

**MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION
SHILLONG**

CASE NO. 34/2023

In the matter of

Petition for Approval of True-up of Generation Business for FY 2022-23

AND

Meghalaya Power Generation Corporation Limited (the Petitioner)

Coram

R.K. Soni, Principal District & Session Judge (Retd.), Member

ORDER

(Dated: 05.06.2024)

The Government of Meghalaya has notified the Power Sector Reforms Transfer Scheme 2010 leading to restructuring and unbundling of erstwhile Meghalaya State Electricity Board (MeSEB) into four entities. Accordingly, Meghalaya Power Generation Corporation Limited (MePGCL) has started functioning as a segregated commercial operation utility independently for power generated in the state of Meghalaya with effect from 1st April 2013.

Commission in exercise of functions vested vide Regulation 16 of MSERC Multi Year Tariff Regulations 2014 had approved Aggregate Revenue Requirement (ARR) for Generation Utility comprising MePGCL Old Projects, MLHEP and New Umtru projects for FY 2022-23 in the MYT Order dated 25.03.2022.

MePGCL has filed petition for True up of business for FY 2022-23 for all the above existing projects along with audited statement of accounts for FY 2022-23 on 30.11.2023 .

The petition has been admitted on 01.12.2023 and registered as case no. 34/2023.

The petitioner was asked to submit additional information and data gaps vide letter dated 07.12.2023.

Petitioner has submitted the additional information/data on 18.01.2024.

Regulation-11 of MYT Regulation, 2014 stipulates that the Commission shall under take true-up of the previous year's expenses and revenue approved with reference to Audited Statement of Accounts made available subject to prudence check including pass through of impact of uncontrollable factors if any.

Commission taking into consideration of all the facts, additional information/data and prudence check as per the Regulations with reference to the audited accounts, after hearing the petitioner and the stakeholders, approves true up for FY 2022-23 in the detailed analysis attached to this order.

Commission notifies that, the impact of true up gap/ surplus shall be appropriated in the next Tariff Order.

Sd/-

**Shri. R.K. Soni, Principal District &
Session Judge (Retd.)
Member**

1. True up of Generation Business for FY 2022-23

1.1 Company Profile and Performance Overview

1.1.1 Company Profile

The MePGCL is a Generation Company within the meaning of Section 2 (28) of the Electricity Act 2003. Further, Section 7 and 10 of the Electricity Act 2003 prescribe the following major duties of the Generating Company:

- To establish, operate and maintain generating stations, tie-lines, sub-stations and dedicated transmission lines connected therewith in accordance with the provisions of this Act or the rules or regulations made there under
- To supply electricity to any licensee in accordance with this Act and the rules and regulations made there under
- To submit technical details regarding its generating stations to the Appropriate Commission and the Authority.
- To co-ordinate with the Central Transmission Utility or the State Transmission Utility, as the case may be, for transmission of the electricity generated by it.

As per Meghalaya Power Sector Transfer Scheme, MePGCL has been vested with the function of generation of power by the State Government of Meghalaya. The Business Scope of the Company falls within the legal framework as specified in the Act and includes:

- To supply electricity to any licensee in accordance with this Act and the rules and regulations made there under,
- To initiate accelerated power development by planning and implementing new power projects,
- To operate the existing generating stations efficiently & effectively,
- To implement Renovation and Modernization for existing plants to improve performance through constant R & M activities, regular maintenance, etc.,
- Achieve high reliability and safety levels in all operational areas,
- Taking appropriate steps towards ensuring safety and adhering to environmental norms
- Adopt best industry practices to become the best and efficient generating company
- Other associated businesses like providing Training, Technical Consultancy services and O&M related services.

1.1.2 Installed Capacity

MePGCL is the state owned power generating company of the state of Meghalaya with an installed capacity of 378.20 MW as on date. All of the generating station of MePGCL are Hydro generating stations.

The Installed Capacity of MePGCL is shown as under:

Table 1 : Installed Capacity of MePGCL as on 01.04.2022

Sl. No.	Name of Station	No. of Units	Capacity (MW)	Total Capacity (MW)	Year of Commissioning
1	Umiam Stage I	I	9	36	21.02.1965
		II	9		16.03.1965
		III	9		06.09.1965
		IV	9		09.11.1965
2	Umiam Stage II	I	10	20	22.07.1970
		II	10		24.07.1970
3	Umiam-Umtru Stage III	I	30	60	6.01.1979
		II	30		30.03.1979
4	Umiam-Umtru Stage IV	I	30	60	16.09.1992
		II	30		11.08.1992
5	Umtru Power Station	I	2.8	11.2	01.04.1957
		II	2.8		01.04.1957
		III	2.8		01.04.1957
		IV	2.8		12.07.1968
6	Sonapani Mini Hydel	I	1.5	1.5	27.10.2009
7	MLHEP (Leshka)	I	42	126	01.04.2012
		II	42		01.04.2012
		III	42		01.04.2013
8	NUHEP (New Umtru)	I	20	40	01.07.2017
		II	20		01.07.2017
9	Lakroh MHP	I	1.5	1.5	01.03.2019
	Total			356.2	

1.1.3 Upcoming Plants

The Ganol Small Hydro Project 22.5 MW has already been Commissioned in 2023-24 and there is another upcoming hydro project of the utility which is scheduled to be commissioned in the near future. The details of the plant are given below:

Table 2 : Details of Upcoming Plants

Sl No	Name of the Plant	Design Energy (MU)	Capex Outlay (INR.Crs)	Debt (INR Crs)	Equity (INR Crs)	Grant (INR Crs)	Year of Commissioning
1	Riangdo SH Project (3 MW)	17.92	39.97	11.4	8.57	20	2025-26 (tentative date)

1.1.4 Performance Highlights

Energy Generation

All the Generating stations being hydro, the annual generation is heavily dependent on the rainfall during the year. The generation trend from FY 2019-20 to FY 2022-23 has been presented in the table below:

Table 3 : Energy Generation Trend of MePGCL (MU)

Sl. No	Station	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23
1	Umiam Stage-I	108.32	149.49	64.92	117.67
2	Umiam Stage-II	55.25	76.09	33.9	62.11
3	Umiam-Umtru Stage-III	141.83	163.71	110.19	129.57
4	Umiam-Umtru Stage-IV	164.5	188.32	125.26	176.00
5	Sonapani MHP	3.59	6.08	5.55	6.47
6	MyntduLeshka HEP	421.65	420.61	380.34	359.69
7	New Umtru HEP	181.43	229.80	160.79	196.24
8	Lakroh MHP	2.11	3.69	4.04	3.43
Total		1078.68	1237.81	884.99	1051.19

Auxiliary Consumption

The actual auxiliary consumption from FY 2019-20 to FY 2022-23 for the generating stations of MePGCL is shown in the table below:

Table 4 : Auxiliary Consumption (MUs)

Sl. No	Station	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23
1	Umiam Stage-I	1.01	0.96	0.55	0.738
2	Umiam Stage-II	0.335	0.42	0.199	0.348
3	Umiam Stage-III	0.863	0.92	0.63	0.727
4	Umiam Stage-IV	1.12	1.18	0.846	1.23
5	Sonapani MHP	0.032	0.06	0.054	0.058
6	Leshka HEP	3.67	3.50	3.63	3.13
7	New Umtru HEP	1.3	1.48	1.11	1.35
8	Lakroh MHP	0.029	0.048	0.04	0.027
	TOTAL	8.356	8.568	7.059	7.608

Plant Availability Factor

The Plant Availability Factor of the generating stations for past three years is tabulated below:

Table 5 : Actual Plant Availability Factor of MePGCL Generating Stations

Sl. No	POWER STATION	2020-21	2021-22	2022-23
1	Stage-I Power Station, Sumer	95.08	75.94	96.04
2	Stage II Power Station, Umsumer	98.14	98.5	98.33
3	Stage III Power Station, Kyrdemkulai	80.45	83.1	82.6
4	Stage IV Power Station, Nongkhyllem	49.14	48.44	63.68
5	Umtru Power Station, Byrnihat	0.00	0.00	0.00
6	Sonapani Mini Power Station	98.19	92.37	98.51
7	Myntdu Leshka Power Station.	90.87	87.68	59.36
8	New Umtru Power station, Byrnihat	99.54	91.08	90.46
9	Lakroh Power Station	80.80	60.03	77.69

MePGCL has filed Project wise claims for True up of Business for FY 2022-23

2. COMPUTATION OF COMPONENTS OF AGGREGATE REVENUE REQUIREMENT FOR FY 2022-23

In accordance with 2014 Tariff Regulations, the ARR of the hydro generating project shall comprise of following:

“54.1 Tariff for supply of electricity from a hydro power generating station shall comprise of two parts, namely, annual capacity charges and energy charges to be in the manner provided hereinafter.

54.2 The fixed cost of a generating station eligible for recovery through annual capacity charges shall consist of:

- (a) Return on equity as may be allowed
- (b) Interest on Loan Capital;
- (c) Operation and maintenance expenses;
- (d) Interest on Working Capital;
- (e) Depreciation as may be allowed by the Commission;
- (f) Taxes on Income

54.3 The annual capacity charges recoverable shall be worked out by deducting other income from the total expenses.”

The calculation of the individual components of ARR for following projects is discussed in subsequent chapters:

- 1. Myntdu-Leshka HEP.
- 2. New Umtru HEP
- 3. Lakroh MHP
- 4. Old plants (including Sonapani)

3. TRUE UP OF ARR FOR MYNTDU LESHKA H.E. PROJECT(MLHEP) FOR FY 2022-23

3.1 Gross Fixed Assets

Petitioner's Submission

MePGCL in compliance to directives of the Commission in previous true up orders has submitted the fixed asset register of all the plants and has claimed the opening and closing GFA accordingly in the true up of ARR of FY 2021-22.

Accordingly, the closing GFA of FY 2021-22 has been considered as opening GFA for 2022-23. The addition and deletion during the year has been considered as per the statement of accounts. The GFA for MLHEP for FY 2022-23 is tabulated below:

Table 6 : Opening and Closing GFA for MLHEP for FY 2022-23

Particular	Opening GFA	Addition	Deletion	Closing GFA
Land	23.90	0	0	23.90
Buildings	146.67	0	0	146.67
Hydraulic Works	622.91	0	0	622.91
Other Civil Works	122.62	0	0	122.62
Plant & Machinery	364.11	0	0	364.11
Lines & cables	4.57	0	0	4.57
Vehicles	0.46	0	0	0.46
Furniture	0.08	0	0	0.08
Office Equipment	0.18	0	0	0.18
Total	1285.50	0.00	0.00	1285.50

MePGCL has requested the Commission to approve the GFA for MLHEP as above.

Commission's Analysis

Commission had approved GFA as on 31.03.2022 for MLHEP at Rs. 1285.71 Crore in its True up order for FY 2021-22. Thus opening GFA and Closing for FY 2022-23 shall be Rs.1285.71 Crore, since no capitalization is reported for FY 2022-23

The asset wise breakup for True up of FY 2022-23 is given below.

Table 7 : Approved Gross Fixed Assets (GFA) for MLHEP for FY 2022-23

(Rs. Cr)				
Sl No	Particulars	Value of Assets at the beginning of the year (01.04.2022)	Additions during the year	Asset Value at the end of the year (31.03.2023)
	1	2	3	4
1	Land	23.90	-	23.90
2	Buildings	146.67	-	146.67
3	Hydraulic Works	622.94	-	622.94
4	Other Civil Works	122.70	-	122.70
5	Plant & Machinery	364.11	-	364.11
6	Lines & cables	4.57	-	4.57
7	Vehicles	0.46	-	0.46
8	Furniture	0.08	-	0.08
9	Office Equipment	0.28	-	0.28
10	Total	1285.71	0.00	1285.71

Commission considers capital cost of the MLHEP for True up of FY 2022-23.

