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. 2/2017

In the matter of:

Approval of provisional Capital Cost of New Umtru Hydro Electric Project and determination of provisional Generation Tariff for FY 2017-18.

AND

Meghalaya Power Generation Corporation Limited - **Petitioner**

(Herein after referred to as MePGCL)

Coram

Shri WMS Pariat, Chairman

ORDER

Date of Order: 06.11.2017

1. Introduction

Meghalaya Power Generation Corporation Limited filed Petition for approval of capital cost of New Umtru Hydro Electric Project 40 MW (2 x 20 MW) and determination of provisional Generation Tariff for FY 2017-18. The New Umtru Hydro Electric Project (NUHEP) was built alongside the old Umtru Project with common water storage and a new dam was built at the location of the old dismantled Umtru weir of the old Project to create enhanced water storage for old and new projects.

Table 1 : Estimated Capital Cost of (2 x 20 MW) NUHEP

(Rs. Crore)

Sl. No.	Particulars	Amount
1	Civil works	323.44
2	Electro Mechanical Works	140.92
3	IDC	157.79
4	Other Charges	4.87
5	Escalation	2.11
	Total estimated project cost	629.00

The NUHEP was commissioned and the date of CoD is 1st July 2017 and generating station is in service and both the units are generating power.

2. Technical performance of NUHEP

Petitioner's submission:

MePGCL has submitted that the Regulation 58 of the MSERC (MYT) Regulations 2014 specifies the norms of operation of Hydro Generation stations and accordingly projected the normative performance of the NUHEP for FY 2017-18 as given below:

Table 2 : Estimated Technical performance of NUHEP for FY 2017-18

Sl. No.	Particulars	Unit	FY 2017-18
1	Installed capacity	MW	2 x 20
2	Date of Commercial operation (CoD)		
	Unit - I		1st July 2017
	Unit - II		1st July 2017
3	Type of Station		
	Surface/Underground		Surface
	ROR/Pondage/storage		Pondage
	Peaking/non-peaking		Non-peaking
4	Design energy	GWh	235
5	Auxiliary consumption including Transmission losses	%	1.50%
6	Normative Plant Availability Factor (NAPAF)	%	62.60%
7	Design energy (estimated) during FY 2017-18 (both units)	MU	180.94
8	Auxiliary consumption	MU	2.71
9	Net Generation	MU	178.23

Commission's analysis:

The Commission opines that petitioner shall be in a better position to estimate the generation/energy during FY 2017-18 based on the hydrological conditions, water inflow and pondage of the project. The Commission provisionally considers the energy from unit-I and II at 180.94 MU during FY 2017-18 and other technical parameters of auxiliary consumption including transmission loss and plant availability factor as projected by the petitioner subject to true up based on final project cost and actual energy.

3. **Capital cost of NUHEP**

Petitioner's submission:

The Petitioner has submitted the actual expenditure incurred till February 2017, certified by the Statutory Auditors, as given in the Table below:

Table 3: Details of Project Cost of NUHEP till February 2017

(Rs. Crore)

Sl. No.	Description of works.	Expenditure
	CIVIL WORKS	
1	a) Preliminary	5.71
2	b) Land	0.06
3	c) Works	
4	- Dam	77.01
5	- Intake	12.38
6	- Hydro Mechanical	7.90
7	- Claims M/s. ITD Cem Ltd.	3.28
8	d) Power plant Civil works	
9	i. Head Race Tunnel.	32.70
10	ii. Surge Shaft.	9.90
11	iii. Pressure Shaft/ Penstock.	12.18
12	iv. Power House Complex	37.64
13	v. Tail Race Tunnel	19.94
14	vi. Switchyard.	2.54
15	vii. Hydro mechanical works.	2.61
16	e. Buildings	5.34
17	f. Plantation	0.03
18	g. Miscellaneous	1.34
19	h. Maintenance.	0.18
20	i. Special T & P.	0.47
21	j. Communication.	4.64
22	k. Environment , Ecology & Afforestation	0.28
23	Establishment	23.53
24	T & P	0.33
	ELECTRICAL & MECHANICAL WORKS.	
25	Preliminary	1.69
26	Generating Plant and Equipment	82.56
27	Establishment @ 6% of item 8	2.15

