

**MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION**  
**SHILLONG**  
**CASE NO. 4/2023**

In the matter of

Petition for Approval of True-up of Generation Business for FY 2021-22

**AND**

Meghalaya Power Generation Corporation Limited (the Petitioner)

**Coram**

**Shri. P.W. Ingty, IAS (Retd), Chairman**

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

**ORDER**

(Dated:13.11.2023)

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 1<sup>st</sup> 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 2021-22 in the MYT Order dated 25.03.2021.

The Provisional ARR for 1.5 MW Lakroh HEP for FY 2019-20 and FY 2020-21 was issued on 25.03.2021.

MePGCL has filed petition for True up of business for FY 2021-22 for all the above existing projects along with audited Statement of accounts for FY 2021-22.

The petition has been admitted on 30<sup>th</sup> May 2023 and registered as case no. 4/2023.

The petitioner was asked to submit additional information and data gaps on 07.06.2023.

Petitioner has submitted the additional information/data on 04.07.2023.

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 2021-22 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, District Judge (Retd.)**  
**(Member)**

Sd/-

**Shri. P.W. Ingty, IAS (Retd)**  
**(Chairman)**

## **1. True up of Generation Business for FY 2021-22**

### **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 Performance Highlights

The initial installed capacity when the erstwhile Meghalaya State Electricity Board (MeSEB) was bifurcated from the Assam State Electricity Board (ASEB) in 1975 was 65.2 MW. With the commissioning of Stage-III HEP (1979), Stage IV HEP (1992) & Sonapani Mini Hydel and uprating of Umiam Stage-II (from 18MW to 20MW in 2012), MLHEP (3x42 MW) in 2013, New Umtru (2x20 MW) in 2017 and Lakroh (1\*1.5 MW) in 2019, the installed capacity increased to 356.2 MW.

All the Generating Stations except Sonapani Mini Hydel Project, MLHEP and Lakroh Mini Hydel Project, as indicated in the Table below are hydel power stations with the main reservoir at Umiam.

MePGCL started functioning as an independent commercial entity from 1st April 2013. The power generated by the MePGCL stations is sold to MePDCL as per the signed Power Purchase Agreements and transmitted to MePDCL through MePTCL interface points. At present, MePGCL is having 9(nine) Hydro Generating stations. The details of existing stations are mentioned below:

**Table 1 : Existing Generation Capacity**

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
	<b>Total</b>			<b>356.20</b>	

*\*Upated from 18 MW to 20 MW in FY 2011-2012*

MePGCL had commissioned 356.2 MW by the end of FY 2021-22 and all 9 (nine) stations were generating at full capacity in FY 2021-22 except Umtru Power Station. All generating

Units of Umtru Power Station could not generate on account of aging of Civil and E&M works and increase in the hydraulic head due to increase in FRL of the common reservoir after completion of NUHEP.

**Historical Energy Generation:** All the generating stations, being hydro, the annual generation depends on the rainfall for the year. It is submitted that the target energy for the old plants needs to be determined based on the actual historical generation achieved in the last 5(five) years since the plants are very old and some have even crossed their useful life and the design energy of these old plants cannot be taken as an accurate base for determination of target generation. The yearly generation of last 5 years for the generating stations is shown in the table below:

**Table 2 : Historical Gross Energy Generation (MU)**

Sl. No	Station	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
1	Umiam Stage-I	128.61	85.12	108.32	149.49	64.94
2	Umiam Stage –II	63.92	43.31	55.25	76.09	33.91
3	Umiam Stage –III	132.15	133.83	141.83	163.71	110.19
4	Umiam Stage-IV	217.48	166.61	164.50	188.32	125.26
5	Umtru Power Station	0	0	0	0	0
6	Sonapani MHP	7.47	7.12	3.59	6.08	5.53
7	Myntdu Leshka HEP	502.57	363.06	421.65	420.61	380.34
8	New Umtru HEP	167.79	179.82	181.43	229.80	160.79
9	Lakroh MHP	-	0.05	2.11	3.69	3.98
	<b>Total</b>	<b>1219.99</b>	<b>978.92</b>	<b>1078.68</b>	<b>1237.80</b>	<b>884.91</b>

### **New Generation Capacity**

In addition to the existing capacity, MePGCL is also currently executing works of Ganol Small Hydro Project and Riangdo Mini Hydel projects, which are proposed, for commissioning in FY 2022-23.

**Table 3 : Details of Upcoming Stations**

Sl No.	New Station	Design Energy (MU)	Capex Outlay (Rs. Crs.)	Debt (Rs. Crs)	Equity (Rs. Crs)	Grant (Rs. Crs)	Year of Commissioning (MM/YY)
1	Ganol SHP	67	507.71	223.11	54.62	229.98	2023-24
2	Riangdo SHP	17	33.99	11.4	2.59	20	2024-25

## 1.2 Operational Norms

The following sections outline details of operational norms for computation of energy generation for FY 2021-22 based on Tariff Regulations, 2014 or past trend as the case may be.

### 1.2.1 Normative Annual Plant Availability Factor

**Table 4 : Normative Annual Plant Availability Factor**

Sl.No.	Station Particular	Norm
(a)	Storage and pondage type plants: where plant availability is not affected by silt and	
(i)	with head variation between Full Reservoir Level (FRL) and Minimum Draw Down Level (MDDL) of upto 8 %	90%
(ii)	with head variation between FRL and MDDL of more than 8%	$(\text{Head at MDDL}/\text{Rated Head}) \times 0.5 + 0.2$
(b)	Pondage type plant	where plant availability is significantly affected by silt - 85%
(c)	Run-of-River type plants	NAPAF to be determined plant-wise, based on 10-day design energy data, moderated by past experience where available/ relevant.

Note:

- 1) A further allowance may be made by the Commission under special circumstances, e.g. abnormal silt problem or other operating conditions and known plant limitations.
- 2) A further allowance of 5 % may be allowed for difficulties in the North East Region.
- 3) In case of new hydroelectric project, the developer shall have the option of approaching the Commission in advance for further above norms.

The NAPAF's for all generating stations during FY 2021-22 as per the MSERC Tariff Regulations, 2014 are summarized below:

**Table 5 : Normative Annual Plant Availability Factor for FY 2021-22**

Station	As per actual
Umiam Stage-I	59.83%
Umiam Stage-II	85.00%
Umiam Stage-III	63.67%
Umiam Stage-IV	61.79%
Umtru	80.00%
Sonapani	45.00%
MLHEP	39.00%
NUHEP	62.60%

### Capacity Utilization Factor (CUF) for Lakroh MHP

Based on the Regulation 32 of the Meghalaya State Electricity Regulatory Commission (Terms and Conditions for determination of Tariff for Generation from Renewable Energy Sources) Regulations, 2014, CUF for Lakroh MHP is 85%. The computation of CUF is furnished as below:

$$\begin{aligned}\text{CUF (\%)} &= \frac{11.01 \times 10^6}{1.5 \times 1000 \times (100 - 1.5) / 100 \times 24 \times 365} \\ &= 85\%\end{aligned}$$

### Auxiliary Consumption and Transformation Loss:

**Table 6 : Auxiliary Consumption**

Sl. No	Station Particular	Norm
1	Surface hydroelectric power generating stations with rotating exciters mounted on the generator shaft	0.7% of energy generated
2	Surface hydroelectric power generating stations with static excitation system	1.0% of energy generated
3	Underground hydroelectric power generating stations with rotating exciters mounted on the generator shaft	0.9% of energy generated
4	Underground hydroelectric power generating stations with static excitation system	1.2% of energy generated

The Commission in the earlier orders has approved auxiliary consumption and transformation losses as per the following table:

**Table 7 : Auxiliary Consumption and Transformation Loss approved by the Commission**

Name of the Plant	Auxiliary consumption (%)	Transformation losses (%)	Total Loss (%)
Uiam Stage I	0.7	0.5	1.2
Uiam Stage II	0.7	0.5	1.2
Uiam Stage III	0.7	0.5	1.2
Uiam Stage IV	1	0.5	1.5
Umtru	0.7	0.5	1.2
Sonapani	0.7	0.5	1.2
Myntdu Leshka HEP	1	0.5	1.5
New Umtru HEP	1	0.5	1.5
Lakroh MHP	1	0.5	1.5

The Auxiliary consumption and Transformation losses, as actual for MePGCL for FY 2021-22 are furnished below:

**Table 8 : Auxiliary Consumption and Transformation Loss for FY 2021-22 (Actual)**

<b>Name of the Plant</b>	<b>Auxiliary consumption + Transformation losses (MU)</b>
Umiam Stage I	0.55
Umiam Stage II	0.20
Umiam-UmtruStage III	0.63
Umiam-Umtru Stage IV	0.85
Umtru	0.04
Sonapani	0.06
MLHEP	3.63
New Umtru HEP	1.12
Lakroh MHP	0.05

Thus, MePGCL has operated its plants efficiently and under the norms specified by the Commission and has been able to limit the auxiliary consumption for plants below the limit set by the Commission in the tariff order for FY 2021-22.

#### **Design Energy – Existing Generating Stations**

The design energy as approved by Commission for MePGCL power stations is provided in the table below:

**Table 9 : Design Energy as approved by MSERC in Tariff Order FY 2021-22**

<b>Name of Power Station</b>	<b>Design Energy (MU)</b>
Umiam Stage I	116
Umiam Stage II	46
Umiam-Umtru Stage III	139
Umiam-Umtru Stage IV	207
Umtru	39
Sonapani Mini Hydel	5
MLHEP	486
NUHEP	235
Lakroh MHP	11.01
<b>Total</b>	<b>1284.01</b>

### Computation of Energy Generation - Existing Stations:

The station-wise actual Generation approved for FY 2021-22 and actual generation are provided in the table below:

**Table 10 : Actual Generation Source Wise**

Sl. No	Approved by the Commission in Multi Year Tariff Order for FY 2021-22							Actual generation for FY 2021-22		
	Name of the Power Station	Gross Generation (MU)	Aux Cons (%)	Transformation Loss (%)	Total Loss (Aux + Transformation) (%)	Aux Cons & Transformation Loss (MU)	Net Generation (MU)	Gross Generation (MU)	Aux Cons & Transformation Loss (MU)	Net Generation (MU)
1	Umiam Stage- I	116	0.7%	0.5%	1.2%	1.39	114.61	64.92	0.55	64.37
2	Umiam Stage- II	46	0.7%	0.5%	1.2%	0.55	45.45	33.89	0.20	33.69
3	Umiam –Umtru Stage-III	139	0.7%	0.5%	1.2%	1.67	137.33	110.19	0.63	109.56
4	Umiam-Umtru Stage-IV	207	1.0%	0.5%	1.5%	3.11	203.9	125.26	0.85	124.4
5	Umtru Power Station	39	0.7%	0.5%	1.2%	0.47	38.53	0	0	0
6	Mini Hydel (Sonapani)	5	0.7%	0.5%	1.2%	0.06	4.94	5.55	0.06	5.49
7	MyntduLeshka HEP	486.23	1.0%	0.5%	1.5%	7.29	478.94	380.34	3.63	376.71
8	New Umtru HEP	235	1.0%	0.5%	1.5%	3.52	231.48	160.79	1.12	159.67
9	Lakroh MHP	11.01	1.0%	0.5%	1.5%	1.15	9.86	4.04	0.05	3.99
	<b>Total</b>	<b>1284.24</b>				<b>19.21</b>	<b>1265.04</b>	<b>884.95</b>	<b>7.13</b>	<b>877.88</b>

## **MePGCL has filed Project wise claims for True up of Business for FY 2021-22**

### **2. Regulation of O&M Expenses for all projects of MePGCL**

MePGCL was asked to submit actual breakup such as pay and allowances including apportionable holding company employee expenses for 27% increase considered including RoP impact for regulating O&M expenses for True up of FY 2021-22 in the Commission's letter dated 7<sup>th</sup> June 2023.

MePGCL submitted the breakup figures in their letter dated 4<sup>th</sup> July 2023 which is found to be reported in the audited statement of accounts for True up.

Commission had in the Tariff Order for FY 2021-22 estimated project wise O&M expenses in the MYT ARR for FY 2021-22 to FY 2023-24 for determination of Tariff for FY 2021-22.

The project wise employee expenses estimated in the ARR versus actual reported in the additional information is analyzed below. The actual reported in the additional information has been segregated project wise in the ratio of the estimated O&M expenses and arrived at admissible project wise O&M expenses as depicted in the table below.