3.2 Depreciation

Petitioner's Submission

The MePGCL submitted that it has calculated the depreciation as per the methodology outlined in the 2014 Tariff Regulations. Further since there is no grant in the funding pattern of MLHEP as approved by Commission in the Capital Cost Order for MLHEP no deduction of depreciation on account of grants has been considered. The calculation of depreciation for MLHEP is tabulated below:

Table 8 : Calculation of Depreciation for MLHEP for FY 2022-23 (Projected)

(Rs. Cr)							
Particular	Opening GFA	Addition	Deletion	Closing GFA	Average GFA	Rate of Depreciation	Depreciation
Land	23.90	0.00	0.00	23.90	23.90	0.00%	0.00
Buildings	146.67	0.00	0.00	146.67	146.67	3.34%	4.90
Hydraulic Works	622.91	0.00	0.00	622.91	622.91	5.28%	32.89
Other Civil Works	122.62	0.00	0.00	122.62	122.62	3.34%	4.10
Plant & Machinery	364.11	0.00	0.00	364.11	364.11	5.28%	19.23
Lines & cables	4.57	0.00	0.00	4.57	4.57	5.28%	0.24
Vehicles	0.46	0.00	0.00	0.46	0.46	9.50%	0.04
Furniture	0.08	0.00	0.00	0.08	0.08	6.33%	0.01
Office Equipment	0.18	0.00	0.00	0.18	0.18	6.33%	0.01
Total	1285.50	0.00	0.00	1285.50	1285.50		61.41

MePGCL requested the Commission to approve the depreciation for MLHEP for FY 2022-23 as Rs. 61.41 Cr.

Commission's Analysis

Regulation 33.1 of MSERC MYT Regulations 2014 specifies that

- *The asset value for the purpose of depreciation shall be the historical cost of the assets as approved by the Commission where:
The opening asset's value recorded in the Balance Sheet as per the Transfer Scheme Notification shall be deemed to have been approved, subject to such modifications as may be found necessary upon audit of the accounts, if such a Balance Sheet is not audited. Consumer contribution or capital subsidy/ grant etc shall be excluded from the asset value for the purpose of depreciation.*
- *The salvage value of the assets shall be considered at 10% and depreciation shall be allowed upto maximum of 90 % of the capital cost of the asset.*
- *Depreciation shall be calculated annually as per straight-line method at the rates specified in CERC (Terms and Conditions of Tariff) Regulations, 2009 as may be amended from time to time.*

The Status of Govt. Grants and contributions notified in the True up orders for FY 2021-22 vide page no.12 shall be made applicable for computation of depreciation for FY 2022-23.

Petitioner reported 13th Installment of Capital Grant released by NEC for Rs.0.47 Crore for survey and investigation for MLHEP 3x70 MW

Table 9 : Status of Capital Grants for MLHEP for True up of FY 2022-23

Particulars	As on 1 st April 2022 (Rs. Cr)	Additions during the year (Rs. Cr)	Amortization (Rs. Cr)	Closing Grants as on 31.03.2023 (Rs. Cr)
Govt Grants (note no 17.1, 15.2 & 15.3)	209.89	0.47	-	210.36
Average Grants				210.13

The computation of depreciation shall be as depicted in the table below for True up of FY 2022-23.

Table 10 : Computation of Depreciation for MLHEP in True up for FY 2022-23**(Rs.Cr)**

Sl No	Particulars	Value of Assets at the beginning of the year (01.04.2022)	Additions during the year	Asset Value at the end of the year (31.03.2023)	Average Assets	90% of the Assets	Dep Rate	Depreciation
	1	2	3	4	5	6		7
1	Land	23.90	-	23.90	23.90	0.00		0.00
2	Buildings	146.67	-	146.67	146.67	132.00	3.34 %	4.41
3	Hydraulic Works	622.94	-	622.94	622.94	560.65	5.28 %	29.60
4	Other Civil Works	122.70	-	122.70	122.70	110.43	3.34 %	3.68
5	Plant & Machinery	364.11	-	364.11	364.11	327.70	5.28 %	17.30
6	Lines & cables	4.57	-	4.57	4.57	4.11	5.28 %	0.22
7	Vehicles	0.46	-	0.46	0.46	0.41	9.50 %	0.04
8	Furniture	0.08	-	0.08	0.08	0.07	6.33 %	0.004
9	Office Equipment	0.28	-	0.28	0.28	0.25	6.33 %	0.02
10	Total	1285.71	0.00	1285.71	1285.71	1135.62		55.28
11	Average rate of dep (55.28/1285.71)*100							4.30%
12	Avg Grants					210.13		
13	Less: Depreciation on Grants							9.04
14	Net Depreciation for True up (sl.no 10-13)							46.24

Commission approves Depreciation at Rs. 46.24 Crore for True up of FY 2022-23.

3.3 Return on Equity

Petitioner's Submission

MePGCL submitted that the opening equity has been considered 30% of the GFA in accordance with the Regulation 27 of the 2014 Tariff Regulations. The rate of return on equity as been considered as 14% in accordance with the provisions of 2014 Tariff Regulations. The calculation of Return on Equity for MLHEP is tabulated below:

As per the above provisions of MSERC MYT Regulations, 2014, and the asset base of MLHEP, the Return on Equity for MLHEP for FY 2022-23 is computed below:

Table 11 : Calculation of Return on Equity for MLHEP for FY 2022-23 (Projected)

Particular	Amount (Rs Cr.)
Opening Equity	385.65
Equity Addition	0.00
Closing Equity	385.65
Average Equity	385.65
Rate of Return on Equity	14%
Return on Equity	53.99

MePGCL requested the Commission to approve the Return on Equity of Rs. 53.99 Cr for Myntdu Leshka HEP as computed above.

Commission's Analysis

The Return on Equity shall be computed as per Regulation 31 read with Regulation 27 of MSERC MYT Regulations 2014.

The average Grants and contributions reported as per the accounts stood at Rs.210.13 Crore shall be considered for computation of Return on Equity for True up of FY 2022-23.

Table 12 : Computation of Return on Equity for True up of FY 2022-23 for MLHEP

Sl.no	Particulars	FY 2022-23 (Rs.Cr)
1	Average GFA / Capital Cost for FY 2022-23	1285.71
2	Less: Average Grants	210.13
3	Net Assets	1075.58
4	70% Debt component	752.91
5	30% Equity	322.67
6	Equity Considered for FY 2021-22	322.75
7	Average Equity for FY 2022-23	322.71
8	Return on Equity @ 14%	45.18

Commission approves Return on Equity at Rs.45.18 Crore for True up of FY 2022-23.

3.4 Interest on Loan Capital

Petitioner's Submission

The Interest on loan has been computed as per the provisions of Regulations 27 and Regulation 32 of the 2014 Tariff Regulations and methodology detailed out in Chapter 2. The weighted average rate of interest has been computed on the actual loans running as tabulated below:

Table 13 : Calculation of weighted Average Rate of Interest for MLHEP

S No	Name of Loan	Opening Balance	Drawal	Repayment	Closing Loan	Average Loan	Interest as Per SOA	ROI
1	PFC Loan for MLHEP	124.99	0.00	20.13	104.86	114.92	12.88	11.21%
2	PFC 170 Cr. Refinancing of Bonds	143.02	0.00	20.36	122.66	132.84	13.18	9.92%
3	REC Loan for MLHEP	127.98	0.00	25.30	102.67	115.33	10.69	9.27%
4	REC loan 60 Crs. (MLHEP)	42.00	0.00	8.28	33.73	37.86	3.86	10.19%
		437.99	0.00	74.07	363.91	400.95	40.62	

MePGCL submitted that Commission has not been considering the PFC loan taken for redemption of bonds and REC loan of Rs. 60 Cr as project loans in the previous true ups. In this regards MePGCL would like to reiterate its submissions in the previous true up Petitions that these loans were availed by MePGCL for the repayment of the bonds which were part of the project financing approved by the Commission. Hence, any loans taken for the payment of the loans part of the funding pattern of the project are not new loans and should be considered as refinancing of existing loans. MePGCL has also submitted the Guidelines issued by Reserve Bank of India dated 02nd June 2016 for Refinancing of project loans.

As per guidelines of RBI, Re-financing of loan was availed from PFC to redeem the bonds. In the recent True up Order, Commission has not considered for refinancing of loan. Therefore, refinancing of loan is required to be admitted by the Commission so that repayment of loan can be taken up by the utility.

As of now the repayment of these loans are done from the revenue generated by the plant as approved by the Commission, thus in a way the repayment is made out of the ROE component of the project which is impacting the financial viability of the project.

Accordingly, MePGCL requested the Commission to consider these loans as project loan and allow the interest on loan accordingly.

The calculation of the interest on loan is tabulated below:

Table 14 : Calculation of Interest on Loan for MLHEP for FY 2022-23 (Projected)

Particular	Amount
Opening Loan	899.85
Cumulative Repayment	410.79
Net Normative	489.06
Addition	0.00
Repayment	74.07
Closing Loan	414.99
Average Loan	452.03
WAROI	10.13%
Interest on Loan	45.79
Financing Charges	0.00
Total IOL	45.79

MePGCL requested the Commission to approve interest on loan as Rs.45.79 Cr. for FY 2022-23

Commission's Analysis

Regulation 32.1 of MSERC MYT Regulations 2014 specifies that-

32.1-Interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the schedule of loan repayment, terms and conditions of loan agreements, bond or debenture and the lending rate specified therein.

Provided that the outstanding loan capital shall be adjusted to make it consistent with the loan amount determined in accordance with regulation 27.

Petitioner has reported capitalization of Interest and Finance costs for Rs.12.44 Crore vide note no.28 of Audited accounts. The same is deducted from MLHEP and NUHEP projects at 50% each project in the True up process.

The MLHEP project construction has been completed in 2013, and all the additional capitalization as provided in the working estimates has been taken into consideration for computation of interest and finance charges. The claim for interest on re-financing from PFC & REC shall not be considered.

Commission considers that the closing balance of outstanding loans for FY 2021-22 shall be drawn as opening balance for FY 2022-23.

Table 15 : Approved Interest on capital loans for True up of FY 2022-23

(Rs. Cr)						
Sl.No	Loans availed for LESHKA Plant	Opening	Repayment	Closing loan	Avg loan	Interest
1	10.75%, from PFC	124.99	20.13	104.86	114.93	12.35
2	9.27%, from REC	102.31	25.31	77.00	89.65	8.31
	Total	227.30	45.44	181.86	204.58	20.66
3	Less: Capitalization (Rs.12.44 Cr/2)					6.22
4	Net Interest Cost					14.44

Commission approves Interest and Finance charges at Rs.14.44 Crore for True up of FY 2022-23.

3.5 Operation and Maintenance Expenses

Petitioner's Submission

Regulation 56 of MSERC Tariff Regulations, 2014 provides for Operation and Maintenance Expenses and is reproduced as under:

"56 (7) "In case of hydro generating stations declared under commercial operation on or after 01/04/2009, O&M expenses shall be fixed at 2% of the original project cost (excluding cost of rehabilitation and resettlement works) and shall be subject to annual escalation at 5.72% for the subsequent years."

Commission vide order dated 13.11.2023 in Case No. 04 of 2023 for truing up of expenses of FY 2021-22 has approved operation and maintenance expenses for MLHEP as Rs. 33.60 Cr. Accordingly, MePGCL is claiming operation and maintenance expenses for FY 2022-23 by applying an escalation of 5.72% over and above the approved O&M expenses for FY 2021-22.

However, MePGCL reserves the right to file review/ appeal against the aforesaid order and the claim of the O&M expenses is liable to change on the basis of outcome of such review/appeal.

The O&M expenses for FY 2022-23 is tabulated below:

Table 16 : O&M Expenses for Myntdu Leshka HEP for FY 2022-23 (Projected)

Particular	Amount (Rs. Cr.)
Operation and Maintenance Expenses	37.42

MePGCL requested the Commission to approve the O&M Expenses for MLHEP for FY 2022-23 as Rs. 37.42 Cr.

Commission's Analysis

As per Regulation 56 of MSERC Tariff Regulations, 2014 provides for Operation and Maintenance Expenses and is reproduced as under:

"56 (7) "In case of hydro generating stations declared under commercial operation on or after 01/04/2009, O&M expenses shall be fixed at 2% of the original project cost (excluding

cost of rehabilitation and resettlement works) and shall be subject to annual escalation at 5.72% for the subsequent years."

