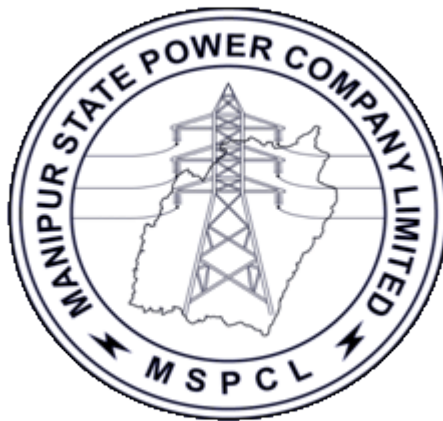


**Truing up of FY 2019-20
and
Annual Performance Review of FY 2020-21
and
ARR and Tariff Petition for FY 2021-22
of
Manipur State Power Company Limited**



Main Text & Formats

Submitted to:

**Joint Electricity Regulatory Commission
for Manipur and Mizoram**

By:

**Manipur State Power Company Limited
(Imphal)**

**BEFORE THE HONOURABLE JOINT ELECTRICITY REGULATORY
COMMISSION FOR MANIPUR AND MIZORAM**

FILING NO _____

CASE NO _____

IN THE MATTER OF: Petition for Approval of Truing up of FY 2019-20 and
Annual Performance Review of FY 2020-21 and ARR
and Tariff Petition for FY 2021-22 of Manipur State
Power Company Limited under Sections 61, 62 and 64
of The Electricity Act 2003.

AND

IN THE MATTER OF: Manipur State Power Company Limited
THE PETITIONER Keishampat, Imphal

PETITIONER

PETITIONER, UNDER SECTIONS 61, 62 AND 64 OF THE ELECTRICITY ACT 2003
FILES FOR INITIATIONS OF PROCEEDINGS BY THE HONORABLE COMMISSION
FOR DECIDING ON THE MATTERS CONCERNING THE APPROVAL OF TRUING
UP OF FY 2019-20 AND ANNUAL PERFORMANCE REVIEW OF FY 2020-21 AND
ARR AND TARIFF PETITION FOR FY 2021-22 OF MANIPUR STATE POWER
COMPANY LIMITED (herein after referred to as "MSPCL").

THE MANIPUR STATE POWER COMPANY LIMITED RESPECTFULLY SUBMITS:

1. The petitioner, Manipur State Power Company Limited is the transmission licensee in the state of Manipur which has been formed after the restructuring of the erstwhile Electricity Department of Manipur with effect from 1st February' 2014, the Electricity Department of Manipur has been restructured into two companies, the Manipur State Power Distribution Company Limited (MSPDCL) responsible for distribution and the Manipur State Power Corporation Limited (MSPCL) responsible for transmission function.

2. Pursuant to the enactment of the Electricity Act, 2003 MSPCL is required to submit its Aggregate Revenue Requirement (ARR) and Tariff Petition as per procedures outlined in Sections 61, 62 and 64 of the Electricity Act, 2003 and the governing regulations thereof.
3. As per Terms and Conditions of JERC MYT regulations' 2014, the ARR and tariff of transmission and distribution are to be determined separately. In the Tariff Order for FY 2016-17 dated 29th February 2016, JERC had issued a directive for filing a separate petition for determination of transmission charges and distribution & retail supply business. In line with this and JERC for M&M MYT Regulations 2014, MSPCL had already filed segregated Multi Year ARR for Second Control Period for FY 2018-19 to FY 2022-23 and Tariff Petition for FY 2018-19 along with truing up of FY 2016-17 and Annual Performance Review of FY 2017-18. Subsequently, MSPCL filed the Tariff petition for the FY 2019-20 & FY 2020-21. Tariff orders in respect of the above petitions have been issued by the Hon'ble Commission.
4. MSPCL has submitted its provisional truing up of FY 2019-20 since audited annual accounts of FY 2019-20 are not ready and Annual Performance Review of FY 2020-21 and ARR & Tariff petition for FY 2021-22 on the basis of the principles outlined in JERC for M&M MYT Regulations 2014 read with JERC for M&M MYT (First Amendment Regulations, 2019) notified by the Joint Electricity Regulatory Commission.
5. MSPCL prays to the Honourable Commission to admit the enclosed petition for provisional Truing up of FY 2019-20 and Annual Performance Review of FY 2020-21 and ARR & Tariff Petition for FY 2021-22.

Manipur State Power Company Limited.

Petitioner

Place: Imphal

Dated: January, 2021.

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Notes:

In this Petition

**Previous Year is defined as Financial Year 2019-20
(referred to as FY-'20 or FY 19-20)**

**Current Year is defined as Financial Year 2020-21
(referred to as FY-'21 or FY 20-21)**

**Ensuing Year is defined as Financial Year 2021-22
(referred to as FY-'22 or FY 21-22)**

**Previous Multi Year or First Control Period is defined as Financial Year 2016-17 to
Financial Year 2017-18
(referred to as FY-'17 to FY-'18 or FY 16-17 to FY 17-18)**

**Current Multi Year or MYT or Second Control Period is defined as Financial Year
2018-19 to Financial Year 2022-23
(referred to as FY-'19 to FY-'23 or FY 2018-19 to FY 2022-23)**

**All currency figures and energy units used in this Petition, unless specifically stated
otherwise, are in Rs. Crore. (Cr.) and Million Units (MUs)**

Chapter 1: Introduction

1. Historical 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 neighboring 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 4th 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 would like to submit that the present petition is for provisional truing up of FY 2019-20 since audited accounts for FY 2019-20 are not ready, Annual Performance Review (APR) of FY 2020-21, ARR and Tariff Petition for FY 2021-22.

2. Background of Regulatory Setup

The State Governments of Manipur and Mizoram, in an aspiration to create an independent Electricity Regulatory Commission to regulate the affairs of power sector, authorized Government of India to constitute a Joint Commission as per Memorandum of Agreement dated 23rd July, 2004 among the Government of India and the States of Manipur and Mizoram. Accordingly, under provisions of Section 83(5) the Electricity Act, 2003, a quasi-judicial independent body as the Joint Electricity Regulatory Commission for the States of Manipur & Mizoram (JERC) was constituted by the Central Government vide Govt. of India F. No. 23/3/2002-R&R dt. 18th January, 2005

notified in the Gazette of India, Extraordinary dated 18th January, 2005. The functioning of the Commission started in January 2008. The Joint Electricity Regulatory Commission issued its first Tariff Order for FY 2010-11 for the state of Manipur on 15th March, 2011. The second tariff order was issued by JERC for FY 2012-13 on 14th August 2012.

EDM had filed the tariff petition for FY 2013-14 to JERC in April' 2013 but the same was not admitted by the commission because of the delay in filing of the petition and since the order had to be issued before the start of the year. The petition for FY 2013-14 was kept by JERC for reference and record purpose. The Petition for FY 2014-15 was filed by EDM before November 2013 and the order has been issued for the same in February' 2014. The Petition for FY 2015-16 was filed by MSPCL before November 2014 and the Order has been issued for the same in February' 2015.

The Hon'ble JERC notified the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 on 9th June 2014. Accordingly, MSPCL submitted a MYT Petition for the Control Period from FY 2015-16 to FY 2017-18. Considering the first Control Period specified in the Regulations as FY 2015-16 to FY 2017-18, the Commission in its Tariff Order dated 29th February 2016 issued the MYT Order for the first Control Period covering FY 2015-16 and FY 2018-19. Subsequently, the Commission vide its Order dated 28th February 2017 undertook True-up for FY 2014-15, FY 2015-16, Annual Performance Review (APR) for FY 2016-17, Aggregate Revenue Requirement and Tariff for FY 2017-18.

Based on the Hon'ble JERC directive for filing of Tariff Petition for Second Control Period of five years covering FY 2018-19 to FY 2022-23, MSPCL submitted a Multi Year ARR for the Second Control Period FY 2018-19 to FY 2022-23 and Tariff Petition for FY 2018-19. The Commission vide its Order dated 12th March 2018 undertook True-up for FY 2016-17, Review for FY 2017-18, determination of Aggregate Revenue Requirement (ARR) for MYT 2nd Control Period FY 2018-2019 to FY 2022-2023 and Transmission Tariff for FY 2018-19.

As per Clause 10.2 and 17.8 of JERC MYT Regulations' 2014, each licensee is required to file a tariff petition for determination of tariff for the ensuing year by 30th November of the current financial year:

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

“17.8 The applicant shall file his Petition for approval of truing up of previous year and tariff for ensuing financial year by 30th November of the current financial year”

Based on the provisions of the JERC MYT Regulations 2014, MSPCL is filing the present petition for provisional truing up of FY 2019-20, Annual Performance Review of FY 2020-21, Revised ARR and Tariff Petition for FY 2021-22.

MSPCL is discharging its duties in the matters of;

- Transmission of power within the state for further use by the distribution licensee;
- Preparing and carrying out schemes for transmission from 33 KV onwards.

MSPCL being a utility undertaking the transmission function, the cost and expenses are with respect to the transmission function which have been filed in this ARR & tariff petition.

3. Contents of this Petition

This Petition covers the provisional truing-up of ARR for FY 2019-20 based on actual expenditure during FY 2019-20, ARR based on revised estimates for FY 2020-21 and ARR along with Tariff Proposal for FY 2021-22 projected based on assumptions and projections of individual elements. As the audit of accounts of MSPCL for FY 2019-20 are under progress, the Petitioner has not submitted for final true-up of FY 2019-20 and shall submit the same along with subsequent year Tariff Petition.

Chapter 2: Overall Approach for Present Filing

MSPCL would like to submit that the present petition for provisional truing up of FY 2019-20, Annual Performance Review of FY 2020-21 and ARR and Transmission Tariff for FY 2021-22 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 2021-22.

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

a. Approach for Truing-up of FY 2019-20

For FY 2019-20, MSPCL has proposed provisional truing-up based on the actual expenses incurred during FY 2019-20 for each parameter of the ARR along with reason and justification for the variation as compared to that approved in the ARR for FY 2019-20 in the Tariff Order dated 26th March 2019 & APR order Dt. 20th March 2020. It is submitted that final truing-up for past years as well as FY 2019-20 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 2019-20.

b. Approach for Annual Performance Review of FY 2020-21

The actual six months expenditure along with estimate for balance six months have been followed for the purpose of estimating the revised ARR for FY 2020-21. However, for estimating the R&M expense and A&G where majority of the expense is undertaken during the later half of the year, the same has been ascertained based on the actual expenditure for FY 2019-20 and previous years along with reasonable assumptions for FY 2020-21.

c. Approach for Projecting ARR for FY 2021-22

For the purpose of estimating/projecting the financial & technical parameters for FY 2021-22, MSPCL has considered its actual performance in the past years and FY 2020-21 (First six months) as base and has projected the elements of ARR for FY 2021-22 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 2019-20, APR of FY 2020-21 and ARR for FY 2021-22 along with the methodology followed by MSPCL.

Chapter 3: Provisional Truing up of FY 2019-20

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 2019-20 shall be carried out under the same Regulations.

The truing up of FY 2019-20 has been carried out by comparing the approved ARR in the MYT order Dt. 12th March 2018 & annual performance review conducted for FY 2019-20 in the order dated 20th March 2020 with the actual data of FY 2019-20. The accounts of FY 2019-20 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 2019-20 for various expenses are available with MSPCL and the same are being submitted to the Hon'ble Commission for provisional truing-up of FY 2019-20. As such, MSPCL is requesting the Hon'ble commission to carry out the provisional truing up of FY 2019-20 as per JERC MYT Regulations 2014. However, MSPCL would request the Commission to pass on the adjustment on account of truing up for FY 2019-20 only after availability of final audited accounts.

Background

The Tariff Order for FY 2019-20 for MSPCL was issued by the Hon'ble Commission on 26th March, 2019 and subsequently Annual Performance Review (APR) for FY 2019-20 was undertaken by the Hon'ble Commission in its order dated 20th March 2020. MSPCL is filing this petition for determination of revised ARR for FY 2021-22, it is important that the actual numbers of FY 2019-20 are considered for projecting the various components of APR for FY 2020-21 and ARR for FY 2021-22. Therefore, MSPCL is submitting for provisional truing-up of FY 2019-20, which is a comparison of the actual performance and expenses of MSPCL vis-à-vis the approved ARR for FY 2019-20 in order dated 26th March 2019. This exercise examines technical and financial performance of MSPCL in FY 2019-20 with the figures approved for FY 2019-20 in the Tariff order & APR order. These aspects are discussed in the section below:

1. Transmission Losses

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. MSPCL is undertaking the metering of the feeders, under the SAMAST Scheme. SAMAST Scheme encompasses installation of 51 No. of Meters at 132 KV, 323 No. of Meters at 33 KV and 160 No. of Meters at 11 KV level and with the implementation of 33 KV system integration with SLDC and reliable communication for grid connectivity which are all in tendering stage under PSDF funding, MSPCL will be in a position to assess the actual losses as real time data would be available for all major substations and identify the loss occurring area. At present, as the data available is haphazard and errors are noticed with the existing pen and paper method, we are unable to arrive at the actual values. In view of the above submission, MSPCL requests the Commission to consider the transmission loss at 8.894% for FY 2019-20 for provisional truing-up.

2. Operation and Maintenance (O&M) Expenses

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&G) Expenses

(a) Employee Expenses

The break-up of actual employee cost of MSPCL in FY 2019-20 is provided below:

Table 1: Actual Employee Expenses for FY 2019-20

(In Rs. Cr.)

Employee Expenses	Approved in T.O Dt. 26.03.2019	Approved in APR Dt. 20.03.2020	Actual for FY 2019-20
Pay Band	69.12	45.32	15.11
Grade Pay			3.75
D.A.			26.60
H.R.A.			1.89
SCA			2.20
TA			1.01
Spl. Pay/ Cy All			0.00
NPS Contribution			2.35
Grand Total	69.12	45.32	52.92

The actual employee expense incurred during FY 2019-20 are Rs. 52.92 Cr. as against the approved employee cost of Rs. 69.12 Cr. in ARR dated 26th March 2019, and Rs. 45.32 Cr. approved in the APR vide Order dated 20th March 2020. The actual employee cost for FY 2019-20 is lower than the approved employee cost as per the Tariff Order Dated 26th March 2019 for the year.

Accordingly, the Hon'ble Commission may consider the Employee Expenses amounting to Rs. 52.92 Cr. for truing up of FY 2019-20.

(b) Repair & Maintenance Expenses

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 transmission system for maintaining the quality of power supply in the region and achieve system availability of 98% as prescribed by the Commission.

MSPCL submits that there has been an addition of Rs. 25.68 Cr. in gross fixed assets during FY 2019-20. The actual R&M expenses incurred during FY 2019-20 is Rs. 9.50 Cr. and lower than the approved R&M expense of Rs. 14.44 Cr. in the Annual Performance Review of FY 2019-20 due to lower capitalisation of assets than approved in the APR for FY 2019-20. As such, the Commission is requested to approve the R&M expenses based on actuals.

Table 2: R&M Expenses for FY 2019-20

(In Rs. Cr.)

Particular	Approved vide Tariff Order dated 26th March, 2019	Approved vide Annual Performance Review 20 Mar, 2020	Actual expense as incurred by MSPCL
R&M Expenses	14.44	14.44	9.50

Accordingly, the Hon'ble Commission may consider the R&M Expenses amounting to Rs. 9.50 Cr. for FY 2019-20.

(c) Administrative and General Expenses

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 20.03.2020 had approved the Administration & General expenses at Rs. 4.61 Cr. for FY 2019-20, in APR as projected by MSPCL. However, the actual expense incurred under A&G expenditure by MSPCL is Rs. 8.09 Cr. for FY 2019-20. The rise in expenses is due to the addition of substations and assets. It is further submitted that these expenses are mostly of uncontrollable nature and is difficult to reduce. The A&G expense for FY 2019-20 are as below:

Table 3: A&G Expenses for FY 2019-20 (In Rs. Cr.)

Particular	Approved vide Tariff Order dated 26th Mar, 2019	Approved vide Annual Performance Review 20 Mar, 2020	Actual expense as incurred by MSPCL in FY 2019-20
A&G Expenses	4.61	4.61	8.09

Accordingly, the Hon'ble Commission may provisionally approve the A&G Expenses amounting to Rs. 8.09 Cr. under the provisional truing up for FY 2019-20.

Table 4: Total O&M Expenses for FY 2019-20 (In Rs. Cr.)

