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# **ABBREVIATIONS**

A&G	Administration & General			
ARR	Aggregate Revenue Requirement			
APTEL	Appellate Tribunal For Electricity			
CAGR	Compound Annual Growth Rate			
CD	Contract Demand			
CoD	Commercial Operation Date			
CERC	Central Electricity Regulatory Commission			
CGS	Central Generating Stations			
CoS	Cost of Supply			
CWIP	Capital Work In Progress			
DE	Debt Equity			
EHT	Extra High Tension			
FY	Financial Year			
GOM	Government of Meghalaya			
GFA	Gross Fixed Assets			
HT	High Tension			
KV	Kilo Volt			
KVA	Kilo Volt Amps			
KVAh	Kilo Volt Ampere hour			
KW	Kilo Watt			
kWh	kilo Watt hour			
LT	Low Tension			
MVA	Million Volt Amps			
MU	Million Unit			
MW	Mega Watt			
MYT	Multi Year Tariff			
MeECL	Meghalaya Energy Corporation Limited			
MePGCL	Meghalaya Power Generation Corporation Limited			
MePDCL	Meghalaya Power Distribution Corporation Limited			
MePTCL Meghalaya Power Transmission Corporation Limited				
MSERC Meghalaya State Electricity Regulatory Commission				
ROE	Return on Equity			
SLDC	State Load Despatch Centre			
SBIMCLR	State Bank of India Marginal Cost Lending Rate			

# MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION 1<sup>ST</sup> Floor (Front Block Left Wing), New Administrative Building Lower Lachumiere, Shillong-793001 East Khasi Hills District, Meghalaya

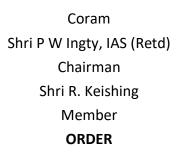
# Case No. 02/2021

## In the matter of

Petition for Approval of Aggregate Revenue Requirement for 3<sup>rd</sup> MYT Control Period FY 2021-22 to FY 2023-24 and Generation Tariff for FY 2021-22 for Meghalaya Power Generation Corporation Limited (MePGCL) for Old plants and Sonapani, MLHEP, New Umtru Project and Lakroh mini HEP under the MSERC (Multiyear Tariff) Regulations, 2014.

#### AND

Meghalaya Power Generation Corporation Limited ...... the Petitioner (herein after referred to as MePGCL)



# (Date:25.03.2021)

- 1. The Meghalaya Power Generation Corporation Limited (herein after referred to as MePGCL) is engaged in the business of power generation in the state of Meghalaya.
- 2. Section 61 & 62 of the Electricity Act, 2003 (herein after referred to as "Act") requires Generation Utility to file an application for determination of Tariff before the Appropriate Commission in such a manner and along with fee as specified by the Appropriate Commission through Regulations. In compliance MePGCL has filed the Petition under the MSERC (Multiyear Tariff) Regulations 2014 as amended in sub-Regulation 1.4 of 2014 (November 2017) and further amended on 18.06.2018 read with section 86 of the Electricity Act 2003.

- The MePGCL shall file Regulatory accounts along with the petition for ARR and Tariff and also for True up of the previous years. MePGCL has filed Statement of Accounts for FY 2018-19 certified by Statutory Auditors and unaudited SOA for FY 2019-20.
- 4. MePGCL has filed petition for determination of ARR for 3rd MYT Control period FY 2021-22, FY 2022-23 and FY 2023-24 and Generation tariff for FY 2021-22 for all the existing generating stations on 04.12.2020. MePGCL has also filed petition for approval of capital cost for Lakroh mini HEP. Keeping in view the desirability for timely completion of tariff process for 3rd MYT Control period FY 2021-22, FY 2022-23 and FY 2023-24, Commission provisionally admitted the petition on 07.12.2020 for further processing subject to the condition that the petitioner shall furnish further information/clarification as deemed necessary by the Commission during the processing of the petition. MePGCL has submitted the additional information/data on 08th and 25th January 2021.
- 5. In accordance with Electricity Act 2003 the Commission had notified MSERC (Conduct of Business) Regulations 2007 and MSERC (Multiyear Tariff) Regulations 2014. These Regulations cover the procedure for filing the tariff application, methodology for determining the tariff and recovery of charges from the beneficiaries as approved.
- 6. The Commission further directed the petitioner to publish the notice in accordance with Tariff Regulations detailing the salient features of the ARR petition and Generation tariff proposals filed by it for financial year 2021-22 inviting for objections/comments by stake holders and public at large.
- 7. Accordingly the MePGCL has published the notice on 17.12.2020 and sought for the objections/comments within 30 days from stakeholders and general public.
- The petitioner was also directed to place the petition on its website and its Headquarter/ other offices for inspection and to obtain relevant extracts by the stakeholders and public.
- 9. The proceedings of tariff orders are governed under the section 61 and 62 of the Electricity Act 2003 and the regulations made there under. The Commission requires the MePGCL and its holding company to file statement of accounts duly audited up to FY 2019-20 for appropriation of any losses/ gains in the present order. However, keeping in view the completion of the tariff proceedings within the time frame as allowed in the Regulations and the Act, the Commission admitted the case and started processing.

- 10. The Commission received some objections and sent them to MePGCL for their response. The Commission received some of the objections and considered the suggestions of consumers, members of the advisory committee and suggestions received during the public hearing. The Commission, to ensure transparency in the process of Tariff determination and for providing proper opportunity to all the stake holders and general public for making suggestions/objections on the Tariff petition and for convenience of the consumers and general public across the state, decided to hold a public hearing at the headquarters of the state. Accordingly the Commission held public hearing at Shillong on 17.03.2021.
- 11. The Proposal of MePGCL was also placed before the state advisory committee in its meeting held on 22.03.2021 and various aspects of the Petition were discussed by the committee. The Commission took the advice of the State advisory committee on the ARR and Tariff Petition of MePGCL for FY 2021-22 during the meeting of the Committee.
- 12. Commission considered expenses reported in the SOA for FY 2018-19 and FY 2019-20 and the ARR elements have been computed based on the inflation rates notified by the Govt. of India for FY 2020-21 wherever necessary as per MSERC MYT Regulations 2014.
- 13. The Commission took into consideration the facts presented by the MePGCL in its petition and subsequent various filings, the suggestions/objections received from stakeholders, consumer's organizations, general public and views of State Advisory Committee and response of the MePGCL to those suggestions/objections.
- 14. Accordingly, the Commission proceeded for determination ARR of 3rd MYT Control period FY 2021-22, FY 2022-23 and FY 2023-24 and Generation Tariff for FY 2021-22 on the basis of available information and inputs received and in accordance with Commission's Regulations for all Generating stations.
- 15. After prudence check having deliberations with the utilities staff, advisory committee meeting and public hearing, the Commission on the basis of records submitted by the licensee, passes this order for determining Aggregate Revenue Requirement for 3rd MYT Control period FY 2021-22, FY 2022-23 and FY 2023-24 and Generation Tariff for FY 2021-22 for all generating stations of MePGCL including Lakroh mini HEP.

- 16. The Commission has reviewed the Directives issued earlier in the Tariff Orders for FY 2013-14 to FY 2018-19 and noted that some of the Directives are complied and some are partially attended. The Commission has dropped the Directives complied with and the remaining Directives are consolidated and fresh Directives are added.
- 17. For the sake of convenience and clarity, this Order has been divided into following chapters.
  - **Chapter 1** Introduction and brief history
  - Chapter 2-Summary of MYT ARR for FY 2021-22, FY 2022-23 and FY 2023-24& Determination of Generation Tariff for FY 2021-22
  - Chapter 3 Public Hearing process, Stakeholder's objections and Petitioner's response and Commission's comments
  - **Chapter 4** Commission's Approach
  - Chapter 5 Analysis of ARR for 3<sup>rd</sup> MYT Control period FY 2021-22 FY 2022-23 and FY 2023-24 for MePGCL old projects, MLHEP and New Umtru Projects.
  - Chapter 6 Determination of Annual Fixed Charges and Energy Charges for FY 2021-22.
  - Chapter 7 Directives
- 18. The MePGCL shall ensure implementation of the Tariff order from the effective date for the generating stations of the state within a week and compliance of the same shall be submitted to the Commission.

This order shall be effective from 1<sup>st</sup> April, 2021 and shall remain in force till 31<sup>st</sup> March, 2022 or till the next Tariff Orders of the Commission.

Sd/-	
Member	
MSERC	

Sd/-Chairman MSERC

# 1. Introduction

## 1.1 Background

#### 1.2 Meghalaya Power Generation Corporation Limited

The Government of Meghalaya has unbundled and restructured the Meghalaya State Electricity Board with effect from 31<sup>st</sup> March, 2010 into the Generation, Transmission and Distribution businesses. The erstwhile Meghalaya State Electricity Board was transformed into four successor entities, viz:

- 1. Generation : Meghalaya Power Generation Corporation Limited (MePGCL)
- 2. Transmission : Meghalaya Power Transmission Corporation Limited (MePTCL)
- 3. Distribution : Meghalaya Power Distribution Corporation Limited (MePDCL)
- 4. Meghalaya Energy Corporation Limited (MeECL) a holding company.

The Government of Meghalaya issued further notification on 29.04.2015 notifying the revised statement of assets and liabilities as on 1<sup>st</sup> April, 2012 to be vested in Meghalaya Energy Corporation Limited. As per the said notification issued by the Government of Meghalaya a separate corporation "Meghalaya Power Generation Corporation Limited" (MePGCL) was incorporated for undertaking Generation Business.

MePGCL has started its Commercial operations with effect from 01.04.2013.

# 1.3 Meghalaya State Electricity Regulatory Commission

Meghalaya State Electricity Regulatory Commission (herein after referred to as "MSERC" or the Commission) is an independent statutory body constituted under the provisions of the electricity Regulatory Commission (ERC) Act, 1998, which was superseded by Electricity Act (EA), 2003. The Commission is vested with the authority of regulating the power sector in the state inter alia including determination of tariff for electricity consumers. The MSERC has notified the terms and conditions for determination of tariff regulations on multiyear basis which gives the procedure and requirement of filing of the ARR for ensuing year. Similarly, the Commission has also notified, MSERC (Terms and Conditions for determination of Tariff for Generation from Renewable Energy Sources) Regulations, 2014.

## 1.4 Filing of Tariff Petition

Regulation 18 provides that each Licensee shall file a tariff petition on or before 30<sup>th</sup> November each year with the Commission which includes statement containing business plan for the control period, calculation of the expected Aggregate Revenue from charges under it currently approved tariff and expected cost of providing service. The information should also contain business plan showing ongoing projects that will spill over beyond the control period and new projects that will commence in the control period.

#### 1.5 Multiyear Tariff Regulations

Regulation 11 of the MSERC Tariff Regulations 2014, provides that the Commission shall undertake the true up of previous year's expenses and revenues approved by the Commission with audited accounts made available to the Commission subject to prudence check including pass through of impact of uncontrollable factors.

#### 1.6 Admission of the Petition

MePGCL has filed petition for approval of ARR for 3<sup>rd</sup> MYT Control period FY 2021-22 FY 2022-23 FY 2023-24 and generation tariff for FY 2021-22 along with SOA of FY 2018-19 certified by statutory auditors and unaudited SOA for FY 2019-20 on 04.12.2020.

Commission undertook the technical validation of the Petition and admitted the Petition Provisionally on 07.12.2020.

#### **1.7** Public hearing process

Regulation 19 of the Tariff Regulations, 2014 provides for giving adequate opportunity to all stake holders and general public for making suggestions/objections on the Tariff Petition as mandated under section 64.3 (a) of the Electricity Act 2003. In the admission order the Commission has directed the Generating Corporation to publish a notice in leading newspapers widely circulated in the State and seek comments from general public and other stake holders. Accordingly MePGCL has published the Notice in the following newspapers and sought comments within 30 days from the general public.

SI. No	Name of News paper	Language	Date of Publication
1	The Shillong Times	English	16.12.2020& 17.12.2020
3	U Nongsain Hima	Khasi	16.12.2020& 17.12.2020
4	Salantini Janera	Garo	16.12.2020& 17.12.2020

#### Table 1.1: Details of Public Notice

The Petitioner has also placed the public notice and the Petition in the website (www.meecl.nic.in) inviting objections and suggestions on its petition. The interested parties/stakeholders were asked to file their objections/suggestions on the petition within 30 days.

MePGCL/Commission received some objections/suggestions from Consumers/ consumer organizations. The Commission examined the objections/ suggestions received and fixed the date for public hearing on MePGCL petition to be held on 17.03.2021.

Communication has also been sent to the objectors to take part in the public hearing process for presenting their views in person before the Commission.

The Public hearing was conducted at commission's office in Shillong as scheduled on 17.03.2021.

The Commission also held meeting with State Advisory committee on the petition 22.03.2021 Proceedings of the meeting are given in Annexure-I.

The names of consumers/consumer organizations those who filed their objections and the objectors who participated in the public hearing for presenting the objections are given in the Annexure II.

A short note on the main issues raised by the objectors in the written submission and also in the public hearing along with response of MePGCL and the Commission's views on the response are briefly annexed in the Chapter-3.

# 2. Summary of Petition for Control period FY 2021-22 to FY2023-24 and Determination of Generation Tariff for FY 2021-22

## 2.1 Summary of the Petition:

#### **Existing Stations**

MePGCL started functioning as an independent commercial entity from 1<sup>st</sup>April 2013. The power generated by the MePGCL stations is sold to MePDCL as per the power purchase agreements signed, and supplied energy to MePDCL at MePTCL interface points. At present MePGCL is having 9 Hydro Generating stations, 4 of these are storage type and 5 are run of the river stations (includes Lakroh mini HEP). The details about existing stations are mentioned below:

SI. No	Station	Туре	No of Units/ Capacity	COD	Capacity (MW)
1	Umiam Stage-I		4*9 MW	FY 1966	36
2	Umiam Stage-II		2*10 MW	FY 1971	20
3	Umiam Stage-III	Storage/ Pondage	2*30 MW	Unit 1: FY 1979 Unit 2: FY 1979	60
4	Umiam Stage-IV		2*30 MW	FY 1993	60
5	Umtru Power Station		4*2.8 MW	Unit 1-3: FY 1958 Unit 4: FY 1969	11.2
6	Sonapani HEP	ROR	1*1.5 MW	FY 2010	1.5
7	Leshka HEP		3*42 MW	Unit 1& 2: FY 2013 Unit 3: FY 2014	126
8	New Umtru	ROR with Pondage	2 * 20	Unit 1 & 2 FY 2017	40
	Total				354.70
9	Lakroh	ROR	1*1.50	01.03.2019	1.50
	Total				356.20

# 2.2 Upcoming Projects

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

SI. No	New Station	Design Energy (MU)	Capex Outlay (Rs. Cr)	Debt (Rs .Cr)	Equity (Rs. Cr)	Grant (Rs. Cr)	Year of Commissioning
1	Ganol SHP (3x7.5 MW)	67.00	507.71	223.11	54.62	229.98	May 2022
2	Riangdo SH Project (3 MW)	17.92	33.99	11.40	20.00	2.59	2022-23

Table 2.2 : Details of	upcoming Stations
------------------------	-------------------

# 2.3 Performance and Operational Norms Existing Generating Capacity

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 Umiam Stage-III HEP (1979), Stage-IV HEP (1992), Sonapani Mini Hydel 1.5 MW (2009), upgrading of Umiam Stage- II (from 18MW to 20 MW in 2012) and commissioning of MLHEP 3 X 42 MW in 2013, the installed capacity increased to 314.20 MW and 40MW New Umtru in 2017, Commissioning of 1.15 MW Lakroh mini HEP project declared COD on 1.03.2019.

All the Generating Stations except Sonapani Mini Hydel Project and Lakroh, as indicated in the table below are hydel power stations with the main reservoir at Umiam for all the stages. Therefore, all these stages depend mainly on water availability at the Umiam reservoir. The total installed capacity of MePGCL projects as on 31.03.2019, was as shown in the table below.

S.	Name of the Station	No. of	Capacity	Total Capacity	Year of
No	Name of the Station	Units	(MW)	(MW)	Commissioning
		I	9		21.02.1965
1	Limiam Stago	II	9	36	16.03.1965
<b>1</b>	Umiam Stage		9	50	06.09.1965
		IV	9		09.11.1965
2	Limiam Stago II	I	10	20	22.07.1970
2	Umiam Stage- II	II	10	20	24.07.1970
3	Limian Stage III	I	30	60	06.01.1979
5	Umiam Stage- III	II	30	60	30.03.1979
4	Umiam Stago IV	I	30	60	16.09.1992
4	Umiam Stage- IV	II	30	60	11.08.1992
	Umtru Power Station	I	2.8	11.2	01.04.1957
5		II	2.8		01.04.1957
5			2.8	11.2	01.04.1957
		IV	2.8		12.07.1968
6	Sonapani Mini Hydel	I	1.5	1.5	27.10.2009
		I	42.		01.04.2012
7	MLHEP (Leshka)	II	42	126	01.04.2012
		III	42		01.04.2013
8	New Umtru		40	40	01.07.2017
9	Lakroh		1.5	1.50	01.03.2019
	Total			356.20	

Table 2.3: Installed Capacity of MePGCL

MePGCL had a total installed Capacity of 356.20 MW with all the generating stations in FY 2019-20, except for 1 (one) unit in Umiam Stage III and all units in Umtru Power Station. There was burning of stator, 11 KV UAT, damage of PRV and overhauling works which prevented one unit of Umiam Stage III from generating power. The Units of Umtru suffered generation due to construction of New Umtru HEP and siltation of hydraulic works which necessitated the cleaning of the water conductor system and draining of penstock.

# 2.4 Historical Yearly Generation for Last Five Years

All the Generating stations being hydro, the annual generation depends on the rainfall for the year. The yearly generation for last 5 years for the generating stations is shown in the table below:

					(MU)
Sl.No	Station	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
1	UMIAM Stage-I	96.63	128.61	85.12	108.32
2	UMIAM Stage –II	50.23	63.92	43.31	55.25
3	UMIAM Stage-III	65.3	132.15	133.83	141.83
4	UMIAM Stage-IV	166.12	217.48	166.61	164.50
5	Sonapani HEP	7.63	7.47	7.12	3.59
6	Leshka HEP	443.85	502.57	363.06	421.65
7	New Umtru	-	167.79	179.82	181.43
8	Lakroh MHP	-	-	0.05	2.11
	Total	829.756	1219.99	978.92	1078.68

#### **Table 2.4: Historical Energy Generation**

#### **Design Energy as approved by the Commission**

(MU) SI.No Station FY 2020-21 FY 2021-22 FY 2022-23 FY 2023-24 1 UMIAM Stage-I 116 116 116 116 2 UMIAM Stage –II 46 46 46 46 3 **UMIAM Stage-III** 139 139 139 139 4 UMIAM Stage-IV 207 20 20 20 5 Sonapani HEP 5 5 5 5 Leshka HEP 486 486 486 486 6 New Umtru 7 235 235 235 235 8 Lakroh MHP 11 11 11 11 9 Ganol SH (New) \_ 67 67 -1245.31 Total 1245.31 1312 1312

# 2.5 Operational Norms

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

SI. No	Station Particular	Norm
a)	Storage and Pondage type plants : where plant availability is not affected by silt and	
1)	With lead variation between Full Reservoir Level( FRL) and Minimum Draw Down Level (MDDL) of up to 8 %	90 %
ii)	With head variation between FRL and MDDL of more than 8 %	(Head at MDDL / Rated Head) x 0.5 + 0.2
b)	Pondage type plant	Where plant availability is significantly affected by silt- 85 %
c)	Run –of River type plant	NAPAF to be determined plant wise based on 10- day design energy data

#### Table 2.5: Normative Annual Plant Availability Factor

#### Note:

- A further allowance may be made by the Honorable Commission under special circumstances, e.g. abnormal silt problem or other operating conditions, and known plant limitations.
- ii) A further 5 % may be allowed for difficulties in the north East Region
- iii) In case of new Hydroelectric project the developer shall have the option of approaching the Commission in advance for further to above norms.
- iv) In the Tariff order for FY 2018-19, Commission has taken view on the computation of Normative Annual Plant Availability Factor (NAPAF) of all generating stations on the technical details of each plant duly verified. For the purpose of capacity charges, the Commission has approved recovery of 50% of fixed charges in 12 equal monthly installments. The NAPAF's for all generating stations computed as per the MYT Regulations, 2014 are summarized below.

Station	As per actual (%)
Umiam Stage- I	59.83
Umiam Stage-II	85.00
Umiam Stage-III	63.67
Umiam Stage-IV	61.79
New Umtru	62.60
Sonapani	45.00
MLHEP	39.00
Lakroh MHP	45.00

SI. No	Station Particular	Norm
a)	Surface hydroelectric power generating stations with	0.7 % of energy
aj	rotating exciters mounted on the generator shaft	generated
b)	Surface hydroelectric power generating stations with	1.0 % of energy
	static excitation system	generated
c)	Underground hydroelectric power generating stations	0.9% of energy
c)	with rotating exciters mounted on the generator shaft	generated
4)	Underground hydroelectric power generating stations	1.2% of energy
d)	with static excitation systems	generated

#### Table 2.7: Auxiliary Consumption and Transformation Loss

Transformation Loss as per norm is 0.5 % of energy generated.

The Commission in the MYT Tariff Order for FY 2018-19 had approved auxiliary Consumption and transformation losses as per the following Table.

Table 2.8: Auxiliary Consumption and Transformation Loss approved by the HonourableCommission

Name of the Plant	Auxiliary Consumption	Transformation Loss (%)	Total Loss (%)
Umiam Stage- I	0.7	0.5	1.2
Umiam Stage-II	0.7	0.5	1.2
Umiam Stage-III	0.7	0.5	1.2
Umiam Stage-IV	1.0	0.5	1.5
New Umtru	1.00	0.5	1.5
Sonapani	0.7	0.5	1.2
MLHEP	1.00	0.50	1.5
Lakroh	1.00	0.50	1.5

The Auxiliary consumption and Transformation Losses, as actual for MePGCL for for 3<sup>rd</sup> MYT Control Period are furnished below:

Table 2.9: Auxiliary consumption and Transformation losses

Name of the Plant	Auxiliary Consumption Transformation Losses (%)			
Umiam Stage- I	1.2			
Umiam Stage-II	1.2			
Umiam Stage-III	1.2			
Umiam Stage-IV	1.5			
Sonapani	1.2			
Leshka	1.5			
New Umtru	1.5			
Lakroh MHP	1.2			

# 2.6 Design Energy- Existing Generating Stations

The design energy as approved by the Commission for MePGCL 's power stations for

FY 2020-21 is provided in table below.

Name of the Power station	Design Energy (MU)		
Umiam Stage- I	116.00		
Umiam Stage-II	46.00		
Umiam Stage-III	139.00		
Umiam Stage-IV	207.00		
Umtru	0.00		
New Umtru	235.00		
Lakroh	11.01		
Mini Hydel (Sonapani)	5.00		
Leskha	486.00		
Total	1245.01		

Table 2.10: Design Energy as approved by MSERC in Tariff Order FY 2020-21

# 2.7 Computation of Net Energy Generation- Existing Stations:

Particulars	Umtru	Umiam-I	Umiam-II	Umiam-III	Umiam-IV	Mini HydelSonapani	Leshka HEP
Type of Station							
Surface/ Under Ground	Surface	Surface	Surface	Surface	Surface	Surface	Surface
Purely RoR/ Pondage/ storage	RoR	Storage	Power Channel (Pondage)	Pondage	Pondage	RoR	RoR
Peaking/ Non Peaking	Non Peaking	Non Peaking	Non Peaking	Non Peaking	Non Peaking	Non Peaking	Non Peaking
Noof Hours Peaking	NA	NA	NA	NA	NA	NA	NA
OverLoad Capacity (MW) and Peaking	NIL	NIL	NIL	NIL	NIL	NIL	NIL
Type of Excit	tation	•	·			•	
Rotating exciters on Generator	Rotating exciters on Generator	Rotating exciters on Generator	Rotating exciters on Generator	Rotating exciters on Generator	NA	Rotating exciters on Generator	NA
Static Excitation	NA	NA	NA	NA	Static Excitation	NA	Static Excitation

The computation of Hydro power generation requires Design Energy, Capacity Index, Details of Reservoir levels, Head Details, Past Availability details, features of the hydro power plants in terms of type of plant, type of excitation, etc. which are provided in the table below.

The stations Net Generation approved for FY 2018-19 and actual of MePGCL for FY 2017-18 are provided in the table below:

	Approved by Commission in Tariff Order FY 2021-22							MePGCL FY 2017-18			
SI No	Name of the Power station	Gross Generati on (MU)	Aux. Cons (%)	Tran sfor mati on Loss (%)	Total Loss(Aux + Transfor mation (%)	Aux Cons & Transf ormati on Loss (MU)	Net Gener ation (MU)	Gross Generat ion (MU)	Total Loss (Aux + Transf ormati on (%)	Aux Cons & Transf ormati on Loss (MU)	Net Generat ion (MU)
1	Umiam – I	116.29	0.70	0.50	1.20	1.40	114.89	127.39	1.04	1.32	126.06
2	Umiam –II	45.51	0.70	0.50	1.20	0.55	44.96	63.54	0.65	0.41	63.13
3	Umiam –III	139.4	0.70	0.50	1.20	1.67	137.73	131.24	0.71	0.93	130.31
4	Umiam –IV	207.5	1.00	0.50	1.50	3.11	204.39	216.07	0.66	1.43	214.64
5	Umtru Power Station	39.01	0.70	0.50	1.20	0.47	38.54	0.00	1.15	0.00	0.00
6	MiniHydel (Sonapani)	5.5	0.70	0.50	1.20	0.07	5.43	7.42	0.74	0.05	7.37
7	Leskha	486.23	1.00	0.50	1.5	7.29	478.94	499.09	0.68	3.39	495.70
8	Lakroh	11.01	1.00	0.50	1.5	0.16	10.85	-	-	-	-
	Total	1050.44				7.26	1035.74	1044.75		7.53	1037.22

Table 2. 11: Net Generation approved and Actuals for FY 2018-19

# 2.8 Separate Petition for MePGCL's Generating Plants

As per the recent tariff orders as well as applicable regulations MePGCL needs to file separate petitions for the different generating plants. In accordance with the directives of the Honorable Commission and MSERC MYT Regulations 2014, the utility is filing a separate petition for,

- 1) Old plants including Sonapani
- 2) Myntdu Leshka Power Plant
- 3) New Umtru
- 4) Lakroh Mini HEP

Due to non- availability of segregated accounts for Old Plants and Sonapani, MePGCL has filed a separate ARR for MePGCL Old plants and sonapani, MLHEP, New Umtru and lakroh mini HEP in the tables below.

Accordingly MePGCL has filed separate ARR for 3<sup>rd</sup> MYT Control period FY 2021-22 to FY 2023-24 and determination of generation Tariff for FY 2021-22.

# 2.8.1 ARR filed for MePGCL Old Projects including Sonapani for 3<sup>rd</sup> MYT Control period

#### FY 2021-22 to FY 2023-24.

SI No	Particulars	FY 2018-19 (Provisional)	FY 2019-20 ( Estimated)	FY 2020-21 (Projected)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
1	Interest and finance charges	43.02	27.63	24.93	27.87	35.53	46.25
2	Depreciation	2.62	2.50	9.57	11.16	20.13	30.02
3	O & M expenses	60.28	76.45	93.25	100.01	108.22	117.35
4	Interest on Working Capital	4.55	4.97	5.30	5.62	6.41	8.20
5	Return on Equity	17.35	14.73	6.03	0.87	2.68	47.23
6	SLDC Charges	1.20	1.68	1.76	1.85	1.94	2.04
7	Net Prior Period Items	-0.08	0.00	0.00	0.00	0.00	0.00
	Total Annual Fixed Cost	128.95	127.95	140.85	147.38	174.92	251.09
8	Less: Non-Tariff Income	10.22	9.29	9.50	9.78	10.08	10.38
9	Net Annual Fixed Cost	118.73	118.67	131.35	137.60	164.85	240.71

#### Table 2. 12: Annual Fixed Charges for MePGCL Oldplants and Sonapani for FY 2021-22

Particulars	FY 2021-22
a. Annual Fixed Cost (AFC) Proposed for FY 2021-22 (a)	137.60
b. Revenue Gap from True up of FY 2017-18 (INR Crs) as approved by	(114.47)
Commission in the True up order for FY 2017-18 (b)	
c. Revenue Gap from True up of FY 2017-18 (INR Crs) for Old Plants*	-59.15
(c=b*177.5 MW/343.5 MW)	
Net AFC for computation of Tariff for FY 2021-22 (d=a+c)	78.45

\* The Commission in its order for True up of FY 2017-18, has allowed a surplus of INR 114.47 Cr. The claim for revenue surplus of MePGCL for Old plants including sonapani has been apportioned, based on its installed capacity.

SI. No	Name of the Power Station	Installed Capacity (MW)	Gross Generation (MU) as approved in Business Pan	Net Generation (MU) as approved in Business plan	Annual Fixed Charge (INR Cr)	Capacity Charge (INR Cr)	Energy Charge (Rs/Unit)
1	Umiam I	36.00	116.00	114.61	15.91	7.96	0.69
2	Umiam II	20.00	46.00	45.45	8.84	4.42	0.97
3	Umiam III	60.00	139.00	137.33	26.52	13.26	0.97
4	Umiam IV	60.00	207.00	203.00	26.52	13.26	0.65
5	Sonapani (Mini Hydel)	1.50	5.00	4.94	0.66	0.33	0.67
	Total	177.50	513.00	506.20	78.4	39.20	0.77

Based on all above submissions, the petitioner humbly prays before the commission to Kindly approve the tariff of Old plants including Sonapani for FY 2021-22 as computed in the above table.

#### Tariff for Ganol HEP

MePGCL requests the Commission to allow to raise monthly bills of Ganol as per levelized tariff for Rs.4.59 per unit. As and when the capital cost is ready and audited, MePGCL will file the petition for approval of capital cost and tariff for Ganol.

#### 2.8.2 ARR filed for MLHEP for 3<sup>rd</sup> MYT Control period FY 2021-22 to FY 2023-24.

Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Interest on Loan capital	72.37	63.35	54.82	47.22	39.19	31.45
Depreciation	61.34	61.41	63.36	63.47	63.67	63.96
O&M Expenses	33.96	35.91	48.21	50.97	53.88	56.96
Interest on working capital	6.17	5.96	5.95	5.93	5.92	5.92
Return on Equity	54.00	53.99	54.02	54.12	54.29	54.54
<b>Total Annual Fixed Cost</b>	227.85	220.62	226.37	221.71	216.95	212.84
Less: Non-Tariff Income	0.023	0.003	0.013	0.014	0.014	0.015
Net Annual Fixed Cost	227.83	220.62	226.35	221.69	216.94	212.83

#### Table 2. 14 : ARR for MLHEP for the Third Control Period (Rs. Cr)

#### Table 2. 15: Annual Fixed Charges, Capacity Charge and Energy Charge for FY 2021-22

Particulars	FY 2021-22	
Annual Fixed Cost (AFC) Proposed for FY 2021-22 (a)	221.69	
Revenue Gap from True Up of FY 2017-18 (INR Crs) as approved by		
Commission in the True Up order for FY 2017-18 (b)	(114.47)	
Revenue Gap from True Up of FY 2017-18 (INR Crs) for MLHEP*		
(c=b*126 MW/343.5 MW)	(41.99)	
Net AFC for computation of Tariff for FY 2021-22 (d=a+c)	179.71	

\*- The Commission in its order for True up of FY 2017-18, has allowed a surplus of INR 114.47 Cr. The claim for revenue surplus of MePGCL for MLHEP has been apportioned, based on its installed capacity.

Particulars	FY 2021-22
Net AFC for Computation of Tariff (INR Cr)	179.71
Gross Generation (MU) as approved in Business Plan	486.00
Less: Auxiliary Consumption @ 1%	4.86
Less: Transformation Loss @ 0.5%	2.43
Net Energy (MU)	478.71
Fixed Charge (INR Cr.)	89.85
Variable Charge (INR/kWh)	1.88

Based on all above submissions, the petitioner humbly prays before the Commission to kindly approve the tariff for MLHEP for FY 2021-22 as computed in the above table.

#### 2.8.3 ARR filed for New Umtru for 3<sup>rd</sup> MYT Control period FY 2021-22 to FY 2023-24.

Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Interest on Loan capital	53.71	49.72	42.95	39.73	36.03	32.33
Depreciation	29.28	29.29	30.22	30.22	30.22	30.22
O&M Expenses	12.28	12.98	17.43	18.43	19.48	20.59
Interest on working capital	3.16	3.05	2.90	2.88	2.86	2.84
Return on Equity	25.26	25.33	25.37	25.37	25.37	25.37
Total Annual Fixed Cost	123.68	120.37	118.88	116.63	113.97	111.36
Less: Non-Tariff Income	0.112	0.002	0.059	0.060	0.062	0.064
Net Annual Fixed Cost	123.57	120.37	118.82	116.57	113.90	111.30

#### Table 2. 17: ARR Requirement for NUHEP for the Control Period

#### Table 2. 18: Annual Fixed Charge for NUHEP for FY 2021-22

Particulars	FY 2021-22
Annual Fixed Cost (AFC) Proposed for FY 2021-22 (a)	116.57
Revenue Gap from True Up of FY 2017-18 (INR Crs) as approved by Commission in the True Up order for FY 2017-18 (b)	(114.47)
Revenue Gap from True Up of FY 2017-18 (INR Crs) for NUHEP* (c=b*40 MW / 343.5 MW)	(13.33)
Net AFC for computation of Tariff for FY 2021-22 (d=a+c)	103.24

\*- The Commission in its order for True up of FY 2017-18, has allowed a surplus of INR 114.47 Cr. The claim for revenue surplus of MePGCL for NUHEP has been apportioned, based on its installed capacity.

#### Table 2. 19: Computation of Tariff for NUHEP for FY 2021-22

Particulars	FY 2021-22
Net AFC for Computation of Tariff (INR Cr)	103.24
Gross Generation (MU) as approved in Business Plan	235.00
Less: Auxiliary Consumption @ 1%	2.35
Less: Transformation Loss @ 0.5%	1.18
Net Energy (MU)	231.48
Fixed Charge (Rs. Cr.)	51.62
Variable Charge (INR/kWh)	2.23

Based on all above submissions, the petitioner humbly prays before the Commission to kindly approve the tariff for NUHEP for FY 2021-22 as computed in the above table.

# 2.8.4 ARR filed for Lakroh Mini HEP for 3<sup>rd</sup> MYT Control period FY 2021-22 to FY 2023-24.

Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Interest on Loan capital	0.04	0.63	0.63	0.63	0.65	0.64
Depreciation	0.09	1.17	1.74	1.76	1.81	1.84
O&M Expenses	0.03	0.37	0.50	0.53	0.56	0.59
Interest on working capital	0.02	0.09	0.10	0.10	0.10	0.11
Return on Equity	0.04	1.12	1.17	1.19	1.22	1.24
Total Annual Fixed Cost	0.23	3.38	4.13	4.20	4.35	4.42

 Table 2. 20 : ARR Requirement for Lakroh MHP for the Control Period

#### Table 2. 21: Computation of Tariff for Lakroh MHP for FY 2021-22

Particulars	FY 2021-22
Net AFC for FY 2021-22 for Computation of Tariff	4.20
Gross Generation (MU) as approved in Business Plan order dated 30.09.2020	11.00
Less: Auxiliary Consumption @ 1%	0.11
Less: Transformation Loss @ 0.5%	0.06
Net Energy (MU)	10.84
Fixed Charge (Rs. Cr.)	2.10
Variable Charge (INR/kWh)	1.94

Based on all the above submissions, the petitioner humbly prays before the Commission to kindly approve the tariff for Lakroh MHP for FY 2021-22 as computed in the above table

# **3. Public Hearing Process**

## 3.1 General

Section 64 (2) of electricity act 2003 read with Regulation 19 of MSERC MYT Regulations 2014 mandates the Generation licensee to publish the Tariff petition in an abridged format in the leading news papers inviting the objections/suggestions on the Tariff petition from the stakeholders.

# 3.2 Objections / Suggestions of Stakeholders Byrnihat Industries Association (BIA) <u>BIA Objections on MePGCL Old Plants Including Sonapani:</u>

- 1. In pursuance of the admission order and the public notice issued pursuant thereto inviting objections and representations from the stake-holders in the State of Meghalaya, the Objector/ Respondent herein, M/s Byrnihat Industries Association ("BIA") is filing the present objections to the petition filed by the Meghalaya Power Generation Corporation Limited (hereinafter referred to as 'MePGCL') seeking determination of Multi Year Tariff for FY 2021-22 to 2023-24 and determination of generation tariff for FY 2021-22 for old plants including Sonapani under the MSERC (Multi Year Tariff) Regulations, 2014 and under Sections 62 and 64 read with Section 86 of Electricity Act, 2003. MePGCL has also filed separate petitions seeking the following:
  - Approval of Capital Cost, AFC for FY 2021-22 to 2023-24 of 3rd MYT Control
     Period and tariff for FY 2021-22 for Lakroh Mini Hydro Electric Project ("LMHEP");
  - b. Determination of MYT for FY 2021-22 to 2023-24 and determination of generation tariff for FY 2021-22 for MLHEP; and
  - c. Determination of MYT for FY 2021-22 to 2023-24 and determination of generation tariff for FY 2021-22 for NUHEP.

Accordingly, the Objector has filed separate objections to the aforesaid petitions.

#### **MePGCL Reply**

Matter of the Records.

#### **Commission's View**

Commission noted the suggestion.

4. At the outset it is submitted that MePGCL has not made public the certified copy of the instant petition and its annexures and forms. It has also not filed audited accounts for FY 2018-19. MePGCL has instead requested this Hon'ble Commission consider the finalized statement of accounts for FY 2018-19 and provisional statement accounts for FY 2019-20. It is pertinent to mention that MePGCL is a habitual offender which has in the past also never filed the CAG audited accounts on time. In the tariff petition filed last year for FY 2020-21,MePGCL had not filed CAG audited accounts from FY 2015-16 till FY 2017-18 and audited/unaudited accounts for FY 2018-19.

# MePGCL's Reply

The tariff petition for Old Stations and Sonapani was made public in the website of MeECL along with its annexures. It is not clear how BIA could prepare their para-wise objections to the instant petition if it was not made public by MePGCL. The objection of BIA claiming that the petition was not made public is, therefore, incorrect and misleading.

The Statement of Accounts of MePGCL for FY 2018-19 were audited by the statutory auditor appointed by the CAG and the audited accounts were submitted to the CAG for his comments. The comments of the CAG are still awaited.

MePGCL has filed the instant tariff petition together with the audited Statement of Accounts for FY 2018-19 alongwith the statutory auditor's report as required for determination of tariff.

Also, as per Regulation 18.2 "in case audited accounts of previous year (i.e., FY 2019-20) is not available audited account for the year immediately preceding the previous year (i.e., FY 2018-19) should be filed alongwith the unaudited accounts for the previous year (i.e., FY 2019-20)". MePGCL has, therefore, duly complied with the provisions of Regulation 18.2 also.

The CAG's comments for FY 2015-16 till FY 2017-18 were submitted to the Hon'ble Commission vide letter Nos. MePGCL/D/GEN/Misc-43/2008/Pt-X/67 dt. 29.03.2018, MePGCL/D/GEN/Misc-43/2008/Pt-XII/52 dt. 30.05.2019 and MePGCL/D/GEN/Misc-43/2008/Pt-XIV/18 dt.30.06.2020 respectively. It is pertinent to mention that

MePGCL had also filed true up petitions for FY 2015-16 to FY 2017-18 along with audited SOA's and CAG's comments for these financial years. The Hon'ble Commission had also passed its true up orders for these financial years. Therefore, the claim of BIA that CAG audited accounts for FY 2015-16 till FY 2017-18 were not submitted, is incorrect.

#### **Commission views:**

Commission noted the response of the Petitioner.

5. MePGCL in the past had also filed Case No. 21 of 2018 seeking determination of generation tariff for FY 2019-20 for Myntdu Leshka Power Station and Old Stations including Sonpani. The Hon'ble Commission in its Order dated 14.12.2018 directed MePGCL as under:

"MePGCL has filed petition for determination of Generation Tariff for Myntdu Leshka Power Station & Old Stations Including Sonapani (MePGCL) for FY 2019-20. The licensee is required to file the petition in the format B meant for Hydel Generation as per MSERC(MYT) Regulations 2014 duly filled in for Commission's scrutiny and processing for revision of tariff for FY 2019-20. The licensee shall also submit audited statement of Accounts for 2016-17, 2017-18 & the actual expenses for first half of 2018-19." (Emphasis supplied)

Thus, it is prayed that MePGCL be directed to make CAG accounts available for all the preceding years. It is also important to mention that this Hon'ble Commission by Order dated 25.03.2020, passed in Case No. 02/2020, also directed MePGCL to get accounts audited by CAG upto 2019-20. Relevant extract of the order is as under:

"2. Financial statements of Accounts:

The Commission directs MePGCL to get the accounts audited by C&AG up to FY 2019-20 as per the Schedule without subjecting the carrying cost claim.

Commission's Review: The Licensee has submitted C&AG reports up to FY 2016-

17. MePGCL has not filed true up petition for FY 2013-14 and FY 2014-15 after receipt of the C&AG audit report. Commission considers Suo-Moto action as per the Regulations. The Licensee had failed to comply with the EA 2003 and MSERC Regulations.

#### **New Directives**

The ARR for MYT period FY 2018-19 to FY 2020-21 was approved based on the projected business plan. The Licensee has not been presenting the audited accounts to the Commission as stipulated in the Regulations. The Commission is constrained to adopt the MYT ARR provisions for want of the audited financial statements up to FY 2018-19. There has been a flaw in the filing of the petitions for approval of the expenses for the past periods of FY 2013-14 and FY 2014-15 where in certain heads of accounts show excess over the admissible expenses in the provisional true up orders. Commission took up Suo-Moto action for Regulatory analysis, and the resultant gaps/surpluses in the Suo-Moto true up exercise has been appropriated in the present Tariff Order. The Licensee is directed to comply with the Regulatory provisions without giving room for public objections in claiming the Gaps of the previous years.

#### **Regulatory Accounts**

The Licensee shall maintain and file Regulatory accounts along with Tariff Petition and for True up petition as mandated in Regulation 4.2 (c) of MYT Regulations 2014."

Thus, it is prayed that appropriate action be taken against MePGCL for its continuous and unjustified failure in filing duly audited accounts.

#### MePGCL Reply

Format-B for Hydel Generation (pages 97 to 102 of MSERC MYT Regulations, 2014) consists of 5 (five) formats, i.e., Formats HG1, HG2, HG3, HG4 and HG5. The first four formats relate to technical details of the Power Station while Format HG5 relates to Annual Revenue Requirement. All these formats were appended as Annexure-H with the MYT Petition filed by MePGCL. Also, MePGCL had always appended the technical formats (HG1 to HG4) with its tariff petitions since its first tariff filing from FY 2013-14 till date.

The CAG's reports on the accounts of MePGCL for FY 2016-17, 2017-18 were submitted to the Hon'ble Commission vide letter nos. MePGCL/D/GEN/Misc-43/2008/Pt-XII/52 dt. 30.05.2019 and MePGCL/D/GEN/Misc-43/2008/Pt-XIV/18 dt.30.06.2020 respectively. The actual expenses for first half of FY 2018-19 were submitted to the Hon'ble Commission vide letter no. MePGCL/D/GEN/Misc-

43/2008/Pt-XII/44 dt.03.04.2019. Therefore, the claim of BIA that the audited accounts for FY 2016-17, FY 2017-18 and actual expenses for first half of FY 2018-19 were not submitted, is incorrect.

Regarding the accounts for FY 2019-20, statutory audit has been taken up and the same will be forwarded to the CAG for his comments as soon as the statutory audit is completed.

Regarding Regulatory Accounts, it may be pointed out that as per Regulation 4.2(C) of the MSERC MYT Regulations, 2014, the application for tariff based on Regulatory Accounts will be applicable once the Regulations in this regard are notified. At present, the Regulations regarding Regulatory Accounts have not been notified yet.

#### **Commission's Views**

Commission noted the Response.

6. The objector is an Association of industrial consumers in the Byrnihat area in the State of Meghalaya. The Industrial consumers are few in number but at the same time contribute a substantial part of the revenue requirements of the electricity utilities in the state. It is submitted that the industries have been set up in the State of Meghalaya based on the representations made on the sustained supply of electricity at competitive prices. The cost of electricity has however increased substantially over the years which have made the operation of industries in the State more and more unviable. In order to submit a comprehensive and detailed analysis of the instant Petition, the Objector has worked with expert consultant, Mercados. A copy of the report prepared by the expert consultant, Mercados, is annexed as Annexure A.

#### MePGCL's Reply

Matter of the Records.

#### **Commission's Views**

Commission noted the suggestion.

- 7. For ease of reference the Objector is making submissions under the following subheadings:
  - a. True-up for FY 2018-19;
  - b. Gross Fixed Asset (GFA) and Capex

- c. Interest and Finance Charges on Loan Capital
- d. Depreciation
- e. Return on Equity
- f. O&M expenses
- g. Interest on Working Capital
- h. Annual Fixed Cost for FY 2021-22 to FY 2023-24 and Generation Tariff for FY 2021-22

#### MePGCL's Reply

Matter of the Records.

#### **Commission's Views**

Commission noted the suggestion.

#### A. True-up for FY 2018-19

8. In its tariff petition, MePGCL has submitted that on account of lockdown there was a delay in start of process of audit for FY 2018-19. Thus, even though the statutory audits for FY 2018-19 are complete the CAG audit is still pending. In light of existing provisions of tariff regulations, MePGCL has submitted that it will file a separate petition seeking true up for FY 2018-19 once audit is completed. Thus, it is prayed that MePGCL be directed to make CAG accounts available at the earliest.

#### MePGCL's Reply

The Statement of Accounts for FY 2018-19alongwith the report of the statutory auditor was forwarded to the CAG for his comments. MePGCL will submit the comments of the CAG during filing of true up for FY 2018-19 as required under Regulation 11.3 of the MSERC MYT Regulations, 2014 which specifies that Audited Accounts including report by CAG are to be submitted for truing up of Annual Revenue Requirement.

#### **Commission's Views**

Commission noted the Response.

#### B. Gross Fixed Asset and Capex

9. MePGCL has considered opening balance of INR 438.69 Crore towards capital cost for FY 2018-19 for the computation of opening balances for FY 2021-22 for the old stations including Sonapani. This Hon'ble Commission, in Order dated 28.09.2020, passed for True-up of 2017-18 had approved closing GFA of INR 49.39 Crore as on 31.03.2018 (Please see Table 2 of Order dated 28.09.2020). Thus, it is prayed that the right amount be considered by this Hon'ble Commission and MePGCL be directed to file tariff petitions with care. Further, MePGCL's claim for FY 2020-21 merits to be dismissed as this Hon'ble Commission has approved Business Plant for the period of FY 2021-22 to 2023-24 as opposed to the period of 2020-21 to 2023-24, as is being claimed by MePGCL.

#### MePGCL's Reply

The Opening GFA of MePGCL for Old Stations and Sonapani for FY 2018-19 is Rs. 438.69 crore, which includes all the assets of Umiam Stage-I, II, III, IV and Sonapani. However, the Hon'ble Commission has considered only the GFA of Umiam Stage-IV (Rs. 38.79 crore) and Sonapani (Rs. 10.60crore) which were the DPR costs in its tariff order for FY 2013-14 (Page-76 of the order). The Hon'ble Commission has not considered the GFA of the other stations on the ground that these assets have fully depreciated. It may be mentioned that these old stations have been renovated and are generating power. Also, the land on which these stations are located and the cost of which forms part of GFA, does not depreciate (and instead has appreciated in value) and, therefore, should have been taken into account while arriving at the GFA of Old stations and Sonapani.