Commission had computed the Employee expenses considering the impact of RoP effective from 01.01.2020 for FY 2020-21 and validated for the MYT control period FY 2021-22 to FY 2023-24 and escalated at 5.72% year on year provisionally for determination of Tariff subject to True up as per Regulations.

The O&M expenses for FY 2021-22 was fixed at Rs.35.40 Crore. Thus the O&M expenses for MLHEP for FY 2022-23 shall be at Rs.37.42 Crore as detailed below for True up of FY 2022-23.

Table 17 : Approved O&M Expenses for True up of FY 2022-23 for MLHEP

Particulars	in Rs. Crore
O&M expenses	37.42
Less: Capitalization reported vide note no.27of SOA (5.34 Cr)	(-) 5.34
Total O&M expenses	32.08

Commission approves O&M expenses for MLHEP at Rs. 32.08 Crore for True up of FY 2022-23.

3.6 Interest on Working Capital Petitioner's Submission

As per Regulation 34.1(iii) of 2014 Tariff Regulations:

"In case of hydro power generating stations, working capital shall cover:

Operation and maintenance expenses for one (1) month;

Maintenance spares at the rate of 15% of O & M expenses escalated at 6% from the date of commercial operation; and

Receivables equivalent to two (2) month of fixed cost:

Provided that in case of own generating stations, no amount shall be allowed towards receivables, to the extent of supply of power by the Generation Business to the Retail Supply Business, in the computation of working capital in accordance with these Regulations. "

The SBI Advance Rate as on 01.04.2022 comes out to be Rs. 12.30%. Accordingly, the calculation of interest on working capital is tabulated below:

Table 18 : Interest on Working Capital for FY 2022-23 (Projected)

S No	Particular	Amount (In Rs. Cr.)
1	O&M Expenses for 1 Month	3.12
2	Maintenance Spares	5.95
3	Receivables	33.99
4	Total Working Capital	43.05
5	Rate of Interest	12.30%
6	Interest on Working Capital	5.30

MePGCL requested Commission to approve interest on working capital for FY 2022-23 for MLHEP as Rs. 5.30 Cr.

Commission's Analysis

As per the Regulations 34.1(iii) interest on working capital shall be allowed on the following components for determination of Tariff.

- O&M Expenses for one (1) month
- Maintenance Spares at 15% of O&M expenses escalated at 6%
- Receivables equivalent to two (2) months of Fixed cost

The computation of Interest on working capital is depicted in the table below.

Table 19 : Computation of Interest on Working Capital of MLHEP for True up of FY 2022-23
(Rs. Cr.)

S. No	Particulars	MLHEP Actual
1	O&M expenses for one month excl MeECL cost (37.42 /12)	3.12
2	Maintenance spares @ 15% of O&M expenses (37.42*15%*6%)	5.95
3	Receivables equivalent to two months of Fixed cost (Rs.137.94*2/12 Cr.)	22.99
4	Total Working Capital Requirements (4=1+2+3)	32.06
5	SBI PLR as on 1st April of the respective Financial Year (%)	12.30 %
6	Interest on Working Capital (6=4*5)	3.94

Commission approves Interest on Working Capital at Rs. 3.94 Crore for True up of FY 2022-23.

3.7 Prior Period Items

MLHEP has -NIL- prior period expenses during FY 2022-23.

3.8 Non Tariff Income

The Petitioner not reported any Non Tariff and Other Income for MLHEP during FY 2022-23.

3.9 Revenue from Operations

Petitioner's Submission

The revenue from sale of power from MLHEP based on the ARR approved by Commission is worked out as Rs. 82.23 Cr.

MePGCL requests Commission to approve the revenue as Rs. 82.23 Cr.

Commission's Analysis

Petitioner has reported Revenue from Sale of Power at Rs.82.23 Crore.

The same is approved as Revenue from Sale of power for True up of FY 2022-23.

Commission approves Revenue from Operations at Rs.82.23 Crore for True up of FY 2022-23.

3.10 Summary of Annual Fixed Cost – Myndtu Leshka HEP (MLHEP)

Petitioner's Submission

Based on the computation of the individual components of ARR for MLHEP as detailed out in above paragraphs the ARR and Gap/(surplus) for MLHEP is tabulated below:

Table 20 : Summary of Annual Fixed Cost FY 2022-23 (Projected)

(Rs. Cr)

S No	Particular	Amount
1	Depreciation	61.41
2	Return on Equity	53.99
3	O&M Expenses	37.42
4	Interest and Finance Charges	45.79
5	Interest on Working Capital	5.30
6	SLDC Charges	0.00
7	Prior Period Expenses	0.00
	Total AFC	203.91
8	Less Non- Tariff Income	0.00
	Add Revenue Gap/Surplus of 2017-18	(-)3.6
	Add Revenue Gap/Surplus of 2018-19	(-)56.69
	Add Revenue Gap/Surplus of 2017-18	(-)68.79
	Net AFC	74.83
9	Revenue From Operation	82.23
	Revenue Gap/ (Surplus)	(-)7.40

MePGCL requested the Commission to approve the ARR for MLHEP as Rs. 203.91 Cr for 2022-23 and Net ARR as Rs.74.83 Cr.

Commission's Analysis

Commission has examined the petition for MLHEP project, analyzed considering the audited statement of accounts after prudent check with reference to the Regulations approves the ARR for True up of FY 2022-23 as depicted in the table below.

Table 21 : Approved ARR of MLHEP for True up of FY 2022-23

(Rs. Cr)

Sl.no	Particulars	Filed by MePGCL	Approved for True up
1	Depreciation	61.41	46.24
2	Return on Equity	53.99	45.18
3	O&M Expenses	37.42	32.08
4	Interest and Finance Charges	45.79	14.44
5	Interest on Working Capital	5.30	3.94
6	SLDC Charges	0.00	0.00
7	Prior Period Expenses	0.00	0.00
	Total AFC	203.91	141.88
8	Less Non- Tariff Income	0.00	0.00
9	Add Revenue Gap/Surplus of 2017-18	(-)3.6	(-)3.60
10	Add Revenue Gap/Surplus of 2018-19	(-)56.69	(-)56.59
11	Add Revenue Gap/Surplus of 2019-20	(-)68.79	(-) 68.79
	Net AFC	74.83	12.90
12	Revenue From Operation	82.23	82.23
13	Revenue Gap/ (Surplus)	(-)7.40	(-) 69.33

Commission approves ARR at Rs. 12.90 Crore for True up of FY 2022-23.

4. TRUE UP OF ARR FOR NUHEP for FY 2022-23

4.1 Gross Fixed Assets

Petitioners' Submission

MePGCL in compliance to directives of the Commission in previous true up orders has submitted the fixed asset register of all the plants and has claimed the opening and closing GFA accordingly in the true up of ARR of FY 2021-22.

Accordingly, the closing GFA of FY 2021-22 has been considered as opening GFA for 2022-23. The addition and deletion during the year has been considered as per the statement of accounts. The GFA for NUHEP for FY 2022-23 is tabulated below:

Table 22 : Opening and Closing GFA for NUHEP for FY 2022-23

Particular	Opening GFA	Addition	Deletion	Closing GFA
Land	1.66	0.03	0.00	1.69
Buildings	95.16	0.00	0.00	95.16
Hydraulic Works	311.64	0.00	0.00	311.64
Other Civil Works	33.23	0.00	0.00	33.23
Plant & Machinery	159.93	0.00	0.00	159.93
Lines & cables	3.62	0.00	0.00	3.62
Vehicles	0.04	0.00	0.00	0.04
Furniture	0.07	0.00	0.00	0.07
Office Equipment	0.02	0.00	0.00	0.02
Total	605.37	0.03	0.00	605.40

MePGCL submitted that the Commission has been considering the GFA of NUHEP based on the capital cost of Rs. 584 Cr and subsequent addition and deletions. However, MePGCL would like to submit that the completed project cost of NUHEP project was Rs.604 Cr only and to substantiate its claim MePGCL is in the process of getting the auditor's certificate for movement of GFA of NUHEP and the same shall be submitted during the course of the proceeding of the Petition.

MePGCL has requested Commission to approve the GFA for NUHEP as above.

Commission's Analysis

Commission had approved Closing GFA at Rs.586.03 Crore in the True up order for FY 2021-22.

Petitioner reported addition of Rs.0.03 Crore during the FY 2022-23.

Thus the GFA for FY 2022-23 shall be considered as depicted in the table below.

Table 23 : Gross Fixed Assets (GFA) of NUHEP for FY 2022-23

		(Rs.Cr)
Particulars	FY 2022-23	
Opening GFA	586.03	
Additions during the Year	0.03	
Closing GFA	586.06	
Average GFA	586.04	

4.2 Grants

Petitioners' Submission

MePGCL submitted that in the Capital Cost order for NUHEP project, the Commission has considered a grant of Rs. 128.37 Cr.

However, as appraised earlier, the State Government has vide Notification No. POWER.44/2011/659, dated 26th November, 2021 converted grants and loans amounting to INR 132.00 crore into equity for NUHEP.

Accordingly, as on date there is no grants in the NUHEP Project

Commission's Analysis

Funding Pattern for GFA is as follows.

Table 24 : Funding Pattern for New Umtru for FY 2022-23

		(Rs.Cr)
Sl.no	Particulars	FY 2022-23
1	Project Cost approved as on CoD	580.72
2	Equity Contribution	164.59
3	Loan Contribution (70% of Sl.no.1)	406.50

Commission considered Equity contribution at Rs.164.59 Crore as per the Govt. of Meghalaya order dated 26.11.2021.

4.3 Depreciation

Petitioner's submission

MePGCL submitted that it has calculated the depreciation as per the methodology outlined in the 2014 Tariff Regulations. Further since there is no grant in the funding pattern of NUHEP as approved by Commission in the Capital Cost Order for NUHEP no deduction of depreciation on account of grants has been considered. The calculation of depreciation for NUHEP is tabulated below:

Table 25 : Calculation of Depreciation for NUHEP for FY 2022-23 (Projected)

Particular	Opening GFA	Addition	Deletion	Closing GFA	Average GFA	Rate of Depreciation	(Rs.Cr)
							Depreciation
Land	1.66	0.03	0.00	1.69	1.68	0.00%	0.00
Buildings	95.16	0.00	0.00	95.16	95.16	3.34%	3.18
Hydraulic Works	311.64	0.00	0.00	311.64	311.64	5.28%	16.45
Other Civil Works	33.23	0.00	0.00	33.23	33.23	3.34%	1.11
Plant & Machinery	159.93	0.00	0.00	159.93	159.93	5.28%	8.44
Lines & cables	3.62	0.00	0.00	3.62	3.62	5.28%	0.19
Vehicles	0.04	0.00	0.00	0.04	0.04	9.50%	0.00
Furniture	0.07	0.00	0.00	0.07	0.07	6.33%	0.00
Office Equipment	0.02	0.00	0.00	0.02	0.02	6.33%	0.00
Total	605.37	0.03	0.00	605.40	605.39		29.39

MePGCL requested the Commission to approve the depreciation for NUHEP for FY 2022-23 as Rs. 29.39 Cr.

Commission's Analysis

Regulation 33.1 of MSERC MYT Regulations 2014 specifies that

- *The asset value for the purpose of depreciation shall be the historical cost of the assets as approved by the Commission where:*

The opening asset's value recorded in the Balance Sheet as per the Transfer Scheme Notification shall be deemed to have been approved, subject to such modifications as may be found necessary upon audit of the accounts, if such a Balance Sheet is not audited. Consumer contribution or capital subsidy/ grant etc shall be excluded from the asset value for the purpose of depreciation.

- The salvage value of the assets shall be considered at 10% and depreciation shall be allowed upto maximum of 90 % of the capital cost of the asset.
- Depreciation shall be calculated annually as per straight-line method at the rates specified in CERC (Terms and Conditions of Tariff) Regulations,2009 as may be amended from time to time.

