MSERC

Meghalaya State Electricity Regulatory Commission

Aggregate Revenue Requirement
&
Generation Tariff

For

FY 2020-21

For

Meghalaya Power Generation Corporation Limited

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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
SOA	Statement of Accounts
SLDC	State Load Despatch Centre
SBIMCLR	State Bank of India Marginal Cost Lending Rate

MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION

1ST Floor (Front Block Left Wing), New Administrative Building
Lower Lachumiere, Shillong-793001
East Khasi Hills District, Meghalaya

CASE NO. 02/2020

In the matter of

Approval of Aggregate Revenue Requirement and Generation Tariff for FY 2020-21 for the state of Meghalaya.

AND

Meghalaya Power Generation Corporation Limited the Petitioner

(herein after referred to as MePGCL)

Coram

Shri P W Ingty, IAS (Retd)

Chairman

Shri R. Keishing

Member

ORDER

(Date: 25.03.2020)

1. The Meghalaya Power Generation Corporation Limited (herein after referred to as MePGCL) deemed licensee as per sec 14 of EA 2003, 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 Licensee to file an application for determination of Tariff before the Appropriate Commission in such a manner and along with fee as specified under the MSERC 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 under section 62 read with section 86 of the Electricity Act 2003.

3. The Licensee shall file Regulatory accounts along with the petitions for ARR and Tariff and also for True up of the previous years. Licensee has filed Statement of Accounts for FY 2017-18 certified by Statutory Auditors.

4. MePGCL has filed petition for determination of ARR and Generation tariff for FY 2020-21 for all the generation stations on 29.11.2019. Keeping in view the desirability for timely completion of tariff process for the ensuing year FY 2020-21, the Commission provisionally admitted the petition on 09.12.2019 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.

5. The Commission further directed the licensee to publish the petition in an abridged form in accordance with Tariff Regulations detailing the salient features of the ARR and tariff petition for FY 2020-21 inviting objections/suggestions by stake holders and public at large.

   Accordingly the MePGCL has published the notice and sought for the objections/suggestions from stakeholders and general public within 30 days from the date of publication.

   The petitioner was also directed to place the petition on its website and its Headquarters website / other offices for inspection and to obtain relevant extracts by the stakeholders and public.

6. The Commission received some objections and sent them to MePGCL for their response. The Commission received the responses to the suggestions of stake holders/General Public.

   The Commission, in order to ensure transparency in the process of Tariff determination and for providing proper opportunity to all 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 05.03.2020.

7. The Proposal of MePGCL was also placed before the state advisory committee in its meeting held on 12.03.2020 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 2020-21 during the meeting of the Committee.

8. The Commission took into consideration the facts presented by the MePGCL in its petition and subsequent various filings, the suggestions/objections received from stakeholders, consumers' organizations, general public, response of the MePGCL to those suggestions/objections and the suggestions of the State Advisory Committee.

9. Commission considered expenses reported in the SOA for FY 2017-18 and the ARR elements have been computed based on the inflation rates notified by the Govt. of India for FY 2018-19 to FY 2020-21 as per MSERC MYT Regulations 2014.

10. Accordingly, the Commission proceeded for determination of ARR and tariff for FY 2020-21 on the basis of available information and inputs received and in accordance with Commission's Regulations for all Generating stations.

11. After having deliberations with the utilities staff, advisory committee meeting and public hearing, Commission passed this order for determining Aggregate Revenue Requirement (Annual fixed charges) for FY 2020-21 for all generating stations of MePGCL.

12. 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 with and some are partially attended. The Commission has dropped the Directives complied with and the remaining Directives are consolidated and fresh Directives are added.

    For the sake of clarity, this Order has been divided into following chapters.

    Chapter 1 - Introduction and brief history

    Chapter 2 - Summary of ARR & Petition for Generation Tariff for FY 2020-21

    Chapter 3 - Public Hearing process, Stakeholder's objections and Petitioner's response and Commission's comments

    Chapter 4 - Commission's Approach

    Chapter 5 - Commission's Analysis, Scrutiny and Approval of ARR for FY 2020-21 & SUO-MOTO action for True up of Business for Previous Years FY 2013-14 and FY 2014-15.

    Chapter 6 - Project wise Generation Tariff for FY 2020-21.

    Chapter 7 - Directives

13. The MePGCL shall ensure implementation of the order from the effective date after issuance of a public notice in such a font size which is clearly visible in two daily news papers having wide circulation in the state within a week and compliance of the same shall be submitted to the Commission.

14. This order shall be effective from 1st April, 2020 and shall remain in force till 31st March, 2021 or till the next Tariff Orders of the Commission.

Shri R. Keishing **Shri P W Ingty, IAS (Retd)**

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 31st 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 1st 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.

The Licensee 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.

A. The Meghalaya Power Generation Corporation Limited (here after referred to as MePGCL or Petitioner) has filed its petition on 29.11.2019 under section 64 (1) of the Electricity Act, 2003 read with Meghalaya State Electricity Regulatory Commission MYT Regulations, 2014 for determination of Aggregate Revenue Requirement and Generation tariff for FY 2020-21.

B. 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 was to implement the tariff orders passed on 31.03.2018 till 31.03.2020. The Licensee shall file true up petition for FY 2019-20 along with audited accounts and C&AG report.

1.4 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.

1.5 Filing of Tariff Petition

Regulation 18 provides that each Licensee shall file a tariff petition on or before 30th 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.

1.6 Admission of the Petition

The MePGCL has submitted the current petition for determination of Aggregate Revenue Requirement (ARR) and Generation tariff for FY 2020-21.The Commission undertook the technical validation of the Petition and admitted the Petition Provisionally on 09.12.2019.

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(2) 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 objections/suggestions from general public and other stake holders. MePGCL has published the Notice in the following newspapers and sought objections/suggestions within 30 days from date of publication.

Table 1.1 : Details of Public Notice

Sl. No	Name of News paper	Language	Date of Publication
1	The Shillong Times (shilling issue)	English	19.12.2019 & 20.12.2019
2	The Shillong Times (Tura issue)	English	19.12.2019 & 20.12.2019
3	U Nongsain Hima	Khasi	19.12.2019 & 20.12.2019
4	Salantini Janera	Garo	19.12.2019 & 20.12.2019

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 on or before 05.03.2020.

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 05.03.2020 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.

The Commission also held meeting with State Advisory committee on 12.03.2020. 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 ARR and Determination of Generation Tariff for FY 2020-21

2.1 Back Ground:

Existing Generating Stations and Installed Capacity

MePGCL started functioning as an independent commercial entity from 1st April 2013. The power generated by the MePGCL stations is sold to MePDCL as per the power purchase agreements signed, and supplied energy to MePDCL at MePTCL interface points. At present MePGCL is having 8 Hydro Generating stations, 4 of these are storage type and 4 are run of the river stations. The details about existing stations are mentioned below:

Table 2.1 : Details of existing stations

Sl. No	Station	Type	No of Units/ Capacity	COD	Capacity (MW)
1	Umiam Stage-I	Storage/ Pondage	4*9 MW	FY 1966	36
2	Umiam Stage-II		2*10 MW	FY 1971	20
3	Umiam Stage-III		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	ROR	4*2.8 MW	Unit 1-3: FY 1958 Unit 4: FY 1969	11.2
6	Sonapani HEP		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 2018	40
	Total				**354.70**

2.2 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 314.7 MW and 40 MW New Umtru in 2017.

All the Generating Stations except Sonapani Mini Hydel Project and Leshka, 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 31st July 2017, was as shown in the table below.

Table 2.2 : Installed Capacity of MePGCL

S. No	Name of the Station	No. of Units	Capacity (MW)	Total Capacity (MW)	Year of Commissioning
1	Umiam Stage	I	9	36	21.02.1965
		II	9		16.03.1965
		III	9		06.09.1965
		IV	9		09.11.1965
2	Umiam Stage- II	I	10	20	22.07.1970
		II	10		24.07.1970
3	Umiam Stage- III	I	30	60	06.01.1979
		II	30		30.03.1979
4	Umiam Stage- IV	I	30	60	16.09.1992
		II	30		11.08.1992
5	Umtru Power Station	I	2.8	11.2	01.04.1957
		II	2.8		01.04.1957
		III	2.8		01.04.1957
		IV	2.8		12.07.1968
6	Sonapani Mini Hydel	I	1.5	1.5	27.10.2009
7	MLHEP (Leshka)	I	42.	126	01.04.2012
		II	42		01.04.2012
		III	42		01.04.2013
8	New Umtru			40	01.07.2017
	Total			**354.70**	

MePGCL had a total installed Capacity of 354.70 MW with all the generating stations in FY 2016-17, 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. The Units of Umtru suffered 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.

2.3 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:

Table 2.3 : Historical Energy Generation

(MU)

Sl.No	Station	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
1	UMIAM Stage-I	102.87	79.10	90.4	114.06	96.63
2	UMIAM Stage –II	50.40	41.35	46.00	58.26	50.23
3	UMIAM Stage-III	132.00	133.57	113.11	117.50	65.30
4	UMIAM Stage-IV	185.25	174.86	162.72	185.01	166.12
5	Umtru Power Station	30.40	20.99	15.27	1.41	0.00
6	Sonapani HEP	7.2	5.4	5.75	6.29	7.633
7	Leshka HEP	198.37	413.22	409.38	445.93	443.85
	Total	706.49	868.49	842.62	928.46	829.76

2.4 New Generation Capacity

In addition to the existing capacity, MePGCL is also currently executing works of Lakroh & Ganol Mini Hydel Projects which are proposed for commissioning in FY 2019-20.

Table 2.4 : Details of upcoming Stations

Sl. No	New Station	Design Energy (MU)	Capex Outlay (Rs. Cr)	Debt (Rs .Cr)	Equity (Rs. Cr)	Grant (Rs. Cr)
1	Ganol SHP	67.09	356.42	146.90	62.96	146.57
2	Lakroh MHP	11.01	20.48	6.46	2.77	11.25

2.5 Operational Norms

The following sections outline details of operational norms for computation of energy generation for FY 2020-21 based on MYT Regulations, 2014 or past trend as the case may be.

Table 2.5 : Normative Annual Plant Availability Factor

Sl. No	Station Particular	Norm
a)	Storage and Pondage type plants : where plant availability is not affected by silt and	
I)	With 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

Note:

i) 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.

Table 2.6 : NAPAF's for all Generating stations

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

Table 2.7 : Auxiliary Consumption and Transformation Loss

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

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 Honourable Commission

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
Umtru	0.7	0.5	1.2
Sonapani	0.7	0.5	1.2

The Auxiliary consumption and Transformation Losses, as actual for MePGCL for FY 2018-19 are furnished below:

Thus MePGCL has operated its plant efficiently and under the norms specified by the Commission considered the auxiliary consumption for plants below the limit set by the Commission in the tariff order for FY 2018-19.

Table 2.9 : Auxiliary consumption and Transformation losses

Name of the Plant	Auxiliary Consumption Transformation Losses (MU)
Umiam Stage- I	1.04
Umiam Stage-II	0.65
Umiam Stage-III	0.71
Umiam Stage-IV	0.66
Umtru	1.15
Sonapani	0.74
Leshka	0.68

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.

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

Name of the Power station	Design Energy (MU)
Umiam Stage- I	116.29
Umiam Stage-II	45.51
Umiam Stage-III	139.4
Umiam Stage-IV	207.5
Umtru	-
New Umtru	180.94
Lakroh	11.01
Mini Hydel (Sonapani)	5.5
Leskha	486.23
Total	**1192.38**

2.7 Computation of Net Energy Generation- Existing Stations:

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.

Table 2.11 : MePGCL Plant Technical Details

Particulars	Umtru	Umiam-I	Umiam-II	Umiam-III	Umiam-IV	Mini Hydel Sonapani	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
No of Hours Peaking	NA	NA	NA	NA	NA	NA	NA
Over Load Capacity (MW) and Peaking	NIL	NIL	NIL	NIL	NIL	NIL	NIL
Type of Excitation							
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 stations Net Generation approved for FY 2018-19 and actual of MePGCL for FY 2015-16 are provided in the table below:

Table 2. 12 : Net Generation approved and Actuals for FY 2018-19

	Approved by Commission in Tariff Order FY 2018-19							MePGCL FY 2015-16			
Sl No	Name of the Power station	Gross Generation (MU)	Aux. Cons (%)	Transformation Loss (%)	Total Loss(Aux + Transformation (%)	Aux Cons & Transformation Loss (MU)	Net Generation (MU)	Gross Generation (MU)	Total Loss(Aux + Transformation (%)	Aux Cons & Transformation Loss (MU)	Net Generation (MU)
1	Umiam - I	116.29	0.70	0.50	1.20	1.40	114.89	114.06	1.04	1.19	112.87
2	Umiam -II	45.51	0.70	0.50	1.20	0.55	44.96	58.26	0.65	0.38	57.88
3	Umiam -III	139.4	0.70	0.50	1.20	1.67	137.73	117.5	0.71	0.84	116.66
4	Umiam e-IV	207.5	1.00	0.50	1.50	3.11	204.39	185.01	0.166	1.22	183.79
5	Umtru Power Station	39.01	0.70	0.50	1.20	0.47	38.54	1.41	1.15	0.06	1.35
6	MiniHydel (Sonapani)	5.5	0.70	0.50	1.20	0.07	5.43	6.29	0.74	0.05	6.24
7	Leskha	486.23						445.93	0.68	3.04	442.89
	Total	**1039.44**				**7.26**	**545.95**	**928.46**		**6.77**	**921.69**

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

Due to non- availability of segregated accounts for Old Plants and Sonapani, MePGCL has filed a petition for MLHEP and MePGCL Old plants separately in the tables below.

Table 2.13 : Summary of ARR for MLHEP for Control Period FY 2018-19 to 2020-21

(INR Cr)

Sl No	Particulars	FY 2016-17 (Provisional)	FY 2017-18 (Estimated)	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
1	Interest on Capital Loan	78.29	64.81	49.27	40.50	34.81
2	Depreciation	61.10	63.01	63.13	63.24	63.24
3	O & M expenses	30.23	31.96	33.79	35.72	37.76
4	Interest on Working Capital	6.37	6.19	5.93	5.83	5.81
5	Return on Equity	53.73	53.73	53.74	53.75	53.75
6	SLDC Charges					
7	Net Prior Period Items	0.01				
	Total Annual Fixed Cost	229.72	219.70	205.85	199.04	195.37
8	Less: Non-Tariff Income	0.03	0.0310	0.0341	0.0375	0.0412
9	Net Annual Fixed Cost	229.70	219.67	205.82	199.00	195.33

MePGCL prays before Commission to kindly approve the Annual Fixed cost of MLHEP for the 2nd MYT Control period FY 2018-19 to FY 2020-21 as submitted above.

Table 2.14 : Summary of AFC for MePGCL Old Plants for Control period (Projected)

(INR Cr)

Sl. No	Particulars	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
		Old Plants + Sonapani (1-2)	Old Plants + Sonapani (1-2)	Old Plants + Sonapani (1-2)
1	Interest and Finance charges	33.28	43.80	57.20
2	Depreciation	12.34	15.49	11.62
3	O & M expenses	83.37	87.80	92.59
4	Employee expenses	100.54	106.00	11.87
5	R & M expenses	9.78	10.32	10.88
6	A & G expenses	6.83	7.21	7.60
7	Interest on working Capital	7.59	8.21	8.89
8	Return on Equity	58.50	61.56	70.11
9	SLDC Charges	1.21	1.27	1.33
10	Net Prior Period Items/ Provision for Bad debts	25.00	25.00	25.00
11	**Total Annual Fixed cost**	**221.29**	**243.13**	**266.73**
12	Less: Non- Tariff income	13.13	14.44	15.88
13	**Net Annual Fixed Cost**	**208.16**	**228.69**	**250.85**

MePGCL submits before Commission to kindly approve the Annual Fixed Cost of Rs.208.16 Crore, Rs. 228.69 Crore, Rs. 250.85 Crore for FY 2018-19, FY 2019-20 and FY 2020-21 respectively for MePGCL's Old Stations.

The Licensee has requested to approve the ARR and Generation Tariff for FY 2020-21.

Table 2.15 : Approved ARR for MePGCL (MLHEP & Old Plants) in MYT Order for FY 2020-21

Sl. No	Particulars	Approved
1	Interest and Finance Charges	47.45
2	Depreciation	57.33
3	O & M expenses	67.18
4	Interest on Working Capital	7.64
5	Return on Equity	56.16
6	SLDC Charges	1.33
7	Net Prior Period Items	-
8	**Gross annual fixed charges**	**237.09**
9	Less Non Tariff Income	15.92
10	**Net Annual Fixed Charges**	**221.17**

3. Public Hearing Process

3.1 Public Hearing Process

Section 64 (2) of electricity act 2003 mandates the distribution licensee to publish the Tariff petition in an abridged format in the leading newspapers inviting the objections/suggestions on the Tariff petition from the stakeholders.