S.N.	Particulars	Approved vide APR Dated. 20 Mar, 2020	Actual for FY 2019-20
1	Employee Expenses	45.32	52.92
2	R&M Expenses	14.44	9.50
3	A&G Expenses	4.61	8.09
4	Total	64.37	70.51

Accordingly, the Hon'ble Commission may consider the O&M Expenses amounting to Rs. 70.51 Cr. as per the actual for provisional truing-up of FY 2019-20.

3. Capital Investment Plan

The details of actual capital expenditure towards various new and augmentation schemes in FY 2019-20 are given below.

Table 5: Capital Expenditure for FY 2019-20

(In Rs. Cr.)

Sl. No.	Name of Project	Capital Expenditure
I	Generation	
1	NIL	
	Sub-Total : Generation Hydro (I)	-
II	Transmission & Distribution	
A.1	Ongoing Schemes	
A.1.1	400 kV System	
1	Installation of 400 kV Sub-Station at Thoubal(NLCPR)	0.79
2	Construction of 400 kV T/L from Yurembam to Thoubal via Nambol	4.91
3	Installation of 2 nos. 400 kV line bays at Imphal(PG) sub-station	6.14
	Total : A.1.1	11.83
A.1.2	132 kV System	
1	Installation of 132/33 kV S/S at Chandel with associated 132 KV line(NLCPR)	0.04
2	Installation of 1x20 MVA transformer at Yaingangpokpi	1.50
3	Renovation & Modernisation of two nos. of 132/33 KV S/S at Yaingangpokpi & Ningthoukhong(NLCPR)	0.09
4	Installation of 132/33 kV S/S at Thanlon with associated line(NLCPR)	5.29
5	Augmentation of Rengpang 132/33 kV sub-station by installing(3x4.16+1x4.16)MVA 132/33 kV single phase transformers	0.60
6	IDC on REC loan	5.47
7	Principal payment on REC loan	50.00
8	Installation of 132/33 kV sub-station at Moreh with erection of associated 132 kV line(NLCPR)	7.28
9	Augmentation of 132/33 KV S/S at Jiribam (Installation of additional transformers)	0.09
10	Stringing of 132 kV line (2nd circuit) from Kakching to Churachandpur(NEC)	1.00
11	Installation of 132 kV sub-station along with associated 132 kV line at Elangkhangpokpi	0.35
12	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.	0.20
	Total : A.1.2	71.92
A.1.3	33 kV System	

Sl. No.	Name of Project	Capital Expenditure
1	Installation of 33/11 kV sub-station at Henglep(NLCPR)	0.89
2	Installation of 33/11 kV sub-station at Chakpikarong(NLCPR)	0.56
3	Installation of 33/11 kV S/S at Sekmai jin(NLCPR)	0.17
4	Installation of 33/11 kV S/S at Chandel (NEC)	1.55
5	Installation of 33/11 kV sub-station with associated 33 KV line at Sugnu(NLCPR)	0.14
6	Installation of 33/11 KV sub-station with associated 33 KV line at Khongjom(NLCPR)	0.69
7	Installation of 33/11 KV sub-station with associated 33 KV line at Sekmai(NLCPR)	0.63
8	Installation of 33/11 KV (2x1 MVA) S/S at NungbiKhullen with associated 33 KV line(NLCPR)	0.97
9	Re-stringing & strengthening of 33 kV lines	3.41
10	Installation of 33/11 KV (2x1 MVA) S/S at Gumnom with associated 33 kV line(NLCPR)	0.87
11	Renovation of 33/11 KV S/S at Khoupum	0.33
12	Installation of 33/11 kV sub-station at KasomKhullen with associated 33 kV line	0.59
13	Installation of 33/11 kV sub-station at Mayangkhang with associated 33 kV line(NEC)	0.19
14	Installation of 33/11 kV sub-station at Mao with associated 33 kV line(NEC)	0.70
15	Construction of 33 kV D/C line on STP from 132/33 kV SS at Thoubal to 33/11 kV SS at Thoubal (old)	0.74
16	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Yairipok under IPDS	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	4.05
18	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Wangjing under IPDS	5.21
19	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Heirop under IPDS	4.99
20	Augmentation of 33/11 kV sub-station at Kangpokpi under IPDS	0.22
21	Augmentation of 33/11 kV sub-station at Karong under IPDS	0.60

Sl. No.	Name of Project	Capital Expenditure
	Total : A.1.3	32.18
A.2	New Schemes	
A.2.1	33 kV System	
	NIL	
	Total : A.2.1	-
	Sub-Total (II):	115.94
III	Misc. Scheme	
1	Renovation and up-gradation of grid sub-station of MSPCL under PSDF funding	25.78
2	AMC for SCADA	0.19
3	Expansion/Upgradation of SCADA/EMS System of SLDCs of NER	2.58
4	Renovation of 33/11 KV S/S - Civil constructions	2.28
5	Installation of Reactive Power Solution on 33/11 kV sub-stations in Manipur under PSDF	2.18
	Total : III	33.01
	Total (I+II+III):	148.95

The Commission had approved a total capital investment of Rs. 265.57 Cr. for FY 2019-20 in the ARR Order for FY 2019-20, 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 submission for FY 2019-20, the capital expenditure for FY 2019-20 was revised to Rs. 127.36 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. 148.95 Cr. during FY 2019-20.

In case of capitalization of assets, the Commission had approved Rs. 251.56 Cr. FY 2019-20 in ARR which was later revised to Rs. 89.72 Cr. in the APR submission for FY 2019-20. MSPCL submits that the actual capitalization during the period has been Rs. 25.68 Cr., details of which are provided in the table below:

Table 6: Capitalised Assets in FY 2019-20**(In Rs. Cr.)**

Sl. No.	Name of Project	Cost of Project
1	Installation of 2x5 MVA, 33/11 kV SS at Wangoi.	9.67
2	Installation of 2x5 MVA, 33/11 kV SS at Yairipok.	9.52

Sl. No.	Name of Project	Cost of Project
3	Augmentation of 33/11 kV S/S from 1x3.15 MVA to 2x3.15 MVA at Kangpokpi	1.43
4	Upgradation of 33/1 kV S/S at Khoupum in Tamenglong District by installing 2x2.5 MVA trf.	5.06
Total Capitalization:		25.68

A summary of the actual capital expenditure and capitalization as against that approved by the Commission is summarized in table below:

Table 7: Capital Expenditure and Capitalisation for FY 2019-20 (in Rs. Cr.)

S.N.	Particulars	Approved vide Tariff Order dated 26th Mar, 2019	Approved vide Annual Performance Review 20th Mar, 2020	Actuals for FY 2019-20
1	Capital Expenditure	265.57	127.36	148.95
2	Capitalisation	251.56	89.72	25.68

Based on the actual capital expenditure and capitalization amount for FY 2019-20, the details of CWIP are as below:

Table 8: Capital Work in Progress for FY 2019-20 (in Rs. Cr.)

S.N.	Particulars	Approved vide Tariff Order dated 26th Mar, 2019	Approved vide Annual Performance Review 20th Mar, 2020	Actual for FY 2019-20
1	CWIP Opening Balance	199.93	420.34	420.34
2	Capital Investment	265.57	127.36	148.95
4	Less: Investment Capitalized	251.56	89.72	25.68
6	CWIP Closing Balance	213.94	457.98	543.60

4. Depreciation

As per JERC MYT Regulations 2014, the depreciation is charged on the basis of straight-line method, on the average GFA 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), which is Accounting Standard 12, depreciation should be claimed on net expenditure after excluding assets funded through government grants. In MSPCL, majority of the

assets are funded through government grants and therefore, depreciation has not been claimed on the assets funded through government grants in the ARR in line with the practise followed by the Commission in the previous Tariff Orders. The details of actual depreciation along with approved figures are for the FY 2019-20 are provided in the Tables below.

Table 9: Depreciation approved by Commission for FY 2019-20 (in Rs Cr.)

S.N.	Particulars	Approved in T.O dt 26.03.2019	Approved by Commission during APR for FY 2019-20	Actuals
1	Opening GFA	1279.90	1279.92	1279.92
2	Addition during the year	251.56	89.72	25.68
3	Capitalization of expenses	0.00	8.97	-
4	Total GFA at the end	1531.46	1378.61	1305.604
5	Average GFA	1405.80	1329.26	1292.762
6	Average rate of Depreciation	5.10%	5.10%	5.10%
7	Depreciation	71.70	67.79	65.97
8	Depreciation allowed	1.08	1.01	0.99

Table 10: Actual Depreciation for FY 2019-20 (In Rs. Cr.)

Particular	FY 2019-20				Depreciation 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	25.68	1213.96	1201.12	5.28%	63.42
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 Equipment	0.21	0.00	0.21	0.21	6.33%	0.01
Vehicles	1.6	0.00	1.6	1.6	9.50%	0.15
Total	1279.92	25.68	1305.60	1292.76		65.97
Percentage of assets non-funded through Grants						1.50%
Depreciation claimed for True-up						0.99

The total depreciation in FY 2019-20 is Rs. 65.97 Cr. 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 2019-20 by MSPCL.

Hence, MSPCL requests the Hon'ble Commission to consider actual depreciation for provisional truing up of FY 2019-20 as Rs. 0.99 Cr.

5. 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 2019-20. Therefore, actual interest and finance charges claimed for truing-up of FY 2019-20 is NIL.

6. Interest on Working Capital

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) percent 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 2020, 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 11: Interest on Working Capital for FY 2019-20**(In Rs. Cr.)**

S.N.	Particulars	Approved vide Tariff Order dated 26th Mar, 2019	Approved vide Annual Performance Review 20th Mar, 2020	Actual as Proposed by MSPCL
1	O&M Expenses for one month	7.35	5.37	5.88
2	Maintenance of Spares (1% of GFA)	13.57	13.57	14.01
3	Receivables for 1 month	7.10	5.05	5.58
4	Total working capital	28.02	23.99	25.47
5	Rate of interest	13.45%	13.80%	12.90%
6	Interest on Working Capital	3.77	3.31	3.29

Hence, MSPCL requests the Hon'ble Commission to consider Interest on Working Capital for provisional truing up of FY 2019-20 as Rs. 3.29 Cr.

7. 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, which ever 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. However, since, accounts of MSPCL are yet to be audited, Income Tax has been considered at MAT rate of 17.16%.

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

Table 12: RoE for FY 2019-20**(InRs.Cr.)**

Return on Equity	Approved vide Tariff Order dated 26th Mar, 2019	Approved vide Annual Performance Review 20th Mar, 2020	Actuals for FY 2019-20
Grand Total (including Tax)	1.96	1.56	1.83

Accordingly, the Hon'ble Commission is requested to consider the RoE (with tax @ 17.16%) amounting to Rs. 1.83 Cr. for provisional true-up for FY 2019-20.

8. Non-Tariff 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. 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. MSPCL has earned Rs. 9.70 Cr. during FY 2019-20 as detailed in table below:

Table 13: Non-Tariff Income for FY 2019-20

(In Rs. Cr.)

S.N.	Particulars	Approved vide Tariff Order dated 26th Mar, 2019	Approved vide APR dated 20th Mar, 2020	Actuals for FY 2019-20
1	SLDC Charges	3.00	3.00	3.00
2	Agency Charges	3.46	2.65	2.65
3	Interest from bank	3.09	3.95	3.95
4	Other income	0.15	0.10	0.10
	Total	9.70	9.70	9.70

The Hon'ble Commission is requested to consider the actual Non-tariff income of Rs. 9.70 Cr. for FY 2019-20.

9. Aggregate Revenue Requirement (ARR) for FY 2019-20 (In Cr.)

The ARR of MSPCL for FY 2019-20 as approved by the Commission vide Tariff Order dated 26th March, 2019 and Annual Performance Review dated 20th March, 2020 and the actual submitted by MSPCL are detailed in table below:

Table 14: Aggregate Revenue Requirement (ARR) for FY 2019-20 (In Rs. Cr.)

Sl. No	Particulars	Approved vide Tariff Order dated 26th Mar, 2019	Approved vide APR dated 20th Mar, 2020	Actuals for FY 2019-20	Difference (Actual -APR)
1	Employee costs	69.12	45.32	52.92	7.60
2	Repair & Maintenance expense	14.44	14.44	9.50	(4.94)
3	Adm & Gen. Expenses	4.61	4.61	8.09	3.48
4	Depreciation	1.08	1.01	0.99	(0.02)
5	Interest & Finance Charges	-	-	-	-
6	Interest on Working capital	3.77	3.31	3.29	(0.03)
7	Add: Return on Equity / ROE	1.96	1.56	1.83	0.27
7	Income Tax	0.40	-	-	-
7	Total Cost	95.38	70.30	76.61	6.36
9	Less: Non-Tariff income	9.70	9.70	9.70	-
10	Less: Expenses Capitalized	-	-	-	-
11	Aggregate Revenue Requirement	85.68	60.60	66.91	6.36

The variation in approved and actual ARR for FY 2019-20 as shown in table above is not proposed to be carried forward in the tariff of ensuing year as the figures for FY 2019-20 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 2019-20.

Chapter 4: Annual Performance Review of FY 2020-21

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 2020-21 based on the provisions of the JERC (Multi Year Tariff) Regulations, 2014. The details of revised estimation of each element of ARR for FY 2020-21 along with rationale and justifications are explained in the sections below.

Background

The Hon'ble Commission had approved the ARR for FY 2020-21 in the Order dated 20th Mar 2020. In view of the availability of actual numbers for FY 2019-20 and first six months of FY 2020-21, MSPCL has proposed revision in ARR for FY 2020-21 considering the changes during FY 2019-20 and actual addition of gross fixed assets during FY 2020-21 which would have a bearing on the various ARR components of MSPCL for FY 2020-21. Detailed explanation for each element and comparison with the amount approved in the Tariff Order for FY 2020-21 dated 20th March 2020 is provided in sections below:

1. Transmission System Availability

As per JERC MYT regulations' 2014, the target transmission availability proposed for FY 2019-20 for MSPCL is 98%. The estimated transmission availability for FY 2020-21 is also 98%.

2. Transmission Loss

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. As submitted in the True-up section, actual data on Transmission losses shall be available after the metering completed as envisaged under the SAMAST Scheme. 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 2020-21 as approved in the Tariff Order dated 20th March 2020.

3. Energy Requirement

MSPCL would like to submit that as per the Tariff Order for FY 2020-21, the approved energy quantum to be transmitted at the input of MSPCL network was 1013.23 MUs. The same has been considered for the APR for the FY 2020-21.

Table 15: Energy to be transmitted for FY 2020-21

(in MUs)

Particulars	Approved (MUs)
Energy to be transmitted	1013.23

4. Operation and Maintenance Expenses

(a) Employee cost

In the Tariff Order dated 20th Mar 2020, the Commission had approved an employee cost of Rs. 69.94 Cr. MSPCL proposes to revise the employee cost considering the following:

Recruitment of 358 employees is planned for the FY 2020-21. The process for the same has been initiated. The details of recruitment is provided below:

- I. 34 Employees under Direct Recruitment
- II. 39 Employees under Die-in harness scheme
- III. 285 employees - Others

The process is expected to be completed in the 2nd half of FY 2020-21 and the recruited persons are likely to join in January/February, 2021; as such 2 months salary is considered towards the new employees for the year.

The actual employee expenditure during the FY 2019-20 & 1st six months of FY 2020-21 are Rs. 52.92 Cr. & 31.84 Cr. respectively. The employee cost for the FY 2020-21 has been estimated based on the actual figures for the FY 2019-20 & 1st six months of FY 2020-21. The actual number of employees as on 31.03.2020 is 1493 and is expected to be 1773 by the end of FY 2020-21. The average employee strength is accordingly estimated to 1633. Detailed computation of employee cost is furnished in tables below.

Table 16: Employee cost for FY 2020-21 (in Rs. Cr.)

Particulars	Approved vide ARR dated 20th Mar, 2020	Actual	Estimated
		(till Sept'20)	FY 2020-21
Employee Expense (Rs. Cr.)	69.94	31.84	69.37
Average number of employees (numbers)	1848	1633	1633

It is submitted that the Hon'ble Commisison may please consider and approve the employee expenditure as proposed above for the FY 2020-21.

(b) Repairs and Maintenance expenses

It is submitted that the Hon'ble Commission had approved R&M expenses for the FY 2020-21 as 10.56 Cr. in the tariff order Dt. 20th March 2020. MSPCL is not proposing any revision in the R&M expenses for the FY 2020-21 and the approved amount has been adopted for FY 2020-21, any differences will be claimed in the trueing up.

Accordingly, the proposed R&M expenses for the FY 2020-21 is Rs. 10.56 Cr. as approved in the ARR Order dated 20th March 2020 as provided in the table below:

Table 17: Revised R&M expense for FY 2020-21 (in Rs. Cr.)