MePGCL has not claimed ARR for FY 2020-21 in the present petition as alleged by BIA but has filed Multi Year Tariff Petition for the Control Period FY 2021-22 to FY 2023-24 and tariff determination for FY 2021-22. The GFA for FY 2020-21 is shown to arrive at the opening GFA of FY 2021-22.

The objection of BIA is, therefore, misplaced and may kindly be rejected by the Hon'ble Commission.

#### **Commission's Views**

Commission noted the Response.

10. It is submitted that this Hon'ble Commission in its Order dated 28.09.2020 had directed MePGCL to submit approved DPRs along with copies of necessary sanctions while projecting capex and capitalization. The relevant extract of the Order is as under:

"MePGCL shall submit the approved DPRs along with copies of sanctioned of working estimates from competent authority and funding arrangements etc., while projecting the year-wise Capex and capitalization in the ARR Petition for the control period FY 2021-22 to FY 2023-24."

MePGCL in contravention of the above direction has not submitted approved DPRs and working estimates in support of its claim for FY 2021-24. MePGCL has also filed any documentary evidence in support additional capitalization being sought by it. Thus, it is prayed that MePGCL's claim be rejected. This Hon'ble Commission may allow the following GFA for the period FY 2021-24:

	As Clai	med by MePGO	L	As per Objector's Assessment			
Particulars	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	
Opening GFA	468.16	520.83	1,079.79	51.73	51.73	51.73	
Addition during the Year	52.67	558.96	96.66	-	-	-	
Retirement during the Year	-	-	-	-	-	-	
Closing GFA	520.83	1,079.79	1,176.45	51.73	51.73	51.73	
Average GFA	494.495	800.31	1128.12	51.73	51.73	51.73	

#### GFA ALLOWABLE FOR THE PERIOD FY 2021-24

#### **MePGCL Reply**

The GFA projected by MePGCL is based on the GFA of the Old Stations and Sonapani as per Audited Statement of Accounts for FY 2018-19 and also as per capex approved in the Business Plan for the 3rd Control Period. As explained at para 9 above, the GFA of all the Old Stations has not been taken into account by the Hon'ble Commission though Renovation, Modernisation and Upgradation of some of the stations was done after their useful life was over. Moreover, the cost of land which forms part of the GFA of these projects and which does not depreciate, has been considered as fully depreciated and was not included in the GFA of Old Stations and Sonapani.

MePGCL has projected opening GFA for FY 2021 – 2024 based on audited SOA for FY 2018 – 2019 and Provisional SOA for FY 2019 -2020 and business plan which is approved by Hon'ble Commission for FY 2021 -2024.

Hence, it is prayed before the Hon'ble Commission to kindly approve the GFA for FY 2021-2024 as per projection in petition.

#### **Commission's Views**

Commission noted the Response.

## C. Interest and Finance Charges on Loan Capital

- 11. MePGCL has claimed interest ofINR 27.87 Crore, INR. 35.53 Crore and INR 46.25 Crore towards at the interest rates of 9.89%, 10.08% and 10.24% for FY 2021-22 to 2023-24, respectively. MePGCL has also considered Interest capitalized during the year and MeECL apportioned Interest Expenses for the computation of Interest and Finance Charges.
- 12. MePGCL has also considered opening loan balance of INR 126.33 Crore for the FY 2018-19 for the computation of opening Loan balances for FY 2021-22 for MePGCL old stations including Sonapani. It is relevant to point out that this Hon'ble Commission, in its Order dated 28.09.2020, passed for Truing up for FY 2017-18, had approved closing Loan balance as Nil (Please see Table 6 of Order dated 28.09.2020). Further, this Hon'ble Commission recognized outstanding loan for MLHEP and NUHEP and not in respect for old stations of MePGCL for FY 2017-18. Thus, the opening loan balance for FY 2018-19 has to be considered to be NIL. MePGCL has not given any justification or supporting documents to show why there has been such an increase in the loan balance. It is prayed that MePGCL be directed to explain why the values have been misreported to such an extent.

- 13. MePGCL has not given any justification or supporting documents to show why there has been such an increase in the loan balance. It is prayed that MePGCL be directed to explain why the values have been misreported to such an extent.
- 14. Further, MePGCL has submitted that 1/3rd of the MeECL interest and finance charges are to be recovered through generation tariff. Accordingly, MePGCL has submitted, in Table 20(a), loan addition of INR 190.30 Crore on account of MeECL. It is pertinent to mention that MePGCL has not submitted any documentary evidence supporting its claim of INR 190.30 Crore. It has also not submitted whether the said scheme, under which such claim has been made, has been approved by this Hon'ble Commission. It is submitted that the consumers cannot be burdened with such large liability without proper evidence and approval from the Hon'ble Commission. It is prayed that this Hon'ble Commission conduct prudence check before allowing any such claims of MePGCL.

## MePGCL's Reply

The loan of MeECL as reflected in the SOA of MeECL for 2019-20 (Note-16) is Rs.190.30 crore, the interest on which is apportioned equally (i.e., 1/3rd) to all the three subsidiaries. The interest claimed is on the loans of MePGCL and apportioned interest on the loan of MeECL.

MSERC MYT Regulation 2014 states as follows:

53. "Renovation and Modernization"

53.1 The generating company for meeting the expenditure on renovation and modernization (R&M) for the purpose of extension of life beyond the useful life of the generating station or a unit thereof, shall make an application before the Commission for approval of the proposal with a detailed project report giving complete scope, justification, cost benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion, reference price level, estimated completion cost including foreign exchange component, if any) record of consultation with beneficiaries and any other information considered to be relevant by the generating company.

53.2 Where generating company makes an application for approval of its proposal

for renovation and modernization the Commission shall give its approval after due consideration of reasonableness of cost estimates, financing plan, schedule of completion, interest during construction, use of efficient technology, cost benefit analysis and such other factors which the Commission may consider relevant.

The loan for Old Plants and Sonapani was for RMU of Umiam Stage-II, Reengineering works of Umiam Stage-I and Umiam-Umtru Stage-IV, etc. These include loans from State Government and other sources.

MePGCL further submits that the opening loan for FY 2018-19 is Rs 126.33 Crores which is the actual as per the audited SOA of MePGCL for the year 2018-19. The details of the additions of the loan were already presented in Format 7, Annexure H of the petition.

Therefore, the objection of BIA that MePGCL has not submitted any document relating to this loan is misplaced. MePGCL stand by its own projection stated in Petition. It is prayed before the Hon'ble Commission to kindly consider projection of loan as shown in the petition.

## **Commission's View**

The Interest and Finance charges shall be considered as admissible as per the MSERC Regulations 2014.

15. Thus, the Commission is requested to allow the following interest charges:

Particulars		А	s per Objector'	s Assessment	1	1
. articului s	FY 2018-19 Actual	FY 2019-20 Provisional	FY 2020-21 Estimated	FY 2021-22 Projected	FY 2022-23 Projected	FY 2023-24 Projected
Opening balance	-	30.11	30.11	30.11	11.26	0.66
Addition during the Year	30.11					
Repayment during the Year	-	0	0	18.85	10.6	28.61
Closing balance	30.11	30.11	30.11	11.26	0.66	-
Average Loan	15.06	30.11	30.11	20.69	5.96	0.33
Interest Rate (%)	9.66%	9.66%	9.32%	10.01%	9.89%	10.08%
Interest accrued	1.45	2.91	2.81	2.07	0.59	0.03
Interest Capitalized	0.52	-	-	-	-	-

# ALLOWABLE INTEREST ON LOAN FOR THE PERIOD FY 2021-24 (in Cr)

a .: .	As per Objector's Assessment						
Particulars	FY 2018-19 Actual	FY 2019-20 Provisional	FY 2020-21 Estimated	FY 2021-22 Projected	FY 2022-23 Projected	FY 2023-24 Projected	
Add: Finance Charge & MeECL Apportioned	-	-	-	-	-	-	
Interest & Financ Charges	0.93	2.91	2.81	2.07	0.59	0.03	
G.Total					2.69		

# MePGCL's Reply

The interest calculated by BIA are based on mere assumptions and are not based on the actual loan as reflected in the SOA's of MePGCL and MeECL.

Hence, it is prayed that the Hon'ble Commission consider the interest as claimed by MePGCL in the tariff petition filed for Old Stations and Sonapani.

# **Commission's View**

Commission noted the Response.

# D. Depreciation

16. MePGCL has claimed depreciation of INR 61.34 Crore for FY 2021-22 to 2023-24.

It is submitted that the weighted average depreciation rate, considered by MePGCL, is grossly overvalued especially considering the asset wise rate of depreciation remaining unchanged. Thus, it is prayed that MePGCL be directed to provide asset wise rate of depreciation considered by it in calculating its claim. In absence of such information, it is prayed that the Hon'ble Commission may consider the weighted average rate of depreciation as already approved by this Hon'ble Commission in Order dated 28.09.2020. Accordingly, the allowable depreciation for FY 2021-22 to 2023-24 is as under:

	As per Objector's Assessment							
Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)		
Opening GFA	49.39	51.73	51.73	51.73	51.73	51.73		
Less: Land	8.99	8.99	8.99	8.99	8.99	8.99		
Addition during the Year	2.48	-	-	-	-	-		
Retirement during the Year	0.14	-	-	-	-	-		
Closing GFA	51.73	51.73	51.73	51.73	51.73	51.73		

#### DEPRECIATION ALLOWABLE FOR THE PERIOD FY 2021-24

Average GFA	41.57	42.74	42.74	42.74	42.74	42.74
Weighted average rate of depreciation	4.32%	4.32%	4.32%	4.32%	4.32%	4.32%
Depreciation	1.62	1.66	1.66	1.66	1.66	1.66
Grand Total					4.99	

# **MePGCL's Reply**

MePGCL has considered the rate of depreciation for various categories of assets strictly as per the rates prescribed in MSERC MYT Regulations. The detailed calculation for depreciation for MePGCL is shown in Format 6, Annexure H.

BIA has considered weighted average rate for calculation of depreciation ,which violates the rates of depreciation prescribed in MSERC MYT Regulations, 2014.

Hence, it is requested before the Hon'ble Commission to kindly consider the rates of depreciation and depreciation amount as projected in the petition.

# **Commission's Views**

Depreciation shall be considered as admissible as per the MSERC MYT Regulations 2014.

## E. Return on Equity

17. MePGCL has claimed Return on Equity of INR 50.79 Crore for FY 2021-22 to 2023-24 after considering return on equity as 14%. The allowable Return on Equity, after considering the allowable GFA is as under:

	As per Objector's Assessment							
Particulars	FY 2018-19 Actual	FY 2019-20 Provisional	FY 2020-21 Estimated	FY 2021-22 Projected	FY 2022-23 Projected	FY 2023-24 Projected		
Opening GFA for the Year	49.39	51.73	51.73	51.73	51.73	51.73		
Additions	2.34	-	-	-	-	-		
Closing GFA for the Year	51.73	51.73	51.73	51.73	51.73	51.73		
Average Assets Base for the year	50.56	51.73	51.73	51.73	51.73	51.73		
Less: Average Grants								
Net Assets	50.56	51.73	51.73	51.73	51.73	51.73		
Debt component (@70%)								
Equity component (@30%)	15.17	15.52	15.52	15.52	15.52	15.52		

# **RETURN ON EQUITY ALLOWABLE FOR THE PERIOD FY 2021-24**

		As per Objector's Assessment						
Particulars	FY 2018-19 Actual	FY 2019-20 Provisional	FY 2020-21 Estimated	FY 2021-22 Projected	FY 2022-23 Projected	FY 2023-24 Projected		
RoE (%)	14%	14%	14%	14%	14%	14%		
Return on Equity	2.12	2.17	2.17	2.17	2.17	2.17		
Grand Total				6.52				

# **MePGCL'S Reply**

The opening GFA of MePGCL as per audited Statement of Accounts for FY 2018-19 is Rs. 2325.33 crore and the closing GFA Rs. 2350.76 crore, with the average base being Rs. 2338.05 crore. After deducting the grant portion of the asset base, the net asset base becomes Rs. 2301.25 crore (Table-22 of the petition). The methodology adopted by the subsidiaries of MeECL relating to calculation of ROE is subjudice with APTEL. Therefore, till such time the matter is disposed of by APTEL, the methodology adopted by the Hon'ble Commission in its past orders, i.e., taking 30% of the GFA as equity and calculating 14% return on this amount, is adopted by MePGCL. The ROE of Old Plants and Sonapani are then obtained by deduction of the ROE of MLHEP and NUHEP.

The opening GFA of Rs. 49.39 crore for FY 2018-19 shown by BIA is not correct since this GFA is only for Umiam-Umtru Stage-IV and Sonapani Power Plants only (that too based on DPR costs) as explained in para- 9 above

It is, therefore, prayed that the ROE obtained as per calculation shown in the tariff petition may kindly be accepted by the Hon'ble Commission.

## **Commission's Views**

The Return on Equity shall be considered as admissible as per the MSERC MYT Regulations 2014.

## F. Operation and Maintenance Expenses (O&M) Expenses

18. MePGCL has claimed INR 325.58 Crore towards O&M expenses, for FY 2021-22 to 2023-24. MePGCL has claimed employee expenses, R&M expenses and A&G expenses for all of its plants while deducting O&M expenses for LHEP, NUHEP and MHLEP. MePGCL has also considered O&M expenses towards MeECL, as after apportioning the same between the other two utilities.

- 19. MePGCL has also considered recruitment of new employees, while claiming employee expenses. It has also escalated the employee expenses for FY 2019-20 by 27% and also considered escalated employee expenses for FY 2021-22 to 2023-24. It is submitted that MePGCL has claimed RoP at the level of MeECL instead of claiming at level of utilities. It is prayed that MePGCL be directed to claim RoP only to the extent paid it and further divide the said expense between its projects. Thus, each project should reflect the actual impact of RoP borne by the said project.
- 20. It is submitted that MePGCL's submissions of 27% escalation is not supported by Regulation 56.7 of MSERC MYT Regulations which provides for calculation of O&M expenses for hydro generating stations, declared under commercial operation on or after 01.04.2009. As per the said regulation the O&M expenses shall be fixed at 2% of the original project cost and shall be subject to annual exemption at 5.72% for the subsequent years. Regulation 56.7 reads 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"

21. Accordingly, the escalation sought by MePGCL merits to be disallowed and its prayed that this Hon'ble Commission may continue with its methodology, followed in Order dated 28.09.2020, and allow escalation of 5.72%. Further, MePGCL's claim qua apportioned expenses, with respect to MeECL, merits to be dismissed as there is no evidence to support the same. MePGCL has also not mentioned any order and/or regulation of this Hon'ble Commission allowing such apportionment. Accordingly, the allowable O&M expenses for FY 2021-24 is as under:

	As Cla	imed by MePG	CL	As per Objector's Assessment			
Particulars	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	
O&M Expenses	100.00	108.22	117.36	35.61	37.65	39.81	
Total	100.00	108.22	117.36	35.61	37.65	39.81	
Grand Total	325.58			113.07			

## **O&M EXPENSES ALLOWABLE FOR THE PERIOD FY 2021-24**

# MePGCL'S Reply

The objector has requested the Hon'ble Commission to consider O&M expenses at 2% of the original project cost with annual escalation of 5.72% for projects whose COD is on or after 01.04.2009 as per Regulation 56.7. It may be mentioned that for its new projects commissioned after 01.04.2009 (i.e., MLHEP and NUHEP), MePGCL has duly followed this regulation and has claimed O&M costs at 2% with annual escalation of 5.72%. It may be mentioned that Umiam Stage-I, II, III and IV were commissioned more than 5 (five) years before 01.04.2009. Therefore, the O&M cost of these stations has to be based on actual O&M expenses as per Regulations 56.2, 56.3, 56.4 and 56.5 of MSERC MYT Regulations 2014. It is pertinent to note that Regulation 56.4 provides for consideration of 50% increase in employee cost on account of pay revision during the year 2009-10.

MePGCL has, therefore, claimed O&M expenses as per actual for Old Plants after deducting the O&M expenses of MLHEP and NUHEP (which were calculated at the rate of 2% of project cost) and Lakroh MHP from the total actual O&M expenses of MePGCL. Also, the pay revision @ 27% as per Revision of Pay 2020 was also taken into account for O&M expenses of Old Plants to arrive at actuals. Apportionment of expenses of MeECL has been allowed by the Hon'ble Commission in its tariff orders from the very beginning since FY 2013-14 and the claim of BIA that there is no evidence of the same is erroneous.

The objection together with the objector's assessment of O&M expenses, therefore, merit to be rejected by the Hon'ble Commission and the O&M expenses as projected by MePGCL in the instant petition may kindly be considered.

## **Commission's Views**

Commission considers O&M expenses shall be allowed as per the Regulations.

### G. Interest on Working Capital

22. MePGCL has claimed INR 19.51 Crore towards Interest on Working Capital for FY 2021-22 to 2023-24 at interest rate of 12.15%. In light of the submissions made above the allowable interest is as under:

<b>.</b>	As Cl	aimed by MePO	GCL	As per (	Objector's Asse	ssment
Particulars	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
O&M for 1 Month	8.33	9.02	9.78	2.97	3.14	3.32
Maintenance Spare @ 15% of O&M expenses, escalated by 6%	15.00	16.23	17.60	5.66	5.99	6.33
Receivable for 2 Month	21.05	25.51	38.05	5.89	5.96	6.21
Total	44.38	50.76	65.43	14.52	15.09	15.86
Interest Rate (%)	12.15%	12.15%	12.15%	12.15%	12.15%	12.15%
Interest on Working Capital	5.39	6.17	7.95	1.76	1.83	1.93
Grand Total	19.51 5.52					

# INTEREST ON WORKING CAPITAL ALLOWABLE FOR THE PERIOD FY 2021-24

## MePGCL's Reply

The interest on Working Capital (IWC) assessed by the objector is not correct since it is based on reduced O&M expenses and lesser ARR as explainted in the preceding paras and it is prayed that the IWC calculated by MePGCL in its instant tariff petition may kindly be considered by the Hon'ble Commission.

## **Commission's Views**

Commission considers Interest on Working Capital as per the MSERC MYT Regulations 2014.

# H. Annual Fixed Charges for FY 2021-22 to 2023-24 and Generation Tariff for FY 2021-22

23. In light of the submissions made above the allowable AFC as per the Objector is as under:

Particulars	As Cla	imed by MePGC	CL	As per	Objector's Ass	essment
r ai liculdi s	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Interest on Loan capital	27.87	35.53	46.25	2.07	0.59	0.03
Depreciation	11.16	20.13	30.02	1.66	1.66	1.66
O&M Expenses	100.01	108.22	117.35	35.61	37.65	39.81
Interest on working capital	5.62	6.41	8.20	1.76	1.83	1.93
Return on Equity	0.87	2.68	47.23	2.17	2.17	2.17
SLDC Charges	1.85	1.94	2.04	1.85	1.94	2.04
Net prior period income/ provisions for bad debts	-	-	-	-	-	-
Total Annual Fixed Cost	147.38	174.91	251.09	45.13	45.85	47.64
Less: Non Tariff Income	9.78	10.08	10.38	9.78	10.08	10.38
Net Annual Fixed Cost	137.60	164.83	240.71	35.35	35.77	37.26
G.Total		543.14			108.38	

### ANNUAL FIXED CHARGES ALLOWABLE FOR THE PERIOD FY 2021-24

24. It is pertinent to mention that in Order dated 28.09.2020 this Hon'ble Commission approved revenue surplus of INR 114.47 Crore while Truing-up for FY 2017-18. MePGCL has adjusted the same while proposing tariff for FY 2021-22. However, since the revenue surplus was for FY 2017-18 adjusting the same in FY 2021-22 would require appropriate carrying cost for the intervening years. Similar submissions were also made by the Objector during the proceedings conducted for determining tariff for FY 2020-21. Regulations 11,20 and 26 of MYT Regulations, 2014 provide for passing of approved gains and losses in tariff consequent to truing up. The same has also been upheld by the Hon'ble Appellate Tribunal for Electricity ("Aptel") in its judgment dated 11.11.2011 passed in OP No. 01 of 2011 wherein it held as under:

"57. This Tribunal has repeatedly held that regular and timely truing-up expenses must be done since:

- (a) No projection can be so accurate as to equal the real situation.
- (b) The burden/benefits of the past years must not be passed on to the consumers of the future.
- (c) Delays in timely determination of tariff and truing-up entails:
  - (i) Imposing an underserved carrying cost burden to the consumers, as is also recognised by para 5.3 (h) (4) of National Tariff Policy.
  - (ii) Cash flow problems for the licensees.

58. A similar position is reflected in the tariff Regulations framed by various State 1st Respondents. These regulations would stipulate that the approved gains and losses have to be passed through the tariff following the True-up."

25. Further, this Hon'ble Commission in its Order dated 25.03.2020, passed in Case No. 02/2020, relied on Section 62(6) of Electricity Act, 2003 and held that the "carrying cost if any for recovery of the gaps/surplus shall be to the account of the licensee." Thus, it is prayed that the following carrying cost be passed on to the consumers:

## CARRYING COST COMPUTATION PERTAINING TO FY 2017-18 REVENUE SURPLUS

Particulars	Interest Rate	Carrying Cost	<b>Cumulative Surplus</b>
Surplus approved by MSERC vide Orderdated 28.09.2020			114.47
FY 2017-18 (1/2 year interest applicable)	13.85%	7.93	122.40
FY 2018-19	13.45%	16.46	138.86
FY 2019-20	13.80%	19.16	158.02
FY 2020-21	12.90%	20.38	178.41
FY 2021-22 (1/2 year interest applicable)	12.05%	10.75	189.16

# MePGCL's Reply

The AFC assessed by the objector is based on erroneous assumptions and, therefore, merits to be rejected. It is prayed that the AFC derived by MePGCL in its MYT Petition may kindly be considered by the Hon'ble Commission.

The objector has claimed carrying cost based on the true up order dated 28.09.2020, the review of which has been filed by MePGCL and which is yet to be disposed of by the Hon'ble Commission. Therefore, the same may kindly be rejected by the Hon'ble

# Commission.

The objections raised by BIA against the MYT Petition of MePGCL for Old Stations and Sonapani for FY 2021-22 to FY 2023-24 do not have any merit as explained in the preceding paras and, therefore, deserve to be rejected.

# **Commission's Views**

Commission noted the Response.

# **BIA objections on MLHEP**

1. In pursuance of the admission order and the public notice issued pursuant thereto inviting objections and representations from the stake-holders in the State of Meghalaya, the Objector/ Respondent herein, M/s Byrnihat Industries Association ("BIA") is filing the present objections to the petition filed by the Meghalaya Power Generation Corporation Limited (hereinafter referred to as 'MePGCL') seeking determination MYT for FY 2021-22 to 2023- 24 and generation Tariff for FY 2021-22 for MLHEP under the MSERC (Multi Year Tariff) Regulations, 2014 and Sections 62 and 64 read with Section 86 of Electricity Act, 2003.

## MePGCL's Reply

Matter of the Record.

## **Commission's Views**

Commission noted the Suggestion

4. At the outset it is submitted that MePGCL has not made public the certified copy of the instant petition and its annexures and forms. It has also not filed audited accounts for FY 2018-19. MePGCL has instead requested this Hon'ble Commission consider the finalized statement of accounts for FY 2018-19 and provisional statement accounts for FY 2019-20. It is pertinent to mention that MePGCL is a habitual offender which has in the past also never filed the CAG audited accounts on time. In the tariff petition filed last year for FY 2020-21, MePGCL had not filed CAG audited accounts from FY 2015-16 till FY 2017-18 and audited/unaudited accounts for FY 2018-19.

## MePGCL's Reply

The instant petition was made public in the website of MeECL along with annexures. It is not clear how did the objector prepare the para-wise objections to the petition without having a copy of the petition as stated in this paragraph. The objection of BIA claiming that the petition was not made public is, therefore, not only incorrect but also misleading.

The Statement of Accounts of MePGCL for FY 2018-19 were audited by the statutory

auditor appointed by the CAG. The audited accounts were forwarded to the CAG for his comments and are still awaited. MePGCL has filed the instant tariff petition together with the audited Statement of Accounts for FY 2018-19 and provisional statement of accounts for FY 2019-20.

As per Regulation 18.2 "in case audited accounts of previous year (i.e., FY 2019-20) is not available audited account for the year immediately preceding the previous year (i.e., FY 2018-19) should be filed along with the unaudited accounts for the previous year (i.e., FY 2019-20)".

Therefore, MePGCL has complied with the provisions of the above regulation while filing the instant tariff petition.

The comments of the CAG on the audited accounts of MePGCL for FY 2015-16 to FY 2017-18 were submitted earlier vide letter nos. MePGCL/D/GEN/Misc-43/2008/Pt-X/67 dt. 29.03.2018, MePGCL/D/GEN/Misc-43/2008/Pt-XII/52 dt. 30.05.2019 and MePGCL/ D/ GEN/Misc-43/2008/Pt-XIV/18 dt. 30.06.2020 respectively. It is pertinent to mention that MePGCL had also filed true up petitions for FY 2015-16 to FY 2017-18 along with SOA's and CAG's comments for these financial years. The Hon'ble Commission had also passed its true up orders for these financial years. Therefore, the claim of BIA that CAG audited accounts from FY 2015-16 till FY 2017-18 were not submitted, is incorrect.

## **Commission's Views**

Commission noted the Response.

5. MePGCL in the past had also filed Case No. 21 of 2018 seeking determination of generation tariff for FY 2019-20 for MyntduLeshka Power Station and Old Stations including Sonpani. The Hon'ble Commission in its Order dated 14.12.2018 directed MePGCL as under:

"MePGCL has filed petition for determination of Generation Tariff for MyntduLeshka Power Station & Old Stations Including Sonapani (MePGCL)for FY 2019-20. The licensee is required to file the petition in the format B meant for Hydel Generation as per MSERC(MYT) Regulations 2014 duly filled in for Commission's scrutiny and processing for revision of tariff for FY 2019-20. The licensee shall also submit audited statement of Accounts for 2016-17, 2017-18 & the actual expenses for first half of 2018-19." (Emphasis supplied)

Thus, it is prayed that MePGCL be directed to make CAG accounts available for all the preceding years. It is also important to mention that this Hon'ble Commission by Order dated 25.03.2020, passed in Case No. 02/2020, also directed MePGCL to get accounts audited by CAG upto 2019-20. Relevant extract of the order is as under: *"2. Financial statements of Accounts:* 

The Commission directs MePGCL to get the accounts audited by C&AG up to FY 2019-20 as per the Schedule without subjecting the carrying cost claim.

Commission's Review: The Licensee has submitted C&AG reports up to FY 2016-17. MePGCL has not filed true up petition for FY 2013-14 and FY 2014- 15 after receipt of the C&AG audit report. Commission considers Suo-Moto action as per the Regulations. The Licensee had failed to comply with the EA 2003 and MSERC Regulations.

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#### New Directives

The ARR for MYT period FY 2018-19 to FY 2020-21 was approved based on the projected business plan. The Licensee has not been presenting the audited accounts to the Commission as stipulated in the Regulations. The Commission is constrained to adopt the MYT ARR provisions for want of the audited financial statements up to FY 2018-19. There has been a flaw in the filing of the petitions for approval of the expenses for the past periods of FY 2013-14 and FY 2014-15 where in certain heads of accounts show excess over the admissible expenses in the provisional true up orders. Commission took up Suo-Moto action for Regulatory analysis, and the resultant gaps/surpluses in the Suo-Moto true up exercise has been appropriated in the previsions without giving room for public objections in claiming the Gaps of the previous years.

## **Regulatory Accounts**

The Licensee shall maintain and file Regulatory accounts along with Tariff Petition and for True up petition as mandated in Regulation 4.2 (c) of MYT Regulations 2014." Thus, it is prayed that appropriate action be taken against MePGCL for its continuous and unjustified failure in filing duly audited accounts.

### MePGCL's Reply

Format-B for Hydel Generation (pages-97 to 102 of MSERC MYT Regulations, 2014) consists of 5 (five) formats, i.e., Formats HG1, HG2, HG3, HG4 & HG5. The first four formats relate to technical details of the power station while Format HG5 relates to Annual Revenue Requirement. MePGCL has always filed /appended the technical formats with its tariff petition since its first tariff filing from FY 2013-14 till date.

The audited Statements of Accounts alongwith the CAG's comments for FY 2016-17 & 2017-18 were submitted to the Hon'ble Commission vide letter nos. MePGCL/D/GEN/M-43/2008/Pt-XII/52 dated 30.05.2019 and MePGCL/D/ GEN/ M-43/2008/Pt-XIV/18 dated 30.06.2020 respectively. The actual half-yearly expenses of 2018-19 were submitted vide letter No. MePGCL/D/ GEN/Misc-43/2008/Pt-XII/44 dated 3rd April, 2019. Therefore, the claim of BIA that the audited accounts for FY 2016-17, FY 2017-18 and actual expenses for the first half of FY 2018-19 were not submitted, is incorrect.

Regarding Regulatory Accounts, it may be pointed out that as per Regulation 4.2(C) of the MSERC MYT Regulations, 2014, the application for tariff determination based on Regulatory Accounts will be applicable once the Regulations in this regard are notified. At present the Regulations regarding Regulatory Accounts have not been notified by the Hon'ble Commission.

Therefore, MePGCL has not filed regulatory accounts with the present tariff petition.

#### **Commission's Views:**

Commission noted the Response.

6. The objector is an Association of industrial consumers in the Byrnihat area in the State of Meghalaya. The Industrial consumers are few in number but at the same time contribute a substantial part of the revenue requirements of the electricity utilities in the state. It is submitted that the industries have been set up in the State of Meghalaya based on the representations made on the sustained supply of electricity at competitive prices. The cost of electricity has however increased substantially over the years which have made the operation of industries in the State of the instant Petition, the Objector has worked with expert consultant, Mercados. A copy of the report prepared by the expert consultant, Mercados, is annexed as Annexure A.

#### MePGCL's Reply

Matter of Records

### **Commission's Views**

Commission noted the Suggestion.

- 7. For ease of reference the Objector is making submissions under the following subheadings:
  - a. True-up for FY 2018-19;
  - b. Gross Fixed Asset (GFA) and Capex
  - c. Interest and Finance Charges on Loan Capital
  - d. Depreciation
  - e. Return on Equity
  - f. O&M expenses
  - g. Interest on Working Capital
  - h. Annual Fixed Cost for FY 2021-22 to FY 2023-24 and Generation Tariff for FY

2021-22

## MePGCL's Reply

Matter of Records

#### **Commission's Views**

Commission noted the Suggestion.

## A. True-up for FY 2018-19

8. In its tariff petition, MePGCL has submitted that on account of lockdown there was a delay in start of process of audit for FY 2018-19. Thus, even though the statutory audits for FY 2018-19 are complete the CAG audit is still pending. In light of existing provisions of tariff regulations, MePGCL has submitted that it will file a separate petition seeking true up for FY 2018-19 once audit is completed. Thus, it is prayed that MePGCL be directed to make CAG accounts available at the earliest.

## MePGCL's Reply

The Audited Statement of Accounts of MePGCL for FY 2018-19 alongwith the Statutory Auditor's Report were submitted to the CAG and the comments of the CAG are awaited. MePGCL will file the true up petition for FY 2018-19 once the CAG's comments / report are received as required under Regulation 11.3 of the MSERC MYT Regulations, 2014, which specifies that Audited Accounts including report by CAG are to be submitted for truing up of Annual Revenue Requirement.

## **Commission's Views:**

Commission noted the Response.

# B. Gross Fixed Asset and Capex

- 9. MePGCL has claimed opening capital cost, for FY 2018-19, of INR 1,285.86 Crore as against the closing GFA of INR 1285.96, approved by this Hon'ble Commission in its Order dated 28.09.2020. Thus, it is prayed that the right amount be considered by this Hon'ble Commission and MePGCL be directed to file tariff petitions with care.Further, MePGCL's claim for FY 2020-21 merits to be dismissed as this Hon'ble Commission has approved Business Plant for the period of FY 2021-22 to 2023-24 as opposed to the period of 2020- 21 to 2023-24, as is being claimed by MePGCL.
- 10. It is submitted that this Hon'ble Commission in its Order dated 28.09.2020 had directed MePGCL to submit approved DPRs along with copies of necessary sanctions while projecting capex and capitalization. The relevant extract of the Order is as under:

"MePGCL shall submit the approved DPRs along with copies of sanctioned of working estimates from competent authority and funding arrangements etc., while projecting the year-wise Capex and capitalization in the ARR Petition for the control period FY 2021-22 to FY 2023-24."

MePGCL in contravention of the above direction has not submitted approved DPRs and working estimates in support of its claim for FY 2021-24. MePGCL has also filed any documentary evidence in support additional capitalization being sought by it. Thus, it is prayed that MePGCL's claim be rejected. This Hon'ble Commission may allow the following GFA for the period FY 2021-24:

	As Claimed by MePGCL			As per Objector's Assessment			
Particulars	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	
Opening GFA	1,287.01	1,289.99	1,295.17	1,285.61	1,285.61	1,285.61	
Addition during the Year	2.98	5.18	6.66	-	-	-	
Retirement during the Year	-	-	-	-	-	-	
Closing GFA	1,289.99	1,295.17	1,301.83	1,285.61	1,285.61	1,285.61	
Average GFA	1,288.5	1,292.58	1,298.5	1,285.61	1,285.61	1,285.61	

# GFA ALLOWABLE FOR THE PERIOD FY 2021-24 (Rs.Cr)

# **MePGCL's Reply**

The GFA of INR 1285.86 crore is as per asset records of MePGCL.

The instant MYT Petition is for the control period FY 2021-22 to FY 2023-24 and tariff determination for FY 2021-22. MePGCL has shown asset addition of INR 1.49 crore approved in the Business Plan for FY 2020-21 to arrive at the Opening GFA for FY 2021-22.

Hence, it is stated that additional capex was added as per approved business plan for FY 2021 -2024, It is requested from Hon'ble Commission to kindly consider the GFA as stated in Petition.

Also Additional capex investment was added to GFA as per approved Business plan order dated 30.09.2020 for FY 2021 – 2024 as stated below :-

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Particulars	(Estimated)	(Projected)	(Projected)	(Projected)
Opening GFA	1285.52	1287.01	1289.99	1295.17
Additions during the year	1.49	2.98	5.18	6.66
Closing GFA	1287.01	1289.99	1295.17	1301.83

## **Commission's Views:**

Commission noted the Response

## C. Interest and Finance Charges on Loan Capital

11. MePGCL has claimed interest of INR 47.22 Crore, 39.19 Crore and 31.45 Crore at the interest of 12.39%, 12.35% and 12.28% for 2021-22 to 2023-24. MePGCL has also considered an opening loan balance of INR 612.76 Crore for FY 2018- 19 as against the closing balance of INR 433.34 Crore, considered by this Hon'ble Commission, in its Order dated 28.09.2020. MePGCL has not given any justification or supporting documents to show why there has been such an increase in the loan balance. It is prayed that MePGCL be directed to explain why the values have been misreported to such an extent.

## MePGCL's Reply

The details of capital expenditure to be funded by grants and debt for FY 2021-22 to FY 2023-24 have been furnished in the capital investment plan of MePGCL and are duly approved by the Hon'ble Commission, vide Order dated 30.09.2020.

MePGCL further submits that the opening loan for FY 2018-19 is Rs 612.76 Crores which is the actual as per the audited SOA of MePGCL for the year 2018-19. The details of the additions of the loan was already presented in format 7 of Annexure B of the petition.

Audited Actual Loan ( 2018 - 2019) in Lakhs						
Particulars	Opening Balance	Ineterst Rate	Addition	Repayment	Closing Balance	Interest Accrued
BSE Bond 2nd Series	5000	11.40%	0	5000	0	285
PFC Loan MLHEP	16910	12.75%	0	1610.33	15300	2053
REC Loan MLHEP	18346	14%	0	2530.42	15815	2391
Federal Bank	774	11.98%	0	773.81	0	46
СВІ	2526	11.15%	0	834.33	1691	235
PFC Loan 170 Cr	11721	11.75%	5000	1244.48	15476	1598
PFC Loan 60 Cr	6000	11.25%	0	827.59	5172	628
Total	61276		5000	12820.96	53455	7237

The opening loan balance of INR 612.76 crore includes PFC loan of INR 170 crore (i.e., Rs. 120 crore + Rs. 50 crore) taken to redeem the BSE bonds of INR 120 crore and INR 50 crore which matured in FY 2017-18 and FY 2018-19. These bonds were approved as loan by the Hon'ble Commission while approving the capital cost of

MLHEP and therefore, the loan of Rs. 170 crore taken from PFC was a replacement of the bonds (total value of bonds being INR 170 crore) which formed part of the loan component approved by the Hon'ble Commission.

# **Commission's Views**

Commission considers the Interest on Ioan capital as per the MSERC MYT regulations 2014.

12. Since the opening balance, considered by MePGCL for 2018-19, is unacceptable, even the rate of interests considered by MePGCL become unacceptable. Thus, it is prayed that the Hon'ble Commission may consider the Weighted Average Interest Rate, approved by it in Order dated 28.09.2020, i.e., 12.15%.

# MePGCL's Reply

As stated in Para 11, opening balance for FY 2018 -2019 is based on actual as per audited SOA and Weighted interest rate considered by MePGCL as per actual audited SOA for FY 2018- 2019 is shown below :-

FY 2018 -2019 (Actual) (Rs. in crore)				
Opening Balance for 2018-19	612.76			
Addition during the Year	50			
Repayment	128.21			
Closing Balance	534.55			
Interest Accrued	72.37			
Weighted Average Interest Rate	12.62%			

## **Commission's Views**

Commission noted the Response

13. Further, in light of lack of transparency on account of MePGCL, it is submitted that normative loan additions should be considered as nil for FY 2021-22 to 2023-24 in accordance with Regulation 55 of the MYT Regulations. Thus, the Hon'ble Commission is requested to allow the following interest charges:

As per Objector's Assessment						
Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Opening balance	433.44	355.23	289.02	233.29	164.87	98.57
Addition during the Year	50.00	-	-	-	-	-
Repayment during the Year	128.21	66.21	55.73	68.42	66.3	66.66
Closing balance	355.23	289.02	233.29	164.87	98.57	31.91
Average Loan	394.34	322.13	261.16	199.08	131.72	65.24
Interest Rate (%)	12.15%	12.15%	12.15%	12.15%	12.15%	12.15%
Interest on Loan	47.91	39.13	31.73	24.19	16.00	7.93
G.Total					48.11	

# ALLOWABLE INTEREST ON LOAN FOR THE PERIOD FY 2021-24

# MePGCL's Reply

The loan addition of Rs. 50 crore during FY 2018-19 is part of the Rs. 170 crore loan taken from PFC for redemption of the Rs. 50 crore bonds during FY 2018-19. The closing balance of the bonds, therefore, became 'Nil' for FY 2018-19, as shown in Format-7 attached with the instant petition. The Hon'ble Commission is, therefore, requested to kindly consider this loan addition since it forms part of the loan component which replaces the bonds approved for the project.

# **Commission's View**

Commission considers Interest on Ioan Capital as per the Regulations.

# D. DEPRECIATION

14. MePGCL has claimed depreciation of INR 191.10 Crore for FY 2021-22 to 2023-24. MePGCL's submission about there being no component of grant, against this project, there is no deduction of depreciation on assets funded through grants is denied. It is submitted that the Audited Balance Sheet for FY 2018-19 (reference Note 13.1) clearly shows that the average grants for FY 2018-19 is INR 193.19 Crore.

## MePGCL's Reply

The Hon'ble Commission had approved the capital cost of MLHEP at Rs. 1134.28 crore (excluding infirm energy value) as on 31.03.2013 consisting of loan (Rs. 794.00

crore) and equity (Rs. 340.28 crore) in its order dated 30.03.2017. There is no grant component as such and the claim of BIA that there is an average grant of INR 193.39 crore for MLHEP for FY 2018-19 is misplaced, since the grants are meant for works of Old Stations, Survey & Investigation works, etc., and not for MLHEP. The claim may, therefore, kindly be rejected.

### **Commission's Views**

Commission considers Depreciation as per the Regulations.

15. Further, the depreciation rate submitted by MePGCL is grossly overvalued as the asset wise rate of depreciation has remained unchanged and there has been no asset addition since FY 2018-19. Thus, it is prayed that MePGCL be directed to provide asset wise rate of depreciation considered by it in calculating its claim. In absence of such information, it is prayed that the Hon'ble Commission may consider the weighted average rate of depreciation as already approved by this Hon'ble Commission in Order dated 28.09.2020. Accordingly, the allowable depreciation for FY 2021-22 to 2023-24 is as under:

	As per Objector's Assessment					
Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Opening GFA	1,285.95	1,285.61	1,285.61	1,285.61	1,285.61	1,285.61
Less: Land	23.90	23.90	23.93	23.98	24.08	23.90
Addition during the Year	-	-	-	-	-	-
Retirement during the Year	0.34	-	-	-	-	-
Closing GFA	1,285.61	1,285.61	1,285.61	1,285.61	1,285.61	1,285.61
Average GFA	1261.88	1261.71	1261.68	1261.63	1261.53	1261.71
Weighted rate of depreciation	4.32%	4.32%	4.32%	4.32%	4.32%	4.32%
Depreciation	49.06	49.06	49.05	49.05	49.05	49.06
Contribution from Grants (as per Note 13.1 to AA)	193.39	193.39	193.39	193.39	193.39	193.39
Depreciation on assets funded through grants	8.35	8.35	8.35	8.35	8.35	8.35
Net depreciation	40.71	40.70	40.70	40.70	40.69	40.70
Grand total	147.16					

## DEPRECIATION ALLOWABLE FOR THE PERIOD FY 2021-24

## MePGCL's Reply

The depreciation rates adopted by MePGCL in the instant petition are as per Depreciation Schedule given in Annexure-II of the MSERC MYT Regulations, 2014. The Hon'ble Commission is, therefore, requested to kindly consider the depreciation rates and depreciation amount as submitted in the instant petition by MePGCL and not the average rate and depreciation given by BIA since these are not as per regulations and have no basis at all.

## **Commission's Views**

Rate of Depreciation shall be considered as per the Regulations.

# E. Return on Equity

16. MePGCL has claimed Return on Equity of INR 162.95 Crore for FY 2021-22 to 2023-24 after considering return on equity as 14%. The allowable Return on Equity, after considering the overall GFA of INR 1285.95 Crore is as under:

		As per Objector's Assignments							
Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)			
Opening GFA for the Year	1,285.95	1,285.61	1,285.61	1,285.61	1,285.61	1,285.61			
Additions	-0.34	-	-	-	-	-			
Closing GFA for the Year	1,285.61	1,285.61	1,285.61	1,285.61	1,285.61	1,285.61			
Average Assets Base for the year	1,285.78	1,285.61	1,285.61	1,285.61	1,285.61	1,285.61			
Less: Average Grants	193.39	193.39	193.39	193.39	193.39	193.39			
Net Assets	1,092.39	1,092.22	1,092.22	1,092.22	1,092.22	1,092.22			
Debt component (@70%)									
Equity component (@30%)	327.72	327.67	327.67	327.67	327.67	327.67			
RoE (%)	14%	14%	14%	14%	14%	14%			
Return on Equity	45.88	45.87	45.87	45.87	45.87	45.87			
Grand Total				137.62					

# RETURN ON EQUITY ALLOWABLE FOR THE PERIOD FY 2021-24 (in Rs. Cr)

# MePGCL's Reply

The objector has calculated ROE by deducting average grants of Rs. 193.39 crore. As explained in para-14 above, the project cost of MLHEP consists only of loan and equity components. The grants of Rs. 193.39 crore are for works relating to Old Stations, Survey & Investigation works, etc., which are not related to MLHEP. Therefore, it is prayed that the ROE for MLHEP may kindly be considered by the Hon'ble Commission without deduction of these grants.

## **Commission's Views**

Return on Equity shall be considered as per the Regulations.

# F. Operation and Maintenance Expenses (O&M) Expenses

- MePGCL has claimed INR 161.81 Crore towards O&M expenses with escalation of 5.72% per annum. MePGCL has also claimed impact of revision of pay effective from January, 2020.
- 18. It is submitted that MePGCL's submissions of 27% escalation is not supported by Regulation 56.7 of MSERC MYT Regulations which provides for calculation of O&M expenses for hydro generating stations, declared under commercial operation on or after 01.04.2009. As per the said regulation the O&M expenses shall be fixed at 2% of the original project cost and shall be subject to annual exemption at 5.72% for the subsequent years. Regulation

56.7 reads 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"

19. Accordingly, the escalation sought by MePGCL merits to be disallowed.

Further, computation of RoP impact has been done MePGCL level and the same cannot be passed on to individual stations such as MLHEP. Accordingly, the allowable O&M expenses for FY 2021-24 is as under:

	As Claimed by MePGCL			As pe	As per Objector's Assessment		
Particulars	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	
0&M	50.96	53.88	56.96	35.40	37.43	39.57	
Total	50.96	53.88	56.96	35.40	37.43	39.57	
Grand Total	161.80			112.40			

## **O&M EXPENSES ALLOWABLE FOR THE PERIOD FY 2021-24**

# **MePGCL Reply**

The annual escalation of 5.72% in O&M expenses provided in Regulation 56.7 of MSERC MYT Regulation, 2014 is for taking care of the normal annual inflation in O&M cost.

In January, 2020, pay revision was implemented and its impact is to the extent of 27%, which cannot be covered by the normal annual escalation of 5.72%. Pay revision is part and parcel of the employee costs which form part of O&M expenses.

Therefore, it is prayed that the impact of pay revision may also kindly be considered by the Hon'ble Commission since this is an additional cost which cannot be treated as normal escalation and cannot be met from the 5.72% annual escalation as proposed by BIA.

# **Commission's Views**

O&M expenses shall be considered as per the Regulations.

# G. Interest on Working Capital

20. MePGCL has claimed INR 17.77 Crore towards Interest on Working Capital for FY 2021-22 to 2023-24 at interest rate of 12.15%. In light of the submissions made above the allowable interest is as under:

	As per Objector's Assignments						
Particulars	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	
O&M for 1 Month	4.25	4.49	4.75	2.95	3.12	3.30	
Maintenance Spare @ 15% of O&M expenses, escalated by 6%	7.64	8.08	8.54	5.63	5.95	6.29	
Receivable for 2 Month	36.95	36.16	35.47	25.04	24.00	23.00	
Total	48.84	48.73	48.76	33.62	33.07	32.59	
Interest Rate (%)	12.15%	12.15%	12.15%	12.15%	12.15%	12.15%	
Interest on Working Capital	5.93	5.92	5.92	4.08	4.02	3.96	
G.Total	17.78 12.06						

# INTEREST ON WORKING CAPITAL ALLOWABLE FOR THE PERIOD FY 2021-24

## MePGCL's Reply

The objector has derived Interest on Working Capital by considering O&M expenses and other components of ARR which have been reduced due to non-consideration of genuine and allowable costs as explained in the preceding paras. It is, therefore, prayed that the figure given by the objector may kindly be rejected and the IWC as proposed by MePGCL in the instant petition be considered by the Hon'ble Commission.

## **Commission's Views**

Interest on working capital shall be considered as per the Regulations.

