PETITION FOR APPROVAL OF CAPITAL COST &

PROJECTED AGGREGATE REVENUE REQUIREMENT FOR FY 2022-23 TO FY 2056-57

&

DETERMINATION OF LEVELIZED TARIFF FOR FY 2022-23 TO FY 2056-57

FOR MYNTRIANG SMALL HYDRO ELECTRIC PROJECT TO ASSAM ELECTRICITY REGULATORY COMMISSION



Prepared by

ASSAM POWER GENERATION CORPORATION LTD

Bijulee Bhawan, Paltanbazar

Guwahati – 781 001

AFFIDAVIT - MSHEP PETITION

BEFORE THE ASSAM STATE ELECTRICITY REGULATORY COMMISSION, GUWAHATI.

Petition No. -

Case No. (to be filed by the Office)

IN THE MATTER OF

Filing of Petition for levelized tariff of Myntriang Small Hydro Electric Project (MSHEP) for the FY 2022-23 to 2056-57.

AND

IN THE MATTER OF

Assam Power Generation Corporation Limited, Bijulee Bhawan, Paltanbazar, Guwahati-781001

Petitioner

I, Sri Tiken Chandra Basumatary, Son of Late Kaharam Basumatary, aged 59 years, residing at Palacia Park, Arunodoi Path, VIP Road, P.O Khanapara, Guwahati-781022, do solemnly affirm and say as follows:

I am the Chief General Manager (Gen.) of Assam Power Generation Corporation Limited, the petitioner in the above matter and am duly authorized by the said Petitioner to make this affidavit for and on behalf of the Assam Power Generation Corporation Limited.

The Statement made in the Petition based on information received from official records and I believe them to reflect truly and no material has been concealed from the statements so made or documents or supporting data etc. attached.

Solemnly affirm at Guwahati on 21th June' 2022 that the contents of this affidavit are true to my knowledge, no part of it is false or no material has been concealed therefore and misleading material included therein.

Place: Guwahati

Date: 21st June'2022

Deponent

(Tiken Chandra Basumatary) Chief General Manager (Gen.),

Assam Power Generation Corporation Ltd.

PRAYER - MSHEP PETITION

BEFORE THE HON'BLE ASSAM ELECTRICITY REGULATORY COMMISSION

FILINGNO

CASENO

IN THE MATTER OF:

Petition for levelized tariff of Myntriang Small Hydro Electric Project (MSHEP) for the FY 2022-23 to 2056-57.

AND IN THE MATTER OF:

Assam Power Generation Corporation Limited incorporated under the provisions of the Companies Act, 1956 and having its registered office in the State of Assam

THE HUMBLE APPLICANT ABOVE NAMED MOST RESPECTFULLY SHEWETH:

- i. That the Assam Power Generation Corporation Limited, hereinafter named as APGCL, is a successor corporate entity, formed in pursuant to the notification of the Government of Assam, notified under sub-sections (1), (2), (5), (6) and (7) of Section 131 and Section 133 of the Electricity Act 2003(Central Act 36 of 2003), for the purpose of transfer and vesting of functions, properties, interests, rights, obligations and liabilities, along with the transfer of Personnel of the Board to the successor corporate entities.
- That APGCL is a company incorporated with the main objective of generation of electricity in the state of Assam.
- That the APGCL is a generating company under the provisions laid down in Section 14 Proviso 5, read with Section 131 (2) of the Electricity Act 2003.
- That MSHEP is a small hydro electric project, the 1st two units of which were commissioned on 08-08-2014 and the final unit of which was commissioned on 04-03-2022.
- That APGCL submitted a Petition for determination of Tariff for MSHEP on 29-11-2016 to the Hon'ble Commission under the AERC (Terms and Conditions for Determination of Tariff from Renewable Energy Sources) Regulations, 2012.
- vi. That in view of the situation that the MSHEP Stage-I was not complete at that time, the Hon'ble commission after receiving the petition directed APGCL vide its Order dated 29/11/2017 to submit a fresh tariff petition for MSHEP with the detailed updated project cost duly certified by Auditor.
- vii. That the Hon'ble Commission issued the AERC (Terms and Conditions for Determination of Tariff from Renewable Energy Sources) Regulations, 2017 vide the Assam Gazette Notification dated 12th October, 2017.
- viii. That APGCL is now filing the Petition for determination of levelized Tariff for MSHEP under the AERC (Terms and Conditions for Determination of Tariff from Renewable Energy Sources) Regulations, 2017 from the FYs 2022-23 to 2056-57.

Place: Guwahati

Date: 21st June'2022

Deponent

(Tiken Chandra Basumatary) Chief General Manager (Gen.),

Assam Power Generation Corporation Ltd.

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1 Background of APGCL

1.1 Profile of APGCL

- 1.1.1 Under the provisions of Electricity Act 2003 (hereinafter referred to as "Electricity Act") the Assam Electricity Reforms First Transfer Scheme, 2004 (hereinafter referred to as "Transfer Scheme") was notified by Government of Assam on 10th December 2004. Under Section 5 (2) of the transfer scheme the functions and undertakings as set out in Schedule-A of the transfer scheme stands transferred to Assam Power Generation Corporation Limited (APGCL). The final transfer scheme was notified by Govt. of Assam vide notification No: PEL/151/2003/Pt.349 dated 16th Aug' 2005 w.e.f. 1st April' 05.
- 1.1.2 Section 131 (2) of the Electricity Act provides "...Any property, interest in property, rights and liabilities vested in the State Government under subsection (1) shall be re-vested by the State Government in a Government company or in a company or companies, in accordance with the transfer scheme so published along with such other property, interest in property, rights and liabilities of the State Government as may be stipulated in such scheme, on such terms and conditions as may be agreed between the State Government and such company or companies being State Transmission Utility or generating company or transmission licensee or distribution licensee,... ".
- 1.1.3 The Section 62 of the Electricity Act 2003 requires the generating company to furnish details as may be specified by the Commission for determination of tariff.
- 1.1.4 As per AERC (Terms and Conditions of Tariff determination from Renewable Energy Sources) Regulations, 2017, the licensee is now filing the Petition for approval of Capital cost, Determination of ARR for FY 2022-23 to FY 2056-57 and Determination of Levelized Tariff for FY 2022-23 to FY 2056-57 for the Myntriang Small Hydro Electric Project (MSHEP).
- 1.1.5 The various data formats and tariff forms, as required by the Hon'ble Commission, are furnished in **Annexure 1**.

1.2 MSHEP Project Summary

1.2.1 The Myntriang Hydro Electric project is located near Karbi Langpi Hydro Electric Project at Amtereng having latitude-26º – 1.5' to 26º 1.6' N and Longitude 92º – 26.03' to 92º 28.45' E. This is a two stage development of the river Myntriang. The river is originated at an elevation of 1078 m. The project area is located in the foot-hills of the Karbi Anglong district with moderate steep topography. The river is passing through gorges and rapids but without any major fall.



- 1.2.2 On 03.03.2014 Commissioning of Stage-II (2 x 1.5 MW = 3 MW) was carried out and on 08.08.2014, the date of Commercial Operation of Stage-II (2 x 1.5 MW = 3 MW) was declared. Commercial date of operation (C.O.D) for the 3rd unit (1.5 MW) of MSHEP Stage-II was declared on 18.05.2018. On 08.02.2021 handing over of unit-III Stage-I MSHEP was completed. Both unit-I & II of Stage-I which started malfunctioning shortly after Inauguration by Hon'ble Chief Minister of Assam on 24.02.2019 and consequently M/s SEPL has carried out the necessary rectification works at site.
- 1.2.3 During the implementation stage, the APGCL took up further studies of power potential of the project based on the hydrological data collected during the period from 2008-2010. On completion of these studies, the APGCL decided to enhance the installed capacity of the project from 9 MW (Stage-I: 2 x 3.0 MW & Stage-II: 2 x 1.5 MW) to 13.50 MW (Stage-I: 3 x 3.0 MW & Stage-II: 3 x 1.5 MW) after examination of the proposal through independent hydrological experts.
- 1.2.4 Based on the above, the capacity of MSHEP station has been enhanced from 9 MW (Stage I : 2 x 3 MW & Stage II : 2 x 1.5 MW) to 13.5 MW (Stage I : 3 x 3 MW & Stage II : 3 x 1.5 MW) and additional agreement dated 02.06.2012 amounting Rs. 5.66 Cr and 01.12.2014 amounting Rs. 23.5 Cr was made with M/s SEPL and accordingly contractual date of completion was fixed on 21.03.2016.

1.3 Commissioning of MSHEP

- 1.3.1 3 MW of the Stage-II of MSHEP was completed in the year 2014 and commercial operation was declared on 8th August 2014. Subsequently, 1.5 MW of the Stage-II of MSHEP was completed in the year 2018 and commercial operation was declared on 15th May 2018.
- 1.3.2 6 MW of the Stage-I of MSHEP was completed in the year 2019 and commercial operation was declared on 15th & 16th February 2019. Subsequently, remaining 3 MW of the Stage-I of MSHEP was completed in the year 2022 and commercial operation was declared on 04th March 2022.

Table 1: Unit-Wise Commissioning dates of MSHEP

Stage	Unit	Installed Capacity (MW)	COD
	1	3	04 th March 2022
Stage - I	2	3	15 th February 2019
	3	3	16 th February 2019
	1	1.5	8 th August 2014
Stage - II	2	1.5	8 th August 2014
	3	1.5	18 th May 2018

1.3.3 The 13.5 MW Myntriang Hydro Electric project was commissioned on 04th March 2022. The copy of the COD declaration certificate of MSHEP is attached herewith as **Annexure - 2**.