S.N.	Particulars	Unit	Approved vide ARR dated 20th Mar, 2020	Estimated FY 2020- 21
1	Proposed R&M Expense	Rs. Cr.	10.56	10.56

MSPCL requests the Commission to approve the above estimated expenses of Rs. 10.56 Cr. for FY 2020-21, 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%.

(c) Administrative and General Expenses

The Commission had approved Rs. 4.00 Cr. as A&G expenses for MSPCL in the ARR Tariff Order for FY 2020-21 dated 20th March 2020. It is submitted that actual A&G Expenses for the FY 2019-20 was Rs. 10.12 Crores. It is submitted that MSPCL expects the A&G expenses for the FY 2020-21 to be in the same range as that for the previous year. Accordingly, MSPCL is proposing Rs. 10.12 Crores towards A&G expenses for the

FY 2020-21 as provided in the table below:

As such, MSPCL requests the Commission to consider the proposed A&G expenses for FY 2020-21 as provided in table below:

Table 18: Proposed A&G Expenses of MSPCL for FY 2020-21 (in Rs. Cr.)

Particulars	Approved vide ARR dated 20th Mar, 2020	Estimated for FY 2020-21
A&G Cost	4.00	10.12

(d) O&M expenses

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 2020-21 vis-à-vis approved figures are given below:

Table 19: Proposed O&M Expenses of MSPCL for FY 2020-21 (in Rs. Cr.)

S.N.	Particulars	Approved vide ARR dated 20th Mar, 2020	Estimated for FY 2020-21
1	Employee Expenses	69.94	69.37
2	R&M Expenses	10.56	10.56
3	A&G Expenses	4.00	10.12
4	Total O&M Expenses	84.50	90.05

5. Capital Expenditure Plan for FY 2020-21

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 2020-21 is provided in the table below:

Table 20: Capital Expenditure plan for FY 2020-21

(in Rs. Cr.)

Sl. No.	Name of Project	Cost of Project	Source of Funding			Budget Outlay, 2020-21		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
I	Transmission & Distribution							
A.1	Ongoing Schemes							
A.1.1	400 kV System							
1	Installation of 400 kV Sub-Station at Thoubal(NLCPR)	243.62	128.20	115.42	243.62	2.00	-	2.00
2	Construction of 400 kV T/L from Yurembam to Thoubal via Nambol	259.68	148.84	110.84	259.68	8.00	-	8.00
3	Installation of 2 nos. 400 kV line bays at Imphal(PG) sub-station	35.24	35.24	-	35.24	2.00	-	2.00
	Total : A.1.1	538.54	312.29	226.25	538.54	12.00	-	12.00
A.1.2	132 kV System							
1	R & M of 132/33 kV sub-station at Yurembam(SPA/NEC)	44.70	10.20	34.50	44.70	0.50	-	0.50
2	Installation of 1x20 MVA transformer at Yaingangpokpi	5.58	5.58	-	5.58	0.60	-	0.60
3	Renovation & Modernisation of two nos. of 132/33 KV S/S at Yaingangpokpi&Ningthoukhong(NLCPR)	40.50	9.67	30.83	40.50	1.00	-	1.00

Sl. No.	Name of Project	Cost of Project	Source of Funding			Budget Outlay, 2020-21		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
4	Renovation & Modernisation of three nos. of 132/33 kV S/S at Kakching, Karong & Churachandpur (NLCPR)	49.69	8.10	41.58	49.69	2.30	-	2.30
5	Installation of 132/33 kV S/S at Thanlon with associated line (NLCPR)	135.88	81.90	53.98	135.88	1.00	-	1.00
6	Installation of 2x20 MVA, 132 kV Sub-Station along with associated 132 kV LILO lines & related works at Thoubal (NEC)	50.38	18.32	32.05	50.38	0.70	-	0.70
7	Providing of Energy Meter	3.47	3.47	-	3.47	0.50	-	0.50
8	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	-	12.63	1.00	-	1.00
9	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	4.00	-	4.00
10	Augmentation of 132/33 kV S/S at Jiribam (Installation of additional transformers)	3.66	3.66	-	3.66	2.00	-	2.00

Sl. No.	Name of Project	Cost of Project	Source of Funding			Budget Outlay, 2020-21		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
11	Stringing of 132 kV line (2nd circuit) from Kakching to Churachandpur(NEC)	17.44	8.28	9.16	17.44	0.50	-	0.50
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	-	10.25	1.40	-	1.40
13	Construction of 132/33 kV sub-station at Tipaimukh	51.39	51.39	-	51.39	0.50	-	0.50
	Total : A.1.2	541.30	310.73	230.57	541.30	16.00	-	16.00
A.1.3	33 kV System							
1	Installation of 33/11 KV (2x1 MVA) S/S at Gelnel(NLCPR)	7.81	4.38	3.42	7.81	0.60	-	0.60
2	Installation of 33/11 KV (2x1 MVA) S/S at NungbiKhullen with associated 33 KV line(NLCPR)	14.50	9.65	4.85	14.50	1.05	-	1.05
3	Installation of 33/11 kV sub-station at Phungyar with associated 33 kV line	11.39	11.39	-	11.39	0.50	-	0.50
4	Installation of 33/11 kV sub-station at KasomKhullen with associated 33 kV line	10.42	10.42	-	10.42	0.42	-	0.42

Sl. No.	Name of Project	Cost of Project	Source of Funding			Budget Outlay, 2020-21		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
5	installation of 33/11 kV sub-station at Poayi at Ukhrul	9.15	9.15	-	9.15	1.00	-	1.00
6	installation of 33/11 kV sub-station at Thueyng at Senapati	14.03	14.03	-	14.03	3.30	-	3.30
	Total : A.1.3	67.30	59.03	8.27	67.30	6.87	-	6.87
A.2	New Schemes							
A.2.1	33 kV System							
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	-	11.75	0.50	-	0.50
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	-	10.44	0.50	-	0.50
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	-	10.57	0.50	-	0.50

Sl. No.	Name of Project	Cost of Project	Source of Funding			Budget Outlay, 2020-21		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
4	Installation of new 33/11 kV sub-station along with associated 33 kV line at Akampat, Imphal East.	8.86	8.86	-	8.86	0.50	-	0.50
5	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at LiyaiKhunou, Senapati district.	10.83	10.83	-	10.83	0.50	-	0.50
6	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at IbudhouMarjing	9.13	9.13	-	9.13	0.50	-	0.50
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	-	11.10	0.50	-	0.50
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	-	7.06	0.50	-	0.50

Sl. No.	Name of Project	Cost of Project	Source of Funding			Budget Outlay, 2020-21		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
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	-	8.90	0.50	-	0.50
10	Installation of 2x5 MVA, 33/11 kV SS at Joujangtek, Noney district	13.06	13.06	-	13.06	0.50	-	0.50
11	Installation of 2x5 MVA, 33/11 kV SS at Oinam, Sena[pati district.	12.41	12.41	-	12.41	0.50	-	0.50
12	Installation of 2x5 MVA, 33/11 kV SS at Gwakhall, Jiribam district.	8.08	8.08	-	8.08	0.50	-	0.50
13	Installation of 2x5 MVA, 33/11 kV SS at Nampisha, Kamjong district	11.10	11.10	-	11.10	0.50	-	0.50
	Total : A.2.1	133.29	133.29	-	133.29	6.50	-	6.50
	Sub-Total (I):	1,280.43	815.34	465.09	1,280.43	41.37	-	41.37
II	Misc. Scheme							
1	Construction of Administrative Building	-	-	-	-	0.50	-	0.50
2	Construction of Divisional & Sub-Divisional office buildings, quarters, complain rooms, etc.	-	-	-	-	1.08	-	1.08

Sl. No.	Name of Project	Cost of Project	Source of Funding			Budget Outlay, 2020-21		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
3	Consultancy for assessment of Hydro Power Potential in the State	1.77	1.77	-	1.77	0.65	-	0.65
4	AMC for SCADA	-	-	-	-	0.40	-	0.40
	Total : II	1.77	1.77	-	1.77	2.63	-	2.63
	Total (I+II):	1,282.20	817.11	465.09	1,282.20	44.00	-	44.00

The status of various schemes planned for execution in FY 2020-21 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 21: Capitalised Assets in FY 2020-21 (in Rs. Cr.)

S.N.	Name of Project	Capacity	Cost of Project
1	400/132 kV , 3x105 MVA Single Phase Transformer (i/c one spare) S/S at Thoubal	3X105 MVA	243.62
2	400 KV D/C line from Yurembam to Thoubal via Nambol	-	259.68
3	Installation of 2x5 MVA, 33/11 kV SS at Wangjing (MoirangPalli)	2X5 MVA	9.52
4	Installation of 2x5 MVA, 33/11 kV SS at Heirolk	2X5 MVA	9.07
5	Installation of 2x5 MVA, 33/11 kV SS at Lamdangmei (Loktak Down Stream sub-station)	2X5 MVA	14.84
6	Installation of 2x2.5 MVA, 33/11 KV S/S at Gumnom with associated 33 kV line.	2X2.5 MVA	9.53
Total Proposed Capitalization :			546.26

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 2020-21 as against the approved values are given below.

Table 22: CWIP, Capital Expenditure and Capitalisation in FY 2020-21 (in Rs. Cr.)

S.N.	Particulars	Approved vide ARR dated 20th Mar, 2020	Proposed Figures for APR of FY 2020-21
1	Opening CWIP	457.98	543.60
2	Capital Expenditure	247.65	44.00
3	Less: Capitalisation	259.68	546.26
4	Closing CWIP	445.95	41.35

6. Gross Fixed Assets

The approved value and revised estimate of GFA for FY 2020-21 based on the actual GFA addition during FY 2019-20 are shown in table below. It is submitted that against the approved capitalization of Rs. 259.68 Cr., the revised estimate for capitalization is Rs. 546.26 Cr. which is based on the progress of various schemes as detailed in previous section.

Table 23: Gross Fixed Assets (in Rs. Cr.)

Particulars	Approved vide ARR dated 20th Mar, 2020	Revised Estimate For
		FY 2020-21
Opening GFA	1369.64	1305.60
Additions during the year	259.68	546.26
O&M Expenses Capitalisation	0.00	0.00
Closing GFA (1+2+3)	1629.32	1851.86

7. Depreciation

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 2020-21 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 24: Depreciation for FY 2020-21 (in Rs. Cr.)

Particular	FY 2020-21				Depreciation Rate	Depreciation
	Opening	Addition	Closing	Average		
Land & Land Development	23.74	0.00	23.74	23.74	0.00%	0.00
Plant & Machinery	1213.96	546.26	1760.22	1487.09	5.28%	78.52
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 Equipment	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
Total	1305.60	546.26	1851.86	1578.73		81.07

The total depreciation in FY 2020-21 is projected to be Rs. 81.07 Cr. However, as approved in MYT order dated 12th 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 2020-21. MSPCL requests the Hon'ble Commission to approve the depreciation of Rs. 1.22 Cr. as shown below.

Table 25: Depreciation to be considered for FY 2020-21 (in Rs. Cr.)

Depreciation	Approved vide ARR dated 20th Mar, 2020	Revised Estimate
Average value of assets	1499.48	1578.73
Rate of Dep.	5.10%	5.14%
Total Depreciation	76.47	81.07
1.5 % of the Depreciation	1.15	1.22

8. Interest and Finance Charges

In the Order dated 20th March 2020, 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 2020-21.

Table 26: Interest and Finance Charges for FY 2020-21 (in Rs. Cr.)

Particulars	Approved vide ARR dated 26th Mar, 2020	Actual (till Sept'20)	Estimated
			FY 2020-21
Total Interest and Finance Charges	-	-	-

9. Interest on Working Capital

For APR of FY 2020-21, 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 1st April 2020 i.e., 12.90%. The calculation is shown below:

Table 27: Interest on Working Capital for the FY 2020-21 (in Rs. Cr.)

S.N.	Particulars	Approved vide ARR dated 20th Mar, 2020	FY 2020-21 Estimated
1	O&M expenses	0.00	7.50
2	Maintenance of Spares (1%)		17.71
3	Receivables		7.26
4	Working Capital Requirement		32.48
5	Rate of interest		12.90%
6	Interest on Working Capital	0.00	4.19

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

10. 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, which ever 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 2020-21. 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 2020-21 has been considered at MAT rate of 17.16%, which is the notified rate for the year.

The actual equity base as per accounts in FY 2020-21 is Rs. 10.05 Cr. The revised Return on Equity (inclusive of tax) along with the approved figures for FY 2020-21 are detailed in table below:

Table 28: Return on Equity for FY 2020-21 (in Rs. Cr.)

Particulars	Approved vide ARR dated 20th Mar, 2020	Estimated For FY 2020-21
Return on Equity	1.56	1.83

The Commission is requested to approve the the Return on Equity of Rs. 1.83 Cr. as estimated for FY 2020-21.

11. Non-Tariff Income

The approved NTI for the FY 2020-21 in the ARR order Dt. 20th March 2020 is 10.20 Cr. The same has been considered for the FY 2020-21. The details are provided in the table

below.

Table 29: Non-Tariff Income for FY 2020-21

(in Rs. Cr.)

Particulars	Approved vide ARR dated 20th Mar, 2020	Revised Estimate
Non-Tariff Income	10.20	10.20

The Commission is requested to approve the Non-tariff Income of Rs. 10.20 Cr. as estimated for FY 2020-21.

12. Aggregate Revenue Requirement

Based on the above analysis, the Aggregate Revenue Requirement estimated for FY 2020-21 by MSPCL under the annual performance review against the figures approved by the Commission for FY 2020-21 are furnished in Table below:

Table 30: Aggregate Revenue Requirement for FY 2020-21

(in Rs. Cr.)

Sr. No.	Particulars	Approved vide ARR dated 20th Mar, 2020	Revised Estimate
1	Employee Expense	69.94	69.37
2	R&M Expense	10.56	10.56
3	A&G Expense	4.00	10.12
4	Depreciation	1.15	1.22
5	Interest on Loans	0.00	0.00
6	Interest on working capital	0.00	4.19
7	Add: Return on Equity / ROE	1.56	1.83
9	Total Cost	87.21	97.28
10	Less: Non-Tariff income	10.20	10.20
11	Less: Expenses Capitalized	0.00	0.00
12	Aggregate Revenue Requirement	77.01	87.08

MSPCL requests the Hon'ble Commission to revise the ARR for FY 2020-21 as proposed above.

Chapter 5: Revised Aggregate Revenue Requirement and Transmission charges for FY 2021-22

Background

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 01.04.2018 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 2021-22 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 2019-20 and first six months of FY 2020-21 to revise the ARR for FY 2021-22 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 2021-22:

- a. Capital Investment Plan for the 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 2021-22.

1. Contracted Capacity in Manipur

- 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 Pallatana Unit-I and Tripura based Baramura power plant etc. to meet its energy requirement.
- The MSPDCL has provided the projected contracted capacity as 280 MW and projected energy to be transmitted as 1590 MUs during the FY 2021-22. MSPCL has considered the above contracted capacity & energy for the FY 2021-22.

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

Table 31: MSPCL Transmission infrastructure snapshot

Voltage Level		400 kV	132 kV	33 kV
No. of Sub-Station	FY 2019-20	-	17	92
	FY 2020-21	01	19	104
	FY 2021-22	01	19	121
Transformation Capacity (MVA)	FY 2019-20	-	698.30	817.15
	FY 2020-21	315	778.30	942.35
	FY 2021-22	315	778.30	1097.35
Line Length (km)	FY 2019-20	-	638.46	1602.78
	FY 2020-21	45	673.01	1723.78
	FY 2021-22	45	673.01	2099.78

2. 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 12th March 2018.

- Considering the progress of various schemes since the issuance of the MYT Order, MSPCL proposes to revise the capital expenditure for FY 2021-22 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 2021-22 along with scheme-wise details are provided in the table below:

Table 32: Proposed Capital expenditure on ongoing and new projects during FY 2021-22

(in Rs. Cr.)