# H. Annual Fixed Charges for FY 2021-22 to 2023-24 and Generation Tariff for FY 2021-22

21. In light of the submissions made above the allowable AFC as per the Objector is as under:

	As Cla	As Claimed by MePGCL			As per Objector's Assessment		
Particulars	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	
Interest on Loan capital	47.22	39.20	31.47	24.19	16.00	7.93	
Depreciation	63.47	63.67	63.96	40.70	40.69	40.70	
O&M Expenses	50.96	53.88	56.96	35.40	37.43	39.57	
Interest on working capital	5.93	5.92	5.92	4.08	4.02	3.96	
Return on Equity	54.12	54.29	54.54	45.87	45.87	45.87	
Total Annual Fixed Cost	221.70	216.95	212.85	150.24	144.01	138.03	
Less: Non Tariff Income	0.014	0.014	0.015	0.014	0.014	0.015	
Net Annual Fixed Cost	221.68	216.94	212.83	150.23	144.00	138.01	
Grand Total			651.45			432.24	

#### ANNUAL FIXED CHARGES ALLOWABLE FOR THE PERIOD FY 2021-24

# MePGCL's Reply

The AFC derived by BIA is not correct since it is based on tariff components which have not taken into account the allowable costs and which have not been calculated as per regulations as explained in the preceding paras.

Therefore, it is prayed that the AFC derived by the objector may kindly be rejected and the AFC as proposed by MePGL in the instant petition be considered by the Hon'ble Commission.

## **Commission's Views**

Commission after Prudence check of the petition, considering the Statement of Accounts for FY 2018-19 and FY 2019-20, the approved business plan for 3<sup>rd</sup> MYT control period, the additional information subsequently filed on 3<sup>rd</sup> February 2021, taking into account, the objections raised by the stakeholders, the response of the licensee for the objections, the minutes of the Public hearing process and views of the State advisory committee, commission will consider the ARR as per Regulations.

22. It is pertinent to mention that in Order dated 28.09.2020 this Hon'ble Commission approved revenue surplus of INR 114.47 Crore while Truing-up for FY 2017-18. MePGCL has adjusted the same while proposing tariff for FY 2021-22. However, since the revenue surplus was for FY 2017-18 adjusting the same in FY 2021-22 would require appropriate carrying cost for the intervening years. Similar submissions were also made by the Objector during the proceedings conducted for determining tariff for FY 2020-21. Regulations 11,20 and 26 of MYT Regulations, 2014 provide for passing of approved gains and losses in tariff consequent to truing up. The same has also been upheld by the Hon'ble Appellate Tribunal for Electricity ("Aptel") in its judgment dated 11.11.2011 passed in OP No. 01 of 2011 wherein it held as under:

*"*57. This Tribunal has repeatedly held that regular and timely truing-up expenses must be done since:

- (a) No projection can be so accurate as to equal the real situation.
- (b) The burden/benefits of the past years must not be passed on to the consumers of the future.
- (c) Delays in timely determination of tariff and truing-up entails:
  - (i) Imposing an underserved carrying cost burden to the consumers, as is also recognised by para 5.3 (h) (4) of National Tariff Policy.
  - (ii) Cash flow problems for the licensees.

58. A similar position is reflected in the tariff Regulations framed by various State 1st Respondents. These regulations would stipulate that the approved gains and losses have to be passed through the tariff following the True-up."

23. Further, this Commission in its Order dated 25.03.2020, passed in Case No. 02/2020, relied on Section 62(6) of Electricity Act, 2003 and held that the "carrying cost if any for recovery of the gaps/surplus shall be to the account of the licensee."Thus, it is prayed that the following carrying cost be passed on to the consumers:

## **CARRYING COST COMPUTATION PERTAINING TO FY 2017-18 REVENUE SURPLUS**

Particulars	Interest Rate	Carrying Cost	Cumulative Surplus
Surplus approved by MSERC vide Orderdated 28.09.2020			114.47
FY 2017-18 (1/2 year interest applicable)	13.85%	7.93	122.40
FY 2018-19	13.45%	16.46	138.86
FY 2019-20	13.80%	19.16	158.02
FY 2020-21	12.90%	20.38	178.41
FY 2021-22 (1/2 year interest applicable)	12.05%	10.75	189.16

## **MePGCL's Reply**

The objector has claimed carrying cost on the true up order dated 28.09.2020, the review of which has been filed by MePGCL and which is yet to be disposed of by the Hon'ble Commission. Therefore, the same may kindly be rejected by the Hon'ble Commission.

### **Commission View's**

Commission noted the Response.

24. In light of submissions made herein above the allowable generation tariff for FY2021-22 is as under:

Particulars	As Claimed by MePGCL	As per Objector's Assessment	
Gross AFC for the FY 2021-22 (Rs. Crore)	221.68	150.23	
Less: FY 2017-18 Surplus adjustment (incl. CarryingCost) (Rs. Crore)	41.99	69.38	
Net AFC for FY 2021-22 for Computation of Tariff (Rs.Cr)	179.69	80.84	
Gross Generation as approved in the Business plan order dated 30.09.2020	486	486	
Less: Auxiliary Consumption @ 1% (MU)	2.35	4.86	
Less: Transformation Loss @ 0.5% (MU)	1.18	2.43	
Net Energy (MU)	482.47	478.71	
Fixed Charge (Rs.Cr)	89.85	40.42	
Variable charge (INR/Kwh)	1.86	0.84	

## ALLOWABLE GENERATION TARIFF FOR THE FY 2021-22

## MePGCL's Reply

The Generation Tariff for FY 2021-22 derived by BIA at INR 0.84/ kwh for variable charge for MLHEP, a new project commissioned in April, 2013, is perhaps the lowest in the country and such a tariff is a discouragement to the development of power projects and runs counter to the National Electricity Policy. The tariff proposed by the objector may, therefore, kindly be rejected and the ARR and tariff submitted in the instant petition by MePGCL may kindly be considered.

## **Commission's views**

Commission noted the Response.

25. The above aspects may be taken into consideration, the objector craves leave to the add to the submission mentioned above and also to submit such material with leave of the commission as may be necessary in the truing up also craves leave to make oral submissions in the public hearing to be conducted by the Hon'ble commission.

# MePGCL Reply:

As explained in the preceding paras, the claims of BIA do not have any merit and deserve to be rejected. The Hon'ble Commission is requested to consider the tariff proposed by MePGCL in the instant petition since these are based on genuine costs and not on presumptions/ assumptions as submitted by the objector.

## **Commission's Views**

Commission noted the Response.

# **BIA objections on NUHEP**

1. In pursuance of the admission order and the public notice issued pursuant thereto inviting objections and representations from the stake-holders in the State of Meghalaya, the Objector/ Respondent herein, M/s Byrnihat Industries Association ("BIA") is filing the present objections to the petition filed by the Meghalaya Power Generation Corporation Limited (hereinafter referred to as 'MePGCL') seeking determination MYT for FY 2021-22 to 2023- 24 and generation Tariff for FY 2021-22 for NUHEP under the MSERC (Multi Year Tariff) Regulations, 2014 and Sections 62 and 64 read with Section 86 of Electricity Act, 2003.

# MePGCL's Reply

Matter of the Record.

## **Commission's View**

Commission noted the Suggestion.

4. At the outset it is submitted that MePGCLhas not made public the certified copy of the instant petition and its annexures and forms. It has also not filed CAG audited accounts for FY 2018-19. MePGCL has instead requested this Hon'ble Commission consider the finalized statement of accounts for FY 2018-19 and provisional statement accounts for FY 2019-20. It is pertinent to mention that MePGCL is a habitual offender which has in the past also never filed the CAG audited accounts on time. In the tariff petition filed last year for FY 2020-21, MePGCL had not filed CAG audited accounts from FY 2015-16 till FY 2017-18 and audited/unaudited accounts for FY 2018-19.

## MePGCL's Reply

The objection of BIA claiming that the petition was not made public is, therefore, incorrect and misleading.

The Statement of Accounts of MePGCL for FY 2018-19 were audited by the Statutory Auditor appointed by CAG and the audited accounts alongwith the Auditor's report were forwarded to the CAG for his comments, which are still awaited. The comments of the CAG for FY 2015-16 till FY 2017-18 were submitted earlier vide letter nos. MePGCL/D/GEN/Misc-43/2008/Pt-X/67 dt. 29.03.2018, MePGCL/D/GEN/ Misc-43/2008/Pt-XII/52 dt. 30.06.2019 and MePGCL/D/GEN/Misc-43/2008/Pt-XIV/18 dt.30.06.2020 respectively. It is pertinent to mention that MePGCL had also filed true up petitions for FY 2015-16 to FY 2017-18 alongwith CAG's comments for these financial years. The Hon'ble Commission had also passed its true up orders for these financial years. Therefore, the claim of the objector that CAG audited accounts from FY 2015-16 till FY 2017-18 were not submitted, is incorrect.

MePGCL has filed the instant tariff petition together with the audited Statement of Accounts for FY 2018-19 and provisional statement of accounts for FY 2019-20.

As per Regulation 18.2 "in case audited accounts of previous year (i.e., FY 2019-20) is not available audited account for the year immediately preceding the previous year (i.e., FY 2018-19) should be filed alongwith the unaudited accounts for the previous year (i.e., FY 2019-20).

Therefore, MePGCL has complied with the provisions of the above regulation while filing the instant tariff petition.

## **Commission's View**

Commission noted the Response.

5. The Commission in its Order dated 14.12.2018, passed in Case No. 21 of 2018, directed MePGCL as under:

"MePGCL has filed petition for determination of Generation Tariff for MyntduLeshka Power Station & Old Stations Including Sonapani (MePGCL) for FY 2019-20. The licensee is required to file the petition in the format B meant for Hydel Generation as per MSERC(MYT) Regulations 2014 duly filled in for Commission's scrutiny and processing for revision of tariff for FY 2019-20. The licensee shall also submit audited statement of Accounts for 2016-17, 2017-18 & the actual expenses for first half of 2018-19." (Emphasis supplied)

Thus, it is prayed that MePGCL be directed to make CAG accounts available for all the preceding years. It is also important to mention that this Hon'ble Commission by Order dated 25.03.2020, passed in Case No. 02/2020, also directed MePGCL to get accounts audited by CAG upto 2019-20. Relevant extract of the order is as under:

# "2. Financial statements of Accounts:

The Commission directs MePGCL to get the accounts audited by C&AG up to FY 2019-20 as per the Schedule without subjecting the carrying cost claim.

Commission's Review: The Licensee has submitted C&AG reports up to FY 2016-17. MePGCL has not filed true up petition for FY 2013-14 and FY 2014- 15 after receipt of the C&AG audit report. Commission considers Suo-Moto action as per the Regulations. The Licensee had failed to comply with the EA 2003 and MSERC Regulations.

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#### **New Directives**

The ARR for MYT period FY 2018-19 to FY 2020-21 was approved based on the projected business plan. The Licensee has not been presenting the audited accounts to the Commission as stipulated in the Regulations. The Commission is constrained to adopt the MYT ARR provisions for want of the audited financial statements up to FY 2018-19. There has been a flaw in the filing of the petitions for approval of the expenses for the past periods of FY 2013-14 and FY 2014-15 where in certain heads of accounts show excess over the admissible expenses in the provisional true up orders. Commission took up Suo-Moto action for Regulatory analysis, and the resultant gaps/surpluses in the Suo-Moto true up exercise has been appropriated in the present Tariff Order. The Licensee is directed to comply with the Regulatory provisions without giving room for public objections in claiming the Gaps of the previous years.

## **Regulatory Accounts**

The Licensee shall maintain and file Regulatory accounts along with Tariff Petition and for True up petition as mandated in Regulation 4.2 (c) of MYT Regulations 2014." Thus, it is prayed that appropriate action be taken against MePGCL for its continuous and unjustified failure in filing duly audited accounts.

## MePGCL's Reply

Format-B for Hydel Generation (pages-97 to 102 of MSERC MYT Regulations, 2014) consists of 5 (five) formats, i.e., Formats HG1, HG2, HG3, HG4 & HG5. The first four formats relate to technical details of the power station while Format HG5 relates to

Annual Revenue Requirement which is presented in details in the tariff petition. MePGCL has always submitted/ appended the technical formats with its tariff petitions since its first tariff filing from FY 2013-14 onwards.

The audited Statements of Accounts along with CAG's comments for FY 2016-17 and 2017-18 were submitted to the Hon'ble Commission vide letter Nos. MePGCL/D/GEN/M-43/2008/Pt-XII/52 dated 30.05.2019 and MePGCL/D/GEN/M-43/2008/Pt-XIV/18 dated 30.06.2020 respectively. The actual half yearly expenses of 2018-19 were submitted to the Hon'ble Commission vide letter No. MePGCL/D/GEN/Misc-43/2008/Pt-XII/44 dated 3rd April, 2019. Therefore, the claim of BIA that the audited accounts for FY 2016-17, FY 2017-18 and actual expenses for the first half of FY 2018-19 were not submitted, is incorrect.

Regarding Regulatory Accounts, it may be pointed out that as per Regulation 4.2(C), the application for tariff determination based on Regulatory Accounts will be applicable once the Regulations in this regard are notified. Since the Regulatory Accounts have not been notified, these have not been filed with the present tariff petition.

## **Commission's View**

Commission noted the Response.

6. The objector is an Association of industrial consumers in the Byrnihat area in the State of Meghalaya. The Industrial consumers are few in number but at the same time contribute a substantial part of the revenue requirements of the electricity utilities in the state. It is submitted that the industries have been set up in the State of Meghalaya based on the representations made on the sustained supply of electricity at competitive prices. The cost of electricity has however increased substantially over the years which have made the operation of industries in the State more and more unviable. In order to submit a comprehensive and detailed analysis of the instant Petition, the Objector has worked with expert consultant, Mercados. A copy of the report prepared by the expert consultant, Mercados, is annexed as Annexure A.

## MePGCL's Reply

Matter of Record.

## **Commission's View**

Commission noted the Suggestions.

- 7. For ease of reference the Objector is making submissions under the following subheadings:
  - a. True-up for FY 2018-19;
  - b. Gross Fixed Asset (GFA) and Capex
  - c. Interest and Finance Charges on Loan Capital
  - d. Depreciation
  - e. Return on Equity
  - f. O&M expenses
  - g. Interest on Working Capital
  - h. Annual Fixed Cost for FY 2021-22 to FY 2023-24 and Generation Tariff for FY 2021-22

#### MePGCL's Reply

Matter of Record.

## **Commission's View**

Commission noted the Suggestion.

## A. True-up for FY 2018-19

8. In its tariff petition, MePGCL has submitted that on account of lockdown there was a delay in start of process of audit for FY 2018-19. Thus, even though the statutory audits for FY 2018-19 are complete the CAG audit is still pending. In light of existing provisions of tariff regulations, MePGCL has submitted that it will file a separate petition seeking true up for FY 2018-19 once audit is completed. Thus, it is prayed that MePGCL be directed to make CAG accounts available at the earliest.

## MePGCL's Reply

The Audited Statement of Accounts of MePGCL for FY 2018-19 along with the Statutory Auditor's Report were submitted to the CAG and the comments of the CAG are awaited. MePGCL will file the true up petition for FY 2018-19 once the CAG's comments are received as required under Regulation 11.3 of the MSERC Regulations, 2014 which specifies that Audited Accounts including report by CAG are to be submitted for truing up of Annual Revenue Requirement.

#### **Commission's View**

Commission noted the Response.

#### B. Gross Fixed Asset and Capex

9. MePGCL has considered opening capital cost, for FY 2018-19, of INR 600.78 Crore as against the closing GFA of INR 580.72 Crores, approved by this Hon'ble Commission in its Order dated 28.09.2020, while conducting true-up for FY 2017-18. Thus, it is prayed that the right amount be considered by this Hon'ble Commission and MePGCL be directed to file tariff petitions with care.

#### MePGCL's Reply

The opening GFA of NUHEP for FY 2018-19 is INR 600.78 crore as per audited Statement of Accounts for FY 2018-19. MePGCL has, therefore, considered this amount in the instant petition.

#### **Commission's View**

Commission noted the Response.

10. Further, this Hon'ble Commission while approving the Business Plan for FY 2021-22 to 2023-24 did not approve any new capex and capitalization in line with the investment plan submitted by MePGCL. Accordingly, no capex and capitalization can also be considered for NUHEP. Thus, it is prayed that the following capital cost and GFA be allowed by this Hon'ble Commission:

#### GFA ALLOWABLE FOR THE PERIOD FY 2021-24

	As Claimed by MePGCL			As per (	As per Objector's Assessment			
Particulars	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)		
Opening GFA	604.13	604.13	604.13	581.82	581.82	581.82		
Addition during the Year	-	-	-	-	-	-		
Retirement during the Year	-	-	-	-	-	-		
Closing GFA	604.13	604.13	604.13	581.82	581.82	581.82		
Average GFA	604.13	604.13	604.13	581.82	581.82	581.82		

#### MePGCL's Reply

The additional capitalization during FY 2018-19 and FY 2019-20 which relate to original scope of work such as payment for land, road diversion, etc. have been

considered since additional capitalization is admissible upto the cut-off date, i.e., 31.03.2020 as per Regulation 29 of MSERC MYT Regulations 2014. This has been done to obtain the opening GFA for FY 2021-22.

Therefore, the GFA assessed by the objector may kindly be rejected and the GFA as submitted by MePGCL in the instant petition may kindly be considered by the Hon'ble Commission.

#### **Commission's View**

Commission noted the Response.

#### C. Interest and Finance Charges on Loan Capital

11. MePGCL has claimed INR 39.73 Crore, INR 36.03 Crore and INR 32.33 Crore, towards interest and finance charges, for FY 2021-22 to 2023-24, at the interest rate of 11.75%. MePGCL has also considered opening loan balance of INR 440.30 Crore, for FY 2018-19, for computation of loan balance for FY 2021-22, as opposed to approved closing balance of INR 293.70 Crore. MePGCL without any justification and documentary proof has considered a different opening loan balance then that approved by this Hon'ble Commission. Thus, since the opening loan balance considered by MePGCL is incorrect even the interest rate considered by it will be incorrect. Accordingly, it is prayed that the Hon'ble Commission may consider the Weighted Average Interest Rate, approved by it in Order dated 28.09.2020, i.e., 9.13%. thus, the allowable interest on loan for the period FY 2021-24 is as under:

		As per Objector's Assessment							
Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)			
Opening balance	293.07	261.62	230.03	206.59	175.14	143.69			
Addition during the Year	-	-	-	-	-	-			
Repayment during the Year	31.45	31.59	23.44	31.45	31.45	31.45			
Closing balance	261.62	230.03	206.59	175.14	143.69	112.24			
Average Loan	277.35	245.83	218.31	190.87	159.42	127.97			
Interest Rate (%)	9.13%	9.13%	9.13%	9.13%	9.13%	9.13%			
Interest on Loan	25.31	22.43	19.92	17.42	14.55	11.68			
G.Total					43.64				

#### ALLOWABLE INTEREST ON LOAN FOR THE PERIOD FY 2021-24

#### MePGCL's Reply

MePGCL had taken loan amounting to Rs. 440.30 from Power Finance Corporation for construction of NUHEP. The interest rate (actual) during FY 2018-19 and FY 2019-20 was 12.65%. The rate of interest projected during the control period is 11.75% as claimed in the instant petition.NUHEP declared COD during FY 2017-18 (COD is on 01.07.2017). Therefore, MePGCL further submits that the opening loan for FY 2018-19 is Rs 440.30 Crores which is the actual as per the audited SOA of MePGCL for the year 2018-19. The details of the loan were already presented in Format 7 of Annexure C of the petition. MePGCL has projected loan balance for FY 2021 – 2024 based on actual audited SOA for FY 2018 -2019, and provisional SOA for FY 2019 -2020.

Therefore, it is prayed before the Hon'ble Commission to kindly consider the methodology used for calculation of rate of interest and projected interest amount as stated in the petition.

#### **Commission's View**

Commission considers Interest on Loan capital as per MSERC MYT Regulations 2014.

#### D. Depreciation

- 12. MePGCL has claimed depreciation of INR 90.66 Crore for FY 2021-22 to 2023-24. MePGCL has further submitted that there is no portion of grant in the original capital cost. This content of MePGCL is denied. This Hon'ble Commission, vide Order dated 28.09.2020, deducted the depreciation, amounting to INR 5.62 Crore, funded through grants for FY 2017-18. MePGCL has also not provided asset wise break-up, funded through grant.
- It is thus, prayed that MePGCL be directed to submit asset wise rate of depreciation considered by it for its claim for FY 2021-22 to 2023-24. Accordingly, the allowable depreciation is as under:

#### DEPRECIATION ALLOWABLE FOR THE PERIOD FY 2021-24

	As per Obje	ctors Assessmen	ts			
Particulars	FY 2018- 19 (Actual)	FY 2019- 20 (Provisional)	FY 2020- 21 (Estimated	FY 2021- 22 (Projected)	FY 2022- 23 (Projected)	FY 2023-24 (Projected)
Opening GFA	580.72	581.82	581.82	581.82	581.82	581.82
Less: Land	0.41	0.48	0.48	0.48	0.48	0.48
Addition during the Year	1.10	-	-	-	-	-
Retirement during the Year	-	-	-	-	-	-
Closing GFA	581.82	581.82	581.82	581.82	581.82	581.82
Average GFA	580.86	581.34	581.34	581.34	581.34	581.34
Weighted rate of depreciation	4.38%	4.38%	4.38%	4.38%	4.38%	4.38%
Depreciation	22.90	22.92	22.92	22.92	22.92	22.92
Contribution from Grants	128.37	128.37	128.37	128.37	128.37	128.37
Depreciation on assets funded through grants	5.62	5.62	5.62	5.62	5.62	5.62
Net depreciation	17.27	17.29	17.29	17.29	17.29	17.29
Grand total		•	•		51.88	•

#### MePGCL's Reply

Opening GFA projected for FY 2021 -2024 is based on actual audited SOA for FY 2018-2019 and provisional audited SOA for FY 2019 -2020. The rates of depreciation adopted by MePGCL are as given at Annexure-II of the MSERC MYT Regulations, 2014. These rates are used to calculate the asset-wise depreciation as given in Format-6 annexed to the instant petition (Annexure-C).

BIA has adopted weighted average rate of depreciation which is not as per regulations. Hence, it is prayed to Hon'ble commission to kindly consider the depreciation amount as projected in petition.

#### **Commission's View**

Commission considers Rate of Depreciation as per MSERC MYT Regulations 2014.

#### E. Return on Equity

14. MePGCL has projected return on equity based on the average asset base for NUHEP. It has also submitted that there is no funding of capital cost by grant due to which whole of asset has been considered for calculating the equity base and the return on equity. Accordingly, MePGCL has claimed INR 76.11 Crore towards return on equity for FY 2021-22 to 2023-24 after considering rate of 14%. It is reiterated that MePGCL has not deducted grants from overall GFA while considering opening equity for FY 2018-19. 15. It is prayed that the Hon'ble Commission consider the following allowable return on equity for FY 2021-22:

		As per Objector's Assessment							
Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)			
Opening GFA for the Year	580.72	581.82	581.82	581.82	581.82	581.82			
Additions	1.10	-	-	-	-	-			
Closing GFA for the Year	581.82	581.82	581.82	581.82	581.82	581.82			
Average Assets Base for the year	581.27	581.82	581.82	581.82	581.82	581.82			
Less: Average Grants	128.37	128.37	128.37	128.37	128.37	128.37			
Net Assets	452.90	453.45	453.45	453.45	453.45	453.45			
Debt component (@70%)									
Equity component (@30%)	135.87	136.04	136.04	136.04	136.04	136.04			
RoE (%)	14%	14%	14%	14%	14%	14%			
Return on Equity	19.02	19.04	19.04	19.04	19.04	19.04			
Grand Total					57.13				

#### **RETURN ON EQUITY ALLOWABLE FOR THE PERIOD FY 2021-24**

#### **MePGCL's Reply**

The capital cost of NUHEP amounting to Rs. 604.13 crore as on FY 2019-20 which includes additional capitalization upto 31.03.2020 consist of loan (Rs. 440.30 crore as explained at para 11 above) and equity of Rs. 163.83 crore.

It may be mentioned that till date there are still pending payments such as payment for land, road diversion, etc., which were included in the original project cost but which could not be made / taken up due to land problems which were settled only in 2020. The total project cost may, therefore, still increase. However, the project cost upto the cut-off dates i.e., Rs. 604.13 crore may kindly be taken into consideration by the Hon'ble Commission.

It may be mentioned that there are no grants against NUHEP and the amount of Rs. 128.37 crore shown as grants by the objector is incorrect since NUHEP is funded only through PFC loan and equity from the State Government.

Based on the total asset base (Section 3.3.2 of the petition) and the Hon'ble Commission's methodology, the return on equity for the control period is given below:

Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Opening GFA	600.78	601.88	604.13	604.13	604.13	604.13
Additions during the year	1.1	2.25	0	0	0	0
Closing GFA	601.88	604.13	604.13	604.13	604.13	604.13
Avg GFA	601.33	603.01	604.13	604.13	604.13	604.13
Equity Value ( 30 % of Avg GFA)	180.40	180.90	181.24	181.24	181.24	181.24
Return on Equity @ 14%	25.26	25.33	25.37	25.37	25.37	25.37

MePGCL hereby denies the ROE claim put up by the objector and reaffirm the ROE as filed in the MYT Tariff Petition.

#### **Commission's Views**

Commission considers Return on Equity as per MSERC MYT Regulations 2014.

#### F. Operation and Maintenance (O&M) Expenses:

- MePGCL has claimed INR 58.50 Crore towards O&M expenses with escalation of 5.72% per annum. MePGCL has also claimed impact of revision of pay effective from January, 2020 and has escalated normative O&M for FY 2019-20 by 27%.
- 17. It is submitted that MePGCL's submissions of 27% escalation is not supported by Regulation 56.7 of MSERC MYT Regulations which provides for calculation of O&M expenses for hydro generating stations, declared under commercial operation on or after 01.04.2009. As per the said regulation the O&M expenses shall be fixed at 2% of the original project cost and shall be subject to annual exemption at 5.72% for the subsequent years. Regulation 56.7 reads 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"

18. Accordingly, the escalation sought by MePGCL merits to be disallowed.

Further, computation of RoP impact has been done MePGCL level and the same cannot be passed on to individual stations such as MLHEP. Accordingly, the allowable O&M expenses for FY 2021-24 is as under:

	As Cl	aimed by MePGCL		As per Objector's Assessment			
Particulars	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	
0&M	18.43	19.48	20.59	10.88	11.50	12.16	
Total	18.43	19.48	20.59	10.88	11.50	12.16	
Grand Total	nd Total 58.50					34.54	

#### **O&M EXPENSES ALLOWABLE FOR THE PERIOD FY 2021-24**

#### MePGCL's Reply

The annual escalation of 5.72% in O&M expenses provided in the regulations is for taking care of the normal annual inflation in O&M cost.

In January, 2020, pay revision was implemented and its impact is to the extent of 27%, which cannot be covered by the normal escalation of 5.72%. Pay revision is part and parcel of the employee costs which form part of O&M expenses and which are recovered through tariff of all power stations of MePGCL.

Therefore, the impact of pay revision may kindly be considered by the Hon'ble Commission since this is an additional cost which cannot be treated as normal escalation and cannot be met from the 5.72% annual escalation as proposed by the objector.

#### **Commission's View**

Commission considers O&M expenses as per MSERC MYT Regulations 2014.

#### G. Interest on Working Capital

19. MePGCL has claimed INR 8.58 Crore towards Interest on Working Capital for FY 2021-22 to 2023-24. MePGCL has failed to consider escalation of 6% on maintenance spares i.e., 15% of O&M expenses. In light of the submissions made above the allowable interest is as under:

	As Cl	laimed by MeP	GCL	As per Objector's Assessment			
Particulars	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	
O&M for 1 Month	1.54	1.62	1.72	0.91	0.96	1.01	
Maintenance Spare @ 15% of O&M expenses, escalated by 6%	2.76	2.92	3.09	1.73	1.83	1.93	
Receivable for 2 Month	19.43	18.98	18.55	11.04	10.66	10.29	

#### INTEREST ON WORKING CAPITAL ALLOWABLE FOR THE PERIOD FY 2021-24

Total	23.73	23.53	23.36	13.68	13.45	13.23
Interest Rate (%)	12.15%	12.15%	12.15%	12.15%	12.15%	12.15%
Interest on Working Capital	2.88	2.86	2.84	1.66	1.63	1.61
G.Total		8.58			4.90	

#### **MePGCL's Reply**

The objector has calculated Interest on Working Capital by considering O&M expenses and other components of ARR which have been reduced due to nonconsideration of genuine and allowable costs as explained in the preceding paras. The IWC proposed by the objector, therefore, has no merits an may kindly be rejected.

#### **Commission's View**

Commission considers Interest on Working Capital as per MSERC MYT Regulations 2014.

# H. Annual Fixed Charges for FY 2021-22 to 2023-24 and Generation Tariff for FY 2021 22

20. In light of the submissions made above the allowable AFC as per the Objector is as under:

	As Clai	med by MePGC	L	As per O	bjector's Assess	ment
Particulars	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Interest on Loan capital	39.73	36.03	32.33	17.42	14.55	11.68
Depreciation	30.22	30.22	30.22	17.29	17.29	17.29
O&M Expenses	18.43	19.48	20.59	10.88	11.50	12.16
Interest on working capital	2.88	2.86	2.84	1.66	1.63	1.61
Return on Equity	25.37	25.37	25.37	19.04	19.04	19.04
Total Annual Fixed Cost	116.63	113.96	111.36	66.30	64.02	61.78
Less: Non Tariff Income	0.06	0.062	0.064	0.06	0.062	0.064
Net Annual Fixed Cost	116.57	113.90	111.30	66.24	63.96	61.72
Grand Total		341.77			191.92	

#### ANNUAL FIXED CHARGES ALLOWABLE FOR THE PERIOD FY 2021-24

#### MePGCL's Reply

The AFC assessed by the objector is incorrect since it has neglected a number of genuine and allowable costs as explained in the preceding paras. The AFC derived by the objector, therefore, may kindly be rejected and the one proposed by MePGCL in the instant petition may, kindly be considered by the Hon'ble Commission.

#### **Commission's View**

Commission after Prudence check of the petition, considering the Statement of Accounts for FY 2018-19 and FY 2019-20, the approved business plan for 3<sup>rd</sup> MYT control period, the additional information subsequently filed on 3<sup>rd</sup> February 2021, taking into account, the objections raised by the stakeholders, the response of the licensee for the objections, the minutes of the Public hearing process and views of the State advisory committee, considers the ARR as per the Regulations.

21. It is pertinent to mention that in Order dated 28.09.2020 this Hon'ble Commission approved revenue surplus of INR 114.47 Crore while Truing-up for FY 2017-18. MePGCL has adjusted the same while proposing tariff for FY 2021-22. However, since

the revenue surplus was for FY 2017-18 adjusting the same in FY 2021-22 would require appropriate carrying cost for the intervening years. Similar submissions were also made by the Objector during the proceedings conducted for determining tariff for FY 2020-21. Regulations 11,20 and 26 of MYT Regulations, 2014 provide for passing of approved gains and losses in tariff consequent to truing up. The same has also been upheld by the Hon'ble Appellate Tribunal for Electricity ("Aptel") in its judgment dated 11.11.2011 passed in OP No. 01 of 2011 wherein it held as under:

*"*57. This Tribunal has repeatedly held that regular and timely truing-up expenses must be done since:

- (a) No projection can be so accurate as to equal the real situation.
- (b) The burden/benefits of the past years must not be passed on to the consumers of the future.
- (c) Delays in timely determination of tariff and truing-up entails:
  - (i) Imposing an underserved carrying cost burden to the consumers, as is also recognised by para 5.3 (h) (4) of National Tariff Policy.
  - (ii) Cash flow problems for the licensees.

58. A similar position is reflected in the tariff Regulations framed by various State 1st Respondents. These regulations would stipulate that the approved gains and losses have to be passed through the tariff following the True-up."

22. Further, this Commission in its Order dated 25.03.2020, passed in Case No. 02/2020, relied on Section 62(6) of Electricity Act, 2003 and held that the "carrying cost if any for recovery of the gaps/surplus shall be to the account of the licensee." Thus, it is prayed that the following carrying cost be passed on to the consumers:

#### Carrying cost computation pertaining to FY 2017-18 Revenue Surplus

Particulars	Interest Rate	Carrying Cost	Cumulative Surplus
Surplus approved by MSERC vide Orderdated 28.09.2020			114.47
FY 2017-18 (1/2 year interest applicable)	13.85%	7.93	122.40
FY 2018-19	13.45%	16.46	138.86
FY 2019-20	13.80%	19.16	158.02
FY 2020-21	12.90%	20.38	178.41
FY 2021-22 (1/2 year interest applicable)	12.05%	10.75	189.16

#### MePGCL's Reply

The objector has claimed carrying costs on the true up order for FY 2017-18 dated 28.09.2020, the review of which was filed by MePGCL and which is yet to be disposed of by the Hon'ble Commission. Therefore, the same may kindly be rejected by the Hon'ble Commission.

#### Commission's view

Commission noted the Response

23. In light of submissions made herein above the allowable generation tariff for FY2021-22 is as under:

Particulars	As Claimed by MePGCL	As per Objector's Assessment
Gross AFC for the FY 2021-22 (Rs. Crore)	116.57	66.24
Less: FY 2017-18 Surplus adjustment (incl. CarryingCost) (Rs. Crore)	13.33	22.03
Net AFC for FY 2021-22 for Computation of Tariff (Rs.Cr)	103.24	44.21
Gross Generation as approved in the Business plan order dated 30.09.2020	235.00	235.00
Less: Auxiliary Consumption @ 1% (MU)	2.35	2.35
Less: Transformation Loss @ 0.5% (MU)	1.18	1.18
Net Energy (MU)	231.48	231.48
Fixed Charge (Rs.Cr)	51.62	22.11
Variable charge (INR/Kwh)	2.23	0.95

#### ALLOWABLE GENERATION TARIFF FOR THE FY 2021-22

24. The above aspects may be taken into consideration, the objector craves leave to the add to the submission mentioned above and also to submit such material with leave of the commission as may be necessary in the truing up also craves leave to make oral submissions in the public hearing to be conducted by the Hon'ble commission.

#### MePGCL's Reply

The generation tariff for NUHEP for FY 2021-22 proposed by the objector is, perhaps, not found anywhere in the country for a project commissioned not even 4 (four) years ago. At an average tariff of Rs. 1.90/kwh proposed by the objector, it is equivalent to a tariff of an old hydropower station which has completed its useful life. Such a tariff will be a great discouragement to the development of clean and renewable energy and will run counter to the National Electricity Policy. The tariff

proposed by the objector for FY 2021-22 for NUHEP, therefore, deserves to be rejected.

#### Commission's views

Commission noted the Response.

The List of Participants in the Public hearing on Generation Petition held on 17.03.2021 is attached as Annexure II.

### 4. Commission's Approach

#### 4.1 General

In the earlier orders, the Commission discussed the principles and provisions of the Regulations for determining tariff for Generating Company. The Commission has tried to adhere to the Regulations, National Tariff Policy and provisions of Electricity Act, 2003 to determine the Tariff of different companies working in the power sector. However, at the same time, the Commission has also tried to adopt such regulations in a pragmatic manner so as to consider the ground realities. In the public hearing, consumers objected to non-availability of audited accounts of MEECL and its subsidiaries and apprehended that there are chances of surpluses. It was even difficult for the Commission to validate numbers without verifying audited accounts. In the absence of audited accounts upto FY 2019-20 the Commission has tried to validate expenditures of generating stations on the basis of actual accounting records for the period April 2020 – September 2020 and provisional records for previous years duly audited as per Regulations. By this approach the Commission has tried to fix the tariff for FY2021-22 and maintain the continuity of improved cash flow in the sector. The Commission shall true up the numbers after the audit of financial statements of MePGCL are submitted.

The Commission has followed the MYT tariff Regulations for the purpose of determining Aggregate Revenue Requirement& Annual Fixed Cost of all generating stations on the basis of records available to it and prudence check subject to reasonability of the cost and financial viability of the generating company. The Commission has also considered the MSERC (terms and conditions for determination of tariff for generation from Renewable Energy Sources) Regulation 2014 subject to modifications wherever required so.

#### **Statutory Requirements:**

Section 64 of the Electricity Act, 2003 requires the generating companies to file an application for determination of tariff under section 62 of the Act in such manner as specified through the Regulations by the Regulatory Commission. Section 61 of the Act further requires the Commission to specify the terms and conditions for

determination of tariff in accordance with the provision of the act. The act also provides that the Commission shall be guided by the principles and methodologies specified by Central Electricity Regulatory Commission, the National Tariff and Electricity Policies.

In the light of the above provisions of the act, the Commission has already notified MSERC (Multiyear tariff) Regulations 2014 and RE Regulations 2018. The Regulations shall be applied in the State of Meghalaya till such time they are revised by the Commission. For the purpose of this Tariff Order, the Commission shall therefore, be guided by the said Regulations subject to the relaxation wherever necessary for various valid reasons recorded therein.

By and large, in line with the provisions of tariff Regulations, the Commission is following at present the cost plus approach and normative standard subject to prudence check and efficient norms.

#### 4.2 Filing of Petition:

Regulation 18 specifies the process of filing a petition for determining the tariff of existing running power plants.

#### 4.3 Capital Investment

Commission has approved business plan for 3<sup>rd</sup> MYT control period for FY 2021-22 to FY 2023-24, according to which the provisions of Capex/Capital expenditure has been considered in the computation of ARR for the Control period. The detailed capital investment and funding pattern as approved in the business plan is appended here in.

SI	Canalian.	CAPEX	Fundir	ng Pattern (F	Rs. Cr)
No	Station	(Rs. Cr)	Equity	Debt	Grant
Exist	ting Stations				
1	Umiam Stage-I	77.56	69.81	7.76	
2	Umiam Stage-II	21.11	19.00	2.11	
3	Umaim Stage-III	410.77	115.08	2.36	293.33
4	Umaim Stage-IV	35.98	10.79	25.19	
5	Umtru HEP	110.50	33.00	77.00	0.50
6	Sonapani	0.34	0.10	0.24	
7	Leshka	16.31	14.68	1.63	
8	New Umtru HEP				
9	Lakroh HEP	1.54	1.39	0.15	
10	MePGCL System Protection and Communication	8.98	2.69	6.29	
11	Dam Rehabilitation and Improvement Project (DRIP)	441.00	123.48		317.52
	Sub-Total (a)	1124.10	390.02	122.72	611.35
Upc	oming Generation Plants				
1	Ganol SHP	507.71	54.62	223.1	229.98
2	Riangdo SHP	33.99	2.59	11.4	20
3	MLHEP Stage-II (3x60 MW)	2069.23	113.88	248.24	1707.11
4	Solar Park (10MW each) in Suchen and Thamar	11.64	9.24	0	2.4
5	Umshamphu (2x1.5 MW)	48.7	14.61	34.09	
6	Amkshar (2x1.20 MW)	46.24	13.87	32.37	
7	Umrina (3x1.50 MW)	75.08	22.52	52.56	
	Sub-Total (b)	2792.59	231.33	601.76	1959.49
Proj	ects under Survey & Investigation				
1	MLHEP-II(3X70)MW	9.6		0.96	8.64
2	UMNGI(2X31)MW	5		0.5	4.5
3	UMNGOT(3X70)MW	8.35		0.835	7.515
4	SELIM(2X48)MW	7.92		0.792	7.128
5	NONGKOHLAIT(3X31)MW	5.02		0.502	4.518
6	MAWBLEI(2X37.5)MW	8.92		0.892	8.028
7	Upper Khri Stage-II HEP	13		13	0
8	Nongnam HEP	13		13	0
9	Mawput HEP	13		13	0
	Sub-Total ©	83.81		43.481	40.329
Gra	nd Total(a+b+c)	4000.50	621.35	767.96	2611.17

#### Table 4. 1 : CAPEX-Station wise summary

#### 4.4 Capital Cost

Regulation 28 and 52 provides the approval of actual capital cost subject to prudence check by the Commission for new investments. The Commission shall scrutinize the reasonableness of the capital cost, financial plans and interest during construction period, use of efficient technology and such other matters for determination of tariff. The regulation also prescribed that in case of any abnormal delay in execution of the project causing cost and time over run attributable due to the failure of the utility, the Commission may not approve the full capitalization of interest and overhead expenses. The regulation also prescribes that where power purchase agreement entered into between generating company and the distribution licensee provides for a ceiling of actual expenditure. The regulation has also prescribed that the Commission may issue guidelines for verifying the capital cost of hydroelectric projects by an independent agency or expert committee and in such a case the capital cost as vetted by such agency may be considered by the Commission while determining the tariff of such hydro generating stations.

For the purpose of this order, the Commission has considered the GFA value as given in the transfer scheme notified by the Government of Meghalaya and added the subsequent assets after the commercial operation. The Commission has taken the same stand as taken in previous years that without audit of financial statements of Corporation, it will adhere to those numbers which are already approved by the Commission in its tariff order for FY 2017-18.

#### 4.5 Additional Capitalization

Regulation 29 provides that some of the capital expenditure (on account of undischarge liabilities, on account of change in law, etc.) actually incurred after the date of commercial operation and up to the cutoff date may be admitted by the Commission subject to the prudence check.

#### 4.6 Renovation and Modernization

Regulation 53 provides that the generating company for the purpose of extension of life beyond the useful life of a generating station or a unit thereof may result expenditure on renovation and modernization.

However, it shall make an application before the Commission for approval of the proposal with a detailed project report giving complete scope, justification, cost benefit analysis, estimated life extension, funding, phasing of expenditure, schedule of completion, reference price level, estimated completion cost. In case of Umiam Stage I & II there was no prior approval of the Commission. Therefore the

Commission is allowing the MePGCL proposal to the extent it may meet out its obligations and consumers are also not unduly overburdened. However, after the audit is over, the Commission shall validate the numbers.

#### 4.7 Debt Equity Ratio

Regulation 27 provides that for the purpose of determination of tariff of new generating stations commencing commercial operation after the notification of this regulation, the debt equity ratio shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance shall be treated as normative loan. Where actual equity employed is less than 30%, the actual equity employed shall be considered. It is important to note that issue of share capital shall only be treated as amount of equity invested for the purpose of determination of tariff.

In the case of existing generating station the debt equity ratio as per the balance sheet on the date of the transfer notification will be the debt equity ratio for the first year of operation subject to such modification as may be found necessary upon audit of the accounts if such balance sheet is not audited. The debt equity amount arrived shall be used for calculating interest on loan, return on equity, etc.

In this tariff order, the Commission is not accepting the size of equity as proposed by the generation corporation.

#### 4.8 Components of Tariff

Regulation 54 provides that there will be tariff for supply of electricity from a hydro power generating station which comprises of two parts, namely, annual capacity charges and energy charges.

The fixed cost of a generating station shall be recovered through annual capacity charges and shall consist of:

- a) Return on equity as may be allowed
- b) Interest on loan capital
- c) Operation and maintenance expenses
- d) Interest on working capital
- e) Depreciation as may be allowed by the Commission
- f) Income Tax.

The annual capacity charges shall be worked out by deducting any other income of the generating company from the total expenses.

#### 4.9 Return on Equity

Return on equity shall be computed in accordance with regulation 27 on the equity base as determined in accordance with regulation 31 and shall not exceed 14%. However, in the absence of audited and separate accounts for each utility the Commission has decided to allow same return on equity as per the Regulation 27 and 31 to Generation Corporation. The Commission shall allow return on equity which shall not exceed 14% for tariff of MePGCL.

In this tariff order, the Commission has decided not to change its position from the previous years and do not allow return on equity as proposed.

#### 4.10 ROE, Depreciation etc.

Commission considers that Hydel Projects namely Umiam-I, II, III& Umtru have served life term prescribed in the CERC Regulations. These plants served even beyond their life term and generated substantial Revenues.

SI. No	Name of the Station	No. of Units	Capacity (MW)	Total Capacity (MW)	Year of Commissioning
		I	9		21.02.1965
1	Limiam Stage L	Ш	9	36	16.03.1965
1	Umiam Stage I	III	9	50	06.09.1965
		IV	9		09.11.1965
2	limiam stago li	I	10	20	22.07.1970
2	Umiam stage-II	Ш	10	20	24.07.1970
3	Umiam stage-III	I	30	60	06.01.1979
5	Unitalli Stage-III	Ш	30	00	30.03.1979
			2.8		01.04.1957
4	Umtru Power Station	Ш	2.8	11.2	01.04.1957
4		III	2.8	] 11.2	01.04.1957
		IV	2.8		12.07.1968

Table 4.2: The Dates of Commissioning and their dates of life term

The depreciation and Return on Equity is not considered against the above 4 projects in the present Order. However O&M expenses are allowed for ARR and tariff determination as already decided by the Commission in the tariff orders for FY 2013-14

#### 4.11 Interest and finance charges on loan capital

Regulation 55 provides that 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 agreement, bond or debentures and the lending rates prevailing thereon. However, the loan capital should meet the requirement of regulation prescribed for debt equity ratio. The regulation also prescribes that interest and finance charges attributable to capital work in progress shall not be allowed. There is a provision in the regulation that generating company shall make every effort to swap loans as long as it results in net benefit to it. In case of any moratorium period is availed by the generating Licensee, the depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.

#### 4.12 Operation and maintenance expenses

The operation and maintenance expenses shall comprise of the following:

- a. Employees cost
- b. Repair and maintenance
- c. Administration and general expenses

In order to introduce efficient operation in the generation, the Commission is allowing ceiling on the O & M expenses so that at the time of truing up it may not allow any unreasonable expenses over and above the O&M expenses beyond limits of ceiling. In the FY 2017-18, the Commission has allowed the O&M expenses as per Regulations which also meet the MePGCL proposal. The approach for determining the O&M expenses from FY 2018-19 onwards shall not be different from the FY 2017-18. The Commission also feels that the expenses should be within the normative provisions and should not exceed the budgeted figures. Accordingly the Commission has allowed combined O&M cost after considering escalation on the expenses as allowed in the Regulations. MePGCL has proposed revision of pay scale commitment to be factored in the ARR of 3<sup>rd</sup> MYT Control period FY 2021-22, FY 2022-23 and FY 2023-24. Commission has provisionally considered the proposal in this order. The O&M expenses against Lakroh mini HEP were included in the MePGCL old projects from FY 2013-14 which are adjusted in this order along with capital cost and final tariff approved by the Commission from the FY 2019-20 to FY 2020-21 and for MYT Control period.

#### 4.13 Interest on working capital

*Regulation 34 (iii) prescribes that working capital shall cover the following:* 

- a. Operation and maintenance expenses for one month
- b. Maintenance spares at 15% of O&M expenses escalated at 6%
- c. Two months receivables of AFC

Rate of interest on the working capital shall be short term prime lending rate of SBAR at 12.15 %.

The interest on Working Capital is allowed as per Regulations.

#### 4.14 Depreciation

Regulation 33 provides that depreciation shall be computed on the assets/capital costs of the assets as approved by the Commission where the opening asset value recorded in the balance sheet as per the transfer scheme notification shall be deemed to have been approved. However, after the audit of the accounts necessary modification may be made. For the new assets the approved cost for the asset value shall be taken into account. The depreciation shall be calculated annually as per straight line method at the rates as specified in CERC regulations. In case of the existing projects the balance depreciable value as on 01.04.2010 shall be worked out by deducting the cumulative depreciation shall only be chargeable from the first year of operation. The Commission has allowed the depreciation in order to meet the financial commitments of the Corporation for renovation and modernization.

