consultant, MSPCL
21	Satadam Chakraborty	Consultant, MSPDCL
22	Surendra Pimparkhedkar	Consultant, MSPDCL
23	H. Jitan Singh	Manager, MSPDCL
24	Hijam Romen Singh	Manager, MSPDCL
25	Th. Ibomcha Meitei	Manager, MSPDCL
26	M. Ashalata	DGM ED(Tech), MSPCL
27	I. Roji Devi	DM, ED (Tech), MSPCL
28	Kh. Gokulchandra Singh	Manager, SSD-I, MSPCL
29	A. Hamid	Dy. Manager, MSPDCL
30	B. Bikram Sharma	Dy. Manager (IT), MSPDCL
31	Bobby Singh Moirangthem	GM (F&A), MSPDCL
32	Chandramani M	DGM, MSPDCL
33	B. Lalneisang Saiate	GM-III
34	L. Dineswar Sing	GM (SLDC) CEI
35	M. Budhachandra Sharma	G.M. (Sub Station), MSPCL
36	Ng. Subhachandra	ED (Tech)
37	Ng. Birjit Singh	OSD (Plg), MSPCL
38	Laishram Ritu	DGM (SO), SLDC
39	Madha Dalal	Consultant, MSPCL
40	Khoisnam Steela	DGM (Comml), SLDC
41	Ranjan Wahengbam	Manager ED (Tech)

Sl No.	Participant Name	Designation & Organisation
42	Oinam Saranjit Singh	Manager (Civil)
43	Richard Zothankima	Asst. Secretary, JERC(M&M)
44	Hijam Shanti Kumar Singh	ED (Tech)
45	Lhunkholal Lupho	Manager (TD-III)

ANNEXURE - II

LIST OF PARTICIPANTS ATTENDED PUBLIC HEARING FOR MSPDCL MULTI YEAR ARR & TARIFF PETITION FOR FY 2020-21, MANIPUR

Venue : Hotel Classic, Regency Hall, Imphal, Manipur.
Date & Time: 25th February, 2020 (Tuesday) from 11:00 a.m.

Sl. No.	Participant Name	Designation & Organisation
1	Mr. Ng. Sarat Singh	Chairperson, JERC (M&M)
2	Mr. Lalchharliana Pachuau	Member, JERC (M&M)
3	Mr. L. Priyokumar	Managing Director, MSPDCL
4	Mr. H. Shantikumar Singh	Executive Director (Tech.), MSPDCL
5	Mr. Th. Aton Singh	Executive Director (Comml.), MSPDCL
6	Mr. H. Thanthianga	Asst. Chief (Engg.), JERC (M&M)
7	Mr. Richard Zothankima	Asst. Secy., JERC (M&M)
8	Mr. K. Hari Prasad	Consultant, ASCI
9	Mr. Satadru Chakraborty	Consultant, MSPDCL
10	Mr. B. Lacneisang Saiate	GM, MSPDCL
11	Mr. Hijam Romen Singh	Manager, MSPDCL
12	Mr. Th. Ibamcha Meitei	Manager, MSPDCL
13	Mr. B. Ibomcha Sharma	GM, EC-II, MSPDCL
14	Mr. Usham Rocky Singh	DGM, MSPDCL
15	Mr. Th. Ibankar	GM, MSPDCL
16	Mr. W. Indira Chanu	MSPDCL C1
17	Mr. Th. Satyajeet Singh	DM, MSPDCL
18	Ms. N. Purnima	DM, MSPDCL
19	Mr. R. Dolendra Singh	Office bearer, AMPCA
20	Mr. K. Sanatomba	Gen. Secy., AMPCA
21	Mr. S. Chaoba Singh	President, AMPCA
22	Mr. Surendra Pimparkhedkar	Sr. Fellow, WISE, Consultant to MSPDCL
23	Mr. Kambam Seityajit	Social & RTI Activist
24	Mr. Maisnam Amba Singh	Social Activist
25	Mr. R.K. Pritam	Public representative
26	Mr. L. Bijoy	Huiyen lanpao (News Paper)
27	Mr. K. Aping	Morning Bell (News Paper)
28	Mr. Niranjan Oinam	Poknapham (News Paper)