Table 26 : Computation of Depreciation for NUHEP for True up of FY 2022-23

(Rs. Cr)

Sl No	Particulars	Value of Assets at the beginning of the year (01.04.2022)	Additions during the Year	Asset Value at the end of the year (31.03.2023)	Average assets	90% of Assets	Rate of Dep	Depreciation
	1	2	3	4	5	6		7
1	Land	1.66	0.03	1.69	1.68	1.51		0.00
2	Buildings	91.87		91.87	91.87	82.68	3.34%	2.76
3	Hydraulic Works	299.32		299.32	299.32	269.38	5.28%	14.22
4	Other Civil Works	31.98		31.98	31.98	28.78	3.34%	0.96
5	Plant & Machinery	155.73		155.73	155.73	140.16	5.28%	7.40
6	Lines & cables	3.48		3.48	3.48	3.14	5.28%	0.17
7	Vehicles	1.83		1.83	1.83	1.65	9.50%	0.16
8	Furniture	0.10		0.10	0.10	0.09	6.33%	0.01
9	Office Equipment	0.05		0.05	0.05	0.04	6.33%	0.00
10	Total	586.03	0.03	586.06	586.04	527.44		25.68

Commission approves Depreciation at Rs.25.68 Crore for True up of FY 2022-23.

4.4 Return on Equity

Petitioner's submission

MePGCL submitted that the opening equity has been considered 30% of the GFA in accordance with the Regulation 27 of the 2014 Tariff Regulations. The rate of return on equity as been considered as 14% in accordance with the provisions of 2014 Tariff Regulations. The calculation of Return on Equity for NUHEP is tabulated below:

Table 27 : Calculation of Return on Equity for NUHEP for FY 2022-23 (Projected)

Particular	Amount (Rs Cr.)
Opening Equity	181.61
Equity Addition	0.01
Closing Equity	181.62
Average Equity	181.62
Rate of Return on Equity	14%
Return on Equity	25.43

MePGCL requested the Commission to approve the return on equity for NUHEP as Rs. 25.43 Cr for FY 2022-23

Commission's Analysis

Return on equity shall be computed as per Regulation 31 on the equity base determined in accordance with regulation 27 and shall not exceed 14%.

Commission had approved actual Equity contribution for FY 2020-21 at Rs.164.59 Crore for computation of RoE for FY 2022-23.

Table 28 : Approved Return on Equity for True up of FY 2022-23 for NUHEP

Sl.no	Particulars	Amount in Cr
	Project Cost	580.72
1	Actual Equity considered for FY 2022-23	164.59
2	Equity considered for FY 2021-22	164.71
3	Average Equity	164.65
4	Return on Equity @ 14% (Sl.no.3 *14%)	23.05

Commission considers Return on Equity at Rs.23.05 Crore for True up of FY 2022-23.

4.5 Interest and Finance charges

Petitioner's submission

Interest on loan has been computed as per the provisions of Regulations 27 and Regulation 32 of the 2014 Tariff Regulations and methodology detailed out in Chapter 2. The weighted average rate of interest has been computed on the actual loans running as tabulated below:

Table 29 : Calculation of weighted Average Rate of Interest for NUHEP (Projected)

(Rs. in Cr)

S No	Name of Loan	Opening Balance	Drawal	Repayment	Closing Loan	Average Loan	Interest as Per SOA	ROI
1	PFC Loan for NUHEP	352.17	0.00	39.31	312.86	332.52	37.60	11.31%

The calculation of the interest on loan is tabulated below:

Table 30 : Calculation of Interest on Loan for NUHEP for FY 2022-23

Particular	Amount
Opening Loan	423.76
Cumulative Repayment	88.13
Net Normative	335.63
Addition	0.02
Repayment	39.31
Closing Loan	296.34
Average Loan	315.99
WAROI	11.31%
Interest on Loan	35.73
Financing Charges	0.00
Total IOL	35.73

MePGCL requested the Commission to approve interest on loan as Rs.35.73 Cr for FY 2022-23

Commission's Analysis

Regulation 32.1 of MSERC MYT Regulations 2014 specifies that-

32.1-Interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the schedule of loan repayment, terms and conditions of loan agreements, bond or debenture and the lending rate specified therein.

Provided that the outstanding loan capital shall be adjusted to make it consistent with the loan amount determined in accordance with regulation 27.

Petitioner has reported capitalization of Interest and Finance costs for Rs.12.44 Crore vide note no.28 of Audited accounts. The same is deducted from MLHEP and NUHEP projects at 50% each project in the True up process.

Table 31 : Computation of Interest and Finance charges of New Umtru HEP for FY 2022-23

(Rs. Cr)

Sl. No.	Particulars	Opening Balance (a)	Rate of Interest (b)	Repayment during the year (c)	Closing Balance (d=a-c)	Average Loan (e=a+d/2)	Interest Admissible (f=e*b)
1	PFC Loan NUHEP	279.85	10.75 %	39.31	240.54	260.19	27.97
2	Less: Capitalization (12.44/2)						6.22
	Net Interest Cost						21.75

Commission approves Interest and Finance charges at Rs. 21.75 crore for True up of FY 2022-23.

4.6 Operation and Maintenance Expenses

Petitioner's submission

Regulation 56 of MSERC Tariff Regulations, 2014 provides for Operation and Maintenance Expenses and is reproduced below.

"56 (7) "In case of hydro generating stations declared under commercial operation on or after 01/04/2009, O&M expenses shall be fixed at 2% of the original project cost (excluding cost of rehabilitation and resettlement works) and shall be subject to annual escalation at 5.72% for the subsequent years."

Commission vide order dated 13.11.2023 in Case No. 04 of 2023 for truing up of expenses of FY 2021-22 has approved operation and maintenance expenses for NUHEP as Rs. 17.62 Cr. Accordingly, MePGCL is claiming operation and maintenance expenses for FY 2022-23 by applying an escalation of 5.72% over and above the approved O&M expenses for FY 2021-22. However, MePGCL reserves the right to file review/ appeal against the aforesaid order and the claim of the O&M expenses is liable to change on the basis of outcome of such review/appeal.

The O&M expenses for FY 2022-23 is tabulated below:

Table 32 : Operation and Maintenance Expenses for NUHEP for FY 2022-23 (Projected)

Particular	Amount (Rs. Cr.)
Operation and Maintenance Expenses	18.63

MePGCL requested Commission to approve the O&M Expenses for NUHEP for FY 2022-23 as Rs. 18.63 Cr.

Commission's Analysis

As per Regulation 56.1 O&M expenses shall mean the total of all expenditure under the following heads:

- (a) Employee Cost
- (b) Repairs and Maintenance
- (c) Administration and General Expenses.

Regulation 56.7 specifies:-

In case of hydro generating stations declared under commercial operation on or after 01/04/2009, O&M expenses shall be fixed at 2% of the original project cost (excluding cost of rehabilitation and resettlement works) and shall be subject to annual escalation at 5.72% for the subsequent years.

The O&M expenses for FY 2021-22 was approved at Rs.14.51 Crore. Thus the O&M expenses after escalation at 5.72% for FY 2022-23 shall be Rs.15.34 Crore as depicted in the table below.

Table 33 : Approved O&M Expenses for True up of FY 2022-23 for NUHEP

Particulars	Amount in Crore
O&M expenses	15.34

Commission approves O&M Expenses at Rs.15.34 Crore of NUHEP for True up of FY 2022-23.

4.7 Interest on Working Capital

Petitioner's submission

As per Regulation 34.1(iii) of 2014 Tariff Regulations:

“In case of hydro power generating stations, working capital shall cover:

Operation and maintenance expenses for one (1) month;

Maintenance spares at the rate of 15% of O & M expenses escalated at 6% from the date of commercial operation; and

Receivables equivalent to two (2) month of fixed cost:

Provided that in case of own generating stations, no amount shall be allowed towards receivables, to the extent of supply of power by the Generation Business to the Retail Supply Business, in the computation of working capital in accordance with these Regulations.”

The SBI Advance Rate as on 01.04.2022 comes out to be Rs. 12.30%. Accordingly, the calculation of interest on working capital is tabulated below:

Table 34 : Computation of Interest on Working Capital for NUHEP for FY 2022-23 (Projected)

S No	Particular	Amount (In Rs. Cr.)
1	O&M Expenses for 1 Month	1.55
2	Maintenance Spares	2.96
3	Receivables	18.67
4	Total Working Capital	23.18
5	Rate of Interest	12.30%
6	Interest on Working Capital	2.85

MePGCL requested the Commission to approve interest on working capital for FY 2022-23 for NUHEP as Rs. 2.85 Cr.

Commission's Analysis

As per the Regulations 34.1(iii) *interest on working capital shall be allowed on the following components for determination of Tariff.*

- *O&M Expenses for one (1) month*
- *Maintenance Spares at 15% of O&M expenses escalated at 6%*
- *Receivables equivalent to two (2) months of Fixed cost*

The Interest on working capital is computed as depicted in the table below

Table 35 : Computation of Interest on Working Capital for True up of FY 2022-23 for NUHEP

Sl.No	Particulars	Rs. Cr
1	O&M expenses for one month (15.34/12)	1.28
2	Maintenance spares @ 15% of O&M expenses (15.34*15%*6%)	2.44
3	Receivables equivalent to two months of Fixed cost (85.82*2/12)	14.30
4	Total Working Capital Requirements (4=1+2+3)	18.02
5	SBI PLR as on 1st April of the respective Financial Year (%)	12.30 %
6	Interest on Working Capital (6=4*5)	2.22

Commission considers Interest on Working capital at Rs.2.22 Crore for true up of FY 2022-23 for NUHEP.

4.8 Revenue from Operations

Petitioner's Submission

The revenue from sale of power from NUHEP based on the ARR approved by Commission is worked out as Rs. 27.56 Cr.

MePGCL requested Commission to approve the revenue as Rs. 27.56 Crore.

Commission's Analysis

Petitioner has reported Revenue from Sale of Power at Rs.27.56 Crore.

The same is considered as Revenue from Sale of power for True up of FY 2022-23.

Commission approves Revenue from Operations at Rs.27.56 Crore for True up of FY 2022-23.

4.9 Prior Period Items

NUHEP has -NIL- prior period expenses during FY 2022-23.

4.10 Non Tariff Income

The Petitioner has not reported any Non Tariff and Other Income for NUHEP during FY 2022-23.

4.11 Aggregate Revenue Requirement for New Umtru HEP

Petitioner's submission

Based on the computation of the individual components of ARR for NUHEP as detailed out in above paragraphs the ARR and Gap/(surplus) for NUHEP is tabulated below:

Table 36 : Summary of Annual Fixed Cost (Approved vis-à-vis Actual) FY 2022-23 (Projected)

(Rs. Cr.)		
S No	Particular	Amount
1	Depreciation	29.39
2	Return on Equity	25.43
3	O&M Expenses	18.63
4	Interest and Finance Charges	35.73
5	Interest on Working Capital	2.85
6	SLDC Charges	0.00
7	Prior Period Expenses	0.00
	Total AFC	112.02
8	Less Non- Tariff Income	0.00
	Revenue Gap/ Surplus for 2017-18	0.00
	Revenue Gap/ Surplus for 2018-19	73.83
	Revenue Gap/ Surplus for 2019-20	73.17
	Net AFC	259.02
9	Revenue From Operation	27.56
	Revenue Gap/ (Surplus)	231.47

MePGCL requested the Commission to approve the ARR for NUHEP as Rs. 112.02 Cr and Net ARR of 259.02 Crore.

Commission's Analysis

Commission has examined the petition for New Umtru project, analyzed considering the audited statement of accounts after prudent check with reference to the Regulations approves the ARR for True up of FY 2022-23 as depicted in the table below.

Table 37 : Approved ARR of NUHEP for True up of FY 2022-23**(Rs. Cr.)**

Sl.No	Particulars	Filed by MePGCL	Approved for True up FY 2022-23
1	Depreciation	29.39	25.68
2	Return on Equity	25.43	23.05
3	O&M Expenses	18.63	15.34
4	Interest and Finance Charges	35.73	21.75
5	Interest on Working Capital	2.85	2.22
6	SLDC Charges	0.00	0.00
7	Prior Period Expenses	0.00	0.00
	Total AFC	112.02	88.04
8	Less Non- Tariff Income	0.00	0.00
9	Revenue Gap/ Surplus for 2017-18	0.00	0.00
10	Revenue Gap/ Surplus for 2018-19	73.83	73.83
11	Revenue Gap/ Surplus for 2019-20	73.17	73.17
	Net AFC	259.02	235.04
12	Revenue From Operation	27.56	27.56
13	Revenue Gap/ (Surplus)	231.47	207.48

Commission approves ARR at Rs. 235.04 Crore for True up of FY 2022-23.