28	Claims of Andritz Hydro excluding PVC	7.38
29	Penalty and Pre payment charges	4.87
30	I.D.C	146.03
31	Explosive	0.20
32	Other Capital Expenditure for Dam, Power House, Environment etc.	6.47
33	Miscellaneous Civil Work Expenditure paid to ITD	5.03
34	Energy bill ITD	2.16
	TOTAL EXPENDITURE	**518.54**

The above capital cost to the end of 28.02.2017 against the estimated project cost of Rs.629.00 crore is certified by the Statutory Auditors (Chartered Accountants) vide their report dated 22.04.2017.

Commission's analysis:

The MSERC (Multi Year Tariff) Regulations 2014 specify;

41 Petition for determination of generation tariff

41.1 A Generating Company is required to file a Petition for determination of tariff for supply of electricity to Distribution Licensees in accordance with the provisions of Chapter 2 of these Regulations.

41.2 Tariff in respect of a Generating Station under these Regulations may be determined Stage-wise, Unit-wise or for the whole Generating Station. The terms and conditions for determination of tariff for Generating Stations specified in this Part shall apply in like manner to Stages or Units, as the case may be, as to Generating Stations.

41.3 Where the tariff is being determined for a Stage or Unit of a Generating Station, the Generating Company shall adopt a reasonable basis for allocation of capital cost relating to common facilities and allocation of joint and common costs across all Stages or Units, as the case may be:

41.4 Provided that the Generating Company shall maintain an Allocation Statement providing the basis for allocation of such costs, which shall be duly audited and certified by the statutory auditors, and submit such audited and certified statement to the Commission along with the application for determination of tariff.

41.5 A Generating Company may file a Petition for determination of provisional tariff in advance of the anticipated Date of Commercial Operation of the Unit or Stage or Generating Station as a whole, as the case may be, based on the capital expenditure actually incurred upto the date of making the Petition or a date prior to making of the Petition, duly audited and certified by the statutory auditors and the provisional tariff shall be charged from the date of commercial operation of such Unit or Stage or Generating Station, as the case may be.

41.6 A Generating Company shall file a fresh Petition in accordance with these Regulations, for determination of final tariff based on actual capital expenditure incurred upto the date of commercial operation of the Generating Station duly certified by the statutory auditors based on Annual Audited Accounts.

41.7 Any difference in provisional tariff and the final tariff determined by the Commission and not attributable to the Generating Company may be adjusted at the time of determination of final tariff for the following year as directed by the Commission.

41.8 In relation to multi-purpose hydroelectric Projects, with irrigation, flood control and power components, the capital cost chargeable to the power component of the Project only shall be considered for determination of tariff.

***16.3 New generating stations**:*

i. The tariff for the supply of electricity by a Generating Company to a Distribution Licensee from a new generating Unit/Station shall be in accordance with tariff as per power purchase agreement approved by the Commission.

The Commission has ascertained that the NUHEP was commissioned and the date of CoD is 1st July 2017 and generating power from the date of CoD and pumping into the state grid. The MePGCL had furnished provisional cost of the project till the end of February 2017 duly certified by the Statutory Auditors and final cost of the project till the end of June 2017 i.e. as on the date of CoD shall be submitted by the MePGCL.

The Commission, in view of the above regulations, shall determine provisional tariff for New Umtru Hydro Electric Project for billing. The Commission, accordingly, determines the provisional tariff for (2 x 20 MW) NUHEP for FY 2017-18.

Regulation 28 of MSERC (Multi Year Tariff) Regulations 2014 specifies Capital Cost and capital structure as shown below:

28.1 Capital cost for a project shall include:

a) The actual expenditure on the date of commercial operation in case of new investments shall be subject to prudence check by the Commission.

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

c) In case of any abnormal delay in execution of the project causing cost and time overrun attributable due to failure of the utility/licensee the Commission may not approve the full capitalization of the interest and overhead expenditures.

d) Where the power purchase agreement or bulk power transmission agreement provides for a ceiling of capital cost, the capital cost to be considered shall not exceed such ceiling.

