BEFORE MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION SHILLONG

PETITION

FOR

REVISION OF GENERATION TARIFF

FOR FY 2023-24

FILED BY



MEGHALAYA POWER GENERATION CORPORATION LIMITED LumJingshai, Short Round Road, Shillong - 793 001

BEFORE THE HON'BLE MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSIONSHILLONG

At its office at Lower Lachumiere, Shillong - 793001

File/Petition No.: _____

IN THE MATTER OF

Revision of Generation Tariff for FY 2023-24, UNDER THE MEGHALAYA STATE ELECTRICITY REGULATORY COMMISSION (MULTI YEAR TARIFF) REGULATIONS, 2014 AND UNDER SECTIONS 62 & 64 READ WITH SECTION 86 OF THE ELECTRICITY ACT 2003.

AND IN THE MATTER OF

MEGHALAYA POWER GENERATION CORPORATION LIMITED, LUMJINGSHAI, SHORT ROUND ROAD, SHILLONG – 793001, MEGHALAYA

PETITIONER

The Petitioner respectfully submits as under:

- 1. In exercising its powers conferred under section 131 and 133 of the Electricity Act 2003, the State Government of Meghalaya notified "The Meghalaya Power Sector Reforms Transfer Scheme 2010" on 31st March 2010 leading to restructuring and unbundling of erstwhile Meghalaya State Electricity Board (MeSEB) into four entities, namely,
- a) Meghalaya Energy Corporation Limited (MeECL): Holding Company;
- b) Meghalaya Power Distribution Corporation Limited (MePDCL): Distribution Utility;
- c) Meghalaya Power Generation Corporation Limited (MePGCL): Generation Utility;
- d) Meghalaya Power Transmission Corporation Limited (MePTCL): Transmission Utility.
- 2. However, the holding company –MeECL-carried out the functions of Distribution, Generation And Transmission utilities from 1st April 2010 onwards, even after restructuring. Therefore, through notification dated 31st March 2012, the State Government notified an amendment to The Power Sector Reforms Transfer Scheme leading to effective unbundling of MeECL into MeECL (Holding Company), MePGCL (Generation utility), MePTCL (Transmission Utility) and MePDCL (Distribution Utility), from 1st April 2012.
- 3. On 23rd December 2013, the Government of Meghalaya issued the latest transfer scheme notification thereby notifying the Assets and Liabilities as on 1st April 2010 to be vested in MeECL. Subsequently, the Government of Meghalaya issued the 4th Amendment to the Notified Transfer Scheme dated 31st March 2010 on 29th April 2015, wherein the opening balances of all the four entities, namely, MePGCL, MePTCL, MePDCL and MeECL as on 1st April 2012 were notified.
- 4. MePGCL began segregated commercial operation as an independent entity from 1st April 2013 onwards.
- 5. The expenses of the holding company, MeECL, are apportioned equally among the generation, transmission and distribution utilities since MeECL is an administrative setup for all the three subsidiaries and undertakes common corporate functions of the three companies.
- 6. In accordance with the directives of the Hon'ble Commission and MSERC Tariff Regulations 2014, the MePGCL is filing separate claims for 1) Old plants including Sonapani, 2) Myndtu Leshka H.E Project (hereinafter referred to as "MLHEP"),3). New Umtru H.E Project (hereinafter referred to as NUHEP) and 4) Lakroh Mini Hydel Project (hereinafter referred to as Lakroh MHP).
- 7. The **Meghalaya State Electricity Regulatory Commission** (hereinafter referred to as "MSERC" or "the Hon'ble Commission") is an independent statutory body constituted under the provisions of Part X

(Sections 82to 109) of the Electricity Act, 2003. The Hon'ble Commission is vested with the authority of regulating the power sector in the State, inter alia, including determination of tariff for electricity consumers.