ANNEXURE - III

MSPDCL - Expected Revenue at approved subsidised Tariffs for FY 2020-21

Sl. No.	Category	Consumers	Contracted Load (in kW)	Annual energy Sales (in MU)	Sales/ Consumer /Month (in kWh)	Revised Tariff		Revenue /month				Annual Revenue (in Rs lakh)	Average realisation (Rs/kWh)	Avg.Rate/Avg CS
						Fixed Charge (Rs/kW/ kVA)	Energy charge (Rs./kWh/ kVAh)	Total Fixed Charges (in Rs lakh)	Energy charge /Consumer (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	15
1	Domestic LT													
1)	Kutir Jyoti					per connection								
	All units	15907	7367	3.88	20.35	25	2.00	3.98	40.70	6.47	10.45	125.40	3.23	35.6%
2)	Normal Domestic													
i)	First 100 kWh	410173	586213	346.15	70.33		4.20		295.39	1211.61				
ii)	Next 100 kWh	37772	84433	47.80	105.46		5.50		450.03	169.98				
iii)	Balance >200 kWh	9003	41279	23.42	216.79		6.40		1077.46	97.00				
	Sub Total (2)	456947	711925	417.37	76.11	60		427.16	1822.88	1478.59	1905.75	22869.00	5.48	60.4%
	Total Domestic LT	472854	719292	421.25	74.24			431.14	1863.58	1485.06	1916.20	22994.40	5.46	60.2%
2	Non-domestic/Commercial			417.37										
a)	LT													
i)	First 100 kWh	19169	44859	22.82	99.20		5.85		580.32	111.24				
ii)	Next 100 kWh	4617	9790	11.08	199.99		6.90		1274.93	58.86				
iii)	Balance above 200 kWh	4085	36400	27.28	556.51		7.45		3931.00	160.58				
	Sub Total LT	27871	91049	61.18	182.93	80		72.84	5786.25	330.68	403.52	4842.24	7.91	87.2%
b)	Commercial HT	777	28649	20.55	2203.99	100	8.10	31.83	19835.91	154.13	185.96	2231.56	10.86	119.7%
	Total Commercial	28648	119698	81.73	237.74			104.67	25622.161	484.81	589.4833	7073.8	8.66	95.5%
3	Public Lighting	441	1144	3.96	748.30	65	8.50	0.74	6360.55	28.05	28.79	345.48	8.72	96.1%
4	Public Water Works													
a)	PWW LT	26	329	1.37	4391.03	100	8.70	0.33	38201.96	9.93	10.26	123.12	8.99	99.1%
b)	PWW HT	241	17627	22.15	7659.06	100	8.30	19.59	70633.56	170.23	189.82	2277.83	10.28	113.3%
	Total PWW	267	17956	23.52	7340.82			19.92	108835.52	180.16	200.08	2400.95	10.21	112.6%
5	Irrigation & Agri													
a)	Irr. & Agl LT	39	301	1.25	2670.94	60	4.20	0.18	11217.95	4.38	4.56	54.72	4.38	48.3%
b)	Irr. & Agl HT	27	729	0.81	2500.00	100	4.40	0.81	12222.22	3.30	4.11	49.33	6.09	67.1%
	Total Irr. & Agl LT	66	1030	2.06	2601.01			0.99	23440.17	7.68	8.67	104.05	5.05	55.7%
6	Industrial													
a)	Micro & Small LT	2317	18845	21.49	772.91	65	4.40	12.25	3400.80	78.80	91.05	1092.60	5.08	56.0%
b)	Medium HT	88	6732	4.36	4128.79	100	5.70	7.48	26149.00	23.01	30.49	365.85	8.39	92.5%
c)	Large HT	49	9670	8.12	13809.52	100	7.10	10.74	108941.77	53.38	64.12	769.49	9.48	104.5%
	Total Industrial	2454	35247	33.97	1153.56			30.47	138491.57	155.19	185.66	2227.95	6.56	72.3%
7	Bulk Supply HT	353	50705	85.41	20162.89	100	6.40	56.34	143380.56	506.13	562.47	6749.69	7.90	87.1%
	Grand Total	505083	945072	651.91	107.56			644.28	447994.10	2847.08	3491.36	41896.320	6.43	70.89%
														9.07