The licensee shall create a separate reserve for meeting the replacement of assets or modernization of the unit in future.

#### 4.15 Income Tax

Income tax shall be treated as expenses and shall be recoverable from the beneficiary through tariff. The income tax actually paid shall be included in the ARR. Any under recovery or over recovery shall be adjusted every year on the basis of income tax certificate issued by the authorities. The Petitioner has not claimed any income tax in the petition for the control period.

#### 4.16 Computation of capacity charges and energy charges

Regulation 57 provides the methodology to calculate the capacity charges and energy charges to be payable by the beneficiary. However, the Commission has determined the same in order to make simple tariff and its application for generator and distribution utility. During the proceedings, the Commission has determined the tariff on the basis of the regulations as well as adopting a pragmatic approach in the interest of the all stakeholders.

## 4.17 ARR for the 3<sup>rd</sup> MYT control Period FY 2021-22 to FY 2023-24 for Existing Generating Stations and Lakroh Mini HEP

Commission considers that the ARR and tariff orders are passed based on the SOA up to FY 2019-20. The estimates are considered based on the audited values for FY 2017-18 and assumed projections for the ARR and tariff for the control period as per the Regulations considering the inflation rates notified by the Govt. of India.

### 5. Analysis of ARR for the 3<sup>rd</sup> MYT Control Period FY 2021-22 to FY 2023-24 for MePGCL Old Projects, MLHEP, New Umtru & Lakroh Projects.

#### 5.1 Tariff Regulations

Under Section 61 of Electricity Act 2003, the Commission has to specify terms and conditions for determination of tariff and in doing so it shall be guided by the following:

- The principles and methodology specified by CERC for determination of Generation, Transmission and Distribution tariff.
- Business of generation, transmission and distribution are to be conducted on commercial principles.
- The factors which encourage development, competition efficiency, good performance and optimum investments.
- Safeguarding consumers interest and at the same time recovery of the cost of electricity in a reasonable manner.
- Principles regarding efficiency in the performance.
- Multiyear tariff principles based on efficiency target.
- Tariff should reflect cost of supply progressively.
- Promotion of generation from renewable energy.
- National Electricity Policy and Tariff policy.

#### 5.2 Regulatory Accounts

The Licensee shall maintain and file Regulatory accounts along with Tariff Petition and True up petition based on the Regulatory accounts as mandated in Regulation 4.2 (c) of MYT Regulations 2014.

# 5.3 ARR for 3<sup>rd</sup> MYT Control Period FY 2021-22 to FY 2023-24 for MePGCL old plants and Sonapani

#### 5.3.1 Capital Expenditure and Capitalization

Petitioner's Submission:

#### a) Capital Expenditure

In the approved Business Plan Order, the Commission has approved the year wise capital expenditure for the control period for MePGCL. The same is given below.

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Total						
Old Plants and Sonapani (Excluding MLHEP, NUHEP and Lakroh HEP)											
Umiam Stage I	1.80	6.27	27.21	42.28	77.56						
Umiam Stage II	0.00	0.24	9.09	11.78	21.11						
Umiam Stage III	0.00	8.68	87.62	97.49	193.76						
Umiam Stage IV	2.00	15.11	18.87	0.00	35.98						
Umtru HEP	0.50	0.00	0.00	25.00	25.50						
Sonapani	0.00	0.00	0.14	0.20	0.34						
Total (a)	4.30	30.30	142.93	176.72	354.25						

Table 5. 1: Capex approved for Old Plants of MePGCL for the Control Period

#### b) Capitalization

In the business plan order, the Commission has approved the year-wise capitalization for the control period for the utility. The same is given below and shown separately for MePGCL as a whole and those pertaining to old plants (inclusing Sonapani):

Table 5. 2: Capitalization Approved for MePGCL.(Old plants including Sonapani) for the Control Period (INR Cr.)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Total
<b>Existing Plants</b>	0.50	35.56	48.41	54.40	138.86

#### Commission's analysis

Commission had approved Capital Expenditure towards system augmentation and improvement works against existing old projects for Rs.656.26 Crore during the period from FY 2020-21 to FY 2024-25 as per Annexure A of the approved business plan.

MePGCL has projected Capex for the period FY 2021-22 to FY 2023-24 at Rs.354.25 Crore as against approved capital expenditure in petition vide table no.1.

Commission considers Capex as projected by MePGCL for Rs.354.25 Crore during the period FY 2020-21 to FY 2023-24 leaving a balance of Rs.302.01 Crore which shall be a spillover investment beyond the control period as depicted in the table below.

## Table 5. 3: Capital Expenditure approved against MePGCL Old projects and Sonapani forthe 3rd MYT Control period

						(113101)
Particulars	Business Plan	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Spill Over Capex
Approved Capex against Existing MePGCL Old Projects and Sonapani	656.26	4.30	30.30	142.93	176.72	302.01

The Funding Tie up of the above Capex is as projected by MePGCL vide table no.2 of the petition is given in the Table below:

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Total
Loan	1.93	11.28	17.44	23.53	54.18
Grant	0.00	6.20	62.57	69.71	138.48
Equity	2.37	12.823	62.92	83.48	161.59
Grand Total	4.30	30.30	142.93	176.72	354.25

Table 5. 4: Brea	kup of the	Capex Funding
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#### Capitalization

Commission considers Capitalization as projected by MePGCL vide table no.3 of the petition for 3<sup>rd</sup> MYT Control period with breakup of funding tie up as filed in the table no. 4 of the petition.

Table 5.	5	Breakup	of Capitalization
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					(RS. Cr)
Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Total
Capitalization	0.50	35.56	48.41	54.40	138.86
Loan	-	19.28	12.73	5.64	37.65
Equity	-	16.28	35.68	48.76	100.72
Grant	0.50	-	-	-	0.50

Commission had approved capital investment in the business plan for 3<sup>rd</sup> MYT Control period against the system improvement of existing projects as detailed below for Rs.656.26 Crore.

Approval was also given for system protection & Improvement Project Dam Rehabilitation (Drip-II & III) for Rs.449.98 Crore.

Commission had approved business plan for 3<sup>rd</sup> MYT Control period on 09.10.2020 in which the capital investment is approved for MePGCL as a whole as per the table below.

(Rs.Cr)

#### Investment Plan for MePGCL

#### a) Proposed and Ongoing Renovation & Modernization works for Existing Stations

	Project Details				ру	(pa	(pa	(pa	(pa		Source of	financing for the	scheme
		t low)	۰.۲۷)	(DD-	pproved INR Cr)	(Project	(Project	(Projected)	(Project		Debt	Component	ıt
SI. No	Name of the Scheme	e of Project (Select iate Code from below)	tart Date (DD-MM-YY)	Project Competition Date (DD- MM-YY)	Total capital Expenditure Approved by MSERC/ Govt/ DPR/ FI (INR Cr)	Project Outlay in FY 2020-21 (Projected) In INR Cr	Project Outlay in FY 2021-22 (Projected) In INR Cr	tlay in FY 2022-23 In INR Cr	Project Outlay in FY 2023-24 (Projected) In INR Cr	Equity Component	Loan Amount (INR Cr)	Loan Source	Capital/ Subsidies/ Grant components
	Le	Nature of F Appropriate C	Project Start	Project C	Total capi MSER	Project Ou	Project Ou	Project Outlay	Project Ou	Eq	Loan 1	Loan 1	Capita
Α	Umiam Stage I Power Station										·		
1	Replacement of Intake gate and Trash Rack of Intake structure at Umiam Stage I HEP.	с	2020-21	2022-23	3.96	0.89	2.07	1.00		3.56	0.40	State Govt.	
2	Replacement of Two penstock butterfly Valve including By- pass valve along with all servo mechanism and related control system.	с	April'21	Mar'22	6.14		2.14	4.00		5.53	0.61	State Govt.	
3	Re-engineering of firefighting system of Generator and Transformer	с	April'22	Mar'23	0.09			0.09		0.08	0.01	State Govt.	PSDF Phase 2
4	Replacement of transformer for Unit-1, Unit-2 and Unit-4.	С	April'23	Mar'24	8.73				8.73	7.86	0.87	State Govt.	
5	Construction of Transformer Yard to accommodate station service transformers, Unit-1 & Unit-3 and procurement of the same.	с	April'23	Mar'24	0.35				0.35	0.32	0.04	State Govt.	
6	Construction of Beams and By-pass Isolators for KPS-1, KPS-2 &Umiam feeders.	с	April'22	Mar'23	0.49			0.49		0.44	0.05	State Govt.	
7	132 KV SF6 Circuit Breaker (Spare)	С	April'21	July'21	0.36		0.36			0.32	0.04	State Govt.	PSDF Phase 2
8	Complete Installation of SCADA including Hardware and Software	е	April'22	Oct'22	18.12			18.12		16.31	1.81	State Govt.	PSDF Phase 2
9	Replacement of Governor and AVR system.	С	April'23	Mar'24	33.20				33.20	29.88	3.32	State Govt.	PSDF Phase 2
10	Replacement of Generator Stator Air Cooler for three Units	с	April '22	Oct'22	3.51			3.51		3.16	0.35	State Govt.	PSDF Phase 2
11	Modification of cooling system for improvement at Stage-I Power station	с	Jan-21	Jun-21	2.62	0.92	1.70			2.35	0.26	FI	

	Project Details				ру	(pa	(pa	(pa	(pa		Source of	financing for the	scheme
		t low)	(\/-1	-00	aproved INR Cr)	(Project	(Project	2022-23 (Projected) R Cr	(Project		Debt	Component	Ŧ
SI. No	Name of the Scheme	Nature of Project (Select Appropriate Code from below)	Project Start Date (DD-MM-YY)	Project Competition Date (DD- MM-YY)	Total capital Expenditure Approved by MSERC/ Govt/ DPR/ FI (INR Cr)	Project Outlay in FY 2020-21 (Projected) In INR Cr	Project Outlay in FY 2021-22 (Projected) In INR Cr	in FY In IN	Project Outlay in FY 2023-24 (Projected) In INR Cr	Equity Component	Loan Amount (INR Cr)	Loan Source	Capital/ Subsidies/ Grant components
	N	Natur Appropri	Project St	Project C	Total capit MSERC	Project Out	Project Out	Project Outlay	Project Out	Equ	Loan 1	Loan 1	Capita
В	Umiam Stage II Power Station												
1	Installation of 250 KVA, 11/0.4 kv substation dedicated to the station supply of Umiam Stage-II Power Station	с	April'22	July'22	8.99			8.99		8.09	0.90	State Govt.	PSDF Phase 2
2	Emulsifier system for Generator Transformer in both Units.	b	April'22	Mar'23	0.10			0.10		0.09	0.01	State Govt.	
3	Installation of On Line Supervisory system (SCADA) for the entire Power Station	е	Apr-23	Mar-24	9.06				9.06	8.15	0.91	State Govt.	
4	Replacement of 11 KV Switchgear Panel	с	Apr-23	Mar-24	2.72				2.72	2.45	0.27	State Govt.	PSDF Phase 2
5	132 KV SF6 Circuit Breaker (Spare)	с	April'21	July'21	0.24		0.24			0.22	0.02	State Govt.	PSDF Phase 2
	Unione Uniter Stoco III Dower Station												
<b>C</b>	Umiam –Umtru Stage III Power Station Renovation Modernisation and Upgradation of Umiam-												1
	Umtru Stage III HEPP.	с	Sept'20	Dec '24	407.40		5.31	87.62	97.46	91.50		JICA	315.90
2	Re-Engineering of 132 KV BUS.	с	April'21	Mar'22	1.50		1.50			0.45	1.05	State Govt	
3	Construction of 33 KV Bus and Bay for Outside source power supply from the existing 132/33 KV 10 MVA Transformer	С	April'21	March'22	1.87		1.87			0.56	1.31	State Govt	
D	Umiam-Umtru Stage IV Power Station.	1						1.00					1
1	Automation and monitoring of MIV of the Generating units	С	April'22	Mar'23	1.06			1.06		0.32	0.74	State Govt	
2	<ul> <li>a) Overhauling and replacement of damaged parts of Unit- II</li> <li>b) Procurement of excitation transformer</li> </ul>	с	April'21	Mar'22	5.04		5.04			1.51	3.53	State Govt	
3	Online Vibration monitoring of Generating Units	с	April'21	Mar'22	0.50		0.50			0.15	0.35	State Govt	
4	Dedicated and reliable Outside Source power supply from	С	April'21	Mar'22	2.79		2.79			0.84	1.95	State Govt	

	Project Details				λq	(pa	(pa	(pa:	(pa		Source of	financing for the	scheme
		ct low)	(77-1	-00)	pproved (INR Cr)	(Project	(Project	(Project	(Project		Debt	Component	Ŧ
SI. No	Name of the Scheme	Nature of Project (Select Appropriate Code from below)	Project Start Date (DD-MM-YY)	Project Competition Date (DD- MM-YY)	al capital Expenditure Approved by MSERC/ Govt/ DPR/ FI (INR Cr)	Project Outlay in FY 2020-21 (Projected) In INR Cr	Project Outlay in FY 2021-22 (Projected) In INR Cr	Project Outlay in FY 2022-23 (Projected) In INR Cr	Project Outlay in FY 2023-24 (Projected) In INR Cr	Equity Component	Loan Amount (INR Cr)	Loan Source	Capital/ Subsidies/ Grant components
	E Z Z	Nature ( Appropriat	Project St	Project C	Total capit MSERC	Project Out	Project Out	Project Out	Project Out	Equ	Loan 1	Loan 1	Capital
	132 KV Bus.										0.47		
5	Telecommunication and Internet Facility	e	April'22	Mar'23 Mar'23	0.24 8.73			0.24 8.73		0.07	0.17	State Govt	
6 7	Supervisory Control System Procurement of Spare Runner	e c	April'22 April'21	Mar'23	6.50			8.73 6.50		2.62 1.95	6.11 4.55	State Govt State Govt	
0	Refurbishment of Stator winding of Unit 1		· ·		6.84	2.00	4.84	0.00		2.05	4.79		
8 9	Hydraulic Power Pack with Control Panel for Butterfly Valve	c C	Sep-20 Apr-21	Aug-21 Mar-22	0.80	2.00	4.84			0.24	4.79 0.56	State Govt State Govt	
10	Installation of Firefighting Scheme for Generator Stators	c	Apr-21 Apr-21	Mar-22	0.80		0.80			0.24	0.36	State Govt	
10	Residual Life Assessment of Power Station	e	Sep-21	Mar-22	3.12		0.30	2.34		0.11	2.18	State Govt	
	Residual Life Assessment of Fower station	C	3CP 21		5.12		0.70	2.54		0.54	2.10		
E	Umtru Power Station												
1	Residual Life Assessment (RLA) of Umtru HEP	с	April,20	Mar,21	0.50	0.50							0.50
2	Renovation Modernisation and Upgradation of Umtru Power Station.	b	April'23	Mar,26	110.00				25.00	33.00	77.00	State Govt	
F	Sonapani Mini Hydro Power Plant												
1	<ul> <li>a) Procurement and Installation of 415V 3 Ph LT panel.</li> <li>b) Relays and Cards to replace some existing defective ones and spares.</li> </ul>	b	April,22	Aug-23	0.34			0.14	0.2	0.102	0.238	State Govt	
	c) Generator Circuit Breaker to replace the existing one.												
G 1	Generation System Protection and Communication Procurement of Diagnostic Tools, Plant & Machineries for	b	April'21	May-22	2.51		1.51	1.00		0.75	1.76	State Govt	PSDF Phase
	Generation system protection division	U		11/10/22	2.31		1.51	1.00		0.75	1.70		2
2	Installation of OPGW for communication system between Stage-3 & Stage-4, Stage-1 & Stage-2 and Umtru-New Umtru power stations including all Fibre Optic Terminal	b	Oct-21	Dec-22	3.19		1.19	2.00		0.96	2.23	State Govt	PSDF Phase 3

	Project Details				λq	(pa	(pa	(pa	(pa		Source of	financing for the	scheme
		ct low)	(77-1	DD-	pproved (INR Cr)	(Project	(Project	(Projected)	(Project		Debt	Component	t
SI. No	Name of the Scheme	Nature of Project (Select Appropriate Code from below)	Project Start Date (DD-MM-YY)	Project Competition Date (DD- MM-YY)	Total capital Expenditure Approved by MSERC/ Govt/ DPR/ FI (INR Cr)	Project Outlay in FY 2020-21 (Projected) In INR Cr	Project Outlay in FY 2021-22 (Projected) In INR Cr	Outlay in FY 2022-23 In INR Cr	Project Outlay in FY 2023-24 (Projected) In INR Cr	Equity Component	Loan Amount (INR Cr)	Loan Source	Capital/ Subsidies/ Grant components
	N	Natur Appropri	Project Si	Project C	Total capit MSER0	Project Out	Project Out	Project Out	Project Out	Edi	Loan 1	Loan 1	Capita
3	Equipments. Procurement of Online Oil Filtration Machine for all												PSDF Phase
5	Generator Transformers under MePGCL.	с	Jan-22	Dec-23	2.11		0.20	1.00	0.91	0.63	1.47	State Govt	4
4	Installation of ADSS OFC for communication system (Dam Water Level monitoring) of Stage-3, Stage-4 and Leshka power stations including all Tranducers, Converter, Fibre Optic Terminal Equipments and all associated accessories	b	Apr-22	Dec-23	1.18			0.50	0.68	0.35	0.83	State Govt	PSDF Phase 5
Н	Dam Rehabilitation and Improvement Project (DRIP): Phase 2 and 3	b	2020-21	2026-27	441	22.05	69.82 5	69.825	69.825	123.48		World Bank	317.52
I	Name of Establishment: MyntduLeshka Stage - I PS, MePGCL,	Suchen											
1	Cooling System modification & improvement @ 251 lakhs	С	Dec. 2020	May. 2021	2.51	1.00	1.51			2.26	0.25		
2	Supply and erection of spare Generator Transformer $1\emptyset$ , 17.5 MVA, 132/33 KV with accessories for Leshka Power Station		Jun-21	Apr-22	1.25		0.44	0.81		1.13	0.13	FI	
3	Replacement of Switchgear & Protection System for Leshka Power Station		Apr-22	Sep-24	10.00			3.50	6.50	9.00	1.00	FI	
4	Upgradation of SCADA for Leshka Power Station		Mar-20	Oct-21	1.40	0.49	0.91			1.26	0.14	FI	
5	Communication from Leshka Dam to LeshkaPower House		Dec-21	Jul-22	0.35		0.12	0.23		0.32	0.04	FI	
6	Replacement of Air coolers including accessories for Stator for all 3 Units for Leshka PS		Oct-22	Apr-24	0.80			0.64	0.16	0.72	0.08	FI	
J	Lakroh Mini Hydel Project												
1	Replacement of Generator Transformer (with 3.3/33 KV, 2.5 MVA) including augumentation of Switchyard from 11 KV to 33 KV for Lakroh PS		Nov-21	Oct-22	1.14		0.40	0.74		1.03	0.11	FI	
2	Communication for Lakroh PS with SLDC		Mar-21	Nov-22	0.40	0.06	0.26	0.08		0.360	0.04	FI	

#### b) Ongoing & Upcoming Plants/Solar Parks

Project Details					2	Ad (be be be by the by					Source of Financing for Scheme				
		oť				ctec	cte	cter	ctec		Debit Component			ŧ	
SI. No.		the Scheme is part Business Plan (YES/No)		n & Date	oenditure Approved {/FI (in INR Crs)	FY 2020-21 (Projected)	FY 2021-22 (Projected)	FV 2022-23 (Projected)	FY 2023-24 (Projected)		Amount Amount	(INR Crs.)		Loan Source	/ Grants Component
100.	Name of Scheme	Whether the S Approved Busines	Project Start Date (DD-MM-YY)	Project Completion (DD-MM-YY)	Total Capital Expenditure Appr MSREC/Govt/DPR/FI (in INR Crs)	Project Outlay in in INR Crs	Project Outlay in in INR Crs	Project Outlay in in INR Crs	Project Outlay in in INR Crs	Equity Component	Loan-1	Loan-2	Loan-1	Loan-2	Capital Subsidies/ (in INR Cr)
1	GANOL -1		01.07.2014	May, 2022	507.71	80.00	150	55.13		54.62	100	123.1	FI	FI	229.98
2	RIANGDO		12.05.2020	May, 2023	33.99	7	10.00	12.00	4.99	2.59	11.40		FI		20.00
3	MLHEP Stage-II (3x60 MW)	No	2023-24	2029-30	2069.23				70	113.88	82.71	165.53	Market Loan	GoME	1707.1 1
4	Solar Park (10MW)each in Suchen and Thamar	Yes	2020-21	2023-24	11.64			1.64	7.19	9.24					2.40
5	Construction of Umshamphu hydel project (2x1.5 MW)	No	Aug-22	Jan-25	48.7			2.435	10	14.61	34.09		FI		
6	Construction of Amkshar hydel project (2x1.20 MW)	No	Sep-22	Feb-25	46.24			2.312	10	13.87	32.37		FI		
7	Construction of Umrina hydel project (3x1.50 MW)	No	Nov-22	Mar-25	75.08			3.754	10	22.52	52.56		FI		

#### c) Survey & Investigation projects

SI. No.	Project Details New H.E. Project Details			Cr.)	ed	ed	ed	ed			Source	r Scheme			
				(INR Cr	(Projected	(Projected	(Projected	(Projected		Debt Component					lent
	of Scheme t Date (DD-MM- YY)		te (DD-MM- on Date (DD- Y) are projected		in FY 2020-21 in NR Cr.) in FY 2021-22 in NR Cr.)		in FY 2022-23 in NR Cr.) in FY 2023-24 in NR Cr.)		ty Component	Loan Amount (NR Cr.)		Loan Source		Capital Subsidies/ Grant Component (INR Cr.)	Contribution Component
	Name	Project Star	Project Com N	Total Expe	Project Outlay	Project Outlay	Project Outlay	Project Outlay	Equity	Loan-1	Loan-2	Loan-1	Loan-2	Capital C	
1	MLHEP-II(3X70)MW	Nov,2006	2020-21	9.6	4.86					0.96		State Govt.		8.64	
2	UMNGI(2X31)MW	March,2014	2020-21	5	0.2					0.5		State Govt.		4.5	
3	UMNGOT(3X70)MW	Nov,2006	2020-21	8.35	2.37					0.835		State Govt.		7.515	
4	SELIM(2X48)MW	March,2008	2021-22	7.92	1.18	1.18				0.792		State Govt.		7.128	
5	NONGKOHLAIT(3X31)MW	March,2014	2020-21	5.02	0.05					0.502		State Govt.		4.518	
6	MAWBLEI(2X37.5)MW	Jan, 2009	2021-22	8.92	1.93	1.95				0.892		State Govt.		8.028	
7	Upper Khri Stage-II HEP	2022-23	2025-26	13.00			3.25	3.25		9.36	3.64	ADB	State Share		
8	Nongnam HEP	2022-23	2025-26	13.00			3.25	3.25		9.36	3.64	ADB	State Share		
9	Mawput HEP	2022-23	2025-26	13.00			3.25	3.25		9.36	3.64	ADB	State Share		

#### 5.3.2 Asset Base for the Utility

#### Petitioner's Submission

From FY 2018-19, MePGCL has implemented IND AS accounting Standard in line with Ministry of Corporate Affairs (MCA) norms. The IND AS are basically standards that have been harmonized with the IFRS to make reporting by Indian companies more in line with the global standards.

#### **Commission's Views**

The Claim by MePGCL as to implementation of IND AS in line with ministry of corporate affairs (MCA) norms shall not be considered for now.

As per the CERC norms the life term of the Hydro generating stations shall be 35 years from the date of COD. Commission considered the capital cost (GFA) of those generating stations which have completed 35 years of life term shall not be reckoned for determination of capital cost (GFA) and allowance of ARR provisions.

MePGCL shall however retain the values of capital cost (GFA) of those generating stations in the books of accounts.

#### **Timing of Accounting for Revenue**

Revenue from sale of power shall be accounted for on an accrual basis. The accounting for revenue shall thus be totally delinked from the timing and the extent of actual collection of revenue from consumers. Where the sale of energy prior to the end of a year has not been billed, a provision for such unbilled revenue shall be made at the yearend so as to treat the amount as revenue in the year of supply of power.

#### 5.3.3 Gross Fixed Assets

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

However, components like depreciation is calculated on the historical value of the asset which is the Gross fixed asset value i.e. GFA (as per MSERC MYT Regulations, 2014). The Historical asset value of asset is the asset base without IND AS adjustment and the same is shown in Note 2: PROPERTY, PLANT AND EQUIPMENT Without IND AS adjustment portion of the FY 2019-20 accounts.

For arriving at the GFA for MePGCL, old plants including Sonapani only (without IND AS adjustment), MePGCL has obtained the audited certificate of the existing gross value of the asset for FY 2018-19 and the same is attached in Annexure F. The Total

value of MePGCL assets for FY 2018-19 (without IND AS adjustment) is also given in Annexure F.

It is important to note that the Commission has not considered the audited cost as per the CA certificate earlier and now the Commission is requested to review the capital cost based on CA certificate and approve the same for further ARR calculations. Also the CA certified cost is also reflected in the audited accounts of MePGCL and can be reconciled by adding the GFA of Old Plants MLHEP, NUHEP and Lakroh to obtain the total GFA of MePGCL as a whole (reflected in audited accounts). The Capital expenditure and capitalization schedule has been prepared in line with business plan for FY 2021-22 to FY 2023-24 which has been approved by the Commission in its order dated 30 September 2020. The GFA calculated for old plants year wise is given below.

### Table 5. 6: Projected Gross Fixed Assets for MePGCL's Old plants including Sonapani for the control period

(Rs Cr)

Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Opening GFA	438.69	441.03	441.24	468.16	520.83	1079.79
Additions during year	2.48	0.21	26.92	52.67	558.96	96.66
Retirements during Year	0.14	0.00	0.00	0.00	0.00	0.00
Closing GFA	441.03	441.24	468.16	520.83	1079.79	1176.44

MePGCL Submits before Commission to kindly approve the GFA of MePGCL's old plants as submitted in the table above.

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

MePGCL has been time and again notified from the FY 2013-14 onwards that Capital cost (GFA) of the MePGCL old plants including Sonapani considered at Rs.49.39 Crore excluding the capital cost of the old projects namely Umiam stage I, II,III and Umtru whose life term of the service has been completed (35 years) for determination of ARR and Generation Tariff for subsequent period.

MePGCL was also notified through the True up orders for FY 2017-18 dated 28.09.2020, wherein the capital cost of MePGCL old projects including sonapani considered at Rs.49.39 Crore.

The GFA filed without adjustment certified by CA as **Annexure F** is representing capital cost including MLHEP and New Umtru.

The Petition filed separately for MLHEP, New Umtru and Lakroh are analyzed for 3<sup>rd</sup> MYT control period for FY 2021-22 to FY 2023-24 in this order.

The Projection of capital cost (GFA) for FY 2018-19 at Rs.438.69 Crore in the table no.

5 of the petition for ARR for 3<sup>rd</sup> MYT control period FY 2021-22 to FY 2023-24 shall not be considered against MePGCL old projects including sonapani.

Addition of the Capital cost (GFA) however shall be considered and the GFA for 3<sup>rd</sup> MYT control period shall be reckoned as approved in the business plan for the allowance of ARR provisions as depicted in the table below.

Table 5. 7 : Approved Gross Fixed Assets for MePGCL Old plants including Sonapani for 3rd

Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Estimated)	FY 2022-23 (Estimated)	FY 2023-24 (Estimated)
Opening GFA	49.39	51.73	51.94	78.86	131.53	690.49
Additions during year	2.48	0.21	26.92	52.67	558.96	96.66
Retirements during Year	0.14	0.00	0.00	0.00	0.00	0.00
Closing GFA	51.73	51.94	78.86	131.53	690.49	787.15

**MYT Control Period** 

Commission approves GFA for 3<sup>rd</sup> MYT control period for FY 2021-22, FY 2022-23 and FY 2023-24 as shown in the above table.

#### 5.3.4 Operation and Maintenance Expense

#### Petitioner's Submission

As per Regulation 56 of MYT Regulations, 2014, the Operation and Maintenance Expenses (O&M) is a sum of Employee Cost, Repairs and Maintenance (R&M) Expense and Administrative and General (A&G) Expenses. The extract of the regulation is reproduced.

#### *"56 Operation and maintenance expenses*

Operation and Maintenance Expenses (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.

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

As per Regulation 56.7 "in case of the hydro generating stations declared under commercial operation on or after 1/04/2009, 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 categorized MePGCL old generating stations into category A and C considering the COD of the projects.

A) Generating stations declared COD upto 31.03.2009

C) Generating Stations Declared COD on or after 01.04.2009 (1.5 MW sonapani)

Commission had fixed O&M expenses as per Regulation 56.7 of MSERC MYT Regulations 2014 and escalated at 5.72% year on year for subsequent years.

Commission had also held that the O&M expenses fixed above includes O&M expenses of leshka and Lakroh projects (under execution) in the tariff orders for FY 2013-14.

The Leshka Project has been declared COD on 01.04.2013 and lakroh project declared COD on 01.03.2019.

Thus the O&M expenses determined as per Regulation shall be segregated for MePGCL Old projects including sonapani and MLHEP Leshka and Lakroh projects.

The Segregation of O&M expenses taken place for Leshka project with effect from 01.04.2013 excluding from the O&M expenses of MePGCL old projects.

As also the O&M expenses for Lakroh project shall be regulated w.e.f 01.03.2019 out of O&M expenses from MePGCL old projects.

#### a) Employee Expenses

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

Before Corporatization, Meghalaya State Electricity Board (MeSEB) had a policy for revising pay scale of employees for every 5 years, Further at the time corporatization in the year 2020, the Management and Employees Associations had mutually decided that the earlier policy of revision of pay would continue in future.

As per this policy, MeECL and its subsidiary companies will implement a revised pay scale of employees effective from January 2020. Supporting documents for Revision of pay has been attached as Annexure G, The employee cost for FY 2020-21 is projected by considering the revised pay of Employees. The following assumptions were taken to arrive at the revised pay of employees.

Monthly Employee Cost Implications to MeECL and its subsidiaries due to RoP 2020

Particulars	Amount (INR Cr)
Monthly Employee Cost existing before RoP 2020	23.37
Revised Monthly Employee Costs after RoP 2020	29.68
Total Financial Implications due to RoP 2020	6.31
% Change in Employee Costs due to RoP 2020	27%

#### Table 5.8 : Impact of RoP 2020 on Employee Expenses

Basic Pay: Increment of Average Salary (Combination of Dearness Allowance with Basic Pay and thereafter an increase of 27% to arrive at new basic pay) by 27% due to ROP 2020 as shown in table above and a subsequent increment of 3% (given on a yearly basis to the permanent employees of MePGCL)

Other components have been calculated as a % of basic pay in proportion as in FY 2019-20 employee expenses.

Dearness Allowance (DA): There would be no revision in DA component for FY 2020-

21 as per the State Government's Directive, so DA component is retained at 1% of basic pay for the year (same DA as applicable during 01.01.2020 when ROP was

implemented)

#### Employee Cost Projections for FY 2021-22 to FY 2023-24

It is submitted that Employee expenses projections for control period FY 2021-22 to FY 2023-24 have been arrived as using the following assumptions:

- Basic pay : On a yearly basis the permanent employees of MePGCL are given an increment of 3%.
- Rest of the Components: Other Components have been calculated as a % of basic pay in proportion as in FY 2019-20 employee expenses.
- Dearness Allowance: As per MeECL policy, employees have two half-yearly increments based on the price index announced by labour Department every year. The Utility has considered the average half-yearly inflation factor as 2.75% based on the past trends of price inflation considered for DA and is shown below:

Date	DA % of Basis	DA Increments
Jul-15	2%	
Jan-16	6%	4%
Jul-16	9%	3%
Jan-17	11%	2%
Jul-17	13%	2%
Jan-18	14%	1%
Jul-18	16%	2%
Jan-19	19%	3%
Jul-19	24%	5%
	Average Half Yearly Increment in DA	2.75%
	Average Yearly Increment in DA	2.75%*2=5.5%

#### Table 5.9 : % of DA Increments

Thus the DA component for the control period is arrived at by adding 5.5% increment yearly for is calculation as a % of basic pay which implies for FY 2021-22, FY 2022-23 and FY 2023-24, DA component will be 6.5%, 12% and 17.5% as % of basic pay.

• The Yearly recruitment of new technical and non-technical staff is considered separately from the projection of employee cost for existing staff in the table detailed below. The variation due to recruitment is shown in a separate table.

#### Employee Cost Projections for FY 2021-22 to FY 2023-24

The employee expenses projected for the control period is as shown below

SI.	Particulars	FY 2018-19	FY 2019-20	FY 2020-21		FY 2022-23	FY 2023-24
No		(Actual)	(Provisional)	(Estimated)	(Projected)	(Projected)	(projected)
-	ARIES & ALLOWANC		I	1	1	1	
1	Basic Pay	38.12	45.11	62.36	64.23	66.16	68.15
2	Dearness Pay	-	-	-			
3	Dearness	5.77	5.78	0.62	4.18	7.94	11.93
	Allowance						
4	House rent	-	-	-	-	-	-
	Allowance						
5	Fixed medical	-	-	-	-	-	-
	allowance						
6	Other	6.63	6.58	9.09	9.37	9.65	9.94
	Allowances #						
7	Medical	0.36	0.44	0.61	0.63	0.65	0.67
	reimbursement						
	Charges						
8	Over time	0.22	0.45	0.62	0.64	0.66	0.68
	payment						
9	ROP 2020	-	-	-	-	-	-
10	Generation	0.00	0.00	0.00	0.00	0.00	0.00
	Incentive		0.00	0.00	0.00	0.00	0.00
11	Leave Travel	-	-	-	-	-	-
	Concession						
12	Apportionment	45.47	48.60	67.19	69.21	71.29	73.43
	of Holding Exp						
13	Sub total	98.67	106.97	140.51	148.25	156.34	164.78
	minal Benefits	1	1	1	1	1	
14	Leave	-	-	-	-	-	-
	Encashment						
15	Gravity	-	-	-	-	-	-
16	Communication	-	-	-	-	-	-
	of pension						
17	Staff welfare	0.00					
	expenses						
18	CPS	0.89	1.01	1.39	1.43	1.48	1.52
19	Workman	-	-	-	-	-	-

#### Table 5.10 : Projected Employee Expenses of MePGCL

(Rs.Cr)

SI. No	Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	1	FY 2022-23 (Projected)	FY 2023-24 (projected)
	compensation	(	(***********	(	(***)*****	(,	([],
20	Ex-gratia	0.02	0.02	0.03	0.03	0.03	0.03
21	Apportionment						
	of Terminal						
	Benefits						
22	Sub Total	0.91	1.03	1.42	1.47	1.51	1.56
Pen	sion Payment	l	1	l .	•	•	
23	Basic Pension	-	-	-	-	-	-
24	Dearness	-	-	-	-	-	-
	Pension						
25	Dearness	-	-	-	-	-	-
	allowance						
26	Any other	-	-	-	-	-	-
	expenses						
27	Sub Total	-	-	-	-	-	-
28	Total (13+22+27)	97.78	108.00	141.93	149.72	157.85	166.33
	Amount	8.25	9.64	13.33	13.73	14.14	14.57
	capitalized						
	Grand Total	89.54	98.35	128.60	135.99	143.71	151.77
	Employee	5.07	5.45	7.10	7.39	7.69	8.00
	Expenses of						
	MeECL						
	Apportioned						
	Net Total	94.61	103.81	135.70	143.38	151.40	159.76

**Apportionment of Employee Expenses**: This pertains to the 30% of the employee costs of MeECL working in transmission generation function. MePGCL has the policy to bear the Employee Cost of MeECL (Holding Company) to the tune of 30% of the total cost in a financial year for such staff (As stated in Note 27.2 of the FY 2019-20 accounts.)

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

MePGCL has yet to file petition for True up of the business for FY 2018-19 and FY 2019-20.

Regulation 56 read with 56.6 and 56.7 specifies that the O&M expenses shall mean the total of all expenditure (2% of the Project cost) under Employee cost, R&M expenses and Adm. and general expenses.

As per the Regulation 56.3, the employee expenses are segregated from O&M expenses for FY 2019-20 and FY 2020-21 for MePGCL Old projects including Sonapani to arrive at the base employee cost for FY 2019-20 at 79.67% of the O&M expenses determined for FY 2017-18. The computation works out to be at 20.33% towards R&M expenses and Adm & General expenses.

The Management of MeECL has approved revision of Pay Scales effective from 01.01.2020 to employees of all the subsidiaries (Generation, Transmission and Distribution) vide notification no. MeECL/CA/PB/112/2019/23 dated 19th November 2019.

Accordingly Employee expenses projected by MePGCL as before ROP at Rs.23.37 Crore is considered provisionally for Pay Revision effective for 3 months from 01.01.2020 in FY 2019-20. MePGCL has not filed breakup figures for Permanent & Non Permanent Employees.

The Employee expenses projected at Rs.23.37 crore has been escalated at 5.72% to arrive at the base year Employee expense for FY 2019-20 before ROP and ROP impact has been considered for 9 months in FY 2020-21 by increase of 27% in employee expenses for FY 2020-21 Provisionally. MePGCL shall file breakup figures for Permanent & Non Permanent Employees for True up.

The O&M Expenses for FY 2019-20 and FY 2020-21 are escalated at 5.72% year on year and for 3<sup>rd</sup> MYT Control period FY 2021-22 to FY 2023-24 provisionally.

Table 5.11 : Computation of O&M Expenses for 3rd MYT Control period after 27% increasein employee expenses due to pay revision 2020

SI.		FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
No	Particulars	(Provisional)	(Provisional)	(Estimated)	(Estimated)	(Estimated)
1	O&M Expenses	63.55	67.18	-	-	-
2	Less: O&M Expenses of MLHEP	31.68	33.49	-	-	-
3	O&M Expenses of MePGCL	31.87	33.69		-	-
4	Employee Exp of MePGCL as claimed	23.37	24.71*			
5	27% of Sl.no.4 considered for 3 months	1.58**	5.00**			
6	Employee Expenses of MePGCL (4+5)	24.96	29.71			
7	R&M and A&G exp	6.48	6.85	-	-	-
8	Net O&M expenses for MePGCL(8=6+7)	31.44	36.56*	38.65	40.86	43.20
9	Apportionment of MeECL 1/3 <sup>rd</sup> Employee Cost	5.45	6.57	6.63	6.71	6.78
10	Total O&M expenses for MePGCL	36.89	43.13	45.28	47.57	49.98

\* The base O&M expenses are escalated at 5.72% year on year as per Regulations

\*\* 27% increase due to ROP factored for 3 months in FY 19-20 and 9 months in FY 2020-21 to arrive at Employee Expenses. The apportionment of Holding Expenses projected in Table no.8 of the petition for Rs.67.19 Crore is not considered for FY 2020-21 for now.

# It is to be stated that any transaction related to the employee benefits made under provisions schedule (note) shall not be considered for determination of Tariff.

The Licensee is further informed that commission had notified in the Tariff Order for FY 2011-12 and FY 2012-13 (combined utility) that as per the Govt. of Meghalaya notification 2010 in connection with the reforms and re organization of MeSEB, directed the MeECL to get complete the exercise of actuary and start funding the **pension trust** so that the liabilities towards pension etc., shall be discharged from the Trust fund and not from the Tariffs.

The Commission had in the Tariff Order for FY 2013-14 held that the O&M expenses claimed by MePGCL for ARR include O&M expenses of Leshka and Lakroh Projects. The Leshka project has been operational and the project cost has been approved and ARR for Leskha project has been notified segregating the O&M expenses from MePGCL ARR from FY 2013-14 onwards.

The O&M expenses for FY 2009-10 was determined at Rs.34.26 Crore in the ARR for 1st MYT Control period FY 2015-16 to FY 2017-18 as per Regulation 56.4 and 56.5 of MSERC Regulations 2014 vide Tariff Order page no.33 & 34. These O&M expenses were computed considering the average of the actuals for FY 2003-04 to FY 2007-08 and normalized by escalating at 5.17% to arrive at the O&M expenses for FY 2009-10. The O&M expenses determined for FY 2009-10 has been escalated at 5.72% year on year upto the FY 2017-18 which included O&M expenses for Lakroh project.

The ROP impact for MePGCL has been considered in the petition filed for 3rd MYT control period FY 2021-22 to FY 2023-24 including the un segregated O&M expenses of Lakroh project. Since the Lakroh MHP has been operational from 01.03.2019, Commission has approved capital cost of the project while determining the O&M expenses for Lakroh.

The O&M expenses covered in the MePGCL old projects shall be adjusted for Lakroh from the ARR of MePGCL old projects for FY 2018-19 to FY 2020-21 and 3<sup>rd</sup> MYT Control period FY 2021-22 to FY 2023-24.

Accordingly the O&M expenses of MePGCL old projects excluding O&M expenses of Lakroh mini HEP is computed Provisionally as detailed below.

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
O&M expenses for MePGCL	36.89	43.13	45.28	47.57	49.98
Less: O&M Exp. Approved for Lakroh mini HEP	0.40	0.54	0.57	0.60	0.63
Approved O&M Exp. For MePGCL	36.49	42.59	44.71	46.97	49.35

Table 5.12 : Approved O&M expenses

Commission considers O&M expenses for MePGCL Old projects at Rs.44.71 Crore, Rs.46.97 crore and Rs.49.35 Crore for 3<sup>rd</sup> MYT Control period for FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

#### **Employee Parameters**

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

The Total number of Employees of MePGCL, based on the year wise requirement plan as approved in the Business Plan of MePGCL for the 3<sup>rd</sup> MYT Control Period from FY 2021-22 to FY 2023-24 dated 28.09.2020 is given below:

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
MePGCL (As on 31 March)	1552	1552	1602	1691	1802
Recruitment for the Year		0	50	89	111

In order to calculate the impact of new recruitments on the employee cost, we have estimated the average salary of the new employees and the same has been estimated to be INR 4.07 lakhs per employee per annum. This is multiplied by the number of new recruits joining each year. The final employee expense of MePGCL considering the effect due to new recruitment of employees is given below:

#### Table 5.13 : Final Employee Expenses of MePGCL considering effect of new recruitment

(Rs. Cr)

Particulars	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Employee cost of	94.61	103.81	135.70	143.38	151.40	159.76
existing employees						
Employee Cost of						
Employees to be						
recruited during FY				1.62	4.52	0 1 /
2020-2024 (Avg				1.63	4.53	8.14
Employee Cost *80%*						
No.of new recruits)						
Total Employee Cost	94.61	103.81	135.70	145.01	155.92	167.91

#### Commission's analysis

Additional claim on account of New Recruitment shall not bear any impact in the ARR and Tariffs, as the O&M Expenses are regulated based on the Capital cost of the generating projects, therefore the additional claim on account of new recruitment shall not be considered.

#### b) Repair and Maintenance Expense and Administrative and General (A&G) Expense

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

The old projects of MePGCL demand comparatively more investment for their maintenance particularly since a lot of assets are old and ageing. Under these circumstances there is a genuine need for incurring repair and maintenance expenses to keep the current assets in good health and under satisfactory running condition. Further, with the development of the generation sector and incorporation of new technologies, there is an increased requirement of repair and maintenance expense.

The R&M Expense for the control period was projected by considering average inflation rate of 5% (CPI) on the actual expenses of FY 2018-19 and FY 2019-20.

#### Administrative and General (A&G) Expense

The A&G Expenses for the control period has been projected by considering inflation rate of 5% (CPI) on the actual expenses of FY 2018-19 and FY 2019-20.

				· · ·
SI.No	Particulars	FY 2021-22	FY 2022-23	FY 2023-24
1	R&M Expenses	10.99	11.59	12.23
2	Adm and General Expenses	13.935	14.631	15.363

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

The O&M expenses determined in the Table no.5.11 includes R&M and Adm. & General Expenses, the R&M and Adm & General expenses shall be regulated in the True up Process subject to the limitations as per the Regulations.

#### c) O&M Cost projection for the 3<sup>rd</sup> MYT Control period Petitioner's Submission

Based on the above computation, the petitioner has projected the O&M cost for the  $3^{rd}$  Control period for the old projects (including Sonapani), as highlighted below:

(Rs.Cr)

Particulars	FY 2018-19 (Audited)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Employee Expenses of MePGCL (a)	94.61	103.81	135.70	145.01	155.92	167.91
R&M Expenses of MePGCL (b)	6.32	9.87	10.41	10.99	11.59	12.23
A&G Expenses of MePGCL (c)	5.63	12.03	13.27	13.93	14.63	15.36
O&M Expenses for MePGCL (d=a+b+c)	106.56	125.71	159.39	169.93	182.14	195.50
O&M Expenses for MLHEP (e)	33.96	35.91	48.21	50.97	53.88	56.96
O&M Expenses for NUHEP(f)	12.28	12.98	17.43	18.43	19.48	20.59
O&M Expenses for Lakroh HEP (g)	0.03	0.37	0.50	0.53	0.56	0.59
O&M Expenses for MePGCL old Plants including Sonapani (h=d-e-f-g)	60.29	76.45	93.25	100.00	108.22	117.36

Table 5.15 : O&M Cost Projection for MePGCL's Old Plants including Sonapani for the 3rdControl period.

Therefore, MePGCL requests Commission to approve O&M expenses as computed above from FY 2021-22 to FY 2023-24 as shown above with due justification provided in the above sections.

#### Commission's Analysis

The O&M expenses for MePGCL old plants including Sonapani have been computed and considered provisionally for ARR of 3<sup>rd</sup> MYT Control period FY 2021-22, FY 2022-23 and FY 2023-24 vide table no 5.12 of this order including ROP impact as per Regulations.

#### 5.3.5 Depreciation

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

The Gross Fixed Asset (GFA) base for FY 2018-19 and FY 2019-20 as shown in Section 3.3.3 (without IND AS adjustment) represents the historical asset value of asset which has been used in the calculation of depreciation component. The additions in GFA for the control period have been considered based on the capitalization schedule as shown in Section 3.3.2 of the petition. The rate of depreciation for various categories of assets has been considered strictly as per the rates prescribed in MSERC MYT Regulations.

It is submitted that though the Commission has not been allowing depreciation for

the old projects, MePGCL would like to submit that the old projects have a depreciable asset value due to renovation and maintenance being carried out from time to time as mentioned above and the audited accounts clearly reflect the depreciable value of such assets. As such, MePGCL requests the Commission to consider this while calculation of depreciation for old projects.

The assets created out of government grants and consumer contribution has not been considered for the calculation of depreciation and thus the same has been **deducted from the depreciation as amortization** to arrive at the net depreciation. The projected amortization of grants from FY 2020-21 onwards has been calculated by the formula: Actual Amortization of Grants of FY 2019-20 (from SOA) + average projected grants for the corresponding year \*5.28%(average actual depreciation rate).

Addition of grant portion of asset for the year is shown in Table 4 in section 3.3.2 of this petition.

Based on the above, the actual depreciation in FY 2018-19, FY2019-20, estimated depreciation in FY 2020-21 and projections for FY 2021-22, FY 2022-23, FY 2023-24 are shown in the following tables. The detailed calculation for MePGCL is shown in Format 6, **Annexure H** for reference.