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2021-22)		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
I	Transmission & Distribution							
A.1	Ongoing Schemes							
A.1.1	400 kV System							
1	Installation of 400 kV Sub-Station at Thoubal(NLCPR)	243.62	128.20	115.42	243.62	22.65	-	22.65
2	Construction of 400 kV T/L from Yurembam to Thoubal via Nambol	259.68	148.84	110.84	259.68	37.03	-	37.03
3	Installation of 2 nos. 400 kV line bays at Imphal(PG) sub-station	35.24	35.24	-	35.24	2.79	-	2.79
	Total : A.1.1	538.54	312.29	226.25	538.54	62.47	-	62.47
A.1.2	132 kV System							
1	Renovation &Modernisation of two nos. of 132/33 KV S/S at Yaingangpokpi&Ningthoukhong(NLCPR)	40.50	9.67	30.83	40.50	2.42	-	2.42
2	Renovation &Modernisation of three nos. of 132/33 kV S/S at Kakching, Karong&Churachandpur(NLCPR)	49.69	8.10	41.58	49.69	0.47	-	0.47
3	Installation of 132/33 kV S/S at Thanlon with associated line(NLCPR)	135.88	81.90	53.98	135.88	9.56	-	9.56

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2021-22)		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
4	Installation of 2x20 MVA,132 kV Sub-Station along with associated 132 kV LILO lines & related works at Thoubal(NEC)	50.38	18.32	32.05	50.38	6.67	-	6.67
5	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	-	12.63	0.51	-	0.51
6	Cost for diversion of forest land for construction of trasmission projects	50.52	50.52	-	50.52	50.52	-	50.52
7	Installation of 132/33 kV sub-station at Morehwth erection of associated 132 kV line(NLCPR)	115.74	87.29	28.45	115.74	27.92	-	27.92
8	Augmentation of 132/33 KV S/S at Ningthoukhong (Installation of additional transformers)	4.99	4.99	-	4.99	4.99	-	4.99
9	Augmentation of 132/33 KV S/S at Kongba (Installation of additional transformers)	2.61	2.61	-	2.61	2.61	-	2.61
10	Stringing of 132 kV line (2nd circuit) from Kakching to Churachandpur(NEC)	17.44	8.28	9.16	17.44	0.59	-	0.59
11	Installation of 132 kV sub-station along with associated 132 kV line at Elangkhangpokpi	56.21	56.21	-	56.21	8.30	-	8.30

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2021-22)		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
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	-	10.25	1.63	-	1.63
13	Construction of 132/33 kV sub-station at Tipaimukh	51.39	51.39	-	51.39	6.33	-	6.33
14	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	-	15.83	5.09	-	5.09
15	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	-	7.98	1.98	-	1.98
16	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	-	22.34	8.72	-	8.72
	Total : A.1.2	644.36	448.30	196.06	644.36	138.30	-	138.30
A.1.3	33 kV System							

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2021-22)		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
1	Installation of 33/11 kV sub-station at Chakpikarong(NLCPR)	10.20	5.20	4.99	10.20	0.78	-	0.78
2	Installation of 33/11 kV S/S at Sekmaiin(NLCPR)	6.43	3.04	3.40	6.43	0.75	-	0.75
3	Installation of 33/11 kV S/S at UkhrulKhunjao(NLCPR)	9.42	5.64	3.79	9.42	0.49	-	0.49
4	Installation of 2x5 MVA 33/11 kV sub-station 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	-	2.15
5	Installation of 33/11 kV sub-station with associated 33 KV line at Sugnu(NLCPR)	9.10	4.25	4.85	9.10	0.59	-	0.59
6	Installation of 33/11 KV (2x1 MVA) S/S at Gelnel(NLCPR)	7.81	4.38	3.42	7.81	0.79	-	0.79
7	Installation of 33/11 KV (2x1 MVA) S/S at NungbiKhullen with associated 33 KV line(NLCPR)	14.50	9.65	4.85	14.50	1.11	-	1.11
8	Re-stringing & strengthening of 33 kV lines	11.54	11.54	-	11.54	3.70	-	3.70
9	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	-	0.94

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2021-22)		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
10	Renovation of 33/11 KV S/S at Khoupum	5.06	5.06	-	5.06	0.85	-	0.85
11	Installation of 33/11 kV sub-station at Phungyar with associated 33 kV line	11.39	11.39	-	11.39	1.46	-	1.46
12	Installation of 33/11 kV sub-station at KasomKhullen with associated 33 kV line	10.42	10.42	-	10.42	0.59	-	0.59
13	Installation of 33/11 kV sub-station at Gamphazol with associated 33 kV line	10.06	10.06	-	10.06	0.48	-	0.48
14	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	-	0.79
15	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	-	0.71
16	installation of 33/11 kV sub-station at Poayi at Ukhrul	9.15	9.15	-	9.15	4.19	-	4.19
17	installation of 33/11 kV sub-station at Thueyng at Senapati	14.03	14.03	-	14.03	6.56	-	6.56
18	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	11.83	-	11.83	0.10	-	0.10

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2021-22)		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
19	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Yairipok under IPDS	9.52	1.33	8.19	9.52	0.33	2.50	2.83
20	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Wangoi under IPDS	9.67	1.48	8.19	9.67	-	0.44	0.44
21	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Wangjing under IPDS	9.52	1.33	8.19	9.52	0.33	1.82	2.15
22	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Heirok under IPDS	9.07	1.21	7.87	9.07	0.21	1.76	1.97
23	Augmentation of 33/11 kV sub-station at Kangpokpi under IPDS	1.43	0.26	1.17	1.43	-	0.96	0.96
24	Augmentation of 33/11 kV sub-station at Karong under IPDS	1.66	0.31	1.36	1.66	-	0.43	0.43
	Total : A.1.3	226.04	140.44	85.60	226.04	27.89	7.90	35.80
A.2	New Schemes							
A.2.1	33 kV System							
1	Installation of 33/11 kV sub-station at Longpi with associated 33 kV line	9.00	9.00	-	9.00	1.80	-	1.80

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2021-22)		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
2	Installation of 33/11 kV sub-station at Nungleiband with associated 33 kV line	9.00	9.00	-	9.00	1.80	-	1.80
3	Installation of 33/11 kV sub-station at Mualnuam at Ccpur.	12.15	12.15	-	12.15	2.43	-	2.43
4	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	-	11.75	2.25	-	2.25
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	-	10.44	1.99	-	1.99
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	-	10.57	2.01	-	2.01
7	Installation of new 33/11 kV sub-station along with associated 33 kV line at Akampat, Imphal East.	8.86	8.86	-	8.86	1.67	-	1.67

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2021-22)		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
8	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at LiyaiKhunou, Senapati district.	10.83	10.83	-	10.83	2.07	-	2.07
9	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at IbudhouMarjing	9.13	9.13	-	9.13	1.73	-	1.73
10	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	-	11.10	2.12	-	2.12
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	-	7.06	1.31	-	1.31
12	Installation of 2x10 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at sports University, Koutruk, Imphal West District.	21.52	21.52	-	21.52	4.30	-	4.30

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2021-22)		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
13	Installation of 2x10 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Sports Complex, KhumanLampak, Imphal East District.	11.25	11.25	-	11.25	2.25	-	2.25
14	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Naharup, Imphal East District.	9.35	9.35	-	9.35	1.87	-	1.87
15	Construction of 33 kV D/C line on double poles with associated line bays from Yaingangpokpi to KhumanLampak	15.38	15.38	-	15.38	3.08	-	3.08
16	Stringing of 33 kV line from Rengpang to Noney along with associated line bays.	7.67	7.67	-	7.67	1.53	-	1.53
17	Construction of 33 kV line on STP along with associated line bays from Tamenglong to Tamei	7.80	7.80	-	7.80	1.56	-	1.56
18	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	-	8.90	1.68	-	1.68

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2021-22)		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
19	Stringing of 33 kV line from Chandel 132/33 kV SS to 33 kV SS at Joupi	5.12	5.12	-	5.12	1.02	-	1.02
20	Stringing of 33 kV line from Tousem 33/11 kV SS to 33/11 kV SS at Oinamlong	8.98	8.98	-	8.98	1.80	-	1.80
21	Installation of 2x5 MVA, 33/11 kV SS at Joujangtek, Noney district	13.06	13.06	-	13.06	2.51	-	2.51
22	Installation of 2x5 MVA, 33/11 kV SS at Oinam, Sena[pati district.	12.41	12.41	-	12.41	2.38	-	2.38
23	Installation of 2x5 MVA, 33/11 kV SS at Gwakhal, Jiribam district.	8.08	8.08	-	8.08	1.52	-	1.52
24	Installation of 2x5 MVA, 33/11 kV SS at Nampisha, Kamjong district	11.10	11.10	-	11.10	2.12	-	2.12

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2021-22)		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
25	Augmentation, R&M of 33/11 kV substations-28 nos.(Hill-Tengnoupal, 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, MoirangKhunou, Nambol)	86.07	86.07	-	86.07	8.61	-	8.61
26	33/11 kV Sub-Station at Rilamcentre	12.35	12.35	-	12.35	1.24	-	1.24
27	33/11 kV Sub-Station at Haochong	10.96	10.96	-	10.96	1.10	-	1.10
28	33/11 kV Sub-Station at Tuinem	13.05	13.05	-	13.05	1.31	-	1.31
29	33/11 kV Sub-Station at Phadang	10.96	10.96	-	10.96	1.10	-	1.10
30	33/11 kV Sub-Station at Lambui	13.05	13.05	-	13.05	1.31	-	1.31
31	33/11 kV Sub-Station at Shirakhong	9.01	9.01	-	9.01	0.90	-	0.90
32	33/11 kV Sub-Station at Wahong	10.96	10.96	-	10.96	1.10	-	1.10
33	33/11 kV Sub-Station at Kwatha	10.26	10.26	-	10.26	1.03	-	1.03
34	33/11 kV Sub-Station at Sita	10.68	10.68	-	10.68	1.07	-	1.07
35	33/11 kV Sub-Station at Khengjoy	9.84	9.84	-	9.84	0.98	-	0.98
36	33/11 kV Sub-Station at Patpuihmun	12.35	12.35	-	12.35	1.24	-	1.24

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2021-22)		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
37	33/11 kV Sub-Station at Thongju Part-II	9.01	9.01	-	9.01	0.90	-	0.90
38	Reconductoring of Imphal Ring Main 33 kV System with HTLS conductor and renovation of associated sub-stations	0.93	0.93	-	0.93	0.09	-	0.09
	Total : A.2.1	469.99	469.99	-	469.99	70.75	-	70.75
	Sub-Total (I):	1,878.93	1,371.01	507.91	1,878.93	299.41	7.90	307.32
II	Misc. Scheme							
1	Consultancy for Hydel Investigation	3.50	3.50	-	3.50	1.05	-	1.05
2	Construction of Administrative Building	-	-	-	-	0.50	-	0.50
3	Construction of Divisional & Sub-Divisional office buildings, quarters, complain rooms, etc.	-	-	-	-	1.00	-	1.00
4	Renovation and up-gradation of grid sub-station of MSPCL under PSDF funding	50.06	16.56	33.50	50.06	8.68	3.35	12.03
5	AMC for SCADA	-	-	-	-	0.40	-	0.40
6	Expansion/Upgradation of SCADA/EMS System of SLDCs of NER	4.95	4.95	-	4.95	2.37	-	2.37
7	Installation of Reactive Power Solution on 33/11 kV sub-stations in Manipur under PSDF	25.55	3.78	21.77	25.55	3.78	4.35	8.13
	Total : II	84.06	28.79	55.27	84.06	17.78	7.70	25.49

Sl. No.	Name of Project	Cost of Project	Source of Funding			Fund Projection(2021-22)		
			State Fund	Grant	Total	State Fund	Grant	Total
1	2	3	4	5	6	7	8	9
	Total (I+II):	1,962.98	1,399.80	563.18	1,962.98	317.20	15.61	332.81

- The Commission is requested to approve the revised capital expenditure proposed above for ongoing and new schemes during the year FY 2021-22. It is submitted that these schemes shall help the utility in delivering quality and reliable power in the State.

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 2021-22 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 2021-22.

Table 33: Proposed Funding of capital Expenditure during FY 2021-22 (in Rs. Cr.)

Year	Equity	Debt	Grant (Central Govt Bodies/ State Govt)
FY 2021-22	-	-	332.81

- MSPCL has considered the capitalization of those works which are proposed to be completed by the end of FY 2021-22. 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 2021-22 is provided below:

Table 34: Proposed Capitalization for the FY 2021-22 (in Rs. Cr.)

Sl. No.	Name of the Project	Proposed Expenditure
1	Installation of 2x2.5 MVA, 33/11 kV sub-station at Paoyi, Ukhrul District.	9.15
2	Installation of 2x2.5 MVA, 33/11 kV sub-station at Thuyeng, Senapati District.	14.03
Total Proposed Capitalization :		23.18

Table 35: Capital Expenditure & Capital Work In Progress (in Rs. Cr.)

Particulars	Approved vide MYT Order For 2021-22	Revised Proposed For FY 2021-22
Opening CWIP	123.42	41.35
Capital Expenditure	123.21	332.81
Capitalization during the Year	123.83	23.18
Closing CWIP	122.80	350.97

5. Gross Fixed Assets (GFA)

- Gross Fixed Assets for FY 2021-22 are projected based on the closing gross fixed assets for FY 2019-20 and the projected capitalization for FY 2020-21.
- The details of opening GFA, addition during the FY 2021-22 & closing GFA is provided in the table below.

Table 36: Projected Gross Fixed Assets for FY 2021-22 (in Rs. Cr.)

Particular	Proposed For FY 2021-22		
	Opening	Addition	Closing
Land & Land Development	23.74	0.00	23.74
Plant & Machinery	1760.22	23.18	1783.40
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
Total	1,851.86	23.18	1,875.04

Table 37: Proposed Gross Fixed Assets for FY 2021-22 (in Rs. Cr.)

Particular	Approved vide MYT Order For 2021-22	Revised Proposed For FY 2021-22
Opening GFA	2405.33	1,851.86
Closing GFA	2534.80	1,875.04

It is submitted that the Hon'ble Commission may kindly consider & approve the GFA as proposed above for the FY 2021-22.

6. Operation & Maintenance Costs

- Operation and Maintenance expenses comprise of the following heads:
 - Employees Expenses** which includes the basic pay, dearness pay, dearness allowances, house rent allowances, and other allowances, new pension scheme paid to the staff;
 - Repair and Maintenance (R&M) Expenses**, which include all expenditure incurred on the maintenance and upkeep of transmission assets; and
 - Administrative and General Expenses**, which include all expenditure incurred in operating a business such as office and IT expenses, consultancy and regulatory fee etc.
- 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 2020-21 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 2021-22 has been explained in the following section.

(a) Employee Expense

In the MYT order Dt. 12.03.2018 Hon'ble Commission had approved employee expenses at Rs. 77.46 Cr. for the FY 2021-22.

The employee expenses for the FY 2021-22 have been projected on the basis of actual employee expenses for the FY 2019-20, estimated expenses for the FY 2020-21 and expected increments/escalations applicable to the ensuing year. The cost attributable towards employees expected to be recruited during the 2nd half of the current financial year as detailed in the section of APR for the FY 2020-21 above, has been considered for the entire year of FY 2021-22.

The year wise number of employees is provided in the table below.

Table 38: Projection of MSPCL Employee for FY 2021-22

Particulars	FY 2019-20 (Actuals)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)
Opening Employees	1571	1493	1773
Retirements	78	78	52
Recruitments	-	358	-
Closing Number of Employees	1493	1773	1721
Average Number of Employees	1532	1633	1747

- 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 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 has projected the employee cost for the FY 2021-22 based on above submissions. The projected employee cost is detailed in the table below.

Table 39: Proposed Employee Cost for FY 2021-22 (in Rs. Cr.)

Particulars	Approved vide MYT Order For 2021-22	Revised Proposed For FY 2021-22
Employee Expense (Rs. Cr.)	77.46	87.71
Average number of employees (numbers)	2074	1747

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

(b) Repairs & Maintenance Expense

- 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. 27.79 Cr. as R&M expenses for the FY 2021-22, however, on the basis of the actual expenses for the FY 2019-20 and estimated expenses for the FY 2020-21, MSPCL is projecting Rs. 10.56 Cr. towards R&M expenses for the ensuing year.
- The proposed R&M expense for FY 2021-22 is provided in the table below:

Table 40: Proposed Repairs & Maintenance Expense for FY 2021-22 (in Rs. Cr.)

Particulars	Approved vide MYT Order For 2021-22	Revised Proposed For FY 2021-22
R&M Expenses	27.79	10.56

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

(c) Administration & General Expense

- 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. 5.30 Cr. for the FY 2021-22 in the MYT order Dt. 12th March 2018. It is submitted that the expenses towards A&G are higher than the figures approved by the Hon'ble Commission in the MYT Order. MSPCL has projected A&G expenses based on the past trends of the expenses. The actual A&G expenses for the FY 2019-20 is Rs. 08.09 Crores. These expenses increase year over year on account of inflation apart from the other factors such as commissioning of new substations & transmission lines. However, MSPCL shall make all efforts to restrict the expenses to the extent possible. Accordingly, MSPCL is projecting the A&G expenses for the FY 2021-22 at Rs. 06.00 Crores.