1.4 Approval of provisional tariff by AERC

- 1.4.1 Earlier, Assam Power Generation Corporation Ltd (APGCL) had filed a Petition (registered as Petition No. 38 of 2016) for approval of Tariff for 13.5 MW Myntriang Small Hydro for FY 2017-18 to FY 2029-30.
- 1.4.2 The Hon'ble Commission vide Order dated 29.11.2017 in Petition No. 38 of 2016 has stated that the cost parameters will change. Therefore, this Hon'ble Commission deemed it fit not to proceed with the determination of Tariff for MSHEP.
- 1.4.3 This Hon'ble Commission also directed APGCL to approach the Commission, after commissioning of Stage I along with detail updated project cost duly certified by Auditor for approval of Tariff by filing a fresh petition.
- 1.4.4 Further, the Hon'ble Commission has allowed APGCL to provisionally bill APDCL @ Rs. 2.18/kWh for the power supplied to APDCL from MSHEP.

2 Capital cost approval of MSHEP

2.1 Capital Expenditure

2.1.1 The Capital expenditure as on COD (i.e. 04th March 2022) and addition for FY 2022-23 is as shown in the table below.

Table 2: Capital expenditure of MSHEP for FY 2022-23

Particulars	Expenditure as on COD (04 th March 2022)	Projected capital expenditure (FY 2022-23)	Total project cost at the end of FY 2022-23
Land	-		
Building	10.36		10.36
Hydraulic works	0.36		0.36
Other civil works	49.98	4.32	54.30
Plant & machinery	63.01		63.01
Lines & cables	1.71		1.71
Vehicle	-		-
Furniture	0.01		0.01
Other office equipment	0.06		0.06
Roads on land belonging to others	-		-
Capital spares at Generating Stations	-		-
Total	125.48	4.32	129.81

- 2.1.2 We hereby submit that the auditor certificate for the capital expenditure undertaken up to 04th March 2022 (COD) is attached as **Annexure 3.**
- 2.1.3 APGCL further submits before this Hon'ble Commission that for in accordance with Regulation 13 of the AERC (Terms and Conditions for Tarff determination from Renewable Energy Sources) Regulations, 2017, the Debt: Equity ratio of 70:30 has been considered for computation of Tariff.
- 2.1.4 APGCL humbly submits before this Hon'ble Commission that the Revised DPR for 13.5 MW MSHEP including 4.5 MW enhancements was submitted to the Hon'ble Commission vide letter No. APGCL / CGM (G) / MYT / 13-16 / 232 / Part / Myntriang Tariff / 18 dated 05/01/2016.
- 2.1.5 AGGCL further submits that the project DPR was prepared considering the applicable provisions of the AERC (Terms & Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2012. Clause 8 (a) (vi) of the said



Regulations states for Project Specific Tariff, wherein this Hon'ble Commission has stated for project specific tariff to be determined on case to case basis. The same is being reproduced below:

- "8. Project Specific Tariff
- a) Project Specific Tariff, on case to case basis, shall be determined by the Commission for the following types of Projects:

.....

However, the Commission may consider any Renewable Energy Projects for determination of project specific tariff as it may deem it appropriate"

- 2.1.6 MSHEP is a small hydro project envisaged long back before the applicability of AERC(Terms & Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2012.
- 2.1.7 Further, APGCL most humbly submits that as the design capacity of the project was enhanced from 9 MW to 13.5 MW during the implementation of the project, the project Cost of MSHEP cannot be determined using the usual design methodology of an SHEP.
- 2.1.8 APGCL also submits that the 1st Tariff Petition of MSHEP was submitted under the purview of the AERC (Terms & Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2012 and as MSHEP's installed capacity and project cost changed during the implementation of the project, the Project Cost of MSHEP was considered as project specific as per the Regulation 8 of the AERC (Terms & Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2012.
- 2.1.9 Based on the above, APGCL most humbly submits to the Hon'ble Commission to apply the provision in the Regulation 8 of the AERC(Terms & Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2012 for Project Specific Project Cost and consider the Project Cost of MSHEP as Project specific and consider and allow total project cost of MSHEP as Rs. 129.81 Crores.
- 2.1.10 APGCL submits that out of 129.81 Crores, Expenditure of Rs 125.48 crores has already been incurred till COD i.e. 04th March 2022. Balance amount of Rs. 4.32 crores is expected to be incurred during FY 2022-23, which APGCL will claim at the time of truing up at actuals.
- 2.1.11 At present, the project cost is Rs 129.81 crores and due to the ongoing arbitration proceedings the same may further increase. Detailed note in respect of the Arbitration proceedings has been provided in **Annexure-4**.



- 2.1.12 APGCL further submits before this Hon'ble Commission that the Hon'ble CERC has allowed the excess claim in Capital Cost (after completion of Arbitration proceedings and final settlement before the court of law) while determining AFC after prudence check.
- 2.1.13 Copies of relevant excerpts from CERC Orders are being attached herewith as **Annexure 5**.
- 2.1.14 APGCL submits before this Hon'ble Commission that a per Regulation 29.2 (a) of the AERC (Terms and Conditions for determination of Multi Year Tariff) Regulations, 2018, claims arising out of settlement of Arbitration proceedings or any other decree of court may be claimed by APGCL as and when applicable. The same is being reproduced below:

"29.2 The capital expenditure incurred or projected to be incurred in respect of the new project on the following counts within the original scope of work after the cut-off date may be admitted by the Commission, subject to prudence check:

a. Liabilities to meet award of arbitration or for compliance of the order or decree of a court;

...."

- 2.1.15 In consideration of the above, APGCL craves leave to approach this Hon'ble Commission to claim any expenditure arising out of the arbitration proceedings as and when the proceedings completely settles before the court of law as per applicable laws.
- 2.1.16 APGCL craves leave to approach this Hon'ble Commission to claim any expenditure arising out of the arbitration proceedings as and when the proceedings completely settles before the court of law as per applicable laws.

3 Total Expenditure incurred and Revenue earned till date

3.1 Total Expenditure incurred till COD i.e, 04th March 2022

- 3.1.1 AGPCL humbly submits before this Hon'ble Commission that since the project was being commissioned in a phased manner, APGCL has incurred costs during the period 2014-15 till COD i.e., 04th March 2022. The year-wise expenditure incurred by APGCL towards MSHEP has been provided below:
- 3.1.2 APGCL submits before this Hon'ble Commission that the total expenditure towards Operation & Maintenance for the period FY 2014-15 to COD i.e. 04th March 2022 is as follows:



Table 3: Year wise Operation & Maintenance Expenses of MSHEP for FY 2014-15 to COD

(In Rs. Crore)

Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-29	FY 2019-20	FY 2020-21	FY 2021-22
Employee Cost	0.50	0.37	0.48	0.58	0.63	0.75	0.55	0.06
R&M Expense	0.02	0.04	0.05	-	-	-	0.06	-
A&G Expense	0.10	0.07	0.09	0.10	0.12	0.09	0.06	0.15
Total O&M	0.62	0.47	0.62	0.68	0.75	0.84	0.67	0.20

3.1.3 APGCL submits before this Hon'ble Commission the year-wise Depreciation booked in accounts for the period FY 2014-15 to COD i.e. 04th March 2022 is as follows:

Table 4: Year wise Depreciation booked for FY 2014-15 to COD

(In Rs. Crore)

Doubles	FY							
Particulars	2014-15	2015-16	2016-17	2017-18	2018-29	2019-20	2020-21	2021-22
Depreciation	0.60	0.93	0.91	2.78	2.35	4.65	4.66	5.00

3.1.4 APGCL humbly requests this Hon'ble Commission to allow the total expenditure incurred for the period FY 2014-15 to COD i.e., 04th March 2022 as follows:

Table 5: Total Expenditure incurred for the period FY 2014-15 to COD

(In Rs. Crore)

Particulars	Total Expenditure (FY 2014-15 to COD i.e., 04 th March 2022)
Total Operation & Maintenance Expenses	4.86
Total Depreciation booked	21.88
Grant Total	26.73

3.2 Toal Revenue Earned for the period FY 2017-18 to COD i.e., 04th March 2022

3.2.1 APGCL submits before this Hon'ble Commission that during the commissioning of MSHEP station, APGCL has also booked revenue for the period FY 2017-18 to COD i.e. 04th March 2022 is as follows:



Table 6: Year-Wise Revenue booked for the period FY 2017-18 to COL)
(In Rs. Crore))

Particulars	FY 2017-	FY 2018-	FY 2019-	FY 2020-	FY 2021-
	18	29	20	21	22
Revenue booked in Accounts	2.28	1.89	6.24	6.77	7.17

- 3.2.2 APGCL humbly submits before this Hon'ble Commission that in absence of station-wise segregation of revenue for generating stations of APGCL; Revenue from sale of power (billed by APGCL) till FY 2016-17 (including revenue for MSHEP) has already been considered by this Hon'ble Commission in Tariff Order dated 19.03.2018 (i.e., Rs. 596.62 Crores as per Audited Accounts). Hence, APGCL has considered Revenue booked in Accounts for MSHEP from FY 2017-18 onwards till COD i.e., 04th March 2022.
- 3.2.3 APGCL humbly requests this Hon'ble Commission to consider the total revenue booked in accounts for the period FY 2017-18 to COD i.e., 04th March 2022 as follows:

Table 7: Total Revenue booked for the period FY 2017-18 to COD

(In Rs. Crore)

Particulars	Total Revenue (FY 2017-18 to COD i.e., 04 th March 2022)
Total Revenue Booked in accounts	24.34

3.3 Net ARR till COD of the station i.e., 04th March 2022

3.3.1 APGCL humbly requests this Hon'ble Commission to consider the Net ARR of APGCL from MSHEP for the period FY 2014-15 to COD (i.e., 04th March 2022) as follows:

Table 8: Net ARR for the period FY 2014-15 to COD

(In Rs. Crore)

Particulars	Total Expenditure (FY 2014-15 to COD i.e., 04 th March 2022)
Total expenditure incurred (A)	26.73
Total Revenue Booked in accounts (B)	24.34
Net Expenditure incurred by MSHEP (A-B)	2.39

3.3.2 APGCL humbly requests the Hon'ble Commission to allow APGCL to recover the amount of Rs. 2.39 Crore in twelve equal monthly instalment of Rs. 0.20 Crores.