5. TRUE UP OF ARR FOR LAKROH MHP for FY 2022-23

5.1 Gross Fixed Assets

Petitioner's Submission

MePGCL in compliance to directives of the Commission in previous true up orders has submitted the fixed asset register of all the plants and has claimed the opening and closing GFA accordingly in the true up of ARR of FY 2022-23.

Accordingly, the closing GFA of FY 2021-22 has been considered as opening GFA for 2022-23. The addition and deletion during the year has been considered as per the statement of accounts. The GFA for Lakroh Small HEP for FY 2022-23 is tabulated below:

Table 38 : Opening and Closing GFA for LAKROH MHP for FY 2022-23 (Projected)

(Rs. in Cr.)

S No	Particular	Opening GFA	Addition	Deletion	Closing GFA
1	Land	0.00	0.00	0.00	0.00
2	Buildings	2.43	0.00	0.00	2.43
3	Hydraulic Works	9.68	0.05	0.00	9.73
4	Other Civil Works	2.43	0.00	0.00	2.43
5	Plant & Machinery	10.31	0.00	0.00	10.31
6	Lines & cables	1.57	0.00	0.00	1.57
7	Vehicles	0.00	0.00	0.00	0.00
8	Furniture	0.00	0.00	0.00	0.00
9	Office Equipment	0.00	0.00	0.00	0.00
	Total	26.42	0.05	0.00	26.47

MePGCL requested the Commission to approve the GFA for Lakroh Small HEP as above.

Commission's Analysis

Commission had approved the closing GFA at Rs.22.68 Crore for the True up of FY 2021-22.

Petitioner has reported addition of Rs.0.05 Crore to GFA during the year.

The closing GFA is considered at Rs.22.73 Crore for True up of FY 2022-23.

Particulars	Amount in Cr
Opening GFA	22.68
Additions during FY 2022-23	0.05
Retirements	0.00
Closing GFA	22.73

Commission approves GFA at Rs.22.73 Crore for True up of FY 2022-23

5.2 Grants

Petitioner's Submission

MePGCL submitted that in the Capital Cost order for Lakroh MHP project, Commission has considered a grant of Rs. 11.75 Cr.

As detailed out in Chapter 2 of this Petition the amortization of the grants has been considered as reduction from ARR as Non-Tariff Income in the previous year's accordingly only the grants in books of account as on date has been considered for calculation. Further, the grants have been bifurcated on proportionate basis in GFA and CWIP. Accordingly, the opening grant for Lakroh comes out to Rs. 4.95 Cr as on 2022-23.

Further, since there is a capital addition in 2022-23 but no further grant is received hence addition to grants has been considered as NIL.

Commission's Analysis

Capital cost of the project is approved for FY 2022-23 at Rs.22.73 Crore.

The Capital Grants and Contributions remained at Rs.11.75 Crore.

Net GFA works out to Rs.10.98 Crore for computation of Return on Equity and Depreciation.

5.3 Depreciation

Petitioner's Submission

MePGCL submitted that it has calculated the depreciation as per the methodology outlined in the 2014 Tariff Regulations. Further since there is no addition in grant in the FY 2022-23 for Lakroh MHP the opening grant has been considered as the closing grant. The calculation of depreciation for LAKROH MHP is tabulated below:

Calculation of Depreciation for LAKROH MHP for FY 2022-23

Particular	Opening GFA	Addition	Deletion	Closing GFA	Average GFA	Rate of Depreciation	Depreciation
Land	0.00	0.00	0.00	0.00	0.00	0.00%	0.00
Buildings	2.43	0.00	0.00	2.43	2.43	3.34%	0.08
Hydraulic Works	9.68	0.00	0.00	9.68	9.68	5.28%	0.51
Other Civil Works	2.43	0.00	0.00	2.43	2.43	3.34%	0.08
Plant & Machinery	10.31	0.00	0.00	10.31	10.31	5.28%	0.54
Lines & cables	1.57	0.00	0.00	1.57	1.57	5.28%	0.08
Vehicles	0.00	0.00	0.00	0.00	0.00	9.50%	0.00
Furniture	0.00	0.00	0.00	0.00	0.00	6.33%	0.00

Office Equipment	0.00	0.00	0.00	0.00	0.00	6.33%	0.00
Total	26.42	0.00	0.00	26.42	26.42		1.30

WAROD	4.92%
Average Grants in GFA	4.95
Depreciation on Grants	0.24
Net Depreciation	1.06

MePGCL requested the Commission to approve the depreciation for Lakroh MHEP for FY 2022-23 as Rs. 1.06 Cr.

Commission's Analysis

Regulation 33.1 of MSERC MYT Regulations 2014 specifies that

- *The asset value for the purpose of depreciation shall be the historical cost of the assets as approved by the Commission where:
The opening asset's value recorded in the Balance Sheet as per the Transfer Scheme Notification shall be deemed to have been approved, subject to such modifications as may be found necessary upon audit of the accounts, if such a Balance Sheet is not audited. Consumer contribution or capital subsidy/ grant etc shall be excluded from the asset value for the purpose of depreciation.*
- *The salvage value of the assets shall be considered at 10% and depreciation shall be allowed upto maximum of 90 % of the capital cost of the asset.*
- *Depreciation shall be calculated annually as per straight-line method at the rates specified in CERC (Terms and Conditions of Tariff) Regulations,2009 as may be amended from time to time.*

Table 39 : Approved Depreciation for Lakroh MHP for FY 2022-23

(Rs. Cr.)

Name of Assets	Value of Asset at the beginning of the year	Addition during the year	Value of Asset at the end of the year	Average Assets	90% of assets	Rate of Depreciation (%)	Depreciation for FY 2022-23
Land and land rights		-					-
Buildings	2.36		2.36	2.36	2.12	3.34 %	0.07
Hydraulic Works	9.32	0.05	9.37	9.34	8.41	5.28 %	0.44
Others Civil Works	2.18		2.18	2.18	1.96	3.34 %	0.06
Plant and Machinery	7.29		7.29	7.29	6.56	5.28 %	0.35
Lines and Cable Network	1.52		1.52	1.52	1.37	5.28 %	0.07
Vehicles	0		0	0	0	9.50 %	0
Furniture and Fixtures	0.009		0.009	0.009	0.008	6.33 %	0.00
Office Equipment	0.008		0.008	0.008	0.008	6.33 %	0.00
Total	22.68	0.05	22.73	22.71	20.44		0.99
Govt Grants and Contributions				11.75		4.36%	
Less: Depreciation on Grants							0.51
Net Depreciation							0.48

Commission considers depreciation at Rs. 0.48 Crore for True up of FY 2022-23.

5.4 Return on Equity

Petitioner's Submission

MePGCL submitted that the opening equity has been considered 30% of the GFA in accordance with the Regulation 27 of the 2014 Tariff Regulations. The rate of return on equity as been considered as 14% in accordance with the provisions of 2014 Tariff Regulations. The calculation of Return on Equity for Lakroh MHEP is tabulated below:

Table 40 : Calculation of Return on Equity for LAKROH MHEP for FY 2022-23 (Projected)

Particular	Amount (Rs Cr.)
Opening Equity	6.44
Equity Addition	0.01
Closing Equity	6.46
Average Equity	6.45
Rate of Return on Equity	14%
Return on Equity	0.90

MePGCL requested the Commission to allow true up gap of Rs.0.90 Cr. as ROE for FY 2022-23 for Lakroh MHP.

Commission's Analysis

Return on equity shall be computed as per Regulation 31 on the equity base determined in accordance with regulation 27 read with 28.10 and shall not exceed 14%.

Table 41 : Computation of Return on Equity for Lakroh MHEP for True up of FY 2022-23

Particulars	In Rs. Cr
Opening GFA	22.68
Addition during the year	0.05
Closing GFA	22.73
Average GFA	22.71
Less: Govt. Grants	11.75
Net GFA	10.96
Debt (70% GFA)	7.67
Equity (30% of GFA)	3.29
Equity for FY 2021-22	3.24
Average Equity	3.26
RoE (%)	14%
Return on Equity	0.46

Commission approves Return on equity at Rs.0.46 Crore for True up of FY 2022-23.

5.5 Interest on Loan Capital

Petitioner's Submission

Interest on loan has been computed as per the provisions of Regulations 27 and Regulation 32 of the 2014 Tariff Regulations and methodology detailed out in Chapter 2. The weighted average rate of interest has been computed on the actual loans running as tabulated below:

Table 42 : Calculation of weighted Average Rate of Interest for LAKROH MHEP (Projected)
(Rs.Cr)

S No	Name of Loan	Opening Balance	Drawl	Repayment	Closing Loan	Average Loan	Interest as Per SOA	ROI
1	PFC Loan for Lakroh	5.76	0.00	0.50	5.27	5.51	0.56	10.18%

The calculation of the interest on loan is tabulated below:

Calculation of Interest on Loan for LAKROH MHEP for FY 2022-23

Particular	Amount
Opening Loan	15.03
Cumulative Repayment	0.32
Net Normative	14.71
Addition	0.03

Particular	Amount
Repayment	0.50
Closing Loan	14.25
Average Loan	14.48
WAROI	10.18%
Interest on Loan	1.47
Financing Charges	0.00
Total IOL	1.47

MePGCL requested the Commission to approve interest on loan as Rs.1.47 Cr. for FY 2022-23

Commission's Analysis

Regulation 32.1 of MSERC MYT Regulations 2014 specifies that-

32.1-Interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the schedule of loan repayment, terms and conditions of loan agreements, bond or debenture and the lending rate specified therein.

Provided that the outstanding loan capital shall be adjusted to make it consistent with the loan amount determined in accordance with regulation 27.

As already notified additional loan projected shall not be considered.

The outstanding loan as approved for True up of FY 2021-22 is now considered for computation of Interest cost for FY 2022-23.

Accordingly Commission has computed Interest and Finance charges as depicted in the table below.

Table 43 : Computation of Interest on loan for FY 2022-23 for LAKROH MHEP

(Rs. Cr)

Sl. No.	Particulars	Opening Balance (a)	Addition during the year (b)	Repayment during the year (c)	Closing Balance (d=a+b-c)	Average Loan $e=(a+d)/2$	Rate of Interest (f)	Interest Accrued (g=e*f)
1	PFC Loan NUHEP	4.55	0.00	0.50	4.05	4.30	10.18%	0.44

Commission considers Interest and Finance charges at Rs.0.44 Crore as claimed by the petitioner for True up of FY 2022-23.

5.6 O&M expenses

Petitioner's Submission

Regulation 56 of MSERC Tariff Regulations, 2014 provides for Operation and Maintenance Expenses and is reproduced as under:

"56 (7) "In case of hydro generating stations declared under commercial operation on or after 01/04/2009, O&M expenses shall be fixed at 2% of the original project cost (excluding cost of rehabilitation and resettlement works) and shall be subject to annual escalation at 5.72% for the subsequent years."

Commission vide order dated 13.11.2023 in Case No. 04 of 2023 for truing up of expenses of FY 2021-22 has approved operation and maintenance expenses for LAKROH SMALL HEP as Rs. 0.57 Cr. Accordingly, MePGCL is claiming operation and maintenance expenses for FY 2022-23 by applying an escalation of 5.72% over and above the approved O&M expenses for FY 2021-22.

However, MePGCL reserves the right to file review/ appeal against the aforesaid order and the claim of the O&M expenses is liable to change on the basis of outcome of such review/appeal.

The O&M expenses for FY 2022-23 is tabulated below:

Table 44 : Operation and Maintenance Expenses for Lakroh MHEP for FY 2022-23

Particular	Amount (Rs. Cr.)
Operation and Maintenance Expenses	0.60

MePGCL requests the Commission to approve the O&M Expenses for Lakroh MHEP for FY 2022-23 as Rs. 0.60 Cr.

Commission's Analysis

As per Regulation 56.1 O&M expenses shall mean the total of all expenditure under the following heads:

- (a) Employee Cost
- (b) Repairs and Maintenance
- (c) Administration and General Expenses.