- The proposed A&G expenses for FY 2021-22 are as provided in the table below:

Table 41: Proposed A&G Expenses for FY 2021-22**(in Rs. Cr.)**

A&G Cost	Approved vide MYT Order For 2021-22	Revised Proposed For FY 2021-22
Total A&G Expenses	5.30	6.00

MSPCL requests the Hon'ble Commission to approve the proposed A&G expenses for the FY 2021-22.

(d) O&M Expenses

Based on the above projected expenses for employees, R&M & A&G , the total O&M expenses for the FY 2021-22 are tabulated below:

Table 42: Proposed O&M Expenses for FY 2021-22**(in Rs. Cr.)**

Particulars	Approved vide MYT Order For 2021-22	Revised proposed for FY 2021-22
Employee Expense (Rs. Crore)	77.46	87.71
R & M Expenses (Rs. Crore)	27.79	10.56
A&G Expenses (Rs. Crore)	5.30	6.00
Total O&M Expenses (Rs. Crore)	110.55	104.27
Expenses capitalized @ 5.1%	5.64	-
Total O&M Expenses (Rs. Crore)	104.91	104.27

7. Depreciation

- 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 12th March 2018, only 1.5% of total depreciation is considered towards ARR projection for FY 2021-22. MSPCL, requests the Hon'ble commission to consider the depreciation for FY 2021-22 as shown in the table below:

Table 43: Projected Depreciation for FY 2021-22**(in Rs. Cr.)**

Particulars	Average Assets	FY 2021-22 (Projected)	
		Depreciation Rate	Depreciation
Land & Land Development	23.74	0.00%	0.00
Plant & Machinery	1771.81	5.28%	93.55
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
Total	1,863.45		96.11

Table 44: Proposed Depreciation for FY 2021-22**(in Rs. Cr.)**

Particulars	Approved vide MYT Order For 2021-22	Revised proposed for FY 2021-22
Total Depreciation	1.69	96.11
Percentage of assets not funded through grants		1.50%
Depreciation to be considered	1.69	1.44

8. Interest on Working Capital Borrowings

- 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) percent 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 1st 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 2020 i.e., 12.90%. Thus, interest on working capital requirement for FY 2021-22 has been worked out as shown in table below.

Table 45: Interest on Working Capital**(in Rs. Cr.)**

Particulars	Approved vide MYT Order For 2021-22	Revised proposed for FY 2021-22
O&M expenses	9.21	8.69
Maintenance of Spares (1%)	25.50	21.62
Receivables	9.32	8.49
Working Capital Requirement	44.03	38.81
Rate of interest*	14.05%	12.90%
Interest on Working Capital	6.79	5.00

*As on 1st April of the financial year in which the Petition is filed i.e. 1st April 2020

MSPSCL requests the commission to approve the Interest on Working Capital as projected above for FY 2021-22.

9. Return on Equity

- 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 2020-21 is of 17.16%. The same has been considered for grossing-up of return on equity for the FY 2021-22.
- As no fresh addition to equity during FY 2021-22 is planned, the closing equity of Rs. 10.05 Cr. for FY 2020-21 has been considered for computation of return on equity for FY 2021-22. Accordingly, return on equity is claimed at the rate of 15.50% grossed up with MAT rate of 17.16% as shown below.

Table 46: Proposed Return on Equity for FY 2021-22 (in Rs. Cr.)

Particulars	Approved vide MYT Order For 2021-22	Revised Proposed For FY 2021-22
Opening Equity	10.05	10.05
Closing Equity	10.05	10.05
Average Equity	10.05	10.05
Rate of Return on Equity	15.50%	15.50%
MAT Rate	20.39%	17.16%
Total Return on Equity	1.96	1.83

Therefore, MSPCL requests the Hon'ble Commission to approve the RoE as projected for FY 2021-22.

10. Non-Tariff & Other Income

- Non-tariff income comprise 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 2021-22 in the MYT order Dt. 12.03.2018, however, based on the actual NTI for the FY 2019-20 & estimated for the FY 2020-21, MSPCL proposes Non-Tariff Income of Rs. 10.60 Cr. for FY 2021-22. The approved & projected NTI for the FY 2021-22 is provided below.

Table 47: Proposed Non-tariff Income for FY 2021-22 (in Rs. Cr.)

Particulars	Approved vide MYT Order For 2021-22	Revised Proposed For FY 2021-22
SLDC Income	8.68	3.70
Agency Charges		2.50
Bank Interest		4.10
Other Income		0.30
Total Non-Tariff Income	8.68	10.60

MSPCL requests the Hon'ble Commission to kindly consider & approve the Non-Tariff Income as proposed above for the FY 2021-22.

11. Aggregate Revenue Requirement

MSPCL requests the Hon'ble Commission to approve the revised Aggregate Revenue Requirement for FY 2021-22 as shown in the table below.

Table 48: Proposed Aggregate Revenue Requirement for FY 2021-22 (in Rs. Cr.)

Particulars	Approved vide MYT Order For 2021-22	Revised Proposed For FY 2021-22
Employee Expense	77.46	87.71
R & M Expense	27.79	10.56
A&G Expense	5.30	6.00
Depreciation	1.69	1.44
Interest on Loans	0.00	0.00
Return on Equity	1.56	1.83
Interest on working capital	6.79	5.00
Income Tax	0.40	0.00
Total Cost	120.99	112.53
Less: Non-Tariff Income	8.68	10.60
Less: Expenses capitalized	5.64	0.00
Net ARR	106.67	101.93

12. 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 2021-22.

2. Transmission losses:

MSPCL has submitted in the previous sections of True-up for the FY 2019-20 & APR for the FY 2020-21 that the Company is making efforts to install meters at 132 kV, 33 kV & 11 kV. It is submitted that MSPCL, as on date has already installed 47 Nos. and 125 Nos. of SEM meters with 15 minutes time block calibration at 132 kV and 33 kV voltage level respectively leaving a balance of 21 Nos. in 132 kV and 66 Nos. in 33 kV voltage level respectively for metering of 132 kV & 33 kV system.

It is further submitted that the SAMAST scheme encompasses installation of 51 Nos. of meters at 132 kV, 323 Nos. of meters at 33 kV and 160 Nos. of meters at 11kV level. Tender of the implementation of SAMAST in the North Eastern region of Assam and Meghalaya states has been approved by MOP and that for the remaining states is in the process of approval by TESC under PSDF funding. Also, 33 kV system integration with SLDC and Reliable communication for grid connectivity are all in tendering stage under PSDF funding. Due to the series of lockdown following Covid-19 Pandemic, the whole process has got delayed. In view of the above, the transmission losses for the MSPCL transmission system cannot be accurately measured at this point of time.

After implementation of the aforementioned Schemes, MSPCL will be in a position to assess the actual losses as real time data would be available for the major substations and identify the loss occurring area. Accordingly, 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 2021-22.

13. Recovery of Transmission ARR and Transmission Tariff Proposal for FY 2021-22

- The total ARR to be recovered for FY 2021-22 is proposed to be Rs. 101.93 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.

- 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 49: Transmission Tariff for FY 2021-22

S.N.	Particulars	Amount
1	Transmission ARR to be recovered (if availability is equal or more than the normative availability) Rs. In Crore	101.93
2	Transmission Tariff for MSPDCL as Rs. Lakhs/month in FY 2021-22	849.44
3	Average Contracted Transmission Capacity for MSPDCL in FY 2021-22 (in MW)	280
4	Transmission Tariff per MW of contracted capacity for long term transmission users per Month (Rs. Lakhs)	3.03
5	Transmission Tariff Rs./MW/Day	9974
6	Energy Proposed to be Transmitted (MUs)	1590
7	Transmission Tariff Rs./Unit	0.64

1. 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. Late payment surcharge:

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.

3. 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.

Chapter 6: Compliance on Directives

The Hon'ble Commission Vide Tariff Order for FY 2020-21 dated 20th March 2020 had issued a set of directives to be followed by MSPCL to comply with the JERC regulations and standards.

In line with the directives, MSPCL has been taking several steps to comply with the directives. The purpose of this section is to appraise the Hon'ble Commission on progress made by MSPCL on this matter since the issuance of the aforesaid tariff order.

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.

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.

Compliance Status:

MSPCL has submitted list of all major capital works costing 5 crore or above for FY 2020-21 for approval from the Commission vide this office letter No. 26/2/ED(Tech)/MSPCL/2014/839-40 dated 13-11-2020.

Details of all major work costing Rs. 5.00 Cr. or above for FY 2020-21 are listed below:

Schemes under State Plan for FY 2020-21

Sl. No.	Name of Projects/schemes	DPR Amount (in Crores)
1	Installation of 2x5MVA ,33/11 KV sub-station along with the associated 33KV line and related civil works at Joujangtek, Noney District	13.06
2	Installation of 2x5MVA ,33/11 KV sub-station along	12.41

Sl. No.	Name of Projects/schemes	DPR Amount (in Crores)
	with the associated 33KV line and related civil works at Oinam, Senapati District	
3	Installation of 2x5MVA ,33/11 KV sub-station along with the associated 33KV line and related civil works at Gwakhal, Jiribam District	8.08
4	Installation of 2x5MVA ,33/11 KV sub-station along with the associated 33KV line and related civil works at Nampisha, Kamjong District	11.1
5	Installation of 2x5MVA ,33/11 KV sub-station along with the associated 33KV line and related civil works at Ibudhou Marjing, Imphal East District	9.13
6	Installation of 2x5MVA ,33/11 KV sub-station along with the associated 33KV line and related civil works at Chingai, Ukhrul District	11.75
7	Installation of 2x5MVA ,33/11 KV sub-station along with the associated 33KV line and related civil works at Somdal, Ukhrul District	9.78
8	Installation of 2x5MVA ,33/11 KV sub-station along with the associated 33KV line and related civil works at Akampat, Imphal East District	8.86
9	Installation of 2x5MVA ,33/11 KV sub-station along with the associated 33KV line and related civil works at Liyaikhunou, Senapati District	10.83
10	Installation of 2x5MVA ,33/11 KV sub-station along with the associated 33KV line and related civil works at Kachai, Ukhrul District	10.44
11	Installation of 2x5MVA ,33/11 KV sub-station along with the associated 33KV line and related civil works at Sanakeithel, Ukhrul District	10.57
12	Installation of 2x5MVA ,33/11 KV sub-station along with the associated 33KV line and related civil works at Nambashi, Ukhrul District	11.1

Sl. No.	Name of Projects/schemes	DPR Amount (in Crores)
13	Installation of 2x5MVA ,33/11 KV sub-station along with the associated 33KV line and related civil works at Khongjarol, Tamenglong District	7.06

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.

Comment of the Commission:

Quarterly progress achieved may be reported to the Commission.

Compliance Status:**Status/progress of 33kV system Works****A. Projects Completed in the year 2019-20**

Sl. No.	Name of the Project
1.	Installation of 2x5 MVA, 33/11 kV SS at Wangoi.
2.	Installation of 2x5 MVA, 33/11 kV SS at Yairipok.
3.	Augmentation of 33/11 kV S/S from 1x3.15 MVA to 2x3.15 MVA at Kangpokpi
4.	Upgradation of 33/1 kV S/S at Khoupum in Tamenglong District by installing 2x2.5 MVA trf.

B. Ongoing Projects

Sl. No.	Name of the Project	Status
1.	400/132 kV , 3x105 MVA Single Phase Transformer (i/c one spare) S/S at Thoubal	90% completed.
2.	400 KV D/C line from Yurembam to Thoubal via	95% completed.

Sl. No.	Name of the Project	Status
	Nambol	
3.	Installation of 2x5 MVA, 33/11 kV SS at Wangjing (MoirangPalli)	Sub Station: 90% completed Line: 50% completed
4.	Installation of 2x5 MVA, 33/11 kV SS at Heirol	Sub Station: 95% completed Line: 70% completed
5.	Installation of 2x5 MVA, 33/11 kV SS at Lamdangmei (Loktak Down Stream sub-station)	Sub Station: 98% completed Line: 70% completed
6.	Installation of 2x2.5 MVA, 33/11 KV S/S at Gumnom with associated 33 kV line.	Sub Station: 90% completed Line: 95% completed
7.	Installation of 2x2.5 MVA, 33/11 kV sub-station at Paoyi, Ukhrul District.	Sub Station: 30% completed Line: 40% completed
8.	Installation of 2x2.5 MVA, 33/11 kV sub-station at Thuyeng, Senapati District.	Sub Station: 30% completed Line: 40% completed
9.	Installation of 2x5 MVA 33/11 KV sub-station along with associated 33 kV line & related civil works at Chingai, Ukhrul .	Completed Tender Process. Work order has been issued.
10.	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Kachai, Ukhrul district.	Completed Tender Process. Work order has been issued.
11.	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Sanakeithel, Ukhrul district.	Completed Tender Process. Work order has been issued.
12.	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at LiyaiKhunou, Senapati district.	Completed Tender Process. Work order has been issued.
13.	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Nambashi, Ukhrul district.	Completed Tender Process. Work order has been issued.

Sl. No.	Name of the Project	Status
14.	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Khongjaron, Tamenglong district.	Completed Tender Process. Work order has been issued.
15.	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Somdal, Ukhru District.	Completed Tender Process. Work order has been issued.
16.	Installation of 2x5 MVA, 33/11 kV SS at Joujangtek, Noneydistrict	Completed Tender Process. Work order has been issued.
17.	Installation of 2x5 MVA, 33/11 kV SS at Oinam, Senapati district.	Completed Tender Process. Work order has been issued.
18.	Installation of 2x5 MVA, 33/11 kV SS at Gwakhal, Jiribam district.	Completed Tender Process. Work order has been issued.
19.	Installation of 2x5 MVA, 33/11 kV SS at Nampisha, Kamjong district	Completed Tender Process. Work order has been issued.
20.	Installation of 2x5 MVA, 33/11 kV SS at IbudhouMarjing, Imphal West district	Completed Tender Process. Work order has been issued.
21.	Installation of 2x5 MVA, 33/11 kV SS at Akampat, Imphal East district	Completed Tender Process. Work order has been issued.

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.

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.

Directives for FY 2019-20:

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

The MSPCL is directed to complete the installation of all metering at the inter-company boundary point (i.e., 132 kV and 33 kV 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.

Comments of the Commission:

The directives are not complied / pending.

Directives 16, 17 and 18 may be clubbed together.

Compliance of Status:

Directives 16, 17 and 18 have been clubbed together as they relate to installation & energisation of meters at all points at various voltage level , recording the actual losses being incurred at 132kV and 33kV level separately and submission of the detailed report.

In continuation, MSPCL, as on date has already 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 metering of 132kV & 33kV system.

Now, SAMAST scheme encompasses installation of **51 nos.** of meters **at 132kV**, **323 nos** of meters at **33kV** and **160 nos.** of meters **at 11kV level**. Tender of the implementation of

SAMAST in the North Eastern region of Assam and Meghalaya states has been approved by MOP and that for the remaining states is in the process of approval by TESC under PSDF funding.

Also, 33kV system integration with SLDC and Reliable communication for grid connectivity are all in tendering stage under PSDF funding. Due to the series of lockdown following Covid-19 Pandemic, the whole process has got delayed.

After implementation of the aforementioned Schemes, MSPCL will be in a position to assess the actual losses as real time data would be available for the major substations and identify the loss occurring area. At present, as the data available is haphazard and errors are noticed with the existing pen and paper method, we are unable to arrive at the actual values.

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.

Comments of the Commission:

This directive is still pending.

Compliance Status:

MSPCL would complete metering of all left out 11 kV feeders (160 Nos.) under SAMAST in due course and any other 11kV feeder in the new 33/11kV substations in operation as per requirement.

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.

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.

Compliance Status:

The Manipur State Power Company Limited has already finalized and audited the Accounts for the financial years 2014-15 and 2015-16. For the financial year 2016-17, the account has already been completed and is now pending with Statutory Audit.

Further the finalization of Accounts has taken time due to the imposition of Lockdown in the State during Covid-19 pandemic. However, the Accounts will be audited and finalized at the earliest despite having problems due to the Covid-19.

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.

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 feeder 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.

Compliance Status:

SAMAST scheme encompasses installation of **160 nos.** of meters **at 11 kV level** which will ensure complete metering of all 11kV feeders (including left out 72 nos. 11 kV feeders without energy meters). Tender of the implementation of SAMAST in the North Eastern region of Assam and Meghalaya states has been approved by MOP and that for the remaining states is in the process of approval by TESC under PSDF funding.

