



**TARIFF ORDER**  
**TRUE-UP FOR FY 2018-19**  
**REVIEW FOR FY 2019-20**  
**AND**  
**DETERMINATION OF AGGREGATE REVENUE REQUIREMENT**  
**&**  
**TRANSMISSION TARIFF FOR FY 2020-21**

**FOR**  
**MANIPUR STATE POWER COMPANY LIMITED**

**Petition (ARR & Tariff) No.3**

**JOINT ELECTRICITY REGULATORY COMMISSION**  
**FOR MANIPUR AND MIZORAM**



## CONTENTS

1.	Introduction .....	7
1.1	JERC for Manipur and Mizoram (JERC, M&M) .....	7
1.2	Manipur State Power Company Ltd .....	9
2.	Summary of the ARR & Tariff Petition .....	11
2.1	Aggregate Revenue Requirement (ARR) .....	11
2.2	Target availability .....	11
2.3	Transmission Loss .....	11
2.4	Transmission ARR and transmission tariff proposal for FY 2020-21 .....	12
2.5	Rebate .....	13
2.6	Late Payment Surcharges .....	13
2.7	Incentive: .....	13
2.8	Prayer .....	14
3.	Brief outline of objections raised, response from MSPCL and Commission's observation .....	15
3.1	Introduction: .....	15
3.2	Public Hearing: .....	15
3.3	Public Hearing Process .....	15
4.	MSPCL – An Overview .....	17
4.1	Background .....	17
5.	Provisional True up of ARR for FY 2018-19 .....	21
5.0	Introduction .....	21
5.1	Background .....	21
5.2	Transmission Loss .....	22
5.3	Operation and Maintenance Expenses .....	22
5.4	Capital Investment Plan .....	26
5.5	Depreciation .....	29
5.6	Interest and Finance Charges .....	31
5.7	Interest on Working Capital .....	31
5.8	Return on Equity (with Tax) .....	33
5.9	Non-Tariff Income .....	34
5.10	Aggregate Revenue Requirement .....	34
6.	Annual Performance Review of FY 2019-20 .....	37
6.1	Background .....	37
6.2	Transmission system availability .....	37
6.3	Transmission Losses .....	37
6.4	Energy Requirement .....	38
6.5	Operation and Maintenance Expenses .....	39
6.5.1	Employee Cost .....	39
6.5.2	Repair & Maintenance Expenses .....	40
6.5.3	Administration and General Expenses .....	41
6.5.4	Summary of O&M expenses .....	42
6.6	Capital Expenditure Plan for FY 2019-20 .....	42
6.7	Gross Fixed Assets .....	52
6.7.1	Depreciation .....	53
6.8	Interest and Finance charges .....	55
6.9	Interest on working capital .....	55
6.10	Return on Equity .....	57
6.11	Non-Tariff Income .....	58
6.12	Aggregate Revenue Requirement .....	58
7.	Determination of Transmission ARR for FY 2020-21 .....	60
7.1	Introduction .....	60

7.2	Contracted Capacity in Manipur .....	61
7.3	Proposed capital expenditure on ongoing and new projects during FY 2020-21 .....	66
7.4	Operation & Maintenance Expenses .....	75
7.4.1	Operation and Maintenance expenses comprise of the following heads: .....	75
7.4.2	Employee Cost.....	76
7.4.3	Repairs & Maintenance Expenses .....	78
7.4.4	Administration & General Expense .....	79
7.5	Summary of O&M expenses .....	79
7.6	Depreciation.....	80
7.7	Interest and Finance Charges.....	81
7.8	Interest on Working Capital .....	81
7.9	Return of Equity .....	83
7.10	Non-tariff Income.....	84
7.11	Aggregate Revenue Requirement (ARR) for FY 2020-21 .....	84
7.12	Transmission Tariff .....	86
7.13	Rebate .....	88
7.14	Late Payment Surcharges.....	88
7.15	Incentive.....	88
8.	Directives.....	90
	Status of 33kV system Works .....	90
	Annexure - I .....	98
	Annexure - II .....	108

## LIST OF TABLES

Table 2.1: Aggregate Revenue Requirement for FY 2020-21 .....	11
Table 2.2: Transmission Tariff projected by MSPCL for FY 2020-21 .....	12
Table 5.1: Actual Employee Expenses for FY 2018-19 .....	23
Table 5.2: R&M Expenses for FY 2018-19 .....	24
Table 5.3: Actual A&G Expenses for FY 2018-19 .....	25
Table 5.4: Total O&M Expenses for FY 2018-19 claimed by MSPCL .....	25
Table 5.5: Capital Expenditure for FY 2018-19 .....	26
Table 5.6: Capitalised Assets in FY 2018-19 .....	28
Table 5.7: Capital Expenditure and Capitalisation for FY 2018-19 (in Rs. Cr.) .....	29
Table 5.8: Capital Works in Progress in FY 2018-19 .....	29
Table 5.9: Depreciation approved by Commission earlier for FY 2018-19 .....	30
Table 5.10: Actual Depreciation for FY 2018-19 .....	30
Table 5.11: Interest on Working Capital for FY 2018-19 .....	32
Table 5.12: RoE for FY 2018-19 .....	33
Table 5.13 : Non-Tariff Income for FY 2018-19 .....	34
Table 5.14: Aggregate Revenue Requirement furnished by MSPCL for FY 2018 19 .....	35
Table 6.1 : Energy to be transmitted for FY 2019-20 .....	38
Table 6.2: Employee cost for FY 2019-20 .....	40
Table 6.3: Details of Employee cost for FY 2019-20 .....	40
Table 6.4 : Revised R&M expense for FY 2019-20 .....	41
Table 6.5: Proposed A&G Expenses of MSPCL for FY 2019-20 .....	41
Table 6.7: O&M Expenses Proposed by MSPCL for FY 2019-20 and adopted by Commission .....	42
Table 6.8: Capital Expenditure for FY 2019-20 estimated by MSPCL .....	43
Table 6.9: Capitalised Assets in FY 2019-20 .....	51
Table 6.10: CWIP, Capital Expenditure and Capitalisation in FY 2019-20 .....	52
Table 6.11: Gross Fixed Assets .....	52
Table 6.12: GFA adopted by the Commission for FY 2019-20 after review .....	53
Table 6.13: Depreciation for FY 2019-20 .....	54
Table 6.14: Depreciation to be considered for FY 2019-20 .....	54
Table 6.15: Depreciation for FY 2019-20 approved by the Commission after review .....	55
Table 6.16: Interest and Finance Charges for FY 2019-20 .....	55
Table 6.17: Interest on Working Capital for the FY 2019-20 .....	56
Table 6.18: Interest on working capital approved by the Commission for FY 2019-20 .....	56
Table 6.19: Return on Equity for FY 2019-20 .....	57
Table 6.20: Non-Tariff Income for FY 2019-20 .....	58
Table 6.21: Non-Tariff Income break-up approved for FY 2019-20 .....	58
Table 6.22: Aggregate Revenue Requirement for FY 2019-20 .....	59
Table 6.23: Aggregate Revenue Requirement commission approved after review .....	59
Table 7. 1: MSPCL Transmission infrastructure snapshot .....	61
Table 7.3: Proposed Capital expenditure on ongoing and new projects during FY 2020-21 .....	66
Table 7. 4: Proposed Funding of capital Expenditure during FY 2020-21 .....	73
Table 7.5: Proposed Capitalization for the FY 2020-21 .....	73
Table 7.6: Capital Expenditure & Capital Work-in-Progress .....	74
Table 7.7: Projected Gross Fixed Assets for FY 2020-21 .....	74
Table 7.8: Proposed Gross Fixed Assets for FY 2020-21 .....	74
Table 7.9: Projection of MSPCL Employee for FY 2020-21 .....	76
Table 7.10: Proposed Employee Cost for FY 2020-21 .....	77
Table 7.11: Proposed Repairs & Maintenance Expense for FY 2020-21 .....	78
Table 7.12: Proposed A&G Expenses for FY 2020-21 .....	79
Table 7.14: Projected Depreciation for FY 2020-21 .....	80
Table 7.15: Proposed Depreciation for FY 2020-21 .....	81
Table 7.16: Interest on Working Capital .....	82
Table 7.17: Proposed Return on Equity for FY 2020-21 .....	83
Table 7.18: Proposed Non-tariff Income for FY 2020-21 .....	84
Table 7.19: Proposed Aggregate Revenue Requirement for FY 2020-21 .....	84
Table 7.20: ARR approved by the Commission for FY 2020-21 .....	85
Table 7.21: Transmission Tariff for FY 2020-21 .....	87
Table 7.22: Transmission Tariff approved by the Commission for FY 2020-21 .....	87



## ABBREVIATIONS

<b>Abbreviation</b>	<b>Description</b>
A&G	Administrative and General
AAD	Advance Against Depreciation
ARR	Aggregate Revenue Requirement
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CWIP	Capital Work in Progress
DONER	Ministry of Development of North Eastern Region
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
NEC	North Eastern Council
NLCPR	Non Lapsable Central Pool of Resources
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
POSOCO	Power System Operation Corporation Limited
PPA	Power Purchase Agreement

<b>Abbreviation</b>	<b>Description</b>
PWW	Public Water Works
R&M	Repair and Maintenance
RAPDRP	Restructured Accelerated Power Development and Return Programme
RoE	Return of Equity
SBAR	State Bank Advance Rate
SLDC	State Load Despatch Centre
T&D	Transmission and Distribution
UI	Unscheduled Interchange
RE	Revised Estimate



**JOINT ELECTRICITY REGULATORY COMMISSION  
FOR MANIPUR AND MIZORAM**

TBL Bhawan, 2<sup>nd</sup> to 5<sup>th</sup> Floor Peter Street,  
E18, Khatla, Aizawl, Mizoram – 796001

**Petition (ARR & Tariff) No.3 of 2020**

In the matter of

True up for FY 2018-19, Review for FY 2019-20 and determination of Aggregate Revenue Requirement (ARR) and Transmission Tariff for FY 2020-21 for transmission of Power by the Manipur State Power Company Limited in the State of Manipur.

**AND**

Manipur State Power Company Ltd.

Petitioner

**Present**

**Mr. Ngangom Sarat Singh  
Chairperson**

**Mr. Lalchharliana Pachuau  
Member**

**ORDER**

1. The Manipur State Power Company Ltd (herein after referred to as MSPCL) is a deemed licensee in terms of section-14 of the Electricity Act 2003 (herein after referred to as Act), engaged in the business of, transmission and generation of electricity in the state of Manipur.
2. Regulation 17 of JERC (M&M) (MYT) Regulations 2014 (here in after referred to as Tariff Regulations), specify that the transmission 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 30<sup>th</sup> November of the current financial year. But

the MSPCL has filed the petition belatedly for determination of ARR and transmission tariff for FY 2020-21 along with true up petition for FY 2018-19 and Annual performance review for FY 2019-20 on 2<sup>nd</sup> January 2020, vide its letter No.26/2 ED(Tech)/MSPCL/2014/935-42, Dated: 2.01.2020.

**3. ARR & Tariff Petition**

The MSPCL in the petition has projected the ARR for FY 2020-21 at Rs. 91.34 Crore as per Regulations 65.1(ii) of Tariff Regulations, the transmission ARR shall be recovered as fixed monthly charges from all long-term transmission users based on their share of transmission capacity in the total transmission capacity. Also, in case the target availability is below normative availability of 98% then the transmission ARR shall be recovered on pro rata basis. Currently MSPCL has only one long term transmission customer which is distribution licensee, (MSPDCL). As such MSPCL has to recover the entire transmission ARR through fixed monthly charges from MSPDCL only.

**4. Admission of Petition.**

In the petition for ARR and Transmission Tariff for FY 2020-21 filed by the MSPCL the commission observed that some crucial and vital information required as specified in Tariff Regulations is lacking. Therefore, the MSPCL was asked to submit the required information vide Commission's letter No.H.20013/27/19-JERC, dated: 16.01.2020 & 21.01.2020. Pending receipt of additional information, the ARR & Tariff petition was admitted on and marked as Petition (ARR and Tariff) No.3 of 2020 to avoid delay in the process of ARR. The MSPCL has submitted some data/information/clarification, etc. vide its letter No. 26/2/ED(TECH)/MSPCL/2014/1072-14, dated: 10<sup>th</sup> February 2020 and letter No. 26/2/ED(TECH)/MSPCL/2014/1085-86, dated:12<sup>th</sup> February 2020.

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

As per Regulation 10(2) and first proviso of Tariff Regulations the Licensee shall file an application for true up of the previous year along with audited annual accounts. The MSPCL has submitted that since the audited annual accounts are not ready they are unable to file final true up petition and hence filed petition for provisional true up of FY 2018-19 with actuals. As such the Commission has not carried out provisional true

up and thereby no passing of the impact of true-up. Provisional true up as furnished by the MSPCL is for an ARR of Rs.71.24 Crore and Commission awaits the audited accounts for giving the true-up and until such time the true-up will be delayed. Since the delay is on the part of MSPCL, they are not entitled for any additional finance cost in the true-up for 2018-19 in due course.

#### **6. Annual performance review for FY 2019-20**

Though the JERC Tariff Regulations do not specifically mandate to provide annual performance review the commission has felt to consider it appropriate to review the present year ARR with reference to Revised Estimate (RE), but, without changing the principles. Accordingly review for FY 2019-20 is carried out. As per review the ARR was reduced to Rs. 70.13 Crs as against the earlier tariff order Dt.26<sup>th</sup> March 2019 amount of Rs.85.69 Crs. The ARR amount as estimated by MSPCL is at Rs.70.13 Crs is therefore provisionally approved after review pending audited account of 2018-19.

#### **7. Public hearing process**

The Commission directed the MSPCL to publish the summary of the ARR and Tariff proposal in an abridged form and manner as approved in accordance with section 64 of the Act and Regulation 17 of Tariff Regulations to ensure public participation.

The public notice was published by Managing Director/MSPCL in the following newspapers inviting the public to submit their objections and suggestions on the petition on or before 14.02.2020. The Tariff Petition was also placed in the official website of MSPCL.

<b>Sl. No.</b>	<b>Name of the Newspaper</b>	<b>Language</b>	<b>Date of Publication</b>
1	The Sangai Express	English	1 <sup>st</sup> February 2020 & 3rd February 2020.
2	Hueiyen Lanpao	Manipuri	1 <sup>st</sup> February 2020 & 3rd February 2020.

No objection/suggestion is received from the public.

**8. Notice for public hearing**

The Commission to ensure transparency in the process of tariff determination and for providing proper opportunity to all stakeholders 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 the public hearing at the headquarters of the state. Accordingly, the commission published a notice in the following leading newspapers giving intimation to the general public, interested parties and the consumers about the public hearing to be held at Imphal in Hotel Classic, Regency Hall on 25<sup>th</sup> February 2020 at 2.00PM.

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

**9. Public hearing**

The public hearing was held as scheduled on at Hotel Classic, Regency Hall, Imphal on 25.2.2020 at 2:00 pm. During public hearing each objector was provided a time slot for presenting before the Commission his/ her views on the Petition of MSPCL. The main issues raised by the objectors during the public hearing and corresponding response of MSPCL are briefly narrated in Chapter-3.

**10. Meeting of State Advisory Committee:**

The proposal of MSPCL was also placed before the State Advisory Committee of Manipur in its 21<sup>st</sup> meeting held on dt: 24<sup>th</sup> February 2020 at Hotel Classic, Conference Hall, Imphal at 11.00 AM. The State Advisory Committee discussed the ARR and Tariff proposal for FY2020-21 of MSPCL. Minutes of the meeting are given in the Annexure-I.

**11.** The Commission took into the consideration of the facts presented by MSPCL in its petition and subsequent filings, the suggestions/ objections received from stakeholders, consumer organisations, general public and state advisory committee and the response of the MSPCL to those suggestions/ objections for approval of ARR and tariff for FY 2020-21.

**12. Compliance of Directives:**

The Commission has reviewed the directives issued earlier to MSPCL in the Tariff Orders for FY 2015-16 to FY 2019-20 and noted that some of the directives have already been complied with and hence dropped and the directives which are not fully complied with and the remaining directives are consolidated and fresh directives are added.

**13.** In exercise of the powers vested under section-62 read with section-64 of the Act and Regulation-16 of Tariff Regulations and other enabling provisions in this behalf, the Commission issues this order approving ARR and Transmission Tariff for FY 2020-21 for Transmission of electricity in the state of Manipur.

**14.** This order is in Eight chapters as detailed below:

1. Chapter 1: Introduction
2. Chapter 2: Summary of ARR & Tariff petition for FY 2020-21
3. Chapter 3: Brief outline of objections raised, response from MSPCL and Commission's observation.
4. Chapter 4: MSPCL – An overview.
5. Chapter 5: Provisional True up for FY 2018-19
6. Chapter 6: Annual Performance Review for FY 2019-20
7. Chapter 7: Analysis and determination of ARR and transmission Tariff for FY 2020-21
8. Chapter 8: Directives.

**15.** The MSPCL shall 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.

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



**(LALCHARLIANA PACHUAU)**  
Member



**(NGANGOM SARAT SINGH)**  
Chairperson

**Place : Aizawl**

**Date: 20.03.2020**

## 1. Introduction

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

In exercise of the powers conferred by the 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 Government of India Gazette (Extra Ordinary) Notification No. 23/3/2002 R&R dated 10/01/2005, (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. 24<sup>th</sup> January 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 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 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 Company Ltd**

In pursuance of the Act the erstwhile Electricity Department, Manipur was unbundled and corporatized into 2 (two) state owned functionally independent successor entities (viz) (i) Manipur State Power Company Ltd (herein after referred to as 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 1<sup>st</sup> 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 31<sup>st</sup> December 2013. MSPCL is the holding company and in charge of all transmission assets of 33 KV and above.

### **The objectives of MSPCL are:**

1. Transmission of power within the state for further use by the distribution licensee and open access consumers.
2. Preparing and carrying out schemes for transmission of power upto 33 kV.

The present petition for provisional truing up of FY 2018-19, Annual Performance Review of FY 2019-20 and ARR and Transmission Tariff for FY 2020-21 is based on the past performance and expected changes in each element of cost and revenue for the ensuing year. MSPCL has studied the previous trends and taken cognizance of other internal and external developments to estimate the likely performance for FY 2020-21.

The approach adopted by MSPCL for filing of this Petition is as detailed below:

#### **a. Approach for Truing-up of FY 2018-19**

For FY 2018-19, MSPCL has proposed provisional truing-up based on the actual expenses incurred during FY 2018-19 for each parameter of the ARR along with reason and justification for the variation as compared to that approved in the

ARR for FY 2018-19 in the Tariff Order dated 12<sup>th</sup> March 2018 & APR order Dt. 26<sup>th</sup> March 2019. It is submitted that final truing-up for past years as well as FY 2018-19 shall be submitted to the Hon'ble Commission post the completion of audit process of previous year's accounts and also the accounts for FY 2018-19.

**b. Approach for Annual Performance Review of FY 2019-20**

The actual first six months expenditure along with estimate for balance six months of 2019-20 have been followed for the purpose of estimating the revised ARR for FY 2019-20. However, for estimating the R&M expense and A&G where majority of the expense is undertaken during the second half of the year, the same has been ascertained based on the actual expenditure incurred for FY 2018-19 and previous years along with reasonable assumptions for FY 2019-20.

**c. Approach for Projecting ARR for FY 2020-21**

For the purpose of estimating/projecting the financial & technical parameters for FY 2020-21, MSPCL has considered its actual performance in the past years and FY 2019-20 (First six months) as base and has projected the elements of ARR for FY 2020-21 with supporting rationales and as per the principles enumerated by the Joint Electricity Regulatory Commission (JERC) Terms and Conditions for (Multi Year Tariff) Regulations, 2014 notified on 9th June, 2014.

The subsequent Chapters provide the actual/projection of various cost components required for determination of Aggregate Revenue Requirement for truing-up of FY 2018-19, APR of FY 2019-20 and ARR for FY 2020-21 along with the methodology followed by MSPCL.

## 2. Summary of the ARR & Tariff Petition for FY 2020-21

### 2.1 Aggregate Revenue Requirement (ARR)

#### Petitioner's submission

MSPCL requests the Hon'ble Commission to approve the revised Aggregate Revenue Requirement for FY 2020-21 as shown in the table below.

**Table 2.1: Aggregate Revenue Requirement for FY 2020-21**

Particulars	(Rs. Crore)	
	Approved vide MYT Order for FY2020-21	Now Proposed for FY 2020-21
R &M Expense	24.30	10.56
Employee Expense	73.27	79.57
A&G Expense	4.94	4.00
Depreciation	1.48	1.15
Interest on Loans	0.00	0.00
Return on Capital Employed	1.56	1.56
Interest on working capital	5.26	4.46
Income Tax	0.40	0.24
<b>Total Cost</b>	<b>111.21</b>	<b>101.54</b>
Less: Non-Tariff Income	8.68	10.20
Less: Expenses capitalized	5.23	0.00
<b>Net ARR</b>	<b>97.30</b>	<b>91.34</b>

### 2.2 Target availability

#### Petitioner's submission

As per JERC MYT regulations 2014, the target availability proposed for MSPCL was 98% and it was also proposed that transmission ARR shall be recovered on pro-rata basis if target availability is below 98%. We request the Commission to continue the same for FY 2020-21.

### 2.3 Transmission Loss

#### Petitioner's submission

It is submitted that under SAMAST initiative, all utilities are advised to install energy meters with least count of 5 minutes to enable settlement in 5-minute intervals as

against current 15-minute intervals. Energy meters for Manipur under SAMAST initiative are being procured by NER SAMAST Group through bulk tendering for all North East Region States. MSPCL had already submitted the required number of meters for Manipur to NER SAMAST group. The procurement process is already underway for the new 5-minute interval SAMAST meters.

MSPCL expects to complete the activity of installation of new 5-minute interval meters by FY 2020-21. Therefore, it is submitted that the transmission losses for the MSPCL transmission system cannot be measured at this point in time. MSPCL requests the Hon'ble Commission to consider the actual transmission loss after installation of meters at the feeders and approve a transmission loss trajectory accordingly. As such already approved transmission loss of **8.5%** may be considered for FY 2020-21.

#### 2.4 Transmission ARR and transmission tariff proposal for FY 2020-21.

- The total ARR to be recovered for FY 2020-21 is proposed to be Rs. 91.34 Crs. As per JERC (Multi Year Tariff) Regulations, 2014, the transmission ARR should be recovered as fixed monthly charges from all long-term users of the transmission system based on the share of average contracted transmission capacity in the total transmission capacity. Also, in case the target availability is below normative availability of 98%, the transmission ARR shall be recovered on pro-rata basis.
- Currently, MSPCL has only one long term transmission customer which is the distribution licensee i.e. MSPDCL. As such, MSPCL proposes to recover the entire transmission ARR as fixed monthly charges from MSPDCL. The proposed tariff is provided in the table below.