**Table 11 : O&M Expenses of All projects for True up of FY 2021-22**

Sl. No	Particulars	MLHEP	NUHEP	Lakroh	MePGCL old projects	Total
1	As estimated in the ARR for FY 2021-22 (incl. MeECL Cost) (in Rs. Cr)	33.91	14.67	0.57	37.47	86.62
2	Percentage increase in Employee cost	39.14 %	16.94 %	0.66 %	43.26 %	3.13 %
3	R&M of MePGCL (in Rs. Cr)	7.20	2.95	-	7.24	17.39
4	<b>Total estimated O&amp;M (Sl.no.1+3)</b>	<b>41.11</b>	<b>17.62</b>	<b>0.57</b>	<b>44.71</b>	<b>104.01</b>
5	Actual employee expenses reported through Audited Accounts (incl. MeECL Cost) (in Rs. Cr)	34.96	15.14	0.59	38.64	89.33
6	Capitalization reported	(-)1.753	(-)1.753	-	(-)1.76	(-)5.26
7	Net Employee expenses considered for True up <b>(5-6)</b>	33.21	13.39	0.59	36.88	<b>84.07</b>
8	Actual R&M of MePGCL	7.20	2.95	0.00	7.24	17.39
9	Capitalization reported	(-)0.17	(-)0.17	(-)0.17	(-)0.17	(-)0.68
10	Net R&M expenses considered for True up <b>(8-9)</b>	7.03	2.78	(-)0.17	7.07	16.71
11	Actual 1/3 <sup>rd</sup> R&M of MeECL reported	0.12	0.12	0.12	0.12	0.48
12	Total R&M considered for True up <b>(10+11)</b>	7.15	2.90	(-)0.05	7.19	<b>17.19</b>
13	<b>Total O&amp;M expenses Considered for True up (Sl.no.7+12)</b>	<b>40.36</b>	<b>16.29</b>	<b>0.54</b>	<b>44.07</b>	<b>101.26</b>

The above analysis forms the basis for determination of O&M expenses for future period with an escalation of 5.72% year on year.

The MePGCL shall adopt the above figures for Regulatory process.

### **3. TRUE UP OF ARR FOR MYNTDU LESHKA H.E. PROJECT(MLHEP) FOR FY 2021-22**

#### **3.1 Capital Cost and Asset Base of MLHEP**

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

##### **3.1.1 Capital Cost of MLHEP**

Commission in its order dated 25<sup>th</sup> March 2021, had approved the GFA for old stations including Sonapani and MLHEP at Rs.1289.99 Cr for FY 2021-22.

Given below is the summary of the value assets of MLHEP for FY 2021-22 as per the segregated Statement of Accounts of MePGCL.

**Table 12 : Audited Capital Cost of MLHEP for FY 2021-22**

(Rs. Cr)					
SL No	Particulars	Value of Assets at the beginning of the year	Addition during the year	Withdrawn during the year	Asset Value at the end of the year
1	Land	23.9	0	0	23.9
2	Buildings	146.67	0	0	146.67
3	Hydraulic Works	622.91	0	0	622.91
4	Other Civil Works	122.62	0	0	122.62
5	Plant & Machinery	364.11	0	0	364.11
6	Lines & cables	4.57	0	0	4.57
7	Vehicles	0.46	0	0	0.46
8	Furniture	0.08	0	0	0.08
9	Office Equipment	0.18	0	0	0.18
	<b>Total</b>	<b>1285.51</b>	<b>0</b>	<b>0</b>	<b>1285.51</b>

##### **3.1.2 Asset Base of MLHEP**

The opening and closing GFA of MLHEP for FY 2021-22, as per the segregated Statement of Accounts of MePGCL is shown in the table below.

**Table 13 : Gross Fixed Assets (GFA) of MLHEP**

Particulars	As per petition (Rs. Cr)	As per order (pg.131) (Rs. Cr)
Opening GFA	1285.51	1287.01
Addition during the year	-	2.89
Closing GFA	1285.51	1289.90
<b>Average GFA</b>	<b>1285.51</b>	

MePGCL requests the Commission to approve Gross Fixed Assets for MLHEP as reflected in the SOA for FY 2021-22 submitted in the above table.

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

Commission has considered GFA as on 31.03.2021 for MLHEP at Rs. 1285.71 Crore in its True up order for FY 2020-21.

The asset wise breakup as approved in the True up order for FY 2021-22 is given below.

**Table 14 : Approved Gross Fixed Assets (GFA) for MLHEP for FY 2021-22**

(Rs. Cr)				
Sl No	Particulars	Value of Assets at the beginning of the year (01.04.2021)	Additions during the year	Asset Value at the end of the year (31.03.2022)
	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	<b>Total</b>	<b>1285.71</b>	<b>0.00</b>	<b>1285.71</b>

The opening balance of GFA on 01.04.2021 considered at Rs.1285.71 Crore and closing balance as on 31.03.2022 shall be at Rs.1285.71 Crore for True up of FY 2021-22.

**Commission considers capital cost of the MLHEP as approved above for FY 2021-22.**

### 3.2 Depreciation

#### Petitioner's Submission

The Commission had approved depreciation of Rs.39.56 Cr. for MLHEP and Old projects for FY 2021-22 in its tariff order (pg.143). As per the Segregated Accounts, the depreciation of MLHEP for the year FY 2021-22 is given below:

**Table 15 : Depreciation as per SOA for MLHEP for FY 2021-22 (Projected)**

(Rs. Cr)		
Particulars	As per petition	As per Order (pg.143)
Land and land rights	-	
Buildings	4.90	4.42
Hydraulic Works	32.89	29.67
Others Civil Works	4.10	3.69
Plant and Machinery	19.23	17.34
Lines and Cable Network	0.24	0.22
Vehicles	0.04	0.04
Furniture and Fixtures	0.005	0.004
Office Equipment	0.01	0.01
<b>Total</b>	<b>61.41</b>	<b>55.39</b>
<b>Average Depreciation</b>		<b>4.87%</b>
Grants available		325.04
Less: depreciation on grants		15.83
<b>Net Depreciation</b>		<b>39.56</b>

Commission arrived at Rs. 39.56 Cr as per order by considering the grant amount of Rs. 325.04 Cr. However, there is no grant for MLHEP, since all grants for MLHEP have been converted into equity. Therefore, the grants amount of Rs. 325.04 Cr as shown in the order is not clear as to how they appear here and the Commission may kindly consider for review of the same.

MePGCL requests the Commission to approve Depreciation of Rs.61.40 Cr. for FY 2021-22 as detailed below.

**Table 16 : Value Assets and Depreciation for FY 2021-22**

*(in.Rs.Lakhs)*

SI No	Particulars	Value of Assets at the beginning of the year	Additions during the year	Withdrawn during the year	Value of Assets at the end of the year	Rate of Dep	Depreciation charges for the year
1	2	3	4	5	6	7	
1	Land & Land Rights	2390.16			2390.16		
2	Buildings	14667.11			14667.11	3.34	489.88
3	Hydraulic Works	62291.44			62291.44	5.28	3288.99
4	Other Civil Works	12262.46			12262.46	3.34	409.57
5	Plant & Machinery	36410.87			36410.87	5.28 & 6.33	1922.81
6	Lines & cables	457.09			457.09	5.28	24.13
7	Vehicles	46.42			46.42	9.50	3.24
8	Furniture	7.89			7.89	6.33	0.50
9	Office Equipment	18.09			18.09	6.33	1.15
10	Assets not in use						
	<b>Total</b>	<b>1,28,551.53</b>			<b>1,28,551.53</b>		<b>6140.26</b>

### 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 2020-21 vide page no.12 shall be made effective for computation of depreciation for FY 2021-22.

Particulars	As on 1 <sup>st</sup> April 2020 (Rs. Cr)	Additions during the year (Rs. Cr)	Amortization (Rs. Cr)	Closing Grants as on 31.03.2021 (Rs. Cr)
<b>Govt Grants (note no 17.1)</b>	<b>189.69</b>	<b>2.24</b>	<b>12.89</b>	<b>179.04</b>
Grants disclosed as Equity share capital (note no.15.2)	187.64	5.59	12.89	180.34
Grants disclosed as Equity share capital (note no.15.3) for FY 2019-20	187.64	57.39	12.89	232.14
Average Grants (Rs.187.64 Cr+Rs.232.14 Cr)/2				209.89

The Grants reported vide note no.15.1 and 17.2 of SoA for Rs.21.46 Crore against NEC, PDSF and DRIP shall be appropriated in the MePGCL old projects.

The computation of depreciation shall be as depicted in the table below for True up of FY 2021-22.

**Table 17 : Computation of Depreciation for MLHEP True up for FY 2021-22**

(Rs.Cr)

Sl No	Particulars	Value of Assets at the beginning of the year (01.04.2021)	Additions during the year	Asset Value at the end of the year (31.03.2022)	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	<b>Total</b>	<b>1285.71</b>	<b>0.00</b>	<b>1285.71</b>	<b>1285.71</b>	<b>1135.62</b>		<b>55.28</b>
11	<b>Average rate of dep (55.28/1285.71)*100</b>							<b>4.30%</b>
12	<b>Avg Grants</b>					<b>209.89</b>		
13	<b>Less: Depreciation on Grants</b>							<b>9.03</b>
14	<b>Net Depreciation for True up (sl.no 10-13)</b>							<b>46.25</b>

**Commission approves Depreciation at Rs. 46.25 Crore for True up of FY 2021-22.**

### 3.3 Return on Equity

#### Petitioner's Submission

It is submitted that the return on equity is computed as per Regulation 27 and 31 of the MSERC MYT Regulations, 2014. MLHEP was funded with 30% equity component. The Commission has approved the ROE for MLHEP and Old projects for FY 2021-22 at Rs.40.47 Crore (Pg.139). However, in arriving at this figure, the Commission has taken into account the grant amount of Rs. 325.04 Cr when there is no grant involves in MLHEP. Therefore, MePGCL submits the petition for review.

As per the above provisions of MSERC MYT Regulations, 2014, and the asset base of MLHEP, the Return on Equity for MLHEP for FY 2021-22 is computed below:

**Table 18 : Return on Equity for Myntdu Leshka HEP for FY 2021-22 (Projected)**

Particulars	As per petition	Approved by MSERC (pg.139)
Audited Capital Cost of MLHEP (Rs. Cr) (a)	1285.51	40.47
Equity Considered for RoE (Rs. Cr) (b=a*30%) (30% of funding is equity)	385.65	
RoE (%) (c)	14%	
RoE (Rs. Cr.) (d=b*c)	54.00	

MePGCL requests the Commission to approve the Return on Equity of Rs. 54.00 Cr for Myntdu Leshka HEP as computed above.

#### Commission's Analysis

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

The Grants and contributions reported as per the accounts stood at Rs.209.89 Crore to be apportioned as already notified in the True up orders for FY 2020-21 dated 22.03.2023.

The Grants reported vide note no.15.1 and 17.2 of SoA for Rs.21.46 Crore against NEC, PDSF and DRIP shall be appropriated in the MePGCL old projects.

**Table 19 : Computation of Return on Equity for True up of FY 2021-22 for MLHEP**

Sl.no	Particulars	FY 2021-22
1	Average GFA / Capital Cost for FY 2021-22	1285.71
2	<b>Less:</b> Average Grants	209.89
3	Net Assets	1075.82
4	70% Debt component	753.07
5	30% Equity	322.75
6	Equity Considered for FY 2020-21	322.75
7	Average Equity for FY 2021-22	322.75
8	Return on Equity @ 14%	45.19

**Commission considers Return on Equity at Rs.45.19 Crore for True up of FY 2021-22.**

### **3.4 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 had approved O&M Expenses of Rs. 41.11 Cr for FY 2021-22. The O&M expenses of MePGCL for FY 2021-22 are shown in the table below:

**Table 20 : O&M Expenses for Myntdu Leshka HEP for FY 2021-22 (Projected)****(Rs. Cr.)**

O&M expenses	As per petition	As per Order
1. Employees benefits expenses	41.11 (as per order)	41.11
(a) Salaries and wages		
2. Other Expenses		
(a) Repairs and maintenance		
(b) Administrative and General Expenses		
<b>Total</b>	<b>41.11</b>	

MePGCL requests the Commission to approve the O&M expenses of Rs. 41.11 Cr. for MLHEP for FY 2021-22.

### 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 2020-21 was fixed at Rs.33.49 Crore. Thus the O&M expenses for MLHEP for FY 2021-22 shall be as detailed below for True up of FY 2021-22.

