

Part – I

True-up for the FY 2020-21

Submitted by:

Power & Electricity Department

Government of Mizoram

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LIST OF ABBREVIATIONS

Abbreviation	Description
A&G	Administration & General
ARR	Aggregate Revenue Requirement
CAGR	Compound Annual Growth Rate
CD	Contract Demand
CERC	Central Electricity Regulatory Commission
CGS	Central Generating Stations
CoS	Cost of Supply
CPSU	Central Power Sector Undertakings
Crs	Crore
D/E	Debt Equity
P&ED	Power & Electricity Department, Govt. of Mizoram
FAC	Fuel Adjustment Costs
FDR	Fixed Deposits Receipts
FY	Financial Year
GFA	Gross Fixed Assets
HP	Horse Power
HT	High Tension
JERC (M&M)	Joint Electricity Regulatory Commission for Manipur & Mizoram
KV	Kilovolt
KVA	Kilovolt Amps
kWh	kilo Watt hour
LT	Low Tension
LTC	Leave Travel Concession
MU	Million Units
MVA	Million Volt Amps
MW	Mega Watt
O&M	Operation & Maintenance
PLF	Plant Load Factor
PLR	Prime Lending Rate
R&M	Repairs and Maintenance
RoE	Rate of Return
₹	Rupees
S/s	Sub Station
SBI	State Bank of India
T&D	Transmission & Distribution
UI	Unscheduled Interchange

1 True-up for FY 2020-21

1.1. Background

Multi Year Tariff Order for the control period of 5 years from FY 2018-19 to FY 2022-23 was issued by the Hon'ble Commission vide Order dated 12.03.2018 under the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014.

The Hon'ble Commission determined the Aggregate Revenue Requirement for the FY 2018-19 to FY 2022-23 & Tariff for the FY 2018-19 vide Order dated 12.03.2018. Further, Tariff Order for the FY 2020-21 was issued vide Order dated 20.03.2020.

Regulation 10(1) & (2) of the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 provides as follows:

“10.1 Where the Aggregate Revenue Requirement and expected revenue from tariff and charges of a Generating Company or Transmission Licensee or Distribution Licensee is covered under a Multi-Year Tariff framework, then such Generating Company or Transmission Licensee or Distribution Licensee, as the case may be, shall be subject to truing up of expenses and revenue during the Control Period in accordance with these Regulations.

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”

Further, the Hon'ble Commission notified the First Amendment Regulations, 2019 is as follows:

“5.2 The filing of the Control Period under these Regulations shall be as under.

(i).....

(ii) From the second year of the Control Period onwards and upto the last year of the Control Period, the petition in each year shall comprise of:

- a. Truing Up for the previous year with audited accounts, and Annual Performance Review (APR) with revision of ARR approved in MYT Order for current year and revised projection of ARR approved in MYT Order for the ensuing year in accordance with these Regulations;*
- b. Revenue from the sale of power at existing tariffs and changes for the current year;*
- c. Revenue gap for the ensuing year calculated based on the revised projection of ARR and truing up of the previous year;*

d. Application for determination of tariff for the ensuing year.”

The Hon’ble Commission carried out the review of the FY 2020-21 vide order dated 26.03.2021. The actual figures for the FY 2020-21 are now available. As required by the Regulations, P&ED is submitting the Audited Annual Accounts for the FY 2020-21 and Asset & Depreciation Register.

Further, in accordance with the Regulation 10(1) & (2) of the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 & Regulation 5.2 (ii) of First Amendment Regulations, 2019 as given above, the P&ED is submitting the present true-up petition for the FY 2020-21 on the basis of the audited Annual Accounts.

P&ED requests the Hon’ble Commission to carry out the true-up of expenses in accordance with the Regulation 10 of the Joint Electricity Regulatory Commission for Manipur and Mizoram (Multi Year Tariff) Regulations, 2014 read with First Amendment Regulations, 2019.