In pursuance of the publication of the Tariff petition in the leading newspapers, M/s Byrnihat Industries Association (BIA) has filed written suggestions/objections on the petition filed by the MePGCL seeking approval of ARR and Determination of Retail Tariff for FY 2020-21.The objections/suggestions by M/s. Byrnihat Industries Association (BIA) and the response of the licensee on the objections/suggestions and the Commission's view have been summarized under various sub-heads as given below.

3.2 Objections of BIA

Byrnihat Industries Association has filed written Suggestions/Objections pursuant to the petition filed by the MePGCL for revision of Tariff for FY 2020-21.

MOST RESPECTFULLY SHOWETH:

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 generation tariff for Myntdu Leshka Power Station (MLP) and old Sonapani FY 2020-21 under the MSERC (Multi Year Tariff) Regulations, 2014 and under Sections 62 and 64 read with Section 86 of Electricity Act, 2003.MePGCL is also seeking revision of tariff for FY 2020-21 based on AFC of FY 2020-21, approved in Order dated 31.03.2018, and pending adjustment of true-up of previous years and review petitions filed by MePCGL.

<u>Respone by MePGCL for Objection 1</u>

Matter of Record

Commission's Remark: Noted

2. At the outset it is pertinent to mention that MePGCL has not made public the certified copy of the instant petition and its annexure and forms. It has also not filed CAG audited accounts from FY 2015-16 till FY 2017-18 and audited/unaudited accounts for FY 2018-19. MePGCL at various places has relied on this Commission's

Order dated 15.11.2017 approving MePGCL's Business Plan however the same is also not available in public domain.

<u>Response by MePGCL for Objection 2</u>

The tariff petition for FY 2020-21 along with annexure is already available in the MeECL website as well as MSERC website. It is not clear how did the objector prepare the Para-wise response to the petition without having a copy of the petition as stated in this Para.

The CAG audited accounts for FY 2015-16 and FY 2016-17 have already been submitted along with the true up petitions filed by MePGCL. Based on the submission of complete set of documents and required annexure, the Commission has also notified the order on the same. The CAG audit for FY 2017- 18 is in progress and will be shared with the Commission at the earliest. The provisional accounts for FY 2018-19 have already been shared with the Commission for necessary action.

It is not clear why the objector is referring to CAG Audit of past years when the petition refers to tariff for FY 2020-21 based on the approved ARR (MYT Order dated 31.03.2018) and gaps of past year. This is an attempt by the objector to divert the attention from the core issue of tariff petition for FY 2020-21.

The objector has also referred to the Business Plan order dated 15th November, 2017. This is an order from the Commission and not a petition/submission from MePGCL. It is not clear why the objector is asking MePGCL for a document related to the notification from the Commission.

Very clearly this paragraph is devoid of any merit.

Commission's Remark: Noted

3. 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 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)

<u>Response by MePGCL for Objection 3</u>

The revision of generation tariff for FY 2019-20 was based on the approved ARR for FY 2019-20 (approved in MIT Order dated 31.03.2018) and true up gaps of previous years. MePGCL had already submitted all the required formats (Format B and Format D) along with the petition for determination of ARR for MYT Control Period FY 2018-19 to FY 2020-21 (whose order came out on 31.03.2018). The ARR was approved and the same was being used for tariff determination for FY 2019-20. Further, Format B (excluding HG5) which was required to be submitted along with tariff petition for FY 2019-20 were also submitted along with the petition, since these formats pertain to technical data.

Further, in the response to the mentioned order of MSERC, MePGCL also submitted its replies vide letter no. MePGCL/D/GEN/Misc-43/2008/Pt-XII/44 dated 03/04/2019. The other relevant documents asked in the order including audited accounts were also annexed with the letter for action required by the Commission.

There has been no further communication from the Commission on this matter.

Commission's Remark: Noted

4. Accordingly, it is prayed that MePGCL be directed to make the aforementioned documents available in the public domain at the earliest and give further time to the Objector to reply to such information.

Response by MePGCL for Objection 4

All the relevant documents for the tariff petition for FY 2019-20 from MePGCL's side are already available on MeECL website and additional documents/information sought by the Commission were submitted as mentioned at point 3 above. MeECL and its subsidiary companies are already suffering greatly from the delay in recovery of its cost and as such, it is requested that the order for this petition may be passed without further delay so that the new tariff can be affected from the first month of the ensuing year.

Commission's Remark: Noted

5. 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.**

6. For sake of convenience and ease of reference the objections have been divided into following major submissions:

A. Treatment of Revenue Gap claimed for FY 2015-16

B. Amount determined after truing up for FY 2016-17

C. Carrying Cost

D. Design Energy

E. Annual Fixed Charges and Tariff

F. Tariff for Lakroh HEP in FY 2020-21

G. Compliance with Directives

H. Determination of Final Capital Cost, AFC for FY 2018-19 to 2020-21 of MYT 2nd Control Period and Generation Tariff for FY 2020-21 for NUHEP

Response by MePGCL for Objection 5 &6

MePGCL inherited very old assets from MeSEB which itself had inherited the same from Assam State Electricity Board (ASEB) in 1975. However, MePGCL has been adding a number of new generation plants in order to sustain the energy demand and to provide reliable and affordable power in the state. Gross fixed asset of the generation company has increased from Rs.303.79 Cr at the start of FY 2012-13 to Rs.2339.16 Cr in FY 2018-19 to cater to the demand in the state. However, the financial position of the generation company is still precarious and needs urgent action. Profit/(Loss) incurred by MePGCL in last 5 years is given below:

Particulars	Profit/(Loss) INR Cr
FY 2014-15	(29.40)
FY 2015-16	(68.94)
FY 2016-17	(19.88)
FY 2017-18	(163.54)

Most of the power stations of MePGCL being old, there is need to regularly take up R &M activities for the stations as well as hydraulic works. However, due to revenue deficit faced in the past years, MePGCL has not been able to take up R&M works in a planned manner. The cost of generation business is also increasing due to increase in the repair and maintenance of aging assets, hike in the employee salaries, inflation, etc. The annual revision of tariff to bridge the gap of cost and tariff is essential to ensure financial sustainability of power companies and ensure reliable power supply, It is pertinent to note that MePGCL has not received any tariff revision this fiscal year (2019-20) and **the average tariff of old stations and Sonapani is in the range of Rs. 0.50 per unit for FY 2018-19 & FY 2019-20 as per MYT Order dated 31-03-2018, which is quite inadequate to meet even the O&M expenses of these stations. Inadequate cost recovery has hampered the finances of McPGCL and may lead to collapse of the company in the near future.**

Keeping in mind the sustainability of the generating company and the overall energy sector of the state, the Commission is requested to approve an adequate tariff revision for MePGCL based on the tariff petition filed for FY 2020-21.

Commission's Remark: Noted

A. TREATMENT OF REVENUE GAP CLAIMED FOR FY 2015-16

7. MePGCL in its petition has claimed revenue gap of INR 182.2 Crore for FY 2015-16 as opposed to revenue surplus of INR 6.55 Crore approved by this Commission in its Order dated 25.09.2018, while truing up FY 2015-16. It is pertinent to mention that MePGCL is claiming this gap on account of revenue petition filed by it, against Order dated 25.09.2018, final order in which is yet to be passed by the Commission. Thus, MePGCL instead of passing on the benefit of revenue surplus, already approved by the Commission, to the consumers is trying to claim revenue gap on basis of a pending petition. This approach of MePGCL is in teeth of Regulations 11, 20 and 26 of MYT Regulations, 2014 which provide for passing of approved gains and losses in tariff consequent to truing up. The same has also been upheld by the 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 recognized 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."

8. Thus, it is submitted that the revenue gap, claimed by MePGCL, needs to be disallowed. Similarly even the carrying cost, claimed on such revenue gap, needs to be disallowed. Instead the consumers should be given carrying cost on the revenue surplus, approved by the Commission in September, 2018, but which is yet to be passed on to the consumers.

Emphasis of Mercados specifies that;

The approach of the Petitioner to seek recovery of an amount not allowed by the Commission and on the other hand, not pass on the gains to the consumers in terms of the amounts already approved by the Commission are contrary to the provisions of the MSERC MYT Regulations,2014. The relevant extracts of the Regulation are as follows:

<u>Response by MePGCL for Objections 7 & 8</u>

Based on the availability of audited accounts and directives of the Commission, MePGCL filed the true up petition for FY 2015-16. The Commission notified the order on the same on 25th September 2018.

MePGCL, being aggrieved by the impugned order, filed the review petition on the

true up order. The Commission vide Order dated 13-12-2018, did not admit the petition on the ground that there is no error apparent on the face of the record of the true up order. The review petition was filed in line with MSERC Regulations which are reproduced below for reference:

1) Clause 22 of MSERC (Multi Year Tariff) Regulations 2014 is reproduced below:

"22 Review of Tariff Order

22.1 All applications for the review of tariff shall be in the form of petition accompanied by the prescribed fee. A petition for review of tariff can be admitted by the Commission under the following conditions:

a) The review petition is filed within sixty days for the date of the tariff order, and / or

b) There is an error apparent on the face of the record

22.2 On being satisfied that there is a need to review the tariff of any generating company or the licensee, the Commission- may on its own initiate process of review of the tariff of any generating company or the licensee. The Commission may also, in its own motion review any tariff order to correct any clerical error or any error apparent of the face of the record"

2)Clause 21 of MSERC (Conduct of Business) Regulations 2007 is reproduced below:

“21. Review of the decisions and orders of the Commission

(1) A person aggrieved by a decision or order of the Commission from which no appeal is preferred, or is not allowed to be preferred, can seek a review of the order if new and important facts which, after the exercise of due diligence, were not within his knowledge or could not be produced by him at the time when the order was passed or on account of some mistake or error apparent on the face of record or for

any other sufficient reason, by making an application within 60 days of the date of the order"

Based 011 the above clauses, any person who is aggrieved by an order of the Hon'ble Commission can seek a review on various grounds like submission of new information, clerical error or apparent error. Subsequent to the issue of the order dated 13-12-2018 mentioned above, MePGCL submitted supplementary information vide letter no. MePGCL/D/GEN/Misc-43/2008/Pt-XII/43 dated 14/03/2019 listing the apparent errors in the true up order and submitted new information and reason(s) to substantiate the justification for review of the true up order. The order on this matter is yet to be issued by the Commission. Since the matter is sub judice, MePGCL has claimed the gaps filed/proposed based on the review petition for true up FY 2015-16 subject to approval of the Commission. The claims of the company are legitimate and hence MePGCL prays before Commission to consider the gap as per the review petition and the carrying cost in net ARR of FY 2020-21.

Commission's Remark: Commission considers the True up business shall be based on the performance reported through the audited accounts.

B. <u>ACCOUNTS DETERMINED DURING TRUE UP OF FY 2016-17</u>

9. MePGCL in its petition has shown revenue surplus of INR 60.50 Crore from true-up of FY 2016-17 in accordance with this Commission's Order dated 18.11.2019 passed while truing-up FY 2016-17. It is submitted that in addition to the revenue surplus, the Commission may also allow carrying cost to the consumers on such revenue surplus. It is a settled principle of law that any deferred recovery of dues/entitlements involves time value of money and hence, such recoveries have to be made allowing the carrying cost irrespective whether the dues are to be paid to the consumers or to be recovered from the consumers.

Emphasis of Mercados specifies that;

The Objector welcomes the proposal of the Petitioner to pass on the revenue surplus amounting to Rs.60.50 Crores approved by this Commission in terms of truing up for FY 2016-17 vide Order dated 18th November, 2019. Further, it is also pointed out that the consumers are also entitled for carrying cost towards such revenue surplus.

<u>Response by MePGCL for Objection 9</u>

MePGCL would like to submit that the total carrying cost claimed in the tariff petition for FY 2020-21 is **INCLUSIVE** of the carrying cost for surplus of INR 60.50 Cr as per true up FY 2016-17 order.

The Commission on 18th November, 2019, issued the generation true up FY 2016-17 order which will be adjusted in the Net ARR of FY 2020-2l. The Commission allowed a surplus of Rs 60.50 Cr for FY 2016-17. Since no segregation of the surplus between old plants and MLHEP has been given in the above true up order, the utility has segregated this surplus among the power plants in proportion to their installed capacity. The calculation of the carrying cost for Old plants including Sonapani & Leshka is inclusive of the segregated surplus as per true up FY 2016-17 Order (Leshka's share of surplus: INR 25.12 Cr, Old plants & Sonapani's share: INR 35.38 Cr). The same is clearly mentioned in the tariff petition filed for FY 2020-21.

The detailed calculations for carrying cost as per the tariff petition filed for FY 2020-21 is again given below for reference:

Carrying Cost Calculation for Myndtu Leshka HEP (Table 2 of the Tariff petition FY 2020-21)

Particulars	INR Cr
Additional Claim as per Review Petition of True Up FY 2015-16 of MLHEP (1)	75.65
Gap from True Up of FY 2016-17 of MLHEP (2)	(25.12)
Interest rate as on 01.04.2019 considered for carrying cost calculation (3)	13.80%
Carrying Cost due to delay in orders (sum of 1&2 *3)	**6.97**

Carrying Cost Calculation for Myndtu Leshka HEP (Table 5 of the Tariff petition FY 2020-21)

Particulars	INR Cr
Additional Claim as per Review Petition of True Up FY 2015-16 of MePGCL (Old Plants including Soaping) (1)	106.57
Gap from True Up of FY 2016-17 of MePGCL (Old Plants including Soaping) (2)	(35.38)
Interest rate as on 01.04.2019 considered for carrying cost calculation (3)	13.80%
Carrying Cost due to delay in orders (sum of 1&2 *3)	**9.82**

The objection in this paragraph is also a stark contrast to the objector's comments in paragraph 10 (Carrying cost head) where the objector admits the calculation of carrying cost on INR 60.50 Cr surplus revenue as well. The claim of the objector in this paragraph is devoid of any merit and an attempt to mislead the Commission as well as the public at large.

Commission’s Remark: Noted

C. CARRYING COST

10. MePGCL in its petition has claimed carrying cost of INR 16.80 Crore towards purported revenue gap of INR 121.72 Crore (proposed revenue gap of INR 182.22 for FY 2015-16 less than approved revenue surplus of INR 60.5 Crore for FY 2016-17). It is reiterated that instead of revenue gap there would be a revenue surplus of INR 67.05 Crore (INR 6.55 Crore for FY 2015-16 and INR 60.5 Crore for FY 2016-17). Accordingly, the consumers are entitled to carrying cost of INR 43.34 Crore. The calculation for the same is as under:

Particulars	Units	Derivation	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Opening Surplus/(Gap) as on 1st April	INR Crore	A	0	6.55	67.05	67.05	67.05	67.05
Additions during the year	INR Crore	B	6.55	60.5	0	0	0	0
Closing Surplus/(Gap) as on 31st March	INR Crore	C=A+ B	6.55	67.05	67.05	67.05	67.05	67.05
Applicable Interest Rate for Carrying Cost	%	D	14.75%	14.05%	14.05%	14.05%	14.05%	14.05%
Carrying Cost for the year	INR Crore	**E=(A+C)/2*D**	0.48	5.17	9.42	9.42	9.42	9.42
Total Carrying Cost on Revenue Surplus as per Objector's Assessment	**INR Crore**	**43.34**						

Emphasis of Mercados specifies that;

The Petitioner has claimed a carrying cost of Rs. 16.80 Crore towards a revenue gap of Rs.121.72 Crore – Rs. 182.22 Crore for FY 2015-16 and Rs. 60.5 Crore (surplus) for FY 2016- 17. As already mentioned in the previous sections, instead of a revenue gap, there would be a revenue surplus of Rs. 67.05 Crore - Rs. 6.55 Crore for FY 2015-16 and Rs. 60.5 Crore for FY 2016-17. Consumers will be entitled for carrying cost towards this revenue expense.

Response by MePGCL for Objection 10

At the outset, MePGCL would like to point out that the objector has also agreed in principle for recovery of carrying cost for the utilities given the delay in orders and pass through of the gaps. However, the methodology used by the objector for the calculations in the table seem to be erroneous.

Firstly, the review petition was filed in November, 2018 and the gaps due to the same had to be passed in the ARR for FY 2019-20. Since there was no order for the review petition, the gap claimed by the petitioner to be passed in FY 2019-20, will now be passed in the net ARR of FY 2020-21. The delay in recovery of gaps is reason for claim of carrying cost in the petition**. Thus, the interest rate applicable for calculation of carrying cost will be the interest rate in FY 2019-20**. However, the objector has used different interest rates for different years for calculation of carrying cost. The method of the objector clearly defies any logic.