**Table 2.2: Transmission Tariff projected by MSPCL for FY 2020-21**

(Rs. Cr)

S.No.	Particulars	Amount
1	Transmission ARR to be recovered (if availability is equal or more than the normative availability) Rs. In Crore	91.34
2	Transmission Tariff for MSPDCL as Rs. Lakhs/month in FY 2020-21	761.18

S.No.	Particulars	Amount
3	Average Contracted Transmission Capacity for MSPDCL in FY 2020-21 (in MW)	256
4	Transmission Tariff per MW of contracted capacity for long term transmission users per Month (Rs. Lakhs)	2.97
5	Transmission Tariff Rs./MW/Day	9775
6	Energy Proposed to be Transmitted (MUs)	1164
7	<b>Transmission Tariff Rs./Unit</b>	<b>0.78</b>

## 2.5 Rebate

As per JERC (Multi Year Tariff) Regulations, 2014, for payment of bills of transmission charges through letter of credit on presentation, a rebate of 2% shall be allowed. Where payments are made subsequently, through opening of letter of credit or otherwise, but within a period of one month of presentation of bills by the transmission licensee, a rebate of 1% shall be allowed.

## 2.6 Late Payment Surcharges

As per JERC (Multi Year Tariff) Regulations, 2014, in case the payment of bills of transmission charges by beneficiary (ies) is delayed beyond a period of one month from the date of billing, late payment surcharge at the rate of 1.25% per month shall be levied.

## 2.7 Incentive:

As per regulation 66 of JERC for M&M (MYT) Regulations 2014 the transmission licensee shall be entitled to incentive for increase in annual availability beyond the target availability prescribed under Regulation 61, in accordance with the following formula and shall be shared by the long term and short term and medium-term customers in the ratio of their average allotted transmission capacity

$$\text{Incentive} = \frac{\text{ATC X (achieved – target availability)}}{\text{Target availability}}$$

Where,

ATC = Annual Transmission charges determined by the Commission for the transmission system of the transmission Licensee for the Concerned year.

## **2.8 Prayer**

1. MSPCL requests the Hon'ble Commission to:

- Admit the Aggregate Revenue Requirement and the Transmission Tariff Proposal for FY 2020-21 as submitted herewith.
- Admit Provisional true up for FY 2018-19 submitted here with.
- Admit the Annual Performance Review of FY 2019-20 as submitted herewith.
- 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.
- Permit submission of any additional information required by the Commission during the processing of this Petition.
- And pass such other and further orders as are deemed fit and proper in the facts and circumstances of the case.

### **3. Brief outline of objections raised, response from MSPCL and Commission's observation**

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#### **3.1 Introduction:**

On admitting the ARR and Tariff Petition for FY 2020-21, the Commission directed the MSPCL 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 abridged form and invite comments/objections/suggestions from them.

#### **3.2 Public Hearing:**

In order to ensure transparency in the process of determination of tariff as envisaged in the Act, Public Hearing was held on 25.02.2020 at Hotel Classic, Regency Hall, Imphal from 2.00PM to 4.30P.M. List of members from the public and Consumers Association who attended the meeting together with the list of Officers of MSPCL who attended the Public Hearing are given in Annexure-II.

#### **3.3 Public Hearing Process**

No Objections are received either from the public or from Consumer's Association.



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## 4. MSPCL – An Overview

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### 4.1 Background

The commissioning of the two micro hydel sets having capacities of 100 KW and 56 KW at Leimakhong in 1930 by the then Manipur State HE Board marked the beginning of the use of electricity in Manipur. The Royal palace and main areas of Imphal Town enjoyed Electricity generated from this captive hydel station. During the World War-II, two more DG sets of 62 KW and 46 KW capacities were installed at the old Imphal Power House by the Armed Forces for electrification of Imphal town and its suburbs. The above installed capacity remained the same till the end of the first Five Year plan (1951-56) of the post-independence period. The second Five Year Plan (1956-61) however saw a significant change in the demand of power in the state. The demand has been growing rapidly envisaging more social acceptance and the gradual promotion of awareness of the people towards the use of electricity for different purposes. This had necessitated further addition in the generation capacity and it was accomplished with the installation of a few more DG sets of various capacities in and around Imphal.

To evacuate the power generated from the captive micro hydel power station (100 + 56) KW at Leimakhong to specific load centres of Palace Compound and main bazar area of Imphal, the 20 Km. long, 11 KV line between Imphal & Leimakhong was constructed for the first time in Manipur in 1930. The state was then having 26 Km. of 11 KV lines and 45 Km. of domestic lines to serve very few consumers in 7 villages/Leikais. Both the line and generating stations were owned by the then Manipur State HE Board, constituted under the ex-officio Chairmanship of the Political Agent. Subsequently Electricity was kept under the administrative control of the Public Works Department, Government of Manipur. It was separated from state PWD and started functioning as an independent Department since February 1970.

The peak load demand of Manipur in 1971 was 3.6 MW only. The demand was met from the State's own generating stations and power purchased from the

neighbouring states/Electricity Board at the low voltage. The per capita consumption of energy was 4.84 KWh. The demand was kept suppressed due to lack of generation till the year 1980. The scenario was abruptly changed after the purchase of bulk power from Assam with the commissioning of 132 KV inter-state transmission line from Imphal to Dimapur and 6.3 MVA, 132/33 KV sub-station at Yurembam in December 1981. The situation was further alleviated with the commissioning of Loktak Hydro Electric Project having a capacity of **3x35 MW on 4<sup>th</sup> of August 1984.**

During the years from 1984 to 1996, a number of Central Sector Power Projects, mostly hydel projects in the North Eastern Region were commissioned. Every project has a share of about 7-8% for Manipur. Because of the availability from such projects, the peak demand of the state has increased gradually over the period of time.

After the enactment of Electricity Act 2003, various reforms have been initiated in the power sector including restructuring of integrated State Electricity Boards into separate companies. The Electricity Department of Manipur had also initiated the process of reforms and restructuring and had engaged M/s SBI Caps to advise the Department on process of corporatization and restructuring of the Electricity Department. In FY 2013-14, with effect from 1st Feb' 2014, Electricity Department of Manipur (EDM) has been restructured and separated into two different entities - 1) Manipur State Power Distribution Corporation Limited (MSPDCL) and 2) Manipur State Power Corporation Limited (MSPCL). Accordingly, the tariff filing for Wheeling and Retail Supply Business will be done by MSPDCL and that of Transmission will be done by MSPCL and submitted to JERC.

MSPCL is the transmission licensee of the State and it is looking after the transmission function upto the level of 33kV and also generation function. It is also the holding company of MSPDCL.

**The details of Transmission network for FY 2020-21 are as below:**

Sl. No.	Voltage	Transmission Line	Sub-Station	Capacity
		Ckt. - Km	No.	MVA
1.	400 kV	90.2	1	315
2.	132/33 kV	720.2	18	787
3.	33/11 kV	2160.62	118	1882

### Transmission Loss

All incoming 132 kV feeders and outgoing 11 kV feeders are not fully metered. Hence the transmission loss cannot be measured at present. As such the MSPCL has estimated the transmission loss at 8.5% during FY 2019-20.



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

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### 5.0 Introduction

As per JERC (Multi Year Tariff) Regulations, 2014, MSPCL is required to submit the truing up of the previous year in each year of the Control Period along with the Tariff Petition of the ensuing year. Since the JERC (Multi Year Tariff) Regulations, 2014 is effective from 1st April 2014; the truing up of FY 2018-19 shall be carried out under the same Regulations.

The truing up of FY 2018-19 has been carried out by comparing the approved ARR in the MYT order Dt. 12th March 2018 & annual performance review conducted for FY 2018-19 in the order dated 26th March 2019 with the actual data of FY 2018-19. **The accounts of FY 2018-19 are currently in compilation stage and the same shall be submitted to the Commission as and when the same are finalized and audited.** However, the actual data of FY 2018-19 for various expenses are available with MSPCL and the same are being submitted to the Hon'ble Commission for provisional truing-up of FY 2018-19. As such, MSPCL is requesting the **Hon'ble commission to carry out the provisional truing up of FY 2018-19 as per JERC MYT Regulations 2014.** However, MSPCL would request the Commission to pass on the adjustment on account of truing up for FY 2018-19 only after availability of final audited accounts.

### 5.1 Background

The Tariff Order for FY 2018-19 for MSPCL was issued by the Hon'ble Commission on 12th March, 2018 and subsequently Annual Performance Review (APR) for FY 2018-19 was undertaken by the Hon'ble Commission in its order dated 26th March 2019. MSPCL is filing this petition for determination of revised ARR for FY 2020-21, it is important that the actual numbers of FY 2018-19 are considered for projecting the various components of APR for FY 2019-20 and ARR for FY 2020-21. Therefore, MSPCL is submitting for provisional truing-up of FY 2018-19, which is a comparison of the actual performance and expenses of MSPCL vis-à-vis the approved ARR for FY 2018-19 in order dated 26th March 2019. This exercise examines technical and

financial performance of MSPCL in FY 2018-19 with the figures approved for FY 2018-19 in the MYT order & APR order. These aspects are discussed in the section below:

## **5.2 Transmission Loss**

### **Petitioner's submission**

MSPCL would like to submit that while it is undertaking all efforts for metering of the feeders, currently all input and output points of transmission system have not been metered. Also, the out-going 11 kV feeders as well as incoming 132 kV lines in the state are being metered. Therefore, it is submitted that the transmission losses in the transmission system cannot be measured for MSPCL at this point of time. MSPCL is making all efforts to complete the metering of all Import and Export points by next Financial Year i.e. FY 2020-21 by which the actual transmission losses can be reported to the Hon'ble Commission.

In the absence of any base level of losses, the Commission had approved intra-state transmission loss of 3.2% on estimated basis in ARR dt 12.03.2018 and 10% in APR dt.26.03.2019 for the FY 2018-19. MSPCL requests the Commission to consider the transmission loss at 10% for FY 2018-19 for provisional truing-up.

### **Commission's Analysis**

Taking into due consideration of the explanations given by the Licensee on the accuracy of the Transmission losses sustained by the in the FY 2018-19 and due to their inability to record the energy handled, the commission prefers to adopt the Transmission losses at 9.02% based on the additional information received from Licensee and adopted provisionally for truing up purpose which is awaiting the audited accounts of FY 2018-19 submission to Commission.

## **5.3 Operation and Maintenance Expenses**

### **Petitioner's submission**

MSPCL submits that the Operation and Maintenance (O&M) Expenses comprises of the following elements:

- (a) Employee Expenses
- (b) Repair and Maintenance (R&M) Expenses

## (c) Administrative and General (A&amp;G) Expenses

**a. Employee Expenses****Petitioner's submission**

The breakup of actual employee cost of MSPCL in FY 2018-19 is provided below:

**Table 5.1: Actual Employee Expenses for FY 2018-19****(Rs. Cr)**

<b>Employee Expenses</b>	<b>Approved in T.O Dt. 12.03.2018</b>	<b>Approved in APR Dt. 26.03.2019</b>	<b>Actual for FY 2018-19</b>
Pay Band	68.25	55.84	18.96
Grade Pay			3.76
D.A.			23.99
H.R.A.			1.81
SCA			2.29
TA			1.07
Spl. Pay/ Cy All			0.00
NPS Contribution			2.42
<b>Grand Total</b>	<b>68.25</b>	<b>55.84</b>	<b>54.29</b>

The actual employee expense incurred during FY 2018-19 are Rs. 54.29 Cr. as against the approved employee cost of Rs. 68.25 Cr. in ARR dated 12th March 2018, and Rs. 55.84 Cr. approved in the APR vide Order dated 26th March 2019. The actual employee cost for FY 2018-19 is lower than the approved employee cost as per the Annual Performance Review for FY 2018-19.

**Accordingly, the Hon'ble Commission may consider the Employee Expenses amounting to Rs. 54.29 Crs. for truing up of FY 2018-19.**

**Commission's Analysis**

The Commission in its earlier order dt.12.03.2018 provided for Rs.68.25Crs towards employee cost and later on it was revised to Rs.55.84crs in the review. MSPCL is indicating the actual cost at Rs.54.29 Crs for FY 2018-19 which is lower than review figure. MSPCL had not submitted Statutory auditor approved annual accounts for scrutiny and hence, the same will be approved upon verification with audited actual.

**b. Repair & Maintenance Expenses****Petitioner's Submission:**

These expenses include expense on repair and maintenance of Plant and Machinery, Transformers, Lines, cable network, vehicles, office equipment, etc. It is important for MSPCL to incur the R&M expenses in order to maintain and strengthen the system for quality of power supply in the region in order to ensure consumer satisfaction and also maintain the regulatory norm of system availability of at least 98%.

MSPCL submits that there has been an addition of Rs. 345.48 Cr. in gross fixed assets during FY 2018-19. The actual R&M expenses incurred during FY 2018-19 was Rs. 10.56 Cr, and marginally lower than the approved R&M expenses of Rs. 12.94 crs in the annual review. As such, the Commission is requested to approve the R&M expenses based on Actuals as detailed in table below:

**Table 5.2: R&M Expenses for FY 2018-19**

Particular	Approved vide Tariff Order dated 12th March, 2018	Approved vide Annual Performance Review 26 Mar, 2019	(Rs. Cr)
			Actual expense as incurred by MSPCL
R&M Expenses	15.37	12.94	10.56

Accordingly, the Hon'ble Commission may consider the R&M Expenses amounting to Rs. 10.56 Cr. for FY 2018-19.

### **Commission's Analysis**

The Commission provisionally considers the R&M expenses at Rs. 10.56 Crs for true-up of this cost in FY 2018-19 subject to verification with audited figures which are due for submission.

### **c. Administrative and General Expenses**

#### **Petitioner's Submission:**

Administrative and General (A&G) expenses comprise of various sub-heads including the following:

- Travel and conveyance expenses
- Hydel investigation expense
- Electricity and Telephone charges
- Consultancy and regulatory fee

- Office expenses on IT equipment, fittings etc.
- Publication expenses
- Other administration expenses

Honourable Commission in its order dated 26.03.2019 had approved the Administration & General expenses at Rs. 6.31 Cr. for FY 2018-19, in APR as projected by MSPCL. However, the actual expense incurred under A&G expenditure by MSPCL is Rs. 10.12 Cr. for FY 2018-19. The rise in expenses is due the rise in employee base, addition of sub-stations and assets. The A&G expense for FY 2018-19 are as below:

**Table 5.3: Actual A&G Expenses for FY 2018-19**

(Rs. Cr)

Particulars	Approved vide Tariff Order dated 12th Mar, 2018	Approved vide Annual Performance Review 26 Mar, 2019	Actual expense as incurred by MSPCL in FY 2018-19
A&G Expenses	4.30	6.31	10.12

**Accordingly, the Hon'ble Commission may provisionally approve the A&G Expenses amounting to Rs. 10.12 Cr. under the provisional truing up for FY 2018-19.**

### **Commission's Analysis**

In this regard, the Commission in the additional information had called for details of Rs.8.40 Crs spent towards Assets running expenses. In reply, the licensee had provided that Rs.5.66 Crs were spent for substation maintenance cost out of the above Rs 8.40 Crs. The reply looks very much evasive and irrelevant as any expenditure on substation maintenance would not be treated under A&G Expenses. Hence, the Commission feels it appropriate to disallow this cost for Truing up purpose without delving deeper in this matter considering the inapt reply sent. Therefore, **the Commission provisionally considers A&G expenses at Rs.4.46crs only for truing-up of this cost in FY 2018-19** subject to verification with audited figures which are due for submission. More so this approved figure is now comparable with that was earlier allowed in T.O Dt.12.03.2018.

### **d. Abstract of O&M Expenses**

**Table 5.4: Total O&M Expenses for FY 2018-19 claimed by MSPCL**  
(Rs. Cr)

S.No	Particulars	Approved vide APR Dated. 26 Mar, 2019	Actual for FY 2018-19
1	Employee Expenses	55.84	54.29
2	R&M Expenses	12.94	10.56
3	A&G Expenses	6.31	10.12
4	<b>Total</b>	<b>75.09</b>	<b>74.97</b>

Accordingly, the Hon'ble Commission may consider the O&M Expenses amounting to Rs. 74.97 Cr. as per the actuals for provisional truing-up of FY 2018-19.

The abstract of O & M charge provisionally considered by Commission for FY 2018-19 is tabulated below

S.No	Particulars	Provisionally approved for FY 2018-19
1	Employee Expenses	54.29
2	R&M Expenses	10.56
3	A&G Expenses	4.46
4	<b>Grand Total</b>	<b>69.31</b>

#### 5.4 Capital Investment Plan

##### Petitioner's submission

The details of actual capital expenditure towards various new and augmentation schemes in FY 2018-19 are given below.

Table-5.5: Capital Expenditure for FY 2018-19

(Rs. Cr)		
Sl. No.	Name of Capital Expenditure Project	Capital Expenditure
<b>I</b>	<b>Generation</b>	
1	Loktak Down Stream Hydro Electric Project (2x33 MW)	2.50
	<b>Sub-Total : Generation Hydro (I)</b>	<b>2.50</b>
<b>II</b>	<b>Transmission &amp; Distribution</b>	
<b>A.1</b>	<b>Ongoing Schemes</b>	
<b>A.1.1</b>	<b>400 kV System</b>	
1	Installation of 400 kV Sub-Station at Thoubal(NLCPR)	29.39
2	Construction of 400 kV T/L from Yurembam to Thoubal via Nambol	39.63
3	Installation of 2 nos. 400 kV line bays at Imphal (PG) sub- station	5.00
	<b>Total : A.1.1</b>	<b>74.01</b>
<b>A.1.2</b>	<b>132 kV System</b>	
1	Installation of 132/33 KV S/S at Hundung (Ukhrul) & its associated line( <b>SPA</b> )	0.11
2	R & M of 132/33 kV sub-station at Yurembam ( <b>SPA/NEC</b> )	2.00
3	Installation of 1x20 MVA transformer at Yaingangpokpi	1.50

4	Renovation & Modernisation of three nos. of 132/33 kV S/S at Kakching, Karong & Churachandpur(NLCPR)	8.32
5	Installation of 132/33 kV S/S at Thanlon with associated line(NLCPR)	10.91
6	Installation of 2x20 MVA,132 kV Sub-Station along with associated 132 kV LILO lines & related works at Thoubal(NEC)	7.05
7	Augmentation of Rengpang 132/33 kV sub-station by installing(3x4.16+1x4.16)MVA 132/33 kV single phase transformers	0.56
8	IDC on REC loan	7.96
9	Principal payment on REC loan	50.00
10	Installation of 132/33 kV sub-station at Moreh with erection of associated 132 kV line(NLCPR)	13.07
11	Stringing of 132 kV line (2nd circuit) from Kakching to Churachandpur(NEC)	2.96
12	Installation of 132 kV sub-station along with associated 132 kV line at Elangkhangpokpi	3.67
13	Construction of 132 kV S/C line (3rd ckt) strung on D/C towers from 132 kV Yurembam sub-station (State) to Yurembam sub-station (PGCIL)	0.20
14	Construction of 132/33 kV sub-station at Tipaimukh	2.24
15	Construction of 132 kV link T/L from 400/132 kV sub- station, Thoubal to 132 kV sub-stations at Kongba, Yaingangpokpi and Hundung on existing Kongba to Kakching 132 kV T/L.	1.00
	<b>Total : A.1.2</b>	<b>111.53</b>
1	Erection of 33 kV feeders from Yurembam POWERGRID sub-station(SCA)	1.80
2	Installation of 2x5 MVA 33/11 kV sub-ststion with associated 33 KV line at Power House site of Loktak Down Stream HE Project(NEC)	2.41
3	Installation of 33/11 KV (2x1 MVA) S/S at Nungbi Khullen with associated 33 KV line(NLCPR)	3.31
4	Re-stringing & strengthening of 33 kV lines	1.79
5	Installation of 33/11 KV (2x1 MVA) S/S at Gumnom with associated 33 kV line(NLCPR)	1.74
6	Renovation of 33/11 KV S/S at Khoupum	0.39
7	Installation of 33/11 kV sub-station at Gamphazol with associated 33 kV line	2.66
8	Installation of 33/11 kV sub-station at Mayangkhang with associated 33 kV line(NEC)	1.23
9	Installation of 33/11 kV sub-station at Mao with associated 33 kV line(NEC)	0.74
10	installation of 33/11 kV sub-station at Poayi at Ukhrul	2.97
11	installation of 33/11 kV sub-station at Thueyng at Senapati	3.17
12	Construction of 33 kV D/C line on STP from 132/33 kV SS at Thoubal to 33/11 kV SS at Thoubal (old)	1.07
13	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Wangoi under IPDS	3.29
	<b>Total : A.1.3</b>	<b>26.57</b>
	<b>Sub-Total (II):</b>	<b>212.11</b>
1	Consultancy for assessment of Hydro Power Potential in the State	0.84

2	Compensation cost for 132/33 kV SS at Khenjang	0.09
3	Compensation cost for 132 kV towers at Nungba SD	0.07
4	AMC for SCADA	0.36
	<b>Total : III</b>	<b>1.36</b>
	<b>Total Capital Expenditure ( I + II + III ):</b>	<b>215.97</b>

The Commission had approved a total capital investment of Rs. 627.80 Cr. for FY 2018-19 in the ARR Order for FY 2018-19, keeping in view the expansion/augmentations and strengthening of the system for handling increased load and also ensuring better quality of supply and network reliability to the consumers. Subsequently, in the APR for FY 2018-19, the capital expenditure for FY 2018-19 was revised to Rs. 158.98 Cr. based on the actual progress of schemes during the first six months and estimated for the balance six months. It is submitted that MSPCL has incurred actual capital expenditure of Rs. 215.97 Cr. during FY 2018-19.

In case of capitalization of assets, the Commission had approved Rs. 434.65 Cr. FY 2018-19 in ARR which was later revised to Rs. 345.48 Cr. in the APR for FY 2018-19. MSPCL submits that the actual capitalization during the period has been Rs. 345.48 Cr., details of which are provided in the table below:

**Table 5.6: Capitalised Assets in FY 2018-19**

		(Rs. Cr)
Sl. No.	Name of Project	Cost of Project
<b>I 132 kV System</b>		
1	Installation of 132/33 KV S/S at Thanlon with associated line	136.04
2	Installation of 132/33 KV sub-station at Moreh with erection of associated 132 KV line and related civil works.	115.9
3	Stringing of 132 kV line (2nd circuit) from Kakching to Churachandpur	17.92
4	Construction of 132/33 kV sub-station at Tipaimukh	51.39
	<b>Sub-Total:</b>	<b>321.25</b>
<b>II 33 kV System</b>		
1	Installation of 33/11 kV sub-station at Kasom Khullen with associated 33 kV line	10.42
2	Construction of 33 kV D/C line on STP from 132/33 kV SS at Thoubal to 33/11 kV SS at Thoubal (old)	11.83
3	Augmentation of 33/11 kV sub-station at Karong under IPDS	1.98
	<b>Sub-Total:</b>	<b>24.23</b>
	<b>Total Capitalization:</b>	<b>345.48</b>

A summary of the actual capital expenditure and capitalization as against that

approved by the Commission is summarized in table below:

**Table 5.7: Capital Expenditure and Capitalisation for FY 2018-19** (in Rs. Cr.)

S.N.	Particulars	Approved vide Tariff Order dated 12th Mar, 2018	Approved vide Annual Performance Review 26 Mar, 2019	Actuals for FY 2018-19
1	Capital Expenditure	627.80	158.98	215.97
2	Capitalisation	434.65	345.48	345.48

Based on the actual capital expenditure and capitalization amount for FY 2018-19, the details of CWIP are as below:

**Table 5.8: Capital Works in Progress in FY 2018-19**

(Rs. Cr)

S.N.	Particulars	Approved in T.O dt 12.03.18	Approved vide APR Dt. 26.03.19	Actual for FY 2018- 19
1	CWIP Opening Balance	305.59	386.43	549.85
2	Capital Investment	627.80	158.98	215.97
3	Less: Investment Capitalized	434.65	345.48	345.48
4	<b>CWIP Closing Balance</b>	<b>498.74</b>	<b>199.93</b>	<b>420.34</b>

### Commission's Analysis

The Commission is awaiting the statutory audited annual account for assessing the actual amount spent on investments and also the assets transferred to Gross Fixed Assets. It is too early to make any constructive comment on the amounts spent by the Licensee without verifiable source of documentary proof and the same will be dealt on submission of audited accounts.