**Table 21 : Approved O&M Expenses for True up of FY 2021-22 for MLHEP**

Particulars	in Rs. Crore
O&M expenses	35.40
<b>Add:</b> 1/3 <sup>rd</sup> R&M of MeECL	0.12
<b>Less:</b> Capitalization reported vide note no.27&30 of SOA (1.75+0.17) Apportioned for MLHEP, NUHEP & MePGCL Old projects.	(-) 1.92
<b>Total O&amp;M expenses</b>	<b>33.60</b>

**Commission approves O&M expenses for MLHEP at Rs. 33.60 Crore for True up of FY 2021-22.**

### 3.5 Interest and Finance Charges

#### Petitioner's Submission

The Commission had considered Rs. 32.71 Cr. as Interest & Finance Charges for FY 2021-22 for MLHEP and Old projects. However, based on the Audited Statement of Accounts, MePGCL humbly requests Commission to allow Rs.51.14 Cr. towards Interest & Finance Charges for FY 2021-22 for MLHEP as shown in the following table:

**Table 22 : Interest & Finance Charges for Myntdu Leshka HEP for FY 2021-22**

Sl. No.	Particulars	Opening Balance	Rate of Interest	Addition during the year	Repayment made during the year	Closing balance	Interest Accrued
1	2	3	4	5	6	7	8
1	PFC Loan	141.33	11.75% - 12%	0.0	16.35	124.99	15.84
2	REC Loan	127.98	8.00%-12.5%	0.0	25.66	102.31	13.48
3	CBI	2.31	10.15%	0.0	4.19	0.0	0.23
4	PFC Loan 170 cr	143.02	11.75%-12.00%	0.0	16.59	126.43	15.97
5	REC Loan 60 cr	42.00	11.25%	0.0	8.27	33.72	4.87
Short Term Loan							
6	PFC (14crs)	1.44	11.50%	0.0	1.45	0.0	0.04
7	PFC (38 crs)	7.03	11.50%	0.0	7.03	0.0	0.12
8	PFC (22 crs)	13.91	11.50%	0.0	13.91	0.0	0.57
	<b>Total</b>	<b>479.02</b>		<b>0.0</b>	<b>93.45</b>	<b>387.45</b>	<b>51.14</b>

Note:- \*PW Project Works

Detailed Statement of Loans and interest accrued for MLHEP is provided at Annexure D of the segregated statement of accounts of MePGCL. It is submitted that Interest & Finance Charges are genuine and legitimate expenditure and it is humbly requests the Commission to approve the entire interest & finance charges as shown above.

The Commission in its order for approval of Capital Cost and True up of FY 2013-14 & Provisional True up for FY 2014-15 and Annual Fixed Charges and Generation Tariff for MYT Control Period FY 2015-16 to FY 2017-18 for MLHEP, has approved the loan opening balance of MLHEP at Rs. 712.88 Crore and closing balance at Rs. 720.40 Crore for FY 2013-14. It has also approved an interest of Rs. 81.57 crore for FY 2013-14. The loan approved by the Commission includes 9.95% BSE Power Bonds of Rs. 120 Crore and 11.40 % BSE Power Bonds of Rs. 50 Crore (i.e., total Rs.170 crore of Power Bonds). These bonds matured in October, 2017 and November, 2018, respectively (i.e., after 5 years and 6 years from Commercial Operation Date of the project). MePGCL had taken a loan of Rs. 170 Crore from PFC for redemption of the bonds. As per Regulation 32.1 of MSERC MYT Regulations, 2014, bond or debenture is part of loan capital.

The weighted average depreciation rate of different assets (i.e., Buildings, Hydraulic Structures, Plants & Machineries, etc.) based on the Capital cost of MLHEP of Rs. 1286.74 Cr. certified by the Statutory Auditor and as per Depreciation rates given in the Depreciation Schedule of the MSERC Regulations, 2014 at pages 84 & 85, is derived as follows:

$$\begin{aligned}
&= \frac{\overbrace{[(146.68 \times 3.34\%) + (623.60 \times 5.28\%) + (122.70 \times 3.34\%) + (364.57 \times 5.28\%) + (4.57 \times 5.28\%) +}^{\text{Buildings Hydraulic works Other civil works Plant \& Machineries Lines \& Cables}} \\
&\quad \underbrace{(0.46 \times 5.28\%)}_{\text{Vehicles}} + \underbrace{(0.08 \times 6.33\%)}_{\text{Furniture}} + \underbrace{(0.18 \times 6.33\%)}_{\text{Office Equipment}} ]}{(146.68 + 623.60 + 122.70 + 364.57 + 4.57 + 0.46 + 0.08 + 0.18)} \\
&= \frac{(4.90 + 32.93 + 4.1 + 19.25 + 0.24 + 0.024 + 0.51 + 0.24)}{1262.84} \\
&= \frac{62.19}{1262.84} \\
&= 4.92 \%
\end{aligned}$$

The weighted average depreciation rate for MLHEP's assets is, therefore, 4.92 %.

The average loan approved by the Commission for MLHEP for FY 2013-14 is Rs. (712.88 + 720.40)/2, or Rs. 716.64 Crore including the Rs. 170 Crore Power Bonds while the total equity approved was Rs. 334.87 Crore. The average loan taken from financial institutions excluding the Power Bonds is, therefore, Rs. 546.64 Crore (i.e., Rs. 716.64 Crore – Rs. 170.00 Crore). For this total loan amount of Rs. 716.64 Crore, taking the repayment period of 12 years (as allowed under Regulation 33.1 (f)) and weighted average rate of depreciation at 4.92%, the accrued depreciation which is meant for repayment of loan principal is derived as shown below:-

Total Amount = Rs. 716.64 Cr. (average loan) + Rs. 334.87 Cr. (approved equity) = Rs. 1051.64 Cr.

Depreciation for 12 years = Rs. 1051.64 Cr. x 0.0492 x 90% x 12 years = Rs. 558.80 cr.

This total depreciation of Rs. 558.80 Cr. on loans (including the Rs. 170 cr. Power Bonds) and approved equity is just sufficient to meet the principal repayment of the loans taken from financial institutions only, i.e., Rs. 546.64 crore, while only Rs. 12.16 crore will be left for repayment/redemption of the Power Bonds, assuming their maturity period at 12 years from FY 2013-14.

Since the depreciation accrued from FY 2013-14 to FY 2017-18 and FY 2018-19 when the Power Bonds become matured was much less, MePGCL was unable to meet the repayment of the bonds through depreciation which might lead to default in payment by MePGCL and breach of agreement made with all stakeholders.

MePGCL was thus compelled to avail take-out financing of Rs. 170 Crore to redeem the bonds in FY 2017-18 & FY 2018-19, which is permissible as per RBI Guidelines dated 2<sup>nd</sup> June, 2016 for Refinancing of Project Loans (Annexure E).

**As per guidelines of RBI, Refinancing 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.**

MePGCL, therefore, requests the Commission to approve the loan of Rs. 170 Crore taken for redemption of the Power Bonds and interest accrued thereon.

The Commission had approved the Capital Cost of MLHEP at Rs. 1134.28 Crore as on 31.03.2013 in its order for Approval of Capital Cost and True Up of FY 2013-14 & Provisional True Up of FY 2014-15 and AFC and Generation Tariff for MYT Control Period FY 2015-16 to FY 2017-18 for MLHEP. It has also stated that interest on loan capital shall be allowed on the outstanding balance of borrowed loans of Rs. 794.00 Crore which is 70% of the project cost of Rs. 1134.28 Crore excluding cost of infirm power (Page-65 of the order). However, it may be mentioned that the project cost of Rs. 1134.28 Crore was on accrual basis, i.e., though the expenditure is fully accounted, yet the actual payment for the full amount of Rs. 1134.28 Crore was not made due to fund constraints. Therefore, as per the books of accounts for FY 2013-14 the Commission had approved the loan opening balance of Rs. 712.88 crore and loan closing balance of Rs. 720.40 Crore (average loan being Rs. 716.64 Crore), which is less than the approved loan of Rs. 794.00 Crore. Therefore, MePGCL was losing the interest on this loan shortfall during FY 2013-14, which was a gain to the consumers.

The capital cost approved for MLHEP, the loan component approved by the Commission and actual average loan from FY 2013-14 to FY 2017-18 are shown in the table below:-

**Table 23 : Additional Loan Eligible for Take-out financing by MePGCL for MLHEP****(Rs. Crore)**

FY	Capital Cost Approved	Loan Component (@ 70% of Project Cost)	Loan Component after Principal repayment (Loan tenure of 12 Years)	Actual Average Loan (as per SOA's)	Additional Loan eligible for take-out financing	Remarks
2013-14	1134.28	794.00	727.83	716.64	1.19	As per Tariff order dated 30.03.2017 on Approval of Capital Cost and True up of FY 2013-14 & Provisional True up of FY 2014-15 And AFC and Generation Tariff for MYT Control Period FY 2015-16 to FY 2017-18
2014-15	1278.62	895.03	828.86	718.70	110.16	
2015-16	1279.11	895.38	812.49	698.73	113.76	
2016-17	1279.41	895.59	805.31	644.71	160.60	
2017-18	1279.41	895.59	794.93	520.71	274.22	

Average additional loan eligible for take-out financing by MePGCL=  $\text{Rs. } \frac{659.93}{5} \text{ Crore} = \text{Rs. } 131.99 \text{ Crore}$

5

Say = Rs. 132.00 Crore

MePGCL, therefore, is eligible for availing an average additional loan of Rs. 132.00 Crore during FY 2013-14 to FY 2017-18 as shown above. From FY 2013-14 to FY 2017-18, MePGCL had not availed this loan amount resulting in the gain to the consumers and loss to the Corporation. As stated before, the project cost of MePGCL was finalized on accrual basis, i.e., the accrued expenditure was booked in full to the project cost while the actual payment is less than the accrued expenditure because MePGCL was facing acute financial crunch and could not pay the outstanding dues of the project which were accounted in full in the project cost of MLHEP.

Regulation 32.1 which governs the interest and finance charges states as under:-

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.

Regulation 27 which governs the Debt-Equity Ratio specifies that equity in excess of 30% of the project cost shall be treated as normative loan. The loan component of the project is

fixed at 70% of the approved project cost. Therefore, in accordance with the above regulations, MePGCL is entitled to avail loan upto 70% of the approved project cost as shown in Table-17 above and can claim interest on this loan amount as permitted by the above regulations.

The Commission in its order dated 25.03.2021 on ARR for Control Period FY 2021-22 to FY 2023-24 & Generation Tariff for FY 2021-22, has stated that “any borrowings after achieving COD shall not be taken into consideration for interest Computation”.

In this connection, it may be pointed out that the Commission did not take into consideration the amount of loan which MePGCL is eligible to avail (i.e., 70% of approved project cost) as shown in Table-17 above and as permitted by Regulations 32.1 and 27 of the MSERC MYT Regulations, 2014. It has also not considered the fact that the project cost of MLHEP was arrived at on accrual basis, i.e., the accrued expenditure is more than the actual payment made on account of the fact that MePGCL was facing acute financial crisis and could not clear the outstanding dues like payment for land acquired and works completed before commissioning of the project which were lying pending for quite a number of years. It was only in FY 2017-18 that the Corporation opted to avail take-out financing of Rs. 60.00 Crore to clear the outstanding dues though it is eligible to avail an additional average loan of more than Rs. 60.00 Crore as shown in Table-17 above and as permitted by Regulations 32.1 and 27 of the MSERC MYT Regulations, 2014. This take-out financing is also in line with the RBI Guidelines dated 2<sup>nd</sup> June, 2016 for Refinancing of Project Loans (Annexure E).

MePGCL, requests the Commission to approve the take-out financing of Rs. 60 Crore and interest accrued thereon, which is in line with the RBI Guidelines for clearing the outstanding dues and as permitted by the regulations.

### **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.*

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. Further loans projected on the completed project shall not be considered.

The loans projected towards refinancing shall not be considered.

Commission considers that the closing balance of outstanding loans for FY 2020-21 shall be drawn as opening balance and repayment of 10% of outstanding capital loans shall be considered wherever necessary for computation of interest and finance charges for True up of FY 2021-22.

**Table 24 : Approved Interest on capital loans for True up of FY 2021-22**

(Rs. Cr)						
Sl.No	Loans availed for LESHKA Plant	Opening	Repayment	Closing loan	Avg loan	Interest
1	11.15%, Central Bank of India	2.31	2.31	0.00	1.15	0.13
2	11.75%, from PFC	126.83	1.84	124.99	125.91	14.79
3	11.07%, from REC	127.98	25.67	102.31	115.15	12.75
	<b>Total</b>	<b>257.12</b>	<b>29.82</b>	<b>227.30</b>	<b>242.21</b>	<b>27.67</b>

**Commission considers Interest and Finance charges at Rs.27.67 Crore for True up of FY 2021-22.**

### **3.6 Interest on Working Capital Petitioner's Submission**

In accordance with the regulations, the Interest on Working Capital for MLHEP is computed below:

**Table 25 : Interest on Working Capital for FY 2021-22 (Projected)**

Particulars	As per petition	As per Order (pg.152)	Gap
O&M expenses for one month (Rs. Cr.) (1) (41.11 Cr /12)	3.42	4.33	2.43
Maintenance spares @ 15% of O&M expenses (2)(41.11*15%*1.06)	6.54		
Receivables equivalent to two months of Fixed cost (Rs. Cr.) (3)	35.58		
Total Working Capital Requirements (Rs. Cr.) (4=1+2+3)	45.54		
SBI PLR as on 1st April of the respective Financial Year (%) (5)	14.85%		
<b>Interest on Working Capital (Rs. Cr.) (6=4*5)</b>	<b>6.76</b>		

MePGCL requests the Commission to approve the Interest on Working Capital of Rs.6.76 Cr with Gap of Rs.2.43 Crore as computed above for FY 2021-22 for MLHEP.