Data given in this chapter is for the entire year i.e. FY 2020-21.

1.2. Energy Sales

The actual sales vis-à-vis the sales approved by the Hon’ble Commission in its Tariff Order dated 26.03.2021 for the FY 2020-21 is as summarized below:

Table 1.1: Energy Sales FY 2020-21

(In MUs)

Sl. No.	Category	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
	LT Consumers			
1	Kutir Jyoti	7.78	7.19	-0.59
2	Domestic	298.43	271.90	-26.53
3	Non-Domestic	9.49	8.20	-1.29
4	Commercial	36.21	34.20	-2.01
5	Public Lighting	2.22	2.11	-0.11
6	Public Water Works	0.95	0.79	-0.16
7	Agriculture	0.09	0.06	-0.03
8	Industrial	3.10	4.06	0.96
	Total LT	358.27	328.50	-29.77
	HT Consumers			
9	Domestic	9.84	4.35	-5.49
10	Non-Domestic	0.56	0.25	-0.31
11	Commercial	14.50	10.07	-4.43
12	Public Water Works	66.55	81.66	15.11
13	Agriculture	0.06	0.10	0.04
14	Industrial	8.36	5.54	-2.82
15	Bulk Supply	57.51	14.45	-43.06
	Total HT	157.38	116.42	-40.96
16	Outside State - Trading	110.07	69.72	-40.35
	Total	625.72	514.65	-111.07

1.3. Distribution Loss

The actual values of the distribution loss for the FY 2020-21 arrived in accordance with the actual energy sales & energy purchase.

Table 1.2: Distribution Loss for FY 2020-21

Sl. No.	Particulars	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
1	2	3	4	5
1	Distribution Loss	19.64%	29.05%	9.41%

1.4. P&ED's Own Generation

The P&ED's own generation approved for the FY 2020-21 and actual value of own generation made by the P&ED for the FY 2020-21 is provided in the table below:

Table 1.3: P&ED's Own Generation FY 2020-21

In (MUs)

Sl. No.	Particulars	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
1	2	3	4	5
1	Total Generation (Net)	50.78	13.81	-36.97
	Total	50.78	13.81	-36.97

It is submitted that P&ED is not operating the **Khawiva SHP, Tuipui SHP, Teirei SHP & Kau Tlabung SHP** and the SHPs have been operated and managed by Amazon Engineering. Hence, the Installed Capacity & energy generation does not include in Own Generation. However, P&ED has procured the energy generated from the above SHPs and has incorporated the same in the power purchase for the year.

1.5. Power Purchase

The power purchase approved for the FY 2020-21 and actual units of power purchase made by the P&ED for the FY 2020-21 is provided in the table below:

Table 1.4: Power Purchase Units FY 2020-21

In (MUs)

Sl. No.	Particulars	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
1	2	3	4	5
1	Power Purchase Units	786.86	710.15	-76.71
	Total	786.86	710.15	-76.71

1.6. Energy Balance

The actual energy balance for the FY 2020-21 and the approvals accorded are compared in the table provided below:

Table 1.5: Energy Balance FY 2020-21

Sl. No.	Energy Balance	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
A	Energy Requirement			
1	Energy Sales	515.65	444.92	-70.73
2	Distribution Loss (%)	19.64%	29.05%	9.41%
3	Distribution Loss (MUs)	126.05	182.14	56.09
4	Total Energy Requirement	641.70	627.06	-14.64
B	Energy Availability			
5	Own Generation	50.78	13.81	-36.97
6	Energy Purchase from ER	32.64	33.11	0.47
7	Less: ER Pool Loss (%)	1.95%	1.95%	0.00
8	Less: ER Pool Loss (Mus)	0.64	0.65	0.01
9	Net Energy for ER	32.00	32.46	0.46
10	Energy Purchase from NER (Exl. Tuirial HEP)	543.62	503.11	-40.51
11	UI / Deviation	0.00	5.09	5.09
12	Sub Total	575.62	540.66	-34.96
13	Less: NER Pool Loss (%)	2.54%	2.54%	0.00
14	Less: NER Pool Loss (MUs)	14.62	13.73	-0.89
15	Net Energy at NERLDC	561.00	526.93	-34.07
16	Energy purchases from Tuirial HEP	141.41	133.81	-7.60
17	Free Energy from Tuirial HEP	18.42	18.25	-0.17
18	Amazon Engineering	0.00	15.45	15.45
19	Rooftop Solar Generation	0.00	0.09	0.09
20	Solar Generation	0.00	1.24	1.24
21	Energy Available	771.61	709.58	-62.03
22	Less: Outside State - Trading	110.07	69.72	-40.35
23	Total Energy Available	661.54	639.86	-21.69
24	Less: Intra State Tr. Loss (%)	3.00%	2.00%	-0.01
25	Less: Intra State Tr. Loss (MUs)	19.85	12.80	-7.05
26	Net Energy Available	641.70	627.06	-14.64
27	Less: Energy requirement at State Periphery	641.70	627.06	-14.64
28	ENERGY SURPLUS/(DEFICIT)	0.00	0.00	0.00

1.7. Fuel Cost

The values of fuel cost are compared with the same approved by the Hon'ble Commission in the Tariff Order dated 26.03.2021 for the FY 2020-21. The actual fuel cost based on the audited annual accounts as compared to the approved figure is provided in the table below.

Table 1.6: Fuel Cost FY 2020-21

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
1	2	3	4	5
1	Cost of Fuel	0.01	0.00	-0.01
	Total	0.01	0.00	-0.01

1.8. Power Purchase Cost

The Hon'ble Commission in the Tariff Order dated 26.03.2021 for the FY 2020-21 had approved a power purchase quantum of 786.86 MUs at a total cost of ₹ 378.42 Crores. P&ED has actually procured 710.15 MUs during the FY 2020-21 at a total cost of ₹ 364.84 Crores. The actual power purchase cost based on the audited annual accounts as compared to the approved figure is provided in the table below.

Table 1.7: Power Purchase Cost FY 2020-21

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
1	2	3	4	5
1	Power Purchase Cost	378.42	364.84	-13.58
	Total	378.42	364.84	-13.58

1.9. Transmission Charges

The Hon'ble Commission in the Tariff Order dated 26.03.2021 for the FY 2020-21 had approved transmission charges of ₹ 35.69 Crores. The actual transmission charges for the FY 2020-21 is ₹ 50.80 Crores. The actual transmission charges based on the audited annual accounts as compared to the approved figure is provided in the table below.

Table 1.8: Transmission Charges FY 2020-21

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
1	2	3	4	5
1	Transmission Charges	35.69	50.80	15.11
	Total	35.69	50.80	15.11

1.10. Employee Cost

The Hon'ble Commission had approved employee cost of ₹ 123.05 Crores for the FY 2020-21 vide Tariff Order dated 26.03.2021. The employee cost approved as above only relates to the distribution function. However, the audited accounts for department is not function wise, hence, segregated actual employee expenses for distribution function is not available. The actual employee cost provided below is total for the department as a whole.

It is submitted that in view of the fact that **the function wise segregated costs are not available and the audited costs are inclusive of the cost of generation & transmission function, P&ED is not claiming the cost of generation & intra-state transmission charges separately.**

The Hon'ble Commission may kindly consider the above submission and true-up the employee cost for the FY 2020-21.

The approved employee cost and actual value of employee cost for FY 2020-21 is provided in the table below:

Table 1.9: Employee Cost FY 2020-21

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
1	2	3	4	5
1	Employee Cost	123.05	188.82	65.77
	Total	123.05	188.82	65.77

1.11. Repair & Maintenance Expenses

The Hon'ble Commission had approved repair & maintenance expenses of ₹ 10.44 Crores for the FY 2020-21 vide Tariff Order dated 26.03.2021. Repair &

maintenance expenses approved as above only relates to the distribution function. However, the audited accounts for department is not function wise hence, segregated actual repair & maintenance expenses for distribution function is not available. The actual repair & maintenance expenses provided below are total for the department as a whole.