Secondly, as stated above, the order of the Hon'ble Commission is due on the review petitions. Given the fact that the costs claimed in the review petition by MePGCL are legitimate and in line with MSERC MYT Regulations 2014, the petitioner has claimed the same amount in the net ARR of FY 2020-21. BIA, in its objections, seems to have conveniently ignored the claims made by MePGCL in its review petitions which were filed in accordance with MSERC MYT Regulations 2014 and MSERC Conduct of Business Regulations.

Based on the above submission, MePGCL prays before the Commission to consider the carrying cost as claimed in the net ARR of FY 2020-21.

Commission's Remark: Filing the petition for true up of business for FY 2016-17 has been delayed by the licensee, the claim of the carrying cost shall not be admissible.

D. <u>DESIGN ENERGY</u>

11. MePGCL in its petition has sought total Annual Fixed Cost (AFC) of INR 114.33 Crore, capacity charges of INR 57.16 Crore and Energy Charge of INR 1.27/unit for FY 2020-21. In its petition, MePGCL has mentioned that as some old plants are past their useful life, their actual average generation of last 6 years be considered, while determining tariff, instead of design energy.

12. It is submitted that this approach of MePGCL is in contravention of Regulation 57 of MYT Regulations, 2014 which provides for calculation of capacity charges and energy charges for hydro generating stations. The relevant part of Regulation 57 is as under:

"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 Dispatch 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."(Emphasis supplied)

13. Alternatively, the Commission may adopt Regulation 44 of CERC (Terms and Conditions of Tariff) Regulations, 2019 for calculating tariff of old plants. Regulation 44 reads as under:

"44. Computation and Payment of Capacity Charge and Energy Charge for

Hydro Generating Stations:

****

(4) 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-bus basis, at the computed energy charge rate. Total energy charge payable to the generating company for a month shall be:

Energy Charges = (Energy charge rate in Rs. / kWh) x {Scheduled energy (exbus) for the month in kWh} x (100 – FEHS) / 100

(5) 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 (7) of this Regulation:

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, in per cent, as mentioned in Note 3 under Regulation 55 of these regulations.

(6) In case the saleable scheduled energy (ex-bus) of a hydro generating station during a year is less than the saleable design energy (ex-bus) for reasons beyond the control of the generating station, the treatment shall be as per clause (7) of this Regulation, on an application filed by the generating company.

(7) Shortfall in energy charges in comparison to fifty percent of the annual fixed cost shall be allowed to be recovered in six equal monthly installments: Provided that in case actual generation from a hydro generating station is less than the design energy for a continuous period of four years on account of hydrology factor, the generating station shall approach the Central Electricity Authority with relevant hydrology data for revision of design energy of the station.

(8) Any shortfall in the energy charges on account of saleable scheduled energy (ex-bus) being less than the saleable design energy (ex-bus) during the tariff period 2014-19 which was beyond the control of the generating station and which could not be recovered during the said tariff period shall be recovered in accordance with clause (7) of this Regulation.

(9) In case the energy charge rate (ECR) for a hydro generating station, computed as per clause (5) of this Regulation exceeds one hundred and twenty 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 one hundred and twenty paise per kWh only."(Emphasis supplied)

Emphasis of Mercados specifies that;

The Petitioner has submitted that ***"..Since the old plants have passed their useful life, MePGCL is requesting the Commission to consider the average of actual generation of last 6 years rather than design energy for computation of tariff in case of old plants to make it more realistic".*** It is respectfully submitted that the prayer of the Petitioner is unsustainable in law as it cannot seek modification of the Regulation in tariff proceedings.

Response by MePGCL for Objection 11 to 13

The old plants (except Stage-IV and Sonapani) have already crossed their useful life of 35 years, so MePGCL has requested the Hon'ble Commission in the tariff petition for FY 2020-21 to consider the average of actual generation of last 6 years rather than design energy for computation of tariff in case of old plants, since the design energy of the plant is not relevant as on date due to changes in hydrology and other uncontrollable factors. Clause 57.2 (3) of MSERC MYT Regulations 2014 cannot be applied for the old hydro generating plants of MePGCL since it clearly mentions that the same may be applied for cases where the actual generation is less than the design energy for one particular year only and then in the subsequent years, it is able to catch up with the norm of design energy. As against this, the old plants of MePGCL have crossed their useful life and the actual generation of these plants in the recent years is much less than the design energy. Moreover, the methodology adopted by MePGCL is in line with the methodology adopted by the Hon'ble Commission in the tariff order FY 2013-14 dated 30th March 2013. The excerpt from the order is given below for reference:

"Considering the past trend on the basis of available data, the Commission at this stage has allowed the average value of last five years actual generation from each plant. This value shall be considered for determining the tariff for 2013-14".

The detailed calculation of the same in given in table 3 and 4 of Chapter 5 of the order.

It may be noted that clause 44 (7) of CERC Tariff Regulations 2019, provides for revision of design energy if the actual generation of the hydro plants falls short of the design energy for four consecutive years. The relevant clause is produced below:

"44. Computation and Payment of Capacity Charge and Energy Charge for Hydro Generating Stations:

(7) Shortfall in energy charges in comparison to fifty percent of the annual fixed cost shall be allowed to be recovered in six equal monthly installments:

Provided that in case actual generation from a hydro generating station is less than the design energy for (l continuous period of four years on account of hydrology factor, the generating station shall approach the Central Electricity Authority with relevant hydrology datafor revision of design energy of the station"

In this case, the Commission has already designed the approach for revision of design energy based on the average of last five years (in the FY 2013-14 tariff order as stated above). As such the objection is devoid of any merit and the objector is unnecessarily trying to mislead the stakeholders on an agreed and settled principle already adopted by the Commission in the past orders which are legally settled.

Commission's Remark: Commission shall consider the computation of the ARR as per the Regulations.

E. <u>ANNUAL FIXED CHARGES AND TARIFF</u>

14. Based on the submissions made above it is submitted that the allowable Net AFC for calculation of tariff for FY 2020-21 is INR 85.52 Crore. Accordingly, the allowable capacity charge is INR 42.76 Crore while allowable energy charge is INR 0.50/unit. The calculation for the same is as under:

Particulars	Units	Derivation	MePGCL's Claim INR Crore	Objector's Assessmen t INR Crore
Total Additional Claim as per Review Petition of True Up FY 2015-16 of MePGCL	INR Crore	**A**	182.22	-6.55
Total Gap/ (Surplus) from True Up Order of FY 2016-17 of MePGCL (MLHEP and Old Plants Combined)	INR Crore	**B**	-60.5	-60.5
Total Gap (Surplus)	**INR Crore**	**C=A+ B**	**121.72**	**-67.05**
Total Carrying Cost	**INR Crore**	**D**	**16.80**	**-43.34**
Annual Fixed Cost Approved by MSERC for Old Stations and Sonapani for FY 2020-21	INR Crore	**E**	33.32	33.32
Annual Fixed Cost Approved by MSERC for MLHEP for FY 2020-21	INR Crore	**F**	162.59	162.59
Annual Fixed Cost Approved by MSERC for FY 2020-21	**INR Crore**	**G=E+F**	**195.91**	**195.91**
Net AFC for Computation of Tariff	**INR Crore**	**H=C+D+G**	**334.43**	**85.52**
Energy Generation for Old Stations and Sonapani for FY 2020-21	MU	**I**	450.30	452.83
Energy Generation for MLHEP for FY 2020-21	MU	**J**	410.22	410.22
Net Energy Generation for FY 2020-21	**MU**	**K=I+J**	**860.52**	**863.05**
Capacity Charge (50% of AFC)	**INR Crore**	**L=H/2**	**167.21**	**42.76**
Energy Charge	**(INR/k Wh)**	**M=[(H /2)*10]/ K**	**1.94**	**0.50**

Response by MePGCL for Objection 14

The order on the review petition on true up FY 2015-16 order is still due from the Commission. Since the matter is sub judice, MePGCL has claimed the gaps filed/proposed based on the review petition for true up FY 2015-16 subject to approval of the Commission. The objector has calculated the net AFC in this paragraph by not considering the revenue gap of INR 182.22 Cr for FY 2015-16 which was claimed in the review petition by MePGCL.

Secondly, the calculation of carrying cost is also erroneous as explained (under Replies to Para 10) above.

Thirdly, it is not clear how the objector had arrived at energy generation for FY 2020-21 at 452.83 MUs when MePGCL has considered 450.30 MUs based on the average generation in the past 6 years. The rationale behind objector's figures has not been explained in the paragraph.

Based on the above submissions, MePGCL prays before the Commission to consider the net AFC and tariff for FY 2020-21 as filed in the petition by MePGCL.

Commission's Remarks: Commission shall consider the Computation of ARR as per the Regulations.

F. TARIFF FOR LAKROH HEP IN FY 2020-21

15. MePGCL in its petition has stated that Lakroh HEP achieved COD on 01.03.2019 and that the final capital cost vetting is in the process pursuant to which it will file petition for approval of capital cost, AFC and tariff determination. Accordingly, MePGCL has sought continuation of levellised tariff of INR 3.70/unit as an interim arrangement.

16. However, it is pertinent to mention that the Commission in its MYT Order dated 31.03.2018, in table 5.48 at page 88, approved average tariff of INR 0.25/kWh for Lakroh HEP. Thus, it is prayed that the same be continued until such time final tariff is approved by the Commission after following the due process prescribed under the MYT Regulations, 2014.

Emphasis of Mercados specifies that;

It is pointed out that the Commission had **approved an average tariff of Rs. 0.25/kWh for Lakroh in the MePGCL MYT Order dated 31st March, 2018.**

The Objector prays that the Commission may disallow the Petitioner's claim, and instead permit the Average Tariff as calculated in the MYT Order to continue until such time that the final tariff for Lakroh is approved. Further, it is prayed that any tariff revision may be approved for Lakroh HEP only after due process prescribed in the MSERC MYT Regulations, 2014 is strictly followed in terms of filing of an appropriate petition.

Response by MePGCL for Objection 15 & 16

It is pertinent to submit here that the tariff petition for MIT control period FY 2018-19 to FY 2020-21 filed by MePGCL in Nov 2017 did not include ARR proposal for the Generating station of Lakroh, since the final tariff petition would have been filed by MePGCL only when the project is completed and COD is achieved and audited capital cost is available. However, the Commission in the MYT order dated 31.03.2018 inadvertently considered the Lakroh project (which was then under construction) as part of old stations reducing the ARR share of old plants including Sonapani. Against the impunged order, the MePGCL had also filed a review petition.

The objector in these paragraphs has claimed for a tariff of Rs 0.25/unit for Lakroh HEP. Leave aside the O&M costs, the approved tariff of Rs 0.25/unit is even not enough for the debt service obligation for Lakroh. This will put further strain on the finances of the petitioner. The final capital cost vetting of Lakroh is in process and MePGCL will soon file the petition for approval of capital cost and tariff for Lakroh HEP.

Meanwhile, MePGCL requests the Commission to continue with the levellised tariff of Rs 3.70 per unit as an interim arrangement. This levellised tariff is like the average tariff over the useful life of the generating plant. This is a more realistic estimate of the future tariff of Lakroh HEP (in fact, in the earlier years of operation, the tariff is higher than levellised tariff).

Thus, as an interim arrangement till the petition for Lakroh is filed before the Hon'ble Commission, MePGCL requests to continue with the levellised tariff of Rs 3.70 per unit.

Commission’s Remark: The Licensee has yet to file the petition for approval of capital cost and Final tariff for Lakroh Project.

G. <u>REPEATED NON-COMPLIANCE</u>

17. It is submitted that MePGCL, in the pasthas failed to comply with the orders/directions of this Commission. The same has also been noted by this Commission in MYT Order dated 31.03.2018 as under:

“6. Directives:

6.1.6 The Commission is constrained to note that the MePGCL has not been complying with some of the directions issued by the Commission in its Tariff Orders. The Commission takes this opportunity to advice the MePGCL to henceforth take all orders and Directions issued with the utmost seriousness. In the past, the MePGCL has not only failed to comply, but has even failed to indicate the reasons for its inability to do so , which could have been taken into consideration by the Commission, whether a relook at the directions issued is necessary, or whether *advice on the matter could be given by it. Failure to comply with the directions issued by the Commission may entail strict action as per provisions of Law."(Emphasis supplied)*

Accordingly, it is prayed that the Commission conduct a thorough prudence check to ensure that MePGCL has complied with its directions and take strict action in case of non- compliance

Response by MePGCL for Objection 17

Against the directives in the order dated 31.03.2018, MePGCL had already submitted its response in its letter no. MePGCL/D/GEN/MISC-43/2008/Pt-XIII/52 dated 21/11/2019. Further, MePGCL would like to add that it has complied with all the directives in the order and there has been no further issue or communication from the Commission on this matter.

Commission's Remarks: Noted.

H. Determination of Final Capital Cost, AFC for FY 2018-19 to 2020-21 of MYT 2nd Control Period and Generation Tariff for FY 2020-21 for NUHEP

18. MePGCL in its petition has also sought determination of final capital cost, AFC for FY 2018-19 to 2020-21 of MYT 2nd Control Period and Generation Tariff for FY 2020 -21 for NUHEP under MYT Regulations, 2014. At the outset it is submitted that MePGCL has not filed the instant petition in accordance with the format prescribed by this Commission and thus, the same merits to be dismissed.

19. Further, MePGCL has referred to various reports and details that have been annexed by it in support of its claims. However, many such annexures, particularly Annexures B, C, J(i) to (iii), are not available on MePGCL's website and thus, the Objector has been unable to provide comments on same.

Response by MePGCL for Objection 18 & 19

MePGCL would like to submit that the capital cost of NUHEP and tariff petition has been submitted in line with MSERC MYT Regulations, 2014. Regulation 52 of the MSERC MYT Regulations, 2014 provides for norms of determining the Capital Cost. The same is reproduced below for reference.

"52 Capital cost

52.1 The actual capital expenditure on the date of commercial operation in the case of new investment shall be subject to prudence check by the commission.

52.2 Scrutiny of cost estimates by the Commission shall be limited to the reasonableness of the capital cost, financial plan, and interest during construction period, use of efficient technology, and such other matters for determination of tariff.

52.3 In case of any abnormal delay m execution of the project causing cost and time overruns attributable due to the failure of the utility, the Commission may not approve the full capitalization of interest and overhead expenses.

52.4 Where power purchase agreement entered into between generating company and the beneficiary provides for a ceiling of actual expenditure, the capital expenditure to be considered shall not exceed such ceiling.

52.5 The capital cost may include capitalized initial spares up to 1.5% of original Project cost.

52.6 The project cost already admitted by the Commission for purpose of tariff determination shall be considered as the original project cost.

52.7 The Commission shall issue guidelines for:

a. Verifying the capital cost of Hydroelectric projects by an independent agency or expert and in such a case, the capital cost as vetted by such agency or expert may be considered by Commission after prudence check while determining the tariff for hydro generating station"

Based on the above, the petition to be filed in compliance with MSERC MIT Regulations requires cost vetting by independent agency or expert, capital cost audit as well as different clearances from Government. The capital cost vetting by independent agency and capital cost audit is complete and as such, MePGCL filed the NUHEP Petition for Approval of Final Capital Cost, AFC for FY 2018-19 to FY 2020-21 of MYT Second Control Period & Tariff for FY 2020-21. The required annexures for the petition have already been shared with the Hon'ble Commission at the time of filing. The annexures include the

a) Capital cost audit of NUHEP

b) Third part vetting report by IIT Guwahati, the agency appointed to study the technical and financial aspects and for third party vetting of the project cost, in line with the provisions of MSERC Regulations and as instructed by the Govt. of Meghalaya and as directed by the Commission in its order dated 14-12-2018

c) Different clearances for NUBEP works.

The petition along with annexures is already available in the MeECL website. Any further documents for the petition can be collected separately from the utility if required.

Commission's Remark: Commission considers the capital cost of New Umtru Project as certified by the statutory auditors. The provisional ARR in the absence of audited accounts for FY 2017-18 to FY 2020-21 shall be adopted into the Generation ARR for FY 2020-21.

20. Additionally, the Objector submits as under:

i. Capital Cost:

21. MePGCL has claimed capital cost of INR 607.25 Crore in NUHEP up to 30.09.2019 which is higher than the capital cost of INR 584 Crore as approved by the Auditors. MePGCL has stated that additional capital costs were incurred due to un-discharged liabilities, works deferred for execution and additional work required for efficient functioning of the Project. It is important to mention that MePGCL has not explained why the Auditor has not approved/certified the entire capital cost being claimed by it.