4 Proposed Power Generation of MSHEP

4.1 Technical Parameters considered for Generation Projection of MSHEP

4.1.1 AGPCL humbly submits before this Hon'ble Commission the technical parameters considered for the projection of generation for MSHEP for the rest of the period of 2022-23 to FY 2056-57 are as given in the table below:

Table 9: Parameters for Generation Projection of MSHEP

Parameters considered for Gross Generation Projection of MSHEP	Basis
Gross Generation	53.217 MU as Normative Generation
Capacity Utilization Factor	45% as per Regulation
Auxiliary Power Consumption	1% as per Regulation

4.2 Projected Generation of MSHEP

4.2.1 APGCL submits before this Hon'ble Commission that considering the technical parameters considered above, the following Generation Plan is proposed by APGCL for MSHEP for the FY 2022-23:

Table 10: Projected Generation of MSHEP for FY 2022-23

Station	Particulars	Unit	FY 2022-23
	Installed Capacity	MW	13.5
	CUF	%	45%
MSHEP	Gross Generation	MU	53.22
IVISHEP	Auxiliary Consumption	%	1%
	Auxiliary Consumption	MU	0.53
	Net Generation	MU	52.68

4.2.2 The detailed year-wise projected Return on Equity claimed by APGCL for FY 2022-23 to FY 2056-57 has been provided in Section-6 below.

5 Fixed Cost of the Plant

5.1 Annual Fixed Cost for FY 2022-23

- 5.1.1 As per regulation 9 of the AERC (Terms and Conditions for Tarff determination from Renewable Energy Sources) Regulations, 2017, the tariff for renewable energy technologies shall be single part tariff consisting of the following fixed cost components:
 - (a) Return on Equity
 - (b) Interest on Long Capital
 - (c) Depreciation



- (d) Interest on Working Capital
- (e) Operation and Maintenance Expenses
- 5.1.2 For the computation of the fixed components, the Petitioner has considered the principles provided in the AERC (Terms and Conditions for Tarff determination from Renewable Energy Sources) Regulations, 2017. These components have been discussed in detail in the following sections of the petition.

5.1 Return on Equity (ROE)

- 5.1.1 In accordance with Regulation 16 of the AERC (Terms and Conditions for Tarff determination from Renewable Energy Sources) Regulations, 2017, normative Return on Equity i.e., 14% has been grossed up by prevailing Minimum Alternate Tax (MAT) as on 1st April of previous year i.e., 17.30% (considering 12% as surcharge and 3% of education cess) for the entire useful life of the project. Hence the rate of return on equity arrives at 16.93%
- 5.1.2 The Petitioner has determined the Return on Equity (RoE) as per the Regulation 16 of the AERC (Terms and Conditions for Tarff determination from Renewable Energy Sources) Regulations, 2017. APGCL prays before this Hon'ble Commission to approve the Return on Equity as claimed by APGCL

Table 11: Computation of Return in Equity for FY 2022-23 (In Rs. Crore)

Station	Particulars	Return on Equity (FY 2022-23)
	Opening Equity	37.65
MSHEP	Closing Equity	38.94
IVISHEP	Rate of Return	16.93%
	Return on Equity	6.48

- 5.1.3 The detailed year-wise projected Return on Equity claimed by APGCL for FY 2022-23 to FY 2056-57 has been provided in Section-6 below.
- 5.1.4 APGCL humbly prays before this Hon'ble Commission to approve the Return on Equity for FY 2022-23 to FY 2056-57 as claimed by APGCL.

5.2 Interest on Loan Capital

- 5.2.1 As per Regulation 14 of the AERC (Terms and Conditions for Tarff determination from Renewable Energy Sources) Regulations, 2017, the Commission will consider the loan tenure of 13 years for the purpose of determination of tariff.
- 5.2.2 In view of the above, the Petitioner has computed the Interest on Loan on normative basis for FY 2022-23. As per Regulation 14 (2) of the AERC (Terms and Conditions for Tarff determination from Renewable Energy Sources)



- Regulations, 2017, the normative interest rate of two hundred (200) basis points above the average State Bank of India Marginal Cost of Funds based Lending Rate (MCLR) (one year tenor) prevalent during the last available six months i.e., i.e., (7.05% + 2.0%) = 9.05% has been considered.
- 5.2.3 APGCL further submits before this Hon'ble Commission that the Government of Assam Vide Sanction No. FS/42_2021-22(I)_05 and Sanction No. FS/42_2021-22(I)_06 has approved conversion of Government of Assam Loan and Government of Assam Grant respectively into Equity. Relevant Copies of Certificate towards Grant & Loan conversion to Equity is being attached herewith as **Annexure 6**.
- 5.2.4 The table below summarizes the interest on loan and finance charges considered for Performance estimate of MSHEP for FY 2022-23.

Interest on Loan Station **Particulars** (FY 2022-23) Net Normative Opening Loan 87.84 Addition of normative loan during the year 3.03 Normative Repayment during the year 6.07 Net Normative Closing Loan 84.80 Avg. Normative Loan 86.32 MSHEP Interest Rate 9.05% **Interest on Loan Capital** 7.81 Add: Bank Charges 0.00 **Net Interest on Loan Capital** 7.81

Table 12: Computation of Interest and finance charges for FY 2022-23 (In Rs. Crore)

- 5.2.5 The detailed year-wise projected Interest on Loan claimed by APGCL for FY 2022-23 to FY 2056-57 has been provided in Section-6 below.
- 5.2.6 APGCL humbly prays before this Hon'ble Commission to approve the Interest on Loan for FY 2022-23 to FY 2056-57 as claimed by APGCL.

5.3 Depreciation

- 5.3.1 APGCL humbly submits before this Hon'ble Commission that APGCL has computed the Depreciation as per Regulation 15 of the AERC (Terms and Conditions for Tarff determination from Renewable Energy Sources) Regulations, 2017, considering Capital Cost of the asset with 10% salvage value.
- 5.3.2 In accordance with Regulation 15 (2) of the AERC (Terms and Conditions for Tarff determination from Renewable Energy Sources) Regulations, 2017, the rate of depreciation of 5.28% has been considered for the computation of Depreciation for the year. The table below summarizes the Depreciation



considered for Performance estimate of MSHEP for FY 2022-23.

Table 13: Computation of Depreciation for FY 2022-23 (In Rs. Crore)

Particulars	Depreciation (FY 2022-23)
Opening GFA	125.48
Addition during the year	4.32
Closing	129.81
Average GFA	127.65
Rate of Depreciation	5.28%
Total Depreciation	6.07
Grant	-
Additions during the year	-
Closing grant	-
Average grant	-
Rate of Depreciation	5.28%
Depreciation on grants	-
Net Depreciation	6.07

- 5.3.3 The detailed year-wise projected Depreciation claimed by APGCL for FY 2022-23 to FY 2056-57 has been provided in Section-6 below.
- 5.3.4 APGCL humbly prays before this Hon'ble Commission to approve the total Depreciation for FY 2022-23 to FY 2056-57 as claimed by APGCL.

5.4 Interest on Working Capital

5.4.1 APGCL humbly submits before this Hon'ble Commission that normative interest on working capital has been claimed as per Regulation 17 (1) of the AERC (Terms and Conditions for Tarff determination from Renewable Energy Sources) Regulations, 2017. The rate of interest on working capital computed at interest rate equivalent to the normative interest rate of three hundred (300) basis points above the average State Bank of India MCLR (One Year Tenor) prevalent during the last available six months, i.e., (7.05% + 3.0 %) = 10.05%. The plant wise interest on working capital considered is shown in the table below:

Table 14: Computation of Interest on Working Capital claimed for FY 2022-23 (In Rs. Crore)

Station	Particulars	Interest on Working Capital (FY 2022-23)
	O&M Expenses for one month	0.40
	Maintenance Spares - 15% of O&M	0.72
MSHEP	Receivables for two months	4.29
	Total Working Capital Requirement	5.41
	Rate of interest	10.05%

Station	Particulars	Interest on Working Capital (FY 2022-23)
	Interest on Working capital	0.54

- 5.4.2 The detailed year-wise projected Interest on Working Capital claimed by APGCL for FY 2022-23 to FY 2056-57 has been provided in Section-6 below.
- 5.4.3 APGCL humbly prays before this Hon'ble Commission to approve the Interest on Working Capital for FY 2022-23 to FY 2056-57 as claimed by APGCL.

5.5 Operation and Maintenance Expenses (O&M Expenses)

- 5.5.1 As per Regulation 19 and Regulation 31 of the AERC (Terms and Conditions for Tarff determination from Renewable Energy Sources) Regulations, 2017, Normative Operation and Maintenance expenses for MSHEP has been claimed (Rs 36 lakhs/MW for capacity below 5 MW and Rs. 27 lakhs/MW for Capacity 5 MW to 25 MW).
- 5.5.2 Further Normative O&M expenses for FY 2017-18 has been escalated at the rate of 5.72 % on year as provided by this Hon'ble Commission to arrive at normative O&M expenses for FY 2022-23 as shown below:

Table 15: Escalation of Normative Operation and Maintenance Expenses (In Rs. Crore)

Jnit No	Configura tion	Capacity (In MW)	O&M Norms FY 2017-18 (Lakhs/ MW)	FY 2017-18 Base Year	FY 2018-19	FY 2019-20	FY 2020-21 Projected	FY 2021-22	FY 2022-23
1	(3x3 MW)+(1. 5x3MW)	13.5	27	3.65	3.85	4.07	4.31	4.55	4.81
	Total O&	M Cost (In C	rore)	3.65	3.85	4.07	4.31	4.55	4.81

Table 16: Operation and Maintenance Expenses claimed for FY 2022-23 (In Rs. Crore)

Station	O&M Expense (FY 2022-23)
MSHEP	4.81

- 5.5.3 APGCL further submits before this Hon'ble Commission that the Special R&M and any other liabilities has not been considered in this Petition and will be claimed separately during True-up.
- 5.5.4 The detailed year-wise projected Normative Operation & Maintenance Expenses claimed by APGCL for FY 2022-23 to FY 2056-57 has been provided in Section-6 below.
- 5.5.5 APGCL humbly prays before this Hon'ble Commission to approve the Operation & Maintenance Expenses for FY 2022-23 to FY 2056-57 as claimed by APGCL.