It is submitted that in view of the fact that **the function wise segregated costs are not available and the audited costs are inclusive of the cost of generation & transmission function, P&ED is not claiming the cost of generation & intra-state transmission charges separately.**

The Hon'ble Commission may kindly consider the above submission and true-up the repair & maintenance expenses for the FY 2020-21.

The approved repair & maintenance expenses and actual value of repair & maintenance expenses for FY 2020-21 is provided in the table below:

Table 1.10: Repair & Maintenance Expenses FY 2020-21

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
1	2	3	4	5
1	Repair & Maintenance expenses	10.44	21.48	11.04
	Total	10.44	21.48	11.04

1.12. Administration & General Expenses

The Hon'ble Commission had approved Administration & General Expenses of ₹ 4.57 Crores for the FY 2020-21 vide Tariff Order dated 26.03.2021. Administration & General Expenses approved as above only relates to the distribution function. However, the audited accounts for department is not function wise hence, segregated actual Administration & General Expenses for distribution function is not available. The actual Administration & General Expenses provided below is total for the department as a whole.

It is submitted that in view of the fact that **the function wise segregated costs are not available and the audited costs are inclusive of the cost of generation & transmission function, P&ED is not claiming the cost of generation & intra-state transmission charges separately.**

The Hon'ble Commission may kindly consider the above submission and true-up the Administration & General Expenses for the FY 2020-21.

The approved Administration & General Expenses and actual value of Administration & General Expenses for the FY 2020-21 is provided in the table below:

Table 1.11: Administration & General Expenses FY 2020-21

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
1	2	3	4	5
1	Administration & General Expenses	4.57	2.81	-1.76
	Total	4.57	2.81	-1.76

1.13. Depreciation

The Hon'ble Commission had approved Depreciation of ₹ 1.96 Crores for the FY 2020-21 vide Tariff Order dated 26.03.2021. The approved Depreciation and actual value of Depreciation as per the Fixed Asset & Depreciation Register for the FY 2020-21 is provided in the table below:

Table 1.12: Depreciation FY 2020-21

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
1	2	3	4	5
1	Depreciation	1.96	4.49	2.53
	Total	1.96	4.49	2.53

1.14. Interest & Finance Charges

The interest & finance charges approved for the FY 2020-21 and actual value of interest & finance charges made by the P&ED for the FY 2020-21 is provided in the table below:

Table 1.13: Interest & Finance Charges FY 2020-21

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
1	2	3	4	5
1	Interest & Finance Charges	1.18	1.18	0.00
	Total	1.18	1.18	0.00

1.15. Interest on Working Capital

The Interest on Working Capital as approved for the FY 2020-21 and actual value of Interest on Working Capital for the FY 2020-21 is provided in the table below:

Table 1.14: Interest on Working Capital FY 2020-21

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
1	2	3	4	5
1	Interest on Working Capital	0.00	7.09	7.09
	Total	0.00	7.09	7.09

1.16. Provision for Bad & Doubtful Debt

The Hon'ble Commission did not approve Provision for Bad & Doubtful Debt for the FY 2020-21 and actual provisions made in the Accounts for the FY 2020-21 is also nil.

Table 1.15: Provision for Bad & Doubtful Debt FY 2020-21

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
1	2	3	4	5
1	Provision for Bad Debt	0.00	0.00	0.00
	Total	0.00	0.00	0.00

1.17. Other Income

The Other Income approved for the FY 2020-21 and actual value of other income made by the P&ED for the FY 2020-21 is provided in the table below:

Table 1.16: Other Income FY 2020-21

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
1	2	3	4	5
1	Non Tariff Income	3.50	10.02	6.52
	Total	3.50	10.02	6.52

1.18. Return on Equity

The Hon'ble Commission did not approve return on equity for FY 2020-21. No provision for the return on equity is made in the Accounts by the P&ED for FY 2020-21.