Regulation 56.7 specifies:-

In case of hydro generating stations declared under commercial operation on or after 01/04/2009, O&M expenses shall be fixed at 2% of the original project cost (excluding cost of rehabilitation and resettlement works) and shall be subject to annual escalation at 5.72% for the subsequent years.

The O&M expenses for FY 2021-22 was approved at Rs.0.53. Thus the O&M expenses for Lakroh MHP for FY 2022-23 shall be Rs.0.56 Crore as detailed below for True up of FY 2022-23.

Table 45 : Approved O&M Expenses for True up of FY 2022-23 for Lakroh MHEP

Particulars	Amount in Crore
O&M expenses	0.56

Commission approves O&M expenses at Rs.0.56 Crore for True up of FY 2022-23.

5.7 Interest on Working Capital

Petitioner's Submission

As per Regulation 34.1(iii) of 2014 Tariff Regulations:

“In case of hydro power generating stations, working capital shall cover:

Operation and maintenance expenses for one (1) month;

Maintenance spares at the rate of 15% of O & M expenses escalated at 6% from the date of commercial operation; and

Receivables equivalent to two (2) month of fixed cost:

Provided that in case of own generating stations, no amount shall be allowed towards receivables, to the extent of supply of power by the Generation Business to the Retail Supply Business, in the computation of working capital in accordance with these Regulations. “

The SBI Advance Rate as on 01.04.2022 comes out to be Rs. 12.30%. Accordingly, the calculation of interest on working capital is tabulated below:

Table 46 : Interest on Working Capital for FY 2022-23 (Projected)

S No	Particular	Amount (In Rs. Cr.)
1	O&M Expenses for 1 Month	0.05
2	Maintenance Spares	0.10
3	Receivables	0.10
4	Total Working Capital	0.25
5	Rate of Interest	12.30%
6	Interest on Working Capital	0.03

MePGCL requested the Commission to approve interest on working capital for FY 2022-23 for LAKROH SMALL HEP as Rs. 0.03 Cr.

Commission's Analysis

As per the Regulations 34.1(iii) *interest on working capital shall be allowed on the following components for determination of Tariff.*

- *O&M Expenses for one (1) month*
- *Maintenance Spares at 15% of O&M expenses escalated at 6%*
- *Receivables equivalent to two (2) months of Fixed cost*

The Interest on working capital is computed as depicted in the table below

Table 47 : Computation of Interest on Working Capital for FY 2022-23 for Lakroh MHEP
(Rs. Cr.)

S.no	Particulars	Lakroh
1	O&M expenses for one month excl. MeECL cost (0.56/12)	0.05
2	Maintenance spares @ 15% of O&M expenses (0.56*15%*6%)	0.09
3	Receivables equivalent to two months of Fixed cost (1.94*2/12)	0.32
4	Total Working Capital Requirements (4=1+2+3)	0.46
5	SBI PLR as on 1st April of the respective Financial Year (%)	12.30 %
6	Interest on Working Capital (Rs. Cr.) (6=4*5)	0.06

Commission approves interest on working capital at Rs. 0.06 Crore for Lahroh MHP for True up of FY 2022-23.

5.8 Prior Period Expenses

The Prior Period Expense for Lakroh MHP for FY 2022-23 treated as -NIL-.

5.9 Non Tariff Income

The Petitioner has not reported any Non Tariff and Other Income for Lakroh MHP during FY 2022-23.

5.10 Revenue from Operations

Petitioner's Submission

The revenue from sale of power from Lakroh MHEP based on the ARR approved by Commission is worked out as Rs. 0.55 Cr.

MePGCL requested the Commission to approve the revenue as Rs. 0.55 Cr

Commission's Analysis

Commission considers Revenue from Operations at. Rs.0.55 Crore as submitted by the MePGCL for True up of FY 2022-23.

5.11 Annual Fixed Cost and Revenue Gap/Surplus for FY 2022-23

Petitioner's Submission

Based on the computation of the individual components of ARR for Lakroh MHEP as detailed out in above paragraphs the ARR and Gap/(surplus) for LAKROH MHEP is tabulated below:

Table 48 : Summary of Annual Fixed Cost (Approved vis-à-vis Actual) FY 2022-23 (Projected)

S No	Particular	Amount (In Cr.)
1	Depreciation	1.06
2	Return on Equity	0.90
3	O&M Expenses	0.60
4	Interest and Finance Charges	1.47
5	Interest on Working Capital	0.03
6	SLDC Charges	0.00
7	Prior Period Expenses	0.00
	Total AFC	4.07
8	Less Non- Tariff Income	0.00
9	Revenue Gap/ Surplus for 2017-18	0.00
10	Revenue Gap/ Surplus for 2018-19	0.00
11	Revenue Gap/ Surplus for 2019-20	1.48
	Net AFC	5.55
12	Revenue From Operation	0.55
	Revenue Gap/ (Surplus)	5.00

MePGCL requested the Commission to approve the ARR for LAKROH M HEP as Rs. 4.07 Cr and Net ARR of 5.55 Cr.

Commission's Analysis

Commission has examined the petition for Lakroh project, analyzed considering the audited statement of accounts after prudent check with reference to the Regulations approves the ARR for True up of FY 2022-23 as depicted in the table below.

Table 49 : Approved ARR for LAKROH MHEP for True up of FY 2022-23

(Rs. Cr.)

Sl.No	Particulars	Filed by MePGCL	Approved for True up
1	Depreciation	1.06	0.48
2	Return on Equity	0.90	0.46
3	O&M Expenses	0.60	0.56
4	Interest and Finance Charges	1.47	0.44
5	Interest on Working Capital	0.03	0.06
6	SLDC Charges	0.00	0.00
7	Prior Period Expenses	0.00	0.00
	Total AFC	4.07	2.00
8	Less Non- Tariff Income	0.00	
9	Revenue Gap/ Surplus for 2019-20	1.48	1.48
	Net AFC	5.55	3.48
10	Revenue From Operation	0.55	0.55
	Revenue Gap/ (Surplus)	5.00	2.93

Commission approves Annual Fixed Cost at Rs.2.00 Crore for True up of FY 2022-23.

6. TRUE UP OF ARR FOR MePGCL OLD PROJECTS INCLUDING SONAPANI FOR FY 2022-23

6.1 Gross Fixed Assets

Petitioner's Submission

MePGCL in compliance to directives of the Commission in previous true up orders has submitted the fixed asset register of all the plants and has claimed the opening and closing GFA accordingly in the true up of ARR of FY 2022-23.

Accordingly, the closing GFA of FY 2021-22 has been considered as opening GFA for 2022-23. The addition and deletion during the year has been considered as per the statement of accounts after deducting the addition deletion for MLHEP, NUHEP and Lakroh Projects. The GFA for Old Stations of MePGCL (Including Sonapani) for FY 2022-23 is tabulated below:

Table 50 : Gross Fixed Assets of MePGCL's Old Plants (Including Sonapani) for FY 2022-23
(Rs. In Cr.)

S No	Particular	Opening GFA	Addition	Deletion	Closing GFA
1	Land	7.21	0.00	0.00	7.21
2	Buildings	13.12	0.04	0.00	13.15
3	Hydraulic Works	128.71	0.00	0.00	128.71
4	Other Civil Works	26.21	0.02	0.02	26.21
5	Plant & Machinery	246.11	1.20	0.00	247.31
6	Lines & cables	4.98	0.00	0.00	4.98
7	Vehicles	1.77	0.00	0.00	1.77
8	Furniture	2.38	0.03	0.00	2.40
9	Office Equipment	1.95	0.01	0.00	1.96
	Total	432.43	1.30	0.02	433.70

MePGCL requested the Commission to approve the GFA for Old Stations of MePGCL (Including Sonapani) as above.

Commission's Analysis

Table 51 : Approved Gross Fixed Assets of MePGCL as whole for True up of FY 2022-23

(Rs. Cr.)

Particulars	MLHEP	NUHEP	Lakroh MHP	MePGCL's Old Plants (including Sonapani)	MePGCL as a whole
	(a)	(b)	(c)	(d)	(e=a+b+c+d)
Opening GFA	1285.71	586.03	22.68	50.46	1944.88
Additions	0.00	0.03	0.05	1.30	1.38
Retirements				0.02	0.02
Closing GFA	1285.71	586.06	22.73	51.74	1946.24
Average GFA	1285.71	586.04	22.71	51.10	1945.56

6.2 Grants

Petitioner's Submission

As detailed out in Chapter 2 of this Petition the amortization of the grants has been considered as reduction from ARR as Non-Tariff Income in the previous year's accordingly only the grants in books of account as on date has been considered for calculation. Further, the grants have been bifurcated on proportionate basis in GFA and CWIP. Accordingly, the opening grant for Old Stations of MePGCL comes out to Rs. 133.55 Cr and closing Grants in GFA comes out to be 135.06 Cr as on 2022-23.

Commission's Analysis

Petitioner has reported capital Grants received towards Implementation of Ganol SHP for Rs.25.00 Crore and Rs.41.00 Crore also financial assistance to tide over the financial crisis under MeECL and its subsidiaries, and Rs.0.47 Crore towards survey and investigation of 3x70 MW MLHEP Stage II project released by NEC vide note no.15.2 of audited accounts.

Petitioner has reported Capital Grants and Contributions at Rs.29.38 Crore against Umiam Umtru Stage III and Umiam bridge vide note no.17.2 of SoA.

Petitioner has shown Grants amortization vide note no.17.1 for Rs.13.04 Crore.

The Grants received against Ganol project shall be appropriated in the project cost approval on the petition to be filed by MePGCL on achieving CoD.

The financial assistance extended to tide over the crisis for Rs.41.00 Crore shall be appropriated in the True up ARR for FY 2022-23.

Status of the Funding for MePGCL Old Projects

S.no	Particulars	Rs.in Cr
1	Average GFA	51.10
2	Average Grants (26.65+41.47)/2	34.06
3	Net GFA	17.04
4	70% of Net GFA (Loan)	11.93
5	30% of Net GFA (Equity)	5.11

6.3 Depreciation

Petitioner's Submission

MePGCL submitted that it has calculated the depreciation as per the methodology outlined in the 2014 Tariff Regulations. The calculation of depreciation for Old Stations of MePGCL (Including Sonapani) is tabulated below:

Table 52 : Depreciation of Assets for FY 2022-23 (Projected)

(Rs. Cr.)							
Particular	Opening GFA	Addition	Deletion	Closing GFA	Average GFA	Rate of Depreciation	Depreciation
Land	7.21	0.00	0.00	7.21	7.21	0.00%	0.00
Buildings	13.12	0.00	0.00	13.12	13.12	3.34%	0.44
Hydraulic Works	128.71	0.00	0.00	128.71	128.71	5.28%	6.80
Other Civil Works	26.21	0.00	0.00	26.21	26.21	3.34%	0.88
Plant & Machinery	246.11	0.00	0.00	246.11	246.11	5.28%	12.99
Lines & cables	4.98	0.00	0.00	4.98	4.98	5.28%	0.26
Vehicles	1.77	0.00	0.00	1.77	1.77	9.50%	0.17
Furniture	2.38	0.00	0.00	2.38	2.38	6.33%	0.15
Office Equipment	1.95	0.00	0.00	1.95	1.95	6.33%	0.12
Total	432.43	0.00	0.00	432.43	432.43		21.81

WAROD	5.04%
Average Grants in GFA	134.31
Depreciation on Grants	6.77
Net Depreciation	15.04

MePGCL requested the Commission to approve the depreciation for Old Stations of MePGCL (Including Sonapani) for FY 2022-23 as Rs. 15.04 Cr.

Commission's Analysis

Regulation 33.1 of MSERC MYT Regulations 2014 specifies that,

- *The asset value for the purpose of depreciation shall be the historical cost of the assets as approved by the Commission where:*

The opening asset's value recorded in the Balance Sheet as per the Transfer Scheme Notification shall be deemed to have been approved, subject to such

modifications as may be found necessary upon audit of the accounts, if such a Balance Sheet is not audited. Consumer contribution or capital subsidy/ grant etc shall be excluded from the asset value for the purpose of depreciation.