6 Detailed year-wise projections of MSHEP for FY 2022-23 to FY 2056-57

Table 17: Projected Generation of MSHEP for FY 2022-23 to FY 2056-57 (In Rs. Crore)

Particulars	FY 22-23	FY 23-24		FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30		FY 31-32	FY 32-33	FY 33-34	FY 34-35	FY 35-36	FY 36-37	FY 37-38	FY 38-39	FY 39-40	FY 40-41	FY 41-42	FY 42-43	FY 43-44	FY 44-45	FY 45-46	FY 46-47	FY 47-48	FY 48-49	FY 49-50	FY 50-51	FY 51-52	FY 52-53	FY 53-54	FY 54-55	FY 55-56	FY 56-57
																		Projecte	d																
Installed Capacity (MW)	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
CUF (%)	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%	45%
Gross Generation (MU)	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22
Auxiliary Consumption (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Auxiliary Consumption (MU)	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53
Net Generation(MU)	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68

Table 18: Projected year-wise Return in Equity for FY 2022-23 to FY 2056-57 (In Rs. Crore)

	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY																	
Particulars	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32						37-38	38-39	39-40	40-41	41-42	42-43	43-44	44-45										54-55	55-56	56-57
																		Projecte	d																
Opening Equity	37.65	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94
Addition during Year	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Closing Equity	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94	38.94
Rate of Return	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%	16.93%
Return on Equity	6.48	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59

Table 19: Projected year-wise Interest on Loan for FY 2022-23 to FY 2056-57 (In Rs. Crore)

	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY																	
Particulars	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33	33-34	34-35	35-36	36-37	37-38	38-39	39-40	40-41	41-42	42-43	43-44	44-45	45-46	46-47	47-48	48-49	49-50	50-51	51-52	52-53	53-54	54-55	55-56	56-57
																		Projecte	d																
Net Normative	87.84	84.80	78.63	72.46	66.29	60.13	53.96	47.79	41.62	35.45	29.28	23.12	16.95	10.78	9.11	7.44	5.77	4.10	2.43	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Opening Loan Addition of																																			\vdash
normative loan during the year	3.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Normative Repayment during the year	6.07	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67
Net Normative Closing Loan	84.80	78.63	72.46	66.29	60.13	53.96	47.79	41.62	35.45	29.28	23.12	16.95	10.78	9.11	7.44	5.77	4.10	2.43	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avg. Normative Loan	86.32	81.72	75.55	69.38	63.21	57.04	50.87	44.70	38.54	32.37	26.20	20.03	13.86	9.94	8.27	6.60	4.93	3.26	1.59	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest Rate	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%	9.05%
Interest on Loan Capital	7.81	7.40	6.84	6.28	5.72	5.16	4.60	4.05	3.49	2.93	2.37	1.81	1.25	0.90	0.75	0.60	0.45	0.30	0.14	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Add: Bank Charges	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Interest on Loan Capital	7.81	7.40	6.84	6.28	5.72	5.16	4.60	4.05	3.49	2.93	2.37	1.81	1.25	0.90	0.75	0.60	0.45	0.30	0.14	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 20: Projected year-wise Depreciation for FY 2022-23 to FY 2056-57 (In Rs. Crore)

	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY																	
Particulars	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33	33-34	34-35	35-36	36-37	37-38	38-39	39-40	40-41	41-42	42-43	43-44	44-45	45-46	46-47	47-48	48-49	49-50	50-51	51-52	52-53	53-54	54-55	55-56	56-57
																		Projecte	t																
Opening GFA	125.48	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81
Addition during the year	4.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Closing	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81
Average GFA	127.65	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81	129.81
Rate of Depreciation	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%
Total Depreciation	6.07	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67
Average grant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rate of Depreciation	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	5.28%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%	1.43%
Depreciation on grants	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Depreciation	6.07	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67

Table 21: Projected year-wise Interest on Working Capital for FY 2022-23 to FY 2056-57 (In Rs. Crore)

												, ,						, ,																	
	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY	FY																	
Particulars	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33	33-34	34-35	35-36	36-37	37-38	38-39	39-40	40-41	41-42	42-43	43-44	44-45	45-46	46-47	47-48	48-49	49-50	50-51	51-52	52-53	53-54	54-55	55-56	56-57
																	1	Projecte	d																
O&M Expenses for one month	0.40	0.42	0.45	0.47	0.50	0.53	0.56	0.59	0.63	0.66	0.70	0.74	0.78	0.83	0.87	0.92	0.98	1.03	1.09	1.15	1.22	1.29	1.36	1.44	1.52	1.61	1.70	1.80	1.90	2.01	2.13	2.25	2.38	2.51	2.66
Maintenance Spares - 15% of O&M	0.72	0.76	0.81	0.85	0.90	0.95	1.01	1.07	1.13	1.19	1.26	1.33	1.41	1.49	1.57	1.66	1.76	1.86	1.97	2.08	2.20	2.32	2.45	2.60	2.74	2.90	3.07	3.24	3.43	3.62	3.83	4.05	4.28	4.53	4.79
Receivables for two months	4.29	4.30	4.26	4.21	4.18	4.14	4.11	4.08	4.06	4.04	4.02	4.01	4.00	3.27	3.35	3.43	3.51	3.60	3.70	3.81	3.94	4.09	4.24	4.40	4.57	4.76	4.95	5.15	5.36	5.59	5.83	6.08	6.35	6.64	6.94
Total Working Capital Requirement	5.41	5.49	5.51	5.54	5.58	5.62	5.68	5.74	5.81	5.89	5.98	6.08	6.19	5.59	5.79	6.01	6.24	6.49	6.75	7.04	7.36	7.70	8.06	8.44	8.84	9.27	9.72	10.19	10.70	11.23	11.79	12.38	13.01	13.68	14.38
Rate of interest	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%	10.05%
Interest on Working capital	0.54	0.55	0.55	0.56	0.56	0.57	0.57	0.58	0.58	0.59	0.60	0.61	0.62	0.56	0.58	0.60	0.63	0.65	0.68	0.71	0.74	0.77	0.81	0.85	0.89	0.93	0.98	1.02	1.07	1.13	1.18	1.24	1.31	1.37	1.45

Table 22: Projected year-wise Operation & Maintenance Expense for FY 2022-23 to FY 2056-57 (In Rs. Crore)

Dombioulous	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28		FY 20-30	FY 30-31	FY 31-32		FY 33-34	FY 34-35	FY 35-36	FY 36-37	FY 27-39		50-40	FY 40-41	FY 41-42	FY 42-43	FY 43-44	FY 44-45	FY 45-46	FY 46-47	FY 47-48	FY 18-10	FY 49-50	FY 50-51	FY 51-52		FY 53-54	FY 54-55		FY 56-57
Particulars	22-23	23-24	24-23	23-20	20-27	27-20	20-23	23-30	30-31	J1-J2	32-33	33-34	34-33	33-30	30-37	37-30		Projecte		41-42	42-43	45-44	44-43	43-40	40-47	47-40	40-43	43-30	30-31	31-32	32-33	33-34	34-33	33-30	30-37
Stage I (3x3 MW)	3.21	3.39	3.59	3.79	4.01	4.24	4.48	4.74	5.01	5.29	5.60	5.92	6.26	6.61	6.99	7.39	7.81	8.26	8.73	9.23	9.76	10.32	10.91	11.53	12.19	12.89	13.63	14.41	15.23	16.10	17.03	18.00	19.03	20.12	21.27
Stage II (1.5x3 MW)	1.60	1.70	1.79	1.90	2.00	2.12	2.24	2.37	2.50	2.65	2.80	2.96	3.13	3.31	3.50	3.70	3.91	4.13	4.37	4.62	4.88	5.16	5.46	5.77	6.10	6.45	6.81	7.20	7.62	8.05	8.51	9.00	9.51	10.06	10.63
Total O&M Cost	4.81	5.09	5.38	5.69	6.01	6.36	6.72	7.11	7.51	7.94	8.40	8.88	9.38	9.92	10.49	11.09	11.72	12.39	13.10	13.85	14.64	15.48	16.37	17.30	18.29	19.34	20.44	21.61	22.85	24.16	25.54	27.00	28.54	30.18	31.90

7 Levelized Tariff

7.1 Tariff Design

- 7.1.1 As per Regulation 10 of the AERC (Terms and Conditions for Tarff determination from Renewable Energy Sources) Regulations, 2017, generic tariff has been determined considering the year of commissioning of the project i.e., 04th March 2022, on levelized basis for the Tariff Period with 45% CUF of installed capacity of 13.5 MW as per Regulation 29 of the AERC (Terms and Conditions for Tarff determination from Renewable Energy Sources) Regulations, 2017.
- 7.1.2 As specified in Regulation 1 (28) of the AERC (Terms and Conditions for Tarff determination from Renewable Energy Sources) Regulations, 2017, 35 years as useful life for Small Hydro Power plant has been considered for tariff design.
- 7.1.3 In accordance with Regulation 10 (3) of the AERC (Terms and Conditions for Tarff determination from Renewable Energy Sources) Regulations, 2017, Levelized Tariff has been carried out for the "useful life" i.e., 35 years for MSHEP.
- 7.1.4 In line with the above detailed computation towards computation of levelized Tariff has been provided below:

Table 23: Computation of Levelized Tariff for 35 years

No Particulars	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32	FY 32-33	FY 33-34	FY 34-35	FY 35-36	FY 36-37	FY 37-38	FY 38-39	FY 39-40	FY 40-41	FY 41-42	FY 42-43	FY 43-44	FY 44-45	FY 45-46	FY 46-47	FY 47-48	FY 48-49	FY 49-50	FY 50-51	FY 51-52	FY 52-53	FY 53-54	FY 54-55	FY 55-56	FY 56-57
No Particulars	22-23	23-24	24-23	25-20	20-27	27-20	20-23	25-30	30-31	31-32	32-33	33-34	34-33	33-30	30-37	37-36		Projected		41-42	42-43	45-44	44-43	1 43-40	40-47	47-40	1 40-43	1 43-30	30-31	31-32	1 32-33	33-34	34-33	33-30	30-37
Power Generation (MU)																																			
Gross Generation	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22
Net Generation	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68
Auxiliary Consumption Loss %	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
l Fixed Charges																																			
Operation & Maintenance Expenditure	4.81	5.09	5.38	5.69	6.01	6.36	6.72	7.11	7.51	7.94	8.40	8.88	9.38	9.92	10.49	11.09	11.72	12.39	13.10	13.85	14.64	15.48	16.37	17.30	18.29	19.34	20.44	21.61	22.85	24.16	25.54	27.00	28.54	30.18	31.90
Special R&M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest & Finance Charges	7.81	7.40	6.84	6.28	5.72	5.16	4.60	4.05	3.49	2.93	2.37	1.81	1.25	0.90	0.75	0.60	0.45	0.30	0.14	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest on working Capital	0.54	0.55	0.55	0.56	0.56	0.57	0.57	0.58	0.58	0.59	0.60	0.61	0.62	0.56	0.58	0.60	0.63	0.65	0.68	0.71	0.74	0.77	0.81	0.85	0.89	0.93	0.98	1.02	1.07	1.13	1.18	1.24	1.31	1.37	1.45
Depreciation	6.07	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67
Return on Equity	6.48	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59
Less: Other Income	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net ARR Requirement	25.72	25.80	25.53	25.28	25.06	24.85	24.66	24.49	24.34	24.22	24.13	24.06	24.02	19.64	20.08	20.55	21.06	21.60	22.19	22.86	23.65	24.52	25.44	26.41	27.44	28.53	29.68	30.90	32.19	33.55	34.99	36.51	38.11	39.81	41.61
<u> </u>																																			
erage Tariff Rate (Rs/KWh)	4.88	4.90	4.85	4.80	4.76	4.72	4.68	4.65	4.62	4.60	4.58	4.57	4.56	3.73	3.81	3.90	4.00	4.10	4.21	4.34	4.49	4.65	4.83	5.01	5.21	5.42	5.63	5.87	6.11	6.37	6.64	6.93	7.23	7.56	7.90
st tax weighted average st of capital	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%	9.44%
count Rate	1.00	0.91	0.83	0.76	0.70	0.64	0.58	0.53	0.49	0.44	0.41	0.37	0.34	0.31	0.28	0.26	0.24	0.22	0.20	0.18	0.16	0.15	0.14	0.13	0.11	0.10	0.10	0.09	0.08	0.07	0.07	0.06	0.06	0.05	0.05
vised Tariff Rate at counted Rate	4.88	4.47	4.05	3.66	3.32	3.00	2.72	2.47	2.25	2.04	1.86	1.69	1.54	1.15	1.08	1.01	0.94	0.88	0.83	0.78	0.74	0.70	0.66	0.63	0.60	0.57	0.54	0.51	0.49	0.47	0.44	0.42	0.40	0.39	0.37

Levelized Tariff Σ Discount factor Σ Disc

7.1.5 In consideration of the above, APGCL humbly prays before this Hon'ble Commission to kindly allow tariff of Rs 4.74/kWh as claimed in this tariff petition.

Discounted Rate

8 Summary of submissions of Performance estimate for FY 2022-23 to FY 2056-57

8.1 Net Annual Revenue Requirement

8.1.1 The Net Annual Revenue Requirement of MSHEP for FY 2022-23 to FY 2056-57 are as shown in the tables below:

Table 24: Year-Wise Net Annual Revenue Requirement claimed for FY 2022-23 to FY 2056-57

SI.	Particulars	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32	FY 32-33	FY 33-34	FY 34-35	FY 35-36	FY 36-37	FY 37-38	FY 38-39	FY 39-40	FY 40-41	FY 41-42	FY 42-43	FY 43-44	FY 44-45	FY 45-46	FY 46-47	FY 47-48	FY 48-49	FY 49-50	FY 50-51	FY 51-52	FY 52-53	FY 53-54	FY 54-55	FY 55-56	FY 56-57
No	rarticulars																	•	Projecte											1						
-1	Power Generation (MU)																																			
	Gross Generation	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22	53.22
	Net Generation	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68
	Auxiliary Consumption Loss %	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
																																				Į
П	Fixed Charges																																			
	Operation & Maintenance Expenditure	4.81	5.09	5.38	5.69	6.01	6.36	6.72	7.11	7.51	7.94	8.40	8.88	9.38	9.92	10.49	11.09	11.72	12.39	13.10	13.85	14.64	15.48	16.37	17.30	18.29	19.34	20.44	21.61	22.85	24.16	25.54	27.00	28.54	30.18	31.90
	Special R&M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Interest & Finance Charges	7.81	7.40	6.84	6.28	5.72	5.16	4.60	4.05	3.49	2.93	2.37	1.81	1.25	0.90	0.75	0.60	0.45	0.30	0.14	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Interest on working Capital	0.54	0.55	0.55	0.56	0.56	0.57	0.57	0.58	0.58	0.59	0.60	0.61	0.62	0.56	0.58	0.60	0.63	0.65	0.68	0.71	0.74	0.77	0.81	0.85	0.89	0.93	0.98	1.02	1.07	1.13	1.18	1.24	1.31	1.37	1.45
	Depreciation	6.07	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	6.17	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67
	Return on Equity	6.48	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59	6.59
	<u>Less</u> : Other Income	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III	Total Fixed Charges	25.72	25.80	25.53	25.28	25.06	24.85	24.66	24.49	24.34	24.22	24.13	24.06	24.02	19.64	20.08	20.55	21.06	21.60	22.19	22.86	23.65	24.52	25.44	26.41	27.44	28.53	29.68	30.90	32.19	33.55	34.99	36.51	38.11	39.81	41.61
IV	Net ARR Requirement	25.72	25.80	25.53	25.28	25.06	24.85	24.66	24.49	24.34	24.22	24.13	24.06	24.02	19.64	20.08	20.55	21.06	21.60	22.19	22.86	23.65	24.52	25.44	26.41	27.44	28.53	29.68	30.90	32.19	33.55	34.99	36.51	38.11	39.81	41.61

8.1.2 APGCL humbly prays before this Hon'ble Commission to approve the Annual Revenue Requirement of MSHEP for FY 2022-23 to FY 2056-57 as claimed by APGCL.

Annexure - 1: Data formats and Tariff Forms

Form-1.1: Form Template for (Wind Power or Small Hydro Project or Solar PV/Solar thermal)

SI.No.	Assumption	Sub-Head	Sub-Head (2)	Unit	Parameter
1	Power Generation	Capacity	Installed Power Generation Capacity	MW	13.5
			Capacity Utilization Factor	%	45%
			Commercial Operation Date	mm/yyyy	04th March 2022
			Useful Life	Years	35
2	Project Cost	Capital Cost / MW	Normative Capital Cost	Rs. Lakh/MW	900
			Capital Cost	Rs. Lakh	12548.36
			Capital Subsidy, if any	Rs. Lakh	
			Net Capital Cost	Rs. Lakh	12548.36
3	Financial Assumptions	Debt Equity	Tariff Period	Years	35
			Debt	%	70%
			Equity	%	30%
			Total Debt Amount	Rs. Lakhs	8783.85
			Total Equity Amount	Rs. Lakhs	3764.51
		Debt Component	Loan Amount	Rs. Lakhs	8783.85
			Moratorium Period	Years	NA
			Repayment Period (including Moratorium)	Years	13
			Interest Rate	%	9.05%
		Equity Component	Equity Amount	Rs. Lakhs	3764.51
			Return on Equity for first 10 years	% p.a	16.93%
			Return on Equity 11th year onwards	% p.a	16.93%
			Discount Rate	%	9.44%
		Depreciation	Depreciation Rate for 1st 12 yrs	%	5.28%
			Depreciation Rate 13th year onward	%	1.43%
			Generation based incentive, if any	Rs. L.p.a	NA
		Incentives	Period for GBI	Years	NA
4	Operation & Maintenance	Normative O&M expense		Rs. Lakh/MW	27
		O&M expense per annum		Rs. Lakh	481.37
		Escalation factor for O&M expense		%	5.72%
5	Working Capital	O&M expense		Months	1
		Maintenance Spare	(% of O&M Expense)	%	15%
		Receivables		Months	2
		Interest on Working Capital		% p.a	10.05%