						(Rs Cr)
SI. No	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Depreciation
1	Land & Land rights	8.99	0.01	0	8.99	0
2	Buildings	15.93	0	0	15.93	0.33
3	Hydraulic Works	128.68	0	0	128.7	2.28
4	Civil Works	26.63	0.02	0.05	26.59	0.82
5	Plant & Machinery	244.82	1.98	0.01	246.8	11.5
6	Lines & Cable Network	3.09	0.38	0	3.48	0.07
7	Vehicles	4.5	0.02	0.01	4.51	0.13
8	Furniture & Fixtures	3.14	0	0.08	3.06	0.15
9	Office Equipment	2.77	0.07	0	2.84	0.14
10	Assets not in use	0.16	0	0	0.16	0
	Total	438.69	2.48	0.14	441.03	15.4
11	Ammortization of Grants					12.77
	Less: - Depreciation of					
	Related Costs Charged to					0.000
	Capital Works					
	Net Depreciation					2.63

Table 5.16 : Actual Depreciation Charges of MePGCL Old Plants including Sonapani for FY 2018-19

### Table 5.17 : Provisional Depreciation Charges of MePGCL's Old Plants including Sonapani forFY 2019-20

SI.						
N	Particulars	Opening GFA	Addition	With drawn	Closing GFA	Depreciation
о		GFA		urawn	GFA	
1	Land & Land rights	8.99	0.00	0.00	8.99	0.00
2	Buildings	15.93	0.00	0.00	15.93	0.34
3	Hydraulic Works	128.70	0.00	0.00	128.69	2.25
4	Civil Works	26.59	0.00	0.00	26.59	0.82
5	Plant & Machinery	246.80	0.06	0.00	246.86	11.51
6	Lines & Cable Network	3.48	0.00	0.00	3.48	0.08
7	Vehicles	4.51	0.00	0.00	4.51	0.08
8	Furniture & Fixtures	3.06	0.01	0.00	3.07	0.14
9	Office Equipment	2.84	0.14	0.00	2.98	0.14
10	Assets not in use	0.16	0.00	0.00	0.16	0.00
	Total	441.03	2.46	-0.06	441.24	15.36
11	Amortization of Grants					12.86
	Less:- Depreciation of Related					
	Costs Charged to Capital					0.00
	Works					
	Net Depreciation					2.51

## Table 5.18 : Estimated Depreciation Charges of MePGCL's Old Plants including Sonapani forFY 2020-21

(Rs Cr)

SI. No	Particulars	Opening GFA	Addition	With drawn	Closing GFA	Depreciation
1	Land & Land rights	8.99	0.37	0.00	9.36	0.00
2	Buildings	15.93	2.96	0.00	18.89	0.58
3	Hydraulic Works	128.69	12.23	0.00	140.90	7.08
4	Civil Works	26.59	2.09	0.00	28.66	0.87
5	Plant & Machinery	246.86	9.00	0.00	255.84	14.27
6	Lines & Cable Network	3.48	0.14	0.00	3.62	0.18
7	Vehicles	4.51	0.06	0.00	4.58	0.44
8	Furniture & Fixtures	3.07	0.04	0.00	3.11	0.21
9	Office Equipment	2.98	0.04	0.00	3.02	0.19
10	Assets not in use	0.16	0.00	0.00	0.16	0.00
	Total	441.24	26.92	0.00	468.16	23.78
11	Ammortization of Grants					14.21
	Net Depreciation					9.57

						(Rs Cr)
SI. No	Particulars	Opening GFA	Addition	With drawn	Closing GFA	Depreciation
1	Land & Land rights	9.36	0.74	0.00	10.11	0.00
2	Buildings	18.89	5.82	0.00	24.71	0.72
3	Hydraulic Works	140.90	23.95	0.00	164.85	8.02
4	Civil Works	28.66	4.07	0.00	32.74	0.96
5	Plant & Machinery	255.84	17.56	0.00	273.41	15.04
6	Lines & Cable Network	3.62	0.26	0.00	3.89	0.19
7	Vehicles	4.58	0.12	0.00	4.69	0.45
8	Furniture & Fixtures	3.11	0.08	0.00	3.19	0.20
9	Office Equipment	3.02	0.08	0.00	3.10	0.20
10	Assets not in use	0.16	0.00	0.00	0.16	0.00
	Total	468.16	52.67	0.00	520.82	25.78
11	Ammortization of Grants					14.61
	Net Depreciation					11.17

### Table 5.19 : Projected Depreciation Charges of MePGCL's Old Plants including Sonapani for FY 2021-22

## Table 5.20 : Projected Depreciation Charges of MePGCL's Old Plants including Sonapani for FY 2022-23

(Rs	Cr)

SI. No	Particulars	Opening GFA	Addition	With drawn	Closing GFA	Depreciation
1	Land & Land rights	10.11	7.90	0.00	18.02	0.00
2	Buildings	24.71	61.70	0.00	86.41	1.85
3	Hydraulic Works	164.85	254.46	0.00	419.31	15.37
4	Civil Works	32.74	43.64	0.00	76.38	1.76
5	Plant & Machinery	273.41	185.46	0.00	458.87	20.93
6	Lines & Cable Network	3.89	3.00	0.00	6.89	0.27
7	Vehicles	4.69	1.20	0.00	5.89	0.51
8	Furniture & Fixtures	3.19	0.78	0.00	3.96	0.23
9	Office Equipment	3.10	0.77	0.00	3.86	0.22
10	Assets not in use	0.16	0.04	0.00	0.20	0.00
	Total	520.82	558.96	0.00	1079.78	41.14
11	Ammortization of Grants					21.00
	Net Depreciation					20.14

SI. No	Particulars	Opening GFA	Addition	With drawn	Closing GFA	Depreciation
1	Land & Land rights	18.02	1.34	0.00	19.36	0.00
2	Buildings	86.41	10.65	0.00	97.05	3.06
3	Hydraulic Works	419.31	43.82	0.00	463.13	23.25
4	Civil Works	76.38	7.44	0.00	83.83	2.62
5	Plant & Machinery	458.87	32.35	0.00	491.22	27.24
6	Lines & Cable Network	6.89	0.54	0.00	7.42	0.36
7	Vehicles	5.89	0.22	0.00	6.11	0.58
8	Furniture & Fixtures	3.96	0.14	0.00	4.11	0.26
9	Office Equipment	3.86	0.14	0.00	4.00	0.25
10	Assets not in use	0.20	0.01	0.00	0.21	0.00
	Total	1079.78	96.66	0.00	1176.43	57.62
11	Ammortization of Grants					27.59
	Net Depreciation					30.03

#### Table 5.21 : Projected Depreciation Charges of MePGCL's Old Plants including Sonapani for FY 2023-24

MePGCL humbly prays before the Commission to kindly approve the depreciation as computed above.

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

As per Regulation 33 of MSERC MYT Regulations 2014

For the purpose of tariff determination, depreciation shall be computed in the following manner:

a) 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.

b) For new assets, the approved/accepted cost for the asset value shall include foreign currency funding converted to equivalent rupee at the exchange rate prevalent on the date of foreign currency actually availed but not later than the date of commercial operation.

(Rs Cr)

- c) 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.
- d) 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.

Provided that land is not a depreciable asset and its cost shall be excluded from the capital cost while computing the historical cost of the asset.

- e) Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on prorata basis.
- f) The remaining depreciable value as on 31st March of the year closing after a period of 12 years from the date of commercial operation shall be spread over the balance useful life of the asset.
- 28.10 The following shall be excluded or removed from the capital cost of the existing and new project:
- a) The assets forming part of the project, but not in use;
- b) De capitalization of Asset;
- c) In case of hydro generating station any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State government by following a two stage transparent process of bidding; and
- d) the proportionate cost of land which is being used for generating power from generating station based on renewable energy:

Provided that any grant received from the Central or State Government or any statutory body or authority for the execution of the project which doesnot carry any liability of repayment shall be excluded from the CapitalCost for the purpose of computation of interest on loan, return on equity and depreciation;

MePGCL has yet to file petition for True up of business for FY 2018-19 and FY 2019-20 along with C&AG audit certification as per Regulation 11.2 and 11.3 of MSERC MYT Regulations 2014.

MePGCL has been notified through ARR and Tariff Orders from the FY 2013-14 that capital cost of the Old projects whose life span as per CERC Regulations has been

completed (35 years) shall not be considered, only the capital cost of Umiam Stage IV and Sonapani shall be considered for computation of Depreciation for ARR and Tariff provisions at Rs.49.39 Crore. MePGCL shall provide segregated asset wise breakup for Umiam Stage IV and Sonapani

The Addition of the capital cost projected for computation of Depreciation for the FY 2018-19 to FY 2020-21 is however considered provisionally. The Depreciation is computed considering original cost of fixed assets at Rs.49.39 Crore and additional capitalization as projected in the petition is considered for allowance of Depreciation after deducting the Govt Grants as approved in the business plan for 3<sup>rd</sup> MYT control period as depicted in the Table below.

SI.			Provisional		Estimated			
No	Particulars	FY	FY	FY	FY	FY	FY	
		2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	
1	Opening GFA	49.39	51.73	51.94	78.86	131.53	690.49	
2	Addition	2.48	0.21	26.92	52.67	558.96	96.66	
3	Retirements	0.14	0.00	0.00	0.00	0.00	0.00	
4	Closing GFA	51.73	51.94	78.86	131.53	690.49	787.15	
	Average GFA	50.56	51.83	65.40	105.20	411.01	738.82	
	90% of GFA	45.50	46.65	58.86	94.67	369.91	664.94	
5	Depreciation @5.28%	2.40	2.46	3.10	4.99	19.53	35.10	
	Govt Grants available				86.41	239.83	364.47	
6	<b>Less:</b> Depreciation on Grants				4.56	12.66	19.24	
7	Net Depreciation	2.40	2.46	3.10	0.43	6.87	15.86	

#### Table 5.22 : Computation of Depreciation for Control Period

(Rs Cr)

Depreciation has been computed at 5.28% provisionally for the control period.

Adjustment of Amortization Grants shall be regulated on filing of True up petition.

Commission considers depreciation at Rs.0.43 Crore, Rs.6.87 Crore, Rs.15.86 Crore for 3<sup>rd</sup> MYT Control period for FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

#### 5.3.6 Interest and Finance Charges

#### Petitioner's Submission

As per Regulation 32 of the MYT Regulations, 2014, 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 prevailing lending rate of bank and financial institution. It is submitted that the Interest on Loan for the control period has been computed by considering Interest obligation for existing loans as well as for new loans projected to be taken based on the approved capital investment plan for the control period. The details of the loan statement for actual FY 2018-19, FY 2019-20, estimated FY 2020-21 and projected FY 2021-22, FY 2022-23 and FY 2023-24 along with the interest accrued component for MePGCL is given in Format 7, Annexure H.

MePGCL and MeECL Loan Statements: The loan portions of the capex in the approved Business Plan have been added over and above the existing loan commitments to arrive at MePGCL's interest on loan. The same loan portion is also shown in Section 3.3.1 of the petition. Justifications for some of the loans under Old Plants and Sonapani head are given below:

- a) State Govt. Loans: These loans have been availed by the utility from the State Government to help MePGCL for setting up of new projects as well as renovation and modernization of existing generation plants under various State or Central schemes. The details about the State Govt. loans are present in Note 12.6 of FY 2018-19 MePGCL audited accounts and Note 16.6 in the accounts of FY 2019-20. The State Government loans have also been earlier approved in the past tariff orders and considered for interest calculation.
- b) Additional Loans Due to Capex: These pertain to the new loan portions of the approved capital expenditure in the next control period. As stated above, the year-wise loan portion has been shown in Section 3.3.1 of the petition, the interest rates for the loans have been assumed at the average interest rates for MePGCL with a loan tenure of 12 years including 1-year moratorium.
- c) Working Capital Loans: The Covid-19 pandemic created severe liquidity crisis to utilities across the country due to delay in billing as well as collection for the utilities. The various restrictions put in place to control the effects of the virus has triggered shortages of raw materials and manpower and disrupted supply chain. MePGCL ensured smooth power supply across the state in spite of fall in revenue for the utility. However, it also had to resort to working capital loans to meet the cash flow gap. The loans from PFC and Advance loans from MeECL come under this category. Though the working capital loans are shown in the

loan statements in Format 7, Annexure H, the interest accrued is not included in the interest and finance calculations as they are already accounted for in the Interest in Working Capital component shown in Section 3.8.

Details of Statement of loans for the capital expenditure for old plants including Sonapani are given in Annexure I. The summarized statement of Interest and Finance charges to be considered for the Control Period for the old projects is shown in the table below:

### Table 5.23 : Interest and Finance Charges Projected of MePGCL's Old Plants for the Third Control Period

						(Rs. Cr)
Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
			(Estimated)	(Projected)	(Projected)	(Projected)
Opening Balance	126.33	156.44	159.14	351.77	383.50	465.33
Addition During the Year	30.11	2.70	192.64	50.58	92.42	119.59
Repayment during the year	-	-	-	18.85	10.60	28.61
Closing Balance	156.44	159.14	351.77	383.50	465.33	556.30
Average Interest Rate	9.66%	9.32%	10.01%	9.89%	10.08%	10.24%
Interest Accrued	13.65	14.71	25.57	36.36	42.80	52.30
Interest Capitalized	0.52	-	8.79	16.68	15.49	14.32
Add: Finance Charge and MeECL Apportioned **	0.81	3.91	8.14	8.18	8.23	8.27
Interest and Finance Charges	13.94	18.62	24.93	27.87	35.53	46.25

\*\* 1/3<sup>rd</sup> of the total MeECL interest and finance charges projected (in the table below)

### Table 5.24 : Interest and Finance Charges Projected for MeECL's Control Period 2021-24

						(Rs. Cr)
Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Opening Balance	-	-	190.30	190.30	190.30	190.30
Addition During the Year	-	190.30	-	-	-	-
Repayment during the year	-	-	-	-	-	-
Closing Balance	-	190.30	190.30	190.30	190.30	190.30
Average Interest Rate		9.65%	11.49%	11.49%	11.49%	11.49%
Interest Accrued for the Year	0.00	9.19	21.87	21.87	21.87	21.87
Add: Other Finance Charge of MeECL ^		2.43	2.55	2.68	2.81	2.95
Total Interest and Finance Charges of MeECL	2.43	11.74	24.42	24.54	24.68	24.82
Apportioned Total Interest and Finance Charges of MeECL	0.81	3.91	8.14	8.18	8.23	8.27

As per Note 22 of MeECL FY 2019-20, includes costs of raising finance, bank and guarantee charges

MePGCL humbly prays before the Commission to kindly approve the Interest and Finance Charges as computed above.

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

As per Regulation 32.1 specifies that "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 interest and finance charges attributable to capital work in progress shall be excluded.

Provided that neither penal interest nor overdue interest shall be allowed for computation of tariff."

MePGCL has yet file True up petition for FY 2018-19 and FY 2019-20.

MePGCL has projected opening loan of Rs.159.14 Crore for FY 2020-21 for which the source wise details are yet to be filed with True up petitions.

Commission had trued down the business for FY 2017-18 as per which no outstanding loans are considered against the MePGCL old projects including sonapani.

The Projected Debt component against the MePGCL Old Projects is amounted to Rs.114.66 Crore as approved for business plan for MYT Control period only shall be considered for determination of ARR for 3<sup>rd</sup> MYT Control period.

Interest cost projected vide table 20.(a) of the petition for MeECL is not considered since no capital works being executed on behalf of MePGCL.

The Repayment is considered at 10% of the opening loan, since the depreciation computed for the control period resulted in negative value.

The average interest rate as projected in the petition however shall be considered at 9.89% as depicted in the table below for MYT control period.

					(Rs. Cr)
Sl.no	Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
1	Opening loans	-	-	103.19	92.87
2	Additions	-	114.66	-	-
3	Repayment	-	11.47	10.32	9.29
4	Closing Loan	-	103.19	92.87	83.58
5	Average Loan		51.60	98.03	88.22
6	Interest @ 9.89%		5.10	9.70	8.72

Table 5.25 : Computation of Interest & Finance Charges for control Period (Estimated)

Commission considers Interest and Finance charges at Rs.5.10 Crore, Rs.9.70 Crore and Rs.8.72 Crore for 3<sup>rd</sup> MYT Control period for FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

#### 5.3.7 Return on Equity

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

The relevant regulations for determination of debt-equity ratio are extracted from the MSERC MYT Regulations, 2014 and reproduced for reference as below:

#### "27 Debt-Equity Ratio

27.1 For a project declared under commercial operation on or after 1.4.2015, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan;

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

Provided further that equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Provided any grant obtained for execution of the project shall not be considered as a part of capital structure for the purpose of debt-equity ratio.

Explanation:- The premium, if any, raised by the generating company or the transmission licensee or the distribution licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure.

27.2 In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2015, debt-equity ratio allowed by the Commission

for determination of tariff for the period ending 31.3.2015 shall be considered.

27.3 Any expenditure incurred or projected to be incurred on or after 1.4.2015as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernization expenditure for life extension shall be serviced in the manner specified in this regulations."

The Regulation 31 & 92 of the MYT Regulations, 2014, provides for computation of Return on Equity (RoE). The extract is reproduced below:

#### "31 Return on Equity

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

Provided that in case of generation & transmission projects commissioned after notification of these regulations, an additional return of 0.5 % shall be allowed if such projects are completed within the time line as specified in CERC Tariff Regulations. Provided that in case of generation & transmission projects commissioned after the notification of these regulations an additional return of 1.5 % shall be allowed if such projects are completed within the original sanctioned project cost without any time and cost overrun whatsoever.

Provided that equity invested in a foreign currency may be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

- The premium received while issuing share capital shall be treated as a part of equity provided the same is utilized for meeting capital expenditure.
- Internal resources created out of free reserves and utilized for meeting capital expenditure shall also be treated as a part of equity.

For computation of RoE till 1<sup>st</sup>April, 2015, the Meghalaya State Electricity Regulatory Commission (Terms and Conditions for determination of Tariff) Regulations, 2011 (hereinafter referred as Tariff Regulations, 2011) have been followed. The relevant provision of Tariff Regulations, 2011 is reproduced below:

#### *"101. Return on Equity*

(1) Return on equity shall be computed on the equity base determined in accordance with Regulation 100, at a fixed rate of 14 percent, per annum.

Provided that equity invested in a foreign currency may be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate prevailing on the due date of billing. The difference in actual exchange rate and the provisional exchange rate considered while determining the ARR shall be taken into consideration at the time of 'Truing up'.

(2) The equity amount appearing in the audited Balance Sheet or as per Transfer Scheme Notification will be taken into account for the purpose of calculating the return on equity for the first year of operation, subject to such modifications as may be found necessary upon audit of the accounts if such a Balance Sheet was not audited....."

The petitioner has projected the Return on Equity for third control period based on its average existing asset base for MePGCL (funded by non-grants). This is similar to the approach followed by the Commission in its past few tariff and true up orders (please refer 3.7.6 for the reason). The asset base used for calculation of equity base and subsequent return on equity has been arrived by reducing the grant portion from the asset.

Based on the grant portion of the asset (above table), the total asset base (Section 3.3.3 of the petition) and the Commission's methodology, the return on equity for the control period is given below:

	Table 5.20 . Grant						(Rs. Cr)
		FY 2018-19 (Audited)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
SI. No	Particulars	Actuals from	the accounts	Addition of the loan, grants and equity for the year arrive at closing cumulative loan, grants and equity been calculated from the capital expenditure schedu shown in the Table 2 of Section 3.3.1 of the petiti			d equity has e schedule as
1	Opening GFA for the Year	2325.33	2350.76	2355.24	2383.71	2440.01	3004.97
2	GFA Addition for the Year	25.43	4.48	28.47	56.30	564.96	103.32
3	Closing GFA for the Year	2350.76	2355.24	2383.71	2440.01	3004.97	3108.28
4	Average Assets Base for the Year	2338.05	2353.00	2369.47	2411.86	2722.49	3056.63
5	Opening Equity Base for the Year	798.91	803.95	918.77	918.77	918.77	976.35
6	Closing Equity Base for the Year	803.95	918.77	918.77	918.77	976.35	1045.76
7	Average Equity Base for the Year	801.43	861.36	918.77	918.77	947.56	1011.06
8	Opening Grant for the Year	0.00	25.67	40.83	267.86	334.36	0.00
9	Closing Grant for the Year	25.67	40.83	267.86	290.26	624.62	0.00
10	Average Grant for the Year	12.84	33.25	154.34	279.06	479.49	0.00
11	Opening Long Term Loan for the Year	0.00	2.80	4.48	227.58	234.86	0.00
12	Closing Long Term Loan for the Year	2.80	4.48	227.58	238.98	473.84	0.00
13	Average Long-Term Loan for the Year	1.40	3.64	116.03	233.28	354.35	0.00
14	Grant Portion of the Asset 14=4*{10/ (7+10+13)}	36.79	87.10	307.54	470.30	732.80	0.00

#### Table 5.26 : Grant Portion of Asset for MePGCL Old Plants the Control Period

Based on the grant portion of the asset (above table), the total asset base (Section 3.3.3 of the petition) and the Commission's methodology, the return on equity for the control period is given below:

Table 5.27 : Return on Equity for MePGCL for the Control Period

							(Rs Cr)
si	Particulars	FY 2018-19 (Audited)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
1	Opening GFA for the Year	2325.33	2350.76	2355.24	2383.71	2440.01	3004.97
2	Closing GFA for the Year	2350.76	2355.24	2383.71	2440.01	3004.97	3108.28
3	Average Assets Base for the Year	2338.05	2353.00	2369.47	2411.86	2722.49	3056.63
6	Average Grant Portion of the Asset Base (From the above table)	36.79	87.10	307.54	470.30	732.80	0.00
7	Asset Base excluding Grant Portion	2301.25	2265.90	2061.93	1941.56	1989.69	3056.63
8	Debt component (70% of GFA)	1610.88	1586.13	1443.35	1359.09	1392.79	2139.64
9	Equity component (30% of GFA)	690.38	679.77	618.58	582.47	596.91	916.99
10	RoE (%)	14%	14%	14%	14%	14%	14%
11	Return on Equity (Rs. Cr.)	96.65	95.17	86.60	81.55	83.57	128.38

						(KS. Cr)
Particulars	FY 2018-19 (Audited)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
RoE of MePGCL (a)	96.65	95.17	86.60	81.55	83.57	128.38
RoE of MLHEP (b)	54.00	53.99	54.02	54.12	54.29	54.54
RoE of NUHEP (c)	25.26	25.33	25.37	25.37	25.37	25.37
RoE of Lakroh HEP (d)	0.04	1.12	1.17	1.19	1.22	1.24
RoE of MePGCL Old Plants including Sonapani (e=a-b-c-d)	17.35	14.73	6.04	0.87	2.69	47.23

The petitioner would however like to submit that the issue of Return on Equity (methodology of MeECL& its subsidiaries vs methodology of MSERC: APTEL Case no 46 of 2016 is still under subjudice. Further the petitioner has appealed against the methodology in the review petition of true up FY 2016-17 whose order is still due from the Commission. In case of favorable order to the petitioner with respect to methodology adopted for return on equity, the petitioner will reclaim/ adjust the additional claim of return on equity in the subsequent tariff petitions. However, the petitioner has hereby claimed return based on the methodology adopted by the Commission in its past orders to avoid ambiguities in figures/calculations resulting in wrong calculations and lower amount of RoE being approved by the Commission.

MePGCL humbly prays before the Commission to kindly approve the RoE as per the above computations.

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

As per Regulation 31.1 read with 27 of MSERC MYT Regulations 2014 specifies that *"Return on equity shall be computed on the equity base determined in accordance with regulation 27 and shall not exceed 14%.* 

Provided that in case of generation & transmission projects commissioned after notification of these regulations, an additional return of 0.5 % shall be allowed if such projects are completed within the time line as specified in CERC Tariff Regulations.

Provided that in case of generation & transmission projects commissioned after the notification of these regulations an additional return of 1.5 % shall be allowed if such projects are completed within the original sanctioned project cost without any time and cost overrun whatsoever.

(De Cr)

Provided that equity invested in a foreign currency may be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

- The premium received while issuing share capital shall be treated as a part of equity provided the same is utilized for meeting capital expenditure.
- Internal resources created out of free reserves and utilized for meeting capital expenditure shall also be treated as a part of equity.

#### 27. Debt Equity Ratio

For a project declared under commercial operation on or after 1.4.2015, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan;

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

Provided further that equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Provided any grant obtained for execution of the project shall not be considered as a part of capital structure for the purpose of debt-equity ratio.

Commission has trued down the business for FY 2017-18. MePGCL has yet to file petition for True up of the business for FY 2018-19 and FY 2019-20.

MePGCL has filed ARR and Tariff petitions for 3<sup>rd</sup> MYT control period separately for MLHEP and MePGCL old projects. The capital grants available as of FY 2019-20 for Rs.210.67 Crore shall be considered for computation of Return on equity against ARR of MePGCL Old projects and MLHEP projects in the proportion of Capital cost.

The Return on Equity has been considered on the capital cost of the MePGCL old plants including sonapani at Rs.49.39 Crore only.

The Govt. Grants and contributions available at Rs.210.67 Crore as per SOA of FY 2019-20 and additions as projected for FY 2020-21 in the Business plan shall be apportioned for MePGCL old projects and MLHEP in the ratio of capital cost of the Projects.

Thus the Capital cost of the MePGCL old projects considered at Rs. 78.86 Crore including subsequent additions as approved for Business plan and the Grants part shall be at Rs.12.16 Crore, and capital cost of MLHEP stood at Rs.1287.01 Crore of which the grants part shall be Rs.198.51 Crore for FY 2020-21.

MePGCL has filed separate ARR for New Umtru Project. The govt. grants available for Rs.128.37 Crore shall be considered for computation of ROE of New Umtru ARR for 3<sup>rd</sup> MYT control period.

The Capex projected against DRIP Phase 2 & 3, during the MYT control period is amounted to Rs.209.48 Crore against which the capital grants available from World Bank is projected at 72% of project outlay at Rs.441.00 Crore shall be considered as grant for MePGCL Old Projects. The Grants part shall be adjusted at Rs.50.27 Crore each year during the MYT period from FY 2021-22 to FY 2023-24.

The Govt. Grant as approved in the business plan for MePGCL old projects is considered at Rs.293.38 Crore for existing projects and shall be adjusted during the MYT control period considering the Capex/capitalization projected.

The Return on Equity for MePGCL Old projects and sonapani based on the capital cost and GFA approved in this order shall be considered for 3<sup>rd</sup> MYT control period as depicted in the table below.

						(Rs Cr)
Particulars	FY 2018-19 (Provisional)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Estimated)	FY 2022-23 (Estimated)	FY 2023-24 (Estimated)
Opening GFA	49.39	51.73	51.94	78.86	131.53	690.49
Additions during year	2.48	0.21	26.92	52.67	558.96	96.66
Retirements during Year	0.14	0.00	0.00	0.00	0.00	0.00
Closing GFA	51.73	51.94	78.86	131.53	690.49	787.15
Capital Cost for MePGCL Old Projects				70.00	424 52	600.40
Opening GFA				78.86	131.53	690.49
Additions during Year				52.67	558.96	96.66
Retirements				-	-	-
Closing GFA				131.53	690.49	787.15
Average GFA				105.20	411.01	738.82
<b>Less:</b> Govt. Grants		12.16	16.37	86.41	239.83	364.47
Net GFA				18.79	171.18	374.35
Debt at 70%				13.15	119.83	262.05
Equity at 30%				5.64	51.35	112.30
ROE @ 14%				0.79	7.19	15.72

Commission considers Return on Equity at Rs.0.79 Crore, Rs.7.19 Crore and Rs.15.72 Crore for 3<sup>rd</sup> MYT Control period FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

#### 5.3.8 Interest on Working Capital

#### Petitioner's Submission

As per Regulation 34.1 (iii) of the MYT Regulations, 2014, the components of working capital will be:

#### "34 Interest on Working Capital

#### 34.1 Generation

(iii) In case of hydro power generating stations, working capital shall cover:

- Operation and maintenance expenses for one (1) month;
- Maintenance spares at the rate of 15% of O & M expenses escalated at 6% from the date of commercial operation; and

• Receivables equivalent to two (2) month of fixed cost: Provided that in case of own generating stations, no amount shall be allowed towards receivables, to the extent of supply of power by the Generation Business to the Retail Supply Business, in the computation of working capital in accordance with these Regulations."

Based on the above, the Interest on Working Capital can be computed as follows: Table 5.30 : Projected Interest on Working Capital of MePGCL Old Plants including Sonapani the

Control Daviad

Control Period									
Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)			
O&M for 1 Months	5.00	6.37	7.77	8.33	9.02	9.78			
Maintenance Spares	8.99	11.47	13.99	15.00	16.23	17.60			
Receivables for 2 Months	19.79	19.78	20.03	21.05	25.51	38.05			
Total (INR Crore)	33.78	37.62	41.79	44.39	50.76	65.43			
Interest Rate (%)	13.45%	13.20%	12.15%	12.15%	12.15%	12.15%			
Interest on Working Capital (INR Crore)	4.54	4.97	5.08	5.39	6.17	7.95			

MePGCL humbly prays before the Commission to kindly approve the Interest on Working Capital as computed above and as per the norms in the MYT Regulations.

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

As per Regulation 34.1 (iii) of MSERC MYT Regulations 2014 Specifies-

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

- Operation and maintenance expenses for one (1) month;
- Maintenance spares at the rate of 15% of O & M expenses escalated at 6% from the date of commercial operation; and
- *Receivables equivalent to two (2) month of fixed cost:*

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

### Table 5.31 : Computation of Interest on Working Capital for MePGCL Old Plants including Sonapani the Control Period

				(Rs.Cr)
SI.	Particulars	FY 2021-22	FY 2022-23	FY 2023-24
no				
1	O&M Expenses	44.71	46.97	49.35
2	O&M Expenses for 1 Month (sl.no.1/12)	3.73	3.91	4.11
3	Maintenance Spares @15% of	7.11	7.47	7.85
	Sl.no.1(sl.no.1*15%+6%)			
4	Receivables for 2 months	7.18	10.43	13.55
5	Total (Sl.no.2+3+4)	18.02	22.81	25.51
6	Interest on Working Capital @12.15%	2.19	2.77	3.10

Commission considers Interest on working capital at Rs.2.20 Crore, Rs.2.65 Crore and Rs.3.10 Crore for 3<sup>rd</sup> MYT Control period FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

#### 5.3.9 Taxes on Income

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

Regulation 35 of the MYT Regulations, 2014, provides for claim of Income Tax as expenses. However, MePGCL submits nil income tax for the control period as of now. The actual incurred if any shall be taken up during true up of subsequent years.

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

Regulation 35 of MYT Regulations 2014 specifies that Commission in its MYT order shall provisionally approve Income tax payable for each year of the Control Period, if any based on the actual audited accounts available for the applicant subject to prudence check.

MePGCL has submitted that income tax shall be claimed in the true up exercise and accordingly commission considered NIL income tax for 3<sup>rd</sup> MYT Control period FY 2021-22 to FY 2023-24.

#### 5.3.10 SLDC Charges

#### Petitioner's Submission

As per Regulation 1, 3(3), 3(6) of MSERC (Levy and Collection of State Load Dispatch Centre Fees and Charges) Regulations, 2009, MePGCL will need to bear 50% of the Annual Revenue Requirement of SLDC. The SLDC charge has been escalated at 5% year-on-year.

						(Rs.Cr)
Particulars	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Particulars	(Actual)	(Provisional)	(Estimated)	(Projected)	(Projected)	(Projected)
SLDC Charges	1.20	1.68	1.76	1.85	1.94	2.04

#### Table 5.32 : SLDC Charges for the Control Period

MePGCL humbly prays before the Commission to kindly approve the SLDC charge as per the above computations.

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

Regulation 59 of 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.* 

MePTCL has estimated SLDC ARR for MYT Control period at Rs.2.80 Crore, Rs.2.94 Crore and Rs.3.08 crore for FY 2021-22 to FY 2023-24 respectively.

Commission considers SLDC charges as claimed by the petitioner at Rs.1.85 Crore, Rs.1.94 Crore and Rs.2.04 Crore considering 50% subject to True up for 3<sup>rd</sup> MYT Control period FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

#### 5.3.11 Non Tariff Income

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

As per Regulation 60 of the MYT Regulations, 2014 the **Other Income** of a generation utility is to be deducted from the total expenses to arrive at the net ARR. The relevant regulation is reproduced below for ready reference:

#### "60 Other income

60.1 All Income other than income from sale of energy and net U I charges gained (after introduction of intra-state ABT) shall be grouped as other income. UI penalties shall not be netted off from other income. The UI penalties shall be borne by the generating company."

The details of Non-Tariff Income are mentioned in table below:

SL No.	PARTICULARS	FY 2018-19 (Audited)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
1	Interest Income						
2	From Banks	0.92	2.17	2.23	2.30	2.37	2.44
3	From Others	0.37	0.00	0.00	0.00	0.00	0.00
4	Other non-operating income						
5	Rental and Hiring Income	0.39	0.36	0.37	0.38	0.39	0.41
6	Rebates	0.01	0.02	0.02	0.02	0.02	0.02
7	Fees and Penalties	0.01	0.04	0.04	0.04	0.05	0.05
8	Sale of scrap, tender forms and others	0.05	0.09	0.09	0.09	0.09	0.10
9	Miscellaneous receipts	1.53	0.07	0.07	0.07	0.08	0.08
10	Revenue Grant		0.50	0.52	0.53	0.55	0.56
11	Total Other Income	3.27	3.25	3.35	3.45	3.55	3.66
12	Other Income of MeECL Apportioned	7.08	6.04	6.22	6.41	6.60	6.80
13	Net Other Income of MePGCL	10.35	9.29	9.57	9.86	10.15	10.46
14	Other Income of MLHEP	0.023	0.003	0.013	0.014	0.014	0.015
15	Other Income of NUHEP	0.11	0.00	0.0587	0.0605	0.0623	0.0642
16	Other Income of Old Plants (13-14-15)	10.22	9.29	9.50	9.78	10.08	10.38

### Table 5.33 : Non-Tariff Income of MePGCL's Old Plants including Sonapani for the Control Period FY 2021-22 to FY 2023-24

MePGCL humbly prays before the Commission to kindly approve the Non-Tariff Income as per the above computations.

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

MePGCL has projected the Non Tariff and Other income from MLHEP and NuHEP deducted from the MePGCL Non Tariff income, Since Separate ARR is filed for MLHEP and New Umtru Projects.

Commission considers the Non Tariff Income of MePGCL as projected in above table at Rs.9.78 Crore, Rs.10.08 Crore and Rs.10.38 Crore for 3<sup>rd</sup> MYT Control Period FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

#### 5.3.12 Annual Revenue Requirement (ARR)

#### Petitioner's Submission

Based on the above submissions, the ARR for each year of the Control Period would be as shown in the following table:

							(Rs.Cr)
SI. No.	Particulars	FY 2018-19 (Audited)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
1	Interest & Finance Charges	43.02	27.63	24.93	27.87	35.53	46.25
2	Depreciation	2.62	2.50	9.57	11.16	20.13	30.02
3	O&M Expenses	60.28	76.45	93.25	100.01	108.22	117.35
4	Interest on working capital	4.55	4.97	5.30	5.62	6.41	8.20
5	Return on Equity	17.35	14.73	6.03	0.87	2.68	47.23
6	SLDC Charges	1.20	1.68	1.76	1.85	1.94	2.04
7	Net Prior Period Items/ Provision for bad debts	-0.08	0.00	0.00	0.00	0.00	0.00
	Total Annual Fixed Cost	128.95	127.95	140.85	147.38	174.92	251.09
8	Less: Non-Tariff Income	10.22	9.29	9.50	9.78	10.08	10.38
	Net Annual Fixed Cost	118.73	118.67	131.35	137.60	164.85	240.71

#### Table 5.34 : Projected ARR of MePGCL Old Plants for the Third Control Period

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

Commission after prudence check of the petition filed by the licensee, taking into consideration of SOA for FY 2018-19 and FY 2019-20 approved Business plan the objections raised by the stake holders, the response of the licensee and minutes of the public hearing and minutes of State Advisory Committee has approved the ARR for MePGCL old projects for 3<sup>rd</sup> MYT Control period FY 2021-22 FY 2022-23 and FY 2023-24 as depicted in the table below:

		1			1		(Rs.Cr)
SI. No.	Deutieuleur	Pro	jected by MeP	GCL	Approved by the Commission		
	Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2021-22	FY 2022-23	FY 2023-24
1	Interest & Finance Charges	27.87	35.53	46.25	5.10	9.70	8.72
2	Depreciation	11.16	20.13	30.02	0.43	6.87	15.86
3	O&M Expenses	100.01	108.22	117.35	44.71	46.97	49.35
4	Interest on working capital	5.62	6.41	8.20	2.19	2.77	3.10
5	Return on Equity	0.87	2.68	47.23	0.79	7.19	15.72
6	SLDC Charges	1.85	1.94	2.04	1.85	1.94	2.04
7	Net Prior Period Items/ Provision for bad debts	0.00	0.00	0.00	0.00	0.00	0.00
	Total Annual Fixed Cost	147.38	174.92	251.09	55.07	75.44	94.79
8	Less: Non-Tariff Income	9.78	10.08	10.38	9.78	10.08	10.38
	Net Annual Fixed Cost	137.60	164.85	240.71	45.29	65.36	84.41

 Table 5.35 : Approved ARR for MePGCL Old Projects including Sonapani for 3rd MYT Control period

 (Pc Cr)

Commission considers ARR for MePGCL for 3<sup>rd</sup> MYT Control period FY 2021-22, FY 2022-23 and FY 2023-24 at Rs.45.29 Crore, Rs.65.36 and Rs.84.41 Crore respectively.

#### 5.4 MLHEP ARR for 3<sup>rd</sup> MYT Control Period FY 2021-22 to FY 2023-24

#### 5.4.1. Capital Expenditure and Capitalization

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

#### **Capital Expenditure**

In the approved Business Plan Order (dated 30.09.2020), the Commission has approved the year wise capital expenditure for the control period for MePGCL. The approved capex of MLHEP as part of the approved business case is presented below:

Table 5.36 : Projected Capex for MLHEP for the Control Period (Rs. Cr.)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Total
Approved Capex as per the Business Plan Order	1.49	2.98	5.18	6.66	16.31

The Loan, Equity and Grant Portion of the capex for third control period is given below:

Table 5.37 : Break up of Capex Projected for MLHEP for the Control Period (Rs. Cr.)
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Capital Expenditure Plan	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Total
Equity	1.34	2.68	4.66	5.99	14.68
Debt	0.15	0.30	0.52	0.67	1.63

The capex components as shown above have been used in the subsequent sections for calculation of different components of tariff.

#### Capitalization

In the approved Business Plan Order, the Commission has approved the year-wise capitalization for the control period for MePGCI. The approved capitalization schedule of MLHEP as part of the approved business plan is given below:

#### Table 5.38 : Capitalization Projected for MLHEP for the Control Period

(Rs. Cr.)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Total
Total Capitalization Approved in the Business Plan Order dated 30.09.2020	0.00	3.91	1.60	0.00	5.51

The Loan, Equity and Grant Portion of the capitalization for the next control period is given below:

#### Table 5.39 : Break up of Capitalization Projected for MLHEP for the Control Period

		-			(Rs. Cr.)
Capitalization	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	Total
Equity Portion of Capitalization	0.00	3.52	1.44	0.00	4.96
Loan Portion of Capitalization	0.00	0.39	0.16	0.00	0.55
Total	0.00	3.91	1.60	0.00	5.51

#### Asset Base of MLHEP

From FY 2018-19, MePGCL has implemented IND AS Accounting Standard in line with Ministry of Corporate Affairs (MCA)'s norms. The IND AS are basically standards that have been harmonized with the IFRS to make reporting by Indian companies more in line with the global standards.

#### Impact of IND AS on Asset Value in Accounts:

IND AS 101 permits a first-time adopter to elect to continue with the carrying value for all of its property, plant and equipment as recognized in the financial statement as at the date of transition to IND AS, measured as per the previous GAAP and use that as its deemed cost as on the date of transition.

On transition to IND AS, the company had elected during the Financial Year 2016-17 to continue with the carrying value of its property, plant and equipment recognized as on 1st of April, 2015 measured as per the previous GAAP and used that carrying value as the deemed cost of the property, plant and equipment for furtherance of recognition and presentation thereon. Thus, the asset value in Note 2 "PROPERTY, PLANT AND EQUIPMENT" for FY 2018-19 and FY 2019-20 accounts is the deemed asset value.

However, components like depreciation is calculated on the historical value of the asset which is the Gross Fixed Asset value i.e. GFA (as per MSERC MYT Regulations, 2014). The historical asset value of asset is the asset base without IND AS adjustment and the same is shown in Note 2: PROPERTY, PLANT AND EQUIPMENT Without IND AS Adjustment portion of the FY 2019-20 accounts.

Based on the capitalization schedule of MLHEP (used for addition of asset in the control period FY 2021-22 to FY 2023-24) and asset as in FY 2018-19 and FY 2019-20 accounts (non IND-AS adjusted) as well as the approved capital cost of MLHEP plant in the previous true up orders for FY 2016-17 and FY 2017-18, the total asset base of MLHEP is given below. It may be noted that the opening asset value for FY 2018-19 has already been approved by the Commission:

						(Rs. Cr.)
Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Opening GFA	1,285.86	1,285.52	1285.52	1287.01	1289.99	1295.17
Additions during the year (Based on the capitalization schedule above)	-	-	1.49	2.98	5.18	6.66
Retirements during the year	0.34	-	-	-	-	-
Closing GFA	1,285.52	1,285.52	1,287.01	1,289.99	1,295.17	1,301.83

#### Table 5.40 : Projected Asset base of MLHEP

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

Commission had approved the GFA for MLHEP at 1285.95 Crore as on 31.03.2018 in the True up orders for FY 2017-18.

MePGCL has yet to file petitions for True up of business for FY 2018-19 and FY 2019-20.

MePGCL has filed petition for 3<sup>rd</sup> MYT control period FY 2021-22, FY 2022-23 and FY 2023-24 separately for MLHEP.

The GFA as of 31.03.2018 is projected at Rs.1285.86 Crore as against Rs.1285.95 Crore approved in True up orders for FY 2017-18 with a difference of Rs.0.09 Crore which shall be reconciled in the True up petition to be filed for FY 2018-19. MePGCL stated that from FY 2018-19 they have implemented IND AS accounting standards in line with Ministry of Corporate affairs norms which shall not be taken into consideration.

The Licensee shall continue with the existing accounting standards by presenting the Historical cost of the Gross fixed assets as notified in this chapter vide para 5.4.2 The asset base projected vide table no.5 of the petition is however taken into consideration for determination of ARR for 3<sup>rd</sup> MYT control period FY 2021-22, FY 2022-23 and FY 2023-24.

Accordingly GFA/Asset base for MLHEP is considered as depicted in the table below

						(Rs. Cr.)
Particulars	FY 2018-19 (Provisional)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Opening GFA	1,285.86	1,285.52	1285.52	1287.01	1289.99	1295.17
Additions during the year (Based on the capitalization schedule above)	-	-	1.49	2.98	5.18	6.66
Retirements during the year	0.34	-	-	-	-	-
Closing GFA	1,285.52	1,285.52	1,287.01	1,289.99	1,295.17	1,301.83

Table 5.41 : Approved GFA/Asset base for MLHEP for 3rd MYT control period

Commission considers GFA/Asset base for 3<sup>rd</sup> MYT control period FY 2021-22, FY 2022-23 and FY 2023-24 as depicted in above table.

#### 5.4.2. Operation and Maintenance Expenses

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

(O&M) is a sum of Employee Cost, Repair and Maintenance (R & M) Expense and Administrative and General (A & G) Expenses. The extract of the regulation is reproduced:

#### *"56 Operation and maintenance expenses*

56.1 Operation and Maintenance Expenses (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

56.2 Operation and maintenance expenses (O&M Expenses) for the existing generating stations, which have been in operation for 5 years or more in the base year 2007-08 shall be derived on the basis of actual operation and maintenance expenses for the year 2003-04 to 2007-08, based on the audited accounts, excluding abnormal operation and maintenance expenses, if any, after prudent check by the Commission.

56.3 The normalized operation and maintenance expenses after prudent check, for the years 2003-04 to 2007-08, shall be escalated at the rate of 5.17% to arrive at the normalized operation and maintenance expenses at the 2007-08 price level and then averaged to arrive at normalized O&M expenses for2003-04 to 2007-08 price level. The average normal O&M expenses at2007-08 price level shall be escalated at the rate of 5.72% to arrive at theism expenses for the year 2009-10.

56.4 The O&M expenses for the year 2009-10 shall be further rationalized considering 50% increase in employee cost on account of pay revision of employees to arrive at the permissible O&M expenses for the year 2009-10.

56.5 The O&M expenses for 2009-10 shall be escalated further at the rate of 5.72% per annum as arrive at the operation and maintenance expenses forth subsequent years of the tariff period.

56.6 In case of the hydro generating stations, which have not been in commercial operation for a period of five years as on 1.4.2009, operation and maintenance expenses shall be fixed at 2% of the original project cost (excluding cost of rehabilitation & resettlement works). Further, in such case, operation and maintenance expenses in first year of commercial operation shall be escalated @5.17% per annum up to the year 2007-08and then averaged to arrive at the O&M expenses at 2007-08 price level. It shall be thereafter escalated @ 5.72% per annum to arrive at operation and maintenance expenses in respective year of the tariff period. (The impact of pay revision on employee cost for arriving at the operation and maintenance expenses for the year 2009-10 shall be considered in accordance with the procedure given in proviso to sub-clause (ii) of clause (f) of this regulation).

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"

Since MLHEP has achieved CoD after 1.04.2009, its O & M expenses have been fixed as per Regulation 56 (7) at 2% of project cost and further escalated at 5.72% to arrive at O & M expenses for FY 2021-22, to FY 2023-24.

	(Rs.Cr)		
Particulars	Amount		
Project Cost	1285.86*		
O&M Expenses for FY 2013-14 (2% of Project Cost)	25.72		
O&M Expenses for FY 2014-15 (5.72% escalation over previous Year)	27.19		
O&M Expenses for FY 2015-16 (5.72% escalation over previous Year)	28.74		
O&M Expenses for FY 2016-17 (5.72% escalation over previous Year)	30.39		
O&M Expenses for FY 2017-18 (5.72% escalation over previous Year)	32.13		
O&M Expenses for FY 2018-19 (5.72% escalation over previous Year)	33.96		
O&M Expenses for FY 2019-20 (5.72% escalation over previous Year)	35.91		
O&M Expenses for FY 2020-21 (5.72% escalation over previous Year and ROP Impact) *	48.21		
O&M Expenses for FY 2021-22 (5.72% escalation over previous Year)			
O&M Expenses for FY 2022-23 (5.72% escalation over previous Year)	53.88		
O&M Expenses for FY 2023-24 (5.72% escalation over previous Year)	56.96		

\* Since MePGCL has already implemented a revised pay scale of employees effective from January 2020, it is taking that into account as well to project O&M for FY 2020-21

Thus, FY 20-21 O&M = O&M 2019-20 \*1.0572\* ROP Impact (27% as stated in detail in employee expense head in Old Plants petition)

MePGCL submits before the Commission to kindly approve the O&M expenses as computed above on normative basis for MLHEP for third control period, i.e., FY 2021-22, to FY 2023-24.

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

Commission had approved the O&M expenses for MLHEP at Rs.28.34 Crore in the True up orders for FY 2017-18.

MePGCL has yet to file petitions for True up of business for FY 2018-19 and FY 2019-20.

The O&M expenses have been escalated at 5.72% year on year and arrived at Rs. 33.49 Crore for FY 2020-21. The employee expenses are considered at 79.67 % of O&M expense amounted at Rs. 25.24 Crore for FY 2019-20.