- 8. Now, based on the provisions of Regulation 6) (2) b) of the Tariff Regulations, 2014, MePGCL also files this petition for revision of tariff for FY 2023-24in station-wise based on approved ARR of FY 2023-24 in MYT order dated 25th March, 2021 and adjustment as per review of true up order for FY 2018-19 & FY 2019-20 dated.30.09.2022 & 3.10.2022, respectively, and, as per True up petition of FY 2020-21.
- 9. In exercise of its powers, MSERC had determined the segregated Annual Fixed Cost (AFC) and tariff for Old Plants including Sonapani, MLHEP, NUHEP and Lakroh for FY 2023-24 in its MYT Order for FY 2021-22 to FY 2023-24.
- 10. The Board of Directors of MePGCL has accorded approval for filing of this petition and authorized the undersigned to file the petition accordingly. A copy of the Board's resolution is enclosed as **Annexure A**.
- 11. The applicant, therefore, humbly prays before the Hon'ble Commission to pass appropriate orders on the following:
- a) To approve the petition forRevision of Generation Tariff for FY 2023-24 for 1) Old Plants including Sonapani 2) MLHEP 3) NUHEP and 4) Lakroh MHP of MePGCL, and
- b) To pass such orders, as Hon'ble Commission may deem fit and proper and necessary, in view of the facts and circumstances of the case
- c) To condone any inadvertent omissions, errors & shortcomings and permit the applicant to add/ change/ modify/ alter this filing and make further submissions as required.

(Smti. M. Lyngdoh) Superintending Engineer (C), PM For and on behalf Meghalaya Power Generation Corporation Ltd

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1.0. Introduction

1.1. Provisions of Law for revision of tariff

- **1.1.1.** The Meghalaya State Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2014 were notified on 25th September 2014. It is submitted that the Regulation 1.4 of the Meghalaya State Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2014 states as under: *"1.4 These Regulations shall be applicable for the determination of tariff in all cases covered under Regulations from April 1, 2015 or from the date the Commission may decide in this respect. However, for all purpose including the review matters pertaining to the period prior to notification of these Regulations, the issues related to determination of tariff shall be governed by regulation MSERC (Terms and Conditions for Determination of Tariff) Regulations, 2011."*
- 1.1.2 It is submitted that this Petition for Revision of Generation Tariff for FY 2023-24 is hereby filed, based on the information received from Accounts wing of MeECL, Audited Statements of Accounts and Multi Year Tariff Orders for FY 2021-22 to FY 2023-24 for MLHEP, NUHEP, Lakroh MHP and Old Plants including Sonapani.
- 1.1.3 The Meghalaya State Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2014 are applicable for determination of tariff effective from 1stApril 2015. Regulations6.2 &11 of the said Regulations lays down the general guiding principles for truing up and the provisions of the said Regulations are reproduced below for reference:

"6.2 (b) From the first year of the control period and onwards, the petition shall comprise of:

- *i.* Truing Up for previous years under Meghalaya State Electricity Regulatory Commission (Terms and conditions for Determination of Tariff) Regulations, 2011 in accordance with this Regulations:
- ii. Revenue from sale of power at existing tariffs and charges for the ensuing year;
- iii. Revenue gap for the ensuing year calculated based on ARR approved in the Tariff Order or MYT Order and truing up for the previous year;

iv. Application for revision of tariff for the ensuing year

1.2. Submissions before the Hon'ble Commission

1.2.1. MePGCL hereby submits the petition under section 61, 62 (1) (a) of the Electricity Act, 2003 and MSERC (Multi Year Tariff) Regulations, 2014 for approval of petition for Revision of Generation tariff for FY 2023-24.

2.0. Revision of Tariff for Myntdu Leshka, NUHEP, Lakroh and Old Stations Including Sonapani For FY 2023-24

2.1 Regulatory Provisions

MePGCL submits that based on the Annual Fixed Cost approved by the Hon'ble Commission, it will calculate the capacity charge and energy charge based on the following provisions of the MYT Regulations, 2014:

"57 Computation and payment of capacity charge and energy charge for Hydro generating stations.

57.1 Capacity Charges:

(1) The fixed cost of a hydro generating station shall be computed on annual basis, based on norms specified under these regulations, and recovered on monthly basis under capacity charge (inclusive of incentive) and energy charge, which shall be payable by the beneficiaries in proportion to their respective allocation in the saleable capacity of the generating station, that is to say, in the capacity excluding the free power to the home State:

Provided that during the period between the date of commercial operation of the first unit of the generating station and the date of commercial operation of the generating station, the annual fixed cost shall provisionally be worked out based on the latest estimate of the completion cost for the generating station, for the purpose of determining the capacity charge and energy charge payment during such period.