Response by MePGCL for Objection 21

MePGCL in its tariff petition has clearly stated the capital cost of Rs 584.00 Cr as certified by the statutory auditor. The petitioner further states that the actual capital cost of Rs 607.25 Cr for NUHEP has not been approved in entirety by the Auditor. However, since all the project costs are legitimate, the petitioner in line with the actual cost has filed the tariff petition for NUHEP. There is complete transparency in the methodology followed by MePGCL.

The total capital cost was not allowed by the auditor in entirety due to the following reasons:

a) Claims of civil works contractor amounting to Rs 3.38 Cr and electromechanical contractor amounting to Rs 5.68 Cr was not approved by the auditor.

b) Initially HUDCO was expected to provide the loan for NUHEP works. Due to non-release of further loan by HUDCO, PFC was selected to take over and provide the loan for NUHEP works. Due to inability of MePGCL to pay the interest during construction, in time, penalty charges of Rs 1.78 Cr were incurred for the project, which was disallowed by the auditor.

c) The initial Interest During Construction (IDC) approved by Board of Directors for NUHEP was Rs.157.79 cr., while the actual IDC was Rs.170.78 cr. which exceeds the approved amount by Rs 13 Cr. The auditor disallowed the extra IDC amount of Rs 13 Cr as well.

All the supporting documents related to the disallowed costs have been attached as Annexures B & I in the tariff petition.

Based on the above submissions, MePGCL prays before the Hon'ble Commission to consider the actual capital cost as filed in petition for the tariff of NUHEP.

Commission's Remark: Commission shall consider approval of the capital cost for NUHEP based on auditor's certification as per the Regulations.

22. MePGCL has also mentioned that it has used the final capital cost (as per actual) for different components of AFC for NUHEP. But it is important to mention that un-discharged liabilities need to be reduced from the capital cost for tariff determination as tariff is allowed on cash basis and not on accrual basis.

Response by MePGCL for Objection 22

MePGCL would like to submit that there were payments due which could not be made prior to COD and these constituted the un discharged liabilities. However, the payment of un discharged liabilities was made after COD. Since, all the payment for un discharged liabilities is already done, the same has been accounted in the final capital cost head. Thus, there is no need for reduction of final capital cost due to un discharged liabilities. It is important to note that regulation 29.1 (a) of MSERC MYT Regulations 2014, which clearly states that additional capitalization which may be approved by the Commission as part of capital cost, can include un discharged liabilities within the original scope of work. As such, the objector is not justified in saying that capital cost has to be on "cash basis". The relevant extract is reproduced below:

"29,1 The following capital expenditure, actually incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to the prudence check:

a) Due to Un-discharged liabilities within the original scope of work;"

Commission's Remark: Commission shall take action as per the Regulations in approving the capital cost of NUHEP.

23. Further, MePGCL has not given any detailed justification towards time overrun and cost overrun incurred in the Project. The Commission may refer to the practice followed by the CERC wherein generating stations have to submit 'Form 5Eii' along with the tariff petition in case of time over run and cost overrun. Under this form each generating station has to submit granular and chronological details of time and cost overrun and also has to provide Critical Path Analysis and Project Evaluation and Review Technique (PERT) chart to substantiate the delay in commissioning of the project. It is prayed that MePGCL also be directed to file similar form.

24. MePGCL has also not provided details of how much amount has been capitalized in terms of initial spares nor provided details of the original project cost. Accordingly, it is prayed that the Commission may verify the capital cost for NUHEP in terms of Regulation 52.7 of MYT Regulations, 2014. Further, MePGCL may not be granted more than 50% of the claimed capital cost till such time it files a revise petition with all the details.

Response by MePGCL for Objection 23 & 24

The detailed justification for the time and cost overrun of the project is part of report prepared by IIT Guwahati, the third party appointed to study the technical and financial aspects and for third party vetting of the project cost. The same has also been shared with the Commission as annexure for the NUHEP petition and is available in MeECL website for reference.

The Capital Cost of NUHEP includes only mandatory spares of about Rs.10.00 lakh for the Electro- Mechanical equipment and substation/switchyard, which is negligible and constitutes much less than 1.5% of the Capital Cost allowed by Regulation 28.2 (c) of the MYT Regulations, 2014. The breakup of the capital cost is annexed with the NUHEP tariff petition for reference. Further, the objections refer to the tariff petition of MePGCL for FY 2020-21 which is guided by the MSERC MYT Regulations, 2014. CERC Tariff Regulations are not binding for the tariff petitions of MePGCL unless specified for any component in the MSERC MYT Regulations 2014. Also, Regulation 52.7 of MSERC MYT Regulations 2014 referred by the objector relates to verification of capital cost by an independent agency/expert which has been done by IIT Guwahati in the case of NUHEP.

As such, it can be clearly seen that the objector is not justified in its claims on reducing the capital cost amount.

Commission's Remark: Commission shall consider the capital cost as per the Regulations.

Response by MePGCL (For Objections 18 to 24 for NUHEP Exclusive)

1. Capital Cost

(i) The capital cost verified by the Statutory Auditor was Rs.583.73 crore as on 31st March, 2019 and Rs. 584.00 crore as on 30th September,2019. The actual expenditure was Rs.607.25 crore (i.e., Rs. 608.47 crore less Rs.1.22 crore cost of infirm power) as on 30-09-2019.However, the statutory auditor has not considered the payment made against claims of the Civil and Electro-Mechanical contractors, penalty charge and some portion of the Interest During Construction. These have been explained in details at Para-21 of our replies to BIA's objections submitted earlier vide letter No.MePGCL/D/GEN/Misc-43/2008/Pt-XIII/90 dated 13th February, 2020.

(ii) The un discharged liabilities as on COD, such as pending payments against works bills, etc. were cleared after COD and the total payment made for NUHEP as on September 2019 was Rs. 607.25 crore (after deduction of cost of infirm power). The detailed reply of MePGCL against this objection was given at Para-22 of the replies submitted earlier vide our letter dated 13/02/2020 referred above.

(iii) MePGCL has attached all the formats required along with the Petition for approval of the capital cost and tariff of NUHEP. The objection of BIA is, therefore, incorrect and misleading.

(iv) The analysis of time and cost overruns was done by IIT Guwahati and independent agency/expert and submitted as directed by the Commission in Its order date 14.12.2018.

The detailed reply in this regard was given at para 23-24 of our replies submitted vide letter dated 13.02.2020 referred above. Also, the clarifications of MePGCL at para 2(a) (b) & (c) to the observations of the Commission submitted vide letter No. MePGCL/D/GEN/M-61/2017/64 dated 14.02.2020 may kindly be referred.

Further, the objections refer to the tariff petition of MePGCL for FY 2020-21 which is guided by the MSERC MYT Regulations, 2014. CERC Tariff Regulations are not binding for the tariff petitions of MePGCL, unless specified as reference for any component in the MSERC MYT Regulations 2014.

(v) The Commission in its order dated 14.12.2018 had directed MePGCL to file the report of independent agency /expert and justification for time and cost overruns. It may be mentioned that the State Govt. while approving the Revised Cost Estimate of NUHEP, had also directed that third party evaluation is to be undertaken in consultation with the Programme Implementation & Evaluation Department(PIED), Govt. of Meghalaya before financial closure of the project. MePGCL had duly consulted PIED and obtained NOC from the Planning Department, Govt. of Meghalaya (copy enclosed as Aanexure-I) before engaging IIT Guwahati as Independent Agency for evaluation/vetting of the project cost. Since IIT Guwahati is a reputed institution, the evaluation/vetting of the capital cost by this agency will be at par with, if not better than, that of the agencies in the empanelled list of CERC. Moreover, MePGCL had also carried out the capital cost audit by an independent agency and the same was submitted as annexure in the petition.

(vi) MePGCL in its tariff petition has clearly stated the capital cost of Rs 584.00 Cr as certified by the statutory auditor. It has further stated that the actual capital cost of Rs.607.25 Cr for NUHEP has not been approved in its entirety by the Auditor. However, since all the costs are legitimate, MePGCL, in line with the actual cost, has filed the tariff petition for NUHEP. There is complete transparency in the methodology followed by MePGCL.

(vii) The Petition along with annexures are available in the website of MeECL. As mentioned above, IIT Guwahati is a reputed institution and is capable of carrying out the cost vetting of Hydro projects. It may again be submitted that engagement of independent /third party for evaluation and vetting of the project cost was directed by the State Govt. and the report was also required to be submitted to the Commission, as directed vide its order dated 14.12.2018, as mentioned at para 5 above. Accordingly, MePGCL had complied with both the above directions.

(viii) The capital cost of New Umtru H.E. Project included only mandatory and essential spares which form part of the original project cost (Electrical & Mechanical package). Additional/Initial spares other than those included in the original project cost were not procured or added to the project cost by MePGCL. Besides, the cost of mandatory/essential spares is only around Rs.I0 (ten) lakhs, which is a very negligible percentage of the total project cost.

In view of the above submissions, the petitioner humbly prays before the Commission to kindly approve the capital cost of New Umtru H.E. Project as filed in the petition dated 29th November,2019 and pass orders accordingly.

Commission's Remark: Commission shall consider the capital cost as per the Regulations.

ii. Design Energy

25. MePGCL has submitted that NUHEP is designed to generate 193 MUs (235 MUs if old Umtru Power Station is not operated) in a year. MePGCL has further stated that it has considered 235 MU as design energy for computation of energy charge till old Umtru Power Station is renovated and starts generation.

26. However, in table 7 of its petition, MePGCL has considered energy generation as 219 MUs, as approved by this Commission, for FY 2019-20 and 2020-21. It is also important to mention that in its petition filed for determination of generation tariff for MLHEP and old plants including Sonapni for FY 2020-21, MePGCL had submitted that Umtru power plant has been under shutdown due to ageing of machines for which renovation and modernization has to be carried out. It was also submitted that Umtru had not generated any power from FY 2016-17 to 2018-19 and nor was it expected to generate any for FY 2020-21. Thus, it is prayed that the approved design energy be approved at 235 MUs for FY 2018-19 to 2020-21.

Response by MePGCL for Objections 25 & 26

MePGCL would like to again submit that the Design energy for the NUHEP is 235 MUs and the same has been submitted in the present tariff petition (Chapter 1.4.2 of the petition). However, the Utility has considered the projected generation of NUHEP for FY 2020-21 as approved in the Business Plan order.

The energy generation for control period FY 2018-19 to FY 2020-21 for MePGCL plants was notified in the Business Plan order dated 15th November, 2017. **The**

Approved Business Plan order clearly indicates approval of 219 MUs as energy generation of NUHEP for FY 2020-21 (Table 8 of the order). In compliance with the order of the Commission MePGCL has used the same approved generation units for computation of energy tariff for NUHEP for FY 2020-21.

Commission's Remark: Commission shall consider the Design Energy as per the petition within the ambit of Regulations.

iii. Interest on Loan

27. It is submitted that MePGCL has claimed incorrect opening loan of INR 479.49 Crore. As on 01.04.2018 the capital cost is INR 603.96 Crore out of which equity has to be 30% i.e. INR 181.19 Crore. Thus, loan will be INR 422.77 Crore. Accordingly, it is prayed that MePGCL be asked to recalculate the figures submitted by it.

Response by MePGCL

MePGCL would like to submit that it has inadvertently considered Rs 479.48 Cr instead of Rs 440.30 Cr as loan balance for interest on loan computation for NUHEP. Further, it would like to state that the initial cost approved for the project was Rs 629 Cr. Keeping the debt to equity ratio at 70:30 for project capex, the loan amount of Rs INR 440.30 Cr. for NUHEP was sanctioned by PFC (70% of 629 Cr=440.30 Cr). Copies of the sanction letters are attached as Annexure -I (a) & (b).

Commission's Remark: Commission shall consider the interest on loan as admissible as per the Regulations**.**

Response by MePGCL (For Objections 27 for NUHEP Exclusive)

2. Loan Capital

The detailed reply in this regard was furnished at para 27 of our replies submitted vide letter dated 13.02.2020 referred above

Further the objector's assessment of loan based on provisionally approved project cost of Rs. 518.54 crore as on February, 2017 is not correct since the actual project cost as on COD (15th July, 2017) which was Rs.566.14 crore (petition filed earlier vide letter No. MePGCL/D/GENIM-6112017/36 dated 30/11/2018) together with additional capitalization after COD (but before the cut-off date of 31.03.2020) amounting to Rs.607.25 crore as on September,2019, needs to be taken into consideration as per MSERC MYT Regulations, 2014.

Commission's Remark: Commission shall consider the capital cost certified by the auditor as on 31.03.2018.

iv. Operation and Maintenance Expenses:

28. Regulation 56.7 of the MYT Regulations, 2014 states that a hydro generating station commissioned after 01.0.2009 will have O&M expenses fixed at 2% of the original project cost which shall be entitled to annual escalation at the rate of 5.72% for subsequent years. It is pertinent to mention that this 2% does not include cost incurred for rehabilitation and resettlement works. However, MePGCL has claimed O&M expenses of INR 12.83 Crore, INR 13.57 Crore and INR 14.35 Crore for FY 2018-19, 2019-20 and 2020-21, respectively, without excluding the cost of rehabilitation and resettlement works. It is prayed that MePGCL be directed to submit duly certified figure for total expenditure, incurred on rehabilitation and resettlement.

29. Further the Commission may also consider reducing the annual escalation to 4.77% as has been done by the Learned CERC, in its CERC (Terms and Conditions of Tariff) Regulations, 2019, after considering the fall in WPI and CPI indices.

Response by MePGCL for Objections 28 & 29

Clause 56.7 of the MSERC MYT Regulations, 2014 relates to the adjustment of cost of rehabilitation and resettlement works for computation of O&M for the generation plant. The same is given below for reference:

"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."

However, MePGCL in this regard would like to submit that there was no rehabilitation and resettlement works for the NUHEP since there was no displacement of the population. Thus, the claim of the objector to adjust the rehabilitation and resettlement cost in O&M calculation for NUHEP is not applicable here.

Further the objections refer to the tariff petition of MePGCL for FY 2020-21 which is guided by the MSERC MYT Regulations, 2014. Thus, this is not the appropriate platform for the objector to raise the need to change the O&M norms specified in the MSERC MYT Regulations 2014 and follow CERC norms.

This is an attempt by the objector to divert the attention from the issue of tariff petition. CERC Tariff Regulations are not binding for the tariff petitions of MePGCL unless specified as such for any component in the MSERC MIT Regulations 2014.

Response by MePGCL (For Objections 28 & 29 for NUHEP Exclusive)

3. Operation & Maintenance Expenses (O&M):

1. The construction of New Umtru H.E. Project did not involve displacement of the local population and resettlement and rehabilitation works. The objection of BIA in this regard is misplaced.

2. MePGCL has considered escalation @5.72% as provided in the MSERC MYT Regulations. The request of the objector to consider escalation @4.77% us per CERC's Regulations may kindly be rejected, since CERC's Regulations are not applicable in the instant case. The objections refer to the tariff petition of MePGCL for FY 2020-21 which is guided by the MSERC MYT Regulations, 2014. CERC Tariff Regulations are not binding for the tariff petitions of MePGCL unless specified as reference for any component in the MSERC MYT Regulations 2014.

   The detailed reply of MePGCL in this regard was furnished at para 28-29 of the replies submitted vide letter dated 13/02/2020 referred above.

   Commission's Remarks: Commission shall consider the O&M Expenses as per the Regulations.

v. Depreciation:

30. MePGCL in its petition has claimed depreciation of INR 31.85 Crore, 31.93 Crore and 31.94 Crore for FY 2018-19, 2019-20 and 2020-21,respectively.MePGCL has calculated the same at a flat rate of 5.26% on the average GFA for the year because detail of category wise assets was not available. MePGCL has not given any reason as to why such details were not available even after two years of commissioning of the Project.

31. It is submitted that MePGCL is trying to mislead this Hon'ble Commission by saying that category wise assets details is unavailable. The audited accounts for FY 2017-19, in schedule titled "Note 1: Property Plant and Equipment", give detailed break up of GFA balance. The same has been classified under 8 major heads which are; buildings, plant and equipment, furniture and fixture, vehicles, office equipment, hydraulic works, other civil works and lines and cable network.

32. Further, as per Regulation 33 of MYT Regulations, 2014 depreciation has to be calculated annually as per straight line method at the rates specified in the CERC (Terms and Conditions of Tariff) Regulations, 2009, as maybe amended from time to time. Thus, the rate prescribed under the new CERC (Terms and Conditions of Tariff) Regulations, 2019 will be applicable in the present case.