The Employee expenses projected at Rs.35.91 crore for FY 2019-20 before ROP as against Rs.31.68 Crore approved for MLHEP which is inclusive of R&M and A&G expenses.

ROP has been considered for 3 months in FY 2019-20 ie., effective from 01.01.2020 and 9 months in FY 2020-21

The employee expenses are considered after increase of 27% in employee expense for FY 2020-21 and O&M expenses have been computed for 3<sup>rd</sup> MYT Control period FY 2021-22, FY 2022-23 and FY 2023-24 in the table below.

#### Table 5.43 : Employee cost for base year FY 2019-20 for MLHEP

(Rs.Cr)

Ye	ar	O&M expenses	Employee Expenses of MLHEP at 79.67% of O&M exp.
2019	9-20	31.68	25.24

### Table 5.44 : Computation of O&M Expenses for 3rd MYT Control period after 27% increasein employee cost due to pay revision 2020

(Rs.Cr)

	Particulars	FY 2019-20 (Provisional)	FY 2020-21 (Provisional)	FY 2021-22 (Estimated)	FY 2022-23 (Estimated)	FY 2023-24 (Estimated)
1	O&M Expenses MLHEP	31.68	33.49	-	-	-
2	Employee Exp of MLHEP (79.67% of Sl.no.1)	25.24	26.68			
3	27% of Sl.no.2	1.70**	5.40**			
4	Employee Expenses of MLHEP(2+3)	26.94	32.08			
5	R&M and A&G exp (20.33% of Sl.no.1)	6.44	6.81	-	-	-
6	Total O&M expenses for MLHEP(6=4+5)	33.38	38.89*	41.11	43.46	45.95

\* The base O&M expenses are escalated at 5.72% year on year as per Regulations

\*\* 27% increase due to ROP factored for 3 months in FY 19-20 and 9 months in FY 2020-21 to arrive at Employee Expenses.

Commission considers O&M expenses for MLHEP at Rs.41.11 Crore, Rs.43.46 crore and Rs.45.95 Crore Provisionally for 3<sup>rd</sup> MYT Control period for FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

#### 5.4.3. Return on Equity

#### Petitioner's Submission

The relevant regulations for determination of debt-equity ratio are extracted from the MSERC MYT Regulations, 2014 and reproduced for reference below:

#### "27 Debt-Equity Ratio

27.1 For a project declared under commercial operation on or after 1.4.2015, if the

equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan;

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

Provided further that equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Provided any grant obtained for execution of the project shall not be considered as a part of capital structure for the purpose of debt-equity ratio.

Explanation:- The premium, if any, raised by the generating company or the transmission licensee or the distribution licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure.

27.2 In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2015, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2015 shall be considered.

27.3 Any expenditure incurred or projected to be incurred on or after 1.4.2015as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernization expenditure for life extension shall be serviced in the manner specified in this regulations."

The Regulation 31 of the MYT Regulations, 2014, provides for computation of Return on Equity (RoE). The extract is reproduced below:

# "31 Return on Equity

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

Provided that in case of generation & transmission projects commissioned after notification of these regulations, an additional return of 0.5 % shall be allowed if such projects are completed within the time line as specified in CERC Tariff Regulations.

Provided that in case of generation & transmission projects commissioned after the notification of these regulations an additional return of 1.5 % shall be allowed if such

projects are completed within the original sanctioned project cost without any time and cost overrun whatsoever.

Provided that equity invested in a foreign currency may be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

- The premium received while issuing share capital shall be treated as a part of equity provided the same is utilized for meeting capital expenditure.
- Internal resources created out of free reserves and utilized for meeting capital expenditure shall also be treated as a part of equity.

The petitioner has projected the Return on Equity for third control period based on the average asset base for MLHEP. This is similar to the approach followed by the Commission in its past few tariff and true up orders. In the case of MLHEP, it may be noted that there is no funding of capital cost by grant and the funding as approved by the Commission also in the past orders has been in the ratio of 70:30 by debt and equity respectively. Since there is no grant portion in MLHEP, the whole of asset has been used for calculation of equity base and subsequent return on equity

Based on the total asset base (Section 3.3.3 of the petition) and the Commission's methodology, the return on equity for the control period is given below:

							(KS. Cr)
SI. No.	Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
1	Opening GFA for the Year	1285.86	1285.52	1285.52	1287.01	1289.99	1295.17
2	Closing GFA for the Year	1285.52	1285.52	1287.01	1289.99	1295.17	1301.83
3	Average Assets Base for the Year	1285.69	1285.52	1286.26	1288.50	1292.58	1298.50
4	Debt component (70% of GFA)	899.98	899.86	900.38	901.95	904.80	908.95
5	Equity component (30% of GFA)	385.71	385.65	385.88	386.55	387.77	389.55
6	RoE (%)	14%	14%	14%	14%	14%	14%
7	Return on Equity (in Rs. Cr.)	54.00	53.99	54.02	54.12	54.29	54.54

Table 5.45 : Projected Return on Equity for MLHEP for the Control Period

(Re Cr)

The petitioner would however like to submit that the issue of Return on Equity (methodology of MeECL& its subsidiaries vs methodology of MSERC: APTEL Case no 46 of 2016) is still subjudice. Further, the petitioner has appealed against the methodology in the review petition of true up FY 2016-17 whose order is still due from the Commission. In case of favorable order to the petitioner with respect to the methodology adopted for return on equity, the petitioner will reclaim/adjust the additional claim of return on equity in the subsequent tariff petitions. However, the petitioner has hereby claimed return based on the methodology adopted by the Commission in its past orders to avoid ambiguities in figures/calculation resulting in wrong calculation and lower amount of RoE being approved by the Commission.

MePGCL humbly prays before the Commission to kindly approve the RoE for MLHEP as per the above computations.

### **Commission's Analysis**

As per Regulation 31 read with 27 of MSERC MYT Regulations 2014

#### *"31 Return on Equity*

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

Provided that in case of generation & transmission projects commissioned after notification of these regulations, an additional return of 0.5 % shall be allowed if such projects are completed within the time line as specified in CERC Tariff Regulations.

Provided that in case of generation & transmission projects commissioned after the notification of these regulations an additional return of 1.5 % shall be allowed if such projects are completed within the original sanctioned project cost without any time and cost overrun whatsoever.

Provided that equity invested in a foreign currency may be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

- The premium received while issuing share capital shall be treated as a part of equity provided the same is utilized for meeting capital expenditure.
- Internal resources created out of free reserves and utilized for meeting capital expenditure shall also be treated as a part of equity.

#### 27 Debt-Equity Ratio

27.1 For a project declared under commercial operation on or after 1.4.2015, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan;

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

Provided further that equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Provided any grant obtained for execution of the project shall not be considered as a part of capital structure for the purpose of debt-equity ratio."

MePGCL has yet file petitions for True up of business for FY 2018-19 and FY 2019-20.

As per SOA for FY 2019-20, Govt. Grants for capital works reported to be Rs.194.30 Crore for combined utility.

As per the approved business plan for the control period, the Govt. Grants for capital works is projected to be Rs.210.67 Crore for Combine utility for FY 2020-21.

Thus the cumulative grants available for combined utility has been allocated among MLHEP and MePGCL Old projects in the ratio of capital cost of the projects which amounted to Rs.198.51 Crore for MLHEP and Rs.12.16 Crore for MePGCL for FY 2020-21.

The Capitalization for MYT Control period FY 2021-22 to FY 2023-24 is projected a meager amount at Rs.14.82 Crore in the petition.

The grants provision as approved for Business plan against the Capex is as detailed below considered in ARR of MLHEP.

			(Rs Cr
Project Name	FY 2021-22	FY 2022-23	FY 2023-24
Ganol I	67.95	24.97	-
Riangdo	5.88	7.06	2.94
Solar Parks	-	0.34	1.48
MLHEP II		-	57.75
Survey and Investigation	2.81	-	-
Total	76.64	32.37	62.17

Table 5.46 : Approved Grants Provision for MYT Control period for MLHEP

SI. No.	Particulars	FY 2018-19 (Provisional)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Approved)	FY 2022-23 (Approved)	FY 2023-24 (Approved)
1	Opening GFA for the Year	1285.86	1285.52	1285.52	1287.01	1289.99	1295.17
2	Additions	-	-	1.49	2.98	5.18	6.66
3	Retirements	0.34	-	-	-	-	-
4	Closing GFA for the Year	1285.52	1285.52	1287.01	1289.99	1295.17	1301.83
3	Average Assets Base for the Year	-	-	1286.26	1288.50	1292.58	1298.50
4	Less: Govt Grants	-	198.51	248.40	325.04	357.41	419.58
5	Net Capital Cost	-	-	1037.86	963.46	935.17	878.92
6	Debt component (70% )	-	-	726.50	674.42	654.62	615.24
7	Equity component (30%)	-	-	311.36	289.04	280.55	263.68
8	RoE (%)	-	-	14%	14%	14%	14%
9	Return on Equity (in Rs. Cr.)	-	-	43.59	40.47	39.28	36.91

Table 5.47 : Computation of ROE for 3rd MYT Control Period for MLHEP

Commission considers Return on Equity at Rs.40.47 Crore, Rs.39.28 Crore and Rs.36.91 crore for 3<sup>rd</sup> MYT control period FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

### 5.4.4. Depreciation

# **Petitioner's Submission**

The Gross Fixed Asset (GFA) base for FY 2018-19 and FY 2019-20 as shown in Section 3.3.3 (without IND AS adjustment) represents the historical asset value of asset which has been used in the calculation of depreciation component. The additions in GFA for the control period has been considered based on the capitalization schedule as shown in Section 3.3.2 of the petition. The rate of depreciation for various categories of assets has been considered strictly as per the rates as stipulated in the MSERC MYT Regulations, 2014. It may be reiterated that since this project is funded completely by debt and equity and there is no grant portion against this project, there is no deduction of depreciation on assets funded through grants. The Commission is requested to take this into account during calculation of depreciation. Based on the above, the actual depreciation in FY 2018-19, FY2019-20, estimated depreciation in FY 2020-21 and projections for FY 2021-22, FY 2022-23, FY 2023-24 are shown in the following tables. The detailed calculation is also shown in Format 6 of Annexure B for reference.

						(Rs Cr)
SI. No.	Particulars	Opening GFA	Addition	With drawn	Closing GFA	Depreciation
1	Land & Land rights	23.90	-	-	23.90	-
2	Buildings	146.68	-	0.01	146.67	4.90
3	Hydraulic Works	623.19	-	0.27	622.91	32.83
4	Other Civil Works	122.62	-	-	122.62	4.10
5	Plant & Machinery	364.17	-	0.06	364.11	19.21
6	Lines & Cable Network	4.57	-	-	4.57	0.24
7	Vehicles	0.46	-	-	0.46	0.04
8	Furniture & Fixtures	0.08	-	-	0.08	0.00
9	Office Equipment	0.18	-	-	0.18	0.01
10	Assets not in use	-	-	-	-	-
	Total	1,285.86	-	0.34	1,285.52	61.34

Table 5.48 : Actual Depreciation Charges of MLHEP for FY 2018-19

# Table 5.49 : Provisional Depreciation Charges of MLHEP for FY 2019-20

						(Rs Cr)
SI. No.	Particulars	Opening GFA	Addition	Withdra wn	Closing GFA	Depreciation
1	Land & Land rights	23.90	-	-	23.90	-
2	Buildings	146.67	-	-	146.67	4.90
3	Hydraulic Works	622.91	-	-	622.91	32.89
4	Other Civil Works	122.62	-	-	122.62	4.10
5	Plant & Machinery	364.11	-	-	364.11	19.23
6	Lines & Cable Network	4.57	-	-	4.57	0.24
7	Vehicles	0.46	-	-	0.46	0.04
8	Furniture & Fixtures	0.08	-	-	0.08	0.00
9	Office Equipment	0.18	-	-	0.18	0.01
10	Assets not in use	-	-	-	-	-
	Total	1,285.52	-	-	1,285.52	61.41

#### Table 5.50 : Estimated Depreciation Charges of MLHEP for FY 2020-21

						(Rs Cr)
SI. No.	Particulars	Opening GFA	Addition	With drawn	Closing GFA	Depreciation
1	Land & Land rights	23.90	0.03		23.93	-
2	Buildings	146.67	0.17		146.84	4.90
3	Hydraulic Works	622.91	0.72		623.64	32.91
4	Other Civil Works	122.62	0.14		122.77	4.10
5	Plant & Machinery	364.11	0.42		364.53	21.15
6	Lines & Cable Network	4.57	0.01		4.58	0.24
7	Vehicles	0.46	0.00		0.46	0.04
8	Furniture & Fixtures	0.08	0.00		0.08	0.00
9	Office Equipment	0.18	0.00		0.18	0.01
10	Assets not in use	-	-		-	-
	Total	1,285.52	1.49		1,287.01	63.36

						(Rs Cr)
SI. No.	Particulars	Opening GFA	Addition	With drawn	Closing GFA	Depreciation
1	Land & Land rights	23.93	0.06		23.98	-
2	Buildings	146.84	0.34		147.18	4.91
3	Hydraulic Works	623.64	1.44		625.08	32.97
4	Other Civil Works	122.77	0.28		123.05	4.11
5	Plant & Machinery	364.53	0.84		365.37	21.19
6	Lines & Cable Network	4.58	0.01		4.59	0.24
7	Vehicles	0.46	0.00		0.47	0.04
8	Furniture & Fixtures	0.08	0.00		0.08	0.01
9	Office Equipment	0.18	0.00		0.18	0.01
10	Assets not in use	-	-		-	-
	Total	1,287.01	2.98		1,289.99	63.47

Table 5.51 : Projected Depreciation Charges of MLHEP for FY 2021-22

#### Table 5.52 : Projected Depreciation Charges of MLHEP for FY 2022-23

						(Rs Cr)
SI. No.	Particulars	Opening GFA	Addition	With drawn	Closing GFA	Depreciation
1	Land & Land rights	23.98	0.10		24.08	-
2	Buildings	147.18	0.59		147.77	4.93
3	Hydraulic Works	625.08	2.51		627.59	33.07
4	Other Civil Works	123.05	0.49		123.55	4.12
5	Plant & Machinery	365.37	1.47		366.84	21.25
6	Lines & Cable Network	4.59	0.02		4.61	0.24
7	Vehicles	0.47	0.00		0.47	0.04
8	Furniture & Fixtures	0.08	0.00		0.08	0.01
9	Office Equipment	0.18	0.00		0.18	0.01
10	Assets not in use	-	-		-	-
	Total	1,289.99	5.18		1,295.17	63.67

Table 5.53 : Projected Depreciation Charges of MLHEP for FY 2023-24

						(Rs Cr)
SI. No.	Particulars	Opening GFA	Addition	With drawn	Closing GFA	Depreciation
1	Land & Land rights	24.08	0.12		24.20	-
2	Buildings	147.77	0.76		148.53	4.95
3	Hydraulic Works	627.59	3.23		630.82	33.22
4	Other Civil Works	123.55	0.64		124.18	4.14
5	Plant & Machinery	366.84	1.89		368.73	21.35
6	Lines & Cable Network	4.61	0.02		4.63	0.24
7	Vehicles	0.47	0.00		0.47	0.04
8	Furniture & Fixtures	0.08	0.00		0.08	0.01
9	Office Equipment	0.18	0.00		0.18	0.01
10	Assets not in use	-	-		-	-
	Total	1,295.17	6.66		1,301.83	63.96

MePGCL humbly prays before the Commission to kindly approve the depreciation charges for MLHEP as computed above.

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

As per Regulation 33 of MSERC MYT Regulations 2014 specifies

For the purpose of tariff determination, depreciation shall be computed in the following manner:

a) 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.

- b) For new assets, the approved/accepted cost for the asset value shall include foreign currency funding converted to equivalent rupee at the exchange rate prevalent on the date of foreign currency actually availed but not later than the date of commercial operation.
- c) 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.
- d) 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.

Provided that land is not a depreciable asset and its cost shall be excluded from the capital cost while computing the historical cost of the asset.

- e) Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on prorata basis.
- f) The remaining depreciable value as on 31st March of the year closing after a period of 12 years from the date of commercial operation shall be spread over the balance useful life of the asset.

MepGCL has yet to file petitions for True up of business for FY 2018-19 and FY 2019-20.

Depreciation has been computed taking into account the Govt. Grants for capital works for 3<sup>rd</sup> MYT Control period as depicted in the tables below.

								(Rs Cr)
SI.	Particulars	Opening	Addition	With	Closing	Average	90% of	Depreciatio
No.	Faiticulais	GFA	Addition	drawn	GFA	GFA	GFA	n
1	Land & Land rights	23.93	0.06		23.98	-	-	-
2	Buildings	146.84	0.34		147.18	147.01	132.31	4.42
3	Hydraulic Works	623.64	1.44		625.08	624.36	561.92	29.67
4	Other Civil Works	122.77	0.28		123.05	122.91	110.62	3.69
5	Plant & Machinery	364.53	0.84		365.37	364.95	328.45	17.34
6	Lines & Cable Network	4.58	0.01		4.59	4.58	4.13	0.22
7	Vehicles	0.46	0.00		0.47	0.47	0.42	0.04
8	Furniture & Fixtures	0.08	0.00		0.08	0.08	0.07	0.004
9	Office Equipment	0.18	0.00		0.18	0.18	0.16	0.01
10	Assets not in use	-	-		-			-
11	Total	1,287.01	2.98		1,289.99	1264.54	1138.08	55.39
12	Avg. Depreciation (%)							4.87%
13	Grants Available							325.04
14	Less: Depreciation on							15.83
14	Grants							15.05
15	Net Deprecitaion							39.56

#### Table 5.54 : Approved Depreciation Charges of MLHEP for FY 2021-22

#### Table 5.55 : Approved Depreciation Charges of MLHEP for FY 2022-23

(Rs Cr)

								(RS CI)
SI. No.	Particulars	Opening GFA	Addition	With drawn	Closing GFA	Average GFA	90% of GFA	Depreciatio n
1	Land & Land rights	23.98	0.10		24.08	-	-	-
2	Buildings	147.18	0.59		147.77	147.48	132.73	4.43
3	Hydraulic Works	625.08	2.51		627.59	626.34	563.70	29.76
4	Other Civil Works	123.05	0.49		123.55	123.30	110.97	3.70
5	Plant & Machinery	365.37	1.47		366.84	366.11	329.50	17.40
6	Lines & Cable Network	4.59	0.02		4.61	4.6	4.14	0.22
7	Vehicles	0.47	0.00		0.47	0.47	0.42	0.04
8	Furniture & Fixtures	0.08	0.00		0.08	0.08	0.07	0.004
9	Office Equipment	0.18	0.00		0.18	0.18	0.16	0.01
10	Assets not in use	-	-		-			
11	Total	1,289.99	5.18		1,295.17	1268.56	1141.70	55.43
12	Avg. Depreciation (%)							4.85%
13	Grants Available							357.41
14	Less: Depreciation on Grants							17.33
15	Net Depreciation (11-14)							38.10

								(Rs Cr)
SI. No.	Particulars	Opening GFA	Addition	With drawn	Closing GFA	Average GFA	90% of GFA	Depreciatio n
1	Land & Land rights	24.08	0.12		24.20	-	-	-
2	Buildings	147.77	0.76		148.53	148.15	133.33	4.45
3	Hydraulic Works	627.59	3.23		630.82	629.20	566.28	29.89
4	Other Civil Works	123.55	0.64		124.18	123.87	111.48	3.72
5	Plant & Machinery	366.84	1.89		368.73	367.79	331.00	17.48
6	Lines & Cable Network	4.61	0.02		4.63	4.62	4.14	0.22
7	Vehicles	0.47	0.00		0.47	0.47	0.42	0.04
8	Furniture & Fixtures	0.08	0.00		0.08	0.08	0.07	0.004
9	Office Equipment	0.18	0.00		0.18	0.18	0.16	0.01
10	Assets not in use	-	-		-			
11	Total	1,295.17	6.66		1,301.83	1274.36	1146.88	55.81
12	Avg. Depreciation (%)							4.86%
13	Grants Available							419.58
14	Less: Depreciation on Grants							20.39
15	Net Deprecitaion							35.42

Table 5.56 : Approved Depreciation Charges of MLHEP for FY 2023-24

Commission considers depreciation at Rs.39.56 Crore, Rs.38.10 Crore and Rs.35.42 Crore for 3<sup>rd</sup> MYT Control Period FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

#### 5.4.5. Interest and Finance Charges

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

As per Regulation 32 of the MYT Regulations, 2014, 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 prevailing lending rate of bank and financial institution. It is submitted that the Interest on Loan for the control period has been computed by considering Interest obligation for existing loans as well as for new loans projected to be taken based on the approved capital investment plan for the control period. The details of the loan statement for actuals FY 2018-19, FY 2019-20, estimated FY 2020-21 and projected FY 2021-22, FY 2022-23 and FY 2023-24 along with the interest accrued component for MLHEP is given in Format 7 of Annexure B

MLHEP Loan Statement: The loan portions of the capex in the approved Business Plan have been added over and above the existing loan commitments to arrive at MLHEP's interest on loan. Justifications for some of the new loans are given below: Existing Capex Loans: All existing loans shown for MLHEP in FY 2018-19 and FY 2019-20 pertain to the loans spent on the capex work (Format 7 of Annexure A). These loans have interest obligations in the next control period as shown in the statements.

Additional Loans Due to Capex: The loan portions of the new capex (as stated in para 3.3.1 of the petition) for MLHEP in the approved Business Plan have also been included to arrive at interest on loans. These pertain to the loan portion of the approved capital expenditure in the next control period. The interest rate for the loans has been assumed at the average interest rate for MLHEP with a loan tenure of 12 years including 1-year moratorium.

Details of Statement of loans for the capital expenditure has been given in format 7 of Annexure B. The summarized statement of Interest and Finance charges to be considered for the Control Period is shown in the table below:

						(Rs. Ir	n Lakhs)
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	
1	BSE Bonds 2nd Series	5000.00	11.40%	0.00	5000.00	0.00	285
2	PFC Loan MLHEP	16909.86	12.75%	0.00	1610.33	15299.53	2053.35
3	REC Loan MLHEP	18345.57	14.00%	0.00	2530.42	15815.15	2391.25
4	Federal Bank (MLHEP)	773.81	11.98%	0.00	773.81	0.00	46.3512
5	CBI (MLHEP)	2525.78	11.15%	0.00	834.33	1691.45	235.111
6	PFC Loan 170 cr (MLHEP)	11720.93	11.75%	5000.00	1244.48	15476.45	1597.85
7	REC Loan 60 cr (MLHEP)	6000.00	11.25%	0.00	827.59	5172.41	628.448
	Total	61275.95		5000.00	12820.96	53454.99	7237.35

Table 5.57 : Interest and Finance Charges of MLHEP : 2018-19 (Actual)

Table 5.58 : Interest and Finance Charges of MLHEP : 2019-20 (Provisional)	
(D-	Lo Lolo A

	(Rs. In Lakhs)							
SL. 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		
1	PFC Loan MLHEP	15299.53	12.75%	0.00	1207.98	14091.55	1873.68	
2	REC Loan MLHEP	15815.15	14.00%	0.00	2530.42	13284.73	2036.99	
3	CBI (MLHEP)	1691.45	11.15%	0.00	833.33	858.12	142.139	
4	PFC Loan 170 cr (MLHEP)	15476.45	11.75%	0.00	1221.83	14254.62	1746.7	
5	REC Loan 60 cr (MLHEP)	5172.41	11.25%	0.00	827.59	4344.82	535.344	
	Total	53454.99		0.00	6621.15	46833.84	6334.86	

	(Rs. In La							
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		
1	PFC Loan MLHEP	14091.55	11.75%	0	1207.85	12883.70	1584.8	
2	REC Loan MLHEP	13284.73	14.00%	0	1897.82	11386.91	1727.01	
3	CBI (MLHEP)	858.12	11.15%	0	624.99	233.13	60.8372	
4	PFC Loan 170 cr (MLHEP)	14254.62	12.00%	0	1221.83	13032.79	1637.24	
5	REC Loan 60 cr (MLHEP)	4344.82	11.30%	0	620.69	3724.13	455.896	
	Total	46833.84		0.00	5573.18	41260.66	5465.79	
	Additional Loans Due to Capex		12.43%	134.11		134.11	16.6669	
	Grand Total	46833.84	12.43%	134.11	5573.18	41394.77	5482.46	

Table 5.59 : Interest and finance charges of MLHEP : 2020-21 (Projected)

Table 5.60 : Interest and finance charges of MLHEP : 2021-22 (Projected)

				0			,
							(Rs. In Lakhs)
SI.	Particulars	Opening	Rate of	Addition	Repayment	Closing	Interest
No		Balance	Interest	during	during the	Balance	Accrued
				the year	year		
1	2	3	4	5	6	7	
1	PFC Loan MLHEP	12883.70	11.75%	0.00	1610.46	11273.24	1419.22
2	REC Loan MLHEP	11386.91	14.00%	0.00	2530.42	8856.49	1417.04
3	CBI (MLHEP)	233.13	11.15%	0.00	233.13	0.00	12.997
4	PFC Loan 170 cr	13032.79	12.00%	0.00	1629.10	11403.69	1466.19
	(MLHEP)						
5	REC Loan 60 cr	3724.13	11.30%	0.00	827.59	2896.54	374.068
	(MLHEP)						
	Total	41260.66		0.00	6830.70	34429.96	4689.51
	Additional Loans	134.11	12.39%	268.22	11.18	391.15	32.5432
	Due to Capex						
	Grand Total	41394.77	12.39%	268.22	6841.88	34821.11	4722.06

Table 5.61 : Interest and finance charges of MLHEP : 2022-23 (Projected)

							(Rs. In Lakhs)
SI	Particulars	Opening	Rate of	Addition	Repayment	Closing	Interest
•		Balance	Interest	during the	during the	Balance	Accrued
Ν				year	year		
0							
1	2	3	4	5	6	7	
1	PFC Loan MLHEP	11273.24	11.75%	0.00	1610.46	9662.78	1229.99
2	REC Loan MLHEP	8856.49	14.00%	0.00	2530.42	6326.07	1062.78
3	PFC Loan 170 cr	11403.69	12.00%	0.00	1629.10	9774.59	1270.7
	(MLHEP)						
4	REC Loan 60 cr (MLHEP)	2896.54	11.30%	0.00	827.59	2068.95	280.55
	Total	34429.96		0.00	6597.57	27832.39	3844.02
	Additional Loans Due to	391.15	12.35%	466.23	32.60	824.79	75.0709
	Сарех						
	Grand Total	34821.11	12.35%	466.23	6630.17	28657.18	3919.09

						(F	Rs. In Lakhs)
SL. No	Particulars	Opening Balance	Rate of Interest	Addition during	Repayment during the	Closing Balance	Interest Accrued
•				the year	year		
1	2	3	4	5	6	7	
1	PFC Loan MLHEP	9662.78	11.75%	0.00	1610.46	8052.32	1040.76
2	REC Loan MLHEP	6326.07	14.00%	0.00	2530.42	3795.65	708.52
3	PFC Loan 170 cr	9774.59	12.00%	0.00	1629.10	8145.49	1075.2
	(MLHEP)						
4	REC Loan 60 cr (MLHEP)	2068.95	11.30%	0.00	827.59	1241.36	187.033
	Total	27832.39		0.00	6597.57	21234.82	3011.52
	Additional Loans Due to	824.79	12.28%	599.44	68.73	1355.50	133.816
	Сарех						
	Grand Total	28657.18	12.28%	599.44	6666.30	22590.32	3145.34

#### Table 5.62 : Interest and finance charges of MLHEP : 2023-24 (Projected)

### Table 5.63 : Interest and Finance Charges for MLHEP for the Control Period

						(Rs. Cr)
Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Opening Balance	612.76	534.55	468.34	413.95	348.21	286.57
Addition During the Year	50.00	0.00	1.34	2.68	4.66	5.99
Repayment during the year	128.21	66.21	55.73	68.42	66.30	66.66
Closing Balance	534.55	468.34	413.95	348.21	286.57	225.90
Average Interest Rate	12.62%	12.63%	12.43%	12.39%	12.35%	12.28%
Interest Accrued	72.37	63.35	54.82	47.22	39.19	31.45

MePGCL humbly prays before the Commission to kindly approve the Interest and Finance Charges for MLHEP as computed above.

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

As per Regulation 32.1 of MSERC MYT Regulation 2014 specifies that

"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 interest and finance charges attributable to capital work in progress shall be excluded. Provided that neither penal interest nor overdue interest shall be allowed for computation of tariff."

MePGCL has yet to file petitions for True up of business for FY 2018-19 and FY 2019-20.

Schedule of the outstanding loans as approved in the True up for FY 2017-18 is considered for computation of loans for FY 2018-19 and FY 2019-20.

							(in Cr)
SI.	Loans available for	Opening	Additions	Repayment	Closing	Avg Loan	Interest
No	MLHEP				Loan		
1	11.98% Federal	5.62		5.62	0.00	2.81	0.34
	Bank						
2	11.15% Central	25.26		8.35	16.91	21.09	2.35
	Bank of India						
3	12.75% from PFC	169.10		16.10	153.00	161.05	20.53
4	11.40% from BSE II	50.00		50.00	0.00	50.00	2.85
5	9.95% from BSE I	0.00		0.00	0.00	0.00	0.00
6	11.07% from REC	183.46		25.30	158.15	170.80	18.90
8	Total	433.34		105.37	328.06	405.75	44.97

Table 5.64 : Computation of Interest and Finance charges for FY 2018-19

MLHEP project was declared COD on 01.04.2013 and the licensee projected fresh borrowing from BSE I at Rs.117.21 Crore.

Licensee has projected outstanding loan from PFC at Rs.117.21 Crore where the loan has been repaid in full during FY 2016-17 is not considered.

Commission considers any borrowings after achieving COD shall not be taken into consideration for interest computation.

							(Rs. Cr)
SI. No	Loans available for MLHEP	Opening	Additions	Repayment	Closing Loan	Avg Loan	Interest
1	11.98% Federal Bank	0.00		0.00	0.00	0.00	0.00
2	11.15% Central Bank of India	16.91		8.33	8.58	12.74	1.42
3	12.75% from PFC	153.00		12.08	140.92	146.96	18.73
4	11.40% from BSE II	0.00		0.00	0.00	0.00	0.00
5	9.95% from BSE I	0.00		0.00	0.00	0.00	0.00
6	11.07% from REC	158.15		25.31	132.84	145.50	16.10
8	Total	328.06		45.72	282.34		36.25

The Licensee has projected Capex during FY 2020-21 against Leskha project and survey and investigation against upcoming New Projects.

Commission considers 70% of the Capex as loan as per the Regulations at Rs.7.76 Crore for the FY 2020-21.

1. . . .

							(Rs. Cr
SI.	Loans available for	Opening	Additions	Repayment	Closing Loan	Avg Loan	Interest
No	MLHEP						
1	11.98% Federal Bank	0.00		0.00	0.00	0.00	0.00
2	11.15% Central Bank	8.58		6.25	2.33	5.45	0.60
	of India						
3	12.75% from PFC	140.92		12.08	128.84	134.88	17.20
4	11.40% from BSE II	0.00		0.00	0.00	0.00	0.00
5	9.95% from BSE I	0.00		0.00	0.00	0.00	0.00
6	11.07% from REC	132.84		18.97	113.87	123.35	13.65
7	11.92% Market loan	0.00	7.76	0.00	7.76	3.88	0.46
8	Total	282.34	7.76	37.30	252.80	267.56	31.91

#### Table 5.66 : Computation of Interest and Finance charges for FY 2020-21

Interest on Market loan is considered on average of outstanding loans at 11.92%

#### Table 5.67 : Computation of Interest and Finance charges for FY 2021-22

							(Rs. C
SI. No	Loans available for MLHEP	Opening	Additions	Repayment	Closing Loan	Avg Loan	Interest
1	11.98% Federal Bank	0.00		0.00	0.00	0.00	0.00
2	11.15% Central Bank of India	2.33		2.33	0.00	1.16	0.13
3	12.75% from PFC	128.84		16.10	112.74	120.79	15.40
4	11.40% from BSE II	0.00			0.00	0.00	0.00
5	9.95% from BSE I	0.00			0.00	0.00	0.00
6	11.07% from REC	113.87		8.27	105.60	109.73	12.15
7	11.94% Market loan for Leshkha II, Ganol, Riangdo and upcoming projects survey	7.76	68.80	0.00	76.56	42.16	5.03
8	Total	252.80	68.80	26.70	294.90	273.84	32.71

Interest on Market loan is considered on average of outstanding loans at 11.94%

#### Table 5.68 : Computation of Interest and Finance charges for FY 2022-23

							(Rs
SI.	Loans available for	Opening	Additions	Repayment	Closing Loan	Avg Loan	Interest
No	MLHEP						
1	11.98% Federal Bank	0.00		0.00	0.00	0.00	
2	11.15% Central Bank of India	0.00		0.00	0.00	0.00	
3	12.75% from PFC	112.55		16.10	96.45	104.50	13.32
4	11.40% from BSE II	0.00		0.00	0.00	0.00	
5	9.95% from BSE I	0.00		0.00	0.00	0.00	
6	11.07% from REC	105.60		25.30	80.30	92.95	10.29
7	12.12% Market loan for Leshkha II, Ganol, Riangdo and upcoming projects survey	76.56	41.88	11.84	106.60	91.58	11.10
8	Total	294.71	41.88	53.24	283.35	196.08	34.71

10% repayment is considered for Market loans.

Interest on Market loan is considered on average of outstanding loans at 12.12%

			1				(Rs. Cr)
SI.	Loans available for	Opening	Additio	Repaymen	Closing	Avg Loan	Interest
N	MLHEP		ns	t	Loan		
ο							
1	11.98% Federal Bank	0.00		0.00	0.00	0.00	0.00
2	11.15% Central Bank of	0.00		0.00	0.00	0.00	0.00
	India						
3	12.75% from PFC	96.45		16.10	80.35	88.40	11.27
4	11.40% from BSE II	0.00		0.00	0.00	0.00	0.00
5	9.95% from BSE I	0.00		0.00	0.00	0.00	0.00
6	11.07% from REC	80.30		25.30	55.00	67.65	7.48
	12.01% Market loan	106.60	46.49	15.31	137.78	122.19	14.67
7	for Leshkha II, Ganol,						
<b>'</b>	Riangdo and upcoming						
	projects survey						
8	Total	283.35	46.49	56.71	273.13	278.24	33.42

Table 5.69 : Computation of Interest and Finance charges for FY 2023-24

10% repayment is considered for Market loans.

Interest on Market loan is considered on average of outstanding loans at 12.01% Commission considers Interest and Finance charges at Rs.32.71 Crore, Rs.34.71 Crore and Rs.33.42 Crore for 3<sup>rd</sup> MYT Control period FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

# 5.4.6. Interest on Working Capital

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

As per Regulation 34.1 (iii) of the MYT Regulations, 2014, the components of working capital will be:

#### "34 Interest on Working Capital

#### 34.1 Generation

(iii) In case of hydro power generating stations, working capital shall cover:

- Operation and maintenance expenses for one (1) month;
- Maintenance spares at the rate of 15% of O & M expenses escalated at 6% from the date of commercial operation; and
- Receivables equivalent to two (2) month of fixed cost:

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

#### Based on the above, the Interest on Working Capital is computed as follows:

Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
O&M for 1 Months	2.83	2.99	4.02	4.25	4.49	4.75
Maintenance Spares	5.09	5.39	7.23	7.64	8.08	8.54
Receivables for 2 Months	37.97	36.77	37.73	36.95	36.16	35.47
Total (INR Crore)	45.90	45.15	48.97	48.84	48.73	48.76
Interest Rate (%)	13.45%	13.20%	12.15%	12.15%	12.15%	12.15%
Interest on Working Capital (INR Crore)	6.17	5.96	5.95	5.93	5.92	5.92

Table 5.70 : Projected Interest on working capital for MLHEP for the Control Period

MePGCL humbly prays before the Commission to kindly approve the Interest on Working Capital for MLHEP as computed above and as per the norms in the MYT Regulations.

### **Commission's Analysis**

As per Regulation 34.1 (iii) of the MYT Regulations, 2014, the components of working capital will be:

# "34 Interest on Working Capital

#### 34.1 Generation

(iii) In case of hydro power generating stations, working capital shall cover:

- Operation and maintenance expenses for one (1) month;
- Maintenance spares at the rate of 15% of O & M expenses escalated at 6% from the date of commercial operation; and
- Receivables equivalent to two (2) month of fixed cost:

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

Particulars	FY 2021-22 (Estimated)	FY 2022-23 (Estimated)	FY 2023-24 (Estimated)
O&M Expenses	41.11	43.46	45.95
O&M for 1 Months (Rs.Cr)	3.43	3.62	3.83
Maintenance Spares @ 15% of O&M Exp escalated at 6% (Rs.Cr)	6.54	6.91	7.31
Receivables for 2 Months of Fixed Cost (Rs.Cr)	25.64	25.92	25.28
Total (INR Crore)	35.61	36.45	36.42
Interest Rate (%)	12.15%	12.15%	12.15%
Interest on Working Capital (INR Crore)	4.33	4.43	4.43

Table 5.71 : Approved Interest on working Capital

Commission Considers Interest on Working Capital at Rs. 4.33 Crore, Rs.4.43 Crore and Rs.4.43 Crore for 3<sup>rd</sup> MYT Control Period FY 2021-22, FY 2022-23 and FY 2023-24 Respectively

### 5.4.7. SLDC Charges

Licensee has not projected SLDC expenses in the petition for MYT control period.

### **Commission's Analysis**

As per Regulation 42 of MSERC MYT Regulations 2014 specifies that

- **42.1** SLDC and Connectivity charges are determined by the Commission and payable by the generating companies shall be considered as expenses.
- **42.2** SLDC and Transmission charges paid for the energy sold outside the state shall not be considered as expenses for determining generation tariff.

Commission had approved SLDC ARR at Rs.2.80 Crore, Rs.2.94 Crore and Rs.3.08 Crore for FY 2021-22, FY 2022-23 and FY 2023-24 for the Control period for Transmission utility.

The SLDC charges shall be payable to Transmission utility which is included in the MePGCL ARR at Rs.1.85 Crore for FY 2021-22, Rs. 1.94 Crore for FY 2022-23 and Rs.2.04 Crore for FY 2023-24 for 3<sup>rd</sup> MYT Control period approved as expense.

#### 5.4.8. Non Tariff Income

#### Petitioner's Submission

As per Regulation 60 of the MYT Regulations, 2014 the **Other Income** of a generation utility is to be deducted from the total expenses to arrive at the net ARR. The relevant regulation is reproduced below for ready reference:

#### "60 Other income

60.1 All Income other than income from sale of energy and net U I charges gained (after introduction of intra-state ABT) shall be grouped as other income. UI penalties shall not be netted off from other income. The UI penalties shall be borne by the generating company."

#### The details of Non-Tariff Income are mentioned in table below:

#### Table 5.72 : Projected Non-Tariff Income of MLHEP for the Control Period

						(Rs. Cr)
Particular	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	(Actual)	(Provisional)	(Estimated)	(Projected)	(Projected)	(Projected)
Non-Tariff Income	0.023	0.003	0.013	0.014	0.014	0.015

MePGCL humbly prays before the Commission to kindly approve the Non-Tariff Income for MLHEP as per the above computations.

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

Licensee has projected a very meager non tariff income when compared with MePGCL Old projects.

However commission considers non tariff income as projected by the licensee at Rs.0.014 Crore, Rs.0.014 Crore and Rs.0.015 Crore for 3<sup>rd</sup> MYT Control period for FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

#### 5.4.9. Annual Revenue Requirement for MLHEP for 3<sup>rd</sup> MYT Control Period

#### Petitioner's Submission

Based on the above submissions, the ARR for each year of the Control Period would be as shown in the following table:

						(Rs Cr)
Particulars	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	(Actual)	(Provisional)	(Estimated)	(Projected)	(Projected)	(Projected)
Interest on Loan	72.37	63.35	54.82	47.22	39.19	31.45
capital	12.31	03.35	54.82	47.22	55.15	51.45
Depreciation	61.34	61.41	63.36	63.47	63.67	63.96
O&M Expenses	33.96	35.91	48.21	50.97	53.88	56.96
Interest on working	6.47	F 06	5.05	5.02	5.02	5.02
capital	6.17	5.96	5.95	5.93	5.92	5.92
Return on Equity	54.00	53.99	54.02	54.12	54.29	54.54
Total Annual Fixed	227.85	220.62	226.37	221.71	216.95	212.84
Cost	227.85	220.62	220.37	221.71	210.95	212.84
Less: Non-Tariff	0.022	0.000	0.012	0.014	0.014	0.015
Income	0.023	0.003	0.013	0.014	0.014	0.015
Net Annual Fixed	222.02	220.62	226.25	221 60	216.04	212.02
Cost	227.83	220.62	226.35	221.69	216.94	212.83

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

Commission after prudence check of the petition filed by the licensee, taking into consideration of SOA for FY 2018-19 and FY 2019-20, the objections raised by the stake holders, the response of the licensee and minutes of the public hearing, minutes of State Advisory Committee and Business plan has computed the ARR for 3<sup>rd</sup> MYT Control period FY 2021-22 FY 2022-23 and FY 2023-24 as depicted in the table below:

						(Rs Cr)
		Filed by MePGC	L	Appro	oved by Comm	ission
Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2021-22	FY 2022-23	FY 2023-24
	(Projected)	(Projected)	(Projected)	(Estimated)	(Estimated)	(Estimated)
Interest on Loan capital	47.22	39.19	31.45	32.71	34.71	33.42
Depreciation	63.47	63.67	63.96	39.56	38.10	35.42
O&M Expenses	50.97	53.88	56.96	41.11	43.46	45.95
Interest on working capital	5.93	5.92	5.92	4.33	4.43	4.43
Return on Equity	54.12	54.29	54.54	40.47	39.28	36.91
Total Annual Fixed Cost	221.71	216.95	212.84	158.18	159.98	156.13
Less: Non-Tariff Income	0.014	0.014	0.015	0.014	0.014	0.015
Net Annual Fixed Cost	221.69	216.94	212.83	158.17	159.97	156.12

#### Table 5.74 : Approved ARR for 3rd MYT control period for MLHEP

Commission considers ARR for MLHEP at Rs.158.17 Crore, Rs.159.97 Crore and Rs.156.12 Crore for FY 2021-22, FY 2022-23 and FY 2023-24 for 3<sup>rd</sup> MYT Control period respectively.

# 5.5 NUHEP ARR for 3<sup>rd</sup> MYT Control Period FY 2021-22 to FY 2023-24

### 5.5.1. Capital Expenditure and Capitalization

### Petitioner's Submission

The Commission had not approved any new capex and capitalization for the control period in line with the investment plan submitted by MePGCL. Thus, there is no capex and capitalization impact for the control period for NUHEP.

### Asset Base of NUHEP for Control Period

From FY 2018-19, MePGCL has implemented IND AS Accounting Standard in line with Ministry of Corporate Affairs (MCA)'s norms. The IND AS are basically standards that have been harmonised with the IFRS to make reporting by Indian companies more in line with the global standards.

### Impact of IND AS on Asset Value in Accounts:

IND AS 101 permits a first-time adopter to elect to continue with the carrying value for all of its property, plant and equipment as recognized in the financial statement as at the date of transition to IND AS, measured as per the previous GAAP and use that as its deemed cost as on the date of transition.

On transition to IND AS, the company had elected during the Financial Year 2016-17 to continue with the carrying value of its property, plant and equipment recognized as on 1st of April, 2015 measured as per the previous GAAP and used that carrying value as the deemed cost of the property, plant and equipment for furtherance of recognition and presentation thereon. Thus, the asset value in Note 2 "PROPERTY, PLANT AND EQUIPMENT" for FY 2018-19 and FY 2019-20 accounts is the deemed asset value.

However, components like depreciation is calculated on the historical value of the asset which is the Gross Fixed Asset value i.e. GFA (as per MSERC MYT Regulations, 2014). The historical asset value of asset is the asset base without IND AS adjustment and the same is shown in Note 2: PROPERTY, PLANT AND EQUIPMENT Without IND AS Adjustment portion of the FY 2019-20 accounts.

MePGCL has also separately audited the NUHEP assets for FY 2018-19 and is attached as **Annexure B.** Thus, the asset base of NUHEP in line with audited FY 2018-19 and provisional FY 2019-20 accounts is given below:

						(Rs.Cr)
Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Opening GFA	600.78	601.88	604.13	604.13	604.13	604.13
Additions during the year	1.10	2.25	-	-	-	-
Retirements during the year	-	0.00	-	-	-	-
Closing GFA	601.88	604.13	604.13	604.13	604.13	604.13

#### Table 5.75 : Projected Asset Base for Control Period

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

MePGCL stated that from FY 2018-19 they have implemented IND AS accounting standards in line with Ministry of Corporate affairs norms which shall not be taken into consideration.

Commission had approved capital cost of NUHEP at Rs.580.72 Crore in the True up orders for FY 2017-18.

The Statement of Accounts of FY 2018-19 and FY 2019-20 does not disclose any CWIP against New Umtru project nor the business plan for FY 2018-19 and FY 2019-20 does projected capex and capitalization for New Umtru Project.

Addition of Capital projected vide para 3.3.2 of the petition does not bare any authority/reference for approval of the GFA for FY 2018-19 to FY 2020-21 and MYT control period FY 2021-22 to FY 2023-24.

MePGCL has yet to file True up petitions for the FY 2018-19 and FY 2019-20.

Commission considers the GFA of New Umtru Project as depicted in the table below;

#### Table 5.76 : Approved GFA for NUHEP for 2nd and 3rd Control period

						(Rs.Cr)
Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Opening GFA	580.72	580.72	580.72	580.72	580.72	580.72
Additions during the year	-	-	-	-	-	-
Retirements during the year	-	-	-	-	-	-
Closing GFA	580.72	580.72	580.72	580.72	580.72	580.72

#### 5.5.2. Operation and Maintenance Expenses

#### Petitioner's Submission

As per Regulation 56 of the MYT Regulations, 2014, the Operation and Maintenance Expenses (O&M) is a sum of Employee Cost, Repairs and Maintenance (R & M) Expense and Administrative and General (A & G) Expenses. The extract of the regulation is reproduced:

#### *"56 Operation and maintenance expenses*

56.1 Operation and Maintenance Expenses (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

56.2 Operation and maintenance expenses (O&M Expenses) for the existing generating stations, which have been in operation for 5 years or more in the base year 2007-08 shall be derived on the basis of actual operation and maintenance expenses for the year 2003-04 to 2007-08, based on the audited accounts, excluding abnormal operation and maintenance expenses, if any, after prudent check by the Commission.

56.3 The normalized operation and maintenance expenses after prudent check, for the years 2003-04 to 2007-08, shall be escalated at the rate of 5.17% to arrive at the normalized operation and maintenance expenses at the 2007-08 price level and then averaged to arrive at normalized O&M expenses for2003-04 to 2007-08 price level. The average normal O&M expenses at2007-08 price level shall be escalated at the rate of 5.72% to arrive at theism expenses for the year 2009-10.

56.4 The O&M expenses for the year 2009-10 shall be further rationalized considering 50% increase in employee cost on account of pay revision of employees to arrive at the permissible O&M expenses for the year 2009-10.

56.5 The O&M expenses for 2009-10 shall be escalated further at the rate of 5.72% per annum as arrive at the operation and maintenance expenses forth subsequent years of the tariff period.