Table 1.17: Return on Equity FY 2020-21

(In ₹ Crores)

Sl. No.	Particulars	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
1	2	3	4	5
1	Return on Equity	0.00	0.00	0.00
	Total	0.00	0.00	0.00

1.19. Revenue from sale of power

The revenue from sale of power approved for the FY 2020-21 vide Tariff Order dated 26.03.2021 and actual value of revenue from sale of power for the FY 2020-21 is provided in the table below:

Table 1.18: Revenue from Sales FY 2020-21

(In ₹ Crores)

Sl. No.	Category	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
	LT Consumers			
1	Kutir Jyoti	2.49	2.21	-0.28
2	Domestic	126.36	125.42	-0.94
3	Non-Domestic	5.08	4.66	-0.42
4	Commercial	22.01	22.96	0.95
5	Public Lighting	2.31	2.00	-0.31
6	Public Water Works	1.31	0.84	-0.47
7	Agriculture	0.03	0.03	0.00
8	Industrial	2.00	1.72	-0.28
	Total LT	161.59	159.85	-1.74
	HT Consumers			
9	Domestic	5.93	1.94	-3.99
10	Non-Domestic	0.33	0.20	-0.13
11	Commercial	10.33	6.31	-4.02
12	Public Water Works	77.90	78.13	0.23
13	Agriculture	0.01	0.05	0.04
14	Industrial	5.67	5.52	-0.15
15	Bulk Supply	39.50	10.20	-29.30
	Total HT	139.68	102.34	-37.33
16	Outside State	39.77	20.08	-19.69
	Total	341.04	282.27	-58.76

1.20. True-up of ARR

It is submitted that in view of the fact **the function wise segregated costs are not available and the audited costs are inclusive of the cost of generation & transmission function, P&ED is not claiming the cost of generation & intra-state transmission charges separately.**

The Annual Revenue Requirement approved for the FY 2020-21 and actual value of Annual Revenue Requirement for the FY 2020-21 is provided in the table below:

Table 1.19: True up of ARR FY 2020-21

(In ₹ Crores)

Sl. No.	Item of Expense	Approved in T.O. dated 26.03.2021	As per Accounts	Deviation
1	2	3	4	5
1	Cost of Fuel	0.01	0.00	-0.01
2	Cost of Generation	5.38	0.00	-5.38
3	Cost of Power Purchase	378.42	364.84	-13.58
4	Transmission Charges	35.69	50.80	15.11
2	Intra-state Transmission Charges	8.76	0.00	-8.76
3	Employee Costs	123.05	188.82	65.77
4	R&M Expenses	10.44	21.48	11.04
5	Administration and General Expenses	4.57	2.81	-1.76
6	Depreciation	1.96	4.49	2.53
7	Interest charges	1.18	1.18	0.00
8	Interest on Working Capital	0.00	7.09	7.09
9	Provision for bad debts	0.00	0.00	0.00
10	Return on NFA /Equity	0.00	0.00	0.00
11	Total Revenue Requirement	569.46	641.51	72.05
12	Less: Non Tariff Income	3.50	10.02	6.52
13	Less: Net surplus in true-up	19.14	19.14	0.00
14	Less: Efficiency Gains (Outstanding dues collection)	5.30	0.00	-5.30
15	Net Revenue Requirement	541.52	612.35	70.83
16	Less: Revenue from Sale of Power	341.04	282.27	-58.77
17	Gross Revenue Deficit	200.48	330.08	129.60
18	Less: Revenue Subsidy from Govt.		160.67	160.67
19	Net Revenue Deficit/Gap	200.48	169.41	-31.07

It is prayed that the Hon'ble Commission may kindly consider the above submission and approve the Aggregate Revenue Requirement and Gap for the FY 2020-21.