Form-2.1: Form Ten	nplate f	or (Wii	nd Pow	er or S	mall H	ydro Pr	oject o	or Solar	r PV/So	lar the	rmal) :	Detern	ninatio	n of Ta	ariff Co	mpone	ents																			
Units Generation	Unit	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Yr-11	Yr-12	Yr-13	Yr-14	Yr-15	Yr-16	Yr-17	Yr-18	Yr-19	Yr-20	Yr-21	Yr-22	Yr-23	Yr-24	Yr-25	Yr-26	Yr-27	Yr-28	Yr-29	Yr-30	Yr-31	Yr-32	Yr-33	Yr-34	Yr-35
Installed Capacity	MW	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
Net Generation	MU	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68	52.68
Tariff Components (Fixed Charge)																																				
O & M Expenditure	Rs. Lakh	481.37	508.91	538.02	568.79	601.33	635.72	672.09	710.53	751.17	794.14	839.57	887.59	938.36	992.03	1048.78	1108.77	1172.19	1239.24	1310.12	1385.06	1464.29	1548.04	1636.59	1730.21	1829.17	1933.80	2044.42	2161.36	2284.99	2415.69	2553.87	2699.95	2854.38	3017.65	3190.26
Depreciation	Rs. Lakh	606.57	616.85	616.85	616.85	616.85	616.85	616.85	616.85	616.85	616.85	616.85	616.85	616.85	167.00	167.00	167.00	167.00	167.00	167.00	167.00	167.00	167.00	167.00	167.00	167.00	167.00	167.00	167.00	167.00	167.00	167.00	167.00	167.00	167.00	167.00
Interest on long term loan	Rs. Lakh	781.19	739.53	683.70	627.88	572.05	516.23	460.40	404.58	348.75	292.93	237.11	181.28	125.46	89.99	74.87	59.76	44.65	29.53	14.42	3.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest on working Capital	Rs. Lakh	54.37	55.14	55.38	55.69	56.07	56.52	57.06	57.68	58.39	59.20	60.10	61.12	62.24	56.17	58.23	60.43	62.76	65.25	67.89	70.76	73.94	77.37	80.99	84.82	88.86	93.14	97.66	102.44	107.50	112.84	118.49	124.46	130.78	137.45	144.51
Return on Equity	Rs. Lakh	648.29	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28	659.28
Total Fixed Cost	Rs. Lakh	2571.80	2579.71	2553.23	2528.49	2505.58	2484.61	2465.68	2448.92	2434.45	2422.40	2412.90	2406.11	2402.18	1964.46	2008.16	2055.23	2105.87	2160.29	2218.70	2285.53	2364.51	2451.69	2543.86	2641.30	2744.31	2853.22	2968.35	3090.08	3218.76	3354.81	3498.63	3650.69	3811.44	3981.38	4161.05
Per Unit Tariff Components	Unit																																			
PU O & M Expenditure	Rs. kWh	0.91	0.97	1.02	1.08	1.14	1.21	1.28	1.35	1.43	1.51	1.59	1.68	1.78	1.88	1.99	2.10	2.22	2.35	2.49	2.63	2.78	2.94	3.11	3.28	3.47	3.67	3.88	4.10	4.34	4.59	4.85	5.12	5.42	5.73	6.06
PU Depreciation	Rs. kWh	1.15	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
PU Interest on long term loan	Rs. kWh	1.48	1.40	1.30	1.19	1.09	0.98	0.87	0.77	0.66	0.56	0.45	0.34	0.24	0.17	0.14	0.11	0.08	0.06	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PU Interest on working Capital	Rs. kWh	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.11	0.11	0.11	0.12	0.12	0.13	0.13	0.14	0.15	0.15	0.16	0.17	0.18	0.19	0.19	0.20	0.21	0.22	0.24	0.25	0.26	0.27
PU Return on Equity	Rs. kWh	1.23	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Per Unit Fixed Cost	Rs. kWh	4.88	4.90	4.85	4.80	4.76	4.72	4.68	4.65	4.62	4.60	4.58	4.57	4.56	3.73	3.81	3.90	4.00	4.10	4.21	4.34	4.49	4.65	4.83	5.01	5.21	5.42	5.63	5.87	6.11	6.37	6.64	6.93	7.23	7.56	7.90
Levelized Tariff	Unit																																			
Discount Factors		1.00	0.91	0.83	0.76	0.70	0.64	0.58	0.53	0.49	0.44	0.41	0.37	0.34	0.31	0.28	0.26	0.24	0.22	0.20	0.18	0.16	0.15	0.14	0.13	0.11	0.10	0.10	0.09	0.08	0.07	0.07	0.06	0.06	0.05	0.05
Discounted Tariff Components	Rs. kWh	4.88	4.47	4.05	3.66	3.32	3.00	2.72	2.47	2.25	2.04	1.86	1.69	1.54	1.15	1.08	1.01	0.94	0.88	0.83	0.78	0.74	0.70	0.66	0.63	0.60	0.57	0.54	0.51	0.49	0.47	0.44	0.42	0.40	0.39	0.37
Levelized Tariff	Rs. kWh	4.74																																		

Annexure - 2: COD declaration certificate as on 04th March 2022



ASSAM POWER GENERATION CORPORATION LTD.

Regd. Office: Bijulee Bhawan, 3rd floor, Paltanbazar, Guwahati-781 001, Assam
CIN: U40101AS2003SGC007239 Tele-Fax: 0361-2739546;
E-mail: cgm-g@apgcl.com, Website: www.apgcl.org

Mridul Saikia

i/c Chief General Manager (Generation)

No. APGCL/CGM (G)/MYNT (STG-I)/2018-19/COD/28

Dated: 07.03.2022

To,

- The Chief General Manager SLDC, AEGCL Kahalipara, Guwahati-19
- 2. The Chief General Manager (Commercial), APDCL Bijulee Bhawan, Paltan Bazar, Guwahati-01
- 3. The Chief General Manager, AEGCL Bijulee Bhawan, Paltan Bazar, Guwahati-01

Sub: Declaration of Date of Commercial Operation (COD) of the 3 MW Unit-1 of Myntriang Small Hydro Electric Project (MSHEP), Stage-I.

Sir,

With reference to the above, this is to inform you that trial run of the **3 MW Unit-1 of MSHEP**, **Stage-I** on partial load of average 2.5 MW for 12 hours (w.e.f. 11.40 AM of 04.03.2022 to 11.40 PM of 04.03.2022) has been successfully completed. As such, the Commercial Operation Date (COD) of the 3 MW Unit-1 of MSHEP, Stage-I is hereby declared as **04.03.2022**. The joint statement of observations by the representatives present is enclosed herewith.

This is for your kind information.

Enclosed: As stated above.

Yours faithfully

Chief General Manager (Gen.), APGCL

Copy to:

- 1. The Hon'ble Chairman, APGCL, Bijulee Bhawan, Guwahati-01 for kind Information.
- 2. The Managing Director, APGCL, Bijulee Bhawan, Guwahati-01 for kind Information.
- 3. The Secretary, AERC, 6th Mile, Guwahati-22, for kind information.
- 4. The Chief General Manager (F&A), APGCL for information.
- 5. The General Manager, KLHEP for information.
- 6. Relevant file.



Visit to the Myntriang Small Hydro Electric Project of APGCL for trial run of Unit-I of Stage-I of 3 MW capacity

As per letter from APGCL no. **APGCL/CGM (G)/MYNT (STG-I)/2018-19/COD/27 Dated 02/03/2022,** officials from APDCL- Commercial wing, SLDC-Assam and APGCL Head Quarter have visited the Myntriang Small Hydro Electric Project of APGCL at Myntriang, West Karbi Anglong on 04.03.2022 to observe the Trial Run of Unit-I of Stage – I of capacity of 3.0 MW. This is for declaration of the Date of Commercial Operation of the said unit. The following points are observed during the Trial Run:

- The Trial Run started at 11:40 AM of 04.03.2022. But, due to the partial availability of water, the unit could not run at Full Load capacity. The unit was running for 12 hours till 11:40 PM of 04.03.2022 and throughout the time, the average generation was around 2.5 MW.
- 2. The performance of the unit was found satisfactory during the test.
- 3. It is also observed that two Energy Meters SI. No. 20007238, Make: L&T and SI. No. 20007239, Make: L&T had been installed and commissioned in the line-1 and line-2 of the unit. The installation report of T&C Division, Nagaon, APDCL is enclosed here with.
- 4. Voice communication is available.
- Telemetry established between MSHEP Stage-I and SLDC will be verified during the visit of SCADA Engineers to the site.
- 6. As per AERC (Assam Electricity Grid Code) Regulations, 2014 and Co-Generation and Generation of Electricity from Renewable Sources of Energy Regulations, 2015, APGCL may take further action for declaration of Commercial Operation. But, since generation at the full installed capacity could not be attained during today's Trial Run due to partial availability of water, APGCL has to demonstrate the same as and when the water is available as per the Regulations.
- 7. APGCL has stated that there was generation by the said unit during January 2022. (Data sheet from APGCL is enclosed).