….

28.4 The approved Capital Cost shall be considered for determination of tariff and if sufficient justification is provided for any escalation in the Capital Cost, the same may be considered by the Commission subject to the prudence check.

28.5 The Commission shall issue guidelines for verifying the capital cost of hydro projects by an independent agency or expert and in such case the capital cost as vetted by such agency may be considered by the Commission after prudence check and reasonability of the expenses while determining the tariff. Scrutiny of projects not controlled by State or Central Government may be done as per State and Central Commission's Regulations, Tariff policy and notification issued by the Government of India in this regard.

28.6 In case the actual capital cost is lower than the approved capital cost, then the actual capital cost will be considered for determination of tariff of the Generating Company or Transmission Licensee or Distribution Licensee.

28.7 The actual capital expenditure on COD for the original scope of work based on audited accounts of the Company limited to original cost may be considered subject to the prudence check by the Commission.

The Commission, in view of Regulation 28 as above, provisionally approves Rs.518.54 crore towards the project cost of NUHEP (2x20 MW) as submitted by the MePGCL and certified by the Statutory Auditors for the purpose of determination of tariff (provisional) for NUHEP for FY 2017-18.

4. **Depreciation**

Petitioner's submission:

MePGCL has submitted that depreciation is computed as per Regulation 33 of the MYT Regulations, 2014. The depreciation is computed on the final gross value of the assets on straight line method using depreciation rates as prescribed in Annexure – II of the MSERC MYT Regulations, 2014. MePGCL has computed the depreciation at a flat rate of 4.74% of the estimated project cost (the rate of depreciation which was worked out for MLHEP) as the assets details are not available at this point of time. Based on the above, the depreciation of NUHEP from its COD till the end of the remaining part of the 1st MYT Control Period i.e. 1st July, 2017 to 31st March, 2018 is computed below:

Table 4: Depreciation projected by petitioner

(Rs. crore)

Particulars	**FY 2017-18**
Capital Cost Incurred	518.54
Average depreciation (%)	4.74%
Period considered (July 2017 to March 2018)	9 Months
Net Depreciation	18.43

MePGCL requested to approve the Depreciation for NUHEP as computed above.

Commission's analysis:

The Commission had approved capital cost of NUHEP at Rs.518.54 crore in paragraph 3. The asset wise depreciation is computed as given in the table below for 9 months i.e. from 1st July 2017 to 31st March 2018.

Table 5: Depreciation approved for FY 2017-18

(Rs. crore)

Sl. No.	Description	Gross value of asset	Rate of Depreciation	Depreciation	for 9 months
A	B	C	D	E=C x D	F=(E/12)x9
1	Land	0.06			
2	Buildings	5.65	3.34%	0.19	0.14
3	Plant and Machinery	512.83	5.28%	27.08	20.31
4	Total	518.54		27.27	20.45

The Commission approves Rs.20.45 crore towards depreciation for 9 months for FY 2017-18.

5. **Return on Equity (RoE)**

Petitioner's submission:

MePGCL has submitted that the Govt. of Meghalaya has infused Rs.128.37 Crore as equity in the New Umtru HEP. The return on equity for NUHEP would be computed based on Regulation 31 read with Regulation 27 of the MSERC MYT Regulations, 2014. The relevant sections of the Regulations are reproduced hereunder:

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

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."

MePGCL has submitted that since the actual equity infused till date is less than 30% of the estimated project cost, the same is being considered for the computation of return on equity. The RoE of NUHEP for the remaining part of the 1st MYT Control Period from its COD when the plant will be functional i.e. 1st July, 2017 to 31st March, 2018 works out as shown below:

Table 6 : Return on Equity project by Petitioner

(Rs. in crore)

Particulars	FY 2017-18
Opening Equity (INR Crore)	128.37
Additions During the Year (INR Crore)	0.00
Closing Equity (INR Crore)	128.37
Average Equity Considered for RoE (INR Crore)	128.37
% RoE as per Regulation	14%
Period considered	9 months
RoE Claim for the part of the year when the plant is operational (July 2017 to March 2018)	**13.48**

MePGCL requested to approve the Return on Equity as computed in the above table for NUHEP.