### 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 26 : Computation of Interest on Working Capital of MLHEP for True up of FY 2021-22**  
(Rs. Cr.)

S. No	Particulars	MLHEP Actual
1	O&M expenses for one month excl MeECL cost (35.40 /12)	2.95
2	Maintenance spares @ 15% of O&M expenses (35.40 *15%*6%)	5.63
3	Receivables equivalent to two months of Fixed cost (Rs. 152.71 *2/12 Cr.)	25.45
4	Total Working Capital Requirements (4=1+2+3)	34.03
5	SBI PLR as on 1st April of the respective Financial Year (%)	12.15 %
6	Interest on Working Capital (6=4*5)	4.13

**Commission considers Interest on Working Capital at Rs. 4.13 Crore for True up of FY 2021-22.**

### 3.7 Prior Period Items

MLHEP has -NIL- prior period expenses during FY 2021-22.

### 3.8 Non Tariff Income

The total non-tariff income for MLHEP during FY 2021-22 is -NIL-.

### 3.9 Revenue from Operations

#### Petitioner's Submission

MePGCL has received Revenue of Rs.84.66 Cr. for MLHEP from MePDCL towards sale of power for FY 2021-22.

#### Commission's Analysis

MePDCL has paid power purchase cost against MLHEP at Rs.84.66 Crore for the FY 2021-22.

The same is considered for True up of FY 2021-22.

**Commission considers Revenue from Operations at Rs.84.66 Crore for True up of FY 2021-22.**

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

#### Petitioner's Submission

The summary of Annual Fixed Cost approved by the Commission for MLHEP vis-à-vis actuals as per the Audited Statement of Accounts for FY 2021-22 is given below:

**Table 27 : Summary of Annual Fixed Cost FY 2021-22 (Projected)**

Particulars	Actual	Approved	(Rs. Cr)
			GAP/ Surplus (+)/ (-)
Depreciation	61.41	39.56	21.84
Return on Equity	54.00	40.47	13.53
O&M Expenses	41.11	41.11	0.00
Interest and Finance Charges	51.14	32.71	18.43
Interest on working capital	6.76	4.33	2.43
SLDC Charges	-	-	
Net Prior Period Items: Income (-)/ Expense	0	0.00	0
<b>Total Annual Fixed Cost (AFC)</b>	<b>214.41</b>	<b>158.18</b>	<b>56.24</b>
Less: Non-Tariff Income	-	0.014	
<b>Net AFC</b>	<b>214.41</b>	<b>158.17</b>	
AFC calculated for tariff allocated based on total approved AFC of MePGCL		98.05	
Revenue from Operation	84.66		
<b>Gap(+)/(Surplus)(-)</b>	<b>129.75</b>	<b>73.51</b>	<b>56.24</b>

MePGCL requests the Commission to pass through the gap of Rs. (+) 56.24 Cr.for MLHEP under the truing up of FY 2021-22 and to be adjusted in the ARR of FY 2024-25.

#### 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 2021-22 as depicted in the table below.

**Table 28 : Approved ARR for MLHEP for True up of FY 2021-22**

Sl.no	Particulars	Actuals	(Rs. Cr)
			Approved for True up
1	Depreciation	61.41	46.25
2	Return on Equity	54.00	45.19
3	O&M Expenses	41.11	33.60
4	Interest and Finance Charges	51.14	27.67
5	Interest on working capital	6.76	4.13
6	SLDC Charges		
7	Net Prior Period Items: Income (-)/ Expense	0	0
	<b>Total Annual Fixed Cost (AFC)</b>	<b>214.41</b>	<b>156.84</b>

**Commission approves ARR at Rs. 156.84 Crore for True up of FY 2021-22.**

#### 4. TRUE UP OF ARR FOR NUHEP for FY 2021-22

##### Petitioners' Submission

#### 4.1 Capital Cost and Funding Pattern of New Umtru HEP

##### 4.1.1 Capital Cost of New Umtru

The New Umtru HEP achieved its CoD on 1<sup>st</sup> July 2017.

The capital cost and the Assets value of New Umtru HEP for FY 2021-22 are based as per the segregated statement of accounts of MePGCL attached as Annexure D. Given below is the Gross Fixed Asset as on 31.03.2022:

Asset-wise break up of NUHEP asset base is given below:

**Table 29 : Actual Capital Cost of NUHEP for the FY 2021-22**

S. No	Name of the Asset	Value of Assets at the beginning of the year	Addition during the year	Withdrawn during the year	Value of Assets at the year
1	Land & Land rights	1.66			1.66
2	Buildings	95.16			95.16
3	Hydraulic Works	311.64			311.64
4	Other Civil Works	33.23	0.41		33.64
5	Plant & Machinery	159.93			159.93
6	Lines & Cable Network	3.62			3.62
7	Vehicles	0.04			0.04
8	Furniture & Fixtures	0.07			0.07
9	Office Equipment	0.02			0.02
10	Assets not in use	-			-
	<b>Total</b>	<b>605.38</b>	<b>0.41</b>		<b>605.79</b>

The assets value of NUHEP for FY 2021-22 in asset wise break-up is attached as Annexure D.

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

Commission had considered capital cost of the project at Rs.585.62 Crore for FY 2020-21.

**MePGCL has reported addition of the capital at Rs.0.41 Crore during FY 2021-22.**

Particulars	Rs.in Cr
Thus the capital cost of the project shall be (Rs.585.62 Cr+Rs.0.41 Cr)	586.03
Equity considered taking into account 30% of capital addition of Rs.0.41 Cr for FY 2021-22 over and above equity of Rs.164.59 Cr for FY 2020-21 + 30% of 0.41 Crore (Rs.164.59 Cr+Rs.0.12 Cr = 164.71 Cr)	164.71

#### 4.1.2 Funding Pattern of NUHEP

##### Petitioner's Submission

The New Umtru HEP was funded by a mix of Loan and Equity. The total loan amount of NUHEP is Rs. 440.30 cr. As it can be clearly seen, there is no grant component in the NUHEP project. The Govt. of Meghalaya vide Notification No.PE.73/97/vol IV/217, dated. 13<sup>th</sup> December, 2012 has notified the Equity infused by the State Govt. in NUHEP(Annexure-F)at INR 32.59 crore. The State Government has also vide Notification No.POWER.44/2011/659, dated 26<sup>th</sup> November, 2021 (Annexure G) converted grants and loans amounting to INR 132.00 crore into equity for NUHEP. The total amount of equity infused in NUHEP by the State Government is therefore INR 164.59 crore (i.e., 32.59 Cr. + INR 132.00 Cr.)

##### Commission's Analysis

Commission considers funding pattern as depicted in the table below

**Table 30 : Funding pattern for New Umtru project for FY 2021-22**

Particulars	Amount in Rs. Crore
Project Cost approved as on CoD	580.72
Equity contribution	164.71
Actual Loan Outstanding as of 31.03.2021	312.01

#### 4.1.3 Asset Base of New Umtru HEP

##### Petitioner's Submission

The opening and closing GFA of NUHEP for FY 2021-22, as per the Audited Statement of Accounts of MePGCL is shown in the table below:

**Table 31 : Gross Fixed Assets (GFA) of NUHEP**

Particulars	(Rs.Cr)
	FY 2021-22
Opening GFA	605.38
Closing GFA	605.79
<b>Average GFA</b>	<b>605.58</b>

The details of assets of NUHEP as stated above are attached as Annexure D. MePGCL requests the Commission to approve Gross Fixed Assets for NUHEP as submitted in the above table.

## Commission Analysis

Commission considers the Asset base as detailed in the table below

**Table 32 : Gross Fixed Assets (GFA) of NUHEP for FY 2021-22**

(Rs.Cr)

Particulars	FY 2021-22
Opening GFA	585.62
Additions during the Year	0.41
Closing GFA	586.03
<b>Average GFA</b>	<b>585.83</b>

## 4.2 Depreciation

### Petitioner's submission

The petitioner presents the depreciation of NUHEP for the year FY 2021-22 true up as follows:

**Table 33 : Depreciation of NUHEP for True up of FY 2021-22 (Projected)**

(Rs.Cr)

Particulars	As per petition	As per Order	Loss/ (Gain)
Land and land rights	-	-	
Buildings	3.17		
Hydraulic Works	16.4		
Others Civil Works	1.11		
Plant and Machinery	8.44		
Lines and Cable Network	0.19		
Vehicles	0.0037		
Furniture and Fixtures	0.0049		
Office Equipment	0.0012		
<b>Total</b>	<b>29.40</b>	<b>16.33</b>	<b>13.07</b>

The Commission in its order considered grant amount of Rs. 187.30 Cr for calculation of Depreciation of NUHEP. However, there is no grant for NUHEP, since all the grants has been converted into equity. Therefore, Commission may kindly consider review for considering the grant.

MePGCL, requests the Commission to approve Depreciation of Rs. 29.40 Cr for NUHEP for FY 2021-22 with a gap of Rs. 13.07 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 34 : Computation of Depreciation for NUHEP for True up of FY 2021-22**

(Rs. Cr)

Sl No	Particulars	Value of Assets at the beginning of the year (01.04.2021)	Additions during the Year	Asset Value at the end of the year (31.03.2022)	Average assets	90% of Assets	Rate of Dep	Depreciation
	1	2	3	4	5	6		7
1	Land	1.66		1.66	1.66	1.49		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	31.57	0.41	31.98	31.78	28.60	3.34%	0.95
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	<b>Total</b>	<b>585.62</b>	<b>0.41</b>	<b>586.03</b>	<b>585.82</b>	<b>527.23</b>		<b>25.66</b>

**Commission Considers Depreciation at Rs.25.66 Crore for True up of FY 2021-22.**

### 4.3 Return on Equity

#### Petitioner's submission

MePGCL submitted that the return on equity is computed as per Regulation 27 and 31 of the MSERC MYT Regulations, 2014. As per the above provisions of MSERC MYT Regulations, 2014, and the asset base of NUHEP, the Return on Equity for NUHEP for FY 2021-22 is computed as shown below:

**Table 35 : Return on Equity for New Umtru HEP (Projected)**

Particulars	FY 2021-22	Approved	Loss/(Gain)
Average Equity Base (Rs. Cr.)(a)	164.59		
Approved Loan (Rs. Cr)	440.30		
Equity based on GFA minus loan (Rs. Cr) (605.58-440.30) (a)	165.28		
30% of Capital Cost(b)	181.67		
Equity to be considered for RoE Calculations (c=lower of a and b)	165.28		
RoE (%) (d)	14%		
<b>Return on Equity (Rs. Cr.) (e=c*d)</b>	<b>23.14</b>	<b>16.52</b>	<b>6.62</b>

MePGCL requests the Commission to approve the Return on Equity of Rs. 23.14 Cr. for true up of FY 2021-22 for NUHEP with gap of Rs. 6.62 Cr. as computed above.

#### 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 2019-20 at Rs.164.59 Crore and Rs.132.00 Crore for FY 2020-21 considering the balance Rs.32.59 Crore as normative loan and interest has been allowed. Therefore opening equity considered at Rs.164.59 Crore for computation of RoE for FY 2021-22.

**Table 36 : Approved Return on Equity for True up of FY 2021-22 for NUHEP**

Sl.no	Particulars	Amount in Cr
	<b>Average GFA</b>	585.82
1	Actual Equity considered for FY 2021-22	164.71
2	Equity considered for FY 2020-21	164.59
3	Average Equity	164.65
4	<b>Return on Equity @ 14% (Sl.no.3 *14%)</b>	<b>23.05</b>

**Commission considers Return on Equity at Rs.23.05 Crore for True up of FY 2021-22.**

#### 4.4 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."

NUHEP achieved CoD after 1.07.2017 and, therefore, its O&M expenses are fixed as per Regulation 56 (7) at 2% of Project Cost. For true up, the O&M expenses are based as per order on approval of Capital cost of NUHEP.

**Table 37 : O&M Expenses for New Umtru HEP for FY 2021-22 (Projected)**

(Rs. Cr.)			
Particulars	As per true up petition	Approved	Gap/(Surplus)
Employee Benefits Expense	17.62		
Repairs and Maintenance			
Administrative and General Expenses			
<b>Total</b>	<b>17.62</b>	<b>17.62</b>	<b>0</b>

MePGCL requests the Commission to approve the O&M expenses of Rs. 17.62 Cr. for NUHEP for FY 2021-22 which is the same as in the tariff order.

##### 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 2020-21 was fixed at Rs.13.72. Thus the O&M expenses for NUHEP for FY 2021-22 shall be Rs.14.51 Crore as detailed below for True up of FY 2021-22.