33. Accordingly, considering the classification of GFA in the audited accounts and the depreciation rate prescribed by the Learned CERC the weighted average depreciation rate should be 4.87%. The calculation for the same is as under:

Particulars	GFA Addition in FY 2017-18	Depreciation Rate as per CERC	Depreciation (INR Crore)
Buildings	94.99	3.34%	3.17
Plant and Equipment	161.16	5.28%	8.51
Furniture and Fixtures	0.02	6.33%	0.00
Vehicles	0.19	9.50%	0.02
Office Equipment	0.05	6.33%	0.00
Hydraulic works	310.61	5.28%	16.40
Other civil works	31.87	3.34%	1.06
Lines and cable network	3.56	5.28%	0.19
Total / Weighted Average	**602.45**	**4.87%**	**29.36**

Response by MePGCL for objections 30 to 33

The final capital cost of NUHEP includes the capital cost of NUHEP as on COD and the additional capitalization. This adds up to Rs 607.25 Cr (final capital cost was the cost as on September, 2019) after adjustment for infirm power. The actual cost details have been annexed with the tariff petition of NUHEP. The asset wise break up of total NUHEP project for purpose of depreciation calculation was not available with the accounts at the time of filing of petition. This same asset wise break up (as per Format 6 of MSERC MYT Regulations, 2014) would have served the requirement for calculation of depreciation asset wise. Due to the non-availability of asset wise break up in desired format, the Utility computed the depreciation using total asset size and average depreciation rate. The Commission in the tariff order dated 6th November 2017 for provisional tariff of NUHEP, had computed INR 27.27 Cr. Depreciation (full year depreciation) on asset base of INR 518.54 Cr, from which average depreciation of 5.26% has been derived by MePGCL.

Thus, the methodology used by MePGCL is based on the established practice of the Commission in case of non-availability of asset- wise break up. Moreover, this is for the projection of depreciation for the control period. Any adjustment due to difference in projection and actual depreciation as per asset wise break up will be carried out when filing the true up petition.

There is no clarity on how the objector correlated the total capitalization of MePGCL in FY 2017-18 with the total GFA of NUHEP. The objector has also failed to consider the fact that there was additional capitalization for NUHEP works and due adjustment needs to be done for the same also. Thus, the methodology of the objector lacks any merit.

Commission's Remark: Commission shall consider the depreciation as per the Regulations.

Response by MePGCL (For Objections 30 to 33 for NUHEP Exclusive)

4. **Depreciation Rate:**

The detailed reply in this regard was furnished at Para 30-33 of our replies submitted vide letter No. MePGCL/D/IGEN/Misc-43/2008/Pt-XIII/90 dated 13.02.2020.

Commission's Remark: Commission shall consider Depreciation as admissible as per the rates notified in CERC Regulations.

vi. Income Tax:

34. MePGCL in its petition has claimed income tax of INR 5.59 Crore for each year of the MYT control period. This has been calculated after taking total effective rate as 21.91%. This approached of MePGCL is in contravention of Regulation 35.1 of MYT Regulations, 2014 which provide as under:

"35 Tax on income

35.1 The Commission in its MYT Order shall provisionally approve Income Tax payable for each year of the Control Period, if any, based on the actual income tax paid as per latest Audited Accounts available for the applicant, subject to prudence check."

35. As per the audited accounts for FY 2017-18, MePGCL incurred loss of INR 163.54 Crore in FY 2017-18 and INR 19.88 Crore in FY 2016-17 and thus, no income tax was payable by it. Consequently, the amount claimed towards income tax merits to be dismissed.

Response by MePGCL for Objections 34 & 35

Like other heads, the "Income Tax" head is a component of AFC which affects the generation business. Thus, the Utility has considered income tax component for calculation of tariff for NUHEP. The income tax calculation is guided by Clause 35 of the MSERC MYT Regulation 2014.

The Utility has calculated the income tax component at the effective Minimum Alternate Tax (MAT) rate on the return on equity.

Any variation between the approved and actual income tax shall get adjusted in the true up of the Generation business.

Against the claim of the objector, while MePGCL has incurred losses in its business in the early years of restructuring, it is striving hard to improve its efficiency. In the upcoming years, the company is expected to undertake further R&M works of old plants, increase further generation also due to new plants like Lakroh, Ganol, Riangdo. This will increase the business volume of MePGCL and help make the business self-sustainable and profitable in future years. Given the fact that projections need to be forward looking, income tax component needs to be included in AFC calculation.

Commission's Remark: Commission shall consider the income tax as per Regulations.

Response by MePGCL (For Objections 34 & 35 for NUHEP Exclusive)

5. **Income Tax:**

The detailed reply in this regard was furnished at para 34-35 of our replies submitted to the Commission vide letter referred above.

Commission's Remark: Commission shall consider the income tax as per Regulations.

vii. AFC for NUHEP for FY 2020-21:

36. MePGCL in its petition has sought INR 97.41 Crore towards adjustment on account of revision of AFC for NUHEP in FY 2020-21 due to final audited capital cost. However, on account of several deficiencies and the complete lack of information/data with which the instant petition has been filed it is prayed that the Commission continue with AFC of INR 24.86 Crore, previously approved in MYT Order dated 31.03.2018.

37. The above aspects may be taken into consideration. BIA craves leave to the add to the submission mentioned above and also to submit such material with the leave of the Commission as may be necessary in the truing up process.

BIA also craves leave to make oral submissions in the public hearing to be conducted by the Commission.

Response by MePGCL for Objections 36 & 37

Against the claim of the objector, the utility would like to state that all the relevant documents and data for the tariff petition have been duly submitted to the Commission. For further clarity and transparency, the objector can collect separately from the utility any other document relevant to tariff petition, if required.

Based on the submission for different components of NUHEP, the petitioner would like to reiterate the fact that the claims in the petition are legitimate and prays before the Commission to pass the order on the same accordingly.

Response by MePGCL (For Objections 36 & 37 for NUHEP Exclusive)

9. **AFC. Fixed Charge And Energy Chnrge fur NUHEIP for FY 2020-21:**

MePGCL had not filed the Final Tariff Petition for New Umtru H.E. Project tor the 2nd MYT Control period of FY 2018-19 to FY 2020-21. Since at the time of tiling of the MYT Petition on 30.11.2017, the audited project cost was not yet available. The petitioner had filed the MYT petition for Old Stations (including Sonapani) and MLHEP only. The Commission had approved Rs. 58.58 crore as AFC for Old Stations only (ref. Table 5.44. page-85 of the Generation Tariff Order for FY 2018-19 dated 31.03.2018) for FY 2020-21. However, out of this AFC of 58.58 crore approved for Old Stations. The Commission had taken out Rs. 24.86 crore and allocated the amount to NUHEP. Similarly an amount of Rs. 0.39 was taken out from the AFC of Old Stations and allocated to Lakroh SHP (which was then under construction and final tariff petition has not been filed yet), resulting in the reduction of AFC approved for Old Stations from Rs. 58.58 crore to Rs. 32.32 crore for FY 2020-21 (ref. Table - 5.47, page-87 of the Generation tariff order for FY 2018-19 dated 31.03.2018). Thus, the Commission in the MYT order dated 31.03.2018 inadvertently considered the Lakroh and NUHEP as part of tariff petition of old stations, reducing the ARR share of old plants including Sonapani. Against the impugned order, MePGCL also filed a review petition.

The capital cost vetting by independent agency and capital cost audit is complete and as such, MePGCL filed the NUHEP Petition for Approval of Final Capital Cost, AFC for FY 2018-19 to FY 2020-21 of MYT Second Control Period & Tariff for FY 2020-21. The request of the objector to approve the AFC of Rs. 24.86 crore for NUHEP as per MYT order dated 31.03.2018 may, therefore kindly be rejected and the AFC claimed by MePGCL as per tariff petition for NUHEP dated 29.11.2019 may kindly be considered by the Commission.

Commission's Remark: Commission shall consider the Annual Fixed Charges as per Regulations.

Annexure- G

List of Participants in the Public Hearing on Generation Tariff for FY 2020-21 filed by MePGCL

Date: 05.03.2020 | Venue: MSERC Conference Hall | Time: 12:00 PM

Present :

1. Mr. P. W, Ingty, IAS (Retd), Chairman, MSERC.
2. Mr. R. Keishing, Member MSERC.
3. Mr. J.B. Poon, Secretary, MSERC.
4. Mr. E. Slong, Consultant (T), MSERC.
5. Mr. P. A. Sawian, Consultant (F), MSERC.

MeECL/MePGCL

1. Shri. E. Shabong Chief Engineer (C) HP & HC MePGCL.
2. Shri. R. Syiem Chief Engineer (Generation) MePGCL
3. Shri. A. Lyngdoh Superintending Engineer (PM), MePGCL
4. Shri. K. Sohtun Asst. Accounts Officer MeECL
5. Shri. PiyushLohia PWC Pvt. Ltd.
6. Shri. SanketSumantray PWC Pvt. Ltd.

Byrnihat Industries Association (BIA)

1. Mr. S. S. Agarwal, Secretary BIA.
2. Mr. U. Aggrawal, Pioneer Carbide Pvt. Ltd.
3. Mr. R. Bajaj, BIA.
4. Mr. B. Mittal, BIA.
5. Mr. P.K. Mishra, BIA.
6. Mr. S. Dhuri, Consultant BIA.
7. Mr. R. Singh, BIA.
8. Ms. R. Singhal, Advocate BIA.

4. Commission's Approach

4.1 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.

National Electricity Policy prescribes that there is a need for ensuring recovery of charges from consumers to make the power sector sustainable. A minimum level of support may be required to make the electricity affordable for consumers of the very poor section. Consumers below poverty line may receive a special support in terms of tariff which is cross subsidized. It also says that existing cross subsidies should also be corrected to tide inefficiencies and losses. The Act requires all consumers to be metered within two years' time and TOD meters for high end consumers with a minimum load of 1 MVA shall also be encouraged.

Similarly electricity policy envisages encouragement of energy conservation and demand side management. Periodic energy audits are mandated for power intensive industries and encouragement of solar water heating system.

Keeping in view the intent of Electricity act, National Electricity Policy and National Tariff Policy, the Commission has framed tariff regulations for generation, transmission and distribution business.

4.2 Filing of Petition:

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

Regulation 4.2 (C) mandates, the licensee shall maintain Regulatory accounts and submit petitions to the commission for determination of Tariff and True up along with Regulatory accounts.

4.3 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 2013-14.

4.4 Additional Capitalization

Regulation 29 provides that some of the capital expenditure (on account of un-discharge 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.

4.5 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.

4.6 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.

4.7 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.

4.8 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.

4.9 ROE, Depreciation etc.

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

Table 4. 1 : The Dates of Commissioning and their dates of life term

Sl. No	Name of the Station	No. of Units	Capacity (MW)	Total Capacity (MW)	Year of Commissioning
1	Umiam Stage I	I	9	36	21.02.1965
		II	9		16.03.1965
		III	9		06.09.1965
		IV	9		09.11.1965
2	Umiam stage-II	I	10	20	22.07.1970
		II	10		24.07.1970
3	Umiam stage-III	I	30	60	06.01.1979
		II	30		30.03.1979
4	Umtru Power Station	I	2.8	11.2	01.04.1957
		II	2.8		01.04.1957
		III	2.8		01.04.1957
		IV	2.8		12.07.1968
5	Sonapani Mini Hydel	I	1.5	1.5	27.10.2009
6	MLHEP (Leshka)	I	42	126	01.04.2012
		II	42		01.04.2012
		III	42		01.04.2013
7	New Umtru	I	20	40	01.07.2017
		II	20		01.07.2017

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.

4.10 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.*

Interest and Finance charges against the New Umtru projects are allowed in this Order provisionally to enable the Licensee to discharge the liability of borrowed money. Interest and finance charges are allowed as admissible, in this order.

4.11 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 met with the MePGCL proposal. For FY 2018-19, the Corporation has demanded more than what Regulation provides for. The approach for determining the O & M expenses for FY 2020-21 shall not be different from the FY 2018-19. The Commission also feels that the expenses should be within the normative 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. The petitioner required controlling its expenses in each head to remain within the ceiling of O&M expenses. The O & M expenses against New Umtru are not considered in this Orders as the final tariff is yet to be got approved by the Licensee.

4.12 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 prevailed as on 01.04.2019 at 13.80%.

The interest on Working Capital is allowed as per Regulations.

On the basis of the FY 2020-21 records, the Commission has allowed interest on loan capital and working capital.

4.13 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 as admitted by the Commission from the gross value of the assets. Depreciation shall only be chargeable from the first year of operation. Consumer contribution or capital subsidy/grant etc shall be excluded from the asset value for the purpose of depreciation.

The Salvage value of the assets shall be considered at 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

However, after meeting its obligation under the contract, the licensee shall create a separate reserve for meeting the replacement of assets or modernization of the unit in future. The Commission has allowed sufficient budget in it and desired that the petitioner shall use it judiciously for its R& M work of old stations.

4.14 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 Licensee has not claimed any income tax in the petition for the FY 2020-21.

4.15 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.

4.16 Truing Up

Regulation 15(4) of Regulations 2011 specifies that, the Commission may undertake **Suo-moto** truing up of the ARR of previous year, if the Licensee fails to make an application for Truing up of the ARR of previous Years.

Regulation 11 of MYT Regulations 2014 provides for filing of truing up petition of previous years together with the audited accounts including audit report by C&AG. The scope of truing up shall be a comparison of the performance of the company with the approved ARR and Revenue from tariffs. The petition shall comprise of the following

- A comparison of audited performance of the Licensee for the previous financial year with the approved forecast for such year subject to prudence check including pass through of impact of uncontrollable factors.
- Review of compliance of directives issued by the Commission from time to time.
- Any other relevant factors.
- **Commission considers Suo-Moto action for final True up for FY 2013-14 & FY 2014-15 in the absence of the petitions, as the true up orders were passed provisionally.**

4.17 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 was to implement the tariff orders passed on 31.03.2018 till 31.03.2020.

4.18 ARR for the FY 2020-21

The Licensee has filed separate ARR for MePGCL Old plants without the breakup data for GFA. The Asset value of old projects is clubbed with the MLHEP ARR, where from segregation of the asset wise GFA data for old projects could not be made.

Commission therefore considers the ARR and Tariff order shall be computed based on the Trued down GFA values of combined utility for FY 2016-17.

Commission considers that the ARR and tariff orders for FY 2020-21 are passed considering the SOA for FY 2017-18 certified by the Statutory Auditors and assumptions for FY 2018-19 to FY 2020-21 adopted at the level of FY 2017-18 in the absence of audited results.

5. Analysis of ARR and Determination of Generation Tariff for MLHEP & MePGCL Old Projects for FY 2020-21

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 Background

MSERC had approved ARR for all the generating stations of MePGCL for FY 2020-21 in the MYT regime on 31.03.2018. The ARR for MLHEP and MePGCL old projects was separately approved, and the licensee was asked to file separate ARR and generation tariff for MePGCL old plants and MLHEP with approved ARR.

MePGCL has filed petition for approval of the ARR and determination of generation tariff for FY 2020-21 on 29.11.2019.

Commission has admitted the petition provisionally on 09.12.2019.

5.3 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.

5.4 ARR for FY 2020-21

Petitioner's Submission:

The Licensee has submitted to approve the ARR and AFC for FY 2020-21 for MLHEP and MePGCL old Projects including sonapani vide table no. 3 & 6 of the petition as summarised below

Table 5.1 : ARR & Annual Fixed Charges for FY 2020-21 – Myndtu Leshka HEP

(INR Cr.)

Particulars	FY 2020-21
Annual Fixed Cost Approved by MSERC for FY 2020-21 (a)	162.59
Add: Additional Claim as per review petition for True up of FY 2015-16 (b)	75.65
Less: Gap (surplus) from True up of FY 2016-17 (c)	(25.12)
Carrying Cost due to delay in orders (d)	6.97
Net AFC for Computation of Tariff (e=a+b+c+d)	**220.10**

Table 5.2 : ARR & Annual Fixed Charges for FY 2020-21: Old Plants Including Sonapani

Particulars	FY 2020-21 (INR Cr.)
Annual Fixed Cost (AFC) Approved for FY 2020-21 (a)	33.32
Add: Additional Claim as per review petition for True up of FY 2015-16 (b)	106.57
Less: Gap (surplus) as per True up of FY 2016-17 (c)	(35.38)
Carrying Cost due to delay in orders (d)	9.82
Total AFC for FY 2020-21 (e=a+b+c+d)	**114.33**

Commission's Analysis:

Commission had approved ARR separately for MLHEP and MePGCL old projects including sonapani in the MYT order for FY 2018-19 to FY 2020-21 and the ARR has been combined for both the projects and approved Annual Fixed Cost combined for MLHEP and MePGCL old Projects including Sonapani vide table no.5.46 and 5.47 of MYT Order.