## 5.5 Depreciation

### Petitioner's submission:

As per Tariff Regulations, the depreciation is charged on the basis of straight-line method, on the GFA in use at the beginning of the year and addition in assets during the financial year. The depreciation is based on the original cost of the Gross Fixed Assets.

Further, as per the guidelines of Institute of Chartered Accountant of India (ICAI), vide "Accounting Standard 12," depreciation should not be claimed on net

expenditure for assets funded through government grants. In MSPCL, most of the funding is through government grants and therefore, depreciation shall not be included under ARR on the assets which are funded through government grants. This is because MSPCL is not required to repay the amount received as grants from the Government.

The actual depreciation is different from the approved values because of the difference in the actual asset base as against the approved values of the asset base.

**Table 5.9: Depreciation approved by Commission earlier for FY 2018-19**  
(Rs. Cr)

S. N.	Particulars	Approved in MYT T.O dt 12.03.2018	Approved In APR for FY 2018-19	Actuals
1	Opening GFA	1153.58	934.43	934.43
2	Addition during the year	434.65	345.48	345.49
3	Capitalization of expenses	4.48	-	-
4	Total GFA at the end	1592.71	1279.91	1279.92
5	Average GFA	1373.15	1107.17	1107.175
6	Average rate of Depreciation	4.57%	5.10%	5.10%
7	Depreciation	62.75	56.47	56.48
8	Depreciation allowed	0.94	0.85	0.85

**Table 5.10: Actual Depreciation for FY 2018-19**

Particular	FY 2018-19				Rate adopted	Deprecia- tion
	Opening	Addition	Closing	Average		
Land & Land Development	17.33	6.41	23.74	20.535	0.00%	0.00
Plant & Machinery	867.53	320.75	1188.28	1027.905	5.28%	54.27
Building	46.51	17.20	63.71	55.11	3.34%	1.84
Furniture & Fittings	0.81	0.30	1.11	0.96	6.33%	0.06
Computer	0.93	0.34	1.27	1.1	15.00%	0.17
Office Equipment	0.15	0.06	0.21	0.18	6.33%	0.01
Vehicles	1.17	0.43	1.6	1.385	9.50%	0.13
<b>Total</b>	<b>934.43</b>	<b>345.49</b>	<b>1279.92</b>	<b>1107.175</b>		<b>56.48</b>
<b>Percentage of assets</b>	<b>1.50%</b>					
<b>Depreciation claimed</b>	<b>0.85</b>					

The total depreciation in FY 2018-19 was Rs.56.68 Crores. However, excluding the depreciation on account of assets funded from grant, only 1.5% of the total depreciation has been claimed for the purpose of truing-up for FY 2018-19 by MSPCL. Hence MSPCL requests the Hon'ble Commission to consider actual depreciation for provisional truing up of FY 2018-19 as Rs. 0.85 Crores.

#### **Commission's Analysis**

The Commission is awaiting the statutory audited annual account for assessing the actual amount of the assets transferred to Gross Fixed Assets and the applicable depreciation. It is too early to make any constructive comment on the amounts spent by the Licensee without verifiable source of documentary proof and the same will be dealt on submission of audited accounts.

### **5.6 Interest and Finance Charges**

The entire capital expenditure of MSPCL since its inception has been funded by the State Government through grants from Central Government Ministries and Agencies like Ministry of Power (MoP) through schemes of NEC, NLCPR, DONER or through State Plan Scheme. **Therefore, the utility does not have any liabilities on account of long-term loans.**

Hence, there is no interest and finance charge approved by the Hon'ble Commission for FY 2018-19. Therefore, actual interest and finance charges claimed for truing-up of FY 2018-19 is NIL.

#### **Commission's Analysis**

Each cost element approval depends only upon the actual amount spent by the Licensee for the benefit of Organisation but not based on the earlier approval of the Commission. But it is observed that Licensee prefers to adopt what was approved earlier. As the utility has specifically stated that it has not spent any amount towards Interest & Financial charges, the amount is treated as nil for true-up purpose even without awaiting the audited accounts submission.

### **5.7 Interest on Working Capital**

#### **Petitioner's Submission**

As per the JERC MYT Regulations 2014, MSPCL is entitled for interest on working capital as per the norms provided. The norms state that the working capital shall

cover the following:

- a. Operation and maintenance expenses for one month; plus
- b. Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus
- c. Receivables equivalent to one (1) month of transmission charges calculated on target availability level; minus
- d. Amount, if any, held as security deposits except the security deposits held in the form of Bank Guarantee from Transmission System Users.
- e. Interest shall be allowed at a rate equal to the State Bank Advance Rate (SBAR) as on 1st April of the financial year in which the Petition is filed.

The interest rate considered by MSPCL is based on the Advance Rate of SBI applicable as on 1st April 2019, in line with the provisions of the Regulations. Based on the Regulations, the normative working capital requirement and interest thereon is computed as per the table below

**Table 5.7: Interest on Working Capital for FY 2018-19**

(Rs. Cr)				
S. No.	Particulars	Approved vide Tariff Order dt 12.03.18	Approved in APR Dt.26.03.19	Actual as Proposed by MSPCL
1	O&M Expenses for one month	7.33	6.26	6.25
2	Maintenance of Spares (1% of GFA)	12.23	9.90	11.47
3	Receivables for 1 month	7.76	5.97	5.94
4	<b>Total working capital</b>	<b>26.72</b>	<b>22.13</b>	<b>23.65</b>
5	Rate of interest	14.05%	13.45%	13.80%
6	<b>Interest on Working Capital</b>	<b>3.75</b>	<b>2.98</b>	<b>3.26</b>

Hence, MSPCL requests the Hon'ble Commission to consider Interest on Working Capital for provisional truing up of FY 2018-19 as Rs. 3.26 Cr.

### Commission's Analysis

The Commission provisionally considers to allow this element of cost as a norm towards interest on working capital for FY 2018-19 as it was considered earlier in the relevant Tariff Order for this year. But, it is to advise the licensee not to prefer these charges in ARR when it was not actually spent by availing short term loans during that financial year. However, this cost element will not be taken into

consideration from FY 2020-21 for the reason of not availing any such loans and to relieve the consumer from the additional burden due to these charges.

## 5.8 Return on Equity (with Tax)

Regulation 22 of MYT Regulation, 2014 provides that equity for the purpose of ROI shall be 30% of capital cost or actual equity, whichever is lower. Further, Regulation 26 of MYT Regulation provides that RoE shall be allowed at the rate of 15.5% of Equity as determined under regulation 22. Accordingly, Equity for the purpose of calculating RoE has been considered as actual equity base for the FY 2018-19. Further Regulation 30 provides that Income Tax payable shall be allowed based on actual income tax as per Audited Accounts. **However, since, account of MSPCL are yet to be audited, Income Tax has been considered at MAT rate of 19.24%.**

The actual equity base as per accounts in FY 2018-19 is Rs. 10.05 Cr. The revised Return on Equity along with the approved figures for FY 2018-19 are detailed in table below:

**Table 5.8:RoE for FY 2018-19**

Return on Equity	(Rs. Cr)		
	Approved in T.O dt.12 03.18	Approved in APR 26.03.19.	Actuals for FY2018-19
Grand Total (including Tax)	1.96	1.96	1.86

Accordingly, the Hon'ble Commission is requested to consider the RoE (with tax @19.24%) amounting to Rs 1.96 Crore for provisional true-up as proposed by MSPCL for FY 2018-19.

## Commission Analysis

The Commission provisionally take into consideration of the ROE amount to be Rs.1.86Crs for FY 2018-19 true-up. However, the allowing of Income Tax portion of ROE Rs.0.30crs will only depends upon tax liability incidence to be verified on submission of Audited Accounts though it is included in the overall ARR true up amount.

## 5.9 Non-Tariff Income

### Non-tariff and Other Income

The Non-tariff income for MSPCL is mainly on account of transmission charges realized for short term power purchase or sale by the distribution licensee. These charges are paid to MSPCL for use of intra state transmission system for short term power purchase or sale on the basis of CERC regulations for Short Term Open Access 2008 and subsequent amendments thereof. Apart from this, non-tariff income is also earned as interest from bank accounts used for managing the account of short term open access charges and agency charges earned for supervision of deposit works. As against the approved Rs. 8.68 Cr. towards non-tariff income, MSPCL has earned Rs. 12.06 Cr. during FY 2017-18 primarily on account of higher interest from bank deposits as detailed in table below:

**Table 5.9 :Non-Tariff Income for FY 2018-19**

(Rs. Cr)				
S.No.	Particulars	Approved in T.O dt.12 03.18	Approved in APR 26.03.19.	Actuals for FY2018-19
1	SLDC Charges	3.66	9.70	3.00
2	Agency Charges	3.19		2.65
3	Interest from bank	1.27		3.95
4	Other income	0.56		0.10
	<b>Total</b>	<b>8.68</b>	<b>9.70</b>	<b>9.70</b>

The Hon'ble Commission is requested to consider the actual Non-tariff income of Rs. 9.70 Cr. for FY 2018-19.

### Commission Analysis:

The Commission pending submission of the audited account for FY 2018-19, provisionally considers the Non-Tariff Income amount at Rs.9.70 Crs which is subject to verification with final audited accounts.

## 5.10 Aggregate Revenue Requirement

The ARR of MSPCL for FY 2018-19 as approved by the Commission vide Tariff Order dated 12<sup>th</sup> March, 2018 and Annual Performance Review dated 26<sup>th</sup> March, 2019 and the actual submitted by MSPCL are detailed in table below:

**Table 5.14: Aggregate Revenue Requirement furnished by MSPCL for FY 2018 19**  
(Rs. Cr)

Sl. No	Particulars	Approved in T.O dt.12 03.18	Approved in APR 26.03.19.	Actuals	Difference (Actual – APR)
1	Repair & Maintenance expense	15.37	12.94	10.56	(2.38)
2	Employee costs	68.25	55.84	54.29	(1.55)
3	A&G Expenses	4.30	6.31	10.12	3.81
4	Depreciation	0.94	0.85	0.85	0.00
5	Interest on Loans	-	-	-	-
6	Return on Capital Employed	1.56	1.96	1.56	(0.40)
7	Interest on Working Capital	3.83	2.97	3.26	0.29
8	Income Tax	0.40	0.40	0.30	(0.10)
9	<b>Total Cost</b>	<b>94.65</b>	<b>81.27</b>	<b>80.94</b>	<b>(0.32)</b>
10	Less: Non- Tariff income	8.68	9.70	9.70	-
11	Less: Expenses Capitalized	4.48	-	-	-
12	<b>Aggregate Revenue Requirement</b>	<b>81.49</b>	<b>71.57</b>	<b>71.24</b>	<b>(0.33)</b>

The variation in approved and actual ARR for FY 2018-19 as shown in table above is not proposed to be carried forward in the tariff of ensuing year as the figures for FY 2018-19 are provisional and MSPCL requests the Commission to undertake any adjustments on account of truing-up only after the availability of audited accounts for FY 2018-19.

### Commission's Analysis

In view of the foregone paras on each expenditure element of the ARR claimed by the MSPCL for the FY 2018-19, for some cost elements the Commission could provide indicative ARR amounts provisionally and while in certain other cost elements audited accounts were required to express its decision of their approval. Under these circumstances, it is suggested MSPCL to submit the true-up for FY 2018-19 separately so that Commission would be in a position to verification and scrutinise the costs actually spent upon the Statutory Auditors approved audited Accounts for 2018-19 made available in this matter.

Since, the delay in timely submission of audited accounts is from the MSPCL side, they shall not prefer to claim for any inflationary related costs for the delay in true-up in their true-up submission for this year at a later date.

In doing so, the MSPCL shall also reflect the receipt of Government Subsidy by MSPDCL pertaining to FY 2018-19 received on behalf MSPCL and portion of fund retained by MSPDCL. It shall also indicate the total amount due from MSPDCL over and above the approved cost pertaining to 2018-19 and also in respect of earlier years if any, so as to claw-back such excess from their annual revenue requirement in the ensuing years filings if reported.

The break up details of subsidy amounts from Govt .of MANIPUR to MSPCL as provided in reply to additional information for the earlier years is as follows:

Rs. In Crores				
Financial Year	Employee cost	O&M expenses	Office Expenses	Total subsidy
2014-15	23.21	4.71	2.35	<b>30.27</b>
2015-16	25.79	4.11	8.21	<b>38.11</b>
2016-17	30.38	4.08	6.73	<b>41.19</b>
2017-18	51.26	10.56	10.12	<b>71.94</b>
2018-19	54.29	10.56	10.12	<b>74.97</b>

In addition, the Licensee had failed to discuss and explain about their fulfilment of Transmission Target availability achievement at 98% during the FY 2018-19 in their submission for FY 2018-19. This issue is one of the important regulatory parameters for full recovery of the ARR claimed, failing which the annual charges are to be apportioned on pro-rata basis amongst the transmission facility user/users. Hence, the licensee shall give due importance to this issue in the submission of ARR in each of their ARR submission.

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## 6. Annual Performance Review of FY 2019-20

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### 6.1 Background

As per JERC (Multi Year Tariff) Regulations, 2014 read with JERC (Multi Year Tariff) (First Amendment) Regulations, 2019, MSPCL is required to submit the Annual Performance Review (APR) of the current year in each year of the Control Period along with the Tariff Petition of the ensuing year. Accordingly, MSPCL has prepared the APR for FY 2019-20 based on the provisions of the JERC (Multi Year Tariff) Regulations, 2014. The details of revised estimation of each element of ARR for FY 2019-20 along with rationale and justifications are explained in the sections below.

### 6.2 Transmission system availability

As per JERC MYT regulations' 2014, the target transmission availability proposed for FY 2018-19 for MSPCL is 98%. **The estimated transmission availability for FY 2019-20 is also 98%.**

#### Commission's Analysis:

The above achievement of transmission availability to 98% must be supported by the documentary proof and it shall be made available to the Commission in this matter invariably.

### 6.3 Transmission Losses

#### Petitioner's submission

It is submitted that in spite of best efforts, the metering of all feeders is yet to be completed and therefore the transmission losses for the MSPCL transmission system cannot be measured at this point in time. MSPCL requests the Hon'ble Commission to consider the actual transmission loss after installation of meters at the feeders and approve a transmission loss trajectory accordingly. **Therefore, MSPCL requests the Hon'ble Commission to consider the transmission loss of 8.5% for FY 2019-20 as approved in the Tariff Order dated 26<sup>th</sup> March 2019.** MSPCL submits to the Hon'ble commission that it will make every effort to reduce the transmission losses once all the meters are installed.

### Commission's Analysis:

As per Tripartite memorandum of understanding made on 26.07.2016 between MoP/ Govt. Of India and GOM and MSPDCL, Govt. Of Manipur will endure to reduce the transmission losses from 3.6% to 3.2% by FY 2018-19. Accordingly, the transmission losses during FY 2018-19 shall be 3.6%.

But, the transmission losses as indicated by the MSPDCL in their calculation is shown at an abnormal loss level of 10% for 2018-19. Given the above scenario, there is no great relevance to the figure 3.6% and bring phenomenal change is not possible in the last phase of the financial year 2019-20 at this juncture.

Therefore, the Commission has no option but to approve intra-state transmission loss at 8.5% after due discussion on this issue in the public hearing and finally it was suggested by the Licensee to keep it at 8.5% for both FY 2019-20 and FY 2020-21 and they would endeavor to achieve it.

## 6.4 Energy Requirement

### Petitioner's submission

MSPCL would like to submit that as per MSPDCL Tariff Order for FY 2019-20, the approved energy quantum to be transmitted at the input of MSPCL network was 811.88 MUs.

**Table 6.1 : Energy to be transmitted for FY 2019-20**

Particulars	Approved (MUs)
Energy to be transmitted	811.88

### Commission's analysis

As per MSPDCL APR filing for FY 2019-20 the estimated energy to be transmitted by MSPCL at State periphery is 929.15 MU (Table-21 of MSPDCL APR for FY 2019-20). On contrary, the Commission noted that the energy units that would be available at state periphery is 913.91 MU only. This clearly shows the MSPCL & MSPDCL are not working in tandem during the submission of ARR filings and each one of them are making different assumptions about their counter parts performance. This kind of approach would give wrong signals to the prospective consumers and may lead them into a state of confusion and both the licensees are directed to refrain this kind of functioning in future but have more co-ordination and closer level of understanding in running the power system of the State.

Eventually, the Commission approves the energy availability at State periphery to be 913.91 MU for FY 2019-20 after review.

## 6.5 Operation and Maintenance Expenses

### 6.5.1 Employee Cost

#### Petitioner's submission

##### a. Employee cost

In the Tariff Order dated 26<sup>th</sup> Mar 2019, the Commission had approved an employee cost of Rs. 69.12 Cr. MSPCL proposes to revise the employee cost considering the following:

Recruitment of 350 employees contemplated during FY 2018-19 is not materialized. Now MSPCL has planned to recruit 388 personnel as follows:

i.	Notification issued by MSPCL for recruitment of personnel during FY 2019-20	285
ii.	Appointed under Die-in-Harness Scheme	02
iii.	Recruitment of personnel for MSPCL under process by MPSC	90
iv.	Recruitment approved by State cabinet for MSPCL during 2019-20	11
	<b>Total :</b>	<b>388</b>

The process is expected to be completed in the 2<sup>nd</sup> half of FY 2019-20 and the recruited persons are likely to join in February, 2020; as such 2 month's salary is considered towards the new employees for the year.

The actual employee expenditure during the FY 2018-19 & 1<sup>st</sup> six months of FY 2019-20 are Rs. 54.29 Cr. & 29.84 Cr. respectively. The employee cost for the FY 2019-20 has been estimated based on the actual figures for the FY 2018-19 & 1<sup>st</sup> six months of FY 2019-20. Further, VII<sup>th</sup> pay Commission scales are effective from 01.04.2019 and the arrears on account of the same are to be paid. As such the 1<sup>st</sup> instalment of Rs. 1.20 Cr. is planned to be paid during FY 2019-20. The actual number of employees as on 31.03.2019 is 1571 and is expected to be 1885 by the end of FY 2019-20.

The average employee strength is accordingly estimated to be 1728. Detailed computation of employee cost is furnished in tables below.

**Table 6.2: Employee cost for FY 2019-20**

(in Rs. Cr.)

Particulars	Approved vide ARR dated 26 Mar, 2019	Actual (till Sept'19)	Estimated FY 2019-20
Employee Expense (Rs. Cr.)	69.12	29.84	54.34
Average number of employees (numbers)	1940	1603	1728

**Table 6.3: Details of Employee cost for FY 2019-20**

(in Rs. Cr.)

Sl. No.	Particulars	Unit	Approved in T.O Dt. 26/03/2019	Estimated for 2019-20
1	Salary of Existing employees	Cr.	59.03	50.91
2	Impact of VII pay Commission*	Cr.	6.28	1.20
3	New employees to be recruited ( Nos)	Nos.	138	388
4	New employees' salary **		3.81	2.23
5	Total (1+2+4)	Cr.	69.12	54.34

\* 1st installment (6 months arrear)

\*\* Two month's salary considered for FY 2019-20

It is submitted that the Hon'ble Commission may please consider and approve the employee expenditure as proposed above for the FY 2019-20.

### Commission's Analysis

The Commission accordingly approves employee cost at Rs. 54.34 Crores less the O&M expenses added to Asset capitalization of Rs.8.97 Crs. Therefore, the O&M cost now adopted by the Commission for FY 2019-20 is taken as Rs.45.37 Crs after review.

### 6.5.2 Repair & Maintenance Expenses

#### Petitioner's submission

It is submitted that the Hon'ble Commission had approved R&M expenses for the FY 2019-20 as 14.44 Cr. in the tariff order Dt. 26<sup>th</sup> March 2019. MSPCL is not proposing any revision in the R&M expenses for the FY 2019-20 and the approved amount has been adopted for FY 2019-20, any differences will be claimed in the truing up.

Accordingly, the proposed R&M expenses for the FY 2019-20 is Rs.14.44 Cr. as approved in the ARR Order dated 26<sup>th</sup> March 2019 as provided in the table below:

**Table 6.4 : Revised R&M expense for FY 2019-20**

(in Rs. Cr.)

Sl. No.	Particulars	Unit	Approved in ARR dt 26.03.2019	Estimated FY 2019-20
1	Proposed R&M Expense	Rs. Cr.	14.44	14.44

**MSPCL requests the Commission to approve the above estimated expenses of Rs. 14.44 Cr. for FY 2019-20, as the same is necessary for proper maintenance and strengthening of the system and quality of supply in the region in order to ensure consumer satisfaction and transmission system availability at 98%.**

#### **Commission Analysis:**

**The Commission accordingly approves R&M expenditure at Rs.14.44 Crore for FY 2019-20 as projected by the licensee in view of the additional financial commitment for system maintenance explained.**

### **6.5.3 Administration and General Expenses**

#### **Petitioner's submission**

The Commission had approved Rs. 4.61Cr. as A&G expenses for MSPCL in the ARR Tariff Order for FY 2019-20 dated 26<sup>th</sup> March 2019. MSPCL is not proposing any revision in the A&G expenses for the FY 2019-20 and the approved amount has been adopted for FY 2019-20, any differences will be claimed in the trueing up.

Accordingly, the proposed A&G expenses for the FY 2019-20 is Rs. 4.61 Cr. as approved in the ARR Order dated 26<sup>th</sup> March 2019 as provided in the table below:

As such, MSPCL requests the Commission to consider the proposed A&G expenses for FY 2019-20 as provided in table below:

**Table 6.5: Proposed A&G Expenses of MSPCL for FY 2019-20**

(in Rs. Cr.)

Particulars	Approved in ARR dt 26.03.2019	Estimated for FY 2019-20
A&G Expenses	4.61	4.61

### Commission Analysis:

The Commission accordingly approves A&G expenditure at Rs.4.61 Crore for FY 2019-20 as was approved earlier by the Commission and the same was projected by the licensee without any change. The actuals incurred will be verified with the audited actuals later.

#### 6.5.4 Summary of O&M expenses

##### Petitioner's Submission

MSPCL submits that the total O&M costs are equal to summation of employee costs, R&M costs and A&G expenses. As such, the total O&M expenses estimated for FY 2019-20 vis-à-vis approved figures are given below:

**Table 6.5: O&M Expenses Proposed by MSPCL for FY 2019-20 and adopted by Commission**

(in Rs. Cr.)				
Sl.No.	Particulars	Approved in T.O dt: 26 03.19	Estimated for FY 2019-20	Commission now adopted
1	Employee Expenses	69.12	54.34	45.37 *
2	R&M Expenses	14.44	14.44	14.44
3	A&G Expenses	4.61	4.61	4.61
4	<b>Total O&amp;M Expenses</b>	<b>88.17</b>	<b>73.39</b>	<b>64.42</b>

(\*) – after deducting the capitalised expenses.