Commission's analysis:

The MSERC (Multi Year Tariff) Regulations 2014 specify as below:

31 Return on Equity

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

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

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

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

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

27 Debt-Equity Ratio

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

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

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

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

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

27.2 ….

27.3 ….

A conjoint reading of above regulations specify that RoE shall be considered at 14% on the actual equity or the equity base of 30% (whichever is less) of the project cost/capital base determined in accordance with Regulation 27 of MSERC (Multi Year Tariff) Regulations 2014. Further, additional return of 0.5% shall be allowed if the project is completed within the time line specified by CERC and 1.5% shall be allowed if the project is completed within the original sanctioned cost without any time and cost overrun.

Implementation of NUHEP commenced during the year 2008 and project completed and CoD declared on 1st July 2017. The project report is silent on the projected date of completion of the project originally contemplated while formulating the project. Hence, the additional return on equity is not considered. The Petitioner also had not claimed additional return on equity.

The Commission had considered the project cost at Rs.518.54 crore in paragraph 3 and the same is considered as capital base for FY 2017-18. In terms of Regulation 27, the 30% of the capital base works out to Rs.155.56 crore. The Regulation 27.1 specify that RoE shall be considered at 14% on the actual equity or the equity base of 30% (whichever is less) of the capital base i.e. project cost. The Commission observes that the actual equity is at Rs.128.37 crore and same is considered for RoE. The Commission accordingly considers Return on equity for 9 months i.e. from the date of CoD of 1st July 2017 to 31st March 2018 for FY 2017-18 as detailed in the table below:

Table 7 : Return on Equity approved for FY 2017-18

Sl. No.	Particulars	Amount (Rs. crore)
1	Project cost/Capital base	518.54
2	equity @ 30% of the capital base (30% of 1)	155.56
3	Debt @ 70% of the capital base (70% of 1)	362.98
4	Actual equity deployed	128.37
5	Equity considered for Return	128.37
6	Rate of Return on Equity	14.00%
7	Return on Equity (5 x 6)	17.97
8	Return on Equity for 9 months	13.48

The Commission accordingly considers Rs.13.48 crore towards RoE for FY 2017-18.

6. **Interest on Loans**

Petitioner's submission:

MePGCL has submitted that the Regulation 32 read with Regulation 27 of the MYT Regulations, 2014 provides the guidelines for computation of interest and finance charges on loan capital and the relevant sections of the regulations are reproduced below:

"32 Interest and finance charges on loan capital

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

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

MePGCL has availed a loan of Rs. 390.17 Crore for the New Umtru HEP and the details of the loan is as shown below:

Table 8: Loan details of NUHEP

Particulars	Amount
Principal Amount (Rs. Crore)	390.17
Lending institution	PFC
Repayment start date	Jul-17
No. of instalments	56
Instalment frequency	Quarterly

Based, on the above, it is estimated that there would be repayment of one instalment in the remaining part of the year and accordingly the interest on loan has been worked out for the remaining months when the plant would be operational (July 2017 to March 2018) as shown below:

Table 9: Interest and Finance Charges projected by Petitioner

(**Rs. crore**)

Particulars	FY 2017-18
Opening Balance (Amount utilized upto Feb., 2017)	390.17
Addition During the Year	0.00
Repayment During the Year	6.97
Closing Balance	383.20
Average Interest Rate	12.15%
Period considered (July 2017 to March 2018)	9 Months
Interest on Loan	35.24

MePGCL has requested to approve the Interest and Finance Charges for NUHEP as computed above.

Commission's analysis:

The MSERC (Multi Year Tariff) Regulations 2014 specify;

"27 Debt-Equity Ratio

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

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

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

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

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

27.2 ….