56.6 In case of the hydro generating stations, which have not been in commercial

operation for a period of five years as on 1.4.2009, operation and maintenance expenses shall be fixed at 2% of the original project cost (excluding cost of rehabilitation & resettlement works). Further, in such case, operation and maintenance expenses in first year of commercial operation shall be escalated @5.17% per annum up to the year 2007-08and then averaged to arrive at the O&M expenses at 2007-08 price level. It shall be thereafter escalated @ 5.72% per annum to arrive at operation and maintenance expenses in respective year of the tariff period. (The impact of pay revision on employee cost for arriving at the operation and maintenance expenses for the year 2009-10 shall be considered in accordance with the procedure given in proviso to sub-clause (ii) of clause (f) of this regulation).

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"

Since NUHEP has achieved CoD after 1.04.2009, its O & M expenses have been fixed as per Regulation 56 (7) at 2% of project cost and further escalated at 5.72% to arrive at O & M expenses for FY 2021-22, to FY 2023-24.

Particulars					
Project Cost	580.71*				
O&M Expenses for FY 2017-18 (2% of Project Cost)	11.61				
O&M Expenses for FY 2018-19 (5.72% escalation over previous Year)	12.28				
O&M Expenses for FY 2019-20 (5.72% escalation over previous Year)	12.98				
O&M Expenses for FY 2020-21 (5.72% escalation over previous Year and ROP Impact) **	17.43				
O&M Expenses for FY 2021-22 (5.72% escalation over previous Year)	18.43				
O&M Expenses for FY 2022-23 (5.72% escalation over previous Year)	19.48				
O&M Expenses for FY 2023-24 (5.72% escalation over previous Year)	20.59				

Table 5.77 : Projected O&M Expenditure of NUHEP for the Control Pe	eriod
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\* The Commission in its true up order for FY 2017-18, has considered the project cost of NUHEP at INR 580.71 crore. Hence, the petitioner is also considering the same for O&M cost calculation purpose.

\*\* Since MePGCL has already implemented a revised pay scale of employees effective from January 2020, it is taking that into account as well to project O&M for FY 2020-21.

Thus, FY 20-21 O&M = O&M 2019-20 \*1.0572\* ROP Impact (27% as stated in detail in employee expense head in Old Plants petition)

MePGCL submits before the Commission to kindly approve the O&M expenses as computed above on normative basis for NUHEP for third control period, i.e., FY 2021-22, to FY 2023-24.

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

Commission had fixed O&M expenses for NUHEP at Rs.11.61 Crore based on the Approved Capital cost of New Umtru at Rs.580.72 Crore.

The approved O&M expenses include R&M expenses and Adm.&General expenses, the ROP factor shall be considered on the employee expenses at 79.67% of the O&M expenses to fix the employee expense including ROP commitment. Thus commission considers 79.67% of O&M expense as employee expense as was computed while fixing employee expense for the FY 2009-10 on the average of previous five years actuals.

On the same analogy, the employee expense of New Umtru shall be Rs.10.93 Crore for the base year FY 2020-21 (12.98\*79.67%).

Accordingly ROP commitment is computed in the table below for employee expenses.

(Rs.Cr)

Year	O&M expenses	nses Employee Expenses of MePGCL including Sonapani 79.67% of O&M exp.			
2019-20	12.98	10.93			

Table 5.79 : Computation of O&M Expenses for NUHEP for 3rd MYT Control period after27% increase in employee cost due to pay revision 2020

	Deutieuleus	EV 2010 10	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	Particulars	FY 2018-19	(Provisional)	(Estimated)	(Estimated)	(Estimated)	(Estimated)
1	O&M Expenses	12.27	12.98	13.72			
2	Employee Exp of NUHEP (79.67% of Sl.no.1)	9.78	10.34	10.93			
3	27% of Sl.no.2			2.95			
4	Employee Expenses of NUHEP (2+3)			13.88			
5	R&M and A&G exp	2.49	2.64	2.79			
6	Total O&M expenses for NUHEP (6=4+5)			16.67*	17.62	18.63	19.69

\* The base O&M expenses are escalated at 5.72% year on year as per Regulations

The O&M expenses of MeECL shall be regulated in the True up process as per the existing arrangement.

Commission considers O&M expenses for NUHEP at Rs.17.62 Crore, Rs.18.63 crore and Rs.19.69 Crore for 3<sup>rd</sup> MYT Control period for FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

### 5.5.3. Return on Equity

### **Petitioner's Submission**

The relevant regulations for determination of debt-equity ratio are extracted from the MSERC MYT Regulations, 2014 and reproduced for reference below:

"27 Debt-Equity Ratio

27.1 For a project declared under commercial operation on or after 1.4.2015, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan;

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

Provided further that equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Provided any grant obtained for execution of the project shall not be considered as a part of capital structure for the purpose of debt-equity ratio.

Explanation:- The premium, if any, raised by the generating company or the transmission licensee or the distribution licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure.

27.2 In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2015, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2015 shall be considered.

27.3 Any expenditure incurred or projected to be incurred on or after 1.4.2015as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernization expenditure for life extension shall be serviced in the manner specified in this regulations."

The Regulation 31 of the MYT Regulations, 2014, provides for computation of Return on Equity (RoE). The extract is reproduced below:

#### *"31 Return on Equity*

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

Provided that in case of generation & transmission projects commissioned after notification of these regulations, an additional return of 0.5 % shall be allowed if such projects are completed within the time line as specified in CERC Tariff Regulations.

Provided that in case of generation & transmission projects commissioned after the notification of these regulations an additional return of 1.5 % shall be allowed if such projects are completed within the original sanctioned project cost without any time and cost overrun whatsoever.

Provided that equity invested in a foreign currency may be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

- The premium received while issuing share capital shall be treated as a part of equity provided the same is utilized for meeting capital expenditure.
- Internal resources created out of free reserves and utilized for meeting capital expenditure shall also be treated as a part of equity.

The petitioner has projected the Return on Equity for third control period based on the average asset base for NUHEP. This is similar to the approach followed by the Commission in its past few tariff and true up orders. In the case of NUHEP, it may be noted that there is no funding of capital cost by grant. Since there is no grant portion in NUHEP, the whole of asset has been used for calculation of equity base and subsequent return on equity.

Based on the total asset base (Section 3.3.2 of the petition) and the Commission's methodology, the return on equity for the control period is given below:

							(Rs Cr)
SI. No.	Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
1	Opening GFA for the Year	600.78	601.88	604.13	604.13	604.13	604.13
2	Closing GFA for the Year	601.88	604.13	604.13	604.13	604.13	604.13
3	Average Assets Base for the Year	601.33	603.00	604.13	604.13	604.13	604.13
4	Debt component (70% of GFA)	420.93	422.10	422.89	422.89	422.89	422.89
5	Equity component (30% of GFA)	180.40	180.90	181.24	181.24	181.24	181.24
6	RoE (%)	14%	14%	14%	14%	14%	14%
7	Return on Equity	25.26	25.33	25.37	25.37	25.37	25.37

Table 5.80 : Projected Return on Equity for NUHEP for the Control Period

The petitioner would however like to submit that the issue of Return on Equity (methodology of MeECL& its subsidiaries vs methodology of MSERC: APTEL Case no 46 of 2016) is still subjudice. Further the petitioner has appealed against the methodology in the review petition of true up FY 2016-17 whose order is still due from the Commission. In case of favorable order to the petitioner with respect to the methodology adopted for return on equity, the petitioner will reclaim/adjust the additional claim of return on equity in the subsequent tariff petitions. However, the petitioner has hereby claimed return based on the methodology adopted by the Commission in its past orders to avoid ambiguities in figures/calculation resulting in wrong calculation and lower amount of RoE being approved by the Commission.

MePGCL humbly prays before the Commission to kindly approve the RoE for NUHEPas per the above computations.

# **Commission's Analysis**

According to Regulation 32 read with 27 of MSERC MYT Regulations 2014

# "31 Return on Equity

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

Provided that in case of generation & transmission projects commissioned after notification of these regulations, an additional return of 0.5 % shall be allowed if such

projects are completed within the time line as specified in CERC Tariff Regulations. Provided that in case of generation & transmission projects commissioned after the notification of these regulations an additional return of 1.5 % shall be allowed if such projects are completed within the original sanctioned project cost without any time and cost overrun whatsoever.

Provided that equity invested in a foreign currency may be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

- The premium received while issuing share capital shall be treated as a part of equity provided the same is utilized for meeting capital expenditure.
- Internal resources created out of free reserves and utilized for meeting capital expenditure shall also be treated as a part of equity.

# "27 Debt-Equity Ratio

27.1 For a project declared under commercial operation on or after 1.4.2015, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan;

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

Provided further that equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Provided any grant obtained for execution of the project shall not be considered as a part of capital structure for the purpose of debt-equity ratio.

27.2 In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2015, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2015 shall be considered.

27.3 Any expenditure incurred or projected to be incurred on or after 1.4.2015as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernization expenditure for life extension shall be serviced in the manner specified in this regulations." MePGCL has yet to file the petitions for True up of FY 2018-19 and FY 2019-20.

The Capex and Capitalization against New Umtru Project is not considered in the business plan for 3<sup>rd</sup> MYT Control period.

The ROE considered after deducting the Govt. Grant available upto FY 2019-20 for 3<sup>rd</sup> MYT Control period as depicted in the table below

							(Rs Cr)
Particulars	FY 2017-18	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Estimated)	FY 2022-23 (Estimated)	FY 2023-24 (Estimated)
Opening GFA	580.72	580.72	580.72	580.72	580.72	580.72	580.72
Additions during the year		-	-	-	-	-	-
Retirements during the year	-	-	-	-	-	-	-
Closing GFA	580.72	580.72	580.72	580.72	580.72	580.72	580.72
Average GFA	580.72	580.72	580.72	580.72	580.72	580.72	580.72
Less: Govt Grants	128.37	129.87	187.30	187.30	187.30	187.30	187.30
Net GFA	452.35	579.22	393.42	393.42	393.42	393.42	393.42
Debt Component at 70%	316.65	405.45	275.39	275.39	275.39	275.39	275.39
Equity Component at 30%	135.70	173.77	118.03	118.03	118.03	118.03	118.03
Return on Equity %	14%	14%	14%	14%	14%	14%	14%
Return on Equity	18.99	24.33	16.52	16.52	16.52	16.52	16.52

#### Table 5.81 : Approved ROE for NUHEP for 3rd MYT Control Period

Commission considers Return on Equity for NUHEP at Rs.16.52 Crore, Rs.16.52 crore and Rs.16.52 Crore for 3<sup>rd</sup> MYT Control period for FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

# 5.5.4. Depreciation

# Petitioner's Submission

The Gross Fixed Asset (GFA) base for FY 2018-19 and FY 2019-20 as shown in Section 3.3.2 (without IND AS adjustment) represents the historical asset value of asset which has been used in the calculation of depreciation component. The rate of depreciation for various categories of assets has been considered strictly as per the rates as stipulated in the MSERC MYT Regulations, 2014. It may be reiterated that since this project is funded completely by debt and equity and there is no grant portion against this project, there is no deduction of depreciation on assets funded through grants. The Commission is requested to take this into account during calculation of depreciation.

Based on the above, the actual depreciation in FY 2018-19, FY2019-20, estimated

depreciation in FY 2020-21 and projections for FY 2021-22, FY 2022-23, FY 2023-24 are shown in the following tables. The detailed calculation is also shown in Format 6, Annexure C for reference.

						(Rs Cr)
SI. No.	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Depreciation
1	Land & Land rights	-	0.41	-	0.41	-
2	Buildings	94.86	-	-	94.86	3.17
3	Hydraulic Works	310.61	0.03	-	310.63	16.40
4	Other Civil Works	31.80	0.57	-	32.38	1.07
5	Plant & Machinery	159.89	0.01	-	159.90	8.44
6	Lines & Cable Network	3.56	-	-	3.56	0.19
7	Vehicles	0.04	-	-	0.04	0.00
8	Furniture & Fixtures	-	0.08	-	0.08	0.00
9	Office Equipment	0.02	-	-	0.02	0.00
10	Assets not in use	-	-	-	-	-
	Total	600.78	1.10	-	601.88	29.28

Table 5.82 : Actual Depreciation Charges of NUHEP for FY 2018-19

Table 5.83	Provisional	Depreciation	Charges of NL	JHEP for FY 2019-20
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						(Rs Cr)
SI. No.	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Depreciation
1	Land & Land rights	0.41	0.07	-	0.48	-
2	Buildings	94.86	0.30	-	95.16	3.17
3	Hydraulic Works	310.63	1.00	0.00	311.64	16.40
4	Other Civil Works	32.38	0.85	-	33.23	1.08
5	Plant & Machinery	159.90	0.02	-	159.93	8.44
6	Lines & Cable Network	3.56	-	-	3.56	0.19
7	Vehicles	0.04	-	-	0.04	0.00
8	Furniture & Fixtures	0.08	-	-	0.08	0.01
9	Office Equipment	0.02	-	-	0.02	0.00
10	Assets not in use	-	-	-	-	-
	Total	601.88		0.06	604.13	29.29

Table 5.84 : Estimated Depreciation Charges of NUHEP for FY 2020-21

						(Rs Cr)
SI. No.	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Depreciation
1	Land & Land rights	0.48	-		0.48	-
2	Buildings	95.16	-		95.16	3.18
3	Hydraulic Works	311.64	-		311.64	16.45
4	Other Civil Works	33.23	-		33.23	1.11
5	Plant & Machinery	159.93	-		159.93	9.28
6	Lines & Cable Network	3.56	-		3.56	0.19
7	Vehicles	0.04	-		0.04	0.00
8	Furniture & Fixtures	0.08	-		0.08	0.00
9	Office Equipment	0.02	-		0.02	0.00
10	Assets not in use	-	-		-	-
	Total	604.13	-		604.13	30.22

						(Rs Cr)
SI. No.	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Depreciation
1	Land & Land rights	0.48	-		0.48	-
2	Buildings	95.16	-		95.16	3.18
3	Hydraulic Works	311.64	-		311.64	16.45
4	Other Civil Works	33.23	-		33.23	1.11
5	Plant & Machinery	159.93	-		159.93	9.28
6	Lines & Cable Network	3.56	-		3.56	0.19
7	Vehicles	0.04	-		0.04	0.00
8	Furniture & Fixtures	0.08	-		0.08	0.00
9	Office Equipment	0.02	-		0.02	0.00
10	Assets not in use	-	-		-	-
	Total	604.13	-		604.13	30.22

Table 5.85 : Projected Depreciation Charges of NUHEP for FY 2021-22

# Table 5.86 : Projected Depreciation Charges of NUHEP for FY 2022-23

						(Rs Cr)
SI. No.	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Depreciation
1	Land & Land rights	0.48	-		0.48	-
2	Buildings	95.16	-		95.16	3.18
3	Hydraulic Works	311.64	-		311.64	16.45
4	Other Civil Works	33.23	-		33.23	1.11
5	Plant & Machinery	159.93	-		159.93	9.28
6	Lines & Cable Network	3.56	-		3.56	0.19
7	Vehicles	0.04	-		0.04	0.00
8	Furniture & Fixtures	0.08	-		0.08	0.00
9	Office Equipment	0.02	-		0.02	0.00
10	Assets not in use	-	-		-	-
	Total	604.13	-		604.13	30.22

#### Table 5.87 : Projected Depreciation Charges of NUHEP for FY 2023-24

						(Rs Cr)
SI. No.	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Depreciation
1	Land & Land rights	0.48	-	-	0.48	-
2	Buildings	95.16	-	-	95.16	3.18
3	Hydraulic Works	311.64	-	-	311.64	16.45
4	Other Civil Works	33.23	-	-	33.23	1.11
5	Plant & Machinery	159.93	-	-	159.93	9.28
6	Lines & Cable Network	3.56	-	-	3.56	0.19
7	Vehicles	0.04	-	-	0.04	0.00
8	Furniture & Fixtures	0.08	-	-	0.08	0.00
9	Office Equipment	0.02	-	-	0.02	0.00
10	Assets not in use	-	-	-	-	-
	Total	604.13	-	-	604.13	30.22

MePGCL humbly prays before the Commission to kindly approve the depreciation charges for NUHEP as computed above.

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

According to Regulation 33 read with 28.10 of MSERC MYT Regulations 2014

For the purpose of tariff determination, depreciation shall be computed in the following manner:

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.

For new assets, the approved/accepted cost for the asset value shall include foreign currency funding converted to equivalent rupee at the exchange rate prevalent on the date of foreign currency actually availed but not later than the date of commercial operation.

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.

Provided that land is not a depreciable asset and its cost shall be excluded from the capital cost while computing the historical cost of the asset.

Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro-rata basis.

The remaining depreciable value as on 31st March of the year closing after a period of 12 years from the date of commercial operation shall be spread over the balance useful life of the asset.

28.10 The following shall be excluded or removed from the capital cost of the existing and new project:

- (a) The assets forming part of the project, but not in use;
- (b) De capitalization of Asset;

- (c) In case of hydro generating station any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State government by following a two stage transparent process of bidding; and
- (d) The proportionate cost of land which is being used for generating power from generating station based on renewable energy:

Provided that any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment shall be excluded from the Capital Cost for the purpose of computation of interest on loan, return on equity and depreciation;

MepGCL has yet to file petitions for True up of business for FY 2018-19 and FY 2019-20.

SI.	<b>-</b>	Opening		With	Closing	Average	90% of	Depreciatio
No.	Particulars	GFA	Addition	drawn	GFA	GFA	GFA	n
1	Land & Land rights	0.00			0.00	0.00	0.00	
2	Buildings	91.57			91.57	91.57	82.41	2.75
3	Hydraulic Works	299.54			299.54	299.54	269.58	14.23
4	Other Civil Works	30.72			30.72	30.72	27.65	0.92
5	Plant & Machinery	155.40			155.40	155.40	139.86	7.39
6	Lines & Cable Network	3.43			3.43	3.43	3.09	0.16
7	Vehicles	0.04			0.04	0.04	0.036	0.003
8	Furniture & Fixtures	0.00			0.00	0.00	0.00	0.00
9	Office Equipment	0.02			0.02	0.02	0.018	0.001
10	Assets not in use	-			-	-		
11	Total	580.72			580.72	580.72	522.64	25.45
12	Avg. Depreciation (%)							4.87
13	Grants Available							129.87
14	Less: Depreciation on Grants							6.32
15	Net Depreciation							19.13

#### Table 5.88 : Approved Depreciation of NUHEP for FY 2018-19

(Rs Cr)

								(Rs Cr)
SI. No.	Particulars	Opening GFA	Addition	With drawn	Closing GFA	Average GFA	90% of GFA	Depreciatio n
1	Land & Land rights	0.00			0.00	0.00	0.00	
2	Buildings	91.57			91.57	91.57	82.41	2.75
3	Hydraulic Works	299.54			299.54	299.54	269.58	14.23
4	Other Civil Works	30.72			30.72	30.72	27.65	0.92
5	Plant & Machinery	155.40			155.40	155.40	139.86	7.39
6	Lines & Cable Network	3.43			3.43	3.43	3.09	0.16
7	Vehicles	0.04			0.04	0.04	0.036	0.003
8	Furniture & Fixtures	0.00			0.00	0.00	0.00	0.00
9	Office Equipment	0.02			0.02	0.02	0.018	0.001
10	Assets not in use	-			-	-		
11	Total	580.72			580.72	580.72	522.64	25.45
12	Avg. Depreciation (%)							4.87
13	Grants Available							187.30
14	Less: Depreciation on Grants							9.12
15	Net Depreciation							16.33

#### Table 5.89 : Approved Depreciation Charges of NUHEP for FY 2019-20

# Table 5.90 : Approved Depreciation Charges of NUHEP for FY 2020-21

								(Rs Cr)
SI.	Particulars	Opening	Addition	With	Closing	Average	90% of	Depreciatio
No.	Particulars	GFA	Addition	drawn	GFA	GFA	GFA	n
1	Land & Land rights	0.00			0.00	0.00	0.00	
2	Buildings	91.57			91.57	91.57	82.41	2.75
3	Hydraulic Works	299.54			299.54	299.54	269.58	14.23
4	Other Civil Works	30.72			30.72	30.72	27.65	0.92
5	Plant & Machinery	155.40			155.40	155.40	139.86	7.39
6	Lines & Cable	2 4 2			2.42	2.42	3.09	0.16
0	Network	3.43			3.43	3.43	3.09	0.16
7	Vehicles	0.04			0.04	0.04	0.036	0.003
8	Furniture & Fixtures	0.00			0.00	0.00	0.00	0.00
9	Office Equipment	0.02			0.02	0.02	0.018	0.001
10	Assets not in use	-			-	-		
11	Total	580.72			580.72	580.72	522.64	25.45
12	Avg. Depreciation (%)							4.87
13	Grants Available							187.30
14	Less: Depreciation on Grants							9.12
15	Net Deprecitaion							16.33

								(Rs Cr)
SI. No.	Particulars	Opening GFA	Addition	With drawn	Closing GFA	Average GFA	90% of GFA	Depreciation
1	Land & Land rights	0.00			0.00	0.00	0.00	
2	Buildings	91.57			91.57	91.57	82.41	2.75
3	Hydraulic Works	299.54			299.54	299.54	269.58	14.23
4	Other Civil Works	30.72			30.72	30.72	27.65	0.92
5	Plant & Machinery	155.40			155.40	155.40	139.86	7.39
6	Lines & Cable Network	3.43			3.43	3.43	3.09	0.16
7	Vehicles	0.04			0.04	0.04	0.036	0.003
8	Furniture & Fixtures	0.00			0.00	0.00	0.00	0.00
9	Office Equipment	0.02			0.02	0.02	0.018	0.001
10	Assets not in use	-			-	-		
11	Total	580.72			580.72	580.72	522.64	25.45
12	Avg. Depreciation (%)							4.87
13	Grants Available							187.30
14	Less: Depreciation on Grants							9.12
15	Net Deprecitaion							16.33

Table 5.91 : Approved Depreciation Charges of NUHEP for FY 2021-22

								(Rs Cr)
SI.	Particulars	Opening	Addition	With	Closing	Average	90% of	Depreciatio
No.		GFA		drawn	GFA	GFA	GFA	n
1	Land & Land rights	0.00			0.00	0.00	0.00	
2	Buildings	91.57			91.57	91.57	82.41	2.75
3	Hydraulic Works	299.54			299.54	299.54	269.58	14.23
4	Other Civil Works	30.72			30.72	30.72	27.65	0.92
5	Plant & Machinery	155.40			155.40	155.40	139.86	7.39
6	Lines & Cable	3.43			3.43	3.43	3.09	0.16
0	Network	5.45			5.45	5.45	5.09	0.10
7	Vehicles	0.04			0.04	0.04	0.036	0.003
8	Furniture & Fixtures	0.00			0.00	0.00	0.00	0.00
9	Office Equipment	0.02			0.02	0.02	0.018	0.001
10	Assets not in use	-			-	-		
11	Total	580.72			580.72	580.72	522.64	25.45
12	Avg. Depreciation							4.87
12	(%)							4.07
13	Grants Available							187.30
14	Less: Depreciation							9.12
14	on Grants							9.12
15	Net Deprecitaion							16.33

								(Rs Cr)
SI. No.	Particulars	Opening GFA	Addition	With drawn	Closing GFA	Average GFA	90% of GFA	Depreciation
1	Land & Land rights	0.00			0.00	0.00	0.00	
2	Buildings	91.57			91.57	91.57	82.41	2.75
3	Hydraulic Works	299.54			299.54	299.54	269.58	14.23
4	Other Civil Works	30.72			30.72	30.72	27.65	0.92
5	Plant & Machinery	155.40			155.40	155.40	139.86	7.39
6	Lines & Cable Network	3.43			3.43	3.43	3.09	0.16
7	Vehicles	0.04			0.04	0.04	0.036	0.003
8	Furniture & Fixtures	0.00			0.00	0.00	0.00	0.00
9	Office Equipment	0.02			0.02	0.02	0.018	0.001
10	Assets not in use	-			-	-		
11	Total	580.72			580.72	580.72	522.64	25.45
12	Avg. Depreciation (%)							4.87
13	Grants Available							187.30
14	Less: Depreciation on Grants							9.12
15	Net Depreciation							16.33

Table 5.93 : Approved Depreciation Charges of NUHEP for FY 2023-24

Commission considers depreciation for NUHEP at Rs.16.33 Crore, Rs.16.33 and Rs.16.33 Crore for 3<sup>rd</sup> MYT Control Period FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

#### 5.5.5. Interest and Finance Charges

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

As per Regulation 32 of the MYT Regulations, 2014, 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 prevailing lending rate of bank and financial institution. It is submitted that the Interest on Loan for the control period has been computed by considering Interest obligation for existing loans in the control period.

There is no new capex for NUHEP in the control period and hence no new loan additions have been shown. The details of the loan statement for actuals FY 2018-19, FY 2019-20, estimated FY 2020-21 and projected FY 2021-22, FY 2022-23 and FY 2023-24 along with the interest accrued component for NUHEP is given in Format 7, Annexure C.

Justifications for existing loan of NUHEP project is given below:

a. **Existing PFC NUHEP Loan**: This loan shown for NUHEP in FY 2018-19 and FY 2019-20 pertain to the loans spent on the capex work (Format 7 of Annexure C). These loans have interest obligations in the next control period as shown in the statements.

The summarized statement of Interest and Finance charges to be considered for the Control Period is shown in the table below:

						(Rs. cr.)
Particulars	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	(Actual)	(Provisional)	(Estimated)	(Projected)	(Projected)	(Projected)
Opening Balance	440.30	408.85	377.26	353.81	322.36	290.91
Addition During the Year	0.00	0.00	0.00	0.00	0.00	0.00
Repayment during the year	31.45	31.59	23.44	31.45	31.45	31.45
Closing Balance	408.85	377.26	353.81	322.36	290.91	259.46
Average Interest Rate	12.65%	12.65%	11.75%	11.75%	11.75%	11.75%
Interest Accrued	53.71	49.72	42.95	39.73	36.03	32.33

 Table 5.94 : Projected Interest and Finance Charges for NUHEP for the Control Period

MePGCL humbly prays before the Commission to kindly approve the Interest and Finance Charges for NUHEP as computed above.

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

As per Regulation 32.1 of MSERC MYT Regulation 2014 specifies that

"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 interest and finance charges attributable to capital work in progress shall be excluded.

Provided that neither penal interest nor overdue interest shall be allowed for computation of tariff."

MePGCL has yet to file petitions for True up of business for FY 2018-19 and FY 2019-20.

Schedule of the outstanding loans as approved in the True up for FY 2017-18 is considered for computation of loans for FY 2018-19 and FY 2019-20.

						(in C
Loans available for MLHEP	Opening	Additions	Repayment	Closing Loan	Avg Loan	Interest
PFC for NUHEP (12.65%)	293.07		31.45	261.62	277.34	35.08
Total	293.07		31.45	261.62	277.34	35.08
	MLHEP PFC for NUHEP (12.65%) Total	MLHEP         293.07           (12.65%)         293.07           Total         293.07	MLHEP         293.07           (12.65%)         293.07           Total         293.07	MLHEP         293.07         31.45           PFC for NUHEP         293.07         31.45           (12.65%)         293.07         31.45	MLHEP         293.07         31.45         261.62           (12.65%)         293.07         31.45         261.62           Total         293.07         31.45         261.62	MLHEP         PFC for NUHEP         293.07         31.45         261.62         277.34           (12.65%)

#### Table 5.95 : Computation of Interest and Finance charges for FY 2018-19

Table 5.96 : Computation of Interest and Finance charges for FY 2019-20

(in Cr)

SI. No	Loans available for MLHEP	Opening	Additions	Repayment	Closing Loan	Avg Loan	Interest
1	PFC for NUHEP (12.65%)	261.62		31.59	230.03	245.82	31.10
2	Total	261.62		31.59	230.03	245.82	31.10

Table 5.97 : Computation of Interest and Finance charges for FY 2020-21

SI. No	Loans available for MLHEP	Opening	Additions	Repayment	Closing Loan	Avg Loan	Interest
1	PFC for NUHEP	230.03		23.44	206.59	218.31	25.65
	(11.75%)						
2	Total	230.03		23.44	206.59	218.31	25.65

#### Table 5.98 : Approved Interest and Finance charges for FY 2021-22

(in Cr)

SI. No	Loans available for MLHEP	Opening	Additions	Repayment	Closing Loan	Avg Loan	Interest
1	PFC for NUHEP (11.75%)	206.59		31.45	175.14	190.86	22.43
2	Total	206.59		31.45	175.14	190.86	22.43

#### Table 5.99 : Approved Interest and Finance charges for FY 2022-23

							(in Cr)
SI. No	Loans available for MLHEP	Opening	Additions	Repayment	Closing Loan	Avg Loan	Interest
1	PFC for NUHEP (11.75%)	175.14		31.45	143.69	159.42	18.73
2	Total	175.14		31.45	143.69	159.42	18.73

#### Table 5.100 : Approved Interest and Finance charges for FY 2023-24

							(in Cr)
SI.	Loans available for	Opening	Additions	Repayment	Closing Loan	Avg Loan	Interest
No	MLHEP						
1	PFC for NUHEP	143.69		31.45	112.24	127.97	15.04
	(11.75%)						
2	Total	143.69		31.45	112.24	127.97	15.04

Commission considers Interest and Finance charges for NUHEP at Rs.22.43 Crore, Rs.18.73 Crore and Rs.15.04 Crore for 3<sup>rd</sup> MYT Control period FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

#### 5.5.6. Interest on Working Capital

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

As per Regulation 34.1 (iii) of the MYT Regulations, 2014, the components of working capital will be:

#### "34 Interest on Working Capital

#### 34.1 Generation

(iii) In case of hydro power generating stations, working capital shall cover:

- Operation and maintenance expenses for one (1) month;
- Maintenance spares at the rate of 15% of O & M expenses escalated at 6% from the date of commercial operation; and
- *Receivables equivalent to two (2) month of fixed cost:*

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

Based on the above, the Interest on Working Capital can be computed as follows:

# Table 5.101 : Projected Interest and Finance Charges projected for NUHEP for the thirdControl Period

						(Rs.Cr.)
Particulars	FY 2018- 19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
O&M for 1 Months	1.02	1.08	1.45	1.54	1.62	1.72
Maintenance Spares	1.84	1.95	2.61	2.76	2.92	3.09
Receivables for 2 Months	20.60	20.06	19.80	19.43	18.98	18.55
Total (INR Crore)	23.46	23.09	23.87	23.73	23.53	23.36
Interest Rate (%)	13.45%	13.20%	12.15%	12.15%	12.15%	12.15%
Interest on Working Capital (INR Crore)	3.16	3.05	2.90	2.88	2.86	2.84

MePGCL humbly prays before the Commission to kindly approve the Interest on Working Capital for NUHEP as computed above and as per the norms in the MYT Regulations.

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

As per Regulation 34.1 (iii) of the MYT Regulations, 2014, the components of working capital will be:

#### "34 Interest on Working Capital

#### 34.1 Generation

(iii) In case of hydro power generating stations, working capital shall cover:

- *Operation and maintenance expenses for one (1) month;*
- Maintenance spares at the rate of 15% of O & M expenses escalated at 6% from the date of commercial operation; and
- Receivables equivalent to two (2) month of fixed cost:

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

MePGCL has yet to file petitions for True up of Business for FY 2018-19 and FY 2019-20.

				(RS.CF)
SI. no	Particulars	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
1	O&M Expenses	17.62	18.63	19.69
2	O&M for 1 Months	1.47	1.55	1.64
3	Maintenance Spares @ 15% of O&M Exp escalated at 6%	2.80	2.96	3.13
4	Receivables for 2 Months of Fixed Cost	12.14	11.70	11.25
5	Total (INR Crore) (Sl.no.2+3+4)	16.41	16.21	16.02
6	Interest Rate (%)	12.15%	12.15%	12.15%
7	Interest on Working Capital (INR.Cr)	1.99	1.97	1.95

Table 5.102 : Computation of Interest on working Capital for NUHEP

(Dc Cr)

Commission considers Interest on Working Capital at Rs.1.99 Crore, Rs.1.97 Crore and Rs.1.95 Crore for 3rd MYT Control period FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

#### 5.5.7. Non Tariff Income

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

As per Regulation 60 of the MYT Regulations, 2014 the **Other Income** of a generation utility is to be deducted from the total expenses to arrive at the net ARR. The relevant regulation is reproduced below for ready reference:

#### "60 Other income

60.1 All Income other than income from sale of energy and net U I charges gained (after introduction of intra-state ABT) shall be grouped as other income. UI penalties shall not be netted off from other income. The UI penalties shall be borne by the generating company."

#### The details of Non-Tariff Income are shown in the table below:

#### Table 5.103 : Non-Tariff Income of NUHEP for the Third Control Period

(Rs.Cr)

Particular	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	(Actual)	(Provisional)	(Estimated)	(Projected)	(Projected)	(Projected)
Non-Tariff Income	0.112	0.002	0.059	0.060	0.062	0.064

MePGCL humbly prays before the Commission to kindly approve the Non-Tariff Income for NUHEP as per the above computations.

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

According to Regulation 60.1 of MSERC MYT Regulations 2014 – "All Income other than income from sale of energy and net U I charges gained (after introduction of intra-state ABT) shall be grouped as other income. UI penalties shall not be netted off from other income. The UI penalties shall be borne by the generating company." Therefore Commission considers Non Tariff Income at Rs.0.06 Crore, Rs.0.06 Crore and Rs.0.06 Crore for FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

#### 5.5.8. SLDC Charges

MePGCL has not projected SLDC Charges for 40 MW New Umtru project, but has included in the ARR of MePGCL old projects.

# 5.5.9. Annual Revenue Requirement for 3<sup>rd</sup> MYT Control period for NUHEP Petitioner's Submission

Based on the above submissions, the ARR for each year of the Control Period would

be as shown in the following table:

						(Rs. cr.)
Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Interest on Loan capital	53.71	49.72	42.95	39.73	36.03	32.33
Depreciation	29.28	29.29	30.22	30.22	30.22	30.22
O&M Expenses	12.28	12.98	17.43	18.43	19.48	20.59
Interest on working capital	3.16	3.05	2.90	2.88	2.86	2.84
Return on Equity	25.26	25.33	25.37	25.37	25.37	25.37
Total Annual Fixed Cost	123.68	120.37	118.88	116.63	113.97	111.36
Less: Non-Tariff Income	0.112	0.002	0.059	0.060	0.062	0.064
Net Annual Fixed Cost	123.57	120.37	118.82	116.57	113.90	111.30

#### Table 5.104 : Projected ARR Requirement for NUHEP for the Control Period

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

Commission after prudence check of the petition filed by the licensee, taking into consideration of SOA for FY 2018-19 and FY 2019-20, the objections raised by the stake holders, the response of the licensee and minutes of the public hearing, minutes of State Advisory Committee and Business plan has computed the ARR for 3<sup>rd</sup> MYT Control period FY 2021-22 FY 2022-23 and FY 2023-24 as depicted in the table below:

						(Rs. cr.)
	Filed by MePGCL			Approved by Commission		
Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2021-22	FY 2022-23	FY 2023-24
	(Projected)	(Projected)	(Projected)	(Estimated)	(Estimated)	(Estimated)
Interest on Loan capital	39.73	36.03	32.33	22.43	18.73	15.04
Depreciation	30.22	30.22	30.22	16.33	16.33	16.33
O&M Expenses	18.43	19.48	20.59	17.62	18.63	19.69
Interest on working capital	2.88	2.86	2.84	1.99	1.97	1.95
Return on Equity	25.37	25.37	25.37	16.52	16.52	16.52
<b>Total Annual Fixed Cost</b>	116.63	113.97	111.36	74.89	72.18	69.53
Less: Non-Tariff Income	0.060	0.062	0.064	0.06	0.06	0.06
Net Annual Fixed Cost	116.57	113.90	111.30	74.83	72.12	69.47

Table 5.105 : Approved ARR for NUHEP for the Control Period

Commission considers ARR for NUHEP at Rs.74.83 Crore, Rs.72.12 Crore and Rs.69.47 Crore for FY 2021-22, FY 2022-23 and FY 2023-24 for 3<sup>rd</sup> MYT Control period respectively.

## 5.6 ARR for 1.5 MW Lakroh mini HEP for 2<sup>nd</sup> MYT Control Period FY 2018-19 to FY 2020-21 and ARR for 3<sup>rd</sup> MYT Control period FY 2021-22 to FY 2023-24

#### 5.6.1 Components of Tariff

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

The different elements of tariff have been calculated for the control period based on the provisions of the MSERC (Terms and Conditions for Determination of Tariff for Generation from Renewable Energy Sources) Regulations, 2014.

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

The tariff for sale of energy from small hydro projects shall be Two-part tariff as fixed cost components detailed below and variable energy charges for actual generation;

- a) Interest on loan capital
- b) Depreciation
- c) Return on equity
- d) Interest on working capital
- e) Operation and maintenance expenses

#### 5.6.2 Capital Expenditure and Capitalization for the Control Period

#### **Capital Expenditure**

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

In the approved Business Plan Order (dated 30.09.2020), the Commission has approved the year wise capital expenditure for the control period for MePGCL. The approved capex of Lakroh MHP as part of the approved business case is presented below:

#### Table 5.106 : Asset base of Lakroh MHP

(Rs. Cr.)

Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Opening GFA	-	22.33	24.35	24.41	25.07	25.89
Additions during the year (Based on the capitalization schedule above)	22.33	2.02	0.06	0.66	0.82	-
Retirements during the year	-	-	-	-	-	-
Closing GFA	22.33	24.35	24.41	25.07	25.89	25.89

The capex components has shown above have been used in the subsequent sections for calculation of different components of tariff.

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

Commission has approved capital cost for 1.5 MW lakroh MHP project at Rs.19.03 Crore. Earlier, Commission had approved business plan for 2<sup>nd</sup> MYT Control period for FY 2018-19 to FY 2020-21 wherein capitalization of Rs.20.48 Crore was considered against lakroh mini Hydel project. The Capital addition for FY 2019-20 projected at Rs.2.02 Crore is not considered, since the investment was not approved in the business plan.

Similarly commission approved business plan for 3<sup>rd</sup> MYT Control period for FY 2021-22 to FY 2023-24 with the capex of Rs.1.54 Crore against lakroh project.

Accordingly commission considers asset base for lakroh MHP as detailed in the table below

						(Rs.Cr)
Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Estimated)	FY 2022-23 (Estimated)	FY 2023-24 (Estimated)
Opening GFA	-	19.03	19.03	19.09	19.75	20.57
Additions during the year (Based on the capitalization schedule above)	19.03	0.00	0.06	0.66	0.82	-
Retirements during the year	-	-	-	-	-	-
Closing GFA	19.03	19.03	19.09	19.75	20.57	20.57

Commission considers GFA and Capitalization as above for the control period.

#### 5.6.3 Operation and Maintenance Expense

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

The O&M Cost of Lakroh MHP shall be calculated following the methodology as per Regulation 34 of the Meghalaya State Electricity Regulatory Commission (Terms and Conditions for determination of Tariff for Generation from Renewable Energy Sources) Regulations, 2014. The excerpts of the regulations is reproduced:

#### "34 Operation and Maintenance Expenses

(1) The normative O&M expenses for small hydro projects for the first year control period shall be as given below:

Size of project	O&M Expenses (INR lakh / MW)
Below 5 MW	23.47
5 MW to 25 MW	16.77

(2)Normative O&M expenses allowed under these regulations shall be escalated at the rate of 5.72 % per annum for the tariff period for the purpose of determination of levellised tariff."

Since the installed capacity of Lakroh MHP is 1.5 MW, its O & M expenses have been calculated at the rate of INR 23.47 Lakh / MW and further escalated at 5.72% to arrive at O & M expenses till FY 2023-24.

Particulars	Amount
Installed Capacity of Lakroh MHP (MW)	1.5
O&M Expenses for FY 2018-19 (at the rate of INR 23.47 Lakh/ MW) (INR Cr.)	0.35
Apportioned for 1 month (INR Cr.) (For AFC calculation of Lakroh)	0.03
O&M Expenses for FY 2019-20 (5.72% escalation over previous Year) (INR Cr.)	0.37
(O&M FY 2018-19 i.e 0.35 * 1.0572)	
O&M Expenses for FY 2020-21 (5.72% escalation over previous Year and ROP	0.50
Impact) **	
O&M Expenses for FY 2021-22 (5.72% escalation over previous Year) (INR Cr.)	0.53
O&M Expenses for FY 2022-23 (5.72% escalation over previous Year) (INR Cr.)	0.56
O&M Expenses for FY 2023-24 (5.72% escalation over previous Year) (INR Cr.)	0.59

#### Table 5.108 : O & M Expenditure of Lakroh MHP for the Control Period

\*\* Since MePGCL has already implemented a revised pay scale of employees effective from January 2020, it is taking that into account as well to project O&M for FY 2020-21

Thus, FY 20-21 O&M = O&M 2019-20 \*1.0572\* ROP Impact (27% as stated in detail in employee expense head in Old Plants petition)

MePGCL submits before the Commission to kindly approve the O&M expenses as computed above on normative basis for Lakroh MHP for third control period i.e. FY 2021-22, to FY 2023-24.

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

Commission has considered capital cost of the Project as per the MSERC MYT Regulations 2014. The O&M expenses shall be computed as per Regulation 56.7 read with Regulation 52.6 of MSERC MYT Regulations 2014 at 2% of the Original project cost.

Accordingly for 1.5MW Lakroh MHP **project cost approved at Rs.19.03 Crore** shall be considered for computation of O&M expenses at 2% of project cost which works out to Rs.0.38 Crore for FY 2018-19. Thus O&M expenses for FY 2018-19 (date of CoD 01.03.2019) shall be Rs.0.03 Crore (ie., Rs.0.38 Cr/12) for one month.

The Increase due to ROP is computed at 27% provisionally for FY 2020-21 and O&M expenses has been escalated at 5.72% for subsequent years computed below.

Particulars	Amount in Cr
O&M expenses for FY 2018-19 considered at Rs0.38 Crore Project	0.03
CoD achieved on 01.03.2019 (Rs0.38 Cr/12)	
O&M expenses escalated for FY 2019-20 at 5.72%	0.40
O&M expenses escalated for FY 2020-21 at 5.72% incl. ROP @27%	0.54
O&M expenses escalated for FY 2021-22 at 5.72%	0.57
O&M expenses escalated for FY 2022-23 at 5.72%	0.60
O&M expenses escalated for FY 2023-24 at 5.72%	0.63

Commission considers O&M expenses as computed above at Rs.0.57 Crore, Rs.0.60 crore and Rs.0.63 crore provisionally for the Control period FY 2021-22, FY 2022-23 and FY 2023-24..

#### 5.6.4 Return on Equity

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

The relevant regulations for determination of debt-equity ratio are extracted from the Meghalaya State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation from Renewable Energy Sources) Regulations, 2014, and reproduced for reference as below:

#### *"17. Debt - Equity Ratio*

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

(2)For determination of project specific tariff, the following provisions shall apply: -

If the equity actually deployed is more than 30% of the capital cost, the amount of equity for the purpose of tariff determination shall be limited to 30% and the balance equity in excess of 30% shall be treated as normative loan.

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

Provided further that the equity invested in foreign currency shall be denominated/ designated in Indian rupees on the date of each investment.

(3) The debt and equity amounts arrived in accordance with the above clauses shall be used for calculating interest on loan and return on equity." The Regulation 20 of the Meghalaya State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation from Renewable Energy Sources) Regulations, 2014, provides for computation of Return on Equity (RoE). The extract is reproduced below:

#### "20. Return on Equity

(1)The value base for the equity shall be 30% of the capital cost for generic tariff determination or actual equity (in case of project specific tariff determination) as determined under Regulation 17.

(2) The normative Return on Equity shall be: 16%

Provided that in case of projects commissioned after notification of these regulations an additional return of 1.0% shall be allowed if such projects are completed within the timeline approved in the sanctioned Detail Project Report and within the original sanctioned project cost without cost overrun."

The petitioner has projected the Return on Equity for third control period based on the average asset base for Lakroh. This is similar to the approach followed by the Commission in its past few tariff and true up order. Based on the total asset base (Section 4.3.3 of the petition) and the Commission's methodology, the return on equity for the control period is given below:

SI.	Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
1	Opening GFA for the Year	0.00	22.33	24.35	24.41	25.07	25.89
2	Closing GFA for the Year	22.33	24.35	24.41	25.07	25.89	25.89
3	Average Assets Base for the Year	11.17	23.34	24.38	24.74	25.48	25.89
4	Debt component (70% of GFA)	7.82	16.34	17.07	17.32	17.84	18.12
5	Equity component (30% of GFA)	3.35	7.00	7.32	7.42	7.64	7.77
6	RoE (%)	16%	16%	16%	16%	16%	16%
7	Return on Equity (in INR Cr.)	0.04*	1.12	1.17	1.19	1.22	1.24

 Table 5.110 : Return on Equity for Lakroh MHP for the Control Period

\*- The RoE for FY 2018-19 has been apportioned for 1 month, as Lakroh was commissioned on 01 March 2019 and thus was operational for just one month during FY 2018-19.

The petitioner would however like to submit that the issue of Return on Equity (methodology of MeECL & its subsidiaries vs methodology of MSERC: APTEL Case no 46 of 2016) is still subjudice. Further, the petitioner has appealed against the methodology in the review petition of true up FY 2016-17 whose order is still due from the Commission. In case of favorable order to the petitioner with respect to methodology adopted for return on equity, the petitioner will reclaim/adjust the additional claim of return on equity in the subsequent tariff petitions. However, the petitioner has hereby claimed return based on the methodology adopted by the Commission in its past orders to avoid ambiguities in figures/calculation resulting in wrong calculation and lower amount of RoE being approved by the Commission.

MePGCL humbly prays before the Commission to kindly approve the RoE for Lakroh MHP as per the above computations.

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

Commission considers project cost under MSERC MYT Regulations 2014, the return on equity shall be computed as per the Regulation 31 read with Regulation 27 of MSERC Regulations 2014.

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

Provided that in case of generation & transmission projects commissioned after notification of these regulations, an additional return of 0.5 % shall be allowed if such projects are completed within the time line as specified in CERC Tariff Regulations.

Provided that in case of generation & transmission projects commissioned after the notification of these regulations an additional return of 1.5 % shall be allowed if such projects are completed within the original sanctioned project cost without any time and cost overrun whatsoever.

Provided that equity invested in a foreign currency may be allowed a return up to the prescribed limit in the same currency and the payment on this account shall be made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

- The premium received while issuing share capital shall be treated as a part of equity provided the same is utilized for meeting capital expenditure.
- Internal resources created out of free reserves and utilized for meeting capital expenditure shall also be treated as a part of equity.

For a project declared under commercial operation on or after 1.4.2015, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan;

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

Provided further that equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Provided any grant obtained for execution of the project shall not be considered as a part of capital structure for the purpose of debt-equity ratio.