Table 5.3 : Approved ARR for MePGCL (MLHEP& Old Plants) in MYT Order for FY 2020-21

(INR.Cr)

Sl. No	Particulars	Total FY 2020-21
1	Interest and Finance Charges	47.45
2	Depreciation	57.33
3	O & M expenses	67.18
4	Interest on Working Capital	7.64
5	Return on Equity	56.16
6	SLDC Charges	1.33
7	Net Prior Period Items	-
8	**Gross annual fixed charges**	**237.09**
9	Less Non Tariff Income	15.92
10	**Net Annual Fixed Charges**	**221.17**

Table 5.4 : Plant wise Annual Fixed Cost allocated for each power station for FY 2020-21

Sl.no	Particulars	Capacity (MW)	Approved AFC (Rs. Crores)
			2020-21
1	Umiam Stage I	36	6.35
2	Umiam Stage II	20	3.53
3	Umiam Stage III	60	10.49
4	Umiam Stage IV	60	10.49
5	Umtru Power Station	11.2	2.00
6	Sonapani	1.5	0.26
7	**Total Old Stations**	**188.70**	**33.32**
8	MLHEP	126	162.59
9	New Umtru	40	24.86
10	Lakroh	1.5	0.39
11	**Total**	**356.20**	**221.17**

The Claim of the Licensee in the petition does not reflect the approved ARR for FY 2020-21 in the MYT Order.

5.5 Gross Fixed Assets

Petitioner's Submission:

MePGCL has claimed GFA at Rs.1283.64 Crore for MLHEP and Rs.49.39 Crore for Old Projects as approved in MYT Order for FY 2020-21.

Commission's Analysis:

The Licensee has submitted SOA for FY 2017-18 certified by Statutory Auditors.

Commission had approved True up of the business for FY 2016-17, according to trued down books for FY 2016-17, Opening GFA is considered at Rs.1286.74 Crore for MLHEP and Rs.49.39 Crore for MePGCL Old Projects.

The Licensee has reported capitalization of Rs.602.45 Crore vide note no.1 of SOA for FY 2017-18. The SOA does not disclose against which projects the capitalization of Rs.602.45 Crore is accounted for in the FY 2017-18. However, since the New Umtru Project cost has been certified by the auditors, commission considers provisionally the capitalization shown in the FY 2017-18 pertaining to New Umtru Project for approval of capital cost of New Umtru and provisional ARR for FY 2018-19 to FY 2020-21 in a separate order.

The Licensee shall file true up petitions from FY 2017-18 to FY 2018-19 along with C&AG audit report.

In the true up accounts for FY 2016-17 the closing balance of the GFA as on 31.03.2017 stood at Rs.1352.11 Crore. Thus opening balance for FY 2017-18 shall be Rs.1352.11 Crore.

Considering the closing balance of the GFA as on 31.03.2017 at Rs.1352.11 crore the GFA for the MYT Period is revised in the table below.

Table 5.5 : Combined Gross Fixed Assets for MLHEP and MePGCL

(INR. Cr)

Sl.No	Particulars	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	Opening GFA as approved for FY 2016-17	1352.11	1352.11	1352.11	1352.11
2	Additions during the year	-	-	-	-
4	Closing GFA	1352.11	1352.11	1352.11	1352.11
5	Average GFA	1352.11	1352.11	1352.11	1352.11

5.6 O& M Expenses for MLHEP & Old Projects and Sonapani

Petitioner's Submission:

MePGCL has claimed O&M Expenses at Rs.67.18 Crore for MLHEP and Old Projects for FY 2020-21.

Commission's Analysis

Commission had approved O&M expenses in the MYT order for FY 2020-21 at Rs.67.18 crore.

Table 5.6 : O & M Expenses

Particulars	FY 2020-21 (in Cr)
O&M Expenses	67.18

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

a) Employee Cost

b) Repairs and Maintenance

c) Administration and General Expenses.

Commission had considered the O&M expenses as per the Regulation 56 (7) for MLHEP and Regulation 56 (5) of MYT Regulations of 2014 for MePGCL old projects.

O&M expenses of MeECL shall be appropriated in the true up exercise.

Table 5.7 : Combined O & M expenses for MePGCL old projects and MLHEP for FY 2020-21

(INR.Cr)

S.no	Particulars	FY 2020-21
1	O & M Expenses for MLHEP	33.49
2	O&M Expenses for old projects	33.69
	Total	**67.18**

Commission considers O& M expenses at Rs. 67.18 Crores for ARR of FY 2020-21.

5.7 Return on Equity for MePGCL (MLHEP and Old Projects)

Petitioner's Submission:

MePGCL has claimed Return on Equity for Rs.56.16 Crore for MLHEP and Old Projects as approved in MYT Order for FY 2020-21.

Commission's Analysis:

Commission had approved Return on Equity in the MYT order for FY 2020-21 at Rs.56.16 crore for MePGCL (MLHEP and Old Projects) considering the projected capitalization as approved for Business plan for FY 2018-19 to FY 2020-21.

As per the SOA for FY 2017-18 certified by Statutory Auditors, the capitalization reported at Rs.602.45 Crore is provisionally considered against the New Umtru Project and the provisional ARR approved for New umtru project considered in separate order shall be included in the MePGCL ARR for FY 2020-21.

Regulation 31 of MYT Regulations 2014 specifies:-

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

Licensee has not submitted asset wise GFA breakup separately for MLHEP and old projects. The GFA after adjusting the grants available as on 31.03.2018 is considered provisionally for computation of ROE for ARR of FY 2020-21 as per the Regulations.

Commission considers Return on Equity as analyzed in the table below

Table 5.8 : Combined Return on Equity for MLHEP & MePGCL Old Projects for FY 2020-21

(INR. Cr)

Sl. No	Particulars	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
1	Opening GFA	1352.11	1352.11	1352.11	1352.11
2	Addition during the year	-	-	-	-
3	Closing GFA	1352.11	1352.11	1352.11	1352.11
4	Average GFA	1352.11	1352.11	1352.11	1352.11
5	Less: Grants and Contributions	192.66	192.66	192.66	192.66
6	Net GFA	1159.45	1159.45	1159.45	1159.45
	Debt Equity Ratio 70:30				
7	Equity @ 30% of Sl.no.6	347.83	347.83	347.83	347.83
8	Return on Equity at 14%	48.70	48.70	48.70	48.70

Commission considers Return on equity at Rs. 48.70 Crore for FY 2020-21.

5.8 Depreciation for MePGCL

Petitioner's Submission:

MePGCL has claimed Depreciation for Rs.57.33 Crore for MLHEP and MePGCL Old Projects as approved in MYT Order for FY 2020-21.

Commission's Analysis

Commission had approved Depreciation at Rs.57.33 Crore for MePGCL (MLHEP & Old Projects) in the MYT order for FY 2020-21.

Licensee has submitted SOA for FY 2017-18 certified by the statutory auditors, in which capitalization is accounted for Rs.602.45 Crore is considered provisionally against New Umtru project for the value certified by the auditors and the project cost and provisional ARR for FY 2018-19 to FY 2020-21 is approved in a separate order.

As per the Regulation 33 (1) of MSERC Regulations 2014, *Depreciation shall be allowed up to 90% of the capital Cost of asset. In case of operation of the Asset for part of the year, depreciation shall be charged on pro-rata basis.*

Consumer contribution or capital subsidy/ grant etc shall be excluded from the asset value for the purpose of depreciation.

Commission has considered the Depreciation on the assets base after grants and subsidies available for FY 2017-18 has been adjusted for computation of depreciation in the table below for ARR FY 2020-21.

Table 5.9 : Combined Depreciation for FY 2020-21 for MLHEP and Old Projects

(INR.Cr)

Sl. No	Particulars	FY 2020-21
1	Opening GFA for FY 2020-21 (Excl. Land)	1321
2	Addition during the year	-
3	Closing GFA	1321
4	Average GFA	1321
5	90% of GFA	1188.90
6	Depreciation @ 4.52%	53.74
7	Less: Depreciation on Grants and Subsidies Rs.192.66 Crore	8.71
8	Depreciation for FY 2020-21	45.03

Commission considers Depreciation for ARR of FY 2020-21 at Rs. 45.03 Crore.

5.9 Interest on Loan Capital

Petitioner's Submission:

MePGCL has claimed Interest on Loan Capital for Rs.47.45 Crore for MLHEP and MePGCL Old Projects as approved in MYT Order for FY 2020-21.

Commission's Analysis:

Commission had approved Interest and Finance Charges at Rs.47.45 Crore for MePGCL (MLHEP & Old Projects) for FY 2020-21 in the MYT Order.

As per the Regulation 32 of MSERC MYT Regulations 2014, *Interest on Loan Capital shall be allowed for tariff as per the schedule of loan, repayment, terms and* *conditions of Loan Agreement and lending rate specified there in.*

Moratorium availed if any by the Generation Company the depreciation provided for in the tariff during the period of moratorium shall be treated as repayment during these years and interest on Loan Capital shall be calculated accordingly.

Licensee has submitted SOA for FY 2017-18 certified by statutory auditors. The SOA's does not reflect the outstanding loans approved in the true up orders for FY 2017-18 and projected some other new loans against the MLHEP for re-financing of bonds which is not relevant for consideration of interest cost. The interest cost considered provisionally against New Umtru and Lakroh projects shall be adjusted on approval of the capital cost and final tariff.

The Interest Cost projected for MeECL shall not be considered for ARR of MePGCL.

The interest and finance charges approved in the MYT order is considered for ARR of FY 2020-21 after adjusting the capitalization projected by the licensee in the absence of audited accounts and loan profile for the period FY 2017-18 to FY 2020-21.

Table 5.10 : Combined Interest and Finance Charges for MLHEP and MePGCL Old Projects for FY 2020-21

(INR. Cr)

Sl. No	Particulars	Opening Balance	Addition during the year	Repayment during the year	Closing Balance	Amount of Interest Accrued
1	2	3	5	6	7	8
1	11.07% REC (MLHEP)	132.85	-	25.3	107.54	13.31
2	13.25 % PFC (MLHEP)	140.92	-	16.11	124.81	17.60
3	12.75 % CBI (ML)	**8.59**	-	8.33	0.26	0.56
4	**Total**	**282.35**	**-**	**49.74**	**232.61**	**31.47**
5	Capitalization on Pro- rata basis	-	-	-	-	(-)9.27
6	**Net Interest (MLHEP)**	**-**	**-**	**-**	**-**	**22.20**
	MePGCL OLD Projects					
7	12.15 % PFC(NUP)	300.08	-	31.45	268.63	34.55
8	11.00 PFC (Lakroh)	4.73	0.46	-	5.19	0.55
9	Total	304.81	0.46	31.45	27382	35.10
10	**Less:** Capitalization of Interest on Pro- rata basis	-	-	-	-	(-)9.85
11	**Net Interest**					**25.25**
12	**Total for MePGCL (6+11)**					**47.45**

Commission considers Interest on Loan capital for FY 2020-21 at Rs.47.45 Crores.

5.10 Interest on Working Capital for MePGCL

Petitioner's Submission:

MePGCL has claimed interest on working Capital for Rs7.64 Crore for MLHEP and MePGCL Old Projects as approved in MYT Order for FY 2020-21

Commission's Analysis:

Commission had approved Interest on Working capital for MePGCL (MLHEP & Old Projects) at Rs. 7.64 Crore for FY 2020-21 in the MYT Order.

Regulation 34 of MSERC Regulations 2014 provides for allowance of Interest on Working Capital for Hydro Power Generating stations for purpose of ARR and determination of Tariff (AFC).

The following components shall be considered for Computation of Interest on working Capital.

a. *O & M expenses for one (1) month*
b. *Maintenance Spares at 15 % of O & M Expenses escalated at 6% from the date of Commercial Operation.*
c. *Receivables equivalent to two (2) months of Fixed Cost.*

Licensee has submitted un-audited SOA for FY 2017-18 and FY 2018-19; Commission has considered the receivables for two months for computation of interest on working capital as per Regulations.

Table 5.11 : Approved Interest on Working Capital (MePGCL) for FY 2020-21

(INR. Cr)

Sl.No	Particulars	FY 2020-21
1	O & M Expenses for 1 Month (excl. MeECL cost)	5.60
2	Maintenance spares at 15% of O & M expenses escalated at 6 % from the COD	10.68
3	Receivable for Two(2) months of (AFC) Fixed Costs	32.30
4	Total working Capital Requirement	48.58
5	**Interest at 13.80%**	**6.70**

Commission considers Interest on working Capital for ARR FY 2020-21 at Rs. 6.70 Crore.

5.11 SLDC Charges

Petitioner's Submission

Commission had approved SLDC charges at Rs. 1.33 Crore for MePGCL (MLHEP & Old Projects) for FY 2020-21 in the MYT Order.

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.*

Commission has determined SLDC charges at Rs.2.66 Crore in the Transmission ARR for FY 2020-21.

50% of the SLDC charges approved in the MePTCL ARR shall be paid by the MePGCL, accordingly the expense at Rs.1.33 Crore is considered for ARR of FY 2020-21.

5.12 Income Tax for MLHEP

Petitioner's Submission

MePGCL has submitted that Income tax shall be claimed in the subsequent filings for true-up.

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.

Since the Licensee has not filed the actual Income tax paid as per the audited accounts, Commission does not consider Income tax for FY 2020-21.

5.13 Non Tariff Income for MePGCL

Petitioner's Submission

Licensee has submitted that the Non Tariff Income is estimated at Rs.15.92 Crore for MePGCL (MLHEP & Old Projects) for FY 2020-21 in the MYT Order.

Commission's Analysis

The Non Tariff and other income considered in the MYT Order at Rs.15.92 Crore.

Commission considers Non- Tariff Income for MePGCL at Rs.15.92 Crore for FY 2020-21.

5.14 Total Gap to be recovered through Tariff in FY 2020-21

Petitioner's Submission

It may be noted that the approved AFC as well as the gaps of previous year(s) due to true up and review petition on true up order is to be cumulatively recovered through the tariff of FY 2020-21. In the review petition on the true up order for FY 2015-16 dated 25th September 2018, the company had requested the Commission to allow an additional gap of Rs. 182.22 Cr. **The utility had segregated this additional gap among the old plants including Sonpani & Myntdu Lehska power plants in proportion to their capacities.** The order on the above mentioned petition is yet to be passed.

The Commission on 18th November, 2019 issued the generation true up FY 2016-17 order which will be adjusted in the Net ARR of FY 2020-21. The Commission has allowed a surplus of Rs 60.50 Cr for FY 2016-17. Since no segregation for old plants and MLHEP has been given for the above true up order, the utility has segregated this surplus among the old plants including Sonapani & Myntdu Lehska power plants in proportion to their capacities.

Based on the above submissions, the final gap due to true up and review petition on true up orders which needs to be passed on in the tariff of FY 2020-21 is given below:

Table 5.12 : Gaps to be passed on in Tariff of FY 2020-21

(INR Cr)

Particulars	**Amount**
Additional Claim as per Review Petition of True Up FY 2015-16 of MePGCL (a)	182.22
Gap/(Surplus) from True up of FY 2016-17 of MePGCL (MLHEP and Old Plants Combined) (b)	(60.50)
Total Gap (c=a+b)	**121.72**

Commission's Analysis

The commission has not admitted the review petition on true up orders for FY 2015-16 filed by the licensee. The True up orders of the business for FY 2015-16 issued on 25.09.2018 resulted in a **surplus of Rs.6.55 Crore** for Old projects and MLHEP shall be appropriated in the ARR of FY 2020-21.

Commission has trued down the business for FY 2016-17 and the approved **surplus of Rs.60.50 Crore** shall be appropriated in ARR for FY 2020-21.

5.15 Carrying Cost

Petitioner's Submission

Petitioner submitted that both the above-mentioned petitions were filed by MePGCL and the orders were due in the last financial year. The delay in the issue of orders has affected the liquidity scenario and the company had to resort to short term borrowing to meet its financial obligations. Thus, keeping this in mind, MePGCL is proposing a carrying cost on the above gap based on the lending rate as on 01.04.2019. The carrying cost computation has been given below:

Table 5.13 : Carrying Cost Calculation for MLHEP

Particulars	**(In INR Cr)**
Additional Claim as per Review Petition of True Up FY 2015-16 of MLHEP (1)	75.65
Gap from True up of FY 2016-17 of MLHEP (2)	(25.12)
Interest rate as on 01.04.2019 considered for carrying cost calculation (3)	13.80%
Carrying Cost due to delay in orders (sum of 1 & 2 *3)	**6.97**

This gap and the carrying cost will have an impact on the AFC requirement for FY 2020-21, and thereby the utility is requesting the Commission to allow the net AFC for FY 2020-21 for MLHEP, which comes up to INR 220.10 Cr. as shown below:

Table 5.14 : Annual Fixed Charges for FY 2020-21 – Myndtu Leshka HEP

(INR Cr.)