#### 6.6 Capital Expenditure Plan for FY 2019-20

##### Petitioner's submission

The MSPCL has taken up several schemes as approved by the Hon'ble Commission in earlier Tariff Orders. The details of schemes in regard to which capital expenditure is estimated to incurred in FY 2019-20 is provided in the table below:

Table 6.6: Capital Expenditure for FY 2019-20 estimated by MSPCL

(Rs. Cr)

Sl. No.	Name of Project	Cost of Project	Source of Funding			Budget Outlay, 2019-2020		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
<b>I</b>	<b>Transmission &amp; Distribution</b>							
<b>A.1</b>	<b>Ongoing Schemes</b>							
<b>A.1.1</b>	<b>400 kV System</b>							
1	Installation of 400 kV Sub-Station at Thoubal (NLCPR)	230.62	115.20	115.42	230.62	1.00	0.00	1.00
2	Construction of 400 kV T/L from Yurembam to Thoubal via Nambol	259.68	148.84	110.84	259.68	3.00	0.00	3.00
3	Installation of 2 nos. 400 kV line bays at Imphal (PG) sub-station	35.24	35.24	0.00	35.24	3.00	0.00	3.00
	<b>Total : A.1.1</b>	<b>525.54</b>	<b>299.29</b>	<b>226.25</b>	<b>525.54</b>	<b>7.00</b>	<b>0.00</b>	<b>7.00</b>
<b>A.1.2</b>	<b>132 kV System</b>							
1	Installation of 132/33 kV S/S at Chandel with associated 132 KV line (NLCPR)	31.52	19.58	11.93	31.52	0.00	0.04	0.04
2	Installation of 1x20 MVA transformer at Yaingangpokpi	5.58	5.58	0.00	5.58	0.50	0.00	0.50
3	Installation of 132/33 kV S/S at Thanlon with associated line (NLCPR)	135.88	81.90	53.98	135.88	3.70	0.00	3.70

**MSPCL Tariff Order for FY 2020-21**

Sl. No.	Name of Project	Cost of Project	Source of Funding			Budget Outlay, 2019-2020		
			State Fund	Grant	Total	State Fund	Grant	Total
4	Augmentation of Rengpang 132/33 kV sub-station by installing(3x4.16+1x4.16) MVA 132/33 kV single phase transformers	12.63	12.63	0.00	12.63	0.50	0.00	0.50
5	IDC on REC loan	0.00	0.00	0.00	0.00	5.60	0.00	5.60
6	Principal payment on REC loan	150.00	150.00	0.00	0.00	50.00	0.00	50.00
7	Installation of 132/33 kV sub-station at Moreh with erection of associated 132 kV line (NLCPR)	115.74	87.29	28.45	115.74	7.50	0.00	7.50
8	Augmentation of 132/33 KV S/S at Jiribam (Installation of additional transformers)	3.66	3.66	0.00	3.66	0.50	0.00	0.50
9	Stringing of 132 kV line (2nd circuit) from Kakching to Churachandpur(NEC)	17.44	8.28	9.16	17.44	0.00	1.00	1.00
10	Construction of 132 kV S/C line (2nd ckt) on D/C towers from Leimatak PH(NHPC) to 132 kV sub-station at Ningthoukhong	20.44	20.44	0.00	20.44	1.00	0.00	1.00
11	Installation of 132 kV sub-station along with associated 132 kV line at Elangkhangpokpi	56.21	56.21	0.00	56.21	0.50	0.00	0.50

Sl. No.	Name of Project	Cost of Project	Source of Funding			Budget Outlay, 2019-2020		
			State Fund	Grant	Total	State Fund	Grant	Total
12	Construction of 132 kV S/C line(3rd ckt) strung on D/C towers from 132 kV Yurembam sub- station (State) to Yurembam sub- station (PGCIL)	10.25	10.25	0.00	10.25	0.50	0.00	0.50
13	Construction of 132 kV link T/L from 400/132 kV sub-station, Thoubal to 132 kV sub-stations at Moreh on Kakching to Moreh 132 kV T/L.	22.34	22.34	0.00	22.34	1.00	0.00	1.00
	<b>Total : A.1.2</b>	<b>581.68</b>	<b>478.15</b>	<b>103.53</b>	<b>431.68</b>	<b>71.30</b>	<b>1.04</b>	<b>72.34</b>
<b>A.1.3</b>	<b>33 kV System</b>							
1	Installation of 33/11 kV sub- station at Henglep ( <b>NLCPR</b> )	7.40	3.70	3.70	7.40	0.00	0.89	0.89
2	Installation of 33/11 kV sub- station at Chakpikarong ( <b>NLCPR</b> )	11.45	6.45	4.99	11.45	0.00	0.56	0.56
3	Installation of 33/11 kV S/S at Sekmaijin ( <b>NLCPR</b> )	7.28	3.89	3.40	7.28	0.00	0.17	0.17
4	Installation of 33/11 kV S/S at Chandel ( <b>NEC</b> )	5.98	3.19	2.79	5.98	0.00	1.55	1.55
5	Installation of 33/11 kV sub- station with associated 33 KV line at Sugnu ( <b>NLCPR</b> )	10.30	5.45	4.85	10.30	0.00	0.14	0.14
6	Installation of 33/11 KV sub- station with associated 33 KV line at	9.02	4.70	4.32	9.02	0.00	0.69	0.69

**MSPCL Tariff Order for FY 2020-21**

Sl. No.	Name of Project	Cost of Project	Source of Funding			Budget Outlay, 2019-2020		
			State Fund	Grant	Total	State Fund	Grant	Total
	Khongjom(NLCPR)							
7	Installation of 33/11 KV sub- station with associated 33 KV line at Sekmai(NLCPR)	8.70	4.52	4.18	8.70	0.00	0.63	0.63
8	Installation of 33/11 KV (2x1 MVA) S/S at Nungbi Khullen with associated 33 KV line(NLCPR)	14.50	9.65	4.85	14.50	1.00	0.97	1.97
9	Re-stringing & strengthening of 33 kV lines	7.18	7.18	0.00	7.18	2.00	0.00	2.00
10	Installation of 33/11 KV (2x1 MVA) S/S at Gumnom with associated 33 kV line(NLCPR)	9.53	5.17	4.36	9.53	0.00	0.87	0.87
11	Installation of 33/11 kV sub- station at Mayangkhang with associated 33 kV line(NEC)	9.63	2.71	6.92	9.63	0.00	0.19	0.19
12	Installation of 33/11 kV sub- station at Mao with associated 33 kV line(NEC)	10.21	3.17	7.04	10.21	0.00	0.70	0.70
13	installation of 33/11 kV sub- station at Poayi at Ukhul	9.15	9.15	0.00	9.15	1.50	0.00	1.50
14	installation of 33/11 kV sub- station at Thueyng at Senapati	14.03	14.03	0.00	14.03	1.50	0.00	1.50
	Construction of 33 kV D/C line on							

**MSPCL Tariff Order for FY 2020-21**

Sl. No.	Name of Project	Cost of Project	Source of Funding			Budget Outlay, 2019-2020		
			State Fund	Grant	Total	State Fund	Grant	Total
15	STP from 132/33 kV SS at Thoubal to 33/11 kV SS at Thoubal (old)	11.83	11.83	0.00	11.83	0.50	0.00	0.50
16	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Yairipok under IPDS	9.32	1.12	8.19	9.32	0.00	4.69	4.69
17	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Wangoi under IPDS	12.49	4.30	8.19	12.49	0.00	3.96	3.96
18	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Wangjing under IPDS	9.33	1.13	8.19	9.33	0.00	5.21	5.21
19	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Heirok under IPDS	8.87	1.00	7.87	8.87	0.00	4.99	4.99
20	Augmentation of 33/11 kV sub-station at Kangpokpi under IPDS	1.43	0.26	1.17	1.43	0.00	0.22	0.22
21	Augmentation of 33/11 kV sub-station at Karong under IPDS	1.66	0.31	1.36	1.66	0.00	0.60	0.60
	<b>Total : A.1.3</b>	<b>189.30</b>	<b>102.93</b>	<b>86.37</b>	<b>189.30</b>	<b>6.50</b>	<b>27.02</b>	<b>33.52</b>

Sl. No.	Name of Project	Cost of Project	Source of Funding			Budget Outlay, 2019-2020		
			State Fund	Grant	Total	State Fund	Grant	Total
<b>A.2</b>	<b>New Schemes</b>							
<b>A.2.1</b>	<b>33 kV System</b>							
1	Installation of 2x5 MVA 33/11 KV sub-station along with associated 33 kV line & related civil works at Chingai, Ukhrul district.	11.75	11.75	0.00	11.75	1.00	0.00	1.00
2	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Kachai, Ukhrul district.	10.44	10.44	0.00	10.44	1.00	0.00	1.00
3	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Sanakeithel, Ukhrul district.	10.57	10.57	0.00	10.57	1.00	0.00	1.00
4	Installation of new 33/11 kV sub-station along with associated 33 kV line at Akampat, Imphal East.	8.86	8.86	0.00	8.86	1.00	0.00	1.00
5	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Liyai Khunou, Senapati district.	10.83	10.83	0.00	10.83	1.00	0.00	1.00
6	Installation of 2x5 MVA, 33/11 kV sub-station along with associated	9.13	9.13	0.00	9.13	1.00	0.00	1.00

MSPCL Tariff Order for FY 2020-21

Sl. No.	Name of Project	Cost of Project	Source of Funding			Budget Outlay, 2019-2020		
			State Fund	Grant	Total	State Fund	Grant	Total
	33 kV line & related civil works at Ibudhou Marjing							
7	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Nambashi, Ukhrul district.	11.10	11.10	0.00	11.10	1.00	0.00	1.00
8	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Khongjaron, Tamenglong district.	7.06	7.06	0.00	7.06	1.00	0.00	1.00
9	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Somdal, Ukhrul District.	8.90	8.90	0.00	8.90	1.00	0.00	1.00
10	Installation of 2x5 MVA, 33/11 kV SS at Joujangtek, Noney district	13.06	13.06	0.00	13.06	1.00	0.00	1.00
11	Installation of 2x5 MVA, 33/11 kV SS at Oinam, Sena pati district.	12.41	12.41	0.00	12.41	1.00	0.00	1.00
12	Installation of 2x5 MVA, 33/11 kV SS at Gwakhah, Jiribam district.	8.08	8.08	0.00	8.08	1.00	0.00	1.00
13	Installation of 2x5 MVA, 33/11 kV SS at Nampisha, Kamjong district	11.10	11.10	0.00	11.10	1.00	0.00	1.00
	<b>Total : A.2.1</b>	<b>133.29</b>	<b>133.29</b>	<b>0.00</b>	<b>133.29</b>	<b>13.00</b>	<b>0.00</b>	<b>13.00</b>

Sl. No.	Name of Project	Cost of Project	Source of Funding			Budget Outlay, 2019-2020		
			State Fund	Grant	Total	State Fund	Grant	Total
	<b>Sub-Total (I):</b>	<b>1429.81</b>	<b>1013.66</b>	<b>416.15</b>	<b>1279.81</b>	<b>97.80</b>	<b>28.06</b>	<b>125.86</b>
<b>II</b>	<b>Misc. Scheme</b>							
1	Construction of Administrative Building	0.00	0.00	0.00	0.00	0.50	0.00	0.50
2	Construction of Divisional & Sub-Divisional office buildings, quarters, complain rooms, etc.	0.00	0.00	0.00	0.00	1.00	0.00	1.00
	<b>Total : II</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.50</b>	<b>0.00</b>	<b>1.50</b>
	<b>Total (I+II):</b>	<b>1429.81</b>	<b>1013.66</b>	<b>416.15</b>	<b>1279.81</b>	<b>99.30</b>	<b>28.06</b>	<b>127.36</b>

The status of various schemes planned for execution in FY 2019-20 are provided in the table above. All the above ongoing scheme are funded from the State budget or Central Government agencies as grants and therefore funding of these schemes are already approved.

MSPCL has considered the capitalization of assets which are expected to be completed during the year which is presented in the table below:

**Table 6.7: Capitalised Assets in FY 2019-20**

(in Rs. Cr.)			
S.N.	Name of Project	Capacity	Cost of Project
1	Installation of 2X5 MVA 33 KV S/S (formerly 1X3.15 MVA 33 KV S/S) along with the associated 33 KV Line and related civil Works at Yairipok, Thoubal District. Manipur under IPDS on Turnkey Basis	2X5 MVA	9.5
2	Installation of 2X5 MVA 33 KV (Formerly 1X3.15 MVA 33 KV S/s) Along with the associated 33 KV Line and related civil works at wangoi, Imphal West, Manipur under IPDS on Turnkey Basis.	2X5 MVA	8.4
3	Installation of 2X20 MVA, 132/33 KV sub-Station along with the associated 132 KV LILO line and related civil Works at Thoubal, Thoubal District, Manipur on Trunkey Basis	2X20 MVA	51
4	Construction of 132 KV D/C (3rd CKT) strung on D/C Tower from 132 KV Yurembam S/s State to Yurembam S/S (PGCI) including line Bay	0.7 KM	10.2
5	Installation of 1X20 MVA transformer at Yaingangpokpi 132/33 KV S/S for replacement of old Transformer	1X20 MVA	5.57
6	Upgradation of 33/11 KV Sub Station at Khoupam in Tamenglong District by installing 2X2.5 MVA Transformer	2X2.5 MVA	5.05
<b>Total Proposed Capitalization:</b>			<b>89.72</b>

It is submitted that **all ongoing capital schemes of MSPCL are being funded by State Government and Central Government agencies in the form of grants and therefore, no equity or debt has been considered by MSPCL for these schemes.** Revised capital expenditure and capitalisation details for FY 2019-20 as against the approved values are given below.

**Table 6.8: CWIP, Capital Expenditure and Capitalisation in FY 2019-20****(in Rs. Cr.)**

Sl. No.	Particulars	Approved in T.O dated 26.03.2019	Now Proposed in APR
1	Opening CWIP	199.93	420.34
2	Capital Expenditure	265.57	127.36
3	Less: Capitalisation (asset cost)	251.56	89.72
4	<b>Closing CWIP</b>	<b>213.94</b>	<b>457.98</b>

**Commission's Analysis:**

MSPCL has estimated an expenditure of Rs.127.36 Crore as against the earlier approved investment amount of Rs.265.57Cr and had under projected for the assets capitalization to Rs.89.72Cr. But the reasons for such under investments and lesser Capitalization was not explained. More so, the opening CWIP amount will have to be verified with the Audited Accounts for FY 2018-19 which are yet to be produced before Commission. Under this uncertainty, the above projections are kept as it is and will be suitably modified at the time of its True-up submission.

**6.7 Gross Fixed Assets****Petitioner's submission**

The approved value and revised estimate of GFA for FY 2019-20 based on the actual GFA addition during FY 2018-19 are shown in table below. It is submitted that against the approved capitalization of Rs. 251.56 Cr., the revised estimate for capitalization is Rs. 89.72 Cr. which is based on the progress of various schemes as detailed in previous section.

**Table 6.11: Gross Fixed Assets****(in Rs. Cr.)**

Particulars	Approved for ARR Dt.26 Mar, 2019	Revised Estimate For FY 2019-20
Opening GFA	1279.92	1279.92
Additions during the year	251.56	89.72
O&M Expenses Capitalisation	-	-
<b>Closing GFA (1+2+3)</b>	<b>1531.48</b>	<b>1369.64</b>

### Commission's Analysis:

The opening GFA as on 1.04.2019 is to be verified on submission of the audited accounts of 2018-19 to start with. Pending the above, the Commission is constrained to provisionally adopt the projections as was made by the MSPCL, since the capitalization now estimated was 1/3<sup>rd</sup> of what has been approved by the Commission and would not burden the consumers additionally by higher depreciation at this juncture. It is noted that the opening CWIP indicated as approved by Commission was only Rs1279.90 crs which was placed wrongly in the petition and so is the case with the closing CWIP also.

It is also noted from the capitalization pattern, the Licensee instead of capitalizing some portion of O&M Expenses along with capitalized asset value, they are preferring to pass it on to the consumers as revenue expenditure. Any such expenditure incurred on account of manhour spent on capital nature works shall have to be capitalized, as its benefit would last for a period beyond one year's time but this prudent accounting concept is missing in the capitalization of CAPEX expenditure related issues. To the extent expenses were capitalized will be reduced from allowable expenditure in the ARR of the relevant year. Therefore, the 10% of capital value is assumed to be the O&M expenses for capitalization in FY 2019-20 and the GFA values are tabulated below:

**Table 6.12: GFA adopted by the Commission for FY 2019-20 after review**  
(Rs. Cr)

Sl. No	Particulars	FY 2019-20
1	Opening GFA	1279.92
2	Add: Additions during the year	89.72
3	Add: Expenses capitalized	8.97
4	Closing GFA	1378.61
5	<b>Average GFA for FY2019-20</b>	<b>1329.26</b>

The Commission approves estimated GFA as on 31.03.2020 at Rs.1378.61 Crore as against the estimation by MSPCL after review.

#### 6.7.1 Depreciation

##### Petitioner's submission

MSPCL has calculated the depreciation at the depreciation rates provided by the Commission in JERC (MYT Tariff) Regulations 2014. Depreciation has been worked

out on the opening gross fixed assets for FY 2019-20 and estimated additions as proposed during the financial year.

As such, the Commission is requested to review the depreciation figures based on the revised addition to fixed assets as shown below:

**Table 6.13: Depreciation for FY 2019-20**

(in Rs. Cr.)

Particular	FY 2019-20				Rate	Depreciation
	Opening	Addition	Closing	Average		
Land & Land Development	23.74	0.00	23.74	23.74	0.00%	0.00
Plant & Machinery	1188.28	89.72	1278.00	1233.14	5.28%	65.11
Building	63.71	0.00	63.71	63.71	3.34%	2.13
Furniture & Fittings	1.11	0.00	1.11	1.11	6.33%	0.07
Computer	1.27	0.00	1.27	1.27	15.00	0.19
Office	0.21	0.00	0.21	0.21	6.33%	0.01
Vehicles	1.60	0.00	1.60	1.60	9.50%	0.15
<b>Total</b>	<b>1279.92</b>	<b>89.72</b>	<b>1369.64</b>	<b>1324.78</b>		<b>67.66</b>

The total depreciation in FY 2019-20 is projected to be Rs.67.66 Cr. However, as approved in MYT Order dated 12<sup>th</sup> March 2018, only 1.5% of assets has been considered to be not funded through grants, the same percentage is considered for projection of depreciation for FY 2019-20. MSPCL requests the Hon'ble Commission to approve the depreciation of Rs.1.01 Cr. as shown below.

**Table 6.14: Depreciation to be considered for FY 2019-20**

(in Rs. Cr.)

Depreciation	Approved vide ARR dated 26 Mar, 2019	Revised Estimate
Average value of assets	1405.80	1324.78
Rate of Dep.	5.10%	5.11%
Total Depreciation	71.70	67.66
1.5 % of the Depreciation	1.08	1.01

**Commission's Analysis:****Table 6.15: Depreciation for FY 2019-20 approved by the Commission after review (Rs. Cr)**

Sl. No	Particulars	Approved in T.O 26.03.2019	Now Adopted for FY 2019-20
1	Opening GFA	1279.90	1279.92
2	Addition during the year	251.56	89.72
3	Capitalization of expenses	0	8.97
4	Total GFA at the end	1531.47	1378.61
5	Average GFA	1405.80	1329.26
6	Average rate of Depreciation	5.10%	5.10%
7	Depreciation	71.71	67.79
8	1.5% of the Depreciation	1.08	1.01

The Commission approves depreciation of Rs 1.01 Crore for FY 2019-20 after review.

**6.8 Interest and Finance charges****Petitioner's submission**

In the Order dated 26<sup>th</sup> March 2019, there were no interest and financial charges approved since entire capital expenditure of MSPCL has been funded by the State Government through grants from Central Government Ministries and Agencies like Ministry of Power (MoP) through schemes of NEC, NLCPR, DONER or through State Plan Scheme. **Therefore, the utility does not have any liabilities on account of long-term loans. As such no interest charges are claimed for FY 2019-20.**

**Table 6.9: Interest and Finance Charges for FY 2019-20****(in Rs. Cr.)**

Particulars	Approved vide ARR dated 26 Mar, 2019	Actual (till Sept'19)	Estimated FY 2019-20
Total Interest and Finance Charges	-	-	-

**Commission's Analysis:**

As there is no loan liability, no interest charges are considered by the Commission for FY 2019-20.

**6.9 Interest on working capital****Petitioner's submission**

For APR of FY 2019-20, MSPCL has calculated the interest on working capital as per the

JERC (Multi Year Tariff) Regulations, 2014, and based on the revised estimated figures as discussed above. The interest rate is taken equal to the SBI PLR rate as on 1<sup>st</sup> April 2019 i.e., 13.80%. The calculation is shown below:

**Table 6.17: Interest on Working Capital for the FY 2019-20**

(in Rs. Cr.)			
Sl. No.	Particulars	Approved vide ARR dated 26 Mar, 2019	FY 2019-20 Estimated
1	O&M expenses	7.35	6.12
2	Maintenance of Spares (1%)	13.57	14.33
3	Receivables	7.10	5.84
4	<b>Working Capital Requirement</b>	<b>28.02</b>	<b>26.29</b>
5	Rate of interest	13.45%	13.80%
6	<b>Interest on Working Capital</b>	<b>3.77</b>	<b>3.63</b>

**MSPCL requests the Hon'ble Commission to revise the Interest on Working Capital as shown in the above table.**

#### **Commission's Analysis:**

As per Regulation 29.2 of Tariff Regulations working capital shall be computed as follows:

- O&M expenses for one month: plus
- Maintenance of spares at 1% of the historical cost escalated from the date of commercial operation; plus
- Receivables equivalent to one month of transmission charges calculated on target availability level; minus
- Amount if any held as security deposits except the security deposits held in the form of bank guarantee from transmission system users.

Interest shall be calculated at a rate equal to State Bank Advance Rate (SBAR) as on 1<sup>st</sup> April of the financial year in which the petition is filed.

Accordingly based on approved costs, the interest on working capital is worked out as detailed in table below:

**Table 6.18: Interest on working capital approved by the Commission for FY 2019-20**

(Rs. Cr)			
Sl. No	Particulars	Total Value	One Month Cost
1	O&M Expenses one month	64.42	5.37
2	Maintenance of spares at 1% of	1279.92	13.57

	opening GFA escalated by 6%		
3	Receivables one month	60.60	5.05
4	<b>Total Working Capital</b>	<b>1404.94</b>	<b>23.09</b>
5	Rate of Interest as on 01.04.2018		13.80%
6	<b>Interest on working Capital</b>		<b>3.31</b>

The Commission approves interest on working capital at 3.31 Crore for FY 2019-20 as against Rs. 3.63 Crore claimed by MSPCL after review.