After implementation of the aforementioned Schemes, MSPCL will be in a position to assess the actual losses as real time data would be available for the major substations and identify the loss occurring area. At present, as the data available is haphazard and errors are noticed with the existing pen and paper method, we are unable to arrive at the actual values.

Directive 22: Providing of Energy Meters:

It is observed from the Capital Expenditure plan for FY 2018-19, Sl 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 30th June 2019 without fail with due explanation covering all issues.

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.

Compliance Status:

Monthly feederwise energy data of 11 kV for all 132/33 kV, 33/11 kV substations wherever Energy meters are available and working for the Month of June, July August & September, 2020 are compiled and maintained.

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.

Compliance status:

This will be discussed in the next Meeting of Co-ordination Forum.

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.

Compliance status:

There is no subsidy received by MSPDCL from Government on behalf of MSPCL.

Chapter 7: Prayer

1. MSPCL requests the Hon'ble Commission to:

- Admit the Revised Aggregate Revenue Requirement of FY 2021-22 and the Transmission Tariff Proposal for FY 2021-22 as submitted herewith.
- Admit the Annual Performance Review of FY 2020-21 as submitted herewith.
- Admit the provisional True-up for 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.

Annexures

3.1 Form F1 – Aggregate Revenue Requirement

(In Rs. Crore)

	Particulars	Form	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
1	Energy Available (MU)				
2	Energy Transmitted (MU)				
3	Transmission Loss %				
A	Capacity Charges (Annual Fixed Charges)				
1	O&M expenses		70.51	90.05	104.27
a	R&M Expense	F18	9.50	10.56	10.56
b	Employee Expenses	F19	52.92	69.37	87.71
c	A&G Expense	F20	8.09	10.12	6.00
2	Depreciation	0	0.99	1.22	1.44
3	Interest on Loans	0	0.00	0.00	0.00
4	Return on Capital Employed	0	1.56	1.56	1.56
5	Interest on Working Capital	F25	3.29	4.19	5.00
6	Income Tax	F29	0.27	0.27	0.27
7	Less: Non-Tariff Income	F26	9.70	10.20	10.60
8	Less: Income from Other Business	F27	0.00	0.00	0.00
9	Less: Expenses Capitalized	F28	0.00	0.00	0.00
	Total		66.91	87.08	101.93

3.2 Form F1a – Projection of Sales

Sl no.	Name of utility to whom energy sold	2017-18 Actual	2018-19	2019-20 Estimated	2020-21 Projected
1	Not Applicable				
2					

3.3 Form F1a – Projection of Connected Load

Sl no.	Name of utility to whom energy sold	2017-18 Actual	2018-19	2019-20 Estimated	2020-21 Projected
1	Not Applicable				
2					

3.4 Form F1a – Projection of Peak Demand

Sl no.	Name of utility to whom energy sold	2017-18 Actual	2018-19	2019-20 Estimated	2020-21 Projected
1	Not Applicable				
2					

3.5 Form F1a – Projection of Minimum Demand

Sl no.	Name of utility to whom energy sold	2017-18 Actual	2018-19	2019-20 Estimated	2020-21 Projected
1	Not Applicable				
2					

3.6 Form F2 – Details of Transmission Lines and Substations

No.	Name of line	Type of line AC/ HVDC	S/C or D/C	Voltage level kV	Line length Ckt.-Km.
Transmission Lines: 33 KV					
1	Yurembam – Mayang Imphal	AC	S/C	33	23.80
2	Yurembam – Leimakhong	AC	S/C	33	20.00
3	KhumanLampak – Imphal P/H	AC	S/C	33	3.50
4	KhumanLampak - Kongba	AC	S/C	33	11.00
5	Napetpalli - KhumanLampak	AC	S/C	33	16.00
6	KhumanLampak – 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 – Tegnoupal	AC	S/C	33	27.00
12	Moirang – MoirangKhunou	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

No.	Name of line	Type of line AC/ HVDC	S/C or D/C	Voltage level kV	Line length Ckt.-Km.
21	Rengpang – Khoupum	AC	S/C	33	25.00
22	Rengpang – Tamenglong	AC	S/C	33	45.00
23	Ningthoukhong – Churachandpur via Moirang	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	Tengnoupal - 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
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

No.	Name of line	Type of line AC/ HVDC	S/C or D/C	Voltage level kV	Line length Ckt.-Km.
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 Sekmaijin	AC	S/C	33	4.00
50	Thanlon - Sinjawl	AC	S/C	33	50.00
51	LILO UkhrulKhunjao	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 - Rengpang	AC	S/C	33	25.00
56	LILO at Gamphajol from Kangpokpi - Leimakhong	AC	S/C	33	2.50
57	LILO at Sekmai from Kangpokpi -Leimakhong	AC	S/C	33	5.00
58	Thoubal - ThoubalLeishangthem	AC	S/C	33	20.00
59	LILO at Khongjom from Kakching -Wangjing	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

No.	Name of line	Type of line AC/ HVDC	S/C or D/C	Voltage level kV	Line length Ckt.-Km.
67	Hundung -NungbiKhullen	AC	S/C	33	45.00
68	LILO at Mayangkhang on KarongKangpokpi	AC	S/C	33	3.00
69	Thoubal - KasomKhullen	AC	S/C	33	41.00
70	Yurembam - Mongsangei	AC	D/C	33	8.14
71	Yurembam - KhumanLampak via Iroisemba (D/C)	AC	D/C	33	13.48
72	SinamChingin - Lamphel	AC	D/C	33	3.50
73	KhumanLampak - 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
Total :					1617.04
Transmission Lines: 132 KV					
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

No.	Name of line	Type of line AC/ HVDC	S/C or D/C	Voltage level kV	Line length Ckt.-Km.
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	4.000
14	LILO at Elangkhangpokpi on Kakching - Churachandpur (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 Thanlon	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
Total :					628.25

No	Name of Sub-station	Type of Substation Conventional/ GIS	Voltage level kV	No. of transformers / Reactors/ SVC etc. (with capacity)	Installed Capacity (MVA)	Date of Commercial operation	Covered in this petition (Yes/No)
Substations - 33/11 taken up by MSPCL							
1	Leimakhong	Conventional	33/11	1	3	April 1979	
2	Ningthoukhong	Conventional	33/11	2	6.3	June 1979	
3	Iroisemba	Conventional	33/11	3	15	31/07/1981	
4	Yurembam*	Conventional	33/11	-	15	June 1979	
5	Mongsangei	Conventional	33/11	2	20	23/04/1982	
6	Moirang*	Conventional	33/11	2	10	05/05/1982	
7	Mayang Imphal	Conventional	33/11	2	6.3	28/07/1983	
8	Kangpokpi	Conventional	33/11	1	3.15	28/09/1983	
9	Kongba	Conventional	33/11	2	20	20/10/1983	
10	Litan	Conventional	33/11	1	3.15	December 1983	
11	Kakching	Conventional	33/11	2	10	31/03/1984	
12	KhumanLampak	Conventional	33/11	4	20	15/07/1987	
13	Thoubal	Conventional	33/11	2	10	06/08/1987	
14	Jiribam	Conventional	33/11	2	10	30/10/1987	
15	Churachandpur	Conventional	33/11	3	15	17/07/2000	
16	Hundung	Conventional	33/11	2	6.3	12/06/1989	
17	Bishnupur (Khwairakpan)	Conventional	33/11	1	6.3	19/07/1989	
18	New Chayang	Conventional	33/11	1	3.15	03/07/1989	

No	Name of Sub-station	Type of Substation Conventional/ GIS	Voltage level kV	No. of transformers / Reactors/ SVC etc. (with capacity)	Installed Capacity (MVA)	Date of Commercial operation	Covered in this petition (Yes/No)
19	Nilakuthi	Conventional	33/11	2	20	15/01/1990	
20	Rengpang	Conventional	33/11	1	3.15	13/12/1991	
21	Yaingangpokpi	Conventional	33/11	1	1	December 1992	
22	Tadubi	Conventional	33/11	1	3.15	03/06/1993	
23	Imphal P/H	Conventional	33/11	3	15		
24	Lamphel	Conventional	33/11	2	20		
25	Tamenglong	Conventional	33/11	1	3.15	05/08/1994	
26	Napetpalli (Lamlai)	Conventional	33/11	1	5	13/11/1994	
27	Tengnoupal	Conventional	33/11	1	4.15	25/03/1995	
28	Khoupum	Conventional	33/11	1	3.15		
29	Wangjing	Conventional	33/11	2	8.15	March 1995	
30	Moirangkhunou	Conventional	33/11	1	3.15	September 1996	
31	Karong (Senapati)*	Conventional	33/11	2	10		
32	Tolloi	Conventional	33/11	1	1	28/04/1999	
33	Airport	Conventional	33/11	1	2	10/07/1999	
34	Nambol	Conventional	33/11	1	5	February 2002	
35	Kamjong	Conventional	33/11	1	1	25/04/2002	
36	Saikul	Conventional	33/11	1	3.15	30/06/2003	
37	Moreh	Conventional	33/11	2	10	27/11/2004	

No	Name of Sub-station	Type of Substation Conventional/ GIS	Voltage level kV	No. of transformers / Reactors/ SVC etc. (with capacity)	Installed Capacity (MVA)	Date of Commercial operation	Covered in this petition (Yes/No)
38	Maram	Conventional	33/11	1	3.15	14/01/2006	
39	Noney	Conventional	33/11	1	3.15	30/11/2005	
40	Singhat	Conventional	33/11	1	3.15	June 2007	
41	Namrei	Conventional	33/11	2	4.15	December 2009	
42	Lakhamai	Conventional	33/11	2	2	December 2009	
43	New Lamka	Conventional	33/11	2	10		
44	Kangla	Conventional	33/11	2	10		
45	Thinkew	Conventional	33/11	2	2		
46	Shivapurikhal	Conventional	33/11	1	3.15	October 2016	
47	Tamei	Conventional	33/11	1	3.15	May 2011	
48	Tousem	Conventional	33/11	1	3.15	November 2011	
49	Jessami	Conventional	33/11	2	5		
50	Kakwa	Conventional	33/11	2	10		
51	Sagolmang	Conventional	33/11	2	6.3		
52	Sangaipat	Conventional	33/11	2	20		
53	Sangaiprou	Conventional	33/11	2	20		
54	Thanlon*	Conventional	33/11	1	2	24/12/2013	
55	JNIMS	Conventional	33/11	2	10		
56	Mantripukhri	Conventional	33/11	2	10		

No	Name of Sub-station	Type of Substation Conventional/ GIS	Voltage level kV	No. of transformers / Reactors/ SVC etc. (with capacity)	Installed Capacity (MVA)	Date of Commercial operation	Covered in this petition (Yes/No)
57	Chingarel	Conventional	33/11	2	10		
58	Sekmaijing	Conventional	33/11	2	10		
59	Oinamlong	Conventional	33/11	2	5	14/08/2017	
60	Sinjawl	Conventional	33/11	2	2		
61	GamphajolSaparmeina	Conventional	33/11	2	5		
62	Chakpikarong	Conventional	33/11	2	2		
63	Sekmai	Conventional	33/11	2	10		
64	ThoubalLeishangthem	Conventional	33/11	2	10		
65	Khongjom	Conventional	33/11	2	10		
66	Chandel	Conventional	33/11	2	10		
67	Willong	Conventional	33/11	2	5		
68	UkhrulKhunjao	Conventional	33/11	2	10	14/08/2017	
69	Gelnel	Conventional	33/11	2	5	14/08/2017	
70	Henglep	Conventional	33/11	2	2	14/08/2017	
71	Phungyar	Conventional	33/11	2	5	14/08/2017	
72	Sugnu	Conventional	33/11	2	10	08/05/2017	
73	Joupi	Conventional	33/11	1	2		
74	Machi	Conventional	33/11	1	2		
75	MayangLangjing	Conventional	33/11	1	3.15		

No	Name of Sub-station	Type of Substation Conventional/ GIS	Voltage level kV	No. of transformers / Reactors/ SVC etc. (with capacity)	Installed Capacity (MVA)	Date of Commercial operation	Covered in this petition (Yes/No)
76	Pherjawl	Conventional	33/11	1	2		
77	Sangaikot	Conventional	33/11	1	2		
78	Urup (Langdum)	Conventional	33/11	1	3.15		
79	Usoipokpi	Conventional	33/11	1	3.15		
80	Wangoo	Conventional	33/11	1	2		
81	Mao	Conventional	33/11	1	10		
82	Mayangkhang	Conventional	33/11	1	10		
83	NungbiKhullen	Conventional	33/11	1	10		
84	KasomKhullen	Conventional	33/11	1	5		
Total : 33/11 KV Sub-Stations :				134	596.5		
Substations - 132 KV taken up by MSPCL							
1	Yurembam	Conventional	132/33	3	94.5	13/07/1981	
2	Ningthoukhong	Conventional	132/33	2	40	10/02/1991	
3	Yaingangpokpi	Conventional	132/33	2	60	30/07/1993	
4	Kakching	Conventional	132/33	2	40	27/07/1994	
5	Karong	Conventional	132/33	2	40	18/01/1997	
6	Churachandpur	Conventional	132/33	2	40	17/07/2000	
7	Rengpang	Conventional	132/33	1	12.5		
8	Jiribam	Conventional	132/33	2	26.3		

No	Name of Sub-station	Type of Substation Conventional/ GIS	Voltage level kV	No. of transformers / Reactors/ SVC etc. (with capacity)	Installed Capacity (MVA)	Date of Commercial operation	Covered in this petition (Yes/No)
9	Kongba	Conventional	132/33	2	40		
10	Hundung	Conventional	132/33	2	25		
11	Chandel	Conventional	132/33	2	25		
12	Thoubal	Conventional	132/33	2	40		
13	Elangkhangpokpi	Conventional	132/33	2	40		
14	Moreh	Conventional	132/33	2	25		
15	Thanlon	Conventional	132/33	2	25		
16	Tipaimukh	Conventional	132/33	2	25		
Total : 132 KV Sub Stations :				32	598.3		

3.7 Form F2a – Statement of Assets not in use

S. No.	Asset details	Date of Acquisition/ Installation	Historical Cost/ Cost of Acquisition	Date of withdrawal from operations	Cumulative depreciation recovered	Proposed residual value

Not Applicable

3.8 Form F3 – Normative Parameters considered for tariff computation

	Particulars	Unit	2019-20	2020-21	2021-22
			Actuals	Estimated	Projected
1	Base Rate of Return on Equity	%	15.50%	15.50%	15.50%
2	Tax Rate	%	17.16%	17.16%	17.16%
3	Target Availability	%	98.00%	98.00%	98.00%
4	Maintenance Spares for Working Capital	% of O&M	19.88%	19.67%	20.74%
5	Receivables for Working Capital	in Months	1	1	1
6	Base Rate of SBI as on 1st April of the relevant Financial Year	%	12.90%	12.90%	12.90%

3.9 Form F4 – Abstract of admitted capital cost for existing projects

	Particulars	Unit	Details
1	Capital Cost as admitted by DERC	Rs Crores	
2	Capital cost admitted as on		
3	Foreign Component, if any (In Million US \$ or the relevant Currency)		
4	Domestic Component	Rs Crores	
5	Foreign Exchange rate considered for the admitted Capital cost		
6	Hedging cost, if any, considered for the admitted Capital cost		
7	Total Capital cost admitted	Rs Crores	

Not Applicable

3.10 Form F5 – Details of Foreign Loans

Particulars	Year 1				Year 2				Year 3 and so on			
	Date	Amount (Foreign Currency)	Exchange Rate	Amount (Rs)	Date	Amount (Foreign Currency)	Exchange Rate	Amount (Rs)	Date	Amount (Foreign Currency)	Exchange Rate	Amount (Rs)
Currency1¹												
Date of loan drawl ²												
Scheduled Principal Repayment												
Scheduled Interest payment												
Closing at the end of financial year												
In case of Hedging ³												
At the date of Hedging												
Period of hedging												
Cost of hedging												
Currency2¹												
Date of loan drawl ²												
Scheduled Principal Repayment												
Scheduled Interest payment												
Closing at the end of financial year												
In case of Hedging ³												
At the date of Hedging												
Period of hedging												
Cost of hedging												
Currency3¹												