(2) The capacity charge (inclusive of incentive) payable to a hydro generating station for a calendar month shall be

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

Where,

AFC = Annual fixed cost specified for the year, in Rupees.

NAPAF= Normative plant availability factor in percentage

NDM = Number of days in the month

NDY = Number of days in the year

PAFM = Plant availability factor achieved during the month, in percentage

(3) The PAFM shall be computed in accordance with the following formula:

 $PAFM = 10000 x \Sigma DCi / \{N x IC x (100 - AUX)\}\%$

i=1

Where,

AUX = Normative auxiliary energy consumption in percentage

DCi = *Declared capacity (in ex-bus MW) for the ith day of the Month which the station can deliver for at least three (3) hours, as certified by the nodal load dispatch centre after the day is over.*

IC = *Installed capacity (in MW) of the complete generating station*

N = Number of days in the month

57.2 Energy Charges:

(1) The energy charge shall be payable by every beneficiary for the total energy scheduled to be supplied to the beneficiary, excluding free energy, if any, during the calendar month, on ex power plant basis, at

the computed energy charge rate. Total Energy charge payable to the generating company for a month shall be:

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

(2) Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis, for a hydro generating station,

shall be determined up to three decimal places based on the following formula, subject to the provisions of clause (4):

 $ECR = AFC x 0.5 x 10 / \{ DE x (100 - AUX) x (100 - FEHS) \}$

Where,

DE = *Annual design energy specified for the hydro generating station, In MWh, subject to the provision in clause (6) below.*

FEHS = *Free energy for home State as fixed from time to time, by competent authority.*

(3) In case actual total energy generated by a hydro generating station during a year is less than the design energy for reasons beyond the control of the generating company, the following treatment shall be applied on a rolling basis:

(i) in case the energy shortfall occurs within ten years from the date of commercial operation of a generating station, the ECR for the year following the year of energy shortfall shall be computed based on the formula specified in clause (2) with the modification that the DE for the year shall be considered as equal to the actual energy generated during the year of the shortfall, till the energy charge shortfall of the previous year has been made up, after which normal ECR shall be applicable;

(ii) in case the energy shortfall occurs after ten years from the date of commercial operation of a generating station, the following shall apply:

Suppose the specified annual design energy for the station is DE MWh, and the actual energy generated during the concerned (first) and the following (second) financial years is A1 and A2 MWh respectively, A1 being less than DE. Then, the design energy to be considered in the formula in clause (5) of this Regulation for calculating the ECR for the third financial year shall be moderated as (A1 + A2 - DE) MWh, subject to a maximum of DE MWh and a minimum of A1 MWh.

(iii) Actual energy generated (e.g. A1, A2) shall be arrived at by multiplying the net metered energy sent out from the station by 100 / (100 – AUX).

(4) In case the energy charge rate (ECR) for a hydro generating station, as computed in clause (5) above, exceeds eighty paise per kWh, and the actual saleable energy in ayear exceeds { DE x (100 - AUX) x (100 - FEHS) / 10000} MWh, the Energy charge for the energy in excess of the above shall be billed at eighty paise per kWh only:

Provided that in a year following a year in which total energy generated was less than the design energy for reasons beyond the control of the generating company, the energy charge rate shall be reduced to eighty paise per kWh after the energy charge shortfall of the previous year has been made up.

(6) The concerned Load Despatch Centre shall finalise the schedules for the hydro generating stations, in consultation with the beneficiaries, for optimal utilization of all the energy declared to be available, which shall be scheduled for all beneficiaries in proportion to their respective allocations in the generating station."

3.0 Capacity Charge and Energy Charge for Myntdu Leshka HEP

The Hon'ble Commission in its order dated 25thMarch, 2021(page 198)had approved theAFC for Generation Tariff for FY 2023-24 as **Rs.156.12 Cr**. for MLHEP.

In the review order of the true up order for FY 2018-19 dated 30.09.2022 & FY 2019-20dated3.10.2022 , the Hon'ble Commission has approved a revenue gap of **INR(+)24.95 Cr** and INR (+)13.85 Cr., respectively.