- The salvage value of the assets shall be considered at 10% and depreciation shall be allowed upto maximum of 90 % of the capital cost of the asset.
- Depreciation shall be calculated annually as per straight-line method at the rates specified in CERC (Terms and Conditions of Tariff) Regulations,2009 as may be amended from time to time.

Despite directives issued for furnishing the project wise asset wise breakup for computation of the depreciation in the True up process, petitioner has not complied with and has not furnished asset wise breakup for Umiam Stage IV project.

In the absence of asset wise breakup, depreciation has to be computed considering the rate of depreciation at 5.28% uniformly for FY 2022-23.

The capital grants available against MePGCL old projects as of FY 2021-22 are at Rs.26.65 Crore.

Petitioner has reported capital grants at Rs.29.38 Crore during FY 2022-23 against MePGCL old projects namely Umiam Umtru Stage III, Umiam bridge.

Table 53 : Approved Depreciation of MePGCL Old projects for True up of FY 2022-23

Sl.no	Particulars	Amount in Cr
1	GFA as on 31.03.2022	50.46
2	Additions during FY 2022-23	1.30
3	Retirements	0.02
4	Closing GFA	51.74
5	Average Assets for FY 2022-23	51.10
6	90% of Average Assets	45.99
7	Deprecation at 5.28% (45.99*5.28%)	2.43
8	Average Grants Available (26.65 + 41.47)/2	34.06
9	Less: Dep on Grants (34.06*5.28%)	1.80
10	Net Depreciation (sl.no.7-Sl.no.9) (2.40-1.80)	0.63
10	Add: 1/3rd Depreciation of MeECL	0.08
11	Net Depreciation	0.71

Commission approves depreciation at Rs. 0.71 Crore for MePGCL Old Projects for True up of FY 2022-23.

6.4 Return on Equity

Petitioner's Submission

MePGCL submitted that the opening equity has been considered 30% of the GFA in accordance with the Regulation 27 of the 2014 Tariff Regulations. The rate of return on equity as been considered as 14% in accordance with the provisions of 2014 Tariff Regulations. The calculation of Return on Equity for Old Stations of MePGCL (Including Sonapani) is tabulated below:

Table 54 : Return on Equity for Old Plants & Sonapani for FY 2022-23 (Projected)

Particular	Amount (Rs Cr.)
Opening Equity	89.66
Equity Addition	89.59
Closing Equity	89.63
Average Equity	14%
Rate of Return on Equity	12.55

MePGCL requested the Commission to approve the return on equity for Old Stations of MePGCL (Including Sonapani) as Rs. 12.55 Cr for FY 2022-23

Commission's Analysis

Return on equity shall be computed as per Regulation 31 on the equity base determined in accordance with regulation 27 read with 28.10 and shall not exceed 14%.

Table 55 : Approved ROE for MePGCL Old projects for FY 2022-23

Sl. no	Particulars	Amount in Cr
1	GFA as on 31.03.2022	50.46
2	Additions during FY 2022-23	1.30
3	Retirements	0.02
4	Closing GFA	51.74
5	Average Assets for FY 2022-23	51.10
6	Less: Grants Available (26.65 + 41.47)/2	34.06
7	Net GFA	17.04
8	30% Equity on Net GFA	5.11
9	30% equity considered for FY 2021-22	11.13
10	Average Equity	8.12
11	ROE at 14%	1.14

Commission approves Return on Equity at Rs.1.14 Crore for True up of FY 2022-23.

6.5 Interest and Finance Charges

Petitioner's Submission

Interest on loan has been computed as per the provisions of Regulations 27 and Regulation 32 of the 2014 Tariff Regulations and methodology detailed out in Chapter 2. The weighted average rate of interest has been computed on the actual loans running as tabulated below:

Table 56 : Interest and Finance Charges for Old Plants including Sonapani (Projected)
(Rs.Cr)

S No	Name of Loan	Opening Balance	Drawal	Repayment	Closing Loan	Average Loan	Interest as Per SOA	ROI
1	State Government Loans	260.34	0.00	0.00	260.34	260.34	12.19	4.68%

The calculation of the interest on loan is tabulated below:

Table 57 : Calculation of Interest on Loan for OLD STATIONS OF MEPGCL (INCLUDING SONAPANI)
for FY 2022-23

Particular	Amount
Opening Loan	209.22
Cumulative Repayment	0.00
Net Normative	209.22
Addition	0.89
Repayment	0.00
Closing Loan	210.11
Average Loan	209.66
WAROI	4.68%
Interest on Loan	9.82
Financing Charges	0.00
Total IOL	9.82

MePGCL requested the Commission to approve interest on loan as Rs.9.82 Cr. for FY 2022-23

Commission's Analysis

Regulation 32.1 of MSERC MYT Regulations 2014 specifies that-

32.1-Interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the schedule of loan repayment, terms and conditions of loan agreements, bond or debenture and the lending rate specified therein.

Provided that the outstanding loan capital shall be adjusted to make it consistent with the loan amount determined in accordance with regulation 27.

No outstanding loan capital is pending for computation of interest and finance charges for FY 2022-23

As per the note no.16 of audited accounts, no fresh borrowings reported against MePGCL old projects, the interest and finance charges claimed for True up shall not be considered.

The interest on loan capital shall be eligible for determination of Tariff as per Regulations and 1/3rd interest cost projected against MeECL for other than capital works shall not be considered.

Commission considers no interest cost shall be admissible against MePGCL old projects for True up of FY 2022-23.

6.6 Operation and Maintenance Expenses

Petitioner's Submission

Regulation 56 of MSERC Tariff Regulations, 2014 provides for Operation and Maintenance Expenses and is reproduced as under:

"56 (7) "In case of hydro generating stations declared under commercial operation on or after 01/04/2009, O&M expenses shall be fixed at 2% of the original project cost (excluding cost of rehabilitation and resettlement works) and shall be subject to annual escalation at 5.72% for the subsequent years."

The total O&M expenses in the books of accounts of MePGCL pertains to all the projects. Since, the O&M expenses of MLHEP, NUHEP and Lakroh projects are determined on normative basis, as per the settled methodology adopted in previous years, MePGCL has calculated the O&M expenses for Old station by reducing the O&M expenses as per the books of accounts by the summation of the O&M expenses claimed for other three stations.

Table 58 : O&M Expenses for Old Plants including Sonapani for FY 2022-23 (Projected)

(Rs. In Cr)

Particulars	Amount as per SOA	O&M Claimed for MLHEP	O&M Claimed for NUHEP	O&M Claimed for Lakroh
Employee Expenses				
Salaries and wages	78.72			
Gratuity Expenses	3.43			
Leave Encashment Expenses	12.73			
Pension Expenses	25.17			
Contribution to provident and other funds	2.89			
Staff welfare expenses				
Apportionment of Employee Benefit Expenses (from Holding Company)	11.92			
Total Employee Expenses	134.86			
Less Employee Capitalized	5.34			
Net Employee Expenses	129.52			
1/3rd of Employee Expenses (MeECL)	1.62			
R&M Expenses				
Buildings	0.85			
Plant and Equipment	8.25			
Hydraulic Works	0.82			
Civil Works	0.55			
Lines & Cables	0.09			
Vehicles	0.10			
Furniture and Fixtures	0.01			
Office equipment	0.07			
Lubricants and Consumable Stores	0.20			
Total R&M Expenses	10.95			
A&G Expenses				
Insurance Charges	6.29			
Rent, Rates and Taxes	0.01			
Telegram, Postage, Telegraph and Telex charges	0.05			
Training, conveyance and vehicle running expenses	2.02			
Printing and stationery expenses	0.08			
Auditors' remuneration	0.05			
Consultancy Charges	0.00			
Technical fees	0.00			
Books & Periodicals	0.00			
Fees and subscription expenses	0.00			
Advertisement charges	0.08			
Legal and professional charges	0.32			
Meghalaya State Electricity Regulatory	0.15			

Particulars	Amount as per SOA	O&M Claimed for MLHEP	O&M Claimed for NUHEP	O&M Claimed for Lakroh
Commission (MSERC) Fees				
Electricity and Water Charges	0.03			
Lab Testing Expenses	0.00			
Staff Advance written off	0.00			
Interest written off	0.00			
Bank Charges	0.00			
Entertainment expenses	0.00			
Miscellaneous expenses	0.06			
Total A&G Expenses	9.14			
Less: Other Expenses Capitalized	0.67			
Net R&M and A&G Expenses	19.42			
1/3 of Other Expenses of MeECL	0.950			
Total O&M Expenses	151.50	37.42	18.63	0.90
O&M Expenses for Old Plants Including Sonapani	94.55			

MePGCL requested Commission to approve the O&M Expenses for Old Stations of MePGCL (Including Sonapani) for FY 2022-23 as Rs. 94.55 Cr.

MePGCL would like to submit that as per the directions of the Commission the actuarial valuation has been completed for FY 2023-24 and the terminal benefits have been claimed in the instant Petition accordingly.

Hence, MePGCL requested the Commission to allow the terminal liabilities included in the Employee expenses in the above table.

Commission's Analysis

As per Regulation 56.1 O&M expenses shall mean the total of all expenditure under the following heads:

- (a) Employee Cost
- (b) Repairs and Maintenance
- (c) Administration and General Expenses.

Regulation 56.7 specifies:-

In case of hydro generating stations declared under commercial operation on or after 01/04/2009, O&M expenses shall be fixed at 2% of the original project cost (excluding cost of

rehabilitation and resettlement works) and shall be subject to annual escalation at 5.72% for the subsequent years.

The O&M expenses for FY 2021-22 was approved at Rs.35.62 Crore. Thus O&M expenses for FY 2022-23 shall be at Rs.37.66 Crore.

Petitioner has projected apportionment of Employee benefit expenses of Holding Company for Rs.11.92 Crore which includes Rs.3.82 Crore towards pension, Gratuity and Leave encashment expenses which shall be met from the Trust funds.

Apportionable R&M and A&G expenses are allowed for True up of FY 2022-23.

Table 59 : Approved O&M Expenses for True up of FY 2022-23 for MePGCL old projects

Particulars	Amount in Crore
O&M expenses	37.66
Add: Apportionment of Employee Benefit Expenses of MeECL	9.72
Add: 1/3 rd R&M Expenses of MeECL	0.34
Add: 1/3 rd Adm&General Expenses of MeECL	0.61
Total O&M Expenses	48.33

Commission approves O&M expenses at Rs.48.33 Crore for True up of FY 2022-23.

6.7 Interest on Working Capital

Petitioner's Submission

As per Regulation 34.1(iii) of 2014 Tariff Regulations:

“In case of hydro power generating stations, working capital shall cover:

Operation and maintenance expenses for one (1) month;

Maintenance spares at the rate of 15% of O & M expenses escalated at 6% from the date of commercial operation; and

Receivables equivalent to two (2) month of fixed cost:

Provided that in case of own generating stations, no amount shall be allowed towards receivables, to the extent of supply of power by the Generation Business to the Retail Supply Business, in the computation of working capital in accordance with these Regulations. “

The SBI Advance Rate as on 01.04.2022 comes out to be Rs. 12.30%. Accordingly, the calculation of interest on working capital is tabulated below:

Table 60 : Interest on Working Capital for FY 2022-23 (Projected)

S No	Particular	Amount (In Rs. Cr.)
1	O&M Expenses for 1 Month	7.88
2	Maintenance Spares	15.03
3	Receivables	23.26
	Total Working Capital	46.17
4	Rate of Interest	0.12
5	Interest on Working Capital	5.68

Commission's Analysis

As per the Regulations 34.1(iii) *interest on working capital shall be allowed on the following components for determination of Tariff.*

- *O&M Expenses for one (1) month*
- *Maintenance Spares at 15% of O&M expenses escalated at 6%*
- *Receivables equivalent to two (2) months of Fixed cost*

The Interest on working capital is computed as depicted in the table below

Table 61 : Computation of Interest on Working Capital of MePGCL old projects for True up FY 2022-23
(Rs. Cr)

S.No	Particulars	FY 2022-23
1	O&M expenses for one month excl. MeECL cost (37.66/12)	3.14
2	Maintenance spares @ 15% of O&M expenses (37.66*15%*6%)	5.99
3	Receivables equivalent to two months of Fixed cost (34.67*2/12)	5.78
4	Total Working Capital Requirements (4=1+2+3)	14.91
5	SBI PLR as on 1st April of the respective Financial Year (%) (e)	12.30%
6	Interest on Working Capital (6=4*5)	1.83

Commission approves Interest on working capital for MePGCL old projects at Rs.1.83 Crore for True up of FY 2022-23.