Not Applicable

	Particulars	Year 1				Year 2				Year 3 and so on			
		Date	Amount (Foreign Currency)	Exchange Rate	Amount (Rs)	Date	Amount (Foreign Currency)	Exchange Rate	Amount (Rs)	Date	Amount (Foreign Currency)	Exchange Rate	Amount (Rs)
	Date of loan drawl ²												
	Scheduled Principal Repayment												
	Scheduled Interest payment												
	Closing at the end of financial year												
	In case of Hedging ³												
	At the date of Hedging												
	Period of hedging												
	Cost of hedging												

3.11 Form F6 - Details of Foreign Equity

Particulars		Year 1				Year 2				Year 3 and so on			
		Date	Amount (Foreign Currency)	Exchange Rate	Amount (Rs)	Date	Amount (Foreign Currency)	Exchange Rate	Amount (Rs)	Date	Amount (Foreign Currency)	Exchange Rate	Amount (Rs)
	Currency1¹												
1	Date of Infusion												
2													
3													
4													
	Currency2¹												
1	Date of Infusion												
2													
3													
4													
	Currency3¹												
1	Date of Infusion												
2													
3													
4													

Not Applicable

3.12 Form F7 – Capital Cost Estimates and Schedule of Commissioning for new projects

Sl. No.	Name of the Scheme	Year of commencement of project	Completed Cost (Rs. Crores)
1	2	3	4
A.1	Ongoing Schemes		
A.1.1	400 kV System		
1	Installation of 400 kV Sub-Station at Thoubal(NLCPR)	2015	230.62
2	Construction of 400 kV T/L from Yurembam to Thoubal via Nambol	2016	259.68
3	Installation of 2 nos. 400 kV line bays at Imphal(PG) sub-station	2016	35.24
Total : A.1.1			525.54
A.1.2	132 kV System		
1	Stringing of 2nd circuit 132 kV line on the existing DC towers from Ningthoukhong to Ccpur-Installation of line bays.	2008	20.08
2	Installation of 132/33 KV S/S at Hundung (Ukhrul) & its associated line(SPA)	2008	20.08
3	R & M of 132/33 kV sub-station at Yurembam(SPA/NEC)	2008	20.08
4	Installation of 132/33 kV S/S at Chandel with associated 132 KV line(NLCPR)	2009	20.09
5	Installation of 1x20 MVA transformer at Yaingangpokpi	2015	20.15

Sl. No.	Name of the Scheme	Year of commencement of project	Completed Cost (Rs. Crores)
6	Renovation & Modernisation of two nos. of 132/33 KV S/S at Yaingangpokpi & Ningthoukhong (NLCPR)	2012	20.12
7	Renovation & Modernisation of three nos. of 132/33 kV S/S at Kakching, Karong & Churachandpur (NLCPR)	2014	20.14
8	Installation of 132/33 kV S/S at Thanlon with associated line (NLCPR)	2014	20.14
9	Installation of 2x20 MVA, 132 kV Sub-Station along with associated 132 kV LILO lines & related works at Thoubal (NEC)	2015	20.15
10	Providing of Energy Meter	2015	20.15
11	Augmentation of Rengpang 132/33 kV sub-station by installing (3x4.16+1x4.16) MVA 132/33 kV single phase transformers	2015	20.15
12	IDC on REC loan	2018	20.18
13	Principal payment on REC loan	2018	20.18
14	Cost for diversion of forest land for construction of transmission projects	2020	20.20
15	Installation of 132/33 kV sub-station at Moreh with erection of associated 132 kV line (NLCPR)	2015	20.15
16	Augmentation of 132/33 KV S/S at Jiribam (Installation of additional transformers)	2015	20.15

Sl. No.	Name of the Scheme	Year of commencement of project	Completed Cost (Rs. Crores)
17	Augmentation of 132/33 KV S/S at Ningthoukhong (Installation of additional transformers)	2013	20.13
18	Stringing of 132 kV line (2nd circuit) from Kakching to Churachandpur(NEC)	2015	20.15
19	Construction of 132 kV S/C line(2nd ckt) on D/C towers from Leimatak PH(NHPC) to 132 kV sub-station at Ningthoukhong	2015	20.15
20	Installation of 132 kV sub-station along with associated 132 kV line at Elangkhangpokpi	2015	20.15
21	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)	2015	20.15
22	Construction of 132/33 kV sub-station at Tipaimukh	2015	20.15
23	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.	2016	20.16
24	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.	2016	20.16

Sl. No.	Name of the Scheme	Year of commencement of project	Completed Cost (Rs. Crores)
25	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.	2016	20.16
Total : A.1.2			503.55
A.1.3	33 kV System		
1	Installation of 33/11 kV sub-station at Henglep(NLCPR)	2009	20.09
2	Installation of 33/11 kV sub-station at Chakpikarong(NLCPR)	2009	20.09
3	Installation of 33/11 kV S/S at Sekmai jin(NLCPR)	2010	20.10
4	Installation of 33/11 kV S/S at UkhrulKhunjao(NLCPR)	2009	20.09
5	Installation of 33/11 kV S/S at Chandel (NEC)	2013	20.13
6	Installation of 33/11 kV S/S at ThoubalLeishangthem with associated 33 KV line(SPA)	2013	20.13
7	Erection of 33 kV feeders from Yurembam POWERGRID sub-station(SCA)	2013	20.13
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)	2014	20.14
9	Installation of 33/11 kV sub-station with associated 33 KV line at Sugnu(NLCPR)	2014	20.14

Sl. No.	Name of the Scheme	Year of commencement of project	Completed Cost (Rs. Crores)
10	Installation of 33/11 KV sub-station with associated 33 KV line at Khongjom(NLCPR)	2014	20.14
11	Installation of 33/11 KV sub-station with associated 33 KV line at Sekmai(NLCPR)	2014	20.14
12	Installation of 33/11 KV (2x1 MVA) S/S at Gelnel(NLCPR)	2014	20.14
13	Installation of 33/11 KV (2x1 MVA) S/S at NungbiKhullen with associated 33 KV line(NLCPR)	2014	20.14
14	Re-stringing & strengthening of 33 kV lines	2015	20.15
15	Installation of 33/11 KV (2x1 MVA) S/S at Gumnom with associated 33 kV line(NLCPR)	2015	20.15
16	Renovation of 33/11 KV S/S at Khoupum	2016	20.16
17	Installation of 33/11 kV sub-station at Phungyar with associated 33 kV line	2015	20.15
18	Installation of 33/11 kV sub-station at KasomKhullen with associated 33 kV line	2015	20.15
19	Installation of 33/11 kV sub-station at Gamphazol with associated 33 kV line	2015	20.15
20	Installation of 33/11 kV sub-station at Mayangkhang with associated 33 kV line(NEC)	2015	20.15
21	Installation of 33/11 kV sub-station at Mao with associated 33 kV line(NEC)	2015	20.15

Sl. No.	Name of the Scheme	Year of commencement of project	Completed Cost (Rs. Crores)
22	installation of 33/11 kV sub-station at Poayi at Ukhrul	2016	20.16
23	installation of 33/11 kV sub-station at Thueyng at Senapati	2016	20.16
24	Construction of 33 kV D/C line on STP from 132/33 kV SS at Thoubal to 33/11 kV SS at Thoubal (old)	2016	20.16
25	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Yairipok under IPDS	2016	20.16
26	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Wangoi under IPDS	2016	20.16
27	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Wangjing under IPDS	2016	20.16
28	Installation of 1x3.15 MVA 33 kV sub-station at along with associated 33 kV line and related works at Heirok under IPDS	2016	20.16
29	Augmentation of 33/11 kV sub-station at Kangpokpi under IPDS	2016	20.16
30	Augmentation of 33/11 kV sub-station at Karong under IPDS	2016	20.16
Total : A.1.3			604.25

Sl. No.	Name of the Scheme	Year of commencement of project	Completed Cost (Rs. Crores)
A.2	New Schemes		
A.2.1	33 kV System		
1	Installation of 2x5 MVA 33/11 KV sub-station along with associated 33 kV line & related civil works at Chingai, Ukhrul district.	2019	20.19
2	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Kachai, Ukhrul district.	2019	20.19
3	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Sanakeithel, Ukhrul district.	2019	20.19
4	Installation of new 33/11 kV sub-station along with associated 33 kV line at Akampat, Imphal East.	2019	20.19
5	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at LiyaiKhunou, Senapati district.	2019	20.19
6	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at IbudhouMarjing	2019	20.19
7	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Nambashi, Ukhrul district.	2019	20.19

Sl. No.	Name of the Scheme	Year of commencement of project	Completed Cost (Rs. Crores)
8	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Khongjaron, Tamenglong district.	2019	20.19
9	Installation of 2x5 MVA, 33/11 kV sub-station along with associated 33 kV line & related civil works at Somdal, Ukhrul District.	2019	20.19
10	Installation of 2x5 MVA, 33/11 kV SS at Gwakhal, Jiribam district.	2019	20.19
11	Installation of 2x5 MVA, 33/11 kV SS at Nampisha, Kamjong district	2019	20.19
12	Augmentation, R&M of 33/11 kV substations-28 nos.(Hill-Tengnoupal, 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, MoirangKhunou, Nambol)	2020	20.20
13	33/11 kV Sub-Station at Rilamcentre	2020	20.20
14	33/11 kV Sub-Station at Haochong	2020	20.20
15	33/11 kV Sub-Station at Tuinem	2020	20.20
16	33/11 kV Sub-Station at Phadang	2020	20.20
17	33/11 kV Sub-Station at Lambui	2020	20.20
18	33/11 kV Sub-Station at Shirakhong	2020	20.20
19	33/11 kV Sub-Station at Wahong	2020	20.20

Sl. No.	Name of the Scheme	Year of commencement of project	Completed Cost (Rs. Crores)
20	33/11 kV Sub-Station at Kwatha	2020	20.20
21	33/11 kV Sub-Station at Sita	2020	20.20
22	33/11 kV Sub-Station at Khengjoy	2020	20.20
23	33/11 kV Sub-Station at Patpuihmun	2020	20.20
24	33/11 kV Sub-Station at Thongju Part-II	2020	20.20
25	Reconductoring of Imphal Ring Main 33 kV System with HTLS conductor and renovation of associated sub-stations	2020	20.20
Total : A.2.1			504.89
Sub-Total (I):			2138.23
III	Misc. Scheme		
1	Consultancy for Hydrel Investigation	2020	20.20
2	Construction of Administrative Building	2019	20.19
3	Construction of Divisional & Sub-Divisional office buildings, quarters, complain rooms, etc.	2019	20.19
4	Consultancy for assessment of Hydro Power Potential in the State	2020	20.20
5	Compensation cost for 132/33 kV SS at Khenjang	2018	20.18
6	Compensation cost for 132 kV towers at Nungba SD	2018	20.18
7	AMC for SCADA	2018	20.18
Total : II			141.32

Sl. No.	Name of the Scheme	Year of commencement of project	Completed Cost (Rs. Crores)
Total (I+II):			2279.55

3.13 Form F8 – Breakup for project cost for Transmission System

No	Break Down	As per original estimates	Actual capital expenditure as on COD	Liabilities / provisions	Variation (B-C-D)	Reasons for Variation
	A	B	C	D	E	F
A	Transmission Line					
1	Preliminary works					
1.1	Design & Engineering					
1.2	Preliminary investigation, Right of way, forest clearance, PTCC , general civil works etc.					
	Total Preliminary works					
2	Transmission Lines material					
2.1	Towers Steel					
2.2	Conductor					
2.3	Earth Wire					
2.4	Insulators					
2.5	Hardware Fittings					
2.6	Conductor & Earthwire accessories					
2.7	Spares					
2.8	Erection, Stringing & Civil works including foundation					
	Total Transmission Line Materials					
3	Taxes and Duties					
3.1	Custom Duty					
3.2	Other Taxes & Duties					
	Total Taxes & Duties					
	Total -Transmission lines					
B.	Substations					
4	Preliminary works & land					

No	Break Down	As per original estimates	Actual capital expenditure as on COD	Liabilities / provisions	Variation (B-C-D)	Reasons for Variation
	A	B	C	D	E	F
4.1	Design & Engineering					
4.2	Land					
4.3	Site preparation					
	Total Preliminary works & land					
5	Civil Works					
5.1	Control Room & Office Building including HVAC					
5.2	Township & Colony					
5.3	Roads and Drainage					
5.4	Foundation for structures					
5.5	Misc. civil works					
	Total Civil Works					
6	Substation Equipment					
6.1	Switchgear (CT,PT, Circuit Breaker, Isolator etc.)					
6.2	Transformers					
6.3	Compensating Equipment(Reactor, SVCs etc.)					
6.4	Control , Relay & Protection Panel					
6.5	PLCC					
6.6	HVDC package					
6.7	Bus Bars/ conductors/Insulators					
6.8	Outdoor lighting					
6.9	Emergency D.G. Set					
6.1	Grounding System					
6.1	Structure for switchyard					
	Total Substation Equipment					

No	Break Down	As per original estimates	Actual capital expenditure as on COD	Liabilities / provisions	Variation (B-C-D)	Reasons for Variation
	A	B	C	D	E	F
7	Spares					
8	Taxes and Duties					
8.1	Custom Duty					
8.2	Other Taxes & Duties					
	Total Taxes & Duties					
	Total (Sub-station)					
9	Construction and pre-commissioning expenses					
9.1	Site supervision & site admn.etc.					
9.2	Tools and Plants					
9.3	construction Insurance					
	Total Construction and pre commissioning expenses					
10	Overheads					
10.1	Establishment					
10.2	Audit & Accounts					
10.3	Contingency					
	Total Overheads					
11	Total Cost (Plant and Equipment)					
12	IDC, FC, FERV & Hedging Cost					

No	Break Down	As per original estimates	Actual capital expenditure as on COD	Liabilities / provisions	Variation (B-C-D)	Reasons for Variation
	A	B	C	D	E	F
12.1	Interest During Construction (IDC)					
12.2	Financing Charges (FC)					
12.3	Foreign Exchange Rate Variation (FERV)					
12.4	Hedging Cost					
	Total of IDC, FC, FERV & Hedging Cost					
13	Capital Cost incl IDC, FC, FERV & Hedging Cost					

3.14 Form F9 - Breakup of Construction/Supply/Service Packages

	Particulars	1	2	3	4	5	6	----
1	Name/ No. of Construction / Supply / Service Package							
2	Scope of works ¹ (in line with head of cost break-ups as applicable)							
3	Whether awarded through ICB/DCB/ Departmentally/ Deposit Work							
4	No. of bids received							
5	Date of Award							
6	Date of Start of work							
7	Date of Completion of Work							
8	Value of Award ² in (Rs. Lakhs)							
9	Firm or With Escalation in prices							
10	Actual capital expenditure till the completion or up to COD whichever is earlier (Rs.Cr.)							
11	Taxes & Duties and IEDC							
12	IDC, FC, FERV & Hedging Cost							
13	Sub -total (9+10+11)							

Not Applicable

3.15 Form F10 – Draw Down Schedule for Calculation of IDC & Financing Charges

No	Draw Down	Quarter 1			Quarter 2			Quarter n (COD)		
	Particulars	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee
1	Loans									
1.1	Foreign Loans									
1.1.1	Foreign Loan 1									
	Draw down Amount									
	IDC									
	Financing charges									
1.1.2	Foreign Loan 2									
	Draw down Amount									
	IDC									
	Financing charges									
1.1.3	--									
	--									
	--									
	Total Foreign Loans									
	Draw down Amount	0	0	0	0	0	0	0	0	0
	IDC	0	0	0	0	0	0	0	0	0
	Financing charges	0	0	0	0	0	0	0	0	0
1.2	Indian Loans									
1.2.1	Indian Loan 1									
	Draw down Amount									
	IDC									
	Financing charges									

No	Draw Down	Quarter 1			Quarter 2			Quarter n (COD)		
	Particulars	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee
1.2.2	Indian Loan 2									
	Draw down Amount									
	IDC									
	Financing charges									
1.2.3	--									
	--									
	--									
	Total Indian Loans									
	Draw down Amount	0	0	0	0	0	0	0	0	0
	IDC	0	0	0	0	0	0	0	0	0
	Financing charges	0	0	0	0	0	0	0	0	0
	Total of Loans drawn	0	0	0	0	0	0	0	0	0
	IDC	0	0	0	0	0	0	0	0	0
	Financing charges	0	0	0	0	0	0	0	0	0
2	Equity									
2.1	Foreign equity drawn									
2.2	Indian equity drawn									
	Total equity deployed	0	0	0	0	0	0	0	0	0