Particulars	**FY 2020-21**
Annual Fixed Cost Approved by MSERC for FY 2020-21 (a)	162.59
Add: Additional Claim as per review petition for True up of FY 2015-16 (b)	75.65
Less: Gap (surplus) from True up of FY 2016-17 (c)	(25.12)
Carrying Cost due to delay in orders (d)	6.97
Net AFC for Computation of Tariff (e=a+b+c+d)	**220.10**

*Before the issue of next tariff order, any further orders from the Commission on the above gaps of past years for MePGCL shall be considered as applicable for adjustment in the Net ARR and determination of tariff for FY 2020-21

Commission's Analysis

The Licensee shall refer to the Regulation 11 of MYT Regulations 2014, according to which the true up petition for FY 2015-16 shall be filed along with the petition for ARR for FY 2017-18 (November 2016) along with C&AG audit report. Whereas MePGCL has filed true up petition for FY 2015-16 on 09.01.2018 and C&AG audit report was filed on 14.02.2018. Commission has issued true up orders on 25.09.2018 after obtaining the required inputs and additional data with reference to the Regulations. The delay in passing true up orders for FY 2015-16 was on the account of belated filing of petition and additional data required. The carrying cost if any for recovery of the Gaps/surplus shall be to the account of the licensee. Similarly petition for true up of FY 2016-17 shall be filed along with the tariff petition for FY 2018-19 (November 2017) together with C&AG audit report. Whereas the licensee has filed true up petition for FY 2016-17 on 30.05.2019. After prudence check by the commission true up orders were passed on 18.11.2019. The delay in issuing true up orders for FY 2016-17 was on the account of belated filing of petition by the Licensee, the carrying cost if any for recovery of the Gaps/surplus shall be to the account of the licensee.

The Licensee shall bear the impact of the carrying cost for recovery of the true up gap/surplus and made good to the beneficiaries where ever surplus is resulted upon true up of the Business as per the Regulations.

Section 62 (6) of EA 2003 specifies that- *If any licensee or a generating company recovers a price or charge exceeding the tariff determined under this section, the excess amount shall be recoverable by the person who has paid such price or charge along with interest equivalent to the bank rate without prejudice to any other liability incurred by the licensee.*

Commission <u>does not</u> consider carrying cost claimed by the licensee.

5.16 Fixed and Energy Charges

Petitioner's Submission

Now, based on the Regulations, 50% of the Annual Fixed Cost is to be recovered as fixed charge and the balance is to be recovered as energy charge from the beneficiary. Therefore, the fixed charge and energy charge for MLHEP for FY 2020-21 is computed below:

Table 5.15 : Fixed and Energy Charges for Myndtu Leshka HEP FY 2020-21

Particulars	FY 2020-21
Net AFC for Computation of Tariff (INR Cr.) (a)	**220.10**
Net Energy Generation in MUs for FY 2020-21 * (b)	410.22
Fixed Charge (INR Cr.) (c=a/2)	**110.05**
Energy Charge (INR /kWh) (d=a/2b)	**2.68**

*Energy Generation for computation of energy charge for Myntdu Leshka HEP is based on the approved Business plan for MePGCL dated 15th November, 2017 (Table 8 of the order)

Based on the above submissions, the petitioner humbly prays before the Commission to kindly approve the tariff of Myntdu Leshka Hydro Electric Project for FY 2020-21 as computed in the above table.

Commission's Analysis

A consolidated fixed charge and Energy Charge for MLHEP and MePGCL old projects has been computed at table no 5.23 in this order for Generation Tariff for FY 2020-21.

5.17 Capital Cost and Provisional ARR for FY 2018-19 to FY 2020-21 for NUHEP

Commission had approved capital cost and final Tariff for New Umtru Project on 25.03.2020. Commission has computed the ARR for FY 2017-18 (for 9 months period from 01.07.2017 to 31.03.2018) and provisional ARR for FY 2018-19 to FY 2020-21 as detailed below.

Table 5.16 : Approved Annual Fixed Charges for New Umtru HEP

(Rs.Cr.)

Sl. No.	Particulars	FY 2017-18 (01.07.17 to 31.03.18)	FY 2018-19 (Provisional)	FY 2019-20 (Provisional)	FY 2020-21 (Provisional)
1	Interest on Loan capital	27.79	33.42	29.56	25.69
2	Depreciation	7.33	17.93	17.99	17.99
3	O&M Expenses	8.71	12.27	12.98	13.72
4	Interest on working capital	1.48	2.00	2.00	1.94
5	Return on Equity	13.25	18.36	19.09	19.13
6	Income Tax	-	-	-	-
7	SLDC	0.11	0.15	0.15	0.15
8	Net Prior Period Items	-	-	-	-
	Total Annual Fixed Cost	**58.67**	**84.18**	**81.82**	**78.67**
9	Less: Non-Tariff Income	-	0.11	0.12	0.12
	Net Annual Fixed Charges	**58.67**	**84.07**	**81.70**	**78.55**

The Licensee shall file the true up petition for FY 2017-18 to FY 2019-20 with reference to actual performance.

The Approved ARR for FY 2020-21 is consolidated for MLHEP and MePGCL old Projects and annual fixed charges for MePGCL including New Umtru project and project wise capacity charges are computed in the table no.5.23 as per the Regulations.

5.18 Capacity Charge and Energy Charge for Old Plants including Sonapani

Petitioner's Submission

Following the same approach followed in the previous MYT tariff orders, MePGCL proposes to recover the annual fixed cost for each station based on the capacity of each station for determining energy charges and fixed charges in FY 2020-21.

It may be noted that the approved AFC as well as the gaps of previous years due to true up and review petition on true up order is to be cumulatively recovered through the tariff of FY 2020-21. The Commission in its order dated 31st March, 2018, had approved the AFC for FY 2020-21 as INR 33.32 Cr for old plants including Soaping.

In the review petition on the true up order for FY 2015-16 dated 25th September 2018, the Utility has requested the Commission (vide No. MePGCL/D/GEN/Misc-43/2008/Pt-XII/19 dated 30th November,2018) to allow an additional gap of INR. 182.22 Cr. The share of old plants including Sonapani from the gap of FY 2015-16 review on true up is Rs 106.57 Cr.

The Commission on 18th November, 2019 issued the generation true up FY 2016-17 order which will be adjusted in the Net ARR of FY 2020-21. The Commission has allowed a surplus of Rs 60.50 Cr for FY 2016-17. The share of Old Plants including Sonapani from the surplus of Rs 60.50 Cr is Rs 35.38 Cr

Both the above-mentioned petitions were filed by MePGCL and the orders were due from the Commission in the last financial year. The delay in order has affected the liquidity scenario of the company and the utility had to resort to short term borrowing to meet its financial obligations. Thus, keeping this in mind, MePGCL is proposing a carrying cost on the above gaps based on the lending rate as on 01.04.2019. The carrying cost computation is given below:

Table 5.17 : Carrying Cost Calculation for Old stations including Sonapani

Particulars	(In INR Cr)
Additional Claim as per Review Petition of True Up FY 2015-16 of MePGCL (Old Plants including Sonapani) (1)	106.57
Gap from True up of FY 2016-17 of MePGCL (Old Plants including Sonapani) (2)	(35.38)
Interest rate as on 01.04.2019 considered for carrying cost calculation (3)	13.80%
Carrying Cost due to delay in orders (sum of 1-2 *3)	**9.82**

The net AFC for MePGCL's old plants including gap of previous years to be passed on for FY 2020-21 is summarized below:

Table 5.18 : Annual Fixed Charges for FY 2020-21: Old Plants Including Soaping

(INR Cr.)

Particulars	FY 2020-21
Annual Fixed Cost (AFC) Approved for FY 2020-21 (a)	33.32
Add: Additional Claim as per review petition for True up of FY 2015-16 (b)	106.57
Less: Gap (surplus) as per True up of FY 2016-17 (c)	(35.38)
Carrying Cost due to delay in orders (d)	9.82
Total AFC for FY 2020-21 (e=a+b+c+d)	**114.33**

***Before the issue of next tariff order, any further orders from Commission on the above gaps of past years for MePGCL shall be considered as applicable for adjustment in the Net ARR and determination of tariff for FY 2020-21**

Since the old plants have passed their useful life, MePGCL is requesting the Commission to consider the average of actual generation of last 6 years rather than design energy for computation of tariff in case of old plants to make it more realistic. The station- wise allotted Net Annual Fixed Cost proposed for recovery in FY 2020-21 is shown in the table below:

Table 5.19 : AFC, Capacity charges and Energy charges for FY 2020-21

Sl. No	Name of the Power Station	MW	Projected Generation FY 2020-21 (Avg of last 6 years) (MU)	Annual Fixed Charges (INR Cr.)	Capacity Charges (INR Cr.)	Energy Charges (INR /Unit)
1.	Umiam I	36	98.82	23.19	11.60	1.17
2.	Umiam II	20	50.56	12.88	6.44	1.27
3.	Umiam III	60	115.74	38.65	19.33	1.67
4.	Umiam IV	60	178.60	38.65	19.33	1.08
5.	Mini Hydel (Sonapani)	1.5	6.58	0.97	0.47	0.74
	Total	**177.5**	**450.30**	**114.33**	**57.16**	**1.27**

The Umtru power plant has been under shutdown due to aging of machines and hydraulic structures, for which renovation and modernization has to be carried out. The station has not generated any power from FY 2016-17 to FY 2018-19 and is not expected to generate any power in FY 2020-21. The same has been approved by the Commission in its Business Plan order dated 15th November, 2018. Thus, the net share of AFC for Old Plants including Sonapani has been proposed to be recovered through the other old plants including Sonapani.

The total installed capacity of the old plants including Sonapani is 177.5 MW (excluding Umtru HEP) and the average generation from these plants is 450.30 MU. Following the similar approach adopted in the MYT tariff order, MePGCL proposes to recover the total annual fixed cost from the beneficiary in the Financial Year 2020-21 on these plants on the basis of their installed capacity and target energy generation as computed above.

Based on all the above submissions, the petitioner humbly prays before the Commission to kindly approve the tariff of Old Plants including Sonapani for FY 2020-21 as computed in the above table.

Commission's Analysis

A consolidated fixed charge and Energy Charge for MLHEP and MePGCL old projects has been computed in this order vide table no.5.23 for ARR FY 2020-21 including New Umtru project.

Commission has considered the ARR for FY 2020-21 after detailed analysis of the petition with reference to SOA of FY 2017-18 , and the **true up surpluses** for the FY 2013-14 and FY 2014-15 **(Suo-Moto Action)** and FY 2015-16 and FY 2016-17 as per the Regulations has also been factored in the ARR for FY 2020-21.

Particulars	Rs. In Cr.
True up (**Suo Moto)** for FY 2013-14 & FY 2014-15	40.19
True up for FY 2015-16 dated 25.09.2018	6.55
True up orders for FY 2016-17 dated 18.11.2019	60.50

The carrying cost proposed by MePGCL in table no.5,6 & 7 of para 2.4 of the petition in question, commission would like to point out that the delay in filing the petitions along with C&AG audit reports was caused from the utility side. The Carrying cost if any to be recovered shall be chargeable to the licensee for the failure to file the true up petitions along with C&AG audit reports as per the Regulations.

The Licensee shall bear the impact of the carrying cost for recovery of the true up gap/surplus and made good to the beneficiary where ever surplus is resulted upon true up of the Business as per the Regulations.

The Licensee has proposed to consider the Net Annual fixed cost in respect of the old plants which have completed their useful life on the basis of last six years average generation, rather than design energy for recovery in FY 2020-21 vide table no.7 of the petition.

In this connection commission would like to clarify that there are no liabilities to be discharged against those old projects towards ROE, Depreciation and Interest on Loan capital etc. However O&M expenses and interest on working capital, SLDC charges etc are allowed in the Annual fixed charges against the old projects, whose useful life time is completed. Commission has considered O&M expenses against Umtru Project which has been not operational from FY 2016-17, and installed capacity of 11.2 MW is not factored for computation of fixed charges. There is no Regulatory provision to consider the Annual fixed charges based on the average generation of last six years as sought for by the licensee.

The Formula for computation of Annual fixed charges as per the Regulations is given below

AFC x 0.5 x NDM/NDY x (PAFM/NAPAF) (in Rupees)

The Energy charges shall be computed as per the Regulation 57.2 (2) is given in the Formula

ECR = AFC x 0.5 X 10 / {DE x (100 – AUX) x (100 – FEHS)}

5.19 Tariff for Lakroh and New Umtru HEP for FY 2020-21

5.19.1. Tariff for Lakroh

Petitioner's Submission

The Lakroh SHP has achieved COD on 1st March, 2019. The final capital cost vetting is in process and the Utility will soon file the petition for approval of capital cost and AFC for FY 2018-19 to FY 2020-21 along with tariff determination for FY 2020-21. MePGCL prays before the Commission to continue with the levelised tariff of Rs 3.70 per unit as an interim arrangement.

Commission's Views

The Licensee has been authorized to bill a provisional Tariff for Lakroh and New Umtru Projects during the FY 2018-19 for the energy sold to the MePDCL till the capital cost has been approved. Since the capital cost for New Umtru has been approved, Licensee shall file true up petition for approval of the commission. The Licensee has yet to file petition for approval of the capital cost and final tariff for lakroh project together with necessary approvals from the competent authorities along with audited Statement of Accounts.

5.19.2. Tariff for New Umtru HEP

Petitioner's Submission

The petitioner is filing separately the petition for approval of Capital Cost, AFC for MYT Control Period FY 2018-19 to FY 2020-21 and tariff for FY 2020-21 of New Umtru Hydro Electric Project (NUHEP) in November, 2019.

Commission's Views

Commission has approved Capital Cost of New Umtru project and Final tariff for FY 2017-18 to FY 2020-21. The Licensee shall file the true up petitions for the FY 2017-18 to FY 2019-20 along with audited accounts and C&AG Reports for commission's approvals as per Regulations.

5.20 SUO-MOTO Truing Up of ARR for FY 2013-14 and FY 2014-15

Commission in its Order dated 30.03.2016 had clearly mentioned vide Para 1.6 of chapter 1; Approach of the Commission, that the true up orders passed for FY 2013-14 and FY 2014-15 shall be interim approvals subject to re-adjustment after filing of audited accounts certified by C&AG.

The Licensee (MePGCL) has not filed petition for True up along with C&AG audit report.

The Licensee had filed Review petition on 30.05.2016, against the provisional True up orders of the Commission dated 30.03.2016, seeking higher allowance of Return on Equity, Interest on working Capital and Interest and finance charges etc., for the FY 2013-14 without filing audited accounts and C&AG audit report.

The Licensee had also filed Review petition on 30.05.2016, seeking higher allowance in respect of ROE, Interest on working capital and interest and finance charges etc., for FY 2014-15 without filing audited accounts and C&AG audit report.

Commission had disposed both the petitions considering the Regulatory implications and held, the Review true up orders for the FY 2013-14 and FY 2014-15 passed on 30.03.2017 are only interim approvals subject to re adjustment of Revenue gap/Surplus after filing of the petition with audited accounts and C&AG audit report.

Thus there has been an omission on the part of the Licensee in filing of the applications for final true up of the Business for FY 2013-14 & FY 2014-15 after receipt of the C&AG audit reports as per the Regulations.

Regulation 15(4) specifies that, *the Commission may undertake **Suo-moto** truing up of the ARR of previous year, if the Licensee fails to make an application for Truing up of the ARR of previous Year.*

There has been a flaw in Regulation of Expenses without C&AG audit report on the Accounts of the Licensee for the FY 2013-14 and FY 2014-15.

The True up gap/surplus Adjustment.

Commission had in the ARR and Tariff Orders for FY 2013-14 and FY 2014-15 held that the O&M Cost claimed by the MePGCL in the Tariff petition for FY 2013-14 & FY 2014-15 includes O&M Costs of MLHEP & Lakroh whose capital cost was not approved and a provisional Tariff for MLHEP & Lakroh was considered at Rs. 2.83 ps/kwh and Rs.0.74 Ps/kwh respectively pending approval of capital cost for MLHEP and final true up based on the C&AG audit reports, for MePGCL.

Commission had approved Capital Cost for the 3x42 MW MLHEP, for which Tariff was fixed at Rs.2.83/kwh provisionally. The Tariff Orders for MePGCL for the FY 2013-14 passed on 30.03.2013 reads that, Rs.135.54 Crores Revenue available based on provisional Tariff allowed at Rs.2.83/kwh for the power generated from MLHEP would enable the licensee meet the financial commitment of Interest on loans and repayment of Principle etc.