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

A conjoint reading of above regulations specify that debt equity shall be considered in the ratio 70 : 30 based on the project cost/capital base. Further, the regulation specify that if actual equity deployed is more that 30% of the capital cost, the excess of 30% shall be treated as normative loan. Provided, where actual equity deployed is less than 30% of capital cost, the actual equity shall be considered for determination of tariff.

The Commission had considered the project cost at Rs.518.54 crore and actual equity deployed at Rs.128.37 crore in earlier paragraph. The Commission considers balance capital cost of Rs.390.17 crore (Rs.518.54 crore – Rs.128.37 crore) towards debt/loan for allowing interest on loan for FY 2017-18.

Regulation 32.4 of MSERC (Multi Year Tariff) Regulations 2014 specify *"in case any moratorium period is availed of in any loan by the generating company, 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"*. The Commission, accordingly considers repayment of loan equivalent to depreciation allowed/considered for FY 2017-18. The rate of interest is considered at 12.15% as projected by the petitioner.

The Commission, accordingly considers interest on loan for 9 months i.e. from the date of CoD of 1st July 2017 to 31st March 2018 for FY 2017-18 as detailed in the table below:

Table 10 : Return on equity approved for FY 2017-18

Sl. No.	Particulars	Amount (Rs. crore)
1	Project cost/Capital base	518.54
2	Equity (actual) considered for RoE	128.37
3	Balance project cost considered as Debt (1-2)	390.17
4	Loan Addition during the year	--
5	Less: Repayment of loan (equivalent to depreciation allowed during the year)	20.45
6	Closing Loan (3+4-5)	369.72
7	Average Loan (3+6)/2	379.94
8	Rate of interest %	12.15%
9	Interest on loan (7 x 8)	46.16
10	Interest on loan for 9 months	34.62

The Commission approves Rs.34.62 crore towards interest on loan for FY 2017-18 (9 months).

7. **Operation and Maintenance Expenses**

Petitioner's submission:

MePGCL has submitted that as per Regulation 56 of the MYT Regulations, 2014, the Operation and Maintenance Expenses for new generating plants (commissioned after 1st April ,2009) is to be determined on a normative basis. The extract of the relevant regulation is reproduced below:

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

……..

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

The NUHEP achieved its CoD after 1.04.2009, the O & M expenses have been computed, as per Regulation 56 (7), at 2% of the project cost for the remaining part of the 1st MYT Control Period from the COD i.e. 1st July 2017 to 31st March, 2018 as shown below:

Table 11: O & M Expenses projected by Petitioner

(Rs. crore)

Particulars	**FY 2017-18**
Capital Cost Incurred	518.54
Normative O&M Cost	2%
Period considered (July 2017 to March 2018)	9 Months
O&M Expenses for the period	7.78

MePGCL requested to approve the O&M expenses of NUHEP as computed above.

Commission's analysis:

The Regulation 56.7 of the MSERC (Multi Year Tariff) Regulations, 2014, specifies that *"in case of hydro generating stations declared under commercial operation on or after 01.04.2009, O&M expenses shall be fixed at 2% of the original project cost (excluding cost of rehabilitation and resettlement works) and shall be subject to annual escalation at 5.72% for the subsequent years".*

The Commission had approved (provisional) capital cost at Rs.518.54 crore for NUHEP in earlier paragraph. The Commission in terms of Regulation 56.7 has computed O&M expenses for 9 months of operation of NUHEP for FY 2017-18 as detailed in the table below.

Table 12: O & M Expenses approved for FY 2017-18

(Rs. crore)

Particulars	**FY 2017-18**
Capital Cost Incurred	518.54
Normative O&M Cost	2%
O&M cost	10.37
O&M Expenses for 9 months (1st July 2017 to 31st March 2018)	7.78

The Commission approves Rs.7.78 crore towards Operation and maintenance expenses 9 months of operations for FY 2017-18.