#### 6.10 Return on Equity

##### Petitioner's submission

Regulation 22 of MYT Regulation, 2014 provides that equity for the purpose of ROI shall be 30% of capital cost or actual equity, whichever is lower. Further, Regulation 26 of MYT Regulation provides that RoE shall be allowed at the rate of 15.5% of Equity as determined under regulation 22. Accordingly, Equity for the purpose of calculating RoE has been considered as actual equity base for the FY 2019-20. Further, Regulation 30 provides that Income Tax payable shall be allowed based on actual income tax as per Audited Accounts. Income Tax for the FY 2019-20 has been considered at MAT rate of 15.6% which is the notified rate for the year.

The actual equity base as per accounts in FY 2019-20 is Rs. 10.05 Cr. The revised Return on Equity (inclusive of tax) along with the approved figures for FY 2019-20 are detailed in table below:

**Table 6.19: Return on Equity for FY 2019-20**

(in Rs. Cr.)

Particulars	Approved vide ARR dated 26 Mar, 2019	Estimated For FY 2019-20
Return on Equity	1.96	1.80

**The Commission is requested to approve the Return on Equity of Rs. 1.80 Crs as estimated for FY 2019-20.**

##### Commission's Analysis:

As per regulation 26 of Tariff Regulations return on equity shall be computed on the paid-up equity, the proposed equity addition of Rs.13.40 cr is not considered as it is not paid at the point of review. As such ROE is allowed as paid equity of Rs.10.05 Crore. Which works out to be Rs.1.80 Crore is including MAT.

The Commission accordingly approves return on equity at Rs. 1.56 Crore as against Rs.1.80 estimated by MSPCL for FY 2019-20 after review and the Income Tax incidence will be. allowed based on actuals at the time of truing up

#### 6.11 Non-Tariff Income

##### Petitioner's submission

The approved NTI for the FY 2019-20 in the ARR order Dt. 26<sup>th</sup> March 2019 is 9.70 Cr. The same has been considered for the FY 2019-20. The details are provided in the table below.

**Table 6.20: Non-Tariff Income for FY 2019-20**

(in Rs. Cr.)

Particulars	Approved vide ARR dated 26 Mar, 2019	Revised Estimate
Non-Tariff Income	9.70	9.70

The Commission is requested to approve the Non-tariff Income of Rs. 9.70 Cr. as estimated for FY 2019-20.

##### Commission's Analysis:

**Table 6.21: Non-Tariff Income break-up approved for FY 2019-20**

(in Rs. Cr.)

Particulars	Approved vide ARR dated 26 Mar, 2019	Approved by Commission
Income from SLDC	9.70	3.00
Agency Charges		2.65
Bank Interest		3.95
Other Income		0.10
<b>Non-Tariff Income</b>	<b>9.70</b>	<b>9.70</b>

The Commission approves non-tariff income at Rs. 9.70 Crore for FY 2019-20 as projected by MSPCL after review.

#### 6.12 Aggregate Revenue Requirement

Based on the above analysis, the Aggregate Revenue Requirement estimated for FY 2019-20 by MSPCL under the annual performance review against the figures approved by the Commission for FY 2019-20 are furnished in Table below:

Table 6.10: Aggregate Revenue Requirement for FY 2019-20

(in Rs. Cr.)

Sl. No.	Particulars	Approved vide ARR dated 26 Mar, 2019	Revised Estimate
1	R&M Expense	14.44	14.44
2	Employee Expense	69.12	54.34
3	A&G Expense	4.61	4.61
4	Depreciation	1.08	1.01
5	Interest on Loans	0.00	0.00
6	Return on Capital Employed	1.96	1.56
7	Interest on working capital	3.77	3.63
8	Income Tax	0.40	0.24
9	<b>Total Cost</b>	<b>95.37</b>	<b>79.83</b>
10	Less: Non-Tariff income	9.70	9.70
11	<b>Aggregate Revenue Requirement</b>	<b>85.68</b>	<b>70.13</b>

MSPCL requests the Hon'ble Commission to revise the ARR for FY 2019-20 as proposed above.

#### Commission Analysis

The details of each cost elements as considered by the Commission after review is tabulated below for FY 2019-20:

Table 6.23: Aggregate Revenue Requirement commission approved after review

(in Rs. Cr.)

Sl. No.	Particulars	ARR approved
1	R&M Expense	14.44
2	Employee Expense	45.32
3	A&G Expense	4.61
4	Depreciation	1.01
5	Interest on Loans	0.00
6	Return on Capital Employed	1.56
7	Interest on working capital	3.31
8	Income Tax	0
9	<b>Total Cost</b>	<b>70.30</b>
10	Less: Non-Tariff income	9.70
11	<b>Aggregate Revenue Requirement</b>	<b>60.60</b>

The Commission therefore approves net ARR at Rs. 60.60 Crore for FY 2019-20 as against the projected amount of Rs.70.13 Crs by MSPCL after review.

## 7. Determination of Transmission ARR for FY 2020-21

### 7.1 Introduction

After the First Control Period i.e. FY 2016-17 to FY 2017-18, the Hon'ble Commission in its Tariff Order for FY 2017-18 had directed that the Second Control Period shall be for a period of five years from 1.04.2018 and that the Petitioner is required to submit ARR for the Control Period FY 2018-19 to FY 2022-23. Accordingly, MSPCL submitted its Multi Year Tariff (MYT) Petition for the determination of ARR for each year of the Second Control Period i.e. FY 2018-19 to FY 2022-23 along with proposed transmission tariff for FY 2018-19 and orders issued vide T.O dt. 12.03.2018.

In line with the provisions of the JERC (Multi Year Tariff) Regulations, 2014, the licensee is required to submit a petition for determination of tariff for the ensuing year along with the truing up for the previous year and APR for current year. MSPCL is submitting its revised ARR and tariff petition for FY 2020-21 on the basis of the principles outlined in JERC (Multi Year Tariff) Regulations, 2014. MSPCL has considered the past trends and taken cognizance of actual financial numbers for FY 2018-19 and first six months of FY 2019-20 to revise the ARR for FY 2020-21 and propose suitable tariff for recovery of the same.

The following sections explain in detail the basis and forecasts of the following elements for FY 2020-21:

- a. Capital Investment Plan for the current year and ensuing year
- b. Determination of Aggregate Revenue Requirement by forecasting the following costs, other income & returns:
  - i. Employee Cost
  - ii. Repairs & Maintenance Cost
  - iii. Admin & General Cost
  - iv. Interest Cost
  - v. Interest on Working Capital
  - vi. Depreciation
  - vii. Return on Equity
  - viii. Non-Tariff Income
- c. Proposed Transmission Tariff for recovery of the proposed ARR for FY 2020-21.

## 7.2 Contracted Capacity in Manipur Petitioner's Submission

- The own generation of Manipur is very less, therefore it relies mainly on the allocation of power from Central Generating Stations like NHPC, NEEPCO, OTPC Palatana Unit-I and Tripura based Baramura power plant etc. to meet its energy requirement.
- The MSPDCL has provided the **projected contracted capacity as 256 MW and projected energy to be transmitted as 1164 MUs during the FY 2020-21.** MSPCL has considered the above contracted capacity & energy for the FY 2020-21.

The details of existing transmission network of Manipur are as provided in the table below:

**Table 7. 1: MSPCL Transmission infrastructure snapshot**

Voltage Level		400 kV	132 kV	33 kV
No. of Sub-Station	FY 18-19	0	16	84
	FY 19-20	1	18	87
	FY 20-21	1	18	118
Transformation Capacity (MVA)	FY 18-19	-	598	597
	FY 19-20	315	678	1352
	FY 20-21	315	787	1882
Line Length (km)	FY 18-19	-	<b>696.2</b>	<b>1676.52</b>
	FY 19-20	90.2	720.2	1687.62
	FY 20-21	90.2	720.2	2160.62

### Commission Analysis:

The Transmission capacity indicated for FY 2020-21 at 256MWs is same as that was estimated by MSPDCL in their ARR filings and the energy to be transmitted by MSPCL would be dependent on the quantum finalized by the Commission in the case MSPDCL as per their need and requirement. Accordingly, the same is considered at 1013.23MU by Commission.

Upon examination of the break-up details provided for the above data, the MSPCL had provided the details for each voltage wise asset for only FY2018-19 and there is no such information for FY 2019-20 and 2020-21 in respect of Sub-Stations, Installed Capacity of Transmission and the Length of the Line it

projected. While, referring to the line length in FY 2018-19 the break-up details provided for 132kV was only 628.25 Ckt.-Km instead of for 696.20 Ckt.-Km and in the case of 33kV also the break provided was only for 1617.04 Ckt.-Km instead of for 1676.52 Ckt.-Km as shown in the Table above.

The details made available are provided below for reference.

Transmission Lines: 132 KV for FY 2018-19					
Sl. No.	Name of line	Type of line AC/ HVDC	S/C or D/C	Voltage level kV	Line length Ckt.-Km.
1	Leimatak -Ningthoukhong	AC	S/C	132	10.50
2	Ningthoukhong - Yurembam	AC	S/C	132	27.50
3	Yurembam - Mao	AC	S/C	132	91.38
4	LILO at Karong	AC	S/C	132	1.16
5	Yurembam - Yaingangpokpi(i)	AC	S/C	132	41.36
6	Yaingangpokpi - kongba	AC	S/C	132	32.28
7	kongba - Kakching	AC	S/C	132	44.95
8	Leimatak -Rengpang(i/c LILO)	AC	S/C	132	39.80
9	Rengpang- Jiribam	AC	S/C	132	52.20
10	Heikakpokpi(Kakching) - Chandel	AC	S/C	132	16.07
11	Yaingangpokpi - Hundung	AC	S/C	132	26.81
12	Yurembam – Yaingangpokpi (ii)	AC	S/C	132	46.99
13	Link line from 132 kV Kakching to 132kV Thoubal via 400kV Thoubal	AC	S/C	132	4.00
14	LILO at Elangkhangpokpi on Kakching - Churchandpur (State Plan)	AC	S/C	132	5.90
15	132kV Moreh line from Kakching to Moreh	AC	S/C	132	45.00
16	132kV Thanlon line from CCpur to	AC	S/C	132	69.48
17	LILO at Tipaimukh on Jiribam (PG) - Aizawl (PG)	AC	S/C	132	5.00
18	Link line from 132 kV Kakching to 132kV Thoubal via 400kV Thoubal	AC	D/C	132	7.00
19	Ningthoukhong - Churachandpur	AC	D/C	132	23.02
20	Kakching–Churachandpur D/C	AC	D/C	132	37.86
132 kV Total :					628.25

#### Transmission Lines: 33 KV for FY 2018-19

Sl. No.	Name of line	Type of line AC/ HVDC	S/C or D/C	Voltage level kV	Line length Ckt.-Km.
1	Yurembam – Mayang Imphal	AC	S/C	33	23.80

Sl. No.	Name of line	Type of line AC/ HVDC	S/C or D/C	Voltage level kV	Line length Ckt.-Km.
2	Yurembam – Leimakhong	AC	S/C	33	20.00
3	Khuman Lampak – Imphal P/H	AC	S/C	33	3.50
4	Khuman Lampak - Kongba	AC	S/C	33	11.00
5	Napetpalli - Khuman Lampak	AC	S/C	33	16.00
6	Khuman Lampak – Nilakuthi	AC	S/C	33	8.50
7	Mongsangei – Kongba	AC	S/C	33	13.81
8	Leimakhong – Nilakuthi	AC	S/C	33	9.50
9	Kakching – Mayang Imphal	AC	S/C	33	19.00
10	Kakching – New Chayang	AC	S/C	33	18.40
11	Kakching – Tengenupal	AC	S/C	33	27.00
12	Moirang – Moirang Khunou	AC	S/C	33	6.50
13	Thoubal- Kongba	AC	S/C	33	15.00
14	Kakching – Thoubal via Wangjing	AC	S/C	33	22.00
15	Leimakhong - Kangpokpi	AC	S/C	33	35.00
16	Yaingangpokpi – Hundung via Litan	AC	S/C	33	32.00
17	Yaingangpokpi – Napetpalli	AC	S/C	33	12.40
18	Hundung – Kamjong	AC	S/C	33	56.00
19	Hundung – Tolloi	AC	S/C	33	28.00
20	Jiribam – Rengpang	AC	S/C	33	75.00
21	Rengpang – Khoupum	AC	S/C	33	25.00
22	Rengpang – Tamenglong	AC	S/C	33	45.00
23	Ningthoukhong – Churachandpur via	AC	S/C	33	27.28
24	Karong - Maram	AC	S/C	33	20.00
25	Maram - Tadubi	AC	S/C	33	20.00
26	Kangpokpi - Karong	AC	S/C	33	18.00
27	Ningthoukhong – Bishnupur	AC	S/C	33	8.80
28	Bishnupur – Nambol	AC	S/C	33	7.00
29	Nambol to tapping at malom	AC	S/C	33	3.00
30	Yurembam to Airport	AC	S/C	33	7.00
31	Sagolmang – Saikul	AC	S/C	33	20.00
32	Tengenupal - Moreh	AC	S/C	33	35.00
33	Yurembam - None	AC	S/C	33	34.50
34	Churachandpur -- Singhat	AC	S/C	33	38.50
35	Tolloi - Namrei	AC	S/C	33	43.00
36	Maram -Lakhamai	AC	S/C	33	40.00
37	Kangla	AC	S/C	33	0.10
38	Churachandpur-Thinkew	AC	S/C	33	38.00
39	Jiribam -Shivapurikhal	AC	S/C	33	43.00
40	Kangpokpi - Tamei	AC	S/C	33	50.00

Sl. No.	Name of line	Type of line AC/ HVDC	S/C or D/C	Voltage level kV	Line length Ckt.-Km.
41	Tousem	AC	S/C	33	42.00
42	Namrei - Jessami	AC	S/C	33	50.00
43	Mongsangei to Kakwa	AC	S/C	33	5.00
44	Napetpalli - Sagolmang	AC	S/C	33	15.00
45	LILO at Sangaipat	AC	S/C	33	3.20
46	LILO at Sangaiprou	AC	S/C	33	0.20
47	Thinkew- Thanlon	AC	S/C	33	75.00
48	Maram - Willong	AC	S/C	33	37.00
49	LILO Sekmai jin	AC	S/C	33	4.00
50	Thanlon - Sinjawl	AC	S/C	33	50.00
51	LILO Ukhrul Khunjao	AC	S/C	33	6.00
52	JNIMS	AC	S/C	33	2.00
53	LILO at Chingarel	AC	S/C	33	4.00
54	LILO Chakpikarong	AC	S/C	33	4.00
55	LILO at Oinamlong from Jiribam -	AC	S/C	33	25.00
56	LILO at Gamphajol from Kangpokpi -	AC	S/C	33	2.50
57	LILO at Sekmai from Kangpokpi -	AC	S/C	33	5.00
58	Thoubal - Thoubal Leishangthem	AC	S/C	33	20.00
59	LILO at Khongjom from Kakching -	AC	S/C	33	5.00
60	Hundung -Phungyar	AC	S/C	33	42.00
61	None - Loktak Downstream HEP	AC	S/C	33	40.00
62	LILO at Gelnel on Kangpokpi-Tamei	AC	S/C	33	6.00
63	Thinkew -Henglep	AC	S/C	33	25.00
64	LILO Sugnu	AC	S/C	33	3.00
65	MoirangKhunou -Wangoo	AC	S/C	33	13.50
66	Shajaoba(Tadubi) - Mao	AC	S/C	33	10.00
67	Hundung -Nungbi Khullen	AC	S/C	33	45.00
68	LILO at Mayangkhang on Karong	AC	S/C	33	3.00
69	Thoubal - Kasom Khullen	AC	S/C	33	41.00
70	Yurembam - Mongsangei	AC	D/C	33	8.14
71	Yurembam – Khuman Lampak via	AC	D/C	33	13.48
72	Sinam Chingin – Lamphel	AC	D/C	33	3.50
73	Khuman Lampak – Kongba (D/C)	AC	D/C	33	14.26
74	Iroisemba - Leimakhong D/C	AC	D/C	33	18.00
75	PGCIL - Yurembam Multi Circuit	AC	M/C	33	0.68
<b>Total :</b>					<b>1617.04</b>

**Capital Expenditure**

- In the MYT Petition, MSPCL had submitted year wise capital expenditure for the various schemes proposed to be undertaken during the Control Period FY 2018-19 to FY 2022-23. The Commission had approved the same in the MYT Order dated 2<sup>th</sup> March 2018.
- Considering the progress of various schemes since the issuance of the MYT Order, MSPCL proposes to revise the capital expenditure for FY 2020-21 for the purpose of revised projection of ARR. The revised capital expenditure is based on the current status of the various schemes which are under implementation.
- The proposed capital expenditure during FY 2020-21 along with scheme-wise details are provided in the table below:

## 7.3 Proposed capital expenditure on ongoing and new projects during FY 2020-21

Table 7.2: Proposed Capital expenditure on ongoing and new projects during FY 2020-21

(in Rs. Cr.)

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2020-21)		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
<b>I</b>	<b>Generation</b>							
<b>1</b>	<b>Loktak Down Stream Hydro Electric Project (2x33 MW)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>10.00</b>	<b>0.00</b>	<b>10.00</b>
	<b>Sub-Total : Generation Hydro (I)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>10.00</b>	<b>0.00</b>	<b>10.00</b>
<b>II</b>	<b>Transmission &amp; Distribution</b>							
<b>A.1</b>	<b>Ongoing Schemes</b>							
<b>A.1.1</b>	<b>400 kV System</b>							
<b>1</b>	<b>Installation of 400 kV Sub-Station at Thoubal(NLCPR)</b>	<b>230.62</b>	<b>115.20</b>	<b>115.42</b>	<b>230.62</b>	<b>7.52</b>	<b>0.00</b>	<b>7.52</b>
<b>2</b>	<b>Construction of 400 kV T/L from Yurembam to Thoubal via Nambol</b>	<b>259.68</b>	<b>148.84</b>	<b>110.84</b>	<b>259.68</b>	<b>23.47</b>	<b>0.00</b>	<b>23.47</b>
<b>3</b>	<b>Installation of 2 nos. 400 kV line bays at Imphal(PG) sub-station</b>	<b>35.24</b>	<b>35.24</b>	<b>0.00</b>	<b>35.24</b>	<b>3.97</b>	<b>0.00</b>	<b>3.97</b>
	<b>Total : A.1.1</b>	<b>525.54</b>	<b>299.29</b>	<b>226.25</b>	<b>525.54</b>	<b>34.96</b>	<b>0.00</b>	<b>34.96</b>
<b>A.1.2</b>	<b>132 kV System</b>							
<b>3</b>	<b>R &amp; M of 132/33 kV sub-station at Yurembam (SPA/NEC)</b>	<b>44.70</b>	<b>10.20</b>	<b>34.50</b>	<b>44.70</b>	<b>0.54</b>	<b>0.00</b>	<b>0.54</b>
<b>4</b>	<b>Installation of 132/33 kV S/S at Chandel with associated 132 KV line(NLCPR)</b>	<b>31.52</b>	<b>19.58</b>	<b>11.93</b>	<b>31.52</b>	<b>0.22</b>	<b>0.00</b>	<b>0.22</b>
<b>5</b>	<b>Installation of 1x20 MVA transformer at Yaingangpokpi</b>	<b>5.58</b>	<b>5.58</b>	<b>0.00</b>	<b>5.58</b>	<b>1.41</b>	<b>0.00</b>	<b>1.41</b>
<b>7</b>	<b>Renovation &amp; Modernisation of three nos. of 132/33 kV S/S at Kakching, Karong &amp; Churachandpur(NLCPR)</b>	<b>49.69</b>	<b>8.10</b>	<b>41.58</b>	<b>49.69</b>	<b>2.78</b>	<b>0.00</b>	<b>2.78</b>
<b>8</b>	<b>Installation of 132/33 kV S/S at Thanlon with associated line(NLCPR)</b>	<b>135.88</b>	<b>81.90</b>	<b>53.98</b>	<b>135.88</b>	<b>6.08</b>	<b>0.00</b>	<b>6.08</b>
<b>9</b>	<b>Installation of 2x20 MVA,132 kV Sub-Station along with associated 132 kV LILo lines &amp; related works at Thoubal(NEC)</b>	<b>50.38</b>	<b>18.32</b>	<b>32.05</b>	<b>50.38</b>	<b>7.37</b>	<b>0.00</b>	<b>7.37</b>

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2020-21)		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
10	Providing of Energy Meter	3.47	3.47	0.00	3.47	0.26	0.00	0.26
11	Augmentation of Rengpang 132/33 kV sub-station by installing(3x4.16+1x4.16)MVA 132/33 kV single phase transformers	12.63	12.63	0.00	12.63	1.61	0.00	1.61
14	Cost for diversion of forest land for construction of trasmission projects	50.52	50.52	0.00	50.52	43.39	0.00	43.39
15	Installation of 132/33 kV sub-station at Moreh wth erection of associated 132 kV line(NLCPR)	115.74	87.29	28.45	115.74	15.85	0.00	15.85
16	Augmentation of 132/33 KV S/S at Jiribam (Installation of additional transformers)	3.66	3.66	0.00	3.66	0.32	0.00	0.32
19	Stringing of 132 kV line (2nd circuit) from Kakching to Churachandpur(NEC)	17.44	8.28	9.16	17.44	1.09	0.00	1.09
20	Construction of 132 kV S/C line(2nd ckt) on D/C towers from Leimatak PH(NHPC) to 132 kV sub-station at Ningthoukhong	20.44	20.44	0.00	20.44	0.03	0.00	0.03
21	Installation of 132 kV sub-station along with associated 132 kV line at Elangkhangpokpi	56.21	56.21	0.00	56.21	8.15	0.00	8.15
22	Construction of 132 kV S/C line(3rd ckt) strung on D/C towers from 132 kV Yurembam sub-station (State) to Yurembam sub- station (PGCIL)	10.25	10.25	0.00	10.25	0.50	0.00	0.50
23	Construction of 132/33 kV sub-station at Tipaimukh	51.39	51.39	0.00	51.39	6.83	0.00	6.83
24	Construction of 132 kV link T/L from 400/132 kV sub-station, Thoubal to 132 kV sub-stations at Kongba, Yaingangpokpi and Hundung on existing Kongba to Kakching 132 kV T/L.	15.83	15.83	0.00	15.83	5.29	0.00	5.29
25	Construction of 132 kV link T/L from 400/132 kV sub-station, Thoubal to 132 kV sub-stations at Kakching & Chandel on existing Kongba to Kakching 132 kV T/L.	7.98	7.98	0.00	7.98	1.98	0.00	1.98
26	Construction of 132 kV link T/L from 400/132 kV sub-station, Thoubal to 132 kV sub-stations at Moreh on Kakching to Moreh 132 kV T/L.	22.34	22.34	0.00	22.34	3.00	0.00	3.00
	<b>Total : A.1.2</b>	<b>705.62</b>	<b>493.95</b>	<b>211.67</b>	<b>705.62</b>	<b>106.70</b>	<b>0.00</b>	<b>106.70</b>
<b>A.1.3</b>	<b>33 kV System</b>							
2	Installation of 33/11 kV sub-station at Chakpikarong(NLCPR)	11.45	6.45	4.99	11.45	2.10	0.00	2.10