6.8 SLDC and Connectivity Charges

As per Regulation 59.1 of MSERC MYT Regulations, SLDC charges as determined by the commission shall be considered as expenses for determining generation Tariff.

Commission considers SLDC charges at RS. 1.94 Crore as expense as claimed in the ARR for True up of FY 2022-23

6.9 Prior Period Expenses

The Prior Period Expense for MePGCL Old Plants including Sonapani for FY 2022-23 treated as -NIL-.

6.10 Non Tariff and Other Income

Commission's Analysis

Petitioner has reported Other Income at Rs.14.33 Crore vide note no.25 of SoA which include amortization Grant for Rs.13.04 Crore.

The 1/3rd Other income reported vide note no.22 of MeECL SoA amounted at Rs.3.12 Crore.

Summing up of the Non Tariff and Other income amounted at Rs.17.45 Crore.

Commission approves Non Tariff and Other income at Rs.17.45 Crore for True up of FY 2022-23

6.11 Revenue from Operations

Petitioner's Submission

The revenue from sale of power from Old Stations of MePGCL (Including Sonapani) based on the ARR approved by the Commission is worked out as Rs. 131.33 Cr.

MePGCL requests the Commission to approve the revenue as Rs. 131.33 Cr..

Commission's Analysis

Commission considers Revenue from Operations at. Rs.131.33 Crore as submitted by the MePGCL for True up of FY 2022-23.

6.12 Accrued Terminal Benefits

Petitioner's Submission

MePGCL submitted that as per the directions of the Commission it has done the actuarial valuation for the terminal benefits. The terminal liabilities for the period from 2013 to 2022-23 after considering the payment of Rs. 860 Cr made to the trust comes out to be Rs. 2441.39 Cr which has been accounted for as Actuarial Loss in the FY 2022-23 in the books of accounts of MePDCL, MePGCL, MePTCL and MeECL as under:

Company	Amount in Rs. Cr
MeECL	21.15
MePDCL	1272.22
MePGCL	749.84
MePTCL	398.17
Total	2441.39

MePGCL submitted that the terminal benefits are an integral part of the employee expenses and are ought to be recovered through tariff.

However, MePGCL also takes the cognizance of the fact that the liabilities accrued for the period of 10 years cannot be allowed by the Commission in one year as that would result in substantial tariff shock.

In view of the above MePGCL would like to propose that the terminal liabilities that have been accrued in 10 years may be allowed in 15 equal installments without any carrying cost. Hence MePGCL proposes an additional recovery of Rs.49.99 Cr for FY 2022-23 and Rs.0.47 Cr on account of the recovery of terminal benefits of MeECL.

MePGCL would also like to submit that the amount of recovery of the accrued liabilities shall be over and above the annual contribution towards terminal benefits. Also since these are not the actual O&M expenses MePTCL would not claim the said expenses for computation of working capital and escalation of O&M expenses.

Accordingly, MePGCL requested the Commission to allow the additional recovery of Rs. 50.46 Cr in 2022-23.

Accordingly, the total Gap of FY 2022-23 comes out to be Rs.201.75 Cr.

Commission's Analysis

As already notified in the True up order for FY 2019-20,

“The Meghalaya Power Sector Reforms and Transfer Scheme,2010, in its provisions laid down in clause 9, state that the Holding company, MeECL will be responsible for setting up a pension Trust Fund and it will also take necessary action to operate it, maintain it and ensure progressive funding of the pension Trust Fund. All benefits of retired MeECL employees

relating to pension and all other terminal benefits of retired employees are to be met from this Trust Fund. This is a statutory provision.”

Para 6 (9) (i to iv) of the Meghalaya Power Sector Transfer Scheme 2010 provides;

“(i) The funds and trusts established for and existing on the date of transfer relating to pension, provident fund, gratuity, leave encashment and all other terminal benefits including for the retired Personnel of the Board shall be vested under the control of MeECL in such manner as the State Government may notify for the purpose.

(ii) MeECL shall be responsible to ensure that the Terminal Benefit Trusts including Pension, Gratuity and Leave encashment, etc. of the Board personnel are progressively funded in regard to the unfunded part to meet the pension, gratuity and leave encashment payments pertaining to the years of service rendered by the personnel of the Board including retired personnel in the Board as determined as per actuarial valuation to be done for the purpose or;

(iii) In the event of any shortfall of funds with the trusts at any point of time relating to the period prior to the Date of Transfer, the State Government shall pay the shortfall of the required funds to meet the ongoing outflow on annual basis;

(iv) MeECL shall be responsible to ensure that the contribution to the Trusts relating to personnel related funds, for the services after the effective date of transfer, of their respective personnel are made as required from time to time.”

The petitioner shall take action, to discharge the liability of Pension, Gratuity, leave encashment etc., as per the Transfer Scheme provision.

6.13 Aggregate Revenue Requirement for Old Stations of MePGCL (Incl. Sonapani) for FY 2022-23

Petitioner's Submission

Based on the computation of the individual components of ARR for Old Stations of MePGCL (Including Sonapani) as detailed out in above paragraphs the ARR and Gap/(surplus) for OLD STATIONS OF MEPGCL (INCLUDING SONAPANI) is tabulated below:

Table 62 : Aggregate Revenue Requirement for Old Stations of MePGCL (Including Sonapani) for FY 2022-23 (Projected)

S No	Particular	Amount (In Cr.)
1	Depreciation	15.04
2	Return on Equity	12.55
3	O&M Expenses	94.55
4	Interest and Finance Charges	9.82
5	Interest on Working Capital	5.68
6	SLDC Charges	1.94
7	Prior Period Expenses	0.00
	Total AFC	139.57
8	Less Non- Tariff Income	4.45
	Revenue Gap/ Surplus for 2017-18	-5.07
	Revenue Gap/ Surplus for 2018-19	-79.33
	Revenue Gap/ Surplus for 2019-20	2.83
	Net AFC	53.55
9	Revenue From Operation	131.33
	Revenue Gap/ (Surplus)	-77.78

MePGCL requested the Commission to approve the ARR for Old Stations of MePGCL (Incl. Sonapani) as Rs. 139.57 Cr and Net ARR of 53.55 Cr.

Commission's Analysis

Commission has examined the petition for MePGCL old projects including Sonapani, analyzed considering the audited statement of accounts after prudent check with reference to the MSERC MYT Regulations 2014 approves the ARR for True up of FY 2022-23 as depicted in the table below.

Table 63 : Approved ARR for MePGCL Old Projects for True up of FY 2022-23

(Rs. Cr.)

Sl.No	Particulars	Filed by MePGCL	Approved for True up
1	Depreciation	15.04	0.71
2	Return on Equity	12.55	1.14
3	O&M Expenses	94.55	48.33
4	Interest and Finance Charges	9.82	0.00
5	Interest on Working Capital	5.68	1.83
6	SLDC Charges	1.94	1.94
7	Prior Period Expenses	0.00	0.00
	Total AFC	139.57	53.95
8	Less: Non- Tariff Income	4.45	17.45
	Net ARR	135.12	36.50
	Revenue Gap/ Surplus for 2017-18	-5.07	-5.07
	Revenue Gap/ Surplus for 2018-19	-79.33	-79.33
	Revenue Gap/ Surplus for 2019-20	2.83	2.83
	Net AFC	53.55	-45.07

Commission considers ARR at (-) 45.07 Crore for MePGCL old projects for True up of FY 2022-23.

7. Consolidated ARR for MLHEP, New Umtru, Lakroh MHEP and MePGCL Old Projects for FY 2022-23 True up.

Table 64 : Consolidated ARR for MLHEP, New Umtru, Lakroh and MePGCL Old Projects for True up of FY 2022-23

(Rs. Cr)

Sl. no	Particulars	MLHEP	New Umtru	Lakroh MHEP	MePGCL Old Plants	Total for MePGCL
1	Depreciation	46.24	25.68	0.48	0.71	73.11
2	Return on Equity	45.18	23.05	0.46	1.14	69.83
3	O&M Expenses	32.08	15.34	0.56	48.33	96.31
4	Interest and Finance Charges	14.44	21.75	0.44	0	36.63
5	Interest on Working Capital	3.94	2.22	0.06	1.83	8.05
6	SLDC Charges	0	0	0	1.94	1.94
	Prior Period Expenses	0.	0	0	0	
7	Total AFC	141.88	88.04	2.00	53.95	285.87
8	Less Non- Tariff Income	0	0	0	17.45	17.45
	Net ARR	141.88	88.04	2.00	36.50	268.42
9	Add: Revenue Gap/ Surplus for 2017-18	- 3.60	0	0	-5.07	-8.67
10	Add: Revenue Gap/ Surplus for 2018-19	-56.59	73.83	-	-79.33	-62.09
11	Add: Revenue Gap/ Surplus for 2019-20	-68.79	73.17	1.48	2.83	8.69
	Net AFC	12.90	235.04	3.48	-45.07	206.35

8. Consolidation of Revenue Gap/Surplus in the True up of FY 2022-23 for MePGCL

The MePGCL has filed Project wise petition for True up ARR for FY 2022-23 with the combined Audited Accounts.

MePGCL has reported Revenue from Operations at Rs. 241.67 Crore vide note no.24 of audited accounts.

Commission has analyzed the project wise claim and Revenue from operations with reference to the Regulations and Audited Accounts after prudence check the true up ARR is approved as detailed in the table below and arrived net Revenue Gap/Surplus (ARR).

Table 65 : Consolidated Revenue Gap/Surplus for MePGCL as a whole for True up of FY 2022-23

(Rs.Cr)

Sl. no	Particulars	MLHEP	New Umtru	Lakroh MHEP	MePGCL Old Projects	Total for MePGCL
1	Net ARR	12.90	235.04	3.48	-45.07	206.35
2	Less: Revenue from Operations	82.23	27.56	0.55	131.33	241.67
	Net Revenue Gap/Surplus	(-) 69.33	207.48	2.93	(-)176.40	(-)35.32

Commission approves Net Revenue Surplus at Rs. (-) 35.32 Crore for MePGCL True up of FY 2022-23 and shall be appropriated in the next Tariff Order.

Sd/-

**Shri. R.K. Soni, Principal District &
Session Judge (Retd.)
Member**

Power Purchase Bills Claimed by MePGCL for FY 2022-23

(in. Rs)

Months	Umiam -I	Umiam -II	Umiam -III	Umiam IV	Umtru Power station	Sonapani Mini Power Station	MLHEP	NUHEP	Lakroh Mini HEP	Total
Apr-22	19937551	12826523	33681030	27197039	0	725893	76350111	16939129	0	187657276
May-22	22626993	14617847	37575796	35257283	0	1125912	91929994	23995272	0	227129097
Jun-22	36580223	24614528	35901720	40931140	0	1272634	94379988	25301011	0	258981244
Jul-22	37863933	25849169	44902302	47968924	0	1235685	97393589	30102343	778587	286094532
Aug-22	30584073	20720445	43708088	49774691	0	1309132	75869624	30967975	892622	253826650
Sep-22	20117399	12939961	40874583	39502427	0	1266067	90110646	28785781	781251	234378115
Oct-22	16893501	10445970	40229301	36661937	0	1298288	81580143	26431389	795742	214336271
Nov-22	16434538	10124542	35022168	30332314	0	1138029	46375814	21735995	638154	161801554
Dec-22	17703443	10978099	32514763	28691717	0	979325	41506997	19316242	553173	152243759
Jan-23	18065876	11287933	30533148	27107499	0	906977	40361759	17904603	481650	146649445
Feb-23	15917092	9716555	28270414	25374249	0	801857	39683798	16475260	0	136239225
Mar-23	19395997	12329515	31797145	28036527	0	805221	46787379	17604210	561337	157317331
										2416654499
Total	272120619	176451087	435010458	416835747	0	12865020	822329842	275559210	5482516	2416654499