**Table 38 : Approved O&M Expenses for True up of FY 2021-22 for NUHEP**

Particulars	Amount in Crore
O&M expenses	14.51
<b>Add:</b> 1/3 <sup>rd</sup> R&M of MeECL	0.12
<b>Less:</b> Capitalization reported vide note no.27&30 of SOA (1.75+0.17) Apportioned for MLHEP, NUHEP & MePGCL Old projects.	(-) 1.92
<b>Total O&amp;M expenses</b>	<b>12.71</b>

**Commission considers O&M Expenses at Rs.12.71 Crore for NUHEP True up of FY 2021-22.**

#### **4.5 Interest and Finance charges**

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

Regulation 32 read with regulation 27 of the MYT Regulations, 2014 provides the guidelines for computation of interest and finance charges. The relevant section of the regulation is reproduced below.

32 Interest and finance charges on loan capital

*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 shown in the section 5.2 (Table-22) above, loan component for Capital cost of NUHEP is Rs. 440.30 Cr and the utility is fulfilling the interest obligations as on date.

The Interest on Loan is computed by considering interest obligation for the project loan. The loan statement along with repayment schedule is shown below. This is as per the audited accounts of MePGCL (Note 16 - Financial Liabilities (Borrowings): NUHEP Head).

**Table 39 : Details of Loans for FY 2021-22 New Umtru HEP (Projected)**

(Rs. in Cr)							
Sl. No	Particulars	Opening Balance (a)	Rate of Interest (b)	Addition during the year (c)	Repayment made (d)	Closing Balance (e=a+c-d)	Interest Accrued
1	PFC Loan NUHEP	384.33	11.75% -12.00 %	0.00	32.16	352.17	44.04

The Interest on loan for NUHEP for FY 2021-22 approved by Commission is Rs. 22.43 Cr. MePGCL requests the Commission to approve Rs. 44.04 Cr as interest on loan for NUHEP in the true up for FY 2021-22 with a gap of Rs 21.61 Cr.

### Commission's Analysis

The petitioner has claimed Interest on Finance charges computed at 8.41% instead of 11.75 % and claimed at Rs.44.04 Crore for True up of FY 2021-22.

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.*

Commission had considered closing balance of outstanding loan at Rs.312.01 Crore for FY 2020-21, the same is carried forward for computation of interest and finance charges for True up of FY 2021-22.

The petitioner had projected loan drawl at Rs.440.30 Crore for execution of the NUHEP as against Rs.406.50 Crore entitled as per Regulations and has been claiming the more interest cost in the petitions for True up from FY 2017-18 to FY 2020-21.

Commission considers that loan capital eligible at Rs.406.50 Crore and has been allowing the interest cost in the True up orders from FY 2017-18 to FY 2020-21.

Accordingly the opening outstanding loan is considered at Rs.312.01 Crore for computation of Interest and Finance charges for True up of FY 2021-22.

**Table 40 : Computation of Interest and Finance charges of New Umtru HEP for FY 2021-22**

(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	312.01	11.75 %	32.16	279.85	295.93	34.77

The Petitioner has reported Capitalization of Interest and Finance cost at Rs.8.31 Crore vide note no.28 of SoA.

**Commission considers Interest and Finance charges at Rs. 26.46 crore (Rs.34.77 Cr- Rs.8.31 Cr) for True up of FY 2021-22.**

## 4.6 Interest on Working Capital

### Petitioner's submission

In accordance with the regulations, the Interest on Working Capital for NUHEP is computed below:

**Table 41 : Interest on Working Capital for FY 2021-22 (Projected)**

Particulars	As per petition	As per Order	Gap/ (Surplus)
O&M expenses for one month (Rs. Cr.) (17.62/12) (a)	1.47		
Maintenance spares @ 15% of O&M expenses (Rs. Cr) (17.62*15%*1.06) (b)	2.80		
Receivables equivalent to two months of Fixed cost (Rs. Cr.) (101.04 *2/12) (c)	19.52		
Total Working Capital Requirements (Rs. Cr.) (d=a+b+c)	23.79		
SBI PLR as on 1st April of the respective Financial Year (%) (e)	14.85%		
<b>Interest on Working Capital (Rs. Cr.) (f=d*e)</b>	<b>3.53</b>	<b>1.99</b>	<b>1.54</b>

MePGCL requests the Commission to approve the gap of Rs. 1.54 Cr on Interest on Working Capital as computed above for FY 2021-22 for NUHEP.

### 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 42 : Computation of Interest on Working Capital for True up of FY 2021-22 for NUHEP**

Sl.No	Particulars	Rs. Cr
1	O&M expenses for one month (14.51/12)	1.21
2	Maintenance spares @ 15% of O&M expenses (14.51*15%*6%)	2.31
3	Receivables equivalent to two months of Fixed cost (87.87*2/12)	14.64
4	Total Working Capital Requirements (4=1+2+3)	18.17
5	SBI PLR as on 1st April of the respective Financial Year (%)	12.15 %
6	<b>Interest on Working Capital (6=4*5)</b>	<b>2.21</b>

**Commission considers Interest on Working capital at Rs. 2.21 Crore for true up of FY 2021-22 for NUHEP.**

#### **4.7 Revenue from Operations**

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

MePGCL has received Revenue of Rs.35.65 Cr. for NUHEP from MePDCL towards sale of power for FY 2021-22 based on the AFC as per MYT order dated 25-03-21.

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

Commission considers Revenue from Generation for NUHEP at Rs.35.65 Crore for true up of FY 2021-22.

#### **4.8 Prior Period Items**

The Prior Period expenses of NUHEP for FY 2021-22 are NIL.

#### **4.9 Non Tariff Income**

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

The Non Tariff income of NUHEP for FY 2021-22 was Rs. 0.015 crore.

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

Audited accounts do not disclose any non tariff income against NUHEP.

Commission considers Non Tariff Income at Rs.0.015 Crore as submitted by the petitioner for True up of FY 2021-22.

#### 4.10 Summary of Annual Fixed Cost – New Umtru HEP

##### Petitioner's submission

The summary of Annual Fixed Cost approved by the Commission for NUHEP vis-à-vis actuals as per the Audited Statement of Accounts for FY 2021-22 is given below:

**Table 43 : Summary of Annual Fixed Cost (Approved vis-à-vis Actual) FY 2021-22 (Projected)**  
(Rs. Cr.)

Particulars	As per petition	As per Order	Loss/ (Gain)
Depreciation	29.40	16.33	
Return on Equity	23.04	16.52	
O&M Expenses	17.62	17.62	
Interest and Finance Charges	44.04	22.43	
Interest on working capital	3.53	1.99	
SLDC Charges	-	-	
<b>Total Annual Fixed Cost (AFC)</b>	<b>117.63</b>	<b>74.89</b>	
Less: Prior period expenses	-		
Less: Non-Tariff Income	(-) 0.015	0.06	
<b>Net AFC</b>	<b>117.615</b>	<b>74.83</b>	
<b>AFC as per order for calculation of tariff based on the total AFC allocated station-wise</b>		<b>44.64</b>	
Revenue from operations	35.65		
<b>Gap/ (Surplus)</b>	<b>81.965</b>	<b>39.18</b>	<b>42.785</b>

MePGCL requests the Commission to pass through the additional gap of (+) Rs.42.78 Cr. for NUHEP under the truing up of FY 2021-22 to be adjusted in the AFC of FY 2024-25.

##### 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 2021-22 as depicted in the table below.

**Table 44 : Approved ARR for NUHEP for True up of FY 2021-22**

(Rs. Cr.)

Sl.No	Particulars	As per Tariff Order	Actuals	Approved for True up FY 2021-22
1	Depreciation	16.33	29.40	25.66
2	Return on Equity	16.52	23.04	23.05
3	O&M Expenses	17.62	17.62	12.71
4	Interest and Finance Charges	22.43	44.04	26.46
5	Interest on working capital	1.99	3.53	2.21
6	SLDC Charges	-	-	
	<b>Total Annual Fixed Cost (AFC)</b>	<b>74.89</b>	<b>117.63</b>	<b>90.09</b>
7	<b>Less: Non-Tariff Income</b>	<b>0.06</b>	<b>(-) 0.015</b>	<b>0.015</b>
	<b>Net AFC</b>	<b>74.83</b>	<b>117.615</b>	<b>90.08</b>

Commission approves ARR at Rs. 90.08 Crore for True up of FY 2021-22.

## 5. TRUE UP OF ARR FOR LAKROH MHP for FY 2021-22

### 5.1 Gross Fixed Assets & Depreciation

#### Petitioner's Submission

The GFA of Lakroh MHP for FY 2021-22, as per the Statement received from Accounts wing is Rs. 26.48 Cr.

**Table 45 : Value of Asset and Depreciation for Lakroh MHP for FY 2021-22 (Projected)**

(Rs. in Cr.)

Name of Assets	Value of Asset at the beginning of the year (Actual)	Addition during the year (Actual)	Withdrawn during the year (Actual)	Value of Asset at the end of the year (Actual)	Rate of Depreciation (%)	Depreciation		
						True up Petition	Approved as per order	Gap/ (Surplus)
Land and land rights	0.0027	-		0.0027				
Buildings	2.44	-		2.44	3.34	0.08		
Hydraulic Works	9.62	0.006		9.68	5.28	0.50		
Others Civil Works	2.21	0.26	0.004	2.43	3.34	0.07		
Plant and Machinery	10.01	0.29	0.000	10.31	5.28	0.54		
Lines and Cable Network	1.41	0.16		1.57	5.28	0.07		
Vehicles	-			-	9.5	0		
Furniture and Fixtures	0.001			0.001	6.33	0.007		
Office Equipment	0.0096			0.0009	6.33	0.006		
Assets not in use	-			-				
<b>Total</b>	<b>25.72</b>	<b>0.79</b>	<b>0.004</b>	<b>26.48</b>		<b>1.28</b>	<b>0.33</b>	<b>0.95</b>

MePGCL requests the Commission to allow a true up gap of Rs.0.95 Cr as Depreciation gap for Lakroh MHP in the true up of FY 2021-22

#### Commission's Analysis

##### GFA

Commission had approved the closing GFA at Rs.22.41 Crore for the True up of FY 2020-21.

MePGCL has filed capitalization for Rs.0.79 Crore during the FY 2021-22. Whereas breakup of capital addition as filed in the additional information dated 04.07.2023 amounted to Rs.0.27 Crore only against the Lakroh MHP. The same has been considered for true up by splitting the asset wise breakup as furnished in the additional information.

Particulars	Amount in Cr
Opening GFA	22.41
Additions during FY 2021-22	0.27
Retirements	0.004
Closing GFA	22.68

**Commission considers GFA at Rs.22.68 Crore for True up of FY 2021-22**

## Depreciation

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 46 : Approved Depreciation for Lakroh MHP for FY 2021-22**

(Rs. Cr.)								
Name of Assets	Value of Asset at the beginning of the year	Additio n during the year	Retire-ments	Value of Asset at the end of the year	Average Assets	90% of assets	Rate of Depre- ciation (%)	Deprecia- tion for FY 2021- 22
Land and land rights		-						-
Buildings	2.36			2.36	2.36	2.12	3.34 %	0.07
Hydraulic Works	9.25	0.07		9.32	9.28	8.35	5.28 %	0.44
Others Civil Works	2.14	0.04	0.004	2.18	2.16	1.94	3.34 %	0.06
Plant and Machinery	7.29	0.00		7.29	7.29	6.56	5.28 %	0.35
Lines and Cable Network	1.36	0.16		1.52	1.44	1.30	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	22.41	0.27		22.68	22.54	20.29		0.99
Govt Grants and Contributions					11.75		4.38%	
Less: Depreciation on Grants								0.51
Net Depreciation								0.48

**Commission considers depreciation at Rs. 0.48 Crore for True up of FY 2021-22.**

## 5.2 Return on Equity

### Petitioner's Submission

The equity- debt ratio is determined as per MSERC (Terms and Conditions for determination of tariff for generation from Renewable Energy Sources), Regulations, 2014

*"17. Debt – Equity Ratio*

*(1). For determination of generation tariff, the debt-equity ratio shall be 70:30....."*

**Table 47 : Return on Equity for Lakroh MHP for FY 2021-22 (Projected)**

(Rs. Cr)			
Particulars	True up Petition	Approved as per order	Gap/(Surplus)
Opening GFA	25.72		
Closing GFA	26.48		
Average GFA	26.10		
Grant	11.75		
GFA without Grant	14.35		
Debt (70% GFA)	10.04		
Equity (30% of GFA)	4.31		
RoE (%)	14%		
<b>Return on Equity (in Rs. Cr.)</b>	<b>0.60</b>	<b>0.32</b>	<b>0.28</b>

MePGCL requests the Commission to allow true up gap of Rs.0.28Cr. as ROE for FY 2021-22 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 48 : Approved Return on Equity for Lakroh MHP for True up of FY 2021-22**

Particulars	In Rs. Cr
Opening GFA	22.41
Addition during the year	0.27
Closing GFA	22.68
Average GFA	22.54
<b>Less: Govt. Grants</b>	<b>11.75</b>
<b>Net GFA</b>	<b>10.79</b>
Debt (70% GFA)	7.55
Equity for FY 2020-21	2.99
Equity (30% of GFA)	3.24
Average Equity	3.12
RoE (%)	14%
<b>Return on Equity</b>	<b>0.44</b>

**Commission considers Return on equity at Rs.0.44 Crore for True up of FY 2021-22.**

### 5.3 Operation and Maintenance Expenses

#### Petitioner's Submission

Since the segregated O&M expenses of Lakroh MHP are not available, the O&M expense for Lakroh MHP is calculated as approved by the Commission in its order dated 25-03-2021, ie., at Rs.0.57 crore.