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2020-21)		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
3	Installation of 33/11 kV S/S at Sekmaijin(NLCPR)	7.28	3.89	3.40	7.28	1.64	0.00	1.64
4	Installation of 33/11 kV S/S at Ukhrul Khunjao(NLCPR)	9.42	5.64	3.79	9.42	0.54	0.00	0.54
7	Erection of 33 kV feeders from Yurembam POWERGRID sub- station(SCA)	21.43	16.83	4.60	21.43	0.02	0.00	0.02
8	Installation of 2x5 MVA 33/11 kV sub-ststion with associated 33 KV line at Power House site of Loktak Down Stream HE Project(NEC)	14.84	7.83	7.01	14.84	2.15	0.00	2.15
9	Installation of 33/11 kV sub-station with associated 33 KV line at Sugnu(NLCPR)	10.30	5.45	4.85	10.30	1.79	0.00	1.79
10	Installation of 33/11 KV sub-station with associated 33 KV line at Khongjom(NLCPR)	9.02	4.70	4.32	9.02	1.00	0.00	1.00
11	Installation of 33/11 KV sub-station with associated 33 KV line at Sekmai(NLCPR)	8.70	4.52	4.18	8.70	0.02	0.00	0.02
12	Installation of 33/11 KV (2x1 MVA) S/S at Gelnel(NLCPR)	7.81	4.38	3.42	7.81	1.39	0.00	1.39
13	Installation of 33/11 KV (2x1 MVA) S/S at Nungbi Khullen with associated 33 KV line(NLCPR)	14.50	9.65	4.85	14.50	1.16	0.00	1.16
14	Re-stringing & strengthening of 33 kV lines	7.18	7.18	0.00	7.18	0.75	0.00	0.75
15	Installation of 33/11 KV (2x1 MVA) S/S at Gumnom with associated 33 kV line(NLCPR)	9.53	5.17	4.36	9.53	0.94	0.00	0.94
16	Renovation of 33/11 KV S/S at Khoupum	5.06	5.06	0.00	5.06	1.18	0.00	1.18
17	Installation of 33/11 kV sub-station at Phungyar with associated 33 kV line	11.39	11.39	0.00	11.39	1.96	0.00	1.96
18	Installation of 33/11 kV sub-station at Kasom Khullen with associated 33 kV line	10.42	10.42	0.00	10.42	1.60	0.00	1.60
19	Installation of 33/11 kV sub-station at Gamphazol with associated 33 kV line	10.06	10.06	0.00	10.06	0.48	0.00	0.48
20	Installation of 33/11 kV sub-station at Mayangkhang with associated 33 kV line(NEC)	9.63	2.71	6.92	9.63	0.79	0.00	0.79
21	Installation of 33/11 kV sub-station at Mao with associated 33 kV line(NEC)	10.21	3.17	7.04	10.21	0.71	0.00	0.71
22	installation of 33/11 kV sub-station at Poayi at Ukhrul	9.15	9.15	0.00	9.15	1.84	0.00	1.84
23	installation of 33/11 kV sub-station at Thueyng at Senapati	14.03	14.03	0.00	14.03	4.18	0.00	4.18

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2020-21)		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
24	Construction of 33 kV D/C line on STP from 132/33 kV SS atThoubal to 33/11 kV SS at Thoubal (old)	11.83	11.83	0.00	11.83	0.34	0.00	0.34
25	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Yairipok under IPDS	9.32	1.12	8.19	9.32	0.12	2.50	2.63
26	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Wangoi under IPDS	12.49	4.30	8.19	12.49	0.50	2.85	3.35
27	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Wangjing under IPDS	9.33	1.13	8.19	9.33	0.13	1.82	1.95
28	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Heirok under IPDS	8.87	1.00	7.87	8.87	0.00	1.76	1.76
29	Augmentation of 33/11 kV sub-station at Kangpokpi under IPDS	1.43	0.26	1.17	1.43	0.00	0.96	0.96
30	Augmentation of 33/11 kV sub-station at Karong under IPDS	1.66	0.31	1.36	1.66	0.00	0.43	0.43
	<b>Total : A.1.3</b>	<b>266.35</b>	<b>167.65</b>	<b>98.70</b>	<b>266.35</b>	<b>27.34</b>	<b>10.32</b>	<b>37.66</b>
<b>A.2</b>	<b>New Schemes</b>							
<b>A.2.1</b>	<b>33 kV System</b>							
4	Installation of 2x5 MVA 33/11 KV sub-station along with associated33 kV line & related civil works at Chingai, Ukhrul district.	11.75	11.75	0.00	11.75	4.30	0.00	4.30
5	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Kachai, Ukhrul district.	10.44	10.44	0.00	10.44	3.78	0.00	3.78
6	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Sanakeithel, Ukhrul district.	10.57	10.57	0.00	10.57	3.83	0.00	3.83
7	Installation of new 33/11 kV sub-station along with associated 33 kV line at Akampat, Imphal East.	8.86	8.86	0.00	8.86	3.14	0.00	3.14
8	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Liyai Khunou, Senapati district.	10.83	10.83	0.00	10.83	3.93	0.00	3.93
9	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Ibudhou Marjing	9.13	9.13	0.00	9.13	3.25	0.00	3.25
10	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV	11.10	11.10	0.00	11.10	4.04	0.00	4.04

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2020-21)		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
	line & related civil works at Nambashi, Ukhrul district.							
11	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Khongjaron, Tamenglong district.	7.06	7.06	0.00	7.06	2.42	0.00	2.42
21	Installation of 2x5 MVA, 33/11 kV SS at Joujangtek, Noney district	13.06	13.06	0.00	13.06	4.82	0.00	4.82
22	Installation of 2x5 MVA, 33/11 kV SS at Oinam, Sena [pati district.	12.41	12.41	0.00	12.41	4.56	0.00	4.56
23	Installation of 2x5 MVA, 33/11 kV SS at Gwakhal, Jiribam district.	8.08	8.08	0.00	8.08	2.83	0.00	2.83
24	Installation of 2x5 MVA, 33/11 kV SS at Nampisha, Kamjong district	11.10	11.10	0.00	11.10	4.04	0.00	4.04
25	Augmentation, R&M of 33/11 kV substations-28 nos.(Hill- Tengenoupal, Tolloi, Kamjong, Jiribam, Lakhaimai,Leimakhong, Litan, Maram, New Chayang, Saikul, Shivapurikhal, Singhat, Tadubi, Tamei, Tamenglong, Tousem, Namarei; Valley- Ningthoukhong, Iroisemba, Moirang, Kakching, Bishnupur, Nilakhuthi, Yaingangpokpi, Napetpalli, Wangjing, Moirang Khunou, Nambol)	86.07	86.07	0.00	86.07	4.30	0.00	4.30
26	33/11 kV Sub-Station at Rilamcentre	12.35	12.35	0.00	12.35	0.62	0.00	0.62
27	33/11 kV Sub-Station at Haochong	10.96	10.96	0.00	10.96	0.55	0.00	0.55
28	33/11 kV Sub-Station at Tuinem	13.05	13.05	0.00	13.05	0.65	0.00	0.65
29	33/11 kV Sub-Station at Phadang	10.96	10.96	0.00	10.96	0.55	0.00	0.55
30	33/11 kV Sub-Station at Lambui	13.05	13.05	0.00	13.05	0.65	0.00	0.65
31	33/11 kV Sub-Station at Shirakhong	9.01	9.01	0.00	9.01	0.45	0.00	0.45
32	33/11 kV Sub-Station at Wahong	10.96	10.96	0.00	10.96	0.55	0.00	0.55
33	33/11 kV Sub-Station at Kwatha	10.26	10.26	0.00	10.26	0.51	0.00	0.51
34	33/11 kV Sub-Station at Sita	10.68	10.68	0.00	10.68	0.53	0.00	0.53
35	33/11 kV Sub-Station at Khengjoy	9.84	9.84	0.00	9.84	0.49	0.00	0.49
36	33/11 kV Sub-Station at Patpuihmun	12.35	12.35	0.00	12.35	0.62	0.00	0.62
37	33/11 kV Sub-Station at Thongju Part-II	9.01	9.01	0.00	9.01	0.45	0.00	0.45
38	Reconductoring of Imphal Ring Main 33 kV System with HTLSconductor and renovation of associated sub-stations	0.93	0.93	0.00	0.93	0.05	0.00	0.05

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2020-21)		
			State Fund	Grant	Total	State Fund	Grant	Total
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
	<b>Total : A.2.1</b>	<b>343.87</b>	<b>343.87</b>	<b>0.00</b>	<b>343.87</b>	<b>55.93</b>	<b>0.00</b>	<b>55.93</b>
	<b>Sub-Total (II):</b>	<b>1841.38</b>	<b>1304.76</b>	<b>536.62</b>	<b>1841.38</b>	<b>224.93</b>	<b>10.32</b>	<b>235.24</b>
<b>III</b>	<b>Misc. Scheme</b>							
1	Consultancy for Hydel Investigation	3.50	3.50	0.00	3.50	1.75	0.00	1.75
5	Consultancy for assessment of Hydro Power Potential in the State	1.77	1.77	0.00	1.77	0.66	0.00	0.66
	<b>Total : III</b>	<b>5.27</b>	<b>5.27</b>	<b>0.00</b>	<b>5.27</b>	<b>2.41</b>	<b>0.00</b>	<b>2.41</b>
	<b>Total (I+II+III):</b>	<b>1846.65</b>	<b>1310.04</b>	<b>536.62</b>	<b>1846.65</b>	<b>237.33</b>	<b>10.32</b>	<b>247.65</b>

The Commission is requested to approve the revised capital expenditure proposed above for ongoing and new schemes during the year FY 2020-21. **It is submitted that these schemes shall help the utility in delivering quality and reliable power in the State.**

Further, it is also submitted that certain transmission works (construction of sub-stations and transmission lines) are being carried out by PGCIL on behalf of the State. **These works are funded by the Central Government and World Bank and therefore it is expected that there is no liability of loan for MSPCL on account of these projects. The transmission infrastructure shall be handed over to MSPCL post completion of these projects.**

#### **Commission Analysis:**

**As enumerated above by the licensee, the construction of transmission lines and sub-stations are being funded by the Central government and World Bank and there is no financial commitment for MSPCL. Besides the project is also being executed by the PGCIL on behalf of State government hence the investment plan is very much welcomed by the Commission for strengthening of the network from the grants/subsidy and it shall reap the benefit in the form of reduced losses and early completion of the scheme is much preferred and therefore the above scheme for FY 2020-21 is approved.**

### **3. Funding of Capital Investment Plan**

- a. It may be noted that funding for most of the schemes are covered by grants from State Government or grants from Central Government bodies like NLCPR and NEC. As such, there are no loans or equity for funding of such schemes. For all these schemes, 100% of the funding is covered by grants from State Government or Central Government. These schemes include Normal State Government plan schemes, NLCPR funding and NEC funding.
- b. For the ongoing schemes the funding is primarily through State Government and Central Government grants and therefore no equity or loan is envisaged for these schemes. However, it is submitted that MSPCL had taken a loan of Rs. 150 Cr. from REC (which has been disbursed in Sept' 16) to expedite the projects which would have been delayed because of slow release of funds from the State

Government. The principal amount of the loan shall be paid as grants from the State Government in the ensuing years and the interest of the loans shall also be recovered from State Government as capital grants (plan component) being interest during construction. Therefore, this loan has also been considered as a grant and no interest has been claimed corresponding to the loan.

- c. As the funds for the new schemes is still to be finalized, in view of the past practice where MSPCL has been receiving the funds from the State and Central Government or its agencies as grants, it is proposed that the funding of new works proposed for FY 2020-21 shall be in form of grants from the State / Central Government and their agencies. However, the Commission is requested to consider the funding pattern of these works based on the actual funding in case of any change in funding pattern with respect to the proposed at the time of true-up for FY 2020-21.

**Table 7. 3: Proposed Funding of capital Expenditure during FY 2020-21**  
(in Rs. Cr.)

Year	Equity	Debt	Grant (Central Govt Bodies/ State Govt)
FY 2020-21	0	0	247.65

MSPCL has considered the capitalization of those works which are proposed to be completed by the end of FY 2020-21. Accordingly, details of capitalization, capital expenditure, capital works in progress & GFA are provided in tables below:

#### 4. Capitalization

A Summary of proposed capitalization and capital expenditure for the FY 2020-21 is provided below:

**Table 7.4: Proposed Capitalization for the FY 2020-21**

(in Rs. Cr.)

Sl. No.	Name of the Project	Proposed Expenditure
1	Construction of 400 kV T/L Yurembam to Thoubal via Nambol	259.68
<b>Total Proposed Capitalization :</b>		<b>259.68</b>

**Table 7.5: Capital Expenditure & Capital Work-in-Progress**

(in Rs. Cr.)

	Approved vide MYT Order For 2020-21	Revised For FY 2020-21
Opening CWIP	456.49	457.98
Capital Expenditure	147.48	247.65
Capitalization during the Year	480.55	259.68
<b>Closing CWIP</b>	<b>123.42</b>	<b>445.95</b>

**Commission Analysis:**

The closing balance of FY 2019-20 is being the opening balance for FY 2020-21 is subjected to the verification has already been discussed in earlier 2019-20 section on this issue. The proposed capital investment from the grants of Central government/State government and the amount of CWIP capitalization transfer to fixed assets are provisionally approved as projected by the MSPCL.

**5. Gross Fixed Assets (GFA)**

Gross Fixed Assets for FY 2020-21 are projected based on the closing gross fixed assets estimated for FY 2019-20 and the projected capitalization for FY 2020-21.

The details of opening GFA, addition during the FY 2020-21 & closing GFA is provided in the table below.

**Table 7.6: Projected Gross Fixed Assets for FY 2020-21**

(in Rs. Cr.)

Particular	Proposed for FY 2020-21		
	Opening	Addition	Closing
Land & Land Development	23.74	0.00	23.74
Plant & Machinery	1278.00	259.68	1537.68
Building	63.71	0.00	63.71
Furniture & Fittings	1.11	0.00	1.11
Computer	1.27	0.00	1.27
Office Equipment	0.21	0.00	0.21
Vehicles	1.60	0.00	1.60
<b>Total</b>	<b>1,369.64</b>	<b>259.68</b>	<b>1,629.32</b>

**Table 7.7: Proposed Gross Fixed Assets for FY 2020-21**

(in Rs. Cr.)

Particular	Approved vide MYT Order For 2020-21	Revised Proposed for FY 2020-21
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Opening GFA	1919.55	1,369.64
Closing GFA	2405.33	1,629.32

It is submitted that the Hon'ble Commission may kindly consider & approve the GFA as proposed above for the FY 2020-21.

#### Commission Analysis:

All the opening balances are linked to the verification with that of audited figure of FY 2018-19, which is possible only on its submission for verification and however the additions to the assets now proposed by the MSPCL is approved provisionally by the commission for the FY 2020-21 without any change.

### 7.4 Operation & Maintenance Expenses

#### 7.4.1 Operation and Maintenance expenses comprise of the following heads:

- (a) **Employees Expenses** which includes the basic pay, dearness pay, dearness allowances, house rent allowances, and other allowances, new pension scheme paid to the staff;
  - (b) **Repair and Maintenance (R&M) Expenses**, which include all expenditure incurred on the maintenance and upkeep of transmission assets; and
  - (c) **Administrative and General Expenses**, which include all expenditure incurred in operating a business such as office and IT expenses, consultancy and regulatory fee etc.
- Due to shortage of manpower leading to operational issues, MSPCL recruited 1043 employees during FY 2016-17 to fill up the large number of vacant posts. Further, it is submitted that MSPCL still needs additional employees for meeting the vacancies created due to retirements as well as fill up the balance number of sanctioned posts in order ensure smooth operations and maintain the growing transmission network. MSPCL plans to recruit new employees in FY 2019-20 and FY 2020-21 and the plan for the same is submitted in following sections.
  - MSPCL has projected each element of O&M expenses i.e. employee expense, R&M costs and A&G expense separately considering the actual data for last three years and first six months of FY 2019-20 along with adjustments and future plans of the utility.

- The methodology adopted by MSPCL for projecting the values of each component of the O&M expense for FY 2020-21 has been explained in the following section.

#### 7.4.2 Employee Cost

##### Petitioner's submission

In the MYT order Dt. 12.03.2018 Hon'ble Commission had approved employee expenses at Rs. 73.27 Cr. for the FY 2020-21.

##### ➤ Existing Employees

The employee expenses for the existing employees have been projected by escalating the expenses of existing employees with the impact of the VII<sup>th</sup> Pay Commission.

##### ➤ New Employees

- Post the formation, MSPCL was suffering from acute shortage of manpower. During FY 2016-17, MSPCL recruited 1043 employees to fill these vacancies. Also, the work charge and muster roll employees were regularized during FY 2016-17 and all employees are on rolls of the utility.
- Also, it was felt that the numbers of sanctioned posts are very less considering the increasing scale of operations of MSPCL. The sanctioned strength was been revised from 1585 employees to 2451 employees in FY 2016-17 in view of addition of transmission network due to commissioning of substations and transmission lines during last 3-4 years as well as transfer of 33/11kV substations from MSPDCL to MSPCL
- MSPCL plans to recruit 388 new employees in second half of FY 2019-20 to fill up the vacancies in the sanctioned strength and to strengthen the institutional capability of the company. The newly recruited employees are expected to join by February, 2020. Accordingly, the salary of the new employees has been estimated for 2 months for the FY 2019-20 & for entire year of FY 2020-21 based on the prevailing salary structure.
- The year wise number of employees is provided in the table below.

**Table 7.8: Projection of MSPCL Employee for FY 2020-21**

Particulars	FY 2018-19 (Actuals)	FY 2019-20 (Estimated)	FY 2020-21 (Projected)
Opening Employees	1638	1571	1885
Retirements	70	74	74
Recruitments	3	388	-
Closing Number of employees	1571	1885	1811
<b>Average Number of Employees</b>	<b>1605</b>	<b>1728</b>	<b>1848</b>

MSPCL would like to bring to the notice of Hon'ble Commission that certain components of employee cost should be considered as uncontrollable factors, especially factors like DA/Basic hike through Government, revision through VII Pay Commission etc. MSPCL would not be in a position to not allow these increases as any deviation will be against law/policy. The revision in salaries and other incentives are kept at par with the other departments of Government of Manipur and is a legal binding on the department to follow the same. Therefore, MSPCL requests the Commission to adopt a relaxed and realistic approach for employee expenditure, keeping in view the obligation of the organization towards the employees.

- MSPCL submits that it has considered additional cost on account VII<sup>th</sup> Pay Commission revisions at 30% during FY 2020-21. Accordingly, same has been included for projecting the employee cost for the FY 2020-21. The projected employee cost is detailed in the table below.

**Table 7.9: Proposed Employee Cost for FY 2020-21**

(in Rs. Cr.)				
Sl. No.	Particulars	Unit	Approved in the MYT order Dt. 12/03/2018	2020-21
1	Salary of Existing employees	Cr.		50.91
2	Impact of VII Pay commission	Cr.		15.27
3	Salary of 388 nos new employees proposed to be recruited in 2019-20	Cr.		13.39
4	<b>Total (1+2+3)</b>	<b>Cr.</b>	<b>73.27</b>	<b>79.57</b>

**MSPCL requests the Hon'ble Commission to approve the employee costs as projected above by the Petitioner.**

### Commission's Analysis

The increase in employee cost projected by MSPCL in FY 2020-21 is at Rs.79.57 Crore from that of in FY 2018-19 at Rs. 54.34 Crore is explained to be due to recruitment of 388 no of employees. But at the same time there are some retirements of 74 nos of employees in each year from 2018-19 to 2020-21. Thereby the net effect of increase in strength is only 312 in 2019-20 and it got further decreased by 74 nos in FY 2020-21 due to 74 nos of retirements. It is also observed that majority of the recruitments were proposed in Staff cadre (221 nos) as compared to Officer cadre (91nos). Besides, the new recruits would not draw as much salary drawn by their seniors in both Officer cadre as well as the staff cadre. Taking this component into effect and also giving adequate due annual increase to their pay of the employee cost the Commission determined the employee cost for FY 2020-21 as Rs.69.94 Crs as against the MSPCL's Rs.79.47 Crs with a built in Rs.3 Crs (three) of cushion towards retirement benefits also.

Thereby, the Commission accordingly approves for Rs.69.94 Crore towards employee cost during FY 2020-21 as against Rs.79.47 Crore projected by MSPCL.

### 7.4.3 Repairs & Maintenance Expenses

#### Petitioner's submission

- These expenses include expenses on repairs and maintenance of Plant and Machinery, Transformers, Lines, cable network etc., Vehicles, Office equipment, etc.
- It is submitted that the Hon'ble Commission has approved Rs. 24.30 Cr. as R&M expenses for the FY 2020-21, however, MSPCL is projecting Rs. 10.56 Cr. towards R&M expenses for the year.
- The proposed R&M expense for FY 2020-21 is provided in the table below:

**Table 7.10: Proposed Repairs & Maintenance Expense for FY 2020-21**

(in Rs. Cr.)

Particulars	Approved in MYT Order For2020-21	Proposed For FY 2020-21
R&M Expenses	24.30	10.56

**MSPCL requests the Commission to approve the R&M expense for proper maintenance and strengthening of the transmission system.**

**Commission's Analysis:**

For this year, the estimation of the R&M expenses was different and it is not based on the average GFA basis as was proposed in FY2019-20. Since the MSPCL has preferred to claim the R&M expenses at a level lower than the value approved in earlier issued MYT Order and it also appears adequate for 2020-21. Since licensee had not provided any detailed reason for the change in methodology, the Commission also now approves the R&M expenses as per the estimate made by the licensee for FY 2020-21 at Rs.10.56 Crs without any change.

**7.4.4 Administration & General Expense****Petitioner's submission**

- Administrative and General (A&G) expense comprise of various sub-heads including the following:

- Travel and conveyance expenses
- Hydel investigation expenses
- Consultancy and regulatory fees
- Office expenses
- Publication expenses
- Other administration expenses

Hon'ble Commission has approved A&G expenses of Rs. 4.94 Cr. for the FY 2020-21 in the MYT order Dt.12 March 2018, however, MSPCL is projecting Rs. 4 Cr. towards A&G expenses for the year.

- The proposed A&G expenses for FY 2020-21 are as provided in the table below:

**Table 7.11: Proposed A&G Expenses for FY 2020-21****(in Rs. Cr.)**

<b>A&amp;G Cost</b>	<b>Approved in MYT Order For 2020-21</b>	<b>Proposed For FY 2020-21</b>
Total A&G Expenses	4.94	4.00

The Commission approves the proposed A&G expenses at Rs.4 Crs as projected by the MSPCL for the FY 2020-21.

**7.5 Summary of O&M expenses**

Based on the above-mentioned expenses for employee cost, R&M & A&G, the

total O&M expenses for the FY 2020-21 projected by MSPCL and those are approved by the Commission are tabulated below:

**Table 7.13: Proposed O&M Expenses for FY 2020-21**

(in Rs. Cr.)