For APDCL:

Pradeep Kr. Baishya, AGM (TRC)

2. Indrajit Tahbildar, AGM (TRC)

3. Rahul Das, DM (TRC)





For APGCL HQ:

- 1. MridulSaikia, CGM(Gen)
- 2. Janardan Das, DGM(O&M)

For SLDC, AEGCL:

- 1. Paban Borah, CGM
- 2. Rupanka Kishore Goswami, AGM (SO)

For MSHEP:

- Lonsing Bey, GM(i/c), KLHEP
 Bigstone Hanse, AGM,MSHEP

MSHEP-1, 72 Hrs COMMISSIONING TEST RUN DATA

DATE: 04-03-2022

ATE	28-01-2022	29-01-2022	30-01-2022	31-01-2022	01-02-2022	02-02-2022	03-02-2022
TIME							
01:00		3.04	3.024	3.014	3.019	3.037	3.019
02:00		3.037	3.025	3.024	3.015	3.04	3.028
03:00		3.049	3.028	3.021	3.016	3.042	3.017
04:00		3.041	3.03	3.023	3.019	3.043	3.069
05:00		3.04	3.026	3.025	3.017	3.046	3.016
06:00		3.047	3.028	3.023	3.015	3.045	3.028
07:00		3.038	3.03	3.02	3.018	3.024	3.03
08:00		3.042	3.028	3.03	3.019	3.024	3.024
09:00		3.046	3.028	3.027	3.013	3.03	3.014
10:00	-	3.01	3.025	3.029	3.023	3.051	3.03
11:00		3.04	3.025	3.028	3.012	3.032	3.027
12:00	1	3.042	3.028	3.023	3.011	3.026	3.018
13:00	2.24	3.043	3.026	3.025	3.009	3.059	3.025
14:00	3.065	Voltage Jerk		3.026	3.012	3.06	3.028
15:00	3.081	Voltage Jerk		3.009	3.024	3.024	Manually Desynch
16:00	3.081	3.042	3.021	3.023	3.023	3.027	
17:00	3.081	3.014	3.024	3.043	3.011	3.046	
18:00	3.054	3.023	3.028	3.01	3.022	3.013	
19:00	3.033	3.035	3.016	3.035	3.025	3.023	
20:00	3.036	3.022	3.033	3.03	3.026	3.024	
21:00	3.035	3.024	3.021	3.035	3.033	3.025	
22:00	3.042	3.026	3.023	3.03	3.03	3.02	
23:00	3.045	3.025	3.026	3.002	3.038	3.023	
00:00	3.033	3.027	3.031	3.024	3.046	3.019	
Daily Gen (MWH)	33.965	67.147	72.742	71.708	73.548	72.812	44.097
Running	11:30	22:00	24	24	24	24	14:32

TILL DATE:

,	ILL DAIL.	
TO	OTAL GEN	1003.07
	(MWH)	
	TOTAL	
R	UNNING	527
	Hrs	
YE	ARLY GEN (MWH)	532.829
1		

^{* 72} Hrs Commissioning Test run for Unit-1, MSHEP-1, started at 13:00 Hrs on 28/01/2022 and ended at 14:00 Hrs on 03/02/2022.

T. General Manage MSHEP FOCL, Lengery, Was K/A



^{*} COD Test run of Unit-1, MSHEP-1, started at 11:30 on 04/03/2022. the Unit-1 synchronised in auto mode at 11:37 Hrs.

Annexure – 3: Auditor Certificate for the Capital Expenditure undertaken up to 04th March 2022 (COD)

NILOTPAL DHAR & ASSOCIATES

CHARTERED ACCOUNTANTS

CHILARAI NAGAR, BHANGAGARH,

HOUSE NO. 17, BYE LANE-3 GUWAHATI: 781032 Phone: +91-361-2527675 MOBILE: +9194353-07003

e-mail: <u>nilotpaldhar @ yahoo.co.in</u>

UDIN: 22066620AKHARF9088

TO WHOMSOEVER IT MAY CONCERN

I M/s Nilotpal Dhar & Associates, Chartered Accountants having been assigned the Review of capital expenditure of Stage I (3x3.0 Mw) & Stage II (3x1.5MW) of Myntriang Small Hydro Electric Project by M/s Assam Power Generation Corporation Limited having its registered office at Bijulee Bhawan, Paltan Bazar, Guwahati-781001, have hereby reviewed the capital expenditure of Stage I (3x3.0 Mw) & Stage II (3x1.5MW) of Myntriang Small Hydro Electric Project till the Station Commercial Operation Date (COD) i.e. 04.03.2022. The review is made on the basis of information and explanation provided by the company.

The total capital expenditure of the Project till the COD i.e. 04.03.2022 is as under:

Particulars	Amount (Rs. in Crore)	F. Y.
I. Name of Vendor		
National Productivity Council	0.01	
Sub Total	0.01	2007-2008
National Productivity Council	0.03	
Khorsing Rongpi	0.03	1
Others	0.05	2008-2009
Sub Total	0.10	1
Sarda Eco Power	2.24	
Khorsing Rongpi	0.06	1
Robison Teron	0.21	1
Samsing Terang	0.05	
Kartik Biswas	0.05	2009-2010
Dhaniram Teron	0.03	1
Others	0.07	1
Sub Total	2.72	1
Sarda Eco Power	19.40	
Robison Teron	0.02	
Klirdap Rongpi	0.04	
Santosh Teron	0.02	2010-2011
Others	0.04	
Sub Total	19.52	
Sarda Eco Power	27.71	
Samsing Terang	0.03	
Kartik Biswas	0.02	2011-2012
Others	0.03	
Sub Total	27.79	
Sarda Eco Power	10.36	2012-2013



(Contd. Page 2)



[2]

Sub Total	10.36	
Sarda Eco Power	7.91	2012 2014
Sub Total	7.91	2013-2014
Sarda Eco Power	3.92	
Swastik Trade Centre	0.04	2014-2015
Sub Total	3.96	7
Sarda Eco Power	8.03	2215 2212
Sub Total	8.03	2015-2016
Sarda Eco Power	18.67	
Aska Equipments	0.02	2016-2017
Sub Total	18.69	7
Sarda Eco Power	8.96	
Asom Sales Enterprises	0.00	2017-2018
Sub Total	8.96	
Sarda Eco Power	2.25	
S D Traders	0.25	7
Robison Teron	0.02	-
TBEA Energy India P. Ltd.	2.37	2018-2019
Secure Meters Ltd.	0.01	7
Sub Total	4.89	7
Robison Teron	0.25	
S D Traders	0.08	_
TBEA Energy India P. Ltd.	0.30	7
Hridaymani Sarma	0.06	
SHOM KHARKA	0.03	2019-2020
M/s Langpi Enterprise	0.07	- L L
Mudit Kumar Borah	0.34	7
Sub Total	1.13	7
Sarda Eco Power	1.81	
Altman Power LLP	0.96	7
Mudit Kumar Borah	0.28	7
Shom Kharka	0.11	7
Oriental Insurance Co. Ltd.	0.10	7
Bitupan Khaklari	0.10	7
Rama Kanta Roy	0.09	┪
Dhaniram Teron	0.09	2020-2021
Sub Total	3.54	7
Shom Kharka	0.39	1
Altman Power LLP	1.27	7
S D Traders	0.32	-
Ganesh Biswas	0.10	2021-2022
Hitech Engineering	0.15	7

(Contd.Page 3)



[3]		
Larta Engtipi	0.02	
Oriental Insurance Co. Ltd.	0.10	
Jiyan Enterprise	0.21	
Rama Kanta Roy	0.15	
M/S Samriddhi	0.13	
Hridaymani Sarma	0.16	
TBEA Energy India P. Ltd.	0.02	
Sub Total	3.54	
I. Total of Vendor	121.16	
II. Employee Cost and Administration and General expenses Capitalised	1.93	
III. Various other expenses	2.39	

Place: Guwahati Date: 04.06.2022



Grand Total (I+II+III)

For Nilotpal Dhar & Associates,
Chartered Accountants
Firm Registration No...24.5566
(Signature & seal)
(Name of the Chartered Accountant)
Membership No...0.66620

125.48



Annexure – 4: Detailed note in respect of the Arbitration proceedings

Brief Note Myntriang Small Hydro Electric Project (13.5 MW).

- The "Engineering, Procurement and Construction Contract for implementation of Myntriang Small Hydro Electric Project for generation of 9 MW (Stage-I: 2 x 3.0 MW & Stage-II: 2 x 1.5 MW) power was awarded to M/s Sarda Eco Power Ltd. (M/s SEPL) at an original cost of Rs. 78.17 Crores vide Board resolution no. 8 dtd:31.03.2008 and thereafter on 24.09.2008, Original Agreement was signed with APGCL. The EPC Contractor started main work at site w.e.f. February 2009 after submission of the performance guarantee.
- Time of completion was 24 months and original date of completion of the work was on 04.02.2011.
- The project comprises of constructions of a diversion weir, a contour canal, a fore bay, two numbers of penstock pipe and an over ground powerhouse in each stage of project.
- In stage-I, design discharge of 4.2 cumec and head of 191 m are utilized to generate power of 2 x 3.0 MW = 6.0 MW. Annual energy at 89% PLF is 46.40 MU.
- In stage-II, design discharge of 6.22 cumec and head of 64 m are utilized to generate power of $2 \times 1.5 \text{ MW} = 3.0 \text{ MW}$. Annual energy at 80% PLF is 21.18 MU.
- Funding required for the implementation of the project has been received from NABARD, AIFA and Govt. of Assam (GOA).
- On 03.03.2014 Commissioning of Stage-II (2 x 1.5 MW = 3 MW) was carried out and on 08.08.2014, the date of Commercial Operation of Stage-II (2 x 1.5 MW = 3 MW) was declared. Ccommercial date of operation (C.O.D) for the 3rd unit (1.5 MW) of MSHEP Stage-II was declared on 18.05.2018. On 08.02.2021 handing over of unit-III Stage-I MSHEP was completed. Both Unit-I & II of Stage-I which started malfunctioning shortly after Inauguration by Hon'ble Chief Minister of Assam on 24.02.2019 and consequently M/s SEPL is carrying out the necessary rectification works at site.
- During the implementation stage, the APGCL took up further studies of power potential of the project based on the hydrological data collected during the period from 2008-2010. On completion of these studies, the APGCL decided to enhance the installed capacity of the project from 9 MW (Stage-I: 2 x 3.0 MW & Stage-II: 2 x 1.5 MW) to 13.50 MW (Stage-I: 3 x 3.0 MW & Stage-II: 3 x 1.5 MW) after examination of the proposal through independent hydrological experts.
- Due to enhancement of power from 9 MW (Stage I : 2 x 3 MW & Stage II : 2 x 1.5 MW) to 13.5 MW (Stage I : 3 x 3 MW & Stage II : 3 x 1.5 MW), additional agreement dated 02.06.2012 amounting Rs. 5.66 Cr and 01.12.2014 amounting Rs. 23.5 Cr was made with M/s SEPL and accordingly contractual date of completion was fixed on 21.03.2016.