**Table 49 : O&M expenses for Lakroh MHP for FY 2021-22 (Projected)**

(Rs.Cr)

O & M expenses for Lakroh MHP	True up Petition	Approved as per order	Gap/(Surplus)
O&M expenses for FY 2021-22 (escalated at 5.72%)	0.57	0.57	-

MePGCL requests the Commission to allow the O&M expenses of Rs.0.57 Cr for Lakroh MHP for FY 2021-22.

#### 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 2020-21 was fixed at Rs.0.50. Thus the O&M expenses for Lakroh MHP for FY 2021-22 shall be Rs.0.53 Crore as detailed below for True up of FY 2021-22.

**Table 50 : Approved O&M Expenses for True up of FY 2021-22 for Lakroh MHP**

Particulars	Amount in Crore
O&M expenses	0.53
<b>Add:</b> 1/3 <sup>rd</sup> R&M of MeECL	0.12
<b>Less:</b> Capitalization reported vide note no. 30 of SOA (0+0.17) Apportioned for MLHEP, NUHEP, Lakroh MHP & MePGCL Old projects.	(-) 0.17
<b>Total O&amp;M expenses</b>	<b>0.48</b>

**Commission Considers O&M expenses at Rs.0.48 Crore for True up of FY 2021-22.**

## 5.4 Interest and Finance charges

### Petitioner's Submission

Commission has approved the Interest & Finance Charges of Rs. 0.63 Cr. Based on the segregated Accounts for Lakroh MHP, MePGCL requests the Commission to allow Rs.0.62 Cr. towards Interest & Finance Charges for FY 2021-22 as shown in the following table:

**Table 51 : Details of loan for Lakroh MHP for FY 2021-22**

(Rs. Cr)							
SI No	Particulars	Opening Balance	Rate of interest	Addition during the year	Repayment during the year	Closing balance	Interest Accrued
1	2	3	4	5	6	7	8
1	PFC Loan Lakroh	6.17	10.15%-10.75%	0	0.41	5.76	0.62
	<b>Total</b>	<b>6.17</b>			<b>0.41</b>	<b>5.76</b>	<b>0.62</b>

### 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 2020-21 is now considered for computation of Interest cost for FY 2021-22.

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

**Table 52 : Computation of Interest on loan for FY 2021-22 for LAKROH MHP**

(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	10.50% PFC Loan NUHEP	4.96	0.00	0.41	4.55	4.75	10.50%	0.50

**Commission considers Interest and Finance charges at Rs.0.50 Crore as claimed by the petitioner for True up of FY 2021-22.**

## 5.5 Interest on Working Capital

### Petitioner's Submission

The IWC is calculated on normative basis as provided in the Regulations. The Interest on Working Capital for true up of FY 2021-22 for Lakroh MHP is presented in the table below:

**Table 53 : Interest on Working Capital for FY 2021-22 (Projected)**

(Rs. In Cr.)				
Sl. No.	Particulars	True up Petition	Approved as per order	Gap/(Surplus)
1	O&M Expense for 1 month	0.047	0.05	0.04
2	Maintenance Spare at 15% O&M*1.06	0.09		
3	Receivables for 2 months	0.52		
4	Total Working Capital (1+2+3)	0.66		
5	SBI short term PLR	14.85%		
6	<b>Interest on Working Capital</b>	<b>0.09</b>		

MePGCL requests the Commission to allow a true up gap of Rs.0.04 Cr. as Interest on Working Capital for true up of FY 2021-22 for Lakroh MHP.

### 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

Commission approves interest on working capital as per Regulations as depicted below.

**Table 54 : Computation of Interest on Working Capital for FY 2021-22 for Lakroh MHP**

(Rs. Cr.)		
S.no	Particulars	Lakroh
1	O&M expenses for one month excl. MeECL cost (0.53/12)	0.04
2	Maintenance spares @ 15% of O&M expenses (0.53*15%*6%)	0.08
3	Receivables equivalent to two months of Fixed cost ( 1.90*2/12)	0.32
4	Total Working Capital Requirements (4=1+2+3)	0.44
5	SBI PLR as on 1st April of the respective Financial Year (%)	12.15 %
6	<b>Interest on Working Capital (Rs. Cr.) (6=4*5)</b>	<b>0.05</b>

**Commission considers interest on working capital at Rs.0.05 Crore for Lahroh MHP for True up of FY 2021-22.**

## 5.6 Prior Period Items & Non-Tariff Income

The Prior Period Expense & Non-Tariff Income for Lakroh MHP for FY 2021-22 is -NIL-.

## 5.7 Revenue from Operations

### Petitioner's Submission

As per the segregated statement received from Accounts wing, the revenue for FY 2021-22 is Rs.0.80 Cr for Lakroh MHP.

### Commission's Analysis

Commission considers Revenue from Operations at. Rs.0.80 Crore as claimed by the MePGCL for True up of FY 2021-22.

## 5.8 Annual Fixed Cost and Revenue Gap/Surplus for FY 2021-22

### Petitioner's Submission

The summary of Annual Fixed Cost approved by the Commission for Lakroh MHP vis-à-vis actuals as per the Statement of Accounts for FY 2021-22 is given below:

**Table 55 : Summary of Annual Fixed Cost (Approved vis-à-vis Actual) FY 2021-22 (Projected)**

Particulars	Actual as per Statement received from Accounts	Approved	Gap/ (Surplus)
a	b	c	d=(b-c)
Depreciation	1.28		
Return on Equity	0.60		
O&M Expenses	0.57		
Interest and Finance Charges	0.62		
Interest on working capital	0.09		
SLDC Charges			
Net Prior Period Items: Income (-)/ Expense			
<b>Total Annual Fixed Cost (AFC)</b>	<b>3.16</b>		
Less: Non-Tariff Income			
<b>Net AFC</b>	<b>3.16</b>	<b>1.90</b>	
<b>Revenue from operation</b>	<b>0.80</b>		
<b>GAP/SURPLUS</b>	<b>2.36</b>	<b>1.10</b>	<b>1.26</b>

MePGCL requests the Commission to pass through the additional gap of Rs. 1.26 Cr. under the truing up of FY 2021-22 for Lakroh MHP to be adjusted in the Tariff for FY 2024-25.

### 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 2021-22 as depicted in the table below.

**Table 56 : Approved ARR for LAKROH MINI HEP for True up of FY 2021-22**

(Rs. Cr.)

Sl.No	Particulars	Claimed for True up	Approved for True up
1	Depreciation	1.28	0.48
2	Return on Equity	0.60	0.44
3	O&M Expenses	0.57	0.48
4	Interest and Finance Charges	0.62	0.50
5	Interest on working capital	0.09	0.05
6	SLDC Charges		
7	Net Prior Period Items: Income (-)/ Expense		
	<b>Total Annual Fixed Cost (AFC)</b>	<b>3.16</b>	<b>1.95</b>
8	Less: Non-Tariff Income	0.00	0.00
	<b>Net AFC</b>	<b>3.16</b>	<b>1.95</b>

**Commission approves Annual Fixed Cost at Rs.1.95 Crore for True up of FY 2021-22 for Lakroh MHP.**

## 6. TRUE UP OF ARR FOR MePGCL OLD PROJECTS INCLUDING SONAPANI FOR FY 2021-22

### 6.1 Gross Fixed Assets

#### Petitioner's Submission

The GFA of MePGCL filed in the petition is the asset based without IND AS adjustment for FY 2021-22 (as per Note 2 of SOA). The GFA of Old stations including Sonapani is arrive after deduction GFA of MLHEP, MUHEP, Lakroh from the GFA of MePGCL.

As per the Directives in the Tariff order for FY 2023-24, the assets of Sonapani as on 31.03.2022 is Rs. 9.72 Cr., this is as per the historical assets of Sonapani MHP submitted to the Commission on 07.06.2022. It may be mentioned that the Commission has approved the GFA of Sonapani MHP at Rs. 10.60 Cr in the tariff order for FY 2013-14, which is the capital project cost of Sonapani MHP. Therefore, MePGCL requests the Commission to kindly consider the capital cost of Sonapani MHP as Rs. 10.60 cr. as approved capital cost.

The opening and closing GFA of Old Plants including Sonapani for FY 2021-22, is the total GFA of MePGCL as per the Audited Statement of Accounts minus GFA of MLHEP, NUHEP & Lakroh as per the segregated accounts of MePGCL is shown in the table below:

**Table 57 : Gross Fixed Assets of MePGCL's Old Plants (Including Sonapani) for FY 2021-22**

(Rs. In Cr.)					
Particulars	MePGCL as a whole	MLHEP	NUHEP	Lakroh MHP	MePGCL's Old Plants (including Sonapani)
	(a)	(b)	(c)	(d)	(e=a-b-c-d)
Opening GFA	2346.31	1285.52	605.38	25.72	429.69
Closing GFA	2348.01	1,285.52	605.79	26.48	430.22
<b>Average GFA</b>	<b>2347.16</b>	<b>1285.52</b>	<b>605.58</b>	<b>26.10</b>	<b>429.96</b>

a: As per abstract from MePGCL's SOA for FY 2021-22 without Ind AS adjustment (Annexure D)

b: MLHEP asset as per section 4.0 of the petition

c: NUHEP asset as per Section 5.0 of the petition

d. Lakroh asset as per Section 6.0 of the petition

### Commission's Analysis

The MePGCL has projected addition of the Capital cost at Rs.1.74 Crore and retirements at Rs.0.004 Crore vide note no.02 in the audited statement of accounts for FY 2021-22.

Project Wise break up of Addition of Assets during FY 2021-22 as reported in the table below:

**Table 58 : Project Wise Addition of Assets during FY 2021-22**

Projects	Rs. In Cr
New Umtru	0.41
Lakroh	0.27
MePGCL Old projects (incl. O&M nature of Capital addition)	0.08
<b>Total addition of Capital cost</b>	<b>0.76</b>

The petitioner was asked to furnish the details of asset wise project wise breakup for the Capital addition projected in the audited accounts in the Commission's letter dated 07.06.2023.

MePGCL has submitted in their letter dated 04.07.2023, a lump sum asset wise figures for Rs.1.74 Crore and stated that details of the above is attached at Annexure-I.

On verification of Annexure-I, the details of asset wise project wise additions are amounted to Rs.0.76 Crore only in all 22 items and also the details include Rs.0.03 Crore representing O&M nature of Capitalization.

Commission considers capital addition as furnished for Rs.0.76 Crore shall be appropriated for the True up of FY 2021-22.

The addition reported for FY 2021-22 considered at Rs.0.08 Crore as per the details furnished by the petitioner.

Commission had approved closing GFA of MePGCL Old projects including sonapani at Rs. 51.45 Crore for the FY 2020-21.

In view of the petitioner's additional information furnished on 17<sup>th</sup> April 2023 the capital cost of the sonapani project is considered at Rs.9.72 Crore instead of 10.79 Crore being allowed for computation of ARR elements.

The GFA of MePGCL as a whole is considered for True up of FY 2021-22 as depicted in the table below.

**Table 59 : Approved Gross Fixed Assets of MePGCL as whole for True up of FY 2021-22**

(Rs. Cr.)

Particulars	MePGCL as a whole	MLHEP	NUHEP	Lakroh MHP	MePGCL's Old Plants (including Sonapani)
	(a)	(b)	(c)	(d)	(e=a-b-c-d)
Opening GFA	1945.20	1285.71	585.62	22.41	50.38
Additions	0.76	0	0.41	0.27	0.08
Closing GFA	1945.96	1285.71	586.03	22.68	50.46
<b>Average GFA</b>	<b>1945.58</b>	<b>1285.71</b>	<b>585.82</b>	<b>22.55</b>	<b>50.42</b>

**MePGCL shall ensure to quote the above approved GFA figures in all the future petitions and documents along with asset wise breakup.**

## 6.2 Depreciation

### Petitioner's Submission

The Commission had considered Rs.0.43 Cr. towards Depreciation for Old projects FY 2021-22. Now based on the actual figures and assets capitalized, MePGCL requests the Commission to allow the actual depreciation of Rs. 13.46 Cr. for true up of FY 2021-22 for Old Plants & Sonapani as shown below:

**Table 60 : Depreciation of Assets for FY 2021-22 (Projected)**

(Rs. Cr.)