ANNEXURE - IV

MSPDCL - Expected Revenue in FY 2020-21 at Full Cost Tariffs (i.e., Without Subsidy)													
Sl. No.	Category	Consumers	Contracted Load (in kW)	Annual energy Sales (in MU)	Sales/ Consumer /Month (in kWh)	Revised 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 lakh)	Energy charge /Consumer (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	15907	7367	3.88	20.35	25	6.75	1.84	137.36	21.85	23.69	284.280	7.32
2)	Normal Domestic												
i)	First 100 kWh	410173	586213	346.15	70.33		7.00		492.31	2019.32			
ii)	Next 100 kWh	37772	84433	47.80	105.46		8.20		744.77	281.31			
iii)	Balance >200 kWh	9003	41279	23.42	216.79		8.55		1663.55	149.76			
	Sub Total (2)	456947	711925	417.37	76.11	60		427.16	2900.64	2450.39	2877.55	34530.60	8.27
	Total Domestic LT	472854	719292	421.25	74.24			429.00	3038.00	2472.24	2901.24	34814.88	8.26
2	Commercial												
a)	LT												
i)	First 100 kWh	19169	44859	22.82	99.20		9.10		902.72	173.04			
ii)	Next 100 kWh	4617	9790	11.08	199.99		9.70		1879.90	86.80			
iii)	Balance above 200 kWh	4085	36400	27.28	556.51		9.85		5391.62	220.25			
	Sub Total Commercial	27871	91049	61.18	182.93	80		72.84	8174.25	480.09	552.93	6635.16	10.85
b)	Commercial HT	777	28649	20.55	2203.99	100	8.05	31.83	19713.47	153.17	185.00	2220.04	10.80
	Total Commercial	28648	119698	81.73	237.74			104.67	27887.713	633.26	737.9333	8855.2	10.83
3	Public Lighting	441	1144	3.96	748.30	65	9.95	0.74	7445.59	32.84	33.58	402.96	10.18
4	Public Water Works												
a)	PWW LT	26	329	1.37	4391.03	100	9.75	0.33	42812.54	11.13	11.46	137.520	10.04
b)	PWW HT	241	17627	22.15	7659.06	100	8.60	19.59	73186.57	176.38	195.97	2351.63	10.62
	Total PWW	267	17956	23.52	7340.82			19.92	115999.12	187.51	207.43	2489.15	10.58
5	Irrigation & Agri												
a)	Irr. & Agl LT	39	301	1.25	2670.94	60	8.80	0.18	23504.27	9.17	9.35	112.20	8.98
b)	Irr. & Agl HT	27	729	0.81	2500.00	100	7.95	0.81	22083.33	5.96	6.77	81.25	10.03
	Total Irr. & Agl LT	66	1030	2.06	2601.01			0.99	45587.61	15.13	16.12	193.45	9.39
6	Industrial												
a)	Micro & Small LT	2317	18845	21.49	772.91	65	7.80	12.26	6028.70	139.68	151.94	1823.26	8.48
b)	Medium HT	88	6732	4.36	4128.79	100	7.85	7.48	36012.22	31.69	39.17	470.01	10.78
c)	Large HT	49	9670	8.12	13809.52	100	8.30	10.74	127354.46	62.40	73.14	877.73	10.81
	Total Industrial	2454	35247	33.97	1153.56			30.48	169395.38	233.77	264.25	3171.01	9.33
7	Bulk Supply HT	353	50705	85.41	20162.89	100	9.00	56.34	201628.90	711.75	768.09	9217.13	10.79
	Grand Total	505083	945072	651.90	107.56			642.15	570982.30	4286.50	4928.65	59143.78	9.07

JOINT ELECTRICITY REGULATORY COMMISSION

FOR MANIPUR AND MIZORAM

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