- In spite of APGCL's full support to M/s SEPL, they failed to rectify both unit-I & II of Stage—I which started malfunctioning shortly after Inauguration by Hon'ble Chief Minister of Assam on 24.02.2019 and instead they tried to unilaterally and arbitrarily carried out unauthorized mutilation to the turbine of unit-II, stage-I by drilling holes in the rotor hub plate and draft tube and changed tail water pool level. Several time extensions were granted to M/s SEPL and still they failed to complete the work resulting in a lapse of 1353 days from 21.03.2016 till termination date on 03.12.2019.
- In view of the above, in the 80th Board Meeting of APGCL dated 30.08.2019 it was resolved that appropriate financial legal action in accordance with contractual provision and in consultation with legal counsel be taken against M/s Sarda Eco Power Ltd. (SEPL). Further resolved that necessary measures should be taken for completion of the balance works of MSHEP which are yet to be started/completed by SEPL and should be taken up by APGCL through other agencies at the earliest.
- On 31.10.2019 APGCL served a final notice for completion of works of the 13.5 MW Myntriang Small H.E. Project- Stage-I & II to the EPC contractor M/s Sarda Eco Power Ltd (SEPL) allowing them to complete all works as per terms of the contract by 15.11.2019 stipulating that the EPC contract would be terminated and other necessary action as per terms of contract and under Law would be taken on their failure.
- However the said EPC contractor failed to complete the works and consequently on 29.11.2019, in 83rd Board Meeting of APGCL, it was resolved to terminate the EPC contract on SEPL's default and due to non-completion of works by 15/11/2019. It was further resolved and approved that APGCL shall complete the remaining works together with rectification of the machines.
- Accordingly APGCL terminated the EPC contract by serving Termination notice to M/s SEPL on 03.12.2019 and thereafter on 05.12.2019, APGCL submitted its claim for invocation of all Bank Guarantees to SBI Ballygunge, Kolkata.
- But M/s SEPL filed Arbitration case no. 61/2019 in the Court of Additional District Judge no 1 Kamrup (M) and the Court restrained invocation of the BG's vide Order dated 16.12.2019.
- Subsequently, M/s SEPL submitted prayers to the Chairman, APDCL/AEGCL/APGCL and Board members of APGCL for revocation of the termination order vide letter dated 29.12.2019 and 30.12.2019. Considering the same, APGCL Board in its 84th meeting dated 06.01.2020 resolved to keep the termination order in abeyance subject to withdrawal of Misc. Arbitration Case no 61/2019 by M/s SEPL together with other conditions.
- On 12/02/2020, M/s SEPL agreed to all the conditions of abeyance vide letter no. GHT/CEO/MYNT/F-05/2019/6547 dated 12.02.2020. M/s SEPL informed that works as mentioned in APGCL's letter dated 06.02.2020, would be taken up on receipt of



permission and completed in 3 months' time in accordance with the conditions laid down by APGCL for abeyance of the termination order.

- Misc. (Arb) case no 61/2019 dated 16.12.2019 was withdrawn by M/s SEPL.
- However on the very next day, M/s SEPL vide letter dated 13.02.2020 requested the President, Institution of Engineers (India), Kolkata to appoint an Arbitrator on behalf of APGCL for arbitration to proceed as APGCL had not appointed any arbitrator till then.
- Thereafter on 18.02.2020, M/s SEPL was directed to withdraw all arbitration cases against APGCL so that Board's abeyance resolution could come into effect. Also requested to extend all BG's.
- Vide letter dated 25/02/2020, M/s SEPL refused to withdraw arbitration case and intimated that the BG's will be renewed shortly but they failed to do so.
- On 26.02.2020, Institution of Engineers (India) nominated Mr. H.C.S. Berry. FIE as arbitrator on behalf of APGCL.
- Meanwhile one of the BG amounting Rs. 1,17,50,000.00 which had already expired on 31.12.2019 had to be en-cashed by APGCL due to failure of M/s SEPL to renew the said BG prior to expiry of claim period i.e. 31.03.2020.
- Remaining works of MSHEP were taken up by APGCL through open tender and completed by 31.03.2020.
- On 04.03.2020, mail received from Arbitrator H.C.S. Berry wherein his appointment as Nominee Arbitrator of the respondent APGCL by the President, the Institution of Engineers (India) was intimated. Sri A.K. Mitra has been appointed as nominee Arbitrator of the Claimant M/s SEPL. Both the nominated Arbitrator has unanimously decided to appoint Hon'ble Mr. Justice H.N Sarma (Retd) to act as Presiding Arbitrator.
- On 12.03.2020, Legal Counsel suggested to contest the arbitration case and to attend the proceedings as nominee arbitrator appointed as per terms of contract.
- Also opined to raise counter claim by APGCL and take necessary action for preparation of inventory, BG encashment and float fresh tender for remaining work.
- On 20.03.2020, Legal counsel M/s Associated Law Chamber (ALC) APGCL was appointed to conduct the arbitration on behalf of APGCL.
- On 30.05.2020, Order no. 1 issued by Arbitral Tribunal w.r.t Case no 1/2020 between M/s SEPL and APGCL laying down the modalities for conducting the proceedings and fixing dates for submission of claims, statement of defence, counter claims & rejoinder.
- On 20.06.2020, Claimant M/s SEPL submitted their Statement of Claims wherein total claim amounts to Rs. 64.72 Crores (approx.). On 22.09.2020, Respondent APGCL filed Statement of Defence with counter claim amounting Rs. 136.29 Crores (approx.).



Currently the Arbitral proceeding is ongoing and Respondent APGCL is continuing its arguments which is tentatively scheduled to be concluded on 19.02.2022 thereafter which Claimant shall submit its counter arguments.

- In the 86th Board meeting dated 28/07/2020, APGCL Board resolved to enforce the termination order dated 03/12/2019 because of M/s SEPL's failure to renew the BGs and withdraw arbitration case against APGCL.
- On 12.08.2020, M/s SEPL requested APGCL to withdraw invocation order to SBI Ballygunge and assured to submit renewed BGs till 30.12.2020 vide letter no. SEPL: APGCL: 2020-21.
- A meeting was held on 14.08.2020 between APGCL & M/s SEPL wherein APGCL's conditions for abeyance of termination was laid down.
- On 14.08.2020 M/s SEPL assured to renew the BGs and to complete repair of the generating machines within three months' time vide letter dated 14.08.2020.
- On 18.08.2020 M/s SEPL again requested APGCL to withdraw invocation of BGs and intimate SBI Ballygunge accordingly vide letter dated 18.08.2020.
- Thereafter M/s SEPL requested APGCL several times to allow them to rectify the machines of Stage-I, MSHEP. In the interest of work and public at large, APGCL Board in its 87th Board meeting dated 08.09.2020 vide resolution no. 12A, approved to allow M/s SEPL to rectify the designated machines of Stage-I, MSHEP under certain conditions. Subsequently on submission of renewed BGs and programme chart for rectification of machines, APGCL vide letter dated 01.02.2021, allowed M/s SEPL to start the rectification work of Unit-I & Unit-II, Stage-I MSHEP as per the submitted schedule.
- In the meantime the EPC contractor submitted that he is in need of fund to complete the rectification work of unit-I & II of stage-I and therefore requested to release their Bank Guarantees but the same cannot be done as the Bank Guarantees may be released only after completion of works against the designated machines followed by expiry of defect liability period of 24 months. However as to relieve M/s SEPL from the said financial constraint so as to carry on the balance work against the aforesaid units, APGCL released payment amounting Rs. 1,55,76,354 against 20th Running Bill & Rs. 25,11,040 against 21st Running Bill respectively of supplementary agreement dated 01.12.2014 (for E&M) on 12.02.2021.
- However M/s SEPL vide letter dated 15.02.2021 stated that the payment made by APGCL was a gross violation of the ongoing arbitration process since part settlement, without their consent, of any claim lying with the Hon'ble Arbitral Tribunal without their approval is not permissible. M/s SEPL would treat the amount so remitted as part payment of the encashed amount of BG and would therefore request APGCL to release the balance amount of the same along with BG for Rs. 1,47,87,050.
- A Committee was formed vide office order no. APGCL/CGM(H&C)/W/2018-19/677/Part-I/20 dated 12.03.2021 to examine the issue of BG release. Committee



- suggested obtaining opinion of an independent legal expert whether any administrative action can be taken when arbitration is going on with M/s Sarda Eco Power ltd. on the issues relating to BG & payments of bills.
- Accordingly legal opinion from Hon'ble Mr. Justice B K Sharma, Former Judge, Guwahati High Court was obtained on 30.04.2021 wherein it was opined that "Once the matter is sub-judice before the Arbitration Tribunal, it was not prudent and/or will be prudent to take any administrative decisions relating to the subject matter, that too without any order from the Tribunal. Under Section 17 of the Arbitration and Conciliation Act, 1996, the Arbitral Tribunal is empowered to pass interim orders during the pendency of Arbitration proceeding before it.
- It was also opined that there is no question of releasing the amount pertaining to Performance Bank Guarantee (PBG) at this stage. The PBG can only be released upon issuance of the Last Final Acceptance Certificate, which is issued after the defects liability period, which is 24 months of the completion of works.
- Further the Hon'ble Justice opined not to entertain any request/demand of the contractor at this stage and during the pendency of Arbitration proceeding. There should not be two parallel proceedings, one at the administration level and another before the Arbitral Tribunal.
- M/s SEPL vide letter dated 15.07.2021 informed GM, KLHEP that the machines of