Particulars	MePGCL (a)	Leshka (b)	New Umtru (c)	Lakroh (d)	Old Plants + Sonapani (a-b-c-d)	Approved by MSERC
Depreciation on Land and land rights	-	-	-	-	-	<b>The approved amount of depreciation was Rs. 0.43 Crore vide order dated 25-03-2021, for Old projects</b>
Depreciation on Buildings	8.38	4.90	3.17	0.08	0.23	
Depreciation on Hydraulic Works	50.49	32.89	16.4	0.50	0.70	
Depreciation on Others Civil Works	6.04	4.10	1.11	0.07	0.76	
Depreciation on Plant and Machinery	39.76	19.23	8.44	0.54	11.55	
Depreciation on Lines and Cable Network	0.59	0.24	0.19	0.07	0.09	
Depreciation on Vehicles	0.06	0.04	0.0037	-	0.017	
Depreciation on Furniture and Fixtures	0.11	0.005	0.0049	0.007	0.09	
Depreciation on Office Equipment	0.10	0.01	0.0012	0.006	0.08	
Apportioned Depreciation from MeECL	0.09	-	-	-	0.09	
<b>Total</b>	<b>105.54</b>	<b>61.40</b>	<b>29.40</b>	<b>1.28</b>	<b>13.46</b>	

Depreciation schedule for the MePGCL's assets is as per abstract from the SOA of MePGCL for FY 2021-22. Depreciation schedule for MLHEP, NUHEP and Lakroh is as per sections 4,5 & 6, respectively. Depreciation for Old plants including Sonapani is arrived at after adjusting depreciation of NUHEP, MLHEP and Lakroh in MePGCL's total Depreciation.

## 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.*

Commission had issued directive no.02 of Tariff Order for FY 2023-24 to file the asset wise breakup for the capital cost of Umiam Stage IV and Sonapani SHP.

The Petitioner has submitted the asset wise breakup in their letter dated 17<sup>th</sup> April 2023 only for Sonapani project as depicted below.

Sl.No	Name of the Asset	Value of the asset at the beginning of the year (in Rs. Lakhs)
1	Land and Land rights	-
2	Buildings	106.96
3	Hydraulic Works	320.74
4	Other Civil works	64.48
5	Plant and Machinery	452.37
6	Lines and Cable Network	22.62
7	Vehicles	-
8	Furniture & Fixtures	2.04
9	Office Equipment	2.33
10	Assets not in use	
	<b>Total</b>	<b>971.54</b>
		<b>9.72 Crore</b>

Whereas Depreciation had been allowed considering the Sonapani project cost at Rs.10.79 Crore.

Thus there has been excess allowance on account of depreciation considering the excess project cost for Rs.1.07 Crore from FY 2013-14 to FY 2020-21.

<b>Excess Project Cost (Rs.1.07 Crore)</b>	<b>90% on Rs.1.07 Cr (in Rs. Cr)</b>	<b>Rate of Dep @ 5.28% (in Rs. Cr)</b>
FY 2013-14	0.96	0.05
FY 2014-15	0.96	0.05
FY 2015-16	0.96	0.05
FY 2016-17	0.96	0.05
FY 2017-18	0.96	0.05
FY 2018-19	0.96	0.05
FY 2019-20	0.96	0.05
FY 2020-21	0.96	0.05
<b>Total</b>		<b>0.40</b>

As already notified through the Directive, Commission considers claw back of excess depreciation allowed for Rs.0.40 Crore from FY 2013-14 to FY 2020-21 as computed above shall be set off in the present true up orders in the depreciation. While capital cost being reduced for Rs.50.38 Crore (51.45 Cr – 1.07 Cr) for FY 2021-22 for computation of depreciation.

Petitioner has reported Govt. Grants and Contributions at Rs.21.46 Crore vide note no.15.2 for Survey and investigation and preparation of DPR for the SSELIM (2x40 MW) and note no. 17.2 for PSDF, DRIP and Renovation and modernization of the E&M package for Umiam, Umtru Stage III & IV.

**Table 61 : Approved Depreciation of MePGCL Old projects for True up of FY 2021-22**

<b>Sl.no</b>	<b>Particulars</b>	<b>Amount in Cr</b>
1	GFA as on 31.03.2021 (51.45 Cr – 1.07 Cr)	50.38
2	Additions during FY 2021-22	0.08
<b>3</b>	<b>Total</b>	<b>50.46</b>
4	Average Assets for FY 2021-22	50.42
5	90% of Average Assets	45.38
6	Deprecation at 5.28%	2.40
7	Average Grants Available (22.46 + 4.19)/2	13.32
8	<b>Less: Dep on Grants (13.32*5.28%)</b>	<b>0.70</b>
<b>9</b>	<b>Depreciation (Sl.no 6-8)</b>	<b>1.70</b>
10	Less: Excess allowed depreciation from FY 13-14 to FY 2020-21	0.40
<b>11</b>	<b>Net Depreciation allowed for FY 2021-22</b>	<b>1.30</b>

**Commission approves depreciation at Rs. 1.30 Crore for MePGCL Old Projects for True up of FY 2021-22.**

### 6.3 Return on Equity

#### Petitioner's Submission

As per Audited Statement of Accounts for MePGCL for FY 2021-22, the average equity base has been considered as Rs. 918.77 Cr. Based on this, Equity base for Sonapani and old plants is Rs. 50.50 Cr as shown in the tables below:

**Table 62 : Return on Equity for MePGCL FY 2021-22**

Particulars	MePGCL
Equity Share Capital as on 31st March 2021 (Rs. Cr) (Note 14 of MePGCL Accounts)	803.95
Addition during the year (Rs. Cr.)	114.82
Equity Share Capital as on 31st March 2022 (a) (Rs. Cr) Note 14 of MePGCL Accounts)	918.77
RoE (%) (b)	14%
<b>Return on Equity (in Rs. Cr.) (c=a*b) (INR Cr)</b>	<b>128.63</b>

**Table 63 : Return on Equity for Old Plants & Sonapani for FY 2021-22 (Projected)**

Particulars	MePGCL (a)	Leshka HEP (b)	New Umtru HEP (c)	Lakroh (d)	Old Plants + Sonapani (a-b-c)	As per Order
Equity considered for true up (1) (Rs. Cr)	918.77	385.65	164.59	4.31	364.22	The approved amount of ROE was Rs. 0.43 Cr. vide order dated 25-03- 2021, for Old Projects
RoE (%) (2)	14%	14%	14%	14%	14%	
<b>Return on Equity (Rs. Cr.) (3=1*2)</b>	<b>128.63</b>	<b>54.00</b>	<b>23.04</b>	<b>0.60</b>	<b>50.99</b>	

MePGCL would like to submit that the issue of Return on Equity of MeECL & its subsidiaries vs. methodology of MSERC (APTEL Case no 46 of 2015& 367 of 2017) is still subjudice. The utility is reiterating the fact that the claim of MePGCL is in line with the MSERC MYT Regulations. For the sake of brevity, MePGCL is not reiterating the grounds and the justification for the claim here since the matter is subjudice. Hence, the utility would like to retain its methodology as per the past petitions & stand on equity base determination which is in line with MSERC Regulations and the Transfer Notification Scheme of the State Government.

MePGCL requests the Commission to approve the Return on Equity of Rs. 50.99 Cr for true up of FY 2021-22 for Old plants including Sonapani as computed above.

### 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%.*

As analyzed in the Depreciation chapter, the capital cost of MePGCL old projects has been reduced by Rs.1.07 Crore. Accordingly the capital cost for computation of RoE shall be considered at Rs.50.38 Crore (Rs.51.45 Cr – 1.07 Cr) and Return on Equity shall be allowed for True up of FY 2021-22 as depicted below.

<b>Excess Project Cost (Rs.1.07 Crore)</b>	<b>30% Equity (in Rs. Cr)</b>	<b>Rate of RoE @ 14 % (in Rs. Cr)</b>
FY 2013-14	0.32	0.04
FY 2014-15	0.32	0.04
FY 2015-16	0.32	0.04
FY 2016-17	0.32	0.04
FY 2017-18	0.32	0.04
FY 2018-19	0.32	0.04
FY 2019-20	0.32	0.04
FY 2020-21	0.32	0.04
<b>Total</b>		<b>0.32</b>

**Table 64 : Approved ROE for MePGCL Old projects for FY 2021-22**

<b>Sl. no</b>	<b>Particulars</b>	<b>Amount in Cr</b>
1	GFA Considered as on 31.03.2021 (Rs.51.45 Cr – 1.07 Cr)	50.38
2	Additions during the year	0.08
3	Closing GFA as on 31.03.2022	50.46
4	Average GFA	50.42
5	<b>Less:</b> Grants Available (22.46 +4.19)/2	13.32
6	Net GFA	37.10
7	30% equity considered for FY 2021-22	11.13
8	30% equity considered in FY 2020-21	14.78
9	Average Equity	12.96
10	<b>ROE at 14%</b>	<b>1.81</b>
11	<b>Less:</b> Excess allowed RoE from FY 13-14 to FY 2020-21 for Sonapani	<b>0.32</b>
12	<b>Net Return on Equity</b>	<b>1.49</b>

**Commission approves Return on Equity at Rs.1.49 Crore for True up of FY 2021-22.**

## 6.4 Operation and Maintenance Expenses

### Petitioner's Submission

Commission had approved Rs. 44.71 Cr. towards O&M Expenses for AFC of FY 2021-22 for MePGCL's Old Plants and Sonapani and MLHEP. The O&M expenses of MePGCL as a whole based on the audited statement of Accounts for FY 2021-22 are shown in the tables below:

Based on the total MePGCL's O&M expenses, the O&M expenses for Old Plants including Sonapani is arrived at by adjusting the O&M expenses for NUHEP, MLHEP and Lakroh, as shown in the table below:

**Table 65 : O&M Expenses for Old Plants including Sonapani for FY 2021-22 (Projected)**

(Rs. In Cr)

Particulars	For MePGCL (including apportionment MeECL)	For Myntdu-Leshka	For NUHEP	For Lakroh MHP	Total Claim for Old Plants & Sonapani (including MeECL apportioned)	Approved in the True up order for Old Stations (Sonapani)	Additi onal claim
	(a)	(b)	(c)		(d)=a-b-c		
Employee Cost	i).Salaries & wages: MePGCL=76.47MeECL=12.85 ii).Contribution to provident and other funds: MePGCL=1.45 MeECL=0.06 iii). <b>Apportionment Terminal Benefit:</b> <b>56.59+18.86/3=62.88*</b> Total= 153.71	<b>41.11</b>	<b>17.62</b>	<b>0.57</b>	<b>116.41</b>	<b>46.79</b>	<b>69.62</b>
R&M Expenses	14.18+(0.19*0.33)=14.24						
A&G Expenses	7.34+(1.27*0.33)=7.76						
<b>Total</b>	<b>175.71</b>						

*\*Apportionment of Terminal Benefit of MePGCL for FY 2021-22*

MePGCL requests the Commission to allow Rs. 116.41 Cr of O&M expenses for Old Plants including Sonapani as shown in the table above in the true up of FY 2021-22.

### 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.*

Commission had approved O&M expenses for MePGCL old projects at Rs.38.64 Crore considering the 27% RoP impact in the ARR for FY 2021-22 provisionally subject to True up.

The O&M expenses for FY 2020-21 was fixed at Rs.33.69 Crore. Thus O&M expenses for FY 2021-22 shall be at Rs.35.62 Crore as detailed below.

Petitioner has reported capitalization of Employee benefit expenses for Rs.5.26 Crore vide note no.27 of SoA and Rs.0.68 crore vide note no. 30 of SoA towards other expenses totaling to Rs.5.94 Crore which shall be deducted from the project wise admissible O&M expenses.

**Table 66 : Approved O&M Expenses for True up of FY 2021-22 for MePGCL old projects**

Particulars	Amount in Crore
O&M expenses	35.62
<b>Add:</b> 1/3 <sup>rd</sup> R&M of MeECL	0.12
<b>Less:</b> Capitalization reported vide note no.27&30 of SOA (1.75+0.17) Apportioned for MLHEP, NUHEP & MePGCL Old projects.	(-) 1.93
<b>Total O&amp;M expenses</b>	<b>33.81</b>

**Accordingly the O&M expenses considered for True up at Rs.33.81 Crore for FY 2021-22.**

## 6.5 Interest and Finance Charges

### Petitioner's Submission

Based on the MePGCL's Statement of Accounts for FY 2021-22 (Note 16.9) and MeECL's Statement of Accounts for FY 2021-22 (Note 23& 23.1), MePGCL requests the Commission to allow Rs. 18.27 Cr. towards Interest & Finance Charges as shown below.