The true up gap and additional claim as per true up petition will have an impact on the ARR for FY 2023-24, and the Company prays before the Hon'ble Commission to allow the revised ARR for FY 2023-24 for MLHEP, which comes to INR 327.09 crores as shown below:

Table 1: Annual Fixed Charges for FY 2023-24 – Myndtu Leshka HEP(INR Cr.		
Particulars	MLHEP	
Annual Fixed Cost Approved by MSERC for FY 2023-24 (Rs. Cr.) (a)	156.12	
Add: Gap Claim as per review petition for True up of FY 2018-19 (b)	(+)24.95	
Add: Gap Claim as per review petition for True up of FY 2019-20 (c)	(+)13.85	
Add: Gap Claim as per review petition for True up of FY 2020-21 (d)	(+)147.83	
Net AFC for Computation of Tariff (e=a+b+c+d)	342.75	

Now, based on the Regulations, 50% of the Annual Fixed Charge is to be recovered as Capacity charge and the balance is to be recovered as energy charge from the beneficiary. Therefore, the capacity and energy charges for MLHEP for FY 2023-24 are computed below:

Table 2: Capacity and Energy Charges for Myndtu Leshka HEP for FY 2023-24

Particulars	FY 2023-24
Net AFC for Computation of Tariff	342.75
Design Energy (MU)	486.00
Less: Auxiliary Consumption @ 1%	4.86
Less: Transformation Loss @ 0.5%	2.43
Net Energy (MU)	478.71
Capacity Charge (Rs. Cr.)	171.375
Energy Charge (Rs./kWh)	3.57

Based on all the above submissions, the petitioner humbly prays before the Hon'ble Commission to kindly approve the revision of tariff for Myntdu Leshka Hydro Electric Project for FY 2023-24 as computed in the above table.

4.0 Capacity Charge and Energy Charge for NUHEP

The Hon'ble Commission in its MYT order dated 25^{th} March, 2021 had approved the ARR for FY 2023-24 as Rs. 69.46 Cr. for NUHEP.

The true up gaps and additional claims as per true up petition will have an impact on the ARR requirement for FY 2023-24, and, therefore, MePGCL prays before the Hon'ble Commission to allow the revised ARR for FY 2023-24 for NUHEP as shown below:

Table 3: Annual Fixed Cost for FY 2023-24 (INR Cr.)		
Particulars	FY 2023-24	
Annual Fixed Cost Approved by MSERC for FY 2023-24 (Rs. Cr.) (a)	69.46	
Add: Additional Claim as per review order for Truing up of FY 2018-19(b)	(+) 74.40	
Add: Additional Claim as per review order for Truing up of FY 2019-20(c)	(+) 73.77	
Add: Additional Claim as per petition for True up of FY 2020-21(d)	(+) 81.25	
Net AFC for Computation of Tariff (e=a+b+c+d)	298.88	

Now, based on the Regulations, 50% of the Annual Fixed Cost is to be recovered as Capacity charge and the balance is to be recovered as Energy Charge from the beneficiary. Therefore, the capacity and energy charges for NUHEP for FY 2023-24 are computed below:

Particulars	FY 2023-24
Net AFC for Computation of Tariff	298.88
Design Energy (MU)	235
Less: Auxiliary Consumption @ 1%	2.35
Less: Transformation Loss @ 0.5%	1.17
Net Energy (MU)	231.48
Capacity Charge (Rs. Cr.)	149.44
Energy Charge (Rs./kWh)	6.45

Table 4: Capacity and Energy Charges for New Umtru HEP FY 2023-24

Based on all the above submissions, the petitioner humbly prays before the Hon'ble Commission to kindly approve the tariff of New Umtru Hydro Electric Project for FY 2023-24as computed in the above table.

5.0 Capacity Charge and Energy Charge for Lakroh MHP

The Hon'ble Commission in its order dated 25^{th} March, 2021 had approved the ARR for FY 2023-24 as Rs.2.08 Cr. for Lakroh MHP.