MePGCL has projected in the Tariff petition for FY 2013-14 (T.O Pg no.75), that useful life of projects namely Umiam Stage I, II, III and Umtru has already completed (35 years) and therefore no depreciation is proposed for the same. Thus the capital cost for Sonapani (1.5 MW) and Umiam Stage IV (60 MW) only was considered for depreciation charges and the ARR for FY 2013-14 and FY 2014-15 has been approved without considering the Depreciation against old projects whose useful life of 35 years has already completed.

Commission while analyzing the Tariff petition for FY 2013-14 & FY 2014-15 had held that the O&M expenses claimed by MePGCL include the employee cost of MLHEP, Lakroh and New umtru.

Commission considers to revisit into the provisional True up orders for FY 2013-14 and FY 2014-15 passed on 30.03.2016 and 30.03.2017 with reference to audited accounts and C&AG audit reports of MePGCL as a whole including MLHEP true up orders for FY 2013-14 & FY 2014-15 after approval of capital cost and final Tariff as per the Regulations.

While doing so, Commission would be required to re consider and regulate the expenses in the True up orders for FY 2013-14 and FY 2014-15 passed on 30.03.2016 & 30.03.2017 respectively for MePGCL & MLHEP in view of the fact that the licensee has not filed petition for final true up after approval of capital cost and true up orders of MLHEP for the FY 2013-14 and FY 2014-15 passed on 30.03.2017 as per the commission’s Directives.

Commission in the Circumstances considers **Suo-Moto** action to relook into the provisional True up orders passed on 30.03.2016 and 30.03.2017 in respect of MePGCL old projects with reference to true up orders passed for MLHEP for the FY 2013-14 & FY 2014-15 and Regulate the expenses, combined for MePGCL admissible as per the MSERC Regulations in the absence of petitions by the Licensee.

Licensee had filed petition for approval of the Capital Cost of MLHEP on 30.11.2016 and for true up of the Business for FY 2013-14 and FY 2014-15 without audited accounts and C&AG audit reports.

Commission had considered the petition and approved the capital cost as per the Regulations. Commission also carried out true up of the business for MLHEP for FY 2013-14 & FY 2014-15 allowing the O&M Costs as per Regulation 56 (7) of MYT Regulations 2014 and other expenses as admissible.

As a result, the O&M Cost of MLHEP which was included in the tariff order for MePGCL (old projects), the True up order for FY 2013-14 and FY 2014-15 were passed without adjusting the O&M cost of MLHEP which was included in MePGCL old projects tariff order due to non-filing of true up petition against old projects with audited accounts and C&AG report.

The C&AG audit report of MePGCL for FY 2013-14 was received on 23.01.2017 by which date the provisional true up order was issued on 30.03.2016 and the C&AG audit report for FY 2014-15 was received on 11.09.2017 by which date the provisional true up order was passed on 30.03.2017, and true up orders of MLHEP for FY 2013-14 and FY 2014-15 was issued on 30.03.2017, and the final true up petition with C&AG report for MePGCL for FY 2013-14 and FY 2014-15 has not come up before the Commission.

Thus there has been a flaw in Regulation of the Expenses for MePGCL as admissible for the FY 2013-14 and FY 2014-15 for which Commission considers the **Suo-Moto** action in the absence of final true up petition from the licensee.

A Comparison of the ARR approved in the provisional true up orders and after receipt of C&AG audit reports for the FY 2013-14 and FY 2014-15 for MePGCL is drawn to arrive at the difference in the O&M expenses and other elements already admitted in the table below.

Table 5.20 : Comparison of Provisional & Final True Up orders for MePGCL in SUO MOTO action

(INR Cr)

Sl. No	Name of the ARR Element	Approved Provisional True Up		Expenses Admissible with reference to Regulations in SUO-MOTO action.	
		FY 2013-14	FY 2014-15	FY 2013-14	FY 2014-15
1	Return On Equity	12.76	12.79	12.76	12.79
2	Interest on Working capital	3.03	3.01	3.03	3.01
3	Interest & Finance Charges	0.33	0.33	0.33	0.33
4	SLDC Charges	1.31	1.17	1.31	1.17
5	O&M Expenses	52.54	55.17	29.85	31.18
6	Depreciation	2.35	2.35	2.35	2.35
	Total	**72.32**	**74.82**	**49.63**	**50.83**
7	Less: Non Tariff Income	4.47	7.51	4.47	7.51
	Net ARR	**67.85**	**67.31**	**45.16**	**43.32**
8	Revenue from Tariffs	53.43	75.25	53.42	75.25
9	**Revenue Gap / (surplus) already adjusted in provisional True up**	**14.42**	**(7.94)**	-	-
10	**Surplus to be appropriated**	**-**	**-**	**(8.26)**	**(31.93)**

The Revenue Surplus of Net ARR on SUO-MOTO action amounted to Rs. 40.19 Cr (8.26+31.93) for FY 2013-14 and FY 2014-15.

C&AG Certificate:

Observations of C&AG audit Report for FY 2013-14 & 2014-15 does not impact change in the expenses as computed in the SUO-MOTO true up.

Final ARR for FY 2013-14 & FY 2014-15 on Suo-Moto exercise shall be considered for adjustment in the ARR for FY 2020-21.

5.21 Aggregate Revenue Requirement for FY 2020-21

Commission after taking into consideration, the petition filed by the licensee, trued down values of FY 2016-17, Statement of Accounts certified by Statutory Auditors for FY 2017-18, the objections raised by the stake holders, the response of the licensee and minutes of the public hearing and State Advisory Committee has computed the ARR for FY 2020-21 as detailed in the table below:

Table 5.21 : Approved Annual Fixed Charges for MePGCL for FY 2020-21

(INR Cr)

Sl. No	ARR Element	As Filed by MePGCL	Approved by Commission
		FY 2020-21	FY 2020-21
1	Interest and Finance Charges	47.45	47.45
2	Depreciation	57.33	45.03
3	O & M expenses	67.18	67.18
4	Interest on Working Capital	7.64	6.70
5	Return on Equity	56.16	48.70
6	SLDC Charges	1.33	1.33
7	Net Prior Period Items	-	-
8	**Gross annual fixed charges**	**237.09**	**216.39**
9	Less: Non Tariff Income	15.92	15.92
10	**Net Annual Fixed Charges**	**221.17**	**200.47**
11	**Less:** Suo Moto True up Surplus for FY 2013-14 and FY 2014-15	**-**	**40.19**
12	**Less:** True up Surplus for FY 2015-16	**-**	**6.55**
13	**Less:** True up surplus for FY 2016-17 Review	**-**	**60.50**
14	**Net ARR (AFC)**	**221.17**	**93.23**

Table 5.22 : Approved Annual Fixed Charges for New Umtru HEP

(Rs.Cr.)

Sl. No.	Particulars	Filed by Petitioner FY 2020-21	Approved FY 2020-21 (Provisional)
1	Interest on Loan capital	46.57	25.69
2	Depreciation	31.94	17.99
3	O&M Expenses	14.35	13.72
4	Interest on working capital	3.39	1.94
5	Return on Equity	25.50	19.13
6	Income Tax	5.59	-
7	SLDC	-	0.15
8	Net Prior Period Items	-	-
	Total Annual Fixed Cost	**127.35**	**78.67**
9	Less: Non-Tariff Income	0.12	0.12
	Net Annual Fixed Charges	**127.23**	**78.55**

Consolidated ARR (AFC) approved for FY 2020-21

(Rs.Cr)

Particulars	Filed by MePGCL	Approved
MePGCL Old Projects & MLHEP	221.17	93.23
New UMTRU	127.23	78.55
Total	**348.40**	**171.78**

5.22 Determination of Annual Fixed charges for the FY 2020-21 for MePGCL Old Plants & MLHEP and New Umtru

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 2020-21. The License shall recover the Annual Fixed Charges from the beneficiary as allocated plant wise in the table below.

Commission after prudent check of the petition filed by MePGCL as also data provided for the queries raised, has determined ARR and Annual Fixed Charges for Generation Stations existing for the FY 2020-21. The Licensee shall recover the Annual Fixed Charges from the beneficiary as allocated plant wise AFC in the table below.

Table 5.23 : Project wise Annual Fixed Charges for the FY 2020-21

Sl. 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	116.29	17.92	8.96		1.54/kWh
2	Umiam Stage II	20	45.51	9.96	4.98		2.19/kWh
3	Umiam Stage III	60	139.40	29.87	14.94		2.14/kWh
4	Umiam Stage IV	60	207.50	29.87	14.94		1.44/kWh
5	Umtru (MePGCL has proposed that no power shall be generated from Umtru Power Plant)	11.2	-		-		-
6	Sonapani	1.5	5.50	0.75	0.37		1.36/kWh
7	**Total Old Stations**	**188.70**	**514.20**	**88.37**	**44.19**		
8	MLHEP	126	486.23	62.74	31.37		1.29/kwh
	Sub Total	**314.70**	**1000.43**	**151.11**	**75.56**		
9	New Umtru	40	235.00	19.92	9.96		0.85/kwh
10	Lakroh	1.5	11.01	0.75	0.37		0.68/kwh
11	**Total**	**356.20**	**1246.44**	**171.78**	**85.89**		**1.37/kwh**
12	**Less:** Umtru under Shutdown	11.20	-	-	-		
13	**Net Capacity**	**345.00**	**1246.44**	**171.78**	**85.89**		**1.37/kwh**

(i) 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.

(iii) The annual fixed charges for Umtru project is allowed towards O & M expenses since the MePGCL has stated that the plant has been kept idle for renovation and modernization. Fixed charges allowed at Rs. 2.18 Crore (factored in other plants AFC).

(iv) Annual fixed charges allowed in the ARR in respect of Lakroah HEP are towards interest and finance charges on the borrowings enabling the Licensee to discharge the liability of loans repayment and interest. No other charges are allowed for annual fixed charges for these project since final tariff of the project has yet to be got approved.

6. Directives

6.1 Directives

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.

1. 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.

Commission's Review:

MePGCL has submitted petition for approval of final Tariff for New Umtru Project. The ARR after approval of final Tariff has been factored in the ARR of MePGCL for FY 2020-21. The Licensee shall file the true up petitions for FY 2017-18 to FY 2019-20 along with C&AG report. The Licensee shall maintain Regulatory accounts and asset wise fixed assets record and shall file along with next True up and Tariff petitions.

The Petition for final Tariff of Lakroh HEP is not filed so far. The Licensee has stated that the COD of Lakroh HEP has been declared as March 2019. MePGCL shall expedite the petition along with full data and information required as per the Regulations.

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.

3. 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.

6.2 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.

6.3 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.

Annexure-I

RECORD NOTE OF THE 22nd MEETING OF THE STATE ADVISORY COMMITTEE HELD ON 12TH MARCH 2020 AT THE MSERC CONFERENCE HALL, SHILLONG.

Present :

Members of the State Advisory Committee

1. Shri P.W. Ingty, IAS (Retd), Chairman, Meghalaya State Electricity Regulatory Commission, Shillong.
2. Shri. R. Keishing, Member (Law), Meghalaya State Electricity Regulatory Commission, Shillong.
3. Shri. Praveen Bakshi, IAS , Secretary Food, Civil Supplies and Consumer Affairs, Government of Meghalaya
4. Dr. Anoop Singh, Coordinator, Centre for Energy Regulation (CER), C/o Associate Prof., Department of Industrial and Management Engineering, Indian Institute of Technology Kanpur, Kanpur – 208016.
5. Chief Engineer, PHE, Government of Meghalaya, Lower Lachumiere, Shillong-793001
6. Shri. F. Marbaniang, Chief Engineer (PWD), Building.
7. CEO, Shillong Municipality, Shillong – 793001, Mobile: 9436115861
8. Shri. E N Marak, MCS (Retd) Matchakolgre, New Tura Araimile West Garo Hills, Tura -794101. Mobile: 9436103643
9. Director Commerce & Industries, Shillong, Meghalaya.
10. Dr. (Mrs) M.P.R. Lyngdoh, (Retd), Principal, Shillong College, Shillong – 793003
11. Shri. Shyam Sunder Agrawal, CMD (Pioneer Carbide Pvt Ltd.), Byrnihat, Ri-Bhoi district, Meghalaya. Mobile: 7002162868 Email: pioneercarbide@gmail.com
12. Shri. Ramesh Bawri, President Confederation of Industries, Meghalaya, Bawri Mansion, Dhanketti
13. Shri. M. Marbaniang, Chairman, The Institution of Engineers (India), Meghalaya Centre, Barik Point, Lower Lachumiere, Shillong – 793001. Phone: 03642503203 Email: iemeghalaya@gmail.com
14. Director (E&M) HQ, Shillong Zone, SE Falls, Shillong-793011, Phone: 03642534847
15. Director(BD), 4 th Floor, TDI Centre, Jasela, IEX, New Delhi – 110025. Email ID: rajesh.medirata@iexindia.com.
16. GM (Commercial) NEEPCO, Demseiniong Shillong- 793003
17. Shri. J.B. Poon, Secretary, MSERC, Shillong.

Calling for the 22nd meeting of the State Advisory Committee (SAC) to order, Chairman welcomed the members and introduced them to other members present. He spoke on the objectives of the State Advisory Committee (SAC meeting and its importance as envisaged in the Electricity Act, 2003. The Chairman also briefed the members present, on the MSERC, MYT Regulations 2014 and implications on the Regulatory norms on each component of the ARR in the Tariff formulation. Members of the Advisory Committee were informed that the Commission has admitted ARR petition for finalization of Capital Cost of New Umtru HEP, Determination of ARR Distribution Tariff, ARR & Transmission and ARR & Generation tariff provisionally on 29.11.2019. The utilities had published the salient features of the petition inviting objections and suggestions from all the stakeholders including general public on the ARR and Tariff Petition for the FY 2020-21.

Views and suggestions given by some of the members

1) Ramesh Bawri President *CII*, Meghalaya thanked the chairperson and highlighted emphasizing of 3 (three) points as indicated below.
   - (i) The Member objected to the increase of tariff to 45% as presented by MePDCL and requested the Commission not to pass such a huge burden to consumers of electricity in Meghalaya.
   - (ii) MeECL should look into their performances to increase the efficiency.
   - (iii) The Member stated that he has experienced that 50% of consumers of Meghalaya are not having meters to record consumption of electricity.
2) Mr. S. S. Agrawal CMD (Pioneer Carbide Pvt Ltd.), Byrnihat.
   - (i) The Member suggested that all the 3 utilities may be asked to submit their ARR petitions along with last year financial audited accounts i.e. for filing tariff petition for the financial year 2020-21, the audited accounts for the financial year 2017-18 should be submitted.
   - (ii) The voltage wise transmission loss figures should be submitted for the previous financial year i.e. for the tariff petition 2020-21, the transmission losses for the financial year 2018-19.
   - (iii) The actual true up figures against true up Orders of MSERC before filing their ARR petitions should be incorporated in their ARR Petitions. No review true up figures should be allowed to incorporate in the ARR petitions.
   - (iv) The filing of ARR figures in their tariff petitions should be within a limit of +/- 20% of the current year tariff for all categories of Consumers.
   - (v) The utility should be made compulsory to post, the filing of their petitions for ARR or true up or any other petitions on their website for its wide publicity.
   - (vi) The AT&C losses should be shown separately voltage wise transmission loss & voltage wise commercial loss.

(vii) If the AT&C losses are not reduced in comparison to the previous year, the utility should file reasons for not able to reduce the losses.

(viii) The ABT meters can be made mandatory at 132 kv level to monitor the transmission losses to the individual feeders.

(ix) The Industrial consumers should be asked to draw short term excess power meant for selling outside the states @ 75% of existing power tariff to increase the revenue of the MePDCL and stop selling of excess power at a cheaper rate.

(x) A load factor rebate can be introduced to the Industrial consumers of MePDCL.

3) Mr. P. Bakshi, IAS, Secretary Food, Civil Supplies and Consumer Affairs, Government of Meghalaya requested the Commission to look into MeECL financial condition and try to salvage from losses.

The meeting ended with a vote of thanks by the Convenor.

Secretary, MSERC.

Annexure-II

List of the Objectors

1. **Name & Address**
   M/s Byrnihat Industries Association (BIA)
   13th Mile, Tamulikuchi, Byrnihat,
   RiBhoi District, Nongpoh,
   Meghalaya-793 101.

2. **Greater Shillong Crematorium & Mortuary Society**
   Shillong Electric Crematorium Complex
   T.B. Hospital Road, Jhalupara, Shillong
   Meghalaya