Particulars	Approved vide MYT Order	Proposed for FY 2020-21	Commission now approved
Employee Expense	73.27	79.57	69.94
R & M Expenses	24.30	10.56	10.56
A&G Expenses	4.94	4.00	4.00
Total O&M Expenses	102.51	94.13	84.50
Expenses capitalized @ 5.1%	5.23	-	Nil (*)
Total O&M Expenses	97.28	94.13	<b>84.50</b>

(\*) – O&M expenses capitalisation is adopted as the works are not executed by the licensee during this year and it will be a special case this year.

## 7.6 Depreciation Petitioner's submission

- Depreciation is charged on the basis of straight-line method, on the average GFA in use during the financial year. The depreciation is based on the category wise assets and the depreciation rates provided by the Commission in JERC (MYT Tariff) Regulations 2014.
- In MSPCL, as mentioned earlier, most of the funding is through government grants, depreciation on the assets funded through government grants have not been considered.
- As approved by Hon'ble Commission in MYT Order dated 12<sup>th</sup> March 2018, only 1.5% of total depreciation is considered towards ARR projection for FY 2020-21.

MSPCL, requests the Hon'ble commission to consider the depreciation for FY 2020-21 as shown in the table below:

**Table 7.14: Projected Depreciation for FY 2020-21**

(in Rs. Cr.)

Particulars	Average Assets	FY 2020-21 (Projected)	
		Depreciation Rate	Depreciation
Land & Land Development	23.74	0.00%	0.00
Plant & Machinery	1407.84	5.28%	74.33
Building	63.71	3.34%	2.13
Furniture & Fittings	1.11	6.33%	0.07
Computer	1.27	15.00%	0.19

Office Equipment	0.21	6.33%	0.01
Vehicles	1.60	9.50%	0.15
<b>Total</b>	<b>1,499.48</b>		<b>76.89</b>

**Table 7.12: Proposed Depreciation for FY 2020-21****(in Rs. Cr.)**

<b>Particulars</b>	<b>Approved vide MYT Order For 2020-21</b>	<b>proposed for FY 2020-21</b>
Total Depreciation	1.48	76.89
Percentage of assets not funded through grants		1.50%
<b>Depreciation to be considered</b>	<b>1.48</b>	<b>1.15</b>

**Commission's Analysis:**

As per the Tariff Regulations 2014, depreciation has to be worked out on average GFA on straight line method with the average rate of depreciation. In the absence of audited annual accounts for FY 2018-19 the average actual rate of depreciation to be adopted is not readily available. Accordingly, depreciation as worked out by the MSPCL at Rs.1.15 Crs is provisionally approved in FY 2020-21 for ARR determination purpose. However, these will be scrutinised later based on actuals reflected in annual account at the time of true-up.

**7.7 Interest and Finance Charges****a. Interest on Long-term/Capital Loans**

The entire capital expenditure of MSPCL since its inception has been funded by the State Government through grants from Central Government Ministries and Agencies like Ministry of Power (MoP) through schemes of NEC, NLCPR, DONER or through State Plan Scheme. Therefore, the utility does not have any liabilities on account of long-term loans.

**Thus, the Commission approves Nil Interest expenses to MSPCL for FY 2019-20.**

**7.8 Interest on Working Capital**

- As per the JERC MYT Regulations 2014, MSPCL is entitled to claim interest on working capital as per the norms provided. The Regulations state that the interest on working capital for transmission licensee shall be computed as follows:

*"29.2 Transmission:*

- (i) *The Transmission Licensee shall be allowed interest on the estimated level of working capital for the financial year, computed as follows:*
- (a) *Operation and maintenance expenses for one month; plus*
  - (b) *Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus*
  - (c) *Receivables equivalent to one (1) month of transmission charges calculated on target availability level; minus*
  - (d) *Amount, if any, held as security deposits except the security deposits held in the form of Bank Guarantee from Transmission System Users.*
- (ii) *Interest shall be allowed at a rate equal to the State Bank Advance Rate (SBAR) as on 1<sup>st</sup> April of the financial year in which the Petition is filed."*

The interest rate is taken equal to the SBI PLR rate as on 1st April 2019 i.e., 13.80%.

Thus, interest on working capital requirement for FY 2020-21 has been worked out as shown in table below.

**Table 7.16: Interest on Working Capital**

(in Rs. Cr.)		
Particulars	Approved vide MYT Order For 2020-21	Revised proposed for FY 2020-21
O&M expenses	8.54	7.84
Maintenance of Spares (1%)	20.35	16.94
Receivables	8.55	7.61
<b>Working Capital</b>	<b>37.44</b>	<b>32.39</b>
Rate of interest*	14.05%	13.80%
<b>Interest on Working Capital</b>	<b>5.26</b>	<b>4.46</b>

\*As on 1<sup>st</sup> April of the financial year in which the Petition is filed i.e. 1<sup>st</sup> April 2019

**MSPSCL requests the commission to approve the Interest on Working Capital as projected above for FY 2020-21.**

### **Commission's Analysis:**

It is observed by the Commission that the licensee is not availing any sort of short-term loan towards working capital needs and the funding for its revenue expense like employee cost, O&M and Office expenses, the Govt of Manipur is providing the subsidy regularly in each year from 2014-15 onwards. Under these circumstances, there was no necessity for MSPCL to go for short-term borrowing or has any fund shortage noted during the past.

In view of the foregone, it is felt to be inappropriate to allow the claim for interest on working capital based on the regulatory provision for which they have no amount reflected as spent in their annual accounts. Any such kind of charges shall not be levied on the consumers for having not spent for that purpose. Therefore, interest on working capital will only be allowed on actually having availed any such loans in future and not otherwise.

Hence, the Commission did not allow the interest on working capital from FY 2020-21 though the MSPCL had made a projection for Rs. 4.27 Crore.

## 7.9 Return of Equity

### Petitioner's submission

- As per the JERC MYT Regulations 2014, MSPCL is entitled for a Return on Equity (RoE) of 15.50% before grossing up with prevailing tax rate. The prevailing Income Tax rate (MAT) for the FY 2019-20 is 15.60%. The same has been considered for grossing-up of return on equity for the FY 2020-21.
- As no fresh addition to equity during FY 2020-21 is planned, the closing equity of Rs. 10.05 Cr. for FY 2019-20 has been considered for computation of return on equity for FY 2020-21. Accordingly, return on equity is claimed at the rate of 17.92% (inclusive of tax) as shown below.

**Table 7.17: Proposed Return on Equity for FY 2020-21**

Particulars	(in Rs. Cr.)	
	Approved vide MYT Order For 2020-21	Proposed For FY 2020-21
Opening Equity	10.05	10.05
Closing Equity	10.05	10.05
Average Equity	10.05	10.05
<i>Rate of Return on Equity</i>	15.50%	15.50%
MAT Rate	20.39%	15.60%
<b>Total Return on Equity</b>	<b>1.96</b>	<b>1.80</b>

Therefore, MSPCL requests the Hon'ble Commission to approve the RoE as projected for FY 2020-21.

### Commission's Analysis:

As per Regulation-26 of Tariff Regulations, return on equity shall be considered only on the paid up equity capital. The MSPCL has stated that the paid-up equity as per opening balance sheet as on 1.2.2014 is Rs. 10.05 Crore. As such the same

is considered to allow return on equity at 15.5%. The Income Tax amount would be allowed upon incidence of tax liability on actual basis during true-up.

Thus, return on equity for FY 2020-21 is approved at Rs.1.56 Crore excluding Tax amount for the reason detailed above.

#### 7.10 Non-tariff Income

- Non-tariff income comprises of income earned from open access charges for short- term power purchase and sale, interest from bank deposits, agency charges, etc.
- Hon'ble Commission had approved Non-Tariff Income of Rs. 8.68 Cr. for the FY 2020-21 in the MYT order Dt. 12.03.2018, however, based on the actual NTI for the FY 2018-19 & estimated for the FY 2019-20, MSPCL proposes Non-Tariff Income of Rs. 10.20 Cr. for FY 2020-21. The approved & projected NTI for the FY 2020-21 is provided below.

**Table 7.18: Proposed Non-tariff Income for FY 2020-21**

(in Rs. Cr.)

Particulars	Approved vide MYT Order For 2020-21	Revised Proposed For FY 2020-21
SLDC Income	3.66	3.50
Agency Charges	3.19	2.50
Bank Interest	1.27	4.00
Other Income	0.56	0.20
<b>Total Non-Tariff Income</b>	<b>8.68</b>	<b>10.20</b>

MSPCL requests the Hon'ble Commission to kindly consider & approve the Non- Tariff Income as proposed above for the FY 2020-21.

#### Commission analysis:

The Commission felt that the estimation made by MSPCL towards Non-Tariff Income amount is fairly reasonable thereby approves the NTI at Rs.10.20 Crs for the FY 2020-21.

#### 7.11 Aggregate Revenue Requirement (ARR) for FY 2020-21

##### Petitioner's Submission

MSPCL requests the Hon'ble Commission to approve the revised Aggregate Revenue Requirement for FY 2020-21 as shown in the table below.

**Table 7.19: Proposed Aggregate Revenue Requirement for FY 2020-21**

(in Rs. Cr.)

Particulars	Approved vide MYT Order For 2020-21	Revised Proposed For FY 2020-21
R & M Expense	24.30	10.56
Employee Expense	73.27	79.57
A&G Expense	4.94	4.00
Depreciation	1.48	1.15
Interest on Loans	0.00	0.00
Return on Capital Employed	1.56	1.56
Interest on working capital	5.26	4.46
Income Tax	0.40	0.24
<b>Total Cost</b>	<b>111.21</b>	<b>101.54</b>
Less: Non-Tariff Income	8.68	10.20
Less: Expenses capitalized	5.23	0.00
<b>Net ARR</b>	<b>97.30</b>	<b>91.34</b>

### Commission Analysis

Based on approved costs the ARR of MSPCL for the FY 2020-21 is arrived at as detailed below:

**Table 7.20: ARR approved by the Commission for FY 2020-21.**  
(Rs. Cr)

Particulars	FY 2020-21
R & M Expense	10.56
Employee Expense	69.94
A&G Expense	4.00
Depreciation	1.15
Interest on Loans	-
Return on Capital Employed	1.56
Interest on working capital	0.00
Income Tax	0.00
Less: Non-Tariff Income	10.20
<b>Net ARR</b>	<b>77.01</b>

Commission approves ARR for FY 2020-21 at Rs.77.01 Crore as against Rs.91.34 Crs projected by MSPCL.

**7.12 Transmission Tariff****Petitioner's submission****Norms of Operation****1. Target availability:**

As per JERC MYT regulations' 2014, the target availability proposed for MSPCL was 98% and it was proposed that transmission ARR shall be recovered on pro-rata basis if target availability is below 98%. We request the Commission to continue the same for FY 2020-21.

**Transmission losses:**

It is submitted that under SAMAST initiative, all utilities are advised to install energy meters with least count of 5 minutes to enable settlement in 5-minute intervals as against current 15-minute intervals. Energy meters for Manipur under SAMAST initiative are being procured by NER SAMAST Group through bulk tendering for all North East Region States. MSPCL had already submitted the required number of meters for Manipur to NER SAMAST group. The procurement process is already underway for the new 5-minute interval SAMAST meters.

MSPCL expects to complete the activity of installation of new 5-minute interval meters by FY 2020-21. Therefore, it is submitted that the transmission losses for the MSPCL transmission system cannot be measured at this point in time. MSPCL requests the Hon'ble Commission to consider the actual transmission loss after installation of meters at the feeders and approve a transmission loss trajectory accordingly. As such already approved transmission loss of 8.5% may be considered for FY 2020-21.

**Recovery of transmission ARR and transmission tariff proposal for FY 2019-20**

1. The total ARR to be recovered for FY 2020-21 is proposed to be Rs. 91.34 Cr.

As per JERC (Multi Year Tariff) Regulations, 2014, the transmission ARR should be recovered as fixed monthly charges from all long-term users of the transmission system based on the share of average contracted transmission capacity in the total transmission capacity.

Also, in case the target availability is below normative availability of 98%, the transmission ARR shall be recovered on pro-rata basis.

2. Currently, MSPCL has only one long term transmission customer which is the distribution licensee i.e. MSPDCL. As such, MSPCL proposes to recover the entire transmission ARR as fixed monthly charges from MSPDCL. The proposed tariff is provided in the table below.

**Table 7.21: Transmission Tariff for FY 2020-21**

Sl. No.	Particulars	Amount
1	Transmission ARR to be recovered (if availability is equal or more than the normative availability) Rs. In Crore	91.34
2	Transmission Tariff for MSPDCL as Rs. Lakhs/month in FY 2020-21	761.18
3	Average Contracted Transmission Capacity for MSPDCL in FY 2020-21 (in MW)	256
4	Transmission Tariff per MW of contracted capacity for long term transmission users per Month (Rs. Lakhs)	2.97
5	Transmission Tariff Rs./MW/Day	9775
6	Energy Proposed to be Transmitted (MUs)	1164
7	<b>Transmission Tariff Rs./Unit</b>	<b>0.78</b>

**Commission's Analysis**

Based on approved costs the transmission tariff approved by the Commission is furnished in the table below:

**Table 7.22: Transmission Tariff approved by the Commission for FY 2020-21**

Sl. No	Particulars	Unit	Approved by Commission
1	Transmission ARR to be recovered (if availability is equal or more than normative availability)	Rs. Crores	77.01
2	Transmission Tariff at Rs.Lakhs/ Month (recovered from MSPDCL)	Rs. Lakhs/ month	641.75
3	Transmission Capacity for FY 2020-21	MW	<b>256</b>
4	Monthly Transmission Tariff	Rs.lakhs/MW/ Month	2.50684
5	Transmission Tariff per day	Rs./MW/Day	8241.65
6	Energy proposed to be transmitted	MU	<b>1013.23</b>
7	Transmission tariff	Rs./kWh	<b>0.76</b>

Currently MSPCL has only one long term transmission consumer (viz) MSPDCL. As such MSPCL is to recover the entire transmission cost from MSPDCL as fixed monthly charges as indicated, supra.

MSPCL will raise monthly Intra-State transmission bills to MSPDCL for timely payment every month.

**7.13 Rebate**

As per JERC (Multi Year Tariff) Regulations, 2014, for payment of bills of transmission charges through letter of credit on presentation, a rebate of 2% shall be allowed. Where payments are made subsequently, through opening of letter of credit or otherwise, but within a period of one month of presentation of bills by the transmission licensee, a rebate of 1% shall be allowed.

**7.14 Late Payment Surcharges**

As per JERC (Multi Year Tariff) Regulations, 2014, in case the payment of bills of transmission charges by beneficiary/(ies) is delayed beyond a period of one month from the date of billing, late payment surcharge at the rate of 1.25% per month shall be levied.

**7.15 Incentive**

As per regulation 66 of JERC for M&M (MYT) Regulations 2014 the transmission licensee shall be entitled to incentive for increase in annual availability beyond the target availability prescribed under Regulation 61, in accordance with the following formula and shall be shared by the long term and short term and medium-term customers in the ratio of their average allotted transmission capacity

$$\text{Incentive} = \frac{\text{ATC} \times (\text{achieved} - \text{target availability})}{\text{Target availability}}$$

Where,

ATC = Annual Transmission charges determined by the Commission for the transmission system of the transmission Licensee for the Concerned year.



## 8. Directives

### Directive 6:

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 Crore or more, before execution of the works.

### Compliance Status

It is submitted that the MSPCL will be submitting the details of all major works costing above Rs. 5.00 Cr. or more for consideration and approval of the Hon'ble Commission in future.

### Comment of the Commission

Separate proposals shall be submitted by MSPCL for approval of Commission for the investments costing Rs 5.00 Crore and above. MSPCL has not submitted any investment proposals costing above Rs. 5.00 Crore for specific approval of the Commission so far. Directive is not complied.

### Directive 9:

#### Improvement of 33 kV system.

As verified from capital investment plan, huge amount is contemplated for improvement of 33 kV systems. The MSPCL is directed to plan for completion of all works well within the targeted dates. Quarterly report on progress achievement may be submitted.

### Compliance Status:

#### Status of 33kV system Works

#### Directive No. 9: Status / Progress of 33kV Works

#### List of Completed 33kV Works

S.No.	Name of the Project/ work
	<b>33 KV system</b>
1	Construction of 33 KV D/C line from Mongsangei to Khumanlampak via Kongba (NLCPR)
2	Installation of 33/11 KV SS with associated 33 KV line at Khongjom (NLCPR)
3	Installation of 33/11 KV SS (2x1 MVA) SS at Gamphazol with associated 33 KV line
4	Installation of 33/11 KV SS at Sinzawl with associated 33 KV Line
5	Erection of 33 KV feeders from Yurembam Power Grid SS (SCA)
6	Installation of 33/11 KV SS with associated 33 KV line at Sugnu (NLCPR)
7	Installation of 33/11 KV SS (2x1 MVA) SS at Gelnel (NLCPR)
8	Installation of 33/11 KV SS (2x1 MVA) SS at Mao with associated 33 KV line (NEC)
9	Installation of 33/11 KV SS (2x1 MVA) SS at Phungyar with associated 33 KV line
10	Construction of 33 KV D/C line from Leimakhong to Iroisemba (NLCPR).

S.No.	Name of the Project/ work
11	Installation of 33 KV S/S at Thanlon.(NLCPR) with associated 33KV line
12	Installation of 33/11 KV Sub-Station at Henglep(NLCPR) with associated 33KV line
13	Installation of 33/11 KV Sub-Station at Chakpikarong (NLCPR) with associated 33KV line
14	Installation of 33/11 KV (2*5 MVA) S/S at Chingaren with associated 33KV line
15	Installation of 33 KV S/S at Willong (NLCPR) with associated 33KV line
16	Installation of 33/11 KV S/S at Oinamlong with associated 33KV line
17	Installation of 33/11 KV S/S at Sekmaijin (NLCPR) with associated 33KV line
18	Installation of 33/11 KV S/S at Ukhrul Khunjao (NLCPR) with associated 33KV line
19	Installation of 33/11 KV S/S at Jessami with associated 33KV line.
20	Installation of 33/11 KV S/S at Thoubal Leishangthem with associated 33 KV line(SPA).
21	Installation of 33/11 KV Sub -Station with associated 33 KV line at Sekmai (NLCPR).
22	Installation of 33/11 KV Sub -Station with associated 33 KV line at Namarei
23	Installation of 33/11 KV Sub -Station with associated 33 KV line at Lakhomei
24	Installation of 33/11 KV Sub -Station with associated 33 KV line at Thinkeu
25	Construction of 33 kV D/C line on STP from 132/33 kV SS at Thoubal to 33/11 kV SS at Thoubal (old)
26	Installation of 33/11 KV SS (2x1 MVA) SS at Nungbi Khullen with associated 33 KV line (NLCPR)
27	Installation of 33/11 KV SS (2x1 MVA) SS at Mayangkhang with associated 33 KV line (NEC)
28	Installation of 33/11 KV SS (2x1 MVA) SS at Kasom Khullen with associated 33 KV line
29	Augmentation of 33/11 kV sub-station at Karong under IPDS

#### List of Ongoing 33kV Works with current Status

Sl. No.	Name of the Project/ work	Status as on Dec, 2017
	<b>33 KV system</b>	
1	Installation of 2x2.5 MVA 33/11 KV Sub-station along with the associated 33 KV line & related work at Gumnom in Ukhrul district in Manipur (NLCPR)	80% Completed
2	Installation of 2x5 MVA 33/11 KV SS with associated 33 KV line at Power House site of Loktak Downstream HE Project (NEC)	98% Completed
3	Installation of 2x2.5MVA 33/11KV Sub-Station along with the associated 33KV LI-LO Line & related Civil works at Paoyi in Ukhrul District(State Plan)	Land development Completed, supply of equipment in progress
4	Installation of 2 x 2.5MVA 33/11Kv sub-station along with the associated 33KV Line & related Civil works at Thuyeng in Senapati District(State Plan)	Land development Completed, supply of equipment in progress
5	Installation of 2x5MVA 33kV S/S along with associated 33kV Line and related civil works at Heirolk (Heirolk Thokchom Leikai), Thoubal District, Manipur(IPDS)	80% Completed

Sl. No.	Name of the Project/ work	Status as on Dec, 2017
6	Installation of 2x5MVA 33kV S/S along with associated 33kV Line and related civil works at Yairipok, Thoubal District, Manipur(IPDS)	80% Completed
7	Installation of 2x5MVA 33kV S/S along with associated 33kV Line and related civil works at Wangoi, Imphal West District, Manipur(IPDS)	80% Completed
8	Installation of 2x5MVA 33kV S/S along with associated 33kV Line and related civil works at Wangjing (Khangapok Moirang palli Bazar), Thoubal District, Manipur(IPDS)	80% Completed
9	Augmentation of 33/11 kV S/S from 1x3.15 MVA to 2x3.15 MVA at Kangpokpi (IPDS)	40% Completed
10	Upgradation of 33/1 1KV Sub-Station at Khoupum in Tamenglong District by installing 2X2,5MVA Transformer (State Plan)	30% Completed

#### Comment of the Commission

*Quarterly progress achieved may be reported to the Commission.*

#### Directive 11: Furnishing of cost benefit analysis of proposed 400/132 kV sub-station at Thoubal.

The MSPCL is directed to submit cost benefit analysis and other aspects that may have bearing on the transmission charges in respect of proposed 400/132 kV sub-station at Thoubal along with details of number of days, configuration and location of grid sub-stations, sub-station capacity (MVA), transmission line length (c.km) showing the need for the proposed investments alternatives considered. The MSPCL is also directed to submit detailed capital investment plan, financial plan for each year of the control period for meeting requirement of load growth, improvement of quality of supply and reliability etc. to the Commission for approval.

#### Compliance Status:

The detailed cost benefit analysis as well as other details required has been submitted as directed by the Commission.

#### Comment of the Commission

The Commission drops this directive.

#### DIRECTIVES OF FY 2018-19

#### Directive 16

MSPCL is directed to complete installation and energisation of meters at all points at various voltage level to know the actual energy loss in

- i) Transmission at 132 kV system
- ii) Sub-Transmission at 33 kV system

MSPCL should provide with energy meters invariably without any further delay to all 11 kV outgoing feeders being the inter-company boundary and the energy injection point to MSPDCL system, for proper energy audit and accounting in order to segregate the transmission and distribution losses in Manipur power supply system.

Monthly joint meter readings should be conducted by MSPCL and MSPDCL.

**Compliance of Status:**

MSPCL, as on date has installed 47 nos. and 125 nos. of SEM meters with 15 minutes time block calibration at 132kV and 33kV voltage level respectively leaving a balance of 21 nos. in 132kV and 66 nos. in 33kV voltage level respectively for complete metering of 132kV & 33kV system as is shown in the table below:

Sl.No.	Particulars	132kV	33kV
1.	Total No. of feeders	68	191
2.	No. of newly installed Energy Feeder	47	125
3	Balance	21	66

Meanwhile, Government of India has initiated an ambitious scheme, SAMAST to facilitate, among other feederwise energy accounting. Techno Economic Sub-Group, PSDF, Government of India, has already recommended DPR for implementation of SAMAST in Manipur for possible funding under PSDF wherein 5 minutes time block SEM meters are incorporated in the DPR. It is worthwhile to mention that NERPC has taken up the initiative for implementation of SAMAST in NER including common tendering and award under PSDF funding.