The true up gap and additional claim as per the true up petition will have an impact on the ARR for FY 2023-24, and, therefore, the MePGCLprays before the Hon'ble Commission to allow the revised ARR for FY 2023-24 for Lakroh MHP as shown below:

Particulars	FY 2023-24	
Annual Fixed Cost Approved by MSERC for FY 2023-24 (Rs. Cr.) (a)	2.08	
Add: Additional Claim as per review order for Truing up of FY 2018-19(b)	-	
Add: Additional Claim as per review order for Truing up of FY 2019-20(c)	(+)1.53	
Add: Additional Claim as per petition for Truing up of FY 2020-21(d)	(+)2.857	
Net AFC for Computation of Tariff (e=a+b+c+d)	6.467	

Table 5: Annual Fixed Cost for FY 2023-24 (Rs.	Cr.)
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Now, based on the Regulations, 50% of the Annual Fixed Cost is to be recovered as capacity charge and the balance is to be recovered as energy charge from the beneficiary. Therefore, the capacity and energy charges for Lakroh MHP for FY 2023-24 are computed below:

Tableo: Capacity and Energy Charges for Lakron MHF F1 2023-2		
Particulars	FY 2023-24	
Net AFC for Computation of Tariff	6.467	
Design Energy (MU)	11.01	
Less: Auxiliary Consumption @ 1%	0.11	
Less: Transformation Loss @ 0.5%	0.05	
Net Energy (MU)	10.85	
Capacity Charge (Rs. Cr.)	3.233	
Energy Charge (Rs./kWh)	2.98	

Based on all the above submissions, the petitioner humbly prays before the Hon'ble Commission to kindly approve the tariff of Lakroh Mini Hydro Electric Project for FY 2023-24 as computed in the above table.

6.0 Capacity Charge and Energy Charge for Old Station including Sonapani

The Hon'ble Commission in its order dated 25thMarch, 2021 had approved the ARR for MYT of FY 2021-22 to FY 2023-24 and Generation Tariff for FY 2023-24atRs. 84.41 Cr. for Old Station including Sonapani.

The true up gap and additional claim as per the true up petitionswill have an impact on the ARR requirement for FY 2023-24, and, therefore, the utility prays before the Hon'ble Commission to allow the revised ARR for FY 2023-24 for Old Stations including Sonapani, which comes to INR140.42 crores as shown below:

Table 7: Annual Fixed Cost for old plants & Sonapanif 12023-24 (RS. Cr.)		
Particulars	FY 2023-24	
Annual Fixed Cost Approved by MSERC for FY 2023-24 (Rs. Cr.) (a)	84.41	
Add: Additional Claim as per review order for Truing up of FY 2018-19 (b)	(+) 3.08	
Add: Additional Claim as per review order for Truing up of FY 2019-20 (c)	(+) 2.83	
Add: Additional Claim as per petition for True up of FY 2020-21 (d)	(+) 52.00	
Net AFC for Computation of Tariff (e=a+b+c-d)	142.32	

Table 7: Annual Fixed Cost for old plants &SonapaniFY2023-24 (Rs. Cr.)

Now, based on the Regulations, 50% of the Annual Fixed Cost is to be recovered as capacity charge and the balance is to be recovered as energy charge from the beneficiary. Therefore, the capacity and energy charges for Old Stations including Sonapani for FY 2023-24 are computed below:

Particulars	Installed Capacity	Design Energy	AFC for FY 2023-24	50% of Capacity Charges	Energy charge
	(MW)	(MU)	(Rs. Crore)	(Rs. Cr)	(Rs./kwh)
Umiam Stage-I	36	116	32.18	16.09	1.38
Umaiam Stage II	20	46	12.76	6.38	1.38
Umiam-Umtru Stage III	60	139	38.56	19.28	1.38
Umiam-Umtru Stage IV	60	207	54.43	28.71	1.38
Umtru	11.2*	-	-	-	-
Sonapani	5	5	1.38	0.39	1.38
Total	177.20	513	142.32		1.38

Table8: Plant wise Annual Fixed Cost of Old Stations including Sonapani for FY 2023-24

* Umtru Power Station is under shut down and is not generating.

Based on all the above submissions, the petitioner humbly prays before the Hon'ble Commission to kindly approve the tariff of Old Stations including Sonapani for FY 2023-24 as computed in the above table.

Petition for Revision of Generation Tariff for FY 2023-24