	I	1		I	I	Γ	(Rs.Cr)
SI.	Particulars	FY 2018-19 (Provisional)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Estimated)	FY 2022-23 (Estimated)	FY 2023-24 (Estimated)
1	Opening GFA for the Year	0.00	19.03	19.03	19.09	19.75	20.57
2	Additions during the Year	19.03	0.00	0.06	0.66	0.82	0.00
3	Closing GFA for the Year	19.03	19.03	19.09	19.75	20.57	20.57
4	Average Assets Base for the Year	9.52	19.03	19.05	19.42	20.16	20.57
5	Less: Grants and Contributions Received	11.07	11.75	11.75	11.75	11.75	11.75
6	Net GFA	-1.55	7.28	7.30	7.67	8.41	8.82
7	Debt component (70% of GFA)	-1.09	5.09	5.11	5.37	5.89	6.17
8	Equity component (30% of GFA)	-0.46	2.19	2.19	2.30	2.52	2.65
9	RoE (%)	14%	14%	14%	14%	14%	14%
10	Return on Equity (in INR Cr.)	NIL	0.31	0.31	0.32	0.35	0.37

 Table 5.111 : Return on Equity for Lakroh MHP for the Control Period

Commission considers Return on Equity at Rs.0.32 Cr, Rs.0.35 Cr and Rs.0.37 Crore for the Control period FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

#### 5.6.5 Depreciation

#### Petitioner's Submission

The Gross Fixed Asset (GFA) base for FY 2018-19 and FY 2019-20 as shown in Section 4.3.3 (without IND AS adjustment) represents the historical asset value of asset which has been used in the calculation of depreciation component. The additions in GFA for the control period have been considered based on the capitalization schedule as shown in Section 4.3.2 of the petition. The rates of depreciation for various categories of assets have been considered strictly as per the rates as stipulated in the MSERC MYT Regulations, 2014.

Based on the above, the actual depreciation in FY 2018-19, FY2019-20, estimated depreciation in FY 2020-21 and projections for FY 2021-22, FY 2022-23, FY 2023-24 are shown in the following tables. The detailed calculation is also shown in Format 6, **Annexure F** for reference.

						(Rs. cr)
SI. No.	Particulars	Opening GFA	Addition	With drawn	Closing GFA	Depreciation
1	Land & Land rights	-	0.00	-	0.00	-
2	Buildings	-	2.25	-	2.25	0.01
3	Hydraulic Works	-	9.35	-	9.35	0.04
4	Other Civil Works	-	1.73	-	1.73	0.00
5	Plant & Machinery	-	7.83	-	7.83	0.03
6	Lines & Cable Network	-	1.15	-	1.15	0.01
7	Vehicles	-	-	-	-	-
8	Furniture & Fixtures	-	0.01	-	0.01	0.00
9	Office Equipment	-	0.00	-	0.00	0.00
10	Assets not in use	-	-	-	-	-
	Total	-	22.33	-	22.33	0.09

Table 5.112 : Actual Depreciation Charges of Lakroh MHP for FY 2018-1	19
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#### Table 5.113 : Provisional Depreciation Charges of Lakroh MHP for FY 2019-20

		-				(Rs. Cr)
SI. No.	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Depreciation
1	Land & Land rights	0.00	-	-	0.00	-
2	Buildings	2.25	-	-	2.25	0.08
3	Hydraulic Works	9.35	-	-	9.35	0.49
4	Other Civil Works	1.73	0.07	-	1.80	0.06
5	Plant & Machinery	7.83	1.95	-	9.77	0.48
6	Lines & Cable Network	1.15	0.00	-	1.15	0.06
7	Vehicles	-	-	-	-	-
8	Furniture & Fixtures	0.01	-	-	0.01	0.00
9	Office Equipment	0.00	0.01	-	0.01	0.00
10	Assets not in use	-	-	-	-	-
	Total	22.33	2.02	-	24.35	1.17

						(Rs. Cr)
SI. No.	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Depreciation
1	Land & Land rights	0.00	0.00		0.00	-
2	Buildings	2.25	0.01		2.26	0.08
3	Hydraulic Works	9.35	0.02		9.38	0.54
4	Other Civil Works	1.80	0.00		1.81	0.11
5	Plant & Machinery	9.77	0.02		9.80	0.93
6	Lines & Cable Network	1.15	0.00		1.15	0.07
7	Vehicles	-	-		-	-
8	Furniture & Fixtures	0.01	0.00		0.01	-
9	Office Equipment	0.01	0.00		0.01	0.00
10	Assets not in use	-	-		-	-
	Total	24.35	0.06		24.41	1.74

Table 5.114 : Estimated Depreciation Charges of Lakroh MHP for FY 2020-21

 Table 5.115 : Projected Depreciation Charges for Lakroh MHP for FY 2021-22

SI. No.	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Depreciation
1	Land & Land rights	0.00	0.00		0.00	-
2	Buildings	2.26	0.06		2.32	0.08
3	Hydraulic Works	9.38	0.25		9.63	0.55
4	Other Civil Works	1.81	0.05		1.85	0.12
5	Plant & Machinery	9.80	0.26		10.06	0.94
6	Lines & Cable Network	1.15	0.03		1.18	0.07
7	Vehicles	-	-		-	-
8	Furniture & Fixtures	0.01	0.00		0.01	-
9	Office Equipment	0.01	0.00		0.01	0.00
10	Assets not in use	-	-		-	-
	Total	24.41	0.66		25.07	1.76

#### Table 5.116 : Projected Depreciation Charges for Lakroh MHP for FY 2022-23

			-			(Rs. Cr)
SI. No.	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Depreciation
1	Land & Land rights	0.00	0.00		0.00	-
2	Buildings	2.32	0.08		2.40	0.08
3	Hydraulic Works	9.63	0.31		9.94	0.57
4	Other Civil Works	1.85	0.06		1.91	0.12
5	Plant & Machinery	10.06	0.33		10.39	0.97
6	Lines & Cable Network	1.18	0.04		1.22	0.08
7	Vehicles	-	-		-	-
8	Furniture & Fixtures	0.01	0.00		0.01	-
9	Office Equipment	0.01	0.00		0.01	0.00
10	Assets not in use	-	-		-	-
	Total	25.07	0.82		25.89	1.81

(Rs. Cr)

						(Rs. Cr)
SI. No.	Value of A Particulars	SSETS and Depre Opening GFA	Addition	24 (Projected) ( Withdrawn	INR Cr) Closing GFA	Depreciation
1	Land & Land rights	0.00	-	-	0.00	-
2	Buildings	2.40	-	-	2.40	0.08
3	Hydraulic Works	9.94	-	-	9.94	0.58
4	Other Civil Works	1.91	-	-	1.91	0.12
5	Plant & Machinery	10.39	-	-	10.39	0.99
6	Lines & Cable Network	1.22	-	-	1.22	0.08
7	Vehicles	-	-	-	-	-
8	Furniture & Fixtures	0.01	-	-	0.01	-
9	Office Equipment	0.01	-	-	0.01	0.00
10	Assets not in use	-	-	-	-	-
	Total	25.89	-	-	25.89	1.84

Table 5.117 : Projected Depreciation Charges for Lakroh MHP for FY 2023-24

MePGCL humbly prays before the Commission to kindly approve the depreciation charges for Lakroh MHP as computed above.

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

According to Regulation 33.1 of MSERC MYT Regulations 2014

*"For the purpose of tariff determination, depreciation shall be computed in the following manner:* 

a) 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.

- b) For new assets, the approved/accepted cost for the asset value shall include foreign currency funding converted to equivalent rupee at the exchange rate prevalent on the date of foreign currency actually availed but not later than the date of commercial operation.
- c) 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.
- d) 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.

Provided that land is not a depreciable asset and its cost shall be excluded from the capital cost while computing the historical cost of the asset.

- *e)* Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro-rata basis.
- f) The remaining depreciable value as on 31st March of the year closing after a period of 12 years from the date of commercial operation shall be spread over the balance useful life of the asset."

Table 5.118 : Actual Depreciation Charges for Lakroh MHP for FY 2018-19
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(Rs. Cr)

SI. No.	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Depreciation
1	Land & Land rights	-		-	0.00	-
2	Buildings	-	2.18	-	2.18	0.00
3	Hydraulic Works	-	8.98	-	8.98	0.04
4	Other Civil Works	-	1.66	-	1.66	0.00
5	Plant & Machinery	-	5.10	-	5.10	0.02
6	Lines & Cable Network	-	1.10	-	1.10	0.00
7	Vehicles	-		-		
8	Furniture & Fixtures	-	0.009	-	0.009	0.00
9	Office Equipment	-	0.002	-	0.002	0.00
10	Assets not in use	-	-	-	-	
	Total	-	19.03	-	19.03	0.06
	Dep for 1 month for FY 2018-19					
	Grants Available				11.07	
	Dep on Grants at 0.32%					0.04
	Net Depreciation					0.02

#### Table 5.119 : Provisional Depreciation Charges for Lakroh MHP for FY 2019-20

						(Rs. Cr)
SI.	Particulars	Opening	Addition	With	Closing	Depreciati
No.		GFA		drawn	GFA	on
1	Land & Land rights	0.00	-	-	0.00	-
2	Buildings	2.18	-	-	2.18	0.06
3	Hydraulic Works	8.98	-	-	8.98	0.43
4	Other Civil Works	1.66		-	1.66	0.05
5	Plant & Machinery	5.10		-	5.10	0.24
6	Lines & Cable Network	1.10		-	1.10	0.05
7	Vehicles			-		
8	Furniture & Fixtures	0.009		-	0.009	0.00
9	Office Equipment	0.002		-	0.002	0.00
10	Assets not in use	-		-	-	
	Total	19.03		-	19.03	0.83
	Grants Available				11.75	
	Dep on Grants at 4.36%					0.51
	Net Depreciation					0.32

						(Rs. Cr)
SI. No.	Particulars	Opening GFA	Addition	With drawn	Closing GFA	Depreciation
1	Land & Land rights	0.00	0.00		0.00	-
2	Buildings	2.18	0.01		2.19	0.06
3	Hydraulic Works	8.98	0.02		9.00	0.43
4	Other Civil Works	1.66	0.00		1.66	0.05
5	Plant & Machinery	5.10	0.03		5.13	0.24
6	Lines & Cable Network	1.10	0.00		1.10	0.05
7	Vehicles		-			
8	Furniture & Fixtures	0.009	0.00		0.009	0.00
9	Office Equipment	0.002	0.00		0.002	0.00
10	Assets not in use	-	-			
	Total	19.03	0.06	-	19.09	0.83
	Grants Available				11.75	
	Dep on Grants at 4.35%					0.51
	Net Depreciation					0.32

#### Table 5.120 : Estimated Depreciation Charges for Lakroh MHP FY 2020-21

#### Table 5.121 : Depreciation Charges Estimated of Lakroh MHP for FY 2021-22

(Rs. Cr)

SI. No.	Particulars	Opening GFA	Addition	With drawn	Closing GFA	Depreciation
1	Land & Land rights	0.00	0.00		0.00	
2	Buildings	2.19	0.06		2.25	0.06
3	Hydraulic Works	9.00	0.25		9.25	0.43
4	Other Civil Works	1.66	0.06		1.72	0.05
5	Plant & Machinery	5.13	0.26		5.39	0.25
6	Lines & Cable Network	1.10	0.03		1.13	0.05
7	Vehicles		0.00		0.00	0.00
8	Furniture & Fixtures	0.009	0.00		0.009	0.00
9	Office Equipment	0.002	0.00		0.002	0.00
10	Assets not in use		-			
	Total	19.09	0.66		19.75	0.84
	Grants Available				11.75	
	Dep on Grants at 4.33%					0.51
	Net Depreciation					0.33

SI. No.	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Depreciation
1	Land & Land rights	0.00	0.00		0.00	
2	Buildings	2.25	0.08		2.33	0.07
3	Hydraulic Works	9.25	0.31		9.56	0.45
4	Other Civil Works	1.72	0.06		1.78	0.05
5	Plant & Machinery	5.39	0.33		5.72	0.26
6	Lines & Cable Network	1.13	0.04		1.17	0.05
7	Vehicles	0.00	-			
8	Furniture & Fixtures	0.009	0.00		0.009	0.00
9	Office Equipment	0.002	0.00		0.002	0.00
10	Assets not in use		-			
	Total	19.75	0.82		20.57	0.88
	Grants Available				11.75	
	Dep on Grants at 4.36%					0.51
	Net Depreciation					0.37

#### Table 5.123 : Depreciation Charges Estimated for Lakroh MHP for FY 2023-24

						(Rs. Cr)
SI. No.	Particulars	Opening GFA	Addition	Withdrawn	Closing GFA	Depreciation
1	Land & Land rights	0.00	-	-	0.00	
2	Buildings	2.33	-	-	2.33	0.07
3	Hydraulic Works	9.56	-	-	9.56	0.45
4	Other Civil Works	1.78	-	-	1.78	0.05
5	Plant & Machinery	5.72	-	-	5.72	0.27
6	Lines & Cable Network	1.17	-	-	1.17	0.05
7	Vehicles		-	-		
8	Furniture & Fixtures	0.009	-	-	0.009	0.00
9	Office Equipment	0.002	-	-	0.002	0.00
10	Assets not in use		-	-		
	Total	20.57	-	-	20.57	0.89
	Grants Available				11.75	
	Dep on Grants at 4.33%					0.51
	Net Depreciation					0.38

Commission considers Depreciation at Rs.0.33 Crore, Rs.0.37 Crore and Rs.0.38 Crore for the Control period FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

(Rs. Cr)

#### 5.6.6 Interest and Finance Charges

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

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 prevailing lending rate of bank and financial institution. It is submitted that the Interest on Loan for the control period has been computed by considering Interest obligation for existing loans as well as for new loans projected to be taken based on the approved capital investment plan for the control period. The details of the loan statement for actuals FY 2018-19, FY 2019-20, estimated FY 2020-21 and projected FY 2021-22, FY 2022-23 and FY 2023-24 along with the interest accrued component for Lakroh MHP is given in Format 7, **Annexure F**.

Justifications for existing loan of Lakroh project is given below:

a) **Lakroh PFC Loan:** This loan shown for Lakroh in FY 2018-19 and FY 2019-20 pertains to the loan spent on the capex work (Format 7 of Annexure G). These loans have interest obligations in the next control period as shown in the statements.

b) Additional loans due to Capex: The loan portion of the capex (Section 4.3.1 of the petition) in the approved Business Plan has been used to arrive at additional loans due to capex head. The interest rate for the loans have been assumed at the average interest rates for Lakroh MHP with a loan tenure of 12 years including 1-year moratorium.

Details of Statement of loans for the capital expenditure has been given in format 7 of **Annexure F.** The summarized statement of Interest and Finance charges to be considered for the Control Period is shown in the table below:

(Rs.Cr)

Particulars	FY 2018- 19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Opening Balance	3.92	5.34	5.88	5.73	5.91	6.18
Addition During the Year	1.42	0.74	0.05	0.59	0.74	0.00
Repayment during the year	0.00	0.20	0.20	0.41	0.46	0.53
Closing Balance	5.34	5.88	5.73	5.91	6.18	5.66
Average Interest Rate	11.25%	11.25%	10.80%	10.75%	10.75%	10.75%
Interest Accrued	0.04	0.63	0.63	0.63	0.65	0.64

\*- The Interest Accrued for FY 2018-19 has been apportioned for 1 month, as Lakroh was commissioned in 01 March 2019, and thus, was operational for just one month during FY 2018-19.

MePGCL humbly prays before the Commission to kindly approve the Interest and Finance Charges for Lakroh MHP as computed above.

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

According to Regulation 32.1 of MSERC Regulation 2014

"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 interest and finance charges attributable to capital work in progress shall be excluded. Provided that neither penal interest nor overdue interest shall be allowed for computation of tariff."

The project commencement has been considered as 2009. The details of source wise opening balance of loans is not filed in the petition. The Licensee shall file the details of source wise opening balance of loans for True up of FY 2018-19 to FY 2020-21. In the absence of data, the Interest and Finance charges are considered provisionally

based on the projections filed by the licensee for 3<sup>rd</sup> MYT control period.

Table 5.125 : Approved Interest and Finance Charges for Lakroh MHP for the Control Period	I
(Rs.	.Cr)

Particulars	FY 2018- 19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Estimated)	FY 2022-23 (Estimated)	FY 2023-24 (Estimated)
Opening Balance	3.92	5.34	5.88	5.73	5.91	6.18
Addition During the Year	1.42	0.74	0.05	0.59	0.74	0.00
Repayment during the year	0.00	0.20	0.20	0.41	0.46	0.53
Closing Balance	5.34	5.88	5.73	5.91	6.18	5.66
Average Interest Rate	11.25%	11.25%	10.80%	10.75%	10.75%	10.75%
Interest Accrued	0.04	0.63	0.63	0.63	0.65	0.64

Commission considers Interest and Finance Charges at Rs.0.63 Crore, Rs.0.65 Crore and Rs.0.64 Crore for the Control period FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

#### 5.6.7 Interest on Working Capital

#### Petitioner's Submission

As per Regulation 21 of MSERC (Terms and Conditions for Determination of Tariff for Generation from Renewable Energy Sources) Regulations, 2014, the components of working capital will be:

#### "21 Interest on Working Capital

(1) The Working Capital requirement in respect of wind energy projects, small hydro power, solar PV and Solar thermal power projects shall be computed as under:

a) Operation & Maintenance expenses for one month;

b) Receivables equivalent to 2 (Two) months of energy charges for sale of electricity calculated on the normative Capacity Utilisation Factor (CUF);"

Based on the above, the Interest on Working Capital can be computed as follows:

Table 5.126 : Projected Interest on Working Capital for Lakroh MHP for the Control Period

						(RS.Cr)
Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
O&M for 1 Month	0.03	0.03	0.04	0.04	0.05	0.05
Maintenance Spares	0.05	0.06	0.07	0.08	0.08	0.09
Receivables for 2 Months (Net AFC in Section 4.9)/6	0.04	0.56	0.69	0.70	0.72	0.74
Total (INR Crore)	0.12	0.65	0.81	0.82	0.86	0.87
Interest Rate (%)	13.45%	13.20%	12.15%	12.15%	12.15%	12.15%
Interest on Working Capital	0.02	0.09	0.10	0.10	0.10	0.11

MePGCL humbly prays before the Commission to kindly approve the Interest on Working Capital for Lakroh MHP as computed above and as per the norms stated above.

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

Commission has considered the Approval of Capital cost and ARR for 3<sup>rd</sup> MYT control period as per the MSERC MYT Regulations 2014.

According to Regulation 34.1(iii) of MSERC MYT Regulations 2014

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

- Operation and maintenance expenses for one (1) month;
- Maintenance spares at the rate of 15% of O & M expenses escalated at 6% from the date of commercial operation; and
- *Receivables equivalent to two (2) month of fixed cost:*

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

Interest on working capital shall be allowed at a rate equal to the State Bank Advance Rate (SBAR) as on 1stApril of the financial year in which the Petition is filed." Table 5.127 : Approved Interest on Working Capital for Lakroh MHP for the Control Period

						(Rs.Cr)
Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Estimated)	FY 2022-23 (Estimated)	FY 2023-24 (Estimated)
O&M Expenses	0.38	0.40	0.54	0.57	0.60	0.63
O&M for 1 Month	0.03	0.03	0.05	0.05	0.05	0.05
Maintenance Spares @15% escalated to 6%	0.00	0.06	0.09	0.09	0.09	0.10
Receivables for 2 Months of AFC	0.00	0.28	0.30	0.31	0.33	0.34
Total (INR Crore)	0.03	0.37	0.44	0.45	0.47	0.49
Interest Rate (%)	13.45%	13.20%	12.15%	12.15%	12.15%	12.15%
Interest on Working Capital	0.00	0.05	0.05	0.05	0.06	0.06

Commission considers Interest on Working Capital at Rs.0.05 Crore, Rs.0.06 Crore and Rs.0.06 Crore for the Control period FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

# 5.6.8 Annual Revenue Requirement (ARR) for each year of the control period Petitioner's Submission

Based on the above submissions, the ARR for each year of the Control Period would be as shown in the following table. MePGCL prays before the Commission to approve the AFC for the control period as claimed by it.

Particulars	FY 2018-19 (Actual)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Projected)	FY 2022-23 (Projected)	FY 2023-24 (Projected)
Interest on Loan capital	0.04	0.63	0.63	0.63	0.65	0.64
Depreciation	0.09	1.17	1.74	1.76	1.81	1.84
O&M Expenses	0.03	0.37	0.50	0.53	0.56	0.59
Interest on working capital	0.02	0.09	0.10	0.10	0.10	0.11
Return on Equity	0.04	1.12	1.17	1.19	1.22	1.24
Total Annual Fixed Cost	0.23	3.38	4.13	4.20	4.35	4.42

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

The licensee has filed petition for approval of the capital cost for Lakroh project and approval of Provisional ARR for FY 2018-19 to FY 2020-21 and for 3<sup>rd</sup> MYT Control period FY 2021-22 to FY 2023-24.

Commission considering the Additional information/data filed on 22<sup>nd</sup> January, 5<sup>th</sup> February 2021 has approved capital cost and provisional ARR for 2<sup>nd</sup> MYT Control period and 3<sup>rd</sup> MYT control period as depicted in the table below.

Particulars	FY 2018-19 (Provisional)	FY 2019-20 (Provisional)	FY 2020-21 (Estimated)	FY 2021-22 (Estimated)	FY 2022-23 (Estimated)	FY 2023-24 (Estimated)
Interest on Loan capital	0.04	0.63	0.63	0.63	0.65	0.64
Depreciation	0.02	0.32	0.32	0.33	0.37	0.38
O&M Expenses	0.03	0.40	0.54	0.57	0.60	0.63
Interest on working capital	0.00	0.05	0.05	0.05	0.06	0.06
Return on Equity	0.00	0.31	0.31	0.32	0.35	0.37
Total Annual Fixed Cost	0.09	1.71	1.85	1.90	2.03	2.08

Table 5.129 : Approved ARR for Lakroh mini HEP for 2<sup>nd</sup> and 3<sup>rd</sup> MYT Control period

Commission considers ARR at Rs.1.90 Crore, Rs.2.03 Crore and Rs.2.08 Crore for 3<sup>rd</sup> MYT Control period FY 2021-22, FY 2022-23 and FY 2023-24 respectively.

## 5.7 <u>Consolidated ARR for MePGCL Old Plants projects including Sonapani,</u> <u>MLHEP, New Umtru project and Lakroh projects for 3<sup>rd</sup> MYT Control Period</u> FY 2021-22 to FY 2023-24

Commission after Prudence check of the petition, considering the Statement of Accounts for FY 2018-19 and FY 2019-20, the approved business plan for 3<sup>rd</sup> MYT control period, the additional information subsequently filed on 3<sup>rd</sup> February 2021, taking into account, the objections raised by the stakeholders, the response of the licensee for the objections, the minutes of the Public hearing process and views of the State advisory committee, has considered the ARR for 3<sup>rd</sup> MYT control period FY 2021-22, FY 2022-23 and FY 2023-24 as depicted in the table below.

# Table 5.130 : Consolidated ARR for MePGCL Old Projects including Sonapani, MLHEP , NewUmtru & Lakroh projects for 3rd MYT Control Period FY 2021-22 to FY 2023-24

					(Rs.Cr)			
SI.	Particulars		ojected by MeP		Approved by the Commission			
No.	MePGCL Old Projects Including Sonapa	FY 2021-22	FY 2022-23	FY 2023-24	FY 2021-22	FY 2022-23	FY 2023-24	
	Interest & Finance Charges	27.87	35.53	46.25	5.10	9.70	8.72	
1		11.16	20.13	30.02	0.43	6.87	15.86	
2	Depreciation							
3	O&M Expenses	100.01	108.22	117.35	44.71	46.97	49.35	
4	Interest on working capital	5.62	6.41	8.20	2.19	2.77	3.10	
5	Return on Equity	0.87	2.68	47.23	0.79	7.19	15.72	
6	SLDC Charges	1.85	1.94	2.04	1.85	1.94	2.04	
7	Net Prior Period Items/ Provision for bad debts	0.00	0.00	0.00	0.00	0.00	0.00	
8	Total ARR	147.38	174.92	251.09	55.07	75.44	94.79	
9	Less: Non-Tariff Income	9.78	10.08	10.38	9.78	10.08	10.38	
10	Net ARR	137.60	164.85	240.71	45.29	65.36	84.41	
	Myntdu Leshkha Hydro Electric Projec		104.05	240.71	45.25	05.50	04.41	
1	Interest on Loan capital	47.22	39.19	31.45	32.71	34.71	33.42	
2	Depreciation	63.47	63.67	63.96	39.56	38.10	35.42	
3	O&M Expenses	50.97	53.88	56.96	41.11	43.46	45.95	
4	Interest on working capital	5.93	5.92	5.92	4.33	4.43	4.43	
5	Return on Equity	54.12	54.29	54.54	40.47	39.28	36.91	
6	Total ARR	221.71	216.95	212.84	158.18	159.98	156.13	
7	Less: Non-Tariff Income	0.014	0.014	0.015	0.014	0.014	0.015	
8	Net ARR	221.69	216.94	212.83	158.17	159.97	156.12	
-	New Umtru					1		
1	Interest on Loan capital	39.73	36.03	32.33	22.43	18.73	15.04	
2	Depreciation	30.22	30.22	30.22	16.33	16.33	16.33	
3	O&M Expenses	18.43	19.48	20.59	17.62	18.63	19.69	
4	Interest on working capital	2.88	2.86	2.84	1.99	1.97	1.95	
5	Return on Equity	25.37	25.37	25.37	16.52	16.52	16.52	
6	Total ARR	116.63	113.97	111.36	74.89	72.18	69.53	
7	Less: Non-Tariff Income	0.060	0.062	0.064	0.060	0.062	0.064	
8	Net ARR	116.57	113.90	111.30	74.83	72.12	69.46	
For I	Lakroh		I		I			
1	Interest on Loan capital	0.63	0.65	0.64	0.63	0.65	0.64	
2	Depreciation	1.76	1.81	1.84	0.33	0.37	0.38	
3	O&M Expenses	0.53	0.56	0.59	0.57	0.60	0.63	
4	Interest on working capital	0.10	0.10	0.11	0.05	0.06	0.06	
5	Return on Equity	1.19	1.22	1.24	0.32	0.35	0.37	
6	Total Annual Fixed Cost	4.20	4.35	4.42	1.90	2.03	2.08	
Grar	nd Total	·	·		·	·	·	
1	MePGCL	137.60	164.85	240.71	45.29	65.36	84.41	
2	MLHEP	221.69	216.94	212.83	158.17	159.97	156.12	
3	New Umtru	116.57	113.90	111.30	74.83	72.12	69.47	
4	Lahroh	4.20	4.35	4.42	1.90	2.03	2.08	
	Net Total ARR	480.06	500.04	569.26	280.19	299.48	312.08	
	Less: Surplus of Revenue in True up for FY 2017-18				114.47	-	-	
	Grand Total	480.06	500.04	569.26	165.72	299.48	312.08	

The Surplus of the Revenue at Rs.114.47 Crore as notified in the True up orders dated 13.10.2020 for FY 2017-18 is adjusted from the Net ARR for FY 2021-22 in the ratio of surplus revenue reported for MePGCL Old projects, MLHEP and NUHEP for True up of FY 2017-18 as detailed in the following table.

(Rs.Cr)

			(13.01)		
Project Name	Sale of Power Claimed from MePDCL (Rs.Cr)	Revenue Reported through True up Petition FY 17-18	Surplus of Revenue deducted in terms of percentage under-reported for FY 17-18		
MePGCL Old Projects	90.58	50.47	24.16		
MLHEP	178.65	100.49	60.12		
New Umtru	74.82	40.39	30.19		
Total	344.05	191.35	114.47		

Table 5.131 : Net ARR after deduction of surplus revenue for Rs.114.47 Crore.

Project Name	Approved ARR for FY 2021-22	Surplus of Revenue deducted in terms of percentage under- reported for FY 17-18	Net ARR considered for Annual Fixed Charges for FY 2021-22		
MePGCL Old Projects 45.29		24.16	21.13		
MLHEP	158.17	60.12	98.05		
New Umtru	74.83	30.19	44.64		
Total	278.29	114.47	163.82		
Add: Lakroh ARR	1.90	0.00	1.90		
Net ARR	280.19	114.47	165.72		

MePDCL had filed Review Petition on the True up orders dated 13.10.2020 for FY 2017-18 wherein it is submitted that the Power purchase cost of MePGCL was claimed at Rs.354.43 Crore as against which commission had approved Rs.344.05 Crore in the True up orders for FY 2017-18.

Commission has examined the details of the power purchase cost claimed by MePGCL amounted to Rs.352.65 Crore with reference to the invoices raised by MePGCL.

The verification of invoices revealed that MePGCL has claimed Power Purchase bills for October 2017 and November 2017 twice and the commission had considered lesser claim instead of Revised claim, as a result short of power purchase cost was allowed in the True up orders of MePDCL for FY 2017-18 to a tune of Rs.8.60 crore.

This anomaly has been rectified in the Review orders passed on.....for MePDCL.

The same effect shall be carried out in the Review orders filed by MePGCL which is pending for want of certain additional information.

As soon as MePGCL files the additional information, the anomaly pointed out by MePDCL shall be carried out in the Review orders to be passed for MePGCL for FY 2017-18.

6. Determination of Annual Fixed Charges for FY 2021-22 for MePGCL Old Projects including Sonapani, MLHEP, New Umtru and Lakroh Projects

Annual Fixed charges for the FY 2021-22 for MePGCL Old Projects including Sonapani, MLHEP, New Umtru and Lakroh Projects

As per Regulation 57

**"57** Computation and payment of capacity charge and energy charge for Hydro generating stations.

57.1 Capacity Charges:

(1) The fixed cost of a hydro generating station shall be computed on annual basis, based on norms specified under these regulations, and recovered on monthly basis under capacity charge (inclusive of incentive) and energy charge, which shall be payable by the beneficiaries in proportion to their respective allocation in the saleable capacity of the generating station, that is to say, in the capacity excluding the free power to the home State:

Provided that during the period between the date of commercial operation of the first unit of the generating station and the date of commercial operation of the generating station, the annual fixed cost shall provisionally be worked out based on the latest estimate of the completion cost for the generating station, for the purpose of determining the capacity charge and energy charge payment during such period.

(2) The capacity charge (inclusive of incentive) payable to a hydro generating station for a calendar month shall be

= AFC x 0.5 x NDM / NDY x (PAFM / NAPAF) (in Rupees)

Where,

AFC = Annual fixed cost specified for the year, in Rupees.

NAPAF= Normative plant availability factor in percentage

NDM = Number of days in the month

NDY = Number of days in the year

PAFM = Plant availability factor achieved during the month, in percentage

(3) The PAFM shall be computed in accordance with the following formula:

```
PAFM =10000 x Σ DCi / { N x IC x (100 - AUX ) } %
```

i=1

Where,

AUX = Normative auxiliary energy consumption in percentage

DCi = Declared capacity (in ex-bus MW) for the ith day of the Month which the station can deliver for at least three (3) hours, as certified by the nodal load dispatch centre after the day is over.

IC = Installed capacity (in MW) of the complete generating station

N = Number of days in the month

#### 57.2 Energy Charges:

(1) The energy charge shall be payable by every beneficiary for the total energy scheduled to be supplied to the beneficiary, excluding free energy, if any, during the calendar month, on ex power plant basis, at the computed energy charge rate. Total Energy charge payable to the generating company for a month shall be:

= (Energy charge rate in Rs. / kWh) x {Scheduled energy (ex-bus) for the month in kWh} x (100 – FEHS) / 100.

(2) Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis, for a hydro generating station, shall be determined up to three decimal places based on the following formula, subject to the provisions of clause (4):

ECR = AFC x 0.5 x 10 / { DE x ( 100 - AUX ) x ( 100 - FEHS )} Where,

DE = Annual design energy specified for the hydro generating station, In MWh, subject to the provision in clause (6) below.

FEHS = Free energy for home State as fixed from time to time, by competent authority.

(3) In case actual total energy generated by a hydro generating station during a year is less than the design energy for reasons beyond the control of the generating company, the following treatment shall be applied on a rolling basis:

- (i) in case the energy shortfall occurs within ten years from the date of commercial operation of a generating station, the ECR for the year following the year of energy shortfall shall be computed based on the formula specified in clause (2) with the modification that the DE for the year shall be considered as equal to the actual energy generated during the year of the shortfall, till the energy charge shortfall of the previous year has been made up, after which normal ECR shall be applicable;
- (ii) in case the energy shortfall occurs after ten years from the date of commercial operation of a generating station, the following shall apply:
  Suppose the specified annual design energy for the station is DE MWh, and the actual energy generated during the concerned (first) and the following (second) financial years is A1 and A2 MWh respectively, A1 being less than DE. Then, the design energy to be considered in the formula in clause (5) of this Regulation for calculating the ECR for the third financial year shall be moderated as (A1 + A2 DE) MWh, subject to a maximum of DE MWh and a minimum of A1 MWh.
- (iii) Actual energy generated (e.g. A1, A2) shall be arrived at by multiplying the net metered energy sent out from the station by 100 / (100 – AUX).
- (4) In case the energy charge rate (ECR) for a hydro generating station, as computed in sub clause (2) above, exceeds eighty paise per kWh, and the actual saleable energy in a year exceeds { DE x ( 100 – AUX ) x ( 100 – FEHS ) / 10000} MWh, the Energy charge for the energy in excess of the above shall be billed at eighty paise per kWh only:

Provided that in a year following a year in which total energy generated was less than the design energy for reasons beyond the control of the generating company, the energy charge rate shall be reduced to eighty paise per kWh after the energy charge shortfall of the previous year has been made up.

(5) The concerned Load Despatch Centre shall finalize the schedules for the hydro generating stations, in consultation with the beneficiaries, for optimal utilization of all the energy declared to be available, which shall be scheduled for all beneficiaries in proportion to their respective allocations in the generating station."

			Filed by MePGCL					Approved by the Commission					
SI. No	Name of the Power Station	Installed Capacity (MW)	Gross Generation (MU) as approved in Business Pan	Net Generation (MU) as approved in Business plan	Annual Fixed Charge (INR Cr)	Capacity Charge (INR Cr)	Energy Charge (Rs/Unit)	Installed Capacity (MW)	Gross Generation (MU) as approved in Business Pan	Net Generation (MU) as approved in Business plan	Net Generation (MU) as approved in Business plan	Annual Fixed Charge (INR Cr)	Energy Charge (Rs/Unit)
1	Umiam I	36.00	116.00	114.61	15.91	7.96	0.69	36.00	116.00	114.61	4.29	2.14	0.36/kWh
2	Umiam II	20.00	46.00	45.45	8.84	4.42	0.97	20.00	46.00	45.45	2.38	1.19	0.52/kWh
3	Umiam III	60.00	139.00	137.33	26.52	13.26	0.97	60.00	139.00	137.33	7.14	3.57	0.51/kWh
4	Umiam IV	60.00	207.00	203.00	26.52	13.26	0.65	60.00	207.00	203.00	7.14	3.57	0.34/kWh
5	Sonapani (Mini Hydel)	1.50	5.00	4.94	0.66	0.33	0.67	1.5	5.00	4.94	0.18	0.09	0.36/kWh
	Total	177.50	513.00	506.20	78.4	39.20	0.77	177.50	513.00	506.20	21.13		
6	MLHEP	126.00	486.00	478.71	89.85	45.00	1.88	126	486.00	478.71	98.05	49.02	2.02/kwh
7	NUHEP	40.00	235.00	231.48	51.62	25.81	2.23	40	235.00	231.48	44.64	22.32	1.90/kwh
8	Lakroh MHP	1.50	11.00	10.84	2.10	1.05	1.94	1.5	11.00	10.84	1.90	0.95	1.73/kwh
	Total	345	1245	1227.23	221.97	110.98	1.80	345.00	1245.00	1227.23	165.72	82.86	1.33/kwh

#### Consolidated Annual Fixed Charges for FY 2021-22

Commission after prudent check of the petition filed by MePGCL as also additional data provided for the queries raised, has determined ARR and Annual Fixed Charges for the Generation Stations existing for the FY 2021-22. The Licensee shall recover the Annual Fixed Charges from the beneficiary as allocated plant wise in the table below.

SI. No	Name of the Plant	Installed Capacity (MW)	Designed Energy (MU)	AFC Allocation (Rs. Cr)	50 % as capacity charges (Rs. Cr)	50 % as energy charges	Average Tariff Rs. Ps/ kWh
1	Umiam Stage I	36	116.00	4.29	2.14		0.36/kWh
2	Umiam Stage II	20	46.00	2.38	1.19		0.52/kWh
3	Umiam Stage III	60	139.00	7.14	3.57		0.51/kWh
4	Umiam Stage IV	60	207.00	7.14	3.57		0.34/kWh
6	Sonapani	1.5	5.00	0.18	0.09		0.36/kWh
7	Total Old Stations	177.50	513.00	21.13			
8	MLHEP	126	486.00	98.05	49.02		2.02/kwh
9	New Umtru	40	235.00	44.64	22.32		1.90/kwh
10	Lakroh	1.5	11.00	1.90	0.95		1.73/kwh
11	Total	345.00	1245.00	165.72	82.86		1.33/kwh

Table 6. 1: Annual Fixed Charges for the FY 2021-22

- MePGCL shall claim 50 % of the annual fixed charges in 12 monthly installments from the beneficiary MePDCL.
- (ii) Energy charges shall be claimed for actual generation during the month as per Average tariff in the above table.

## 7. Directives

#### 7.1 Earlier Directives

#### 1. Filing of Tariff Petition for FY 2019-20

There has been a gap in the incumbency of the competent Commission. The Petition filed by the Licensee for approval of the ARR and Tariff order for FY 2019-20 was not registered. The Licensee had to implement the tariff orders passed on 31.03.2018, till 31.03.2020. The Licensee shall render the regulatory accounts for FY 2019-20 duly audited by C&AG for true up of business.

#### Commission's Review:

Delay in filing of the True up petitions causing delay in recovery of charges attributing to levy/claim of interest on the borrowed money.

The Licensee shall expedite filing of petitions as per the due dates.

#### 2. Filing of Petition for New Umtru and Lakroh

MePGCL shall file the petition for approval of capital cost and final tariff with all the required data for Lakroh project.

#### Status:

The True up petition of New Umtru H.E. Project for FY 2017-18 was filed on 30<sup>th</sup> June, 2020. For FY 2018-19, the CAG's report has not been obtained and, therefore, the true up petition for FY 2018-19 has not been filed. The petition will be filed once the CAG's report is available.

The Final tariff petition for Lakroh SHP will be filed by 30<sup>th</sup> November 2020.

#### **Commission's Review:**

Commission had issued orders in FY 2021-22, the Directive is dropped.

#### **3.** Financial statements of Accounts:

The Commission directs MePGCL to get the accounts audited by C&AG up to FY 2019-20 as per the Schedule without subjecting the carrying cost claim.

Status:

Compilation of the accounts for FY 2018-19 was completed and the process of auditing the same has been taken up by the Accounts Wing of MeECL.

#### Commission's Review:

Delay in filing of the True up petitions causing delay in recovery of charges attributing to levy/claim of interest on the borrowed money.

The Licensee shall expedite filing of petitions as per the due dates.

#### 4. Assets Records and Project wise Breakup

The Licensee was directed to maintain Assets records for each project, since all the Old plants have served their life, allowing RoE and depreciation on those assets would result in excess recovery of costs and tariffs. The asset records shall be duly verified as per the Regulations and ensure to delete the value of assets from the asset base in the Regulatory books for the purpose of calculation of RoE and Depreciation. MePGCL has not complied with the Directive. The Licensee shall submit a report by June 2020.

MePGCL is directed to maintain separate asset records of MLHEP and submit to the Commission by June 2020.

#### Status:

MePGCL has a consolidated Statement of Accounts for the corporation as a whole. However, individual asset records of old plants (including sonapani), MLHEP, NUHEP and lakroh can be segregated from this consolidated SOA. The asset records of MLHEP, NUHEP and lakroh MHP were submitted to the Commission vide letter no. MePGCL/D/GEN/M-43/2008/Pt-XIV/19 Dt.30.06.2020 in compliance with this directive.

#### Commission's View:

Licensee has been filing separate ARR project wise, the breakup of assets for MePGCL old projects approved by the commission at Rs.49.39 Crore shall be filed in all the future applications. The segregated breakup for MLHEP, New UMTRU HEP and Lakroh shall invariably be filed in all future applications.

### 7.2 Directives issued in the Tariff Order dated 25.03.2020

#### **Audited Annual Accounts**

The ARR for MYT period FY 2018-19 to FY 2020-21 was approved based on the projected business plan. The Licensee has not been presenting the audited accounts to the Commission as stipulated in the Regulations. The Commission is constrained

to adopt the MYT ARR provisions for want of the audited financial statements up to FY 2018-19.

#### Status:

MePGCL is doing its best to complete the audit of the accounts for FY 2018-19 inspite of the constrains arising out of the COVID-19 situation. While filing true up petitions, the actual expenses as per statements of Accounts audited by the CAG are being used. The audited SOA's reflect the actual expenses of MePGCL and it is prayed that the Commission kindly consider the actual expenses reflected in the SOA's after audit by the CAG, while approving the True up petitions of MePGCL.

#### **Commission's View:**

Licensee shall ensure filing of True up petition for FY 2018-19 and FY 2019-20 immediately; commission considers approval of the expenses admissible as per Regulations.

#### Regulation of Expenses for FY 2013-14 and FY 2014-15

There has been a flaw in the filing of the petitions for approval of the expenses for the past periods of FY 2013-14 and FY 2014-15 where in certain heads of accounts show excess over the admissible expenses in the provisional true up orders.

Commission took up **Suo-Moto** action for Regulatory analysis, and the resultant gaps/surpluses in the **Suo-Moto** true up exercise has been appropriated in the present Tariff Order. The Licensee is directed to comply with the Regulatory provisions without giving room for public objections in claiming the Gaps of the previous years.

#### Status:

Licensee not responded.

#### Commission's View:

The Licensee shall file the True up petition inclusive of suo-motu orders for appropriate action by the commission.

#### 7.3 Regulatory Accounts

The Licensee shall maintain and file Regulatory accounts along with Tariff Petition and for True up petition as mandated in Regulation 4.2 (c) of MYT Regulations 2014. **Status:** 

The Regulatory Accounts shall be maintained as per guidelines/formats once issued by the Commission.

#### Commission's View:

Noted.

#### Annexure-I

## RECORD NOTE OF THE STATE ADVISORY COMMITTEE MEETING HELD ON 22.03. 2021

#### at Pine Wood Hotel, SHILLONG .

#### Time: 13:00 Hours

#### **Members Present in the Meeting**

- Shri. P W Ingty, IAS (Retd.),
   Chairman Meghalaya Sate Electricity Regulatory Commission Shillong.
- 2 Shri. Roland Keishing, Member(Law) Meghalaya State Electricity Regulatory Commission Shillong.
- Principal Secretary/ Commissioner and Secretary Food,
   Civil Supplies and Consumer Affairs, Government of Meghalaya.
- Shri. Shyam Sunder Agarwal,
   CMD(Pioneer Carbide Pvt. Ltd.), Byrnihat, Ri-Bhoi District, Meghalaya.

#### J.B Poon

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Chairman/Former Chairman, The Institution of Engineers(India), Meghalaya

6 Shri. Eswoll Slong, Secretary MSERC, Convenor

#### <u>Minutes</u>

- (1) Chairman MSERC has welcomed the Honorable members of State Advisory Committee
- (2) Director MePDCL, has made Power point Presentation of the Tariff petition filed by MePDCL.
- (3) Principal Secretary/ Commissioner and Secretary Food Civil Supplies and Consumer Affairs, Government of Meghalaya has addressed the Meeting.

The Member stated that the State of Meghalaya has been experiencing unprecedented power cuts. The member opined the distribution company in consultation with the Govt. jointly address the present crisis of power interruptions.

The people of the state expect good services from the Distribution company while justifying a marginal increase in the Tariffs and extend the support for improvement of the performance by the Discom in a Win-Win corporation.

### (4) Shri. Shyam Sunder Agarwal, CMD(Pioneer Carbide Pvt. Ltd.), Byrnihat, Ri-Bhoi District, Meghalaya.

The Member suggested that MeECL shall provide the T&D loss data for the Previous year mandatorily along with the petition for fixation of ARR for FY 2021-22.

It is suggested that ABT meters should be provided mandatorily at 132 KV and 33 KV voltage level to monitor the Transmission losses to the individual feeders at injection and consumers end.

The member also suggested, MePDCL shall file month wise sale of surplus power outside the state with details of buyer. It is pointed out during FY 2019-20 was shown for 554.26 MU surplus power sold at Rs.1.66 Ps/kwh. Table 34 of the petition for FY 2021-22 reveals 286.18 MU surplus power sold against swapping agreement (FY note 23). The above sale as compared to IEX average rate of Rs.2.98 per unit during the FY 2019-20.

The Member further pointed out that Total power sold to HT and EHT consumers within the state was 544 MU inclusive of 379.94 MU sold to Ferro Alloy consumers which is 69.79% during the FY 2019-20.

It is suggested to incentive vise the Ferro Alloy consumers to increase their consumption to reduce the sale of power out side the sate at the rate of Rs.1.66 ps per unit only.

The Surplus power can be offered to HT:EHT level industries at a discounted rate of 30 to 40% which provides utility better revenue realization and reduces T&D losses. There was a confesses on this proposal during the public hearing on 18.3.2021. The Utility may be advice to file voltage wise Network data and T&D losses.

### (5) J.B Poon Chairman/Former Chairman, The Institution of Engineers(India), Meghalaya

The Member has suggested that MePDCL shall expedite audited accounts for the previous years which enables to claim Revenue gap in the ARR's and Tariff petitions.

### (6) Shri. Roland Keishing, Member (Law) Meghalaya State Electricity Regulatory Commission Shillong.

The Member deliberated that all the suggestions and advices proposed by the Members/participants will be shared in the Tariff Orders. The Member also welcomed the corporation and good advices suggested for best welfare of the licensee and consumers at large.

The Chairman MSERC has conveyed thanks to the members/participants for their views and suggestions in the State Advisory committee meeting.

Secretary MSERC has invited members and participants for the lunch hosted by MSERC.

Sd/-

Secretary MSERC

#### Annexure-II

## List of Participants in the Public Hearing on Generation Petition for FY 2021-22 filed by MePGCL

#### Date: 17.03.2021 | Venue: MSERC Conference Hall | Time: 14:30 Hours

#### Present :

- 1. Mr. P. W, Ingty, IAS (Retd), Chairman, MSERC.
- 2. Mr. R. Keishing, Member(Law) MSERC.
- 3. 3. Mr. E. Slong, Secretary, MSERC.

#### MeECL/MePGCL

- 1. Shri. M. Rymbai, Chief Engineer (HP&HC)
- 2. Shri. R. Syiem, Chief Engineer (Generation)
- 3. Shri A. Lyngdoh, Superintending Engineer (PM)
- 4. Shri.Sunny Kr. Singh, Techno-Commercial Assistant
- 5. Shri. A. Battacharjee, Assistant techno legal
- 6. Shri. G.A. Dkhar, Law Officer, MeECL
- 7. Shri. R. Laloo, Senior Accountant Officer, MePGCL
- 8. Smti. L .Kharpran, AAO, MePGCL

#### **Byrnihat Industries Association (BIA)**

- 1. Shri.Shyam Sunder Agarwal, Secretary BIA
- 2. Shri. S. Asati, Consultant BIA
- 3. Smti. Meera Agarwal, Director Pioneer Carbide
- 4. Shri.AbhijeetSrivastav, Executive R.A
- 5. Shri. MohitGoyal, BIA
- 6. Shri. Kaustar Paul

#### **Others**

- 1. Shri. P. K. Shullet, President JAC, MEA
- 2. Shri. A Dkhar, SecretaryDorbarShnongLumawbah
- 3. Shri. C. W. Pariat, Member MEA
- 4. Shri. P. Marwein, Member MEA
- 5. Shri. E. Lyngdoh, Pensioners Association
- 6. Shri. O. L. Warjri, Pensioners Association
- 7. Shri. A. M. Kyndiah, Pensioners Association
- 8. Shri. SanjeevChanda,Advocate