In view of the upcoming SAMAST scheme, MSPCL has dropped the idea of completion of the metering as the investment may not be fruitful. With a view of the complete feeder metering in Manipur system, DPR for SAMAST scheme of Manipur incorporates, among others installation of SEM meters with five minute time block calibration in 1 no. in 400kV, 51 nos. in 132kV, 323 nos. in 33kV & 160

nos. in 11kV system respectively. The additional meters, if required MSPCL ensure to provide from own source during the implementation of SAMAST.

It is therefore pleaded that the Hon'ble Commission may be kind enough to grant time till the implementation of SAMAST in Manipur.

**Comments of the Commission**

The directive is not complied.

**Directive 17**

MSPCL is directed to submit the details of meter installation status of all feeders at all voltage levels in all sub-stations along with a single line diagram within 2 (two) months for proper monitoring.

**Compliance of Status:**

May be clubbed with Directive 16

**Comments of the Commission**

Yet to be complied. The directive is still pending.

**Directives for FY 2019-20**

**Directive 18: Installation of Meters at 132kV and 33kV voltage levels**

a) The MSPCL is directed to complete the installation of all metering at the inter-company boundary point (i.e., 132kV and 33kV voltage levels) on or before August 2019 and report compliance to the Commission by the end of August 2019 positively.

MSPCL shall have to record the actual losses being incurred at 132kV and 33kV level separately and submit the detailed report in the next ARR tariff petition.

**Compliance of Status:**

May be clubbed with Directive 16

**Comments of the Commission:**

This directive is still pending.

**Directive 19: Completion of full metering of pending 11kV feeder in all 33/11kV SS**

MSPCL should achieve full/complete metering of 11kV feeder in all 33/11kV sub-stations by steps to install meters in the remaining feeders where meters are not yet installed in the following time-bound manner and report the compliance to the Commission soon on completion by end of December 2019.

- a) 11kV incoming feeder meters to the 11kV bus by June 2019 and
- b) Outgoing 11kV feeders by December 2019.

The above directive is made with an object to accomplish to account for the quantum of power injected into the MSPDCL periphery by MSPCL which is not being done at present easily.

**Compliance Status:**

As on date, MSPCL has completed metering of 273 nos. 11kV feeders out of 388 feeders and another 160 nos. is incorporated in the SAMAST DPR.

It is therefore pleaded that MSPCL may be permitted to complete metering of 11kV feeders in Manipur during the implementation of SAMAST.

**Comments of the Commission:**

This directive is still pending.

**Directive 20: Submission of all the Audited Annual Account from FY 2015-16 to 2017-18**

MSPCL should file in the next tariff petition with true up for 2015 – 2016, 2016 – 2017 and 2017-18 base on audited figure. **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:**

It is submitted that the Annual Accounts are under compilation & MSPCL has taken steps for completing the same at earliest. The Audited Accounts shall be submitted on completion of audit. Hon'ble Commission may kindly consider the same.

**Comments of the Commission:**

The detailed reasons why such a long delay is taking place in getting the audited accounts of the pending years may be submitted. This directive is still pending.

**Directive 21: The Licensee shall furnish the under mentioned details of feeder metering in the next ARR filing submissions to the Commission in comprehensive manner:**

**Details of feeders metering to be submitted**

**A. Name of 132/33/11kV installation:**

- No. and name of 11kV incoming feeder

- Name of 11kV incoming feeder provided with meter
- No. and name of Out-going 11kV feeder
- Name of 11kV Out-going feeders provided with meters
- No of 11kV feeders without meters

**B. Names of 33/11kV Sub-Stations:**

- No. and name of 11kV incoming feeder
- No. and 11kV provided with meter.
- No. and name of 11kV outgoing feeder provided with meter.
- No. and name of 11kV outgoing feeder without meter.

**Compliance Status:**

MSPCL has submitted a detailed list as directed.

**Comments of the Commission:**

The detailed list of 11kV feeders with and without energy meters show that 146 nos. of outgoing 11kV feeders are metered while 72 nos. are without energy meters. Most of the substations located in plain areas are having 11kV feeders meters. The feederwise monthly sent out to MSPDCL can be computed from these feeders to know the distinctive losses pending complete installation of the energy meters to the balance 11kV feeders.

**Directive 22: Providing of Energy Meters:**

It is observed from the Capital Expenditure plan for FY 2018-19, SI No.9, out of the total capital outlay of Rs.3.71Cr, it is stated that expenditure to the tune of Rs.3.21Cr (i.e., about 87%) were already spent till the ARR filing date. Under these circumstances, Licensee needs explain why there are still lagging behind in the full-fledged metering till date.

If so, how the amount of Rs.3.21 crs was utilised for the purpose of providing energy meters. The report must be submitted to the Commission latest by the 30<sup>th</sup> June 2019 without fail with due explanation covering all issues.

**Compliance Status:**

Regarding the metering status in the 132kV, 33kV & 11kV feeders, MSPCL has issued work order to M/s. NE Energy Solutions Pvt. Ltd., Kolkata for supply and installation of tri-vector energy meters on turn-key basis as follows:

<b>132kV feeder meter</b>			
<b>Sl.No.</b>	<b>Work Order Quantity</b>	<b>Installed Quantity</b>	<b>Balance Quantity</b>
1.	47	47	0
<b>33kV feeder meter</b>			
1.	153	125	28
<b>11kV feeder meter</b>			
1.	273	273	0

All the procured energy meters (as per work order) at the 132kV & 11kV level have been metered successfully. However, in-case of 33kV level, 28 nos. of energy meters are remaining due to the following reasons:

- a) 16 nos. of the existing 33kV sub-stations are without control panel. Therefore installation work cannot be carried out.
- b) Another 13 nos. of energy meters which were previously installed are still working.

MSPCL has issued work order to M/s. NE Energy Solutions Pvt. Ltd., Kolkata for supply and installation of tri vector energy meters of 132kV level – 47 nos., 33kV level 1 – 153 nos. and 11kV level – 273 nos. amounting to Rs. 3.47 Cr. Vide Order No.4/MSPCL/METER/SS/132/33/11kV/2014 (Purch)/3536-46, dated 11/09/2015 including Service Tax, Labour cess, Vat, Department charges etc. Out of Rs.3.47 Cr., MSPCL has utilised Rs. 3.21 Cr. for supply and installation of the so far installed energy meters at 132kV, 33kV & 11kV level.

At present, NERLDC and NERPC is ready to implement a scheme for installation of new energy meters under SAMAST (Scheduling, Accounting, Metering and Settlement of Transaction in electricity) in NER state entities. Accordingly, necessary information/data of different voltage level sub-stations for installation of energy meters of MSPCL have been submitted to them.

**Comments of the Commission:**

The Commission is of the opinion that even after 273 nos. of 11kV feeder meters are installed, no 11kV feederwise energy sent out and injected to the MSPDCL is recorded and utilised to find out the distribution losses so far and capital invested is not properly utilised.

MSPCL is directed to record monthly feederwise energy sent out to the Discom immediately if not done so far and compliance report is to be submitted in this May, 2020.

**Fresh Directives 2020-21**

**Directive 1:**

MSPCL will raise monthly intra-state transmission bill to MSPDCL and MSPDCL will make timely payment. Rebate & late payment surcharge as per rules will be applied.

**Directive 2:**

MSPCL is to submit a detail report on the subsidy received by MSPDCL from Government on behalf of MSPCL and report if any balance is still due with MSPDCL on account of the Government subsidy.



## Annexure - I

**MINUTES OF THE 19<sup>TH</sup> MEETING OF THE STATE ADVISORY COMMITTEE OF MANIPUR****Venue: REGENCY HALL, HOTEL IMPHAL, IMPHAL****Date & Time: 5<sup>TH</sup> MARCH 2019, 11AM**

The Chairman of the Committee, Mr. Lalchharliana Pachuau, Chairperson of the Joint Commission for Manipur & Mizoram chaired the meeting.

The list of members and participants attending the meeting is appended.

After welcoming the Members and Invitees, the Chairperson initiated the agenda wise discussion as below:

**Agenda No.1. Confirmation on the Minutes of the 18<sup>th</sup> Meeting of the SAC, Manipur held on 19<sup>th</sup> February, 2018.**

Requesting the members to express their views and comments on the minutes of the 18<sup>th</sup> SAC and after obtaining nods from the members, the minutes was declared as confirmed.

**Agenda No. 2. Action taken report on the minutes of 18<sup>th</sup> SAC Meeting, Manipur.**

- i) **Up to date status of action taken regarding installation of reliable meters on 11 kV feeders at all injecting points of MSPDCL and check meters (vide Agenda No. 3 of the minutes of 18<sup>th</sup> SAC, Manipur).**

As per the action taken report furnished by MSPDCL, the up-to-date status of the installation of reliable meters on 11 kV feeder at all injecting points of MSPDCL and check meters as on 31<sup>st</sup> January, 2019 are as shown below:

**Status of Feeder Meter Installation  
(As per MSPDCL record)**

Row Labels	Non-RAPDRP	R-APDRP	Grand Total
<b>INCOMING</b>			
Meter	83		83
No of Meter	16		16
Replacement Required	6		6
Grand Total (a)	105		105
<b>OUTGOING</b>			
Meter	79	67	146
No of Meter	38		38
Replacement Required	4		4
Grand Total (b)	121	67	188
<b>STATION FEEDERS</b>			
Meter	34		34
No of Meter	5		5
Replacement Required	1		1
Grand Total (c)	40		40
<b>Overall Grand Total (a+b+c)</b>	<b>266</b>	<b>67</b>	<b>333</b>

It is decided that reliable meters shall be provided to all the 11 kV incomers of MSPDCL lines within 4 (four) month by MSPCL to enable meter reading of energy injection to MSPDCL and MSPCL shall provide all necessary meters at 132 kV and 33 kV level within 6 months from now. At these 33/11 kV substation which are having RE type construction (ie without panels/control room etc) The interface metering between MSPCL & MSPDCL can be achieved by installing correct rating of CT/PT combination (like that of used in boundary metering with meter as per CEA Meter Regulations) the interface meter should have accuracy class of 0.2S and the CT/PT should be compatible to accuracy class of the meter.

The MD, MSPCL informed the Committee that he shall look into the feasibility of such outdoor metering in Non-Conventional Substations and will achieved metering as committed in line with the foregone commitment.

**ii) Action taken towards recovery of outstanding dues or writing off outstanding debt of different Department and installation of pre-paid meters in all Government Offices and residents (vide Agenda No. 4 of the minutes of 18<sup>th</sup> Meeting of SAC, Manipur).**

As per the report given by Mr. L. Priyokumar, MD (MSPDCL), recovery of the outstanding dues of the different Departments is one of the major efforts that MSPDCL takes seriously and there is no plan of writing-off the outstanding dues of the different Departments. Disconnection letters were served to all the defaulting Departments. However, it may be noted that the budgetary provision of all Departments for the energy consumed is very meager. A reminder letter to the different Departments to clear all their respective outstanding dues was also served from time to time with a copy to the Principal Secretary (Finance), Government of Manipur vide file no. MSPDCL/Comm/Govt. Dues 17-18/Letters. The total Govt Outstanding dues as on 31<sup>st</sup> December 2018 is Rs. 92.35 crores. The Department wise breakup of the Govt. Outstanding Dues is also furnished in the Meeting.

He further stated that the working capacity of a pre-paid meter is limited within 50kW load and so providing pre-paid meters to Government Offices consuming energy through a dedicated transformer with load of above 50kW is not possible. Separate DTR meters

are installed for such cases. Hence installation of pre-paid meters in all Government Offices is not considered mandatory.

In this regard, Dr. Ch Ibohal Meitei, Prof Manipur Institute of Management Studies, Manipur University has stated that the recovery of bad debt is very critical for the running of the company and to put more pressure to the defaulting Department their names should be published in the local domain for more public pressure. This suggestion was also endorsed by Dr. L. Sadananda Singh, General Secretary, Senior Citizens for Society, Manipur. It was also decided that the Commission will write to the Chief Secretary, Government of Manipur to take steps for the recovery of the bad debt at the earliest possible time and deduction to be made at source. Mr. L. Manglem Singh, Director, MANIREDA stated that MANIREDA has no outstanding due and the Department are paying bills regularly. It was decided that MSPDCL may come out with the real outstanding dues upto 31<sup>st</sup> December, 2018. Mr. Nobert Khayi, Social Worker, W.Phungreitang, Ukhrul informed the Committee that in Ukhrul there are hardly 2 / 3 staffs and people has to wait long hours to clear up their dues in the office and requested MSPDCL to look after this matter urgently. He further suggested outsourcing of billing and collection of bill and conducting awareness programme regarding transmission and distribution status in Manipur. Mr. L. Priyokumar informed the members that they have been taking actions to improve billing and payment through internet to sort out various difficulties being faced by the consumers. The Meeting also agreed that MSPDCL should come up with more revenue collection centres.

**iii) Reports on energy audit in RAPDRP towns (vide Agenda no. 5 of the minutes of 18<sup>th</sup> Meeting of SAC, Manipur).**

MSPDCL furnished the energy audit report for the month of September, 2018 in RAPDRP Towns. After going through the report, Member of the Commission, Mr. Ng Sarat Singh suggested to improve billing efficiency above 90%. They should take 3 months reading to assess monthly consumption rate. Managing Director, MSPDCL should gear up so that there is no loss in revenue collection. It was again suggested to have joint meter reading s at 33 kV and 11 kV Sub Station in presence of both MSPDCL and MSPCL representatives as per the schedule dates well prepared in advance by both of them together for taking the reading.

- iv) The latest reconciled status of feeder meter installation at 11 kV feeders in the single line diagram of all the sub-stations showing incoming/outgoing 11 kV feeders. Details of sub-station-wise incoming/outgoing feeders of all voltage levels with meter installation status under MSPCL (vide Agenda No. 9 of the minutes of 19<sup>th</sup> Meeting of SAC Manipur).**

Managing Director, MSPCL Mr. N.Sarat Singh explained in detail the status of metering of 11 kV, 33 kV and 132 kV feeders and furnished the detail network diagram to the Commission and promised that metering in all the 11 kV incoming feeders in all substations will be completed within 2 (two) months and all the outgoing 11 kV feeders will be completed within 6 (six) months.

**Agenda 3 : Determination of Retail Tariff of MSPDCL for FY 2019 - 20 and Transmission Tariff of MSPCL for FY 2019 – 20.**

The MD, MSPDCL explained in detail the basis of the proposal for the increase of the retail tariff for FY 2019–20. Mr. Elangbam Dolendra Singh, Adviser, All Manipur Power Consumer's Association enquired why the Commission always prepare different Tariff rates for Manipur and Mizoram. The Member of the Commission informed him that the situation of Manipur and Mizoram is different and the Commission cannot issue a common tariff for the two States. He further mentioned that the amount of fix charge in the proposed tariff is very high and it should not be increased and in view of huge number of urban poor consumers the proposed tariff is very high and is not agreeable at all. Dr. Ch. Ibohal Meitei has stated that there should not be a tariff shock and a nominal increase in tariff would be accepted by the consumers. He further stated that the MSPDCL should come up with better billing and collection centre by use of social network i.e. internet etc. where the consumers can pay their bills. Mr. Priyokumar, MD, MSPDCL replied that consumers will very soon can pay their dues through internet banking system. The Committee agreed for a small hike in the tariff for FY 2019- 20.

**Agenda 4 : Truing Up**

The 2 (two) companies has an Annual Audited Accounts for the year up to 2015 – 16 only. Chairman informed them they should take immediate steps for auditing of their accounts

without which truing up cannot be a carried one. Both MDs, MSPDCL and MSPCL assured that audited annual accounts shall be made available at least up to FY 2016-17 in the next Tariff Petition.

**Agenda 5: Revenue Collection Centre:**

The Chairman informed the Committee that on visit by the Commission at faraway places like Chandel, Ukhrul and Senapati for Consumer awareness programmes, the public has informed the Commission that more payment counters are required. This also was affirmed by Mr. Nobert Khayi and he suggested that outsourcing of billing and collection of revenue may be thought of for far-flung areas. Mr. PriyoKumar, MD, MSPDCL informed the Committee that the Company already have taken steps and franchisee systems will be in operation very soon.

**Agenda 6: Subsidy**

As per the Electricity Act, 2003 the Government has to specify the specific category of consumer which should be given subsidy. The Government of Manipur has so far not reacted on this matter. MSPDCL shall make proposal to the Government of Manipur for incorporation in their filling of next Tariff Petition.

**Agenda 7: Integration of billing system**

The Chairman enquired from the MSPDCL whether the different prepaid meters manufactured by different companies could be integrated together. The MSPDCL informed the Committee that with a new software, the system could be integrated now, and there is no difficulty in re-calibrating the machines with new tariff rates.

The Meeting ended at 2:30 PM with a vote of thanks from the Chair.

Sd/- LALCHHARLIANA PACHUAU  
Chairperson

**Memo No. H. 11019/26/13-JERC      Dated Aizawl, the 15<sup>th</sup> March, 2019**

Copy to:

1. Secretary to Hon'ble Chief Minister, Govt. of Manipur for kind information to the Hon'ble Chief Minister.
2. P.S. to Hon'ble Power Minister Govt. of Manipur for kind information to the Hon'ble Power Minister.
3. 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.



**ATTENDANT LIST OF MEMBERS AND PARTICIPANTS**  
**THE 19<sup>TH</sup> MEETING OF STATE ADVISORY COMMITTEE OF MANIPUR**

**Date & Time : 5<sup>th</sup> March, 2019 (Tuesday) 11:00 a.m.**

**Venue : Hotel Classic Regency Hall, Imphal, Manipur.**

Sl.No.	Participant Name	Designation / Organisation
<b>List of Members</b>		
1	Er. Lalchharliana Pachuau	Chairperson, JERC (M&M)
2	Er. Ng. Sarat Singh	Member, JERC(M&M)
3	Mr. L.Manglem Singh	Director, MANIREDA, Imphal, Manipur
4	Dr. Ch. Ibohal Meitei	Professor, Manipur Institute of Management Studies, Manipur University
5	D r. L. Sadananda Singh	General Secretary, Senior Citizens for Society, Manipur
6	Mr. Elangbam Dolendra Singh,	Advisor, All Manipur Power Consumers' Association
7	Mr. Nobert Khayi	Social Worker, West Phungreitang, Ukhrul
8	Mr. Rishikumar Singh	President, All Manipur Entrepreneurs Association
9	Mr. M. Brojen Singh	Kakching Wairi Thongam Leikai, Manipur
10	Miss H.Lalthomawi	Advocate, Tipaimukh Road, Hiangtam Lamka, Manipur
11	Mr. R.S.Daikho	Reikhumai Taphou, Senapati, Manipur
<b>SPECIAL INVITEES/INVITEES</b>		
1	Er. L.Priyokumar	Managing Director, MSPDCL
2.	Er.N. Sarat Singh	Managing Director, MSPCL
3	Er. H.Thanthianga	Assistant Chief (Engineering), JERC (M&M)
4	Mr. Richard Zothankima	Assistant Secretary, JERC (M&M)
5	Mr. L.Dineshkumar Singh	General Manager (SLDC, MSPCL)
6	Mr. N.Dwijen Singh	Executive Director (Civil), MSPCL
7	Ms.Khoisnam Steela	DGM (Comm), SLDC
8	Ms.Tesah Janggougin Khongthang	Manager, LT Cell
9	Ms. Laishram Ritu	DGM (Sys. Opt), SLDC
10	Mr. H.Manimukta Singh	DGM, SLDC
11	Mr.L.Surchandra Singh	Manager, T.D. III
12	Mr. Ranjan .W	Dy. Manager, ED (Tech)
13	Mr. Amit Goenka	Sr. Manager (Deloitte), Consultant, MSPCL
14	Mr. Ng. Birjit Singh	GM, MSPCL
15	Mr. Th. Kaminimohon Singh	GM , Purchase
16	Mr. M.Budhachandra Sharma	GM Substation

Sl.No.	Participant Name	Designation / Organisation
17	Mr. K.Jila Singh	General Manager (Commercial), MSPDCL
18	Mr. H.Shantikumar Singh	ED (Tech), MSPCL
19	Mr. Th. Aton Singh	ED, Commercial, MSPDCL
20	Mr. Ng. Subhachandra Sharma	GM Substation
21	Mr. Jaspreet Singh	Consultant
22	Mrs. N.Purnima	Deputy Manager, MSPDCL
23	Mr. Y Dayanta	Manager (Projects), MSPDCL
24	Mr. Sh. Santosh Sharma	Manager, MSPDCL
25	Mr. G. Tapankumar Sharma	Manager MSPCL
26	Mr. S.Kripachariya Singh	DGM, MSPCL

## Annexure - II

**LIST OF PERSONS WHO ATTENDED PUBLIC HEARING ON MULTI YEAR ARR  
& TARIFF PETITION FOR FY 2019-20 IN RESPECT OF MSPCL, MANIPUR**

**Venue:Hotel Classic, Regency Hall, Imphal, Manipur.**

**Date & Time: 6<sup>th</sup> March, 2019 (Wednesday) at 2:00 PM.**

1	Er. Lalchharliana Pachuau	Chairperson, JERC (M&M)
2	Er. Ng. Sarat Singh	Member, JERC (M&M)
3	Mr. N. Sarat Singh	Managing Director, MSPCL
4	Mr. H. Thanthianga	Asst. Chief (Engg.), JERC (M&M)
5	Mr. Richard Zothankima	Asst. Secy., JERC (M&M)
6	Mr. Ng. Subhachandra Singh	E.D. (Tech.), MSPCL
7	Mr. Amit Goenka	Consultant, MSPCL
8	Mr. K. Hari Prasad	Consultant, JERC (M&M) (ASCI, Hyderabad)
9	Mr. M. Budha Chandra Sharma	G.M. Sub-Station GRLE, MSPCL
10	Mr. Th. Kamini Mohon Singh	G.M., Purchase & Store, MSPCL
11	Mr. S. Tombisana Singh	D.G.M. (GVC), MSPCL
12	Mr. L. Dinesh M. Singh	G.M. (SLDC), MSPCL
13	Mr. A.Robin Singh	D.S.M., TD-II, MSPCL
14	Mr. N. Jasobanta Singh	DGM, MSPCL
15	Mr. A.Satyabrata Singh	DGM, MSPCL
16	Mr. H. Manimukta Singh	DGM, MSPCL
17	Mr. TRanjan W.	Dy. M, MSPCL
18	Mr. G. Tapankumar Sharma	Manager, MSPCL
19	Mr. Ranendra Nandubem	GM. (F&A), MSPCL
20	Mr. K. Jila Singh	GM. (Comml), MSPDCL
21	Mr. Laishram Ritu	DGM (Sys. Opt.), SLDC, MSPCL
22	Mr. Khoisnam Steela	DGM (Comml), SLDC, MSPCL
23	Mr. Usham Rocky Singh	Manager, MSPCL
24	Mr. Sh. Santosh Sharma	Manager, MSPDCL
25	Mr.Ng. Subhachandra Singh	MSPCL
26	Mr. N. Dwijen	ED, MSPCL
27	Mr. Ng. Birjit Singh	GM, MSPCL
28	Mr. Th. Aton Singh	ED (Comml), MSPDCL



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**JOINT ELECTRICITY REGULATORY COMMISSION**  
**FOR MANIPUR AND MIZORAM**

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