8. **Income Tax**

Petitioner's submission:

MePGCL has submitted that Regulation 35 of the MYT Regulations, 2014, provides for claim of Income Tax as expenses. MePGCL submits that in the first year of operations, income tax would be charged at the effective Minimum Alternate Tax (MAT) rate on the return on equity. The effective MAT rate prevailing is as shown below:

Table 13: Effective Tax Rate

Particulars	Rate
Minimum Alternate Tax (MAT)	18.50%
Surcharge rate for net income > 1 Cr	15.00%
MAT + Surcharge	21.28%
Education and Higher Education Cess thereon	3.00%
Total effective tax rate	**21.91%**

Accordingly, the tax payable on the Return on Equity of NUHEP works out as below:

Table 14: Income tax projected by Petitioner for NUHEP

Particulars	FY 2017-18
Return on equity (INR Crore)	13.48
Effective tax rate (%)	21.91%
Tax payable (INR Crore)	**2.95**

MePGCL requested to approve the Income Tax for NUHEP as computed above.

Commission's analysis:

The Regulation 35.1 of the MSERC (Multi Year Tariff) Regulations, 2014, specify that *"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".*

The Commission opines that the NUHEP is one of the generating stations owned and operated by the MePGCL. The income tax shall be payable by the MePGCL on the overall financial and operational performance of the company and not on the basis of generating station/unit-wise financial and operational performance.

The Commission has observed from the audited accounts for FY 2014-15, MePGCL had not incurred/paid any expenses towards income tax. Hence, the Commission has not considered income tax for determination of provisional tariff of NUHEP.

9. **<u>SLDC charges</u>**

Petitioner's submission:

MePGCL had submitted that Regulation 59 of MYT Regulations, 2014 provides for claim of SLDC & Connectivity charges as expenses. It is submitted that as per the approved tariff order of SLDC, the charges applicable for MePGCL for each year of the control period of FY 2015-16 to FY 2017-18 is as Rs. 1.55 Crore. Based on this, the SLDC charges for NUHEP from its COD till the end of the remaining part of the 1st MYT Control Period i.e., 1st July. 2017 to 31st March, 2018 has been proportionately worked out as shown below:

Table 15: Connectivity and SLDC Charges projected by Petitioner

(Rs. crore)

Particulars	**FY 2017-18**
Total SLDC charges for MePGCL (Rs. crore)	1.55
Total Installed Capacity of MePGCL (MW)	314.70
Installed Capacity of NUHEP (MW)	40.00
Period considered (July 2017 to March 2018)	9 Months
SLDC charges for NUHEP (Rs. crore)	**0.15**

MePGCL requested to approve the SLDC charges for NUHEP as computed above.

Commission's analysis:

The Commission had approved SLDC charges at Rs.1.55 crore for FY 2017-18 in tariff order of SLDC dated 31st March 2015. The Commission, accordingly, provisionally considers the SLDC charges for FY 2017-18 for NUHEP as given in the table below:

Table 16: SLDC Charges for MUHEP

(Rs. crore)

Particulars	**FY 2017-18**
Total SLDC charges for MePGCL (Rs. crore)	1.55
Total Installed Capacity of MePGCL (MW)	314.70
Installed Capacity of NUHEP (MW) (2x20 MW)	40.00
SLDC charges for NUHEP (Rs. crore)	0.20
SLDC charges for NUHEP for 9 months (Rs. crore)	**0.15**

10. **<u>Interest on working capital</u>**

Petitioner's submission:

MePGCL has submitted that Regulation 34.1 (iii) of the MYT Regulations, 2014 specifies the components of working capital as below:

*"**34.1 Generation***

…

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

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

…

Interest on working capital shall be allowed at a rate equal to the State Bank Advance Rate (SBAR) as on 1st April of the financial year in which the Petition is filed."

As per the above mentioned regulation, the computation of Interest on Working Capital for NUHEP is shown below:

Table 17: Interest on Working Capital projected by Petitioner

(Rs. Crore)

Particulars	FY 2017-18
O&M expenses for one month (INR Crore)	0.86
Maintenance spares @ 15% of O&M expenses (INR Crore)	1.56
Receivables equivalent to two months of Fixed cost (INR Crore)	17.81
Total Working Capital Requirements (INR Crore)	**20.23**
SBI PLR as on 1.5.2015 (%)	14.05%
Interest on Working Capital (INR Crore)	**2.13**

MePGCL requested to approve Interest on Working Capital for NUHEP as computed above.