3.16 Form F11 – Financial Package upto COD

	Financial Package as Approved		Financial Package as on COD		As Admitted on COD	
	Currency	Amount	Currency	Amount	Currency	Amount
Loans						
Loan-I						
Loan-II						
Loan-III						
and so on						
Total Loan		0		0		0
Equity						
Foreign						
Domestic						
Total Equity		0		0		0
Debt : Equity Ratio						

Not Applicable

3.17 Form F12 – Details of Project Specific Loans

Particulars	Package 1	Package 2	Package 3	Package 4	Package 5	Package 6
Source of Loan ¹						
Currency ²						
Amount of Loan sanctioned						
Amount of Gross Loan drawn upto 31.03.2011/ COD ^{3,4,5,13,15}						
Interest Type ⁶						
Fixed Interest Rate, if applicable						
Base Rate, if Floating Interest ⁷						
Margin, if Floating Interest ⁸	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Are there any Caps/Floor ⁹	Not Applicable					
If above is yes, specify caps/floor						
Moratorium Period ¹⁰						
Moratorium effective from						
Repayment Period ¹¹						
Repayment effective from						
Repayment Frequency ¹²						
Repayment Instalment ^{13,14}						
Base Exchange Rate ¹⁶						
Are foreign currency loan hedged?						
If above is yes, specify details ^{17, 18, 19}						

3.18 Form F13 – Details of Allocation of corporate loans to various transmission projects

Particulars	Package 1	Package 2	Package 3	Package 4	Package 5	Package 6
Source of Loan ¹						
Currency ²						
Amount of Loan sanctioned						
Amount of Gross Loan drawn upto 31.03.2011/ COD ^{3,4,5,13,15}						
Interest Type ⁶						
Fixed Interest Rate, if applicable						
Base Rate, if Floating Interest ⁷						
Margin, if Floating Interest ⁸	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Are there any Caps/Floor ⁹						
If above is yes, specify caps/floor						
Moratorium Period ¹⁰						
Moratorium effective from						
Repayment Period ¹¹						
Repayment effective from						
Repayment Frequency ¹²						
Repayment Instalment ^{13,14}						
Base Exchange Rate ¹⁶						
Are foreign currency loan hedged?						
If above is yes, specify details ^{17, 18, 19}						

Not Applicable

Distribution of loan packages to various transmission projects

Name of the Projects						Total
Transmission Project 1						
Transmission Project 2						

3.19 Form F14 – Statement of Additional Capitalisation after COD

No	Year	Work/ Equipment proposed to be added after COD up to Cut off Date/ Beyond Cut off Date	Amount capitalised and Proposed to be capitalised	Justification	Regulations under which covered	Admitted Cost ¹
1						
2						
3						
4						
5						

3.20 Form F15 – Financing of Additional Capitalization

Financial Year (Starting from COD)	Actual					Admitted				
	Year 1	Year 2	Year 3	Year 4	Year 5 & so on	Year 1	Year 2	Year 3	Year 4	Year 5 & so on
Amount capitalised in Work/ Equipment										
Financing Details										
Loan-1										
Loan-2										
Loan-3 and so on										
Total Loan ²										
Equity										
Internal Resources										
Others										
Total										

3.21 Form F16 – Statement of Capital Cost**(in Rs. Crores)**

		Particulars	2019-20 (Actuals)	2020-21 (Estimated)	2021-22 (Projected)
A	a	Opening Gross Block Amount as per books	1279.92	1305.60	1851.86
	b	Amount of capital liabilities in A(a) above			
	c	Amount of IDC, FC, FERV & Hedging cost included in A(a) above			
	d	Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a)			
B	a	Additional Gross Block Amount as per books	25.68	546.26	23.18
	b	Amount of capital liabilities in B(a) above			
	c	Amount of IDC, FC, FERV & Hedging cost included in B(a) above			
	d	Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a)			

		Particulars	2019-20 (Actuals)	2020-21 (Estimated)	2021-22 (Projected)
B	a	Closing Gross Block Amount as per books	1305.60	1851.86	1875.04
	b	Amount of capital liabilities in C(a) above			
	c	Amount of IDC, FC, FERV & Hedging cost included in C(a) above			
	d	Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a)			

3.22 Form F17 – Statement of Capital Work in Progress**(In Rs. Crores)**

		Particulars	2019-20	2020-21	2021-22
A	a	Opening CWIP Amount as per books	420.34	543.60	41.35
	b	Amount of capital liabilities in above			
	c	Amount of IDC, FC, FERV & Hedging cost included in a above			
B	a	Addition/ Adjustment in CWIP Amount during the period	148.95	44.00	332.81
	b	Amount of capital liabilities in above			
	c	Amount of IDC, FC, FERV & Hedging cost included in a above			
C	a	Capitalization/Transfer to Fixed asset of CWIP Amount during the period	25.68	546.26	23.18
	b	Amount of capital liabilities in above			
	c	Amount of IDC, FC, FERV & Hedging cost included in a above			
D	a	Closing CWIP Amount as per books	543.60	41.35	350.97
	b	Amount of capital liabilities in above			
	c	Amount of IDC, FC, FERV & Hedging cost included in a above			

3.23 Form F18 – R&M Expenses (In Rs. Crores)

	Particulars	2019-20	2020-21	2021-22
		Actual	Estimated	Projected
1	Plant and Machinery	9.5	10.56	10.56
2	Building			
6	Vehicles			
7	Furniture and Fixtures			
8	Office Equipment			
11	Computer			
12	Land and land development	9.50	10.56	10.56
	Total			
13	Any other items (Capitalisation)	0.00	0.00	0.00
	Total	9.50	10.56	10.56

3.24 Form F19 – Employee Expenses**(In Rs. Crores)**

	Particulars	2019-20	2020-21	2021-22
		Actuals	Estimated	Projected
1	Salaries	15.11	50.12	62.93
2	Additional Pay	3.75	0.00	0.00
3	Dearness Allowance (DA)	26.60	2.57	4.40
4	House Rent Allowance	1.89	4.01	5.03
5	SCA	2.20	5.24	6.14
6	Medical Expenses Reimbursement	0.00	0.00	0.00
7	Travelling Allowance(Conveyance Allowance)	1.01	2.16	2.47
8	Provident Fund Contribution	2.35	5.27	6.73
9	Impact of VII Pay Commission	0.00	0.00	0.00
10	Work Charge & Muster Roll	0.00	0.00	0.00
11	New Employee Salaries	0.00	0.00	0.00
12	Net Employee expenses (D)-(E)	52.92	69.37	87.71

3.25 Form 19a – Employee Strength

	Particulars	2019-20		2020-21		2021-22	
		Working Strength At The Beginning Of The Year	Sanctioned Strength At The Beginning Of The Year	Working Strength At The Beginning Of The Year	Sanctioned Strength At The Beginning Of The Year	Working Strength At The Beginning Of The Year	Sanctioned Strength At The Beginning Of The Year
1	Board of Directors	1	5	1	5	1	5
2	Support staff to Board of Directors						
2(a)	Technical						
2(b)	Administrative						
2(c)	Accounts & Finance						
2(d)	Others (please specify)						
3	All Other Staff						
3(a)	Technical	1197	1960	1127	1960	1319	1960
3(a)(i)	Officers	157		152		255	
3(a)(ii)	Staff	1040		975		1064	
3(b)	Non-technical	373	486	365	486	453	486
3(b)(i)	Administrative	75		73		72	
3(b)(i)(a)	Officers	5		5		5	
3(b)(i)(b)	Staff	70		68		67	
3(b)(ii)	Accounts & Finance	9	0	9	0	10	0
3(b)(ii)(a)	Officers	4		4		4	
3(b)(ii)(b)	Staff	5		5		6	
3(b)(iii)	Others (please specify)	289	0	283	0	371	0
3(b)(iii)(a)	Officers						
3(b)(iii)(b)	Staff	289		283		371	

	Particulars	2019-20		2020-21		2021-22	
		Working Strength At The Beginning Of The Year	Sanctioned Strength At The Beginning Of The Year	Working Strength At The Beginning Of The Year	Sanctioned Strength At The Beginning Of The Year	Working Strength At The Beginning Of The Year	Sanctioned Strength At The Beginning Of The Year
	Total	1571	2451	1493	2451	1773	2451

3.26 Form F20 – Administration and General Expenses**(In Rs. Crores)**

	Particulars	2019-20	2020-21	2021-22
		Actuals	Estimated	Projected
1	Telephone, Postage, Telegram & Telex Charges	8.09	10.12	6.00
2	Conveyance And Travelling			
3	Vehicle Expenses			
4	Printing And Stationery			
5	Advertisement Expenses			
6	Electricity Charges To Offices			
7	Miscellaneous Expenses			
8	Legal Charges			
9	Auditor's Fee			
10	Vehicle Running Expenses Truck / Delivery Van			
11	Fabrication Charges			
12	Office related expenses			
13	Running expenses of assets			
	Total A&G Expenses	8.09	10.12	6.00
	Less: A&G Expenses Capitalised			
	Total A&G Expenses	8.09	10.12	6.00

3.27 Form F21 – Fixed Assets and Depreciation

(In Rs. Crores)

Name of Asset	Depreciation rate ¹	2019-20				
		Actual				
		Opening	Addition	Adjustment & Deduction	Depreciation	Closing
Land owned under full ownership					0.00	0.00
Land under lease	0.00%	23.74	0.00		0.00	23.74
For investment in land					0.00	0.00
For cost of clearing site					0.00	0.00
Plant and Machinery	5.28%	1188.28	25.68		63.42	1213.96
Building	3.34%	63.71	0.00		2.13	63.71
Furniture and Fittings	6.33%	1.11	0.00		0.07	1.11
Computer	15.00%	1.27	0.00		0.19	1.27
Office Equipment	6.33%	0.21	0.00		0.01	0.21
Vehicles	9.50%	1.60	0.00		0.15	1.60
Total		1279.92	25.68	0.00	65.97	1305.60

Name of Asset	Depreciation rate ¹	2020-21				
		Estimated				
		Opening	Addition	Adjustment & Deduction	Depreciation	Closing
Land owned under full ownership		0.00			0.00	0.00
Land under lease	0.00%	23.74	0.00		0.00	23.74
For investment in land		0.00			0.00	0.00
For cost of clearing site		0.00			0.00	0.00
Plant and Machinery	5.28%	1213.96	546.26		78.52	1760.22
Building	3.34%	63.71	0.00		2.13	63.71
Furniture and Fittings	6.33%	1.11	0.00		0.07	1.11
Computer	15.00%	1.27	0.00		0.19	1.27
Office Equipment	6.33%	0.21	0.00		0.01	0.21
Vehicles	9.50%	1.60	0.00		0.15	1.60
Total		1305.60	546.26	0.00	81.07	1851.86

Name of Asset	Depreciation rate ¹	2021-22				
		Projected				
		Opening	Addition	Adjustment & Deduction	Depreciation	Closing
Land owned under full ownership		0.00			0.00	0.00
Land under lease	0.00%	23.74	0.00		0.00	23.74
For investment in land		0.00			0.00	0.00
For cost of clearing site		0.00			0.00	0.00
Plant and Machinery	5.28%	1760.22	23.18		93.55	1783.40
Building	3.34%	63.71	0.00		2.13	63.71
Furniture and Fittings	6.33%	1.11	0.00		0.07	1.11
Computer	15.00%	1.27	0.00		0.19	1.27
Office Equipment	6.33%	0.21	0.00		0.01	0.21
Vehicles	9.50%	1.60	0.00		0.15	1.60
Total		1851.86	23.18	0.00	96.11	1875.04

3.28 Form F21a – Consumer Contribution and grants towards cost of capital assets

(In Rs. Crores)

		2019-20		2020-21		2021-22	
		Actual		Estimated		Projection	
		Additions during the Year	Balance at the end of the Year	Additions during the Year	Balance at the end of the Year	Additions during the Year	Balance at the end of the Year
1	Consumer Contribution towards Cost Of Capital Assets						
3	Grant towards Cost Of Capital Assets	148.95	1,588.93	44	1,632.93	332.81	1,965.74
	Total	148.95	1588.93	44	1632.93	332.81	1965.74

3.29 Form 22 – Interest and Finance Charges

	Loan Details	Loan Tenure (yrs)	FY 2018-19					
			Actual					
			Rate of Inter est	Openi ng Balanc e	Amou nt receiv ed	Princip al repaym ent	Inter est Due	Closi ng Balanc e
A	Interest charges on State Govt. Loans, Bonds And Advances							
1	State Government Loans							
2	Bonds							
3	Foreign Currency Loans / Credits							
4	Debentures							
	Sub-total							
	Interest on Long Term Loans / Credits from the FIs/ banks/ organisations approved by the State Government							
A	Secured Loans							
	Loan 1							
	Loan 2							
	Loan 3							
	Loan 4							
	Sub-total							
B	Unsecured Loans							
	Loan 1							
	Loan 2							
	Loan 3							
	Loan 4							
	Sub-total							

Not Applicable

	Loan Details	Loan Tenure (yrs)	FY 2018-19					
			Actual					
			Rate of Inter est	Openi ng Balanc e	Amou nt receiv ed	Princip al repaym ent	Inter est Due	Closi ng Balanc e
C	Other Interest & Finance Charges							
	Cost of raising Finance / Bank Charges							
	Interest on Security Deposit							
	Penal Interest Charges							
	Lease Rentals							
	Sub-total							
D	Grand Total Of Interest & Finance Charges (A + B + C)							
E	Less: Interest & Finance Charges Capitalised							
	Net Total Of Interest & Finance Charges (D - E)							

3.30 Form 23 – Statement of Equity

	Loan Details	Unit	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
1	Equity (Opening Balance)	Rs Crores	10.05	10.05	10.05
2	Net additions during the year	Rs Crores	0.00	0.00	0.00
3	Equity (Closing Balance)	Rs Crores	10.05	10.05	10.05
4	Average Equity	Rs Crores	10.05	10.05	10.05
5	Rate of Return on Equity	%	15.50%	15.50%	15.50%

3.31 Form 24 – Return on Equity**(In Rs. Crores)**

No	Loan Details	Form	2019-20	2020-21	2021-22
			Actuals	Estimated	Projected
1	Regulated Rate Base				
2	Original Costs of Fixed Assets				
3	Accumulated Depreciation				
4	Addition in Regulated Rate Base				
a	Investments during the year				
b	Depreciation				
5	Change in Working Capital				
6	Equity (Average)	F23	10.05	10.05	10.05
7	Debt				
8	Rate of return on Equity	F23	15.50%	15.50%	15.50%
9	Rate of Return on Debt				
10	Weighted Avg Cost of Capital (WACC)		15.50%	15.50%	15.50%
11	Return on Equity (without tax)		1.56	1.56	1.56

3.32 Form 25 – Working Capital requirements**(in Rs. Crores)**

	Particulars	Unit	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
1	Receivables for one months calculated on NATAF	Rs Crores	5.58	7.26	8.49
2	Maintenance Spares	Rs Crores	14.01	17.71	21.62
3	O&M expenses for 1 month	Rs Crores	5.88	7.50	8.69
	Total Working Capital	Rs Crores	25.47	32.48	38.81
	Rate of Interest	%	12.90%	12.90%	12.90%
	Interest on Working Capital	Rs Crores	3.29	4.19	5.00

3.33 Form 26 – Details of Non-Tariff Income (in Rs. Crores)

No	Particulars	Unit	2019-20	2020-21	2021-22
			Actual	Estimated	Projected
1	Income from SLDC	Rs Crores	3.00	3.50	3.70
2	Agency Charges	Rs Crores	2.65	2.50	2.50
3	Bank Interest	Rs Crores	3.95	4.00	4.10
4	Other Income	Rs Crores	0.10	0.20	0.30
	Total	Rs Crores	9.70	10.20	10.60

3.34 Form 27 – Income from other Businesses

No	Particulars	Unit	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
				Actuals		Estimated			Projected	
1		Rs Crores			Not Applicable					
2		Rs Crores								
3		Rs Crores								

3.35 Form 28 – Expenses capitalized (In Rs. Crores)

		2018-19	2019-20	2020-21
		Actual	Estimated	Projected
1	Interest & Finance charges Capitalised	0.00	0.00	0.00
2	Employee expenses			
3	A&G Expenses			
4	Others, if any			
	Grand Total	0.00	0.00	0.00

3.36 Form 29 – Income Tax Provisions**(In Rs. Crores)**

		2019-20	2020-21	2021-22
		Actuals	Estimated	Projected
1	Income Tax on the Return on Equity	0.27	0.27	0.27
2	As Per Return Filed For The Year			
3	As Assessed For The Year			
4	Credit/Debit Of Assessment Year(s) (Give Details)			
	Total	0.27	0.27	0.27

