## BEFORE THE MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION, SHILLONG

#### IN THE MATTER OF:

Petition filed by the Meghalaya Power Generation Company Limited (**MePGCL**) for MYT of Generation Business FY 2018-19 to FY 2020-21 and Determination of Generation Tariff for FY 2018-19.

#### AND IN THE MATTER OF:

#### Meghalaya Power Generation Corporation Ltd

Lum Jingshai, Short Round Road, Shillong - 793 001, Meghalaya

....Petitioner

Versus

#### **Byrnihat Industries Association**

13<sup>th</sup> Mile, Tamulikuchi, Byrnihat, RiBhoi District, Nangpoh, Meghalaya – 793101

.... Objector

#### **INDEX**

S. No.	Particulars	Page No.				
01.	Objections on behalf of BIA along with Affidavit 1-41					
02.	Annexure 1- Copy of the report prepared by expert	42-66				
	consultant, Mercados					

Place: Shillong Filed by:

Date: 24.01.2018

Byrnihat Industries Association 13<sup>th</sup> Mile, Tamulikuchi, Byrnihat, Ri Bhoi District, Nongpoh, Meghalaya – 793101

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# SUGGESTIONS/ OBJECTIONS ON BEHALF OF BYRNIHAT INDUSTRIES ASSOCIATION

#### **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/ Objector") is filing the present objections to the petition

filed by the Meghalaya Power Generation Corporation Limited (hereinafter referred to as 'MePGCL') for MYT of Generation Business for FY 2018-19 to 2020-21 and determination of Generation Tariff for FY 2018-19 in accordance with MSERC (Multi Year Tariff) Regulations, 2014 (hereinafter "MYT Regulations") and Sections 62 and 64 read with Section 89 of the Electricity Act, 2003 (hereinafter "EA 2003").

- 2. The Objector is an Association of industrial consumers in the Brynihat 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. It is submitted that the viability and sustainability of the industries is essential also for the economic development of the State.
- 3. It is stated that the Petition filed by MePGCL is bereft of required details and MePGCL has not complied with the provisions of the Tariff Regulations of the Hon'ble Commission. The details provided by MePGCL are arbitrary and without sufficient justification.

- 4. For sake of convenience and ease of reference the objections have been divided into following major submissions:
  - I. ARR for MHLEP for the 2<sup>nd</sup> Control Period of FY 2018-19 to FY 2020 21
  - II. ARR for Old Stations and Sonapani for the 2<sup>nd</sup> Control Period of FY 2018-19 to FY 2020-21

#### I. MYT for FY 2018-19 to 2020-21 for MLHEP

#### a. Annual Accounts

5. The Petitioner in the tariff petition has stated that based on "audited statement of accounts for FY 2015-16 and provisional statement of accounts for FY 2016-17 and Business Plan for FY 2018-21" it has submitted estimates for FY 2017-18 and ARR projections for FY 2018-19 to 2020-21. However, it is important to note that the Petitioner has not made the Annual Accounts of FY 2016-17 nor the Audited Annual Accounts of 2015-16 available to the public. Further, even the Business Plan for FY 2018-21, as approved by this Hon'ble Commission, has also not been provided anywhere. This information on the basis of which the Petitioner has filed the instant petition has not been made accessible to the general public making it very difficult for the Objector to verify the calculations and figures, which have been submitted by the Petitioner. This is clearly against the mandate of EA 2003 which provides for a transparent and efficient process of tariff determination.

- 6. Regulation 4 of the MYT Regulations provide for Multi-Year Tariff
  Framework. The relevant extract of Regulation 4.2 reads as under:
  - "4.2 The Multi-Year Tariff framework shall be based on the following elements, for determination of Aggregate Revenue Requirement and expected revenue from tariff and charges for Generating Company, Transmission Licensee, and Distribution Business:
  - a) A detailed Business Plan based on the principles specified in these Regulations, for each year of the Control Period, shall be submitted by the applicant for the Commission's approval:

Provided that the performance parameters, whose trajectories have been specified in the Regulations, shall form the basis of projection of these performance parameters in the Business Plan:

Provided further that a Mid-term Review of the Business Plan may be sought by the Generating Company, Transmission Licensee and Distribution Licensee through an application filed three (3) months prior to the filing of Petition for truing-up for the second year of the Control Period and the tariff determination for the third year of the control period

Provided further that a Mid-term Review of the Business Plan may be sought by the Generating Company, Transmission Licensee and Distribution Licensee through an application filed three (3) months prior to the filing of Petition for truing-up for the second year of the Control Period and the tariff determination for the third year of the control period.

- b) Based on the Business Plan, the applicant shall submit the forecast of Aggregate Revenue Requirement (ARR) for the entire Control Period and expected revenue from existing tariffs for first year of the Control Period and the Commission shall determine ARR for the entire Control Period and the tariff for the first year of the control period for the Generating Company, Transmission Licensee, Distribution Business.
- 7. However, the Petitioner in direct contravention to the above Regulation has not submitted the audit reports for FY 2015-16, for MeECL, and FY 2016-17. Even though the Petitioner submits that it has attached the audited statement of accounts for FY 2015-16, the same has not been made available. Thus, it is prayed that the Petitioner be directed to submit the audited accounts of all the relevant years.

#### b. Gross Fixed Assets

8. MePGCL is claiming Gross Fixed Assets ("GFA") amounting to INR 1279.19

Crore based on the opening balance of GFA as on 01.04.2016. the closing GFA for each FY of the control period has been worked out by MePGCL upon consideration of actual capitalization during FY 2016-17, estimated capitalization during FY 2017-18 and projections during MYT based on investment plan approved by this Hon'ble Commission.

9. The Hon'ble Commission in its order dated 30.03.2017, passed for determination of Capital Cost and True up of 2013-14 and Provisional True up of FY 2014-15 and Annual Fixed Charges and Generation Tariff for MYT Control Period FY 2015-16 to FY 2017-18, has already taken into account that the GFA of MLHEP constitutes a significant amount of grant. From page 66 of the aforementioned order it is clear that an amount of Rs. 288.02 Crore was included as grant in the GFA as on 31.03.2014 while calculating depreciation for FY 2013-14. The relevant extract of the order is as under:

"Commission's analysis:

The Depreciation against the Myntdu Leshka Hydro Electric Project is computed as per the Regulation 57 as given in the Table below:

Table 3: Approved Depreciation for FY 2013-14 True up"

(Rs. Crore)

Particulars	Approved for FY 2013-14 True up
Opening GFA as on 01.04.2013	1134.28
Additions during FY 2013-14	156.16
Deductions as proposed by licensee	11.83
Closing GFA	1278.44
Average GFA excluding land value	1184.32
Depreciation at 4.43%	52.50
Depreciation on grants available	12.76
(4.43%) at Rs.288.02 Crore	
Net Depreciation for F 2013-14 True up	39.74

....." (Emphasis supplied)

10. MePGCL has not provided the necessary details/ break up regarding components of loan, equity or grants on actual basis and has simply included the entire capex as capitalized in GFA. It is submitted that the same cannot be allowed as such inflated GFA will directly artificially increase generation tariff, which would ultimately be borne by the consumers.

#### c. Depreciation

- 11. MePGCL in its tariff petition has claimed depreciation amounting to Rs. 61.10 crore, Rs. 63.01 Crore, Rs. 63.13 Crore, Rs. 63.24 Crore and Rs. 63.24 Crore for FY 2016-17 to 2020-21, respectively. It is stated that the depreciation is being claimed in accordance with Regulation 33 of MYT Regulations and using depreciation rates prescribed in Appendix III of CERC (Terms and Conditions of Tariff) Regulations, 2009. Having perused the calculations submitted by MePGCL, following key points emerge:
  - i. MePGCL has considered depreciation for plant and machinery at the rate of
     5.81% as opposed to CERC prescribed rate of 5.28%;
  - ii. MePGCL, in direct contravention of this Hon'ble Commission's order, has not considered reduction of depreciation on grants, as was done by the Hon'ble Commission in its order dated 30.03.2017. (The relevant extract of the said order has been reproduced in para 7 of the instant submissions)
  - iii. Further, Regulation 33 of MYT Regulation provides for exclusion of consumer contribution or capital subsidy/ grants from the asset value while for calculation of depreciation.

## 12. Accordingly, the reworked depreciation is as under:

<u>2018-19</u>

S. N.	Name of the Asset	Value of Assets at the beginni ng of the year	Additi on during the year	Withdra wn during the year	Value of Assets at the year	Rate of Depreciat ion (%)	Depreciat ion charges for the year
1	Land	23.73	0.08	0.00	23.81	0%	0.00
2	Buildings	145.82	0.52	0.00	146.34	3.34%	4.88
3	Plant and Equipment	362.43	1.29	0.00	363.72	5.28%	19.17
4	Furniture and Fixtures	0.08	0.00	0.00	0.08	6.33%	0.01
5	Vehicles	0.46	0.00	0.00	0.46	9.50%	0.04
6	Office equipment	0.18	0.00	0.00	0.18	6.33%	0.01
7	Bearer Plants	0.00	0.00	0.00	0.00		0.00
8	Others:	0.00	0.00	0.00	0.00		0.00
a)	Hydraulic Works	619.91	2.21	0.00	622.12	5.28%	32.79
b)	Other Civil Works	121.93	0.43	0.00	122.36	3.34%	4.08
c)	Lines and Cable Network	4.54	0.02	0.00	4.56	5.28%	0.24
10	Assets under lease	0.00	0.00	0.00	0.00		0.00
	Total	1,279.0	4.55		1,283. 63	4.78%	61.22
	Amortization of Grants	288.02			288.02	4.78%	13.76
	Net Depreciation						47.46

## <u>2019-20</u>

S. N	Name of the Asset	Value of Assets at the beginnin g of the year	Additio n during the year	Withdraw n during the year	Value of Assets at the year	Rate of Depreciati on (%)	Depreciatio n charges for the year
1	Land	23.82	-		23.82	0%	0.00
2	Buildin gs	146.34	-		146.34	3.34%	4.89
3	Plant and Equipm ent	363.72	-		363.72	5.28%	19.20
4	Furnitur e and Fixtures	0.08	-		0.08	6.33%	0.01
5	Vehicle s	0.46	-		0.46	9.50%	0.04
6	Office equipm ent	0.18	-		0.18	6.33%	0.01
7	Bearer Plants	-	-	0	-	0.00%	
8	Others:	-	-		-	0.00%	
a)	Hydraul ic Works	622.12	-		622.12	5.28%	32.85
b)	Other Civil Works	122.37	-		122.37	3.34%	4.09
c)	Lines and Cable	4.56	-		4.56	5.28%	0.24

	Networ					
	k					
1	Assets					
	under	-			0.00%	
0	lease					
	Total	1,283.65		1,283.65	4.78%	61.33
	Amortiz					
	ation of	288.02		288.02	4.78%	13.76
	Grants					
	Net					
	Depreci					47.57
	ation					

## <u>2020-21</u>

S. N.	Name of the Asset	Value of Assets at the beginning of the year	Additio n during the year	Withdra wn during the year	Value of Assets at the year	Rate of Depreciatio n (%)	Depreciati on charges for the year
1	Land	23.82	-	-	23.82	0%	0.00
2	Buildin gs	146.34	-	-	146.34	3.34%	4.89
3	Plant and Equipm ent	363.72	-	-	363.72	5.28%	19.20
4	Furnitur e and Fixtures	0.08	-	-	0.08	6.33%	0.01
5	Vehicle s	0.46	-	-	0.46	9.50%	0.04
6	Office equipm	0.18	-	-	0.18	6.33%	0.01

	ent						
7	Bearer	_	_	_	_	0.00%	
,	Plants		_	_	_	0.0070	
8	Others:	-	-	-	-	0.00%	
	Hydraul						
a)	ic	622.12	-	-	622.12	5.28%	32.85
	Works						
	Other						
b)	Civil	122.37	-	-	122.37	3.34%	4.09
	Works						
	Lines						
	and						
c)	Cable	4.56	-	-	4.56	5.28%	0.24
	Networ						
	k						
	Assets						
10	under	-	-	-	-	0.00%	
	lease						
	Total	1,283.65			1,283.6	4.78%	61.33
		_,			5		
	Amortiz						
	ation of	288.02			288.02	4.78%	13.76
	Grants						
	Net						
	Depreci						47.57
	ation						

13. It is prayed that the same maybe considered by this Hon'ble Commission while calculating depreciation.

## d. Debt Equity Ratio

14. MePGCL has shown an opening debt of Rs. 704.62 Crore and opening equity base of Rs. 383.76 Crore as on 01.04.2016 against an opening GFA of Rs. 1279.19 Crore. Regulation 27 of the MYT Regulations provides for calculation of debt-equity ratio. Clause (2) of Regulation 27 clearly states that for generating station, declared under commercial operation prior to 01.04.2015. The debt equity ratio allowed by the Commission for determination of tariff for the period ending 31.03.2015 shall be considered. Relevant extract of Regulation 27 reads as under:

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

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

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

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

... ....

27.2 In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2015, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2015 shall be considered"

- 15. Accordingly, it is pointed out that this Hon'ble Commission in its order dated 30.03.2017 while approving tariff for FY 2017-18 allowed an equity base of Rs. 334.98 Crore and opening debt of Rs. 717.19 Crore against GFA of Rs. 1278.80 Crore. Also, as has already been mentioned above the admitted grant component in the GFA base is Rs. 288.02 Crore as on 31.03.2014. However, MePGCL seems to have omitted the grant component already recognized by this Hon'ble Commission in order dated 30.03.2017.
- 16. Therefore, based on the additional capital expenditure claimed during 2015-16, the normative debt-equity ratio has been determined as on 31.03.2016. Thus, debt and equity as on 01.04.2016 ought to be Rs. 717.62 Crore and Rs. 335.16 Crore, respectively.

#### e. Outstanding Loan and Interest on Loan

- 17. MePGCL is purportedly claiming interest on loan as per Regulation 32 of the MYT Regulations. MePGCL has sought interest cost based on the opening loan balance of Rs. 704.62 Crore as on 01.04.2016 and additional loan drawl to the tune of Rs. 13.51 Crore from FY 2016-17 to 2020-21.
- 18. As has been submitted above MePGCL has considered a lower level of debt and higher level of equity as opposed to what has been allowed by this Hon'ble Commission in order dated 30.03.2017. MePGCL has also failed to provide information on capital expenditure funded by grants and by debt and has not even acknowledged the grant gone into capital investments. Thus, it is prayed

that the grant, for which MePGCL bore no cost, should not be considered while determining the generation tariff.

19. BIA, on the basis of order dated 30.03.2017 and above submissions, has assumed opening loan balance as on 01.04.2016. The rate of interest being the same as that claimed by MePGCL. Accordingly, interest on loan allowable to MePGCL is as under:

(in Rs. Crore)

Particulars	FY 2016-17 (Actual)	FY 2017-18 (Estimated)	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
Opening Balance	717.62	654.41	478.65	375.87	329.07
Addition During the Year	0.00	1.13	4.11	4.13	4.14
Repayment during the year	63.21	176.89	106.89	50.93	49.74
Closing Balance	654.41	478.65	375.87	329.07	283.47
Average Interest Rate	11.63%	11.71%	11.89%	11.93%	11.87%
Interest Accrued	79.78	66.34	50.80	42.05	36.35

#### f. Return on Equity and Equity Base

20. MePGCL has claimed Return on Equity (ROE) based on an opening equity base of Rs 383.76 Crore, as on 01.04.2016. However, the Hon'ble Commission in its order dated 30.03.2017 had approved normative equity base of Rs. 334.98 Crore as on 31.03.2015. The Hon'ble Commission had observed as under:

#### "4.2.4 Return on Equity

Commission's analysis:

The Commission considers the debt equity ratio of GFA at 70:30 and return on equity is calculated considering 30% of assets addition to equity capital held as 01.04.2014 as given in the Table below:

Particulars	For FY 2014-15
Opening Equity (Rs. Crore)	334.87
30% Assets Additions during the year 2014-15 (Rs. Crore)	0.11
Closing Equity (Rs. Crore)	334.98
Average Equity (Rs. Crore)	334.93
Return on Equity at 14% (Rs. Crore)	46.89

....,

21. As is evident there is no reconciliation between the claims of MePGCL and the equity base and GFA as per Accounts. Accordingly, the Hon'ble Commission may allow equity base on normative basis to the tune of 30% after taking into account the grant that has gone into capital investment. The Hon'ble Commission has already adopted a similar approach in the previous tariff order. Thus, the allowable ROE as per BIA's assessment is as under:

Particulars	FY 2016-17 (Provisional)	FY 2017-18 (Estimated)	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
Opening Equity Base	335.16	335.15	335.15	335.35	335.35
Equity added for Capex (a)		0.00	0.20	0.25	0.00
Equity as 30% GFA	-0.02	0.00	1.37	0.00	0.00

Return on Equity (in Rs. Cr.)	46.92	46.92	46.93	46.95	46.95
RoE (%)	14%	14%	14%	14%	14%
Average Equity Base	335.15	335.15	335.25	335.35	335.35
Closing Equity Base	335.15	335.15	335.35	335.35	335.35
Addition of Equity (Lower of a and b)	-0.02	0.00	0.20	0.00	0.00
(b)					

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

- 22. MePGCL has claimed O&M expenses on the basis of project cost amounting to Rs. 1279.19 crore. It has submitted "since MLHEP has achieved COD after 1.04.2009, its O & M expenses have been fixed as per Regulation 56 (7) at 2% of capital cost and further escalated at 5.72% to arrive at O & M expenses for FY 2018-19, FY 2019-20 & FY 2020-21."
- 23. However, it is pertinent to mention Regulation 56 of MYT Regulations which provides as under:

"56.6 In case of the hydro generating stations, which have not been in commercial operation for a period of five years as on 1.4.2009, operation and maintenance expenses shall be fixed at 2% of the original project cost (excluding cost of rehabilitation & resettlement works). Further, in such case, operation and maintenance expenses in first year of commercial operation shall be escalated @5.17% per annum up to the year 2007-08 and then averaged to arrive at the O&M expenses at 2007-08 price level. It shall be

thereafter escalated @ 5.72% per annum to arrive at operation and maintenance expenses in respective year of the tariff period. (The impact of pay revision on employee cost for arriving at the operation and maintenance expenses for the year 2009-10 shall be considered in accordance with the procedure given in proviso to sub-clause (ii) of clause (f) of this regulation).

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

24. Further, the Hon'ble Commission in its Order dated 30.03.2017 approved a project cost of Rs. 1134.28 Crore. As no further capital cost prudence has been conducted with respect to the items of additional capital expenditure, the latest cost within the cut-off date ought to be considered as Rs. 1134.28. Accordingly, the allowable O&M expenses are as under:

(in Rs. cr.)

O&M Expenses for FY 2013-14	22.69	(2% of Project Cost)
O&M Expenses for FY 2014-15	23.99	
O&M Expenses for FY 2015-16	25.36	
O&M Expenses for FY 2016-17	26.81	(5.72% escalation over
O&M Expenses for FY 2017-18	28.34	previous Year)
O&M Expenses for FY 2018-19	29.97	F,
O&M Expenses for FY 2019-20	31.68	
O&M Expenses for FY 2020-21	33.49	

25. It is submitted that this will be a reasonable and prudent level of O&M expense allowable to MePGCL based on the expenses approved during 2014-15. This Hon'ble Commission is requested to kindly allow O&M expenses in accordance with the calculations submitted above.

#### h. Interest on Working Capital

- 26. MePGCL through the instant tariff petition is purportedly claiming working capital on normative basis as Rs. 42.19 cr., Rs. 41.50 cr. and Rs. 41.37 cr. in 2018-19, 2019-20 and 2020-21 respectively. MePGCL submits that the calculations are in accordance with Regulation 34.2 of the MYT Regulations.
- 27. In light of the changes made in O&M expenses, as depicted above, the working capital requirements will also change. Additionally, the rate of interest for the purpose of computing working capital shall be 14% as revised by the State Bank of India.
- 28. In view of the above, the BIA has re-worked the working capital requirements and thus the interest on working capital allowable to BIA for the MYT period shall be as below:

(in Rs. Crore)

Particulars	FY 2016-17 (Provisional)	FY 2017-18 (Estimated)	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
Operation and	2.22	2.26	2.50	2.64	2.70
Maintenance Expense for One Month	2.23	2.36	2.50	2.64	2.79

Maintenance Spare at 15% O&M	4.02	4.25	4.49	4.75	5.02
Two Months Receivable of AFC	34.41	32.40	30.05	28.88	28.23
Working capital required	40.67	39.01	37.05	36.28	36.05
SBI short term PLR	14.00%	14.00%	14.00%	14.00%	14.00%
Amount of interest on working capital	5.69	5.46	5.19	5.08	5.05

#### i. Allowable Annual Fixed Charge for MLHEP

29. Thus, in accordance with the submissions made above the allowable annual fixed charges for MLHEP for FY 2018-19 to 2020-21 are as under:

(in Rs. Crore)

Sl.	Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
No.	rarticulars	(Provisional)	(Estimated)	(Projected)	(Projected)	(Projected)
1	Interest on Loan capital	79.78	66.34	50.80	42.05	36.35
2	Depreciation	47.28	47.35	47.46	47.57	47.57
3	O&M Expenses	26.81	28.34	29.97	31.68	33.49
4	Interest on working capital	5.69	5.46	5.19	5.08	5.05
5	Return on Equity	46.92	46.92	46.93	46.95	46.95
	Total Annual Fixed Cost	206.48	194.42	180.35	173.32	169.41
6	Less: Non-Tariff Income	0.03	0.03	0.03	0.04	0.04
	Net Annual Fixed Cost	206.45	194.39	180.31	173.29	169.37

30. Accordingly, as seen in the table above, as per BIA's assessment, the annual fixed charge claim of MePGCL merits disallowance of at least Rs. 25.51 cr., Rs. 25.71 cr. and Rs. 25.96 cr. in 2018-19, 2019-20 and 2020-21 respectively, in line with the MYT Regulations.

Particulars	2018	3-19
	Petitioner's	Objector's
	claim	Assessment
Annual Fixed Cost for FY 2018-19	205.82	180.33
Gap for True Up FY 2013-14 & True Up FY 2014-15	81.50	81.50
Net AFC for Computation of Tariff	287.32	261.83
Design Energy (MU)	486.23	486.23
Less: Auxiliary Consumption @ 1%	4.86	4.86
Less: Transformation Loss @ 0.5%	2.43	2.43
Net Energy (MU)	478.94	478.94
Capacity Charge (Rs. Cr.)	143.66	130.91
Variable Charge (Rs./kWh)	3.00	2.73

#### II. MYT for 2018-19 to 2020-21 for Old Stations and Sonapani

#### a. Gross Fixed Assets (GFA)

31. MePGCL has claimed GFA as a whole based on the opening balance of GFA as on 01.04.2016 at Rs. 1707.69 Crore. The closing GFA for each financial year of the control period has been worked out by MePGCL on the basis of actual capitalization during 2016-17, estimated capitalization during 2017-18 and projections during the MYT period, based on the investment plan approved by this Hon'ble Commission.

- 32. As is evident from the available provisional Annual Accounts for FY 2015-16 the GFA for MePGCL as on 31.03.2016 is Rs. 1696.14 Crore. MePGCL has not provided the necessary details/ break up regarding components of loan, equity or grants on actual basis and has simply included the entire capex as capitalized in GFA. It is submitted that the same cannot be allowed as such inflated GFA will directly impact generation tariff, which would ultimately be borne by the consumers.
- 33. Based on the available provisional accounts, the GFA projections for old stations and Sonapani, as per BIA's assessment is as under:

(in Rs. cr.)

Particulars –	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
MePGCL	(Provisional)	(Estimated)	(Projected)	(Projected)	(Projected)
Opening GFA	1696.14	1,712.11	1,712.11	1,745.05	1,858.21
Additions during	16.13	0	32.94	113.16	468.57
the year	10.13		32.74	113.10	100.57
Retirements	0.16	0	0	0	0
during the year	0.10			Ü	Ü
Closing GFA	1,712.11	1,712.11	1,745.05	1,858.21	2,326.78
Particulars –	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Old	(Provisional)	(Estimated)	(Projected)	(Projected)	(Projected)
Opening GFA	416.95	432.98	432.98	461.37	574.53
Additions during	16.13	0.00	28.39	113.16	468.57
the year	10.15	0.00	26.39		100.27
Retirements	0.10	0.00	0.00	0.00	0.00
during the year	0.10	0.00	0.00	0.00	0.00
Closing GFA	432.98	432.98	461.37	574.53	1,043.10

#### b. Depreciation

34. MePGCL is claiming depreciation to the tune of Rs 12.34 Crore, Rs 15.49 Crore & Rs 11.62 Crore for Old Stations, including Sonapani, for FY 2018-19, FY 2019-20 & FY 2020-21, respectively, purportedly, based on Regulation 33 of MYT Regulation. MePGCL has erroneously considered 5.81% as rate for depreciation as against 5.28%, as prescribed under CERC Tariff Regulations, 2014. Accordingly, the reworked depreciation according to BIA is as under:

<u>2018-19</u>

S.N.	Name of the Asset	Value of Assets at the beginning of the year	Addition during the year	Withdrawl during the year	Value of Assets at the year	Rate of Depreci ation (%)	Depreciatio n charges for the year
1	Land	32.89	0.63		33.51	0%	0.00
2	Building s	162.47	3.10		165.57	0.03	5.48
3	Plant and Equipme nt	608.13	11.62		619.75	0.05	32.42
4	Furnitur e and Fixtures	3.20	0.06		3.26	0.06	0.20
5	Vehicles	4.83	0.09		4.92	0.10	0.46
6	Office equipme nt	2.89	0.06		2.94	0.06	0.18
7	Bearer Plants	-	-		-	0.00	

S.N.	Name of the Asset	Value of Assets at the beginning of the year	Addition during the year	Withdrawl during the year	Value of Assets at the year	Rate of Depreci ation (%)	Depreciatio n charges for the year
8	Others:	-	-		-	0.00	
a)	Hydrauli c Works	752.26	14.37		766.63	0.05	40.10
b)	Other Civil Works	149.18	2.85		152.03	0.03	5.03
c)	Lines and Cable Network	7.66	0.15		7.81	0.05	0.41
10	Assets under lease	0.16	0.00		0.16	0.00	0.00
	Total	1723.65	32.94		1756.59		84.28
11	Amortiz ation of Grants						12.04
	Net Depreci ation						72.24

## **2019-20**

S. N	Name of the Asset	Value of Assets at the beginning of the year	Addition during the year	Withdrawn during the year	Value of Assets at the year	Rate of Depreci ation (%)	Depreciation charges for the year
1	Land	33.51	2.16		35.67	0%	0.00

2	Bldngs	165.57	10.67	176.24	0.03	5.71
	Plant &					
3	Equipm	619.75	39.93	659.67	0.05	33.78
	ent					
	Furnitur					
4	e and	3.26	0.21	3.47	0.06	0.21
	Fixtures					
5	Vehicle	4.92	0.32	5.24	0.10	0.48
	Office					
6	equipm	2.94	0.19	3.13	0.06	0.19
	ent					
	Bearer					
7	Plants	-	-	-	0.00	
8	Others:	-	-	-	0.00	
	Hydraul					
a)	ic	766.63	49.39	816.02	0.05	41.78
	Works					
	Other					
b)	Civil	152.03	9.79	161.82	0.03	5.24
	Works					
	Lines &					
	Cable					2.12
c)	Networ	7.81	0.50	8.31	0.05	0.43
	k					
	Assets					
1	not in	0.16	0.01	0.17	0.00	0.00
0	use					
	Total	1756.59	113.16	1869.75		87.82
	Amortiz					
	ation of					12.45
	Grants					
	Net					
	Depreci					75.37
	ation					

<u>2020-21</u>

S.N  1 2	Name of the Asset  Land Bldngs Plant & Equipm ent	Value of Assets at the beginning of the year 35.67 176.24	Addition during the year  8.94 44.17	Withdrawn during the year	Value of Assets at the year  44.61 220.41  824.99	Rate of Deprecia tion (%) 0% 0.03	Depreciatio n charges for the year 0.00 6.62
4	Furnitur e and Fixtures	3.47	0.87	-	4.33	0.06	0.25
5	Vehicle	5.24	1.31	-	6.55	0.10	0.56
6	Office equipm ent	3.13	0.79	-	3.92	0.06	0.22
7	Bearer Plants	-	-	-	-	0.00	
8	Others:	-	-	-	-	0.00	
a)	Hydraul ic Works	816.02	204.50	-	1020.52	0.05	48.48
b)	Other Civil Works	161.82	40.55	-	202.38	0.03	6.08
c)	Lines and Cable Networ	8.31	2.08	-	10.39	0.05	0.49
10	Assets not in	0.17	0.04	-	0.21	0.00	0.00

S.N	Name of the Asset	Value of Assets at the beginning of the year	Addition during the year	Withdrawn during the year	Value of Assets at the year	Rate of Deprecia tion (%)	Depreciatio n charges for the year
	use						
	Total	1869.75	468.57	-	2338.32		101.91
	Amortiz						
	ation of						30.95
	Grants						
	Net						
	Depreci						70.96
	ation						

#### c. Debt- Equity Ratio

- 35. MePGCL in its tariff petition has shown opening debt at Rs. 1124.41 Crore and opening equity of Rs. 399.04 Crore as on 01.04.2016 against an opening GFA of Rs. 1707.69 Crore. As has been mentioned above Regulation 27.2 of the MYT Regulations states that "for generating station, declared under commercial operation prior to 01.04.2015. The debt equity ratio allowed by the Commission for determination of tariff for the period ending 31.03.2015 shall be considered."
- 36. It is pertinent to note that the Hon'ble Commission in its order dated 31.03.2017 approved opening debt and equity of old stations, including Sonapani, as on 01.04.2016 at Rs. 91.35 Crore against GFA of Rs. 303.80 Crore. Based on additional capital expenditure of Rs. 4.56 Crore claimed

during 2015-16 the normative debt equity ratio has been determined as on 31.03.2016. Thus, debt and equity for old stations, including Sonapani, as on 01.04.2016 ought to be Rs. 217.01 Crore and Rs. 92.72 Crore, respectively.

#### d. Additional Loan and Interest on Loan

- 37. MePGCL has claimed additional loan drawl to the tune of Rs. 565.74 Crore for FY 2016-17 to 2020-21. It is submitted that the same doesn't conform to the GFA addition claimed by MePGCL. As has already been stated MePGCL has not made available details regarding capital expenditure funded by grant and by debt, and has not acknowledged the grant expended for capital investments during the period.
- 38. BIA upon consideration of GFA drawl and normative equity admissible during the period has calculated the additional debt drawl. Accordingly, based on interest on loan computed above for MLHEP, and the interest on loan claimed for MePGCL, the interest on loan for old stations, including Sonapani is as under:

(in Rs. Crore)

Particulars	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
	(Estimated)	(Projected)	(Projected)	(Projected)
Opening Balance	1,224.41	1,145.78	1,112.19	1,166.74
Addition During the Year	0.00	19.87	79.21	380.32
Repayment during the year	197.18	151.23	95.28	94.09
Closing Balance	1,027.23	1,014.42	1,096.12	1,452.97
Average Interest Rate	11.57%	11.40%	11.12%	10.80%

Particulars	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
	(Estimated)	(Projected)	(Projected)	(Projected)
Interest Accrued	118.85	115.64	121.89	156.92
Less: Interest Capitalised	52.15	51.08	47.31	43.53
Add: Finance Charge and	4.90	4.90	4.90	4.90
MeECL Apportioned				
Interest and Finance	71.60	69.46	79.48	118.29
Charges for MePGCL				
Interest and Finance Charges	66.34	50.80	42.05	36.35
for MLHEP				
Interest and Finance	5.26	18.66	37.43	81.94
Charges for Old Plants				
Including Sonapani				

#### e. Equity Base and Return on Equity

39. MePGCL has claimed Return on Equity (RoE) on the basis of opening equity of Rs. 399.04, as on 01.04.2016. It is pertinent to note that this Hon'ble Commission in its order dated 31.03.2017 approved normative equity base of Rs. 91.35 Crore as on 31.03.2015 while observing:

#### "4.2.5 Return on Equity

.....

#### Commission's Analysis

The Commission had considered opening GFA on 01.04.2014 at Rs. 303.80 Crore. Closing GFA at Rs. 305.17 Crore. The Commission Considered Equity capital at Rs. 91.35 Crore and considered at Rs. 12.79 Cr as Return on Equity."

40. Thus, as has been stated above, in absence of any reconciliation between the equity base and the GFA as per Accounts and claims of MePGCL, Hon'ble Commission may allow equity base on normative basis to the tune of 30% of GFA or the actual, whichever is lower after taking into account the grant that has gone into capital investment. The Hon'ble Commission has adopted a similar approach of allowing normative equity in earlier Order also. Hence, the allowable RoE as assessed by BIA for the MYT period is as below:

Particulars	FY 2016-17 (Provisional)	FY 2017-18 (Estimated)	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
Opening Equity Base	92.72	97.56	97.56	106.07	140.02
Equity added for Capex (a)	13.99	0.00	9.68		88.25
Equity as 30% GFA (b)	4.84	0.00	8.52	33.95	140.57
Addition of Equity (Lower of a and b)	4.84	0.00	8.52	33.95	88.25
Closing Equity Base	97.56	97.56	106.07	140.02	228.27
Average Equity Base	95.14	97.56	101.82	123.05	184.15
RoE (%)	14%	14%	14%	14%	14%
Return on Equity (in Rs. Cr.)	13.32	13.66	14.25	17.23	25.78

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

- 41. MePGCL is claiming O&M expenses assuming an escalation of 3-6% on all the components of O&M expenses, as provided in Regulation 56 of MYT Regulations. In the instant tariff Petition MePGCL has submitted as under:
  - "For projections for the control period, the following assumptions have been made:
  - a. Basic Pay: On a yearly basis, the permanent employees of MePGCL are given an increment of 3%.
  - b. Dearness Allowance (DA): The DA increment is considered around 12% on yearly basis.
  - c. House Rent Allowance (HRA): The HRA is paid as a percentage of Basic Pay.
  - d. Other Allowances: The other allowances which include Medical Allowance, Overtime Allowance, etc. have been taken with a yearly increment of 6%.
  - e. Terminal benefits provision for FY 2017-18 has been considered at an increment of 3%. However, the same will be claimed as per the actuals at the time of true-up.

#### Administrative & General (A & G) Expenses Projection:

The increase in A & G expenses mainly depend upon the market inflation and the increase in business volume. As the A & G Expense is being projected for the remaining control period as a whole, therefore A & G expense for the remaining control period is projected by considering the present average inflation rate of 5.50% over A&G expenses as per provisional Statement of Accounts (SoA) FY 2016-17 for the control period.

#### Repair and Maintenance (R & M) Expense Projection:

Most of the stations of MePGCL being old, there is need to regularly take up R & M activities for the stations as well as the hydraulic and other works. However, due to revenue deficit faced by MeECL & its subsidiaries, MePGCL has not been able to take up R&M works in a planned manner. Therefore, MePGCL has considered present year's average inflation rate of 5.50% for projection of R&M cost over R&M expenses as per provisional SoA FY 2016-17 for the control period."

- 42. It is important to note the observations of this Hon'ble Commission while issuing MYT order for FY 2015-16 to 2017-18:
  - "The expenses can only be validated if the audited records were made available to the Commission. The Commission has examined the O&M expenses projected by MePGCL. In accordance with the regulations and available records, the Commission has allowed escalation on the O&M expenditures as allowed in FY 2014-15 and determined the charges for the control period. After getting the audited records the Commission shall review the same and if required appropriate changes shall be considered."
- 43. Hence, it is submitted that the Hon'ble Commission adopt similar approach while determining O&M expenses in the instant petition. As the latest audited accounts for FY 2015-16 show employee expenses at Rs. 62.19 Crore, the claim of MePGCL to increase the same to Rs. 95.47 Crore for FY 2017-18 is

unreasonable. It is prayed that in absence of latest audited accounts for FY 2016-17 the Hon'ble Commission approve the O&M expenses on escalation basis i.e. at 5.72% y-o-y in line with its previous orders. Consequently, the revised O&M expenses are:

(in Rs. cr.)

O %-M Exmanses for EV 2014 15	50.07	Approved in true up order		
O&M Expenses for FY 2014-15	52.27	dated 31.3.2017		
O&M Expenses for FY 2015-16	55.26			
O&M Expenses for FY 2016-17	58.42			
O&M Expenses for FY 2017-18	61.76	Escalated @5.72%		
O&M Expenses for FY 2018-19	65.30	Escalated C3.7270		
O&M Expenses for FY 2019-20	69.03			
O&M Expenses for FY 2020-21	72.98			

44. Hon'ble Commission is requested to kindly not allow O&M expenses beyond that computed in the aforesaid paras as the same is a reasonable and prudent level of O&M expenses, allowable to MePGCL, based on the latest trued-up data.

#### g. Interest on Working Capital

45. MePGCL in its Petition has claimed working capital requirements to the tune of Rs. 96.19 Crore, Rs. 99.96 Crore and Rs. 104.63 Crore in 2018-19, 2019-20 and 2020-21 respectively, on normative basis purportedly based on Regulation 34.1 of MYT Regulations.

- 46. It is submitted that owing to change in the O&M expenses as depicted in the previous paras, the working capital requirements ought to change. Additionally, the rate of interest for the purpose of computing working capital shall be 14% as revised by the State Bank of India.
- 47. In view of the above, BIA has re-worked the working capital requirements and thus the interest on working capital allowable to MePGCL for the MYT period is as below:

(in Rs. Crore)

Particulars	FY 2017-18	FY 2018-	FY 2019-	FY 2020-
	(Estimated)	19	20	21
		(Projected)	(Projected)	(Projected)
Operation and Maintenance Expense	5.15	5.44	5.75	6.08
for One Month				
Maintenance Spares at 15% O&M	9.26	9.79	10.35	10.95
Two Months Receivable of AFC	16.38	19.31	23.58	32.72
Working capital required	30.80	34.55	39.69	49.75
SBI short term PLR	14.00%	14.00%	14.00%	14.00%
Interest on working capital for Old	4.31	4.84	3.30	6.96
plants including Sonapani				

#### h. Allowable Annual Fixed Charge for Old Stations including Sonapani

48. In view of the above facts and deliberations, the allowable Annual Fixed Charges for old stations and Sonapani for FY 2018-19, FY 2019-20 and FY 2020-21 as per Objector's assessment is depicted as under:

Particul		FY 2017-1	8		FY 2018-1	9		FY 2019-20		FY 2020-21			
ars		(Estimated	<b>d</b> )		(Projected	1)	(Projected)				(Projecte	d)	
	MePGCL	Leshka	Old Plants	MePGCL	Leshka	Old Plants	MePGCL	Leshka	Old Plants	MePGC	Leshka	Old Plants	
	1	2	+Sonapani	1	2	+Sonapani	1	2	+Sonapani	L 1	2	+Sonapani	
			1-2			1-2			1-2			1-2	
Interest	71.60	66.34	5.26	69.46	50.80	18.66	79.48	42.05	37.43	118.29	36.35	81.94	
&													
Finance													
Charges													
Depreci	71.45	47.35	24.09	72.24	47.46	24.79	75.37	47.57	27.80	70.96	47.57	23.39	
ation													
O&M	90.11	28.34	61.76	95.26	29.97	65.30	100.71	31.68	69.03	106.47	33.49	72.98	
Expense													
Interest	9.77	5.46	4.31	10.02	5.19	4.84	8.38	5.08	3.30	12.01	5.05	6.96	
on													
working													
capital													
Return	60.58	46.92	13.66	61.19	46.93	14.25	64.18	46.95	17.23	72.73	46.95	25.78	
on													
Equity													
SLDC	1.15		1.15	1.15		1.15	1.15		1.15	1.15		1.15	
Charges													
Net	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	

Prior												
Period												
Items/Pr												
ovision												
for Bad												
Debt												
Total	304.65	194.42	110.24	309.33	180.35	128.98	329.26	173.32	155.94	381.61	169.41	212.20
Annual												
Fixed												
Cost												
Less:	11.96	0.031	11.93	13.16	0.03	13.13	14.48	0.04	14.44	15.92	0.04	15.88
Non-												
Tariff												
Income												
Net	292.69	194.39	98.31	296.17	180.32	115.86	314.78	173.28	141.50	365.69	169.37	196.32
Annual												
Fixed												
Cost												

## 49. <u>Disallowance in the overall claims of MePGCL as per Objector's assessment:</u>

Particulars	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21

	(Estimated)			(Projected)			(Projected)			(Projected)		
	Petitione r's claim	Objector' s assessme nt	Disallo wance propose d	Petitio ner's claim	Objector' s assessme nt	Disallowan ce proposed	Petitione r's claim	Objecto r's assessm ent	Disallowan ce proposed	Petition er's claim	Objector' s assessme nt	Disallowan ce proposed
Interest & Finance Charges	89.81	71.60	18.21	82.56	69.46	13.10	84.30	79.48	4.82	92.00	118.29	-26.29
Depreciatio n	74.64	71.45	3.19	75.46	72.24	3.22	78.73	75.37	3.36	74.85	70.96	3.89
O&M Expenses	111.22	90.11	21.11	117.15	95.26	21.89	123.52	100.71	22.81	130.35	106.47	23.88
Interest on working capital	13.34	9.77	3.57	13.52	10.02	3.50	14.04	8.38	5.66	14.70	12.01	2.69
Return on Equity	111.55	60.58	50.97	112.24	61.19	51.05	115.31	64.18	51.13	123.86	72.73	51.13
SLDC Charges	1.15	1.15	0.00	1.21	1.15	0.06	1.27	1.15	0.12	1.33	1.15	0.18
Net Prior Period Items/Provi sion for	25.00	0.00	25.00	25.00	0.00	25.00	25.00	0.00	25.00	25.00	0.00	25.00

Bad Debt												
Total												
Annual	426.71	304.65	122.06	427.14	309.33	117.81	442.17	329.26	112.91	462.11	381.61	80.50
Fixed Cost												
Less: Non-												
Tariff	11.96	11.96	0.00	13.16	13.16	0.00	14.48	14.48	0.00	15.92	15.92	0.00
Income												
Net												
Annual	414.74	292.69	122.05	413.98	296.17	117.81	427.69	314.78	112.91	446.18	365.69	80.49
Fixed Cost												

50. Accordingly, the allowable annual fixed charges for old stations, sonapani and MLHEP are summarised below:

# Old stations and Sonapani:

S. N.	Name of the Power Station	MW	Projected Generation (Avg. of last 6 years) (MU)	Annual Fixed Charges (Rs. Cr.)	Capacity Charges (Rs. Cr.)	Energy Charges (Rs./kWh)
1.	Umiam I	36	98.65	22.10	11.05	1.12
2.	Umiam II	20	43.22	12.28	6.14	1.42
3.	Umiam III	60	114.51	36.84	18.42	1.61
4.	Umiam IV	60	180.25	36.84	18.42	1.02
5.	Umtru Power Station	11.2	17.69	6.88	3.44	1.94
6.	Mini Hydel (Sonapani)	1.5	6.37	0.92	0.46	0.72
	Total	188.7	460.70	115.86	57.93	1.26

# MLHEP:

	Objector's assessment for 2018-19
Annual fixed charges	180.33
Gap for True Up FY 2013-14 & True Up FY 2014-15	81.50
Net AFC for Computation of Tariff	261.83
Design Energy (MU)	486.23
Less: Auxiliary Consumption @ 1%	4.86
Less: Transformation Loss @ 0.5%	2.43
Net Energy (MU)	478.94
Capacity Charge (Rs. Cr.)	130.91
Variable Charge (Rs./kWh)	2.73

39

51. It is reiterated that the above computations of annual fixed charges have been

done by BIA based on the available data. Hon'ble Commission is requested to

kindly call for all the relevant data to adjudge the reasonableness of

computations submitted by MePGCL.

52. The above aspects may be taken into consideration. BIA craves leave to

substantiate the above submissions as may be necessary in the MYT and tariff

determination process. BIA also craves leave to make oral submissions in the

public hearing to be conducted by the Hon'ble Commission.

DATE: BRYNIHAT INDUSTRIES

PLACE: ASSOCIATION/

**OBJECTOR** 

# BEFORE THE MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION, SHILLONG

#### IN THE MATTER OF:

Petition filed by the Meghalaya Power Generation Company Limited (**MePGCL**) for MYT of Generation Business FY 2018-19 to FY 2020-21 and Determination of Generation Tariff for FY 2018-19.

#### AND IN THE MATTER OF:

Meghalaya Power Generation Company Ltd Lum Jingshai, Short Round Road, Shillong - 793 001, Meghalaya

....Petitioner

Versus

Byrnihat Industries Association 13<sup>th</sup> Mile, Tamulikuchi, Byrnihat, RiBhoi District, Nangpoh, Meghalaya – 793101

...... Objector/ Respondent

#### AFFIDAVIT IN SUPPORT

I Shyam Sundar Agrawal, son of Late Mr. Bhagwan Das Agrawal, aged about 61 years, Secretary of the Appellant Association, resident of 14 Bhajanka Building, GS Road, Dispur, Guwahati-781005, do solemnly affirm as follows:

- 1. I am Secretary of Byrnihat Industries Association, the Objector/Respondent in the above matter and am duly authorized by the said Objector/ Respondent to make this affidavit on its behalf.
- 2. I say that the facts contained in the accompanying objection is based on the records of the Objector Association maintained in its ordinary course of business

and believed by me to be true. I say that the submissions are based on legal advise received and believed by me to be true.

**DEPONENT** 

#### **VERIFICATION**

I, the deponent above named, do hereby verify the contents of the accompanying affidavit to be true to the best of my knowledge, no part of it is false and nothing material has been concealed therefrom.

Verified at Shillong on this ...... day of January, 2018.

**DEPONENT** 

# Byrnihat Industries Association (BIA)

**Statement of Objections** 

on

Filing of the Petition for Multi Year Tariff for FY 2018-19 to FY 2020-21

&

determination of Tariff for FY 2018-19 under the Meghalaya State Electricity Regulatory Commission (Multi Year Tariff) Regulations 2014

by

Meghalaya Power Generation Corporation Limited (MePGCL)

January, 2018



### **TABLE OF CONTENTS**

1	INTRODUCTION	44
2	MYT for 2018-19 to 2020-21- MLHEP	46
2.1	Annual Accounts	46
2.2	Gross Fixed Assets	46
2.3	Depreciation	47
2.4	Debt: equity ratio	49
2.5	Outstanding loan and Interest on Loan	50
2.6	Equity base and Return on equity	51
2.7	O&M expenses	52
2.8	Interest on Working Capital	
2.9	Allowable Annual Fixed Charge for MLHEP	54
3	MYT for 2018-19 to 2020-21- OLD STATIONS & SONAPANI	55
3.1	Gross Fixed Assets	55
3.2	Depreciation	56
3.3	Debt: equity ratio	58
3.4	Additional loan and Interest on Loan	59
3.5	Equity base and Return on equity	60
3.6	O&M expenses	
3.7	Interest on Working Capital	
3.8	Allowable Annual Fixed Charge for old stations and sonapani	



#### THE STATEMENT OF OBJECTIONS BY THE OBJECTOR

#### 1 INTRODUCTION

The generation company namely Meghalaya Power Generation Corporation Limited (hereinafter referred to as the 'MePGCL' or 'Petitioner'), has begun segregated commercial operations as an independent entity from 1<sup>st</sup> April 2013 onwards. MePGCL has filed the Petition for Multi Year Tariff for FY 2018-19 to FY 2020-21 & determination of Tariff for FY 2018-19 in terms of the Meghalaya State Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2014 (hereinafter referred to as 'Tariff Regulations').

The present Statement of Objections is being filed on behalf of the Byrnihat Industries Association (hereinafter referred to as the "Objector"), a society registered under the Meghalaya Societies Registration Act, 1983 having its registered Office at Byrnihat, Ri-Bhoi District, Meghalaya. The Byrnihat Industries Association was formed by the different industrial units for the welfare, smooth and effective functioning of its units. The Petitioner regularly participates in the proceedings related to determination of ARR and Tariff by the Hon'ble Meghalaya State Electricity Regulatory Commission (hereinafter referred to as 'State Commission' or 'MSERC' or 'Commission') and also takes up the other issues concerning its Members. The HT & EHT Industrial consumers though comprise only 0.043% of the total number of consumers in the State, account for around 42% of total energy consumption and 46.50% of total revenue from the sale of power as in 2014-15. The special characteristics of the Industrial consumers that benefit the Utilities are:

- They are the subsidising category of consumers for the utilities. Hence they are the revenue earners ensuring better returns for the utilities.
- The Load curve and consumption pattern enable better capacity utilisation and low Cost of Service for the Utilities in comparison to LT consumer categories.

In recent years, Meghalaya has witnessed firming up of power capacity from several sources and an increase in own generation capacity, thus moving towards becoming a net



power exporter from being a power deficit State. Being abundantly rich in Hydro Power Generation, the consumers in the State of Meghalaya ought to have a considerably lower power procurement costs resulting into lower tariffs across all the categories along with the low industrial tariffs. However, the tariff hikes in the recent years have disproportionately burdened the consumers of Meghalaya.

The key Points of Objections in terms of the present Petition filed by the Petitioner have been dealt in two parts with respect to Myntdu Leshka Power Plant (MLHEP) and Old Plants including Sonapani and are with respect to several key aspects as below:

- 1. Gross Fixed Assets
- 2. Debt: equity ratio
- 3. Depreciation
- 4. Equity base and Return on equity
- 5. Outstanding loan and Interest on loan
- 6. O&M expenses
- 7. Interest on working capital

The brief facts, propositions, analysis, grounds and point wise objections to the instant Petition are narrated herein below-



#### 2 MYT for 2018-19 to 2020-21- MLHEP

#### 2.1 Annual Accounts

The Petitioner has submitted the following approach for filing the instant Petition:

#### "3.1 Approach

13. Based on the **Audited Statement of Accounts for FY 2015-16** and **Provisional Statement of Accounts for FY 2016-17** & **Business Plan for FY 2018 - 2021** which has been approved by the Hon'ble Commission in its order dated 15<sup>th</sup> November, 2017, estimates for the FY 2017-18 and ARR projections for FY 2018-19 to FY 2020-21 are prepared." (**Emphasis Supplied**)

Contrary to the aforementioned claim, the Petitioner has neither provided the Annual Accounts of 2016-17 nor the Audited Annual Accounts of 2015-16 in the instant Petition. It is also pointed out that the Business Plan for 2018-19 to 2020-21 approved by the Hon'ble Commission has also not been provided anywhere. The Objector has no access either to the Order issued by Hon'ble Commission or to the Petition filed by MePGCL in respect of approval of such Business Plan. None of the above stated documents are available even on the web-portal of Petitioner/Commission. For the Objector or Hon'ble Commission to verify the reasonableness of projections during the MYT period, it is pertinent that the basis for such projections be made available along with the Petition.

#### 2.2 Gross Fixed Assets

The Petitioner has claimed the Gross Fixed Assets (GFA) based on the opening balance of GFA as on 1.4.2016 at Rs. 1279.19 cr. and the closing GFA for each year of the control period is worked out by the Petitioner considering actual capitalization during 2016-17, estimated capitalization during 2017-18 and projections during the MYT period based on its investment plan approved by the Hon'ble Commission.

At the outset, it is stated that the GFA of MLHEP constitutes a significant amount of grant which was duly taken into account by this Hon'ble Commission in its Order dated 30.3.2017 while determining the Capital Cost and True up of 2013-14 & Provisional True Up of FY 2014-15 and Annual Fixed Charges and Generation Tariff for MYT Control Period FY 2015-16 to FY 2017-18. It is observed from page 66 of the said Order that an amount of Rs. 288.02 cr. is included as grant in the GFA as on 31.3.2014.



Needless to say, the Petitioner has not clearly furnished the details/breakup in respect of the components of loan, equity or grants on actual basis and has simply included the entire capex as capitalised in GFA.

#### 2.3 Depreciation

The Petitioner has claimed depreciation purportedly as per Regulation 33 of the MYT Regulations, 2014. It has stated that it has considered depreciation rates as prescribed in the CERC Tariff Regulations, 2009. The Objector has perused the detailed computations submitted in the tariff formats in respect of depreciation. Following key points of objections emerge from the claim of Petitioner:

- a) The depreciation rate for plant and machinery has been considered at 5.81% against 5.28% prescribed by the CERC Tariff Regulations, 2014;
- b) Noticeably, while the Hon'ble Commission has considered reduction of depreciation on grants in the previous order dated 30.3.2017 while approving the Capital Cost, True up of 2013-14, Provisional True Up of FY 2014-15, Annual Fixed Charges and Generation Tariff for MYT Control Period FY 2015-16 to FY 2017-18, the Petitioner has not considered the same in the instant Petition. The Tariff Regulations provide the following in terms of depreciation:
  - "33.1 For the purpose of tariff determination, depreciation shall be computed in the following manner:
  - a) The asset value for the purpose of depreciation shall be the historical cost of the assets as approved by the Commission where:

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

In view of the above, the Objector has re-worked depreciation as below:

#### 2018-19



S.N.	Name o f the Asset	Value of Assets at the beginning of the year	Addition during the year	Withdrawn during the year	Value of Assets at the year	Rate of Depreciation (%)	Depreciation charges for the year
1	Land	23.73	0.08	0.00	23.81	0%	0.00
2	Buildings	145.82	0.52	0.00	146.34	3.34%	4.88
3	Plant and Equipment	362.43	1.29	0.00	363.72	5.28%	19.17
4	Furniture and Fixtures	0.08	0.00	0.00	0.08	6.33%	0.01
5	Vehicles	0.46	0.00	0.00	0.46	9.50%	0.04
6	Office equipment	0.18	0.00	0.00	0.18	6.33%	0.01
7	Bearer Plants	0.00	0.00	0.00	0.00		0.00
8	Others:	0.00	0.00	0.00	0.00		0.00
a)	Hydraulic Works	619.91	2.21	0.00	622.12	5.28%	32.79
b)	Other Civil Works	121.93	0.43	0.00	122.36	3.34%	4.08
c)	Lines and Cable Network	4.54	0.02	0.00	4.56	5.28%	0.24
10	Assets under lease	0.00	0.00	0.00	0.00		0.00
	Total	1,279.08	4.55		1,283.63	4.78%	61.22
	Amortization of Grants	288.02			288.02	4.78%	13.76
	Net Depreciation						47.46

#### **2019-20**

S.N.	Name of the Asset	Value of Assets at the beginning of the year	Addition during the year	Withdrawn during the year	Value of Assets at the year	Rate of Depreciation (%)	Depreciation charges for the year
1	Land	23.82	-		23.82	0%	0.00
2	Buildings	146.34	-		146.34	3.34%	4.89
3	Plant and Equipment	363.72	-		363.72	5.28%	19.20
4	Furniture and Fixtures	0.08	-		0.08	6.33%	0.01
5	Vehicles	0.46	-		0.46	9.50%	0.04
6	Office equipment	0.18	-		0.18	6.33%	0.01
7	Bearer Plants	-	-	0	-	0.00%	
8	Others:	-	-		-	0.00%	
a)	Hydraulic Works	622.12	-		622.12	5.28%	32.85
b)	Other Civil Works	122.37	-		122.37	3.34%	4.09
c)	Lines and Cable Network	4.56	-		4.56	5.28%	0.24
10	Assets under lease	-				0.00%	
	Total	1,283.65			1,283.65	4.78%	61.33
	Amortization of Grants	288.02			288.02	4.78%	13.76
	Net Depreciation						47.57

#### 2020-21



S.N.	Name of the Asset	Value of Assets at the beginning of the year	Addition during the year	Withdrawn during the year	Value of Assets at the year	Rate of Depreciation (%)	Depreciation charges for the year
1	Land	23.82	-	-	23.82	0%	0.00
2	Buildings	146.34	-	-	146.34	3.34%	4.89
3	Plant and Equipment	363.72	-	-	363.72	5.28%	19.20
4	Furniture and Fixtures	0.08	-	-	0.08	6.33%	0.01
5	Vehicles	0.46	-	-	0.46	9.50%	0.04
6	Office equipment	0.18	-	-	0.18	6.33%	0.01
7	Bearer Plants	-	-	-	-	0.00%	
8	Others:	-	-	-	-	0.00%	
a)	Hydraulic Works	622.12	-	-	622.12	5.28%	32.85
b)	Other Civil Works	122.37	-	-	122.37	3.34%	4.09
c)	Lines and Cable Network	4.56	-	-	4.56	5.28%	0.24
10	Assets under lease	-	-	-	-	0.00%	
	Total	1,283.65		-	1,283.65	4.78%	61.33
	Amortization of Grants	288.02			288.02	4.78%	13.76
	Net Depreciation						47.57

Accordingly, depreciation may be allowed as determined above by the Objector.

#### 2.4 Debt: equity ratio

The Petitioner has claimed the opening debt at Rs. 704.62 cr. and opening equity base of Rs. 383.76 cr. on 1.4.2016 against an opening GFA of Rs. 1279.19 cr. Clause 27 of the Tariff Regulations provides as below:

#### "27 Debt-Equity Ratio

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

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

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



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

....

27.2 In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2015, <u>debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2015 shall be considered." (Emphasis Supplied)</u>

The Objector wishes to point out w.r.t the opening debt and equity on 1.4.2016, that the Hon'ble Commission in its Order dated 30.3.2017 while approving the tariff for 2017-18 admitted an equity base is Rs. 334.98 cr. and the admitted opening debt is Rs. 717.19 cr. against a GFA of Rs. 1278.80 cr. Further as already pointed out in the earlier paras, the admitted grant component in the GFA base is Rs. 288.02 cr. as on 31.3.2014.

Based on the additional capital expenditure claimed during 2015-16 i.e. (Rs. 9.93-9.32) cr., the normative debt:equity has been determined as on 31.3.2016. Therefore, debt and equity as on 1.4.2016 ought to be Rs. 717.62 cr. and Rs. 335.16 cr. respectively.

Needless to say, the Petitioner appears to have omitted the grant component that was duly recognised by Hon'ble Commission in its Order dated 30.3.2017;

#### 2.5 Outstanding loan and Interest on Loan

The Petitioner has claimed interest cost based on the opening loan balance of Rs. 704.62 cr. on 1.4.2016. Further, the Petitioner has claimed an additional loan drawl to the tune of Rs. 13.51 cr. from 2016-17 to 2020-21.

It has already been depicted in the earlier paras that the Petitioner has erroneously considered a lower level of debt and higher equity base than allowed by the Commission in the order dated 30.3.2017. It has also not provided the details of capital expenditure funded by grants and by debt and has not even acknowledged the grant gone into capital investments during the period. It is imperative that such grant for which there is no cost to the Petitioner, must not be considered for the purpose of determining generation tariff.

The Objector has assumed the opening loan balance on 1.4.2016 as approved by the Commission in its Order dated 30.3.2017 and in the MYT order for the previous control period and addition during the period based on the grant component explained in earlier



paras. The rate of interest as being equal to the rate of interest claimed by the Petitioner. Accordingly, the Objector has worked out the interest on loan allowable to the Petitioner as under:

(in Rs. Crore)

Particulars	FY 2016- 17 (Actual)	FY 2017-18 (Estimated)	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
Opening Balance	717.62	654.41	478.65	375.87	329.07
Addition During the Year	0.00	1.13	4.11	4.13	4.14
Repayment during the year	63.21	176.89	106.89	50.93	49.74
Closing Balance	654.41	478.65	375.87	329.07	283.47
Average Interest Rate	11.63%	11.71%	11.89%	11.93%	11.87%
Interest Accrued	79.78	66.34	50.80	42.05	36.35

#### 2.6 Equity base and Return on equity

The Petitioner has claimed Return on Equity (RoE) based on an opening equity base on 1.4.2016 at Rs. 383.76 cr. It is noteworthy that the Commission has approved a normative equity base of Rs. 334.98 cr. on 31.3.2015 in its Order dated 30.3.2017. The observations of the State Commission for 2014-15 in the Order dated 30.3.2017 in this regard are as below:

#### "4.2.4 Return on Equity

Commission's analysis:

The Commission considers the debt equity ratio of GFA at 70:30 and return on equity is calculated considering 30% of assets addition to equity capital held as 01.04.2014 as given in the Table below:

Particulars	For FY 2014-15
Opening Equity (Rs. Crore)	334.87
30% Assets Additions during the year 2014-15 (Rs. Crore)	0.11
Closing Equity (Rs. Crore)	334.98
Average Equity (Rs. Crore)	334.93
Return on Equity at 14% (Rs. Crore)	46.89

....."

Accordingly, in absence of any reconciliation between the equity base and the GFA as per Accounts and the claims of Petitioner, Hon'ble Commission may allow equity base on



normative basis to the tune of 30% <u>after taking into account the grant that has gone into capital investment</u>. The Commission has adopted a similar approach of allowing normative equity in earlier Order also.

In view of the above, the allowable RoE as assessed by the Objector for the MYT period for the Petitioner is as below:

Particulars	FY 2016-17 (Provisional)	FY 2017-18 (Estimated)	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
Opening Equity Base	335.16	335.15	335.15	335.35	335.35
Equity added for Capex (a)		0.00	0.20	0.25	0.00
Equity as 30% GFA (b)	-0.02	0.00	1.37	0.00	0.00
Addition of Equity (Lower of a and b)	-0.02	0.00	0.20	0.00	0.00
Closing Equity Base	335.15	335.15	335.35	335.35	335.35
Average Equity Base	335.15	335.15	335.25	335.35	335.35
RoE (%)	14%	14%	14%	14%	14%
Return on Equity (in Rs. Cr.)	46.92	46.92	46.93	46.95	46.95

#### 2.7 O&M expenses

The Petitioner has claimed Operation & Maintenance expenses based on the project cost claimed on 1.4.2016 i.e. 1279.19 cr. The submissions of Petitioner in this respect are as below:

"Since MLHEP has achieved COD after 1.04.2009, its O & M expenses have been fixed as per Regulation 56 (7) at 2% of capital cost and further escalated at 5.72% to arrive at O & M expenses for FY 2018-19, FY 2019-20 & FY 2020-21."

The Tariff Regulations provide for O&M expenses as below:

"56.6 In case of the hydro generating stations, which have not been in commercial operation for a period of five years as on 1.4.2009, operation and maintenance expenses shall be fixed at 2% of the original project cost (excluding cost of rehabilitation & resettlement works). Further, in such case, operation and maintenance expenses in first year of commercial operation shall be escalated @5.17% per annum up to the year 2007-08and then averaged to arrive at the O&M expenses at 2007-08 price level. It shall be thereafter escalated @ 5.72% per annum to arrive at operation and maintenance expenses in respective year of the



tariff period. (The impact of pay revision on employee cost for arriving at the operation and maintenance expenses for the year 2009-10 shall be considered in accordance with the procedure given in proviso to sub-clause (ii) of clause (f) of this regulation).

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

The Commission had approved a project cost of Rs. 1134.28 cr. as on COD in its Order dated 30.3.2017. Since no further capital cost prudence has been conducted with respect to the items of additional capital expenditure, the latest cost within the cut-off date ought to be considered as Rs. 1134.28 cr. Based on this cost, the allowable O&M expenses shall be as below:

(in Rs. cr.)

O&M Expenses for FY 2013-14	22.69	(2% of Project Cost)
O&M Expenses for FY 2014-15	23.99	
O&M Expenses for FY 2015-16	25.36	
O&M Expenses for FY 2016-17	26.81	
O&M Expenses for FY 2017-18	28.34	(5.72% escalation over previous Year)
O&M Expenses for FY 2018-19	29.97	,
O&M Expenses for FY 2019-20	31.68	
O&M Expenses for FY 2020-21	33.49	

This will be a reasonable and prudent level of O&M expense allowable to the Petitioner based on the expenses approved during 2014-15. Hon'ble Commission is requested to kindly not allow O&M expenses beyond that computed in the aforesaid paras.

#### 2.8 Interest on Working Capital

The Petitioner has claimed working capital requirements to the tune of Rs. 42.19 cr., Rs. 41.50 cr. and Rs. 41.37 cr. in 2018-19, 2019-20 and 2020-21 respectively, on normative basis purportedly based on Regulation 34.2 of MSERC Tariff Regulations, 2014.



It is submitted that owing to change in the O&M expenses as depicted in the previous paras, the working capital requirements ought to change. Additionally, the rate of interest for the purpose of computing working capital shall be 14% as revised by the State Bank of India.

In view of the above, the Objector has re-worked the working capital requirements and thus the interest on working capital to be allowed to the Petitioner for the MYT period shall be as below:

(in Rs. Crore)

Particulars	FY 2016-17 (Provisional)	FY 2017-18 (Estimated)	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
Operation and Maintenance Expense for One Month	2.23	2.36	2.50	2.64	2.79
Maintenance Spare at 15% O&M	4.02	4.25	4.49	4.75	5.02
Two Months Receivable of AFC	34.41	32.40	30.05	28.88	28.23
Working capital required	40.67	39.01	37.05	36.28	36.05
SBI short term PLR	14.00%	14.00%	14.00%	14.00%	14.00%
Amount of interest on working capital	5.69	5.46	5.19	5.08	5.05

#### 2.9 Allowable Annual Fixed Charge for MLHEP

In view of the above facts and deliberations, the allowable Annual Fixed Charges for MLHEP for FY 2018-19, FY 2019-20 and FY 2020-21 as per Objector's assessment is depicted as under:



(in Rs. Crore)

SI. 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 Loan capital	79.78	66.34	50.80	42.05	36.35
2	Depreciation	47.28	47.35	47.46	47.57	47.57
3	O&M Expenses	26.81	28.34	29.97	31.68	33.49
4	Interest on working capital	5.69	5.46	5.19	5.08	5.05
5	Return on Equity	46.92	46.92	46.93	46.95	46.95
	Total Annual Fixed Cost	206.48	194.42	180.35	173.32	169.41
6	Less: Non-Tariff Income	0.03	0.03	0.03	0.04	0.04
	Net Annual Fixed Cost	206.45	194.39	180.31	173.29	169.37

Accordingly, as seen in the table above, as per Objector's assessment, the Annual Fixed charge claim of the Petitioner merits disallowance of at least Rs. 25.51 cr., Rs. 25.71 cr. and Rs. 25.96 cr. in 2018-19, 2019-20 and 2020-21 respectively, in line with the Tariff Regulations, 2014.

Particulars	201	8-19
	Petitioner's claim	Objector's Assessment
Annual Fixed Cost for FY 2018-19	205.82	180.33
Gap for True Up FY 2013-14 & True Up FY 2014-15	81.50	81.50
Net AFC for Computation of Tariff	287.32	261.83
Design Energy (MU)	486.23	486.23
Less: Auxiliary Consumption @ 1%	4.86	4.86
Less: Transformation Loss @ 0.5%	2.43	2.43
Net Energy (MU)	478.94	478.94
Capacity Charge (Rs. Cr.)	143.66	130.91
Variable Charge (Rs./kWh)	3.00	2.73

#### 3 MYT for 2018-19 to 2020-21- OLD STATIONS & SONAPANI

#### 3.1 Gross Fixed Assets

The Petitioner has claimed the Gross Fixed Assets (GFA) for MePGCL as a whole based on the opening balance of GFA as on 1.4.2016 at Rs. 1707.69 cr. and the closing GFA for each year of the control period is worked out by the Petitioner considering actual capitalization during 2016-17, estimated capitalization during 2017-18 and projections during the MYT period based on its investment plan approved by the Hon'ble Commission.



At the outset, it is stated that the GFA of MePGCL as evident from the available provisional Annual Accounts for 2015-16 is Rs. 1696.14 cr. as on 31.3.2016. The Petitioner has not clearly furnished the details/breakup in respect of the components of loan, equity or grants on actual basis and has simply included the entire capex as capitalised in GFA.

Based on the available accounts of 2015-16, the GFA projections for MePGCL and for the old stations and Sonapani, based on the GFA projected for MLHEP as per Objector's assessment is as below:

(in Rs. cr.)

Particulars - MePGCL	FY 2016-17 (Provisional)	FY 2017-18 (Estimated)	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
Opening GFA	1696.14	1,712.11	1,712.11	1,745.05	1,858.21
Additions during the year	16.13	0	32.94	113.16	468.57
Retirements during the year	0.16	0	0	0	0
Closing GFA	1,712.11	1,712.11	1,745.05	1,858.21	2,326.78
Particulars - Old	FY 2016-17 (Provisional)	FY 2017-18 (Estimated)	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
Opening GFA	416.95	432.98	432.98	461.37	574.53
Additions during the year	16.13	0.00	28.39	113.16	468.57
Retirements during the year	0.10	0.00	0.00	0.00	0.00
Closing GFA	432.98	432.98	461.37	574.53	1,043.10

#### 3.2 Depreciation

The Petitioner has claimed depreciation purportedly as per Regulation 33 of the MYT Regulations, 2014. It has stated that it has considered depreciation rates as prescribed in the CERC Tariff Regulations, 2009. The Objector has perused the detailed computations submitted in the tariff formats in respect of depreciation. The depreciation rate for plant and machinery has been considered at 5.81% against 5.28% prescribed by the CERC Tariff Regulations, 2014. In view of the above, the Objector has re-worked depreciation as below:

#### 2018-19

S.N.	Name of the Asset	Value of Assets at the beginning of the year	Addition during the year	Withdraw n during the year	Value of Assets at the year	Rate of Depreci ation (%)	Depreciat ion charges for the year
1	Land	32.89	0.63		33.51	0%	0.00
2	Buildings	162.47	3.10		165.57	0.03	5.48



S.N.	Name of the Asset	Value of Assets at the beginning of the year	Addition during the year	Withdraw n during the year	Value of Assets at the year	Rate of Depreci ation (%)	Depreciat ion charges for the year
3	Plant and Equipment	608.13	11.62		619.75	0.05	32.42
4	Furniture and Fixtures	3.20	0.06		3.26	0.06	0.20
5	Vehicles	4.83	0.09		4.92	0.10	0.46
6	Office equipment	2.89	0.06		2.94	0.06	0.18
7	Bearer Plants	-	-		-	0.00	
8	Others:	-	-		-	0.00	
a)	Hydraulic Works	752.26	14.37		766.63	0.05	40.10
b)	Other Civil Works	149.18	2.85		152.03	0.03	5.03
c)	Lines and Cable Network	7.66	0.15		7.81	0.05	0.41
10	Assets under lease	0.16	0.00		0.16	0.00	0.00
	Total	1723.65	32.94		1756.59		84.28
11	Amortization of Grants						12.04
	Net Depreciation						72.24

#### **2019-20**

S.N.	Name of the Asset	Value of Assets at the beginning of the year	Addition during the year	Withdraw n during the year	Value of Assets at the year	Rate of Depreci ation (%)	Depreciat ion charges for the year
1	Land	33.51	2.16		35.67	0%	0.00
2	Buildings	165.57	10.67		176.24	0.03	5.71
3	Plant and Equipment	619.75	39.93		659.67	0.05	33.78
4	Furniture and Fixtures	3.26	0.21		3.47	0.06	0.21
5	Vehicles	4.92	0.32		5.24	0.10	0.48
6	Office equipment	2.94	0.19		3.13	0.06	0.19
7	Bearer Plants	-	-		-	0.00	
8	Others:	-	-		-	0.00	
a)	Hydraulic Works	766.63	49.39		816.02	0.05	41.78
b)	Other Civil Works	152.03	9.79		161.82	0.03	5.24
c)	Lines and Cable Network	7.81	0.50		8.31	0.05	0.43
10	Assets not in use	0.16	0.01		0.17	0.00	0.00
	Total	1756.59	113.16		1869.75		87.82
	Amortization of Grants						12.45
	Net Depreciation						75.37

#### <u>2020-21</u>

S.N.	Name of the Asset	Value of Assets at the beginning of the year	Addition during the year	Withdra wn during the year	Value of Assets at the year	Rate of Depreciatio n (%)	Depreci ation charges for the year
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S.N.	Name of the Asset	Value of Assets at the beginning of the year	Addition during the year	Withdra wn during the year	Value of Assets at the year	Rate of Depreciatio n (%)	Depreci ation charges for the year
1	Land	35.67	8.94	-	44.61	0%	0.00
2	Buildings	176.24	44.17	-	220.41	0.03	6.62
3	Plant and Equipment	659.67	165.32	-	824.99	0.05	39.20
4	Furniture and Fixtures	3.47	0.87	-	4.33	0.06	0.25
5	Vehicles	5.24	1.31	-	6.55	0.10	0.56
6	Office equipment	3.13	0.79	-	3.92	0.06	0.22
7	Bearer Plants	-	-	-	i	0.00	
8	Others:	-	-	-	-	0.00	
a)	Hydraulic Works	816.02	204.50	-	1020.52	0.05	48.48
b)	Other Civil Works	161.82	40.55	-	202.38	0.03	6.08
c)	Lines and Cable Network	8.31	2.08	-	10.39	0.05	0.49
10	Assets not in use	0.17	0.04	-	0.21	0.00	0.00
	Total	1869.75	468.57	-	2338.32		101.91
	Amortization of Grants						30.95
	Net Depreciation						70.96

Accordingly, deprecation may be allowed as computed above by the Projector.

#### 3.3 Debt: equity ratio

The Petitioner has claimed the opening debt at Rs. 1124.41 cr. and opening equity base of Rs. 399.04 cr. on 1.4.2016 against an opening GFA of Rs. 1707.69 cr. for MePGCL. Clause 27 of the Tariff Regulations provides as below:

#### "27 Debt-Equity Ratio

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

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

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

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

....



27.2 In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2015, <u>debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2015 shall be considered." (Emphasis Supplied)</u>

The Objector wishes to point out that with respect to the opening debt and equity of old stations and sonapani on 1.4.2016, the Hon'ble Commission, in its Order dated 31.3.2017 admitted an equity base at Rs. 91.35 cr. for the old stations and sonapani, against a GFA of Rs.303.80 cr.

Based on the additional capital expenditure claimed during 2015-16 i.e. Rs. 4.56 cr., the normative debt:equity has been determined as on 31.3.2016. therefore, debt and equity for the old stations as on 1.4.2016 ought to be Rs. 217.01 cr. and Rs. 92.72 cr. respectively.

#### 3.4 Additional loan and Interest on Loan

The Petitioner has claimed an additional loan drawl to the tune of Rs. 565.74 cr. from 2016-17 to 2020-21, which apparently doesn't conform to the GFA addition claimed by the Petitioner. Evidently, the Petitioner has also not provided the details of capital expenditure funded by grants and by debt and has not even acknowledged the grant gone into capital investments during the period.

The Objector has worked out additional debt drawl during the period based on GFA drawl and normative equity admissible during the period. Based on the interest on loan computed in previous section for MLHEP, and the interest on loan claimed for MePGCL, the interest on loan for old stations & Sonapani shall be as below:

(in Rs. Crore)

Particulars	FY 2017-18 (Estimated)	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
Opening Balance	1,224.41	1,145.78	1,112.19	1,166.74
Addition During the Year	0.00	19.87	79.21	380.32
Repayment during the year	197.18	151.23	95.28	94.09
Closing Balance	1,027.23	1,014.42	1,096.12	1,452.97
Average Interest Rate	11.57%	11.40%	11.12%	10.80%
Interest Accrued	118.85	115.64	121.89	156.92
Less: Interest Capitalised	52.15	51.08	47.31	43.53
Add: Finance Charge and MeECL Apportioned	4.90	4.90	4.90	4.90
Interest and Finance Charges for MePGCL	71.60	69.46	79.48	118.29



Particulars	FY 2017-18 (Estimated)		FY 2019-20 (Projected)	
Interest and Finance Charges for MLHEP	66.34	50.80	42.05	36.35
Interest and Finance Charges for Old Plants Including Sonapani	5.26	18.66	37.43	81.94

#### 3.5 Equity base and Return on equity

The Petitioner has claimed Return on Equity (RoE) based on an opening equity base on 1.4.2016 at Rs. 399.04 cr. for old stations and sonapani. It is noteworthy that the Commission has approved a normative equity base of Rs. 91.35 cr. on 31.3.2015 in its Order dated 31.3.2017. The observations of the State Commission for 2014-15 in the Order dated 31.3.2017 in this regard are as below:

#### "4.2.5 Return on Equity

.....

#### Commission's Analysis

The Commission had considered opening GFA on 01.04.2014 at Rs. 303.80 Crore. Closing GFA at Rs. 305.17 Crore. The Commission Considered Equity capital at Rs. 91.35 Crore and considered at Rs. 12.79 Cr as Return on Equity."

Accordingly, in absence of any reconciliation between the equity base and the GFA as per Accounts and claims of the petitioner, Hon'ble Commission may allow equity base on normative basis to the tune of 30% of GFA or the actual, whichever is lower <u>after taking</u> <u>into account the grant that has gone into capital investment</u>. The Commission has adopted a similar approach of allowing normative equity in earlier Order also.

In view of the above, the allowable RoE as assessed by the Objector for the MYT period for the Petitioner is as below:

Particulars	FY 2016-17 (Provisional)	FY 2017-18 (Estimated)	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
Opening Equity Base	92.72	97.56	97.56	106.07	140.02
Equity added for Capex (a)	13.99	0.00	9.68		88.25
Equity as 30% GFA (b)	4.84	0.00	8.52	33.95	140.57
Addition of Equity (Lower of a and b)	4.84	0.00	8.52	33.95	88.25



Particulars	FY 2016-17 (Provisional)	FY 2017-18 (Estimated)	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
Closing Equity Base	97.56	97.56	106.07	140.02	228.27
Average Equity Base	95.14	97.56	101.82	123.05	184.15
RoE (%)	14%	14%	14%	14%	14%
Return on Equity (in Rs. Cr.)	13.32	13.66	14.25	17.23	25.78

#### 3.6 O&M expenses

The Petitioner has claimed Operation & Maintenance expenses assuming an escalation of 3-6% on all the components of employee expenses, A&G expenses and R&M expenses. The relevant extract from the Petition is as below:

"For projections for the control period, the following assumptions have been made:

- a. Basic Pay: On a yearly basis, the permanent employees of MePGCL are given an increment of 3%.
- b. Dearness Allowance (DA): The DA increment is considered around 12% on yearly basis.
- c. House Rent Allowance (HRA): The HRA is paid as a percentage of Basic Pay.
- d. Other Allowances: The other allowances which include Medical Allowance, Overtime Allowance, etc. have been taken with a yearly increment of 6%.
- e. Terminal benefits provision for FY 2017-18 has been considered at an increment of 3%. However, the same will be claimed as per the actuals at the time of true-up.

#### Administrative & General (A & G) Expenses Projection:

The increase in A & G expenses mainly depend upon the market inflation and the increase in business volume. As the A & G Expense is being projected for the remaining control period as a whole, therefore A & G expense for the remaining control period is projected by considering the present average inflation rate of 5.50% over A&G expenses as per provisional Statement of Accounts (SoA) FY 2016-17 for the control period.

#### Repair and Maintenance (R & M) Expense Projection:



Most of the stations of MePGCL being old, there is need to regularly take up R & M activities for the stations as well as the hydraulic and other works. However, due to revenue deficit faced by MeECL & its subsidiaries, MePGCL has not been able to take up R&M works in a planned manner. Therefore, MePGCL has considered present year's average inflation rate of 5.50% for projection of R&M cost over R&M expenses as per provisional SoA FY 2016-17 for the control period.

It is submitted that the Commission made following observations while issuing the MYT order for the period 2015-16 to 2017-18:

"The expenses can only be validated if the audited records were made available to the Commission. The Commission has examined the O&M expenses projected by MePGCL. In accordance with the regulations and available records, the Commission has allowed escalation on the O& M expenditures as allowed in FY 2014-15 and determined the charges for the control period. After getting the audited records the Commission shall review the same and if required appropriate changes shall be considered."

Since the latest Audited Accounts for 2015-16 indicate the employee expenses at Rs. 62.19 cr., the claim of the Petitioner to increase the same to Rs. 95.47 cr. during 2017-18 is unwarranted. It is requested that in absence of the latest audited Accounts for 2016-17, the Hon'ble Commission may adopt the same approach and approve the O&M expenses on escalation basis i.e. @5.72% y-o-y in line with its earlier orders. The O&M expenses have been worked out as below:

(in Rs. cr.)

O&M Expenses for FY 2020-21	72.98	
O&M Expenses for FY 2019-20	69.03	
O&M Expenses for FY 2018-19	65.30	Escalated @5.72%
O&M Expenses for FY 2017-18	61.76	Escalated @E 7204
O&M Expenses for FY 2016-17	58.42	
O&M Expenses for FY 2015-16	55.26	
O&M Expenses for FY 2014-15	52.27	Approved in true up order dated 31.3.2017

This will be a reasonable and prudent level of O&M expense allowable to the Petitioner based on the latest trued-up data. Hon'ble Commission is requested to kindly not allow O&M expenses beyond that computed in the aforesaid paras.



#### 3.7 Interest on Working Capital

The Petitioner has claimed working capital requirements to the tune of Rs. 96.19 cr., Rs. 99.96 cr. and Rs. 104.63 cr. in 2018-19, 2019-20 and 2020-21 respectively, on normative basis purportedly based on Regulation 34.1 of MSERC Tariff Regulations, 2014.

It is submitted that owing to change in the O&M expenses as depicted in the previous paras, the working capital requirements ought to change. Additionally, the rate of interest for the purpose of computing working capital shall be 14% as revised by the State Bank of India.

In view of the above, the Objector has re-worked the working capital requirements and thus the interest on working capital to be allowed to the Petitioner for the MYT period shall be as below:

(in Rs. Crore)

Particulars	FY 2017-18 (Estimated)	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
Operation and Maintenance Expense for One Month	5.15	5.44	5.75	6.08
Maintenance Spares at 15% O&M	9.26	9.79	10.35	10.95
Two Months Receivable of AFC	16.38	19.31	23.58	32.72
Working capital required	30.80	34.55	39.69	49.75
SBI short term PLR	14.00%	14.00%	14.00%	14.00%
Interest on working capital for Old plants including Sonapani	4.31	4.84	3.30	6.96

#### 3.8 Allowable Annual Fixed Charge for old stations and sonapani

In view of the above facts and deliberations, the allowable Annual Fixed Charges for old stations and sonapani for FY 2018-19, FY 2019-20 and FY 2020-21 as per Objector's assessment is depicted as under:



(in Rs. Crore)

Particulars	FY 2017-18 (Estimated)			FY 2018-19 (Projected)			FY 2019-20 (Projected)			FY 2020-21 (Projected)		
	MePGCL 1	Leshka 2	Old Plants +Sonapani 1-2									
Interest & Finance Charges	71.60	66.34	5.26	69.46	50.80	18.66	79.48	42.05	37.43	118.29	36.35	81.94
Depreciation	71.45	47.35	24.09	72.24	47.46	24.79	75.37	47.57	27.80	70.96	47.57	23.39
O&M Expenses	90.11	28.34	61.76	95.26	29.97	65.30	100.71	31.68	69.03	106.47	33.49	72.98
Interest on working capital	9.77	5.46	4.31	10.02	5.19	4.84	8.38	5.08	3.30	12.01	5.05	6.96
Return on Equity	60.58	46.92	13.66	61.19	46.93	14.25	64.18	46.95	17.23	72.73	46.95	25.78
SLDC Charges	1.15		1.15	1.15		1.15	1.15		1.15	1.15		1.15
Net Prior Period Items/Provision for Bad Debt	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	0	0.00
Total Annual Fixed Cost	304.65	194.42	110.24	309.33	180.35	128.98	329.26	173.32	155.94	381.61	169.41	212.20
Less: Non- Tariff Income	11.96	0.031	11.93	13.16	0.03	13.13	14.48	0.04	14.44	15.92	0.04	15.88
Net Annual Fixed Cost	292.69	194.39	98.31	296.17	180.32	115.86	314.78	173.28	141.50	365.69	169.37	196.32



#### **Disallowance in the overall claims of MePGCL as per Objector's assessment:**

Particulars	FY 2017-18 (Estimated)				FY 2018-19 (Projected)			FY 2019-20 (Projected)			FY 2020-21 (Projected)		
	Petitioner's claim	Objector's assessmen t	Disallowa nce proposed	Petitioner' s claim	Objector's assessment	Disallowanc e proposed	Petitioner's claim	Objector's assessment	Disallowan ce proposed	Petitioner's claim	Objector's assessmen t	Disallowa nce proposed	
Interest & Finance Charges	89.81	71.60	18.21	82.56	69.46	13.10	84.30	79.48	4.82	92.00	118.29	-26.29	
Depreciation	74.64	71.45	3.19	75.46	72.24	3.22	78.73	75.37	3.36	74.85	70.96	3.89	
O&M Expenses	111.22	90.11	21.11	117.15	95.26	21.89	123.52	100.71	22.81	130.35	106.47	23.88	
Interest on working capital	13.34	9.77	3.57	13.52	10.02	3.50	14.04	8.38	5.66	14.70	12.01	2.69	
Return on Equity	111.55	60.58	50.97	112.24	61.19	51.05	115.31	64.18	51.13	123.86	72.73	51.13	
SLDC Charges	1.15	1.15	0.00	1.21	1.15	0.06	1.27	1.15	0.12	1.33	1.15	0.18	
Net Prior Period Items/Provision for Bad Debt	25.00	0.00	25.00	25.00	0.00	25.00	25.00	0.00	25.00	25.00	0.00	25.00	
Total Annual Fixed Cost	426.71	304.65	122.06	427.14	309.33	117.81	442.17	329.26	112.91	462.11	381.61	80.50	
Less: Non-Tariff Income	11.96	11.96	0.00	13.16	13.16	0.00	14.48	14.48	0.00	15.92	15.92	0.00	
Net Annual Fixed Cost	414.74	292.69	122.05	413.98	296.17	117.81	427.69	314.78	112.91	446.18	365.69	80.49	



Accordingly, the allowable annual fixed charges for old stations, sonapani and MLHEP are summarised below:

#### Old stations and sonapani:

S. N.	Name of the Power Station	MW	Projected Generation (Avg. of last 6 years) (MU)	Annual Fixed Charges (Rs. Cr.)	Capacity Charges (Rs. Cr.)	Energy Charges (Rs./kWh)
1.	Umiam I	36	98.65	22.10	11.05	1.12
2.	Umiam II	20	43.22	12.28	6.14	1.42
3.	Umiam III	60	114.51	36.84	18.42	1.61
4.	Umiam IV	60	180.25	36.84	18.42	1.02
5.	Umtru Power Station	11.2	17.69	6.88	3.44	1.94
6.	Mini Hydel (Sonapani)	1.5	6.37	0.92	0.46	0.72
	Total	188.7	460.70	115.86	57.93	1.26

#### **MLHEP:**

	Objector's assessment for 2018-19			
Annual fixed charges	180.33			
Gap for True Up FY 2013-14 & True Up FY 2014-15	81.50			
Net AFC for Computation of Tariff	261.83			
Design Energy (MU)	486.23			
Less: Auxiliary Consumption @ 1%	4.86			
Less: Transformation Loss @ 0.5%	2.43			
Net Energy (MU)	478.94			
Capacity Charge (Rs. Cr.)	130.91			
Variable Charge (Rs./kWh)	2.73			

It is reiterated that the above computations of annual fixed charges have been done by the Objector based on the available data. Hon'ble Commission is requested to kindly call for all the relevant data to adjudge the reasonableness of computations of the Petitioner.