Commission's analysis:

The Commission has examined the computation of working capital requirement and interest on working capital submitted by MePGCL for NUHEP.

Regulation 34.1(iii) of MSERC (Multi Year Tariff) Regulations 2014 the maintenance spares shall be considered at 15% of the O&M expenses escalated at 6% from the date of commercial operation. The NUHEP started operations during FY 2017-18 and being the 1st year of operations, the spares are considered at 15% of O&M expenses and no escalation is considered.

The Interest on working capital shall be allowed at a rate equal to State Bank Advance Rate as on 1st April of the financial year in which the petition is filed. The petition is filed on 29th June 2017 i.e. during FY 2017-18. It is to state that the Banks have now adopted the Marginal Cost of fund based Lending Rate (MCLR) and the SBI Advance Rates (SBAR) are no longer applicable for borrowings from Banks with effect from 1st January 2017. The effective SBI MCLR for working capital loans of Rs.0.25 crores up to Rs.100 crores is 11.70% with effect from 01.04.2016. Hence the same is adopted for computation of interest on working capital for FY 2017-18 as detailed in the table below:

Table 18 : Interest on Working Capital approved

(Rs. Crore)

Sl. No.	Particulars	FY 2017-18
1	O&M expenses for one month	0.65
2	Maintenance spares @ 15% of O&M expenses	1.17
3	Receivables equivalent to two months of Fixed cost	12.96
4	Total Working Capital Requirement (1+2+3)	14.78
5	SBI MCLR as on 1.04.2017 (%)	11.70%
6	Interest on Working Capital (4 x 5)	1.73
7	Interest on Working Capital for 9 months	1.30

11. **Fixed Cost of NUHEP**

The Commission based on the above analysis has approved the fixed cost for FY 2017-18 for NUHEP as details in the table below:

Table 19: Fixed cost approved for FY 2017-18

(Rs. Crore)

Sl. No.	Particulars	Projected by MePGCL	Approved for FY 2017-18
1	O&M expenses	7.78	7.78
2	Depreciation	18.43	20.45
3	Return on equity	13.48	13.48
4	Interest on loans	35.24	34.62
5	SLDC charges	0.15	0.15
6	Income tax	2.95	--
7	Interest on working capital	2.13	1.30
8	Total fixed cost (1 to 7)	80.16	77.78
9	Less: Other income	--	--
10	Net Fixed cost (8 - 9)	80.16	77.78

12. **Capacity charge and energy charges approved**

The Commission has considered designed estimated energy at 180.94 MU in paragraph 2 and net fixed cost at Rs.77.78 crore in paragraph 11 above. The Commission, in terms of Regulation 57 of MSERC (MYT) Regulations 2014, has computed capacity charge and energy charge for FY 2017-18 (for 9 months from the date of CoD of 1.7.2017 to 31.3.2018) as detailed in the table below:

Table 20: Capacity and Energy Charges approved for FY 2017-18

(Rs. Crore)

Sl. No.	Particulars	Projected by MePGCL	Approved for FY 2017-18
1	Fixed cost (Rs. Crore)	80.16	77.78
2	Design energy (MU)	180.94	180.94
3	Less: Auxiliary consumption @ 1% (MU)	1.81	1.81
4	Less: Transmission loss @ 0.5% (MU)	0.90	0.90
5	Net Energy (MU)	178.23	178.23
6	Capacity charge (Rs. Crore) (50% of Sl.No.1)	40.08	38.89
7	Energy Charge (Rs. Crore) (50% of Sl.No.1)/Sl.No.5)	2.25	2.18

The MePGCL shall raise the bill based on the provisional tariff for the capacity charge and energy charges based on the energy supplied to the Discom i.e. MePDCL. The MePDCL may pass on the capacity charge and energy charges to the consumers and collect the same through Fuel and power purchase price adjustment during FY 2017-18 as no power purchase quantity and generation cost of NUHEP is included in the tariff order for FY 2017-18.

(WMS Pariat)
Chairman