**Table 67 : Interest and Finance Charges for Old Plants including Sonapani (Projected)**  
(Rs.Cr)

Particulars	MePGCL SOA (a)	MeECL SOA (b)	Total Old Plants c =(a+b )	As per Order
Amount of interest paid	1.39	16.88 (33% of 51.66)	18.27	The approved amount of Interest and finance charges was Rs.5.10 Cr. vide order dated 25-03-2021, for Old Projects.

Detailed Statement of all the Loans along with the purpose of loans is given in Note 16.7 of MePGCL 's SOA and Note 23 & 23.1 of MeECL's SOA for FY 2021-22.

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

The interest on capital loans shall be eligible for determination of Tariff as per Regulations and 1/3<sup>rd</sup> 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 2021-22.**

## 6.6 Interest on Working Capital

### Petitioner's Submission

Commission had allowed Rs. 2.20 Cr. for MePGCL's Old Plants & Sonapani and MLHEP towards Interest on Working Capital for AFC of FY 2021-22. As per the relevant norms for working capital provided in MSERC MYT Regulations 2014, MePGCL requests the Commission to allow Rs.7.59 Cr. as Interest on Working Capital for true up of FY 2021-22 for old plants & Sonapani.

**Table 68 : Interest on Working Capital (Rs. Cr.) FY 2021-22 (Projected)**

Sl.No.	Particulars	MePGCL	As per Order
1	O&M Expense for 1 month (A)	9.70	The approved amount of Interest on working capital was Rs. 2.19 Cr. vide order dated 25-03-2021, for Old projects.
2	Maintenance Spare at 15% O&M (B)	18.51	
3	Receivables for 2 months (c)	34.75	
4	Total Working Capital (A+B+C)	62.96	
5	SBI short term PLR as on March 2023	14.85%	
6	<b>Interest on Working Capital</b>	<b>9.35</b>	

### 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 69 : Computation of Interest on Working Capital of MePGCL old projects for True up FY 2021-22**  
(Rs. Cr)

S.No	Particulars	FY 2021-22
1	O&M expenses for one month excl. MeECL cost (35.62/12)	2.97
2	Maintenance spares @ 15% of O&M expenses (35.62*15%*6%)	5.66
3	Receivables equivalent to two months of Fixed cost ( 21.01*2/12)	3.50
4	Total Working Capital Requirements (4=1+2+3)	<b>12.13</b>
5	SBI PLR as on 1st April of the respective Financial Year (%) (e)	12.15%
6	Interest on Working Capital (6=4*5)	<b>1.47</b>

**Commission considers Interest on working capital for MePGCL old projects at Rs.1.47 Crore for True up of FY 2021-22.**

### 6.7 SLDC and Connectivity Charges

#### Petitioner's Submission

As per the Audited Statement of Accounts (Note 26) of MePGCL for FY 2021-22, SLDC's charge is Rs. 1.85 Cr. Hence, MePGCL requests Commission to consider Rs. 1.85 Cr for True up of FY 2021-22 as SLDC's charges.

### Commission's Analysis

Regulation 59.1 of MSERC MYT Regulations 2014 specifies that-

*Connectivity charges and SLDC charges as determined by the Commission shall be considered as expenses. SLDC and transmission charges paid for energy sold outside the state shall not be considered as expenses for determining generation tariff.*

**Commission considers SLDC connectivity charges at Rs.1.85 Crore as claimed by the MePGCL for True up of FY 2021-22.**

### 6.8 Prior Period Items

As per the Audited Statement of Accounts, MePGCL the Prior Period Expense for MePGCL's old plants & Sonapani is NIL.

**Commission considers Prior Period Items -NIL- for True up of FY 2021-22.**

## 6.9 Non-Tariff and Other Income

### Petitioner's Submission

Based on the Statements of Accounts for MePGCL, the utility requests Commission to approve Rs.14.79 Cr. as Non tariff income for true up of FY 2021-22 for Old Plants & Sonapani as shown below:

**Table 70 : Non Tariff Income for FY 2021-22 (Projected)**

Particulars	MePGCL (a)	Leshka (b)	New Umtru (c)	Lakroh (d)	Old Plants + Sonapani (e=a-b-c-d)
Non tariff income (Rs.Cr)	14.69	0	0.015	0	<b>14.675</b>

### Commission's Analysis

Commission considers Non Tariff and Other Income at Rs.14.70.Crore as reported in note no.25 of audited accounts which includes Rs.12.92 Crore towards Amortization of grants. The Other income from MeECL is reported to be at Rs.2.74 Crore vide note no.21 of SOA. Summing up of the above breakup, the non tariff and other income amounts to Rs.17.44 Crore for True up of FY 2021-22.

**Commission considers Non Tariff and Other income at Rs.17.44 Crore for True up of FY 2021-22.**

## 6.10 Revenue from Operations

### Petitioner's Submission

As per the Audited Statement of Accounts of MePGCL for FY 2021-22, MePGCL had received Revenue of Rs. 144.50 Cr.

**Table 71 : Revenue from Operations for Old Plants including Sonapani (Projected)**

(Rs in Cr)					
Particulars	MePGCL (a)	Leshka (b)	New Umtru (c)	Lakroh (d)	Old Plants + Sonapani (e=a-b-c-d)
Revenue from Operations for True Up	144.50	84.65	35.66	0.80	23.38

### Commission's Analysis

The MePGCL has disclosed Revenue from Operations at Rs.144.50 Crore for FY 2021-22 vide note no.24 of audited statement of Accounts.

**Commission considers Revenue from Operations shall be considered at Rs.144.50 Crore for True up of FY 2021-22.**

## 6.11 Annual Fixed Cost for MePGCL old projects for FY 2021-22

### Petitioner's Submission

**Table 72 : Summary of Annual Fixed Cost (Approved vis-à-vis Actual) FY 2021-22 (Projected)**

Particulars	True Up of Old + Plants	Approved AFC (Old Plants + Sonapani)	GAP/SURPLUS (+)/(-) (Rs.Cr)
Depreciation	13.46	0.43	13.18
Return on Equity	50.99	0.79	49.71
O&M Expenses	116.41	44.71	2.08
Interest and Finance Charges	18.27	5.10	13.17
Interest on working capital	9.35	2.19	2.09
SLDC Charges	1.85	1.85	0
Net Prior Period Items: Income (-)/ Expense	-		
<b>Total Annual Fixed Cost (AFC)</b>	<b>210.33</b>	<b>55.07</b>	<b>80.23</b>
Less: Non-Tariff Income	14.675	9.78	
<b>Net AFC</b>	<b>195.66</b>	<b>45.29</b>	<b>150.36</b>
Revenue from operations	23.38		
<b>Revenue Gap/ (Surplus)</b>	<b>172.275</b>	<b>21.91</b>	<b>150.36</b>

MePGCL requests the Commission to pass through the additional gap of (+) Rs. 150.36 Cr. under the truing up of FY 2021-22 for Old Plants including Sonapani to be adjusted in the ARR of FY 2024-25.

### 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 Regulations approves the ARR for True up of FY 2021-22 as depicted in the table below.

**Table 73 : Approved ARR for MePGCL Old Projects for True up of FY 2021-22**

(Rs. Cr.)

Sl.No	Particulars	Claimed for True up	Approved for True up
1	Depreciation	13.46	1.30
2	Return on Equity	50.99	1.49
3	O&M Expenses	116.41	33.81
4	Interest and Finance Charges	18.27	0
5	Interest on working capital	9.35	1.47
6	SLDC Charges	1.85	1.85
7	Net Prior Period Items: Income (-)/ Expense		
	<b>Total Annual Fixed Cost (AFC)</b>	<b>210.33</b>	<b>39.92</b>
8	Less: Non-Tariff Income	14.67	17.44
	<b>Net AFC</b>	<b>195.66</b>	<b>22.48</b>

Commission considers ARR at 22.48 Crore for MePGCL old projects for True up of FY 2021-22.

**7. Consolidated ARR for MLHEP, New Umtru, Lakroh MHEP and MePGCL Old Projects for FY 2021-22 True up.**

**Table 74 : Consolidated ARR for MLHEP, New Umtru, Lakroh and MePGCL Old Projects for True up of FY 2021-22**

(Rs. Cr)						
Sl. no	Particulars	MLHEP	New Umtru	Lakroh MHEP	MePGCL Old Plants	Total for MePGCL
1	Depreciation	46.25	25.66	0.48	1.30	73.69
2	Return on Equity	45.19	23.05	0.44	1.49	70.17
3	O&M Expenses	33.60	12.71	0.48	33.81	80.60
4	Interest and Finance Charges	27.67	26.46	0.50	0	54.63
5	Interest on working capital	4.13	2.21	0.05	1.47	7.86
6	SLDC Charges	0.00	0.00	0.00	1.85	1.85
	<b>Total Annual Fixed Cost (AFC)</b>	<b>156.84</b>	<b>90.09</b>	<b>1.95</b>	<b>39.92</b>	<b>288.80</b>
7	<b>Less: Non-Tariff Income</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>17.44</b>	<b>17.45</b>
	<b>Net ARR</b>	<b>156.84</b>	<b>90.08</b>	<b>1.95</b>	<b>22.48</b>	<b>271.35</b>

**8. Consolidation of Revenue Gap/Surplus in the True up of FY 2021-22 for MePGCL**

The MePGCL has filed Project wise petition for True up ARR for FY 2021-22 with the combined Audited Accounts.

MePGCL has reported Revenue from Operations at Rs. 144.50 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 75 : Consolidated Revenue Gap/Surplus for MePGCL as a whole for True up of FY 2021-22**

(Rs.Cr)						
Sl. no	Particulars	MLHEP	New Umtru	Lakroh MHEP	MePGCL Old Projects	Total for MePGCL
1	Net ARR	156.84	90.08	1.95	22.48	271.35
2	<b>Less: Revenue from Operations</b>	<b>84.65</b>	<b>35.66</b>	<b>0.80</b>	<b>23.38</b>	<b>144.50</b>
	<b>Net Revenue Gap/Surplus</b>	<b>72.19</b>	<b>54.42</b>	<b>1.15</b>	<b>(-) 0.90</b>	<b>126.85</b>

**Commission approves Net Revenue Gap at Rs. 126.85 Crore for MePGCL True up of FY 2021-22 and shall be appropriated in the next Tariff Order.**

Sd/-  
Shri. R.K. Soni, District Judge (Retd.)  
(Member)

Sd/-  
Shri. P.W. Ingty, IAS (Retd.)  
(Chairman)

**Power Purchase Bills Claimed by MePGCL for FY 2021-22**

(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-21	8723211.38	5088298.95	14723250.64	13918757.96		340815.46	42859226.84	15157201.86	554330.07	<b>101365093</b>
May-21	8195840.52	4708650.12	14352154.90	13761444.00		391685.60	48370184.33	17054156.43	774001.08	<b>107608117</b>
Jun-21	2016075.63	1170329.53	4284070.27	3914221.92		162153.76	124336534.06	28745836.38	1409122.86	<b>166038344</b>
Jul-21	2258816.34	1340410.27	5321932.64	4813225.65		198518.42	119066440.62	37425367.13	1495123.55	<b>171919835</b>
Aug-21	2697042.19	1659620.02	5965071.27	5610590.95		208560.95	130660788.79	40097131.88	1487040.34	<b>188385846</b>
Sep-21	2971889.78	1835980.54	6303521.47	6092784.00		196455.55	77882255.38	42680660.50	1345563.67	<b>139309111</b>
Oct-21	3012415.66	1860591.85	6272067.56	5991310.76		197730.33	80313890.42	39585220.97	1004167.05	<b>138237395</b>
Nov-21	2919177.75	1811398.00	5829137.17	4961114.46		159260.56	45492174.61	31030081.82	0.00	<b>92202344</b>
Dec-21	3113493.98	1949707.52	5314359.92	4520201.12		143097.18	43503042.67	28070954.34	0.00	<b>86614857</b>
Jan-22	3091792.06	1935479.00	5243224.55	4517267.31		140820.55	42913043.25	27152707.62	0.00	<b>84994334</b>
Feb-22	2824865.91	1756631.41	4856500.12	4212212.00		126025.48	42608059.11	25369346.12	0.00	<b>81753640</b>
Mar-22	3028898.00	1921424.00	4654156.00	4108889.00		110919.00	48573389.00	24196859.82		<b>86594535</b>
										<b>1445023451</b>
<b>Total</b>	<b>44853519.20</b>	<b>27038521.21</b>	<b>83119446.51</b>	<b>76422019.13</b>	<b>0</b>	<b>2376042.84</b>	<b>846579029.10</b>	<b>356565524.90</b>	<b>8069348.62</b>	<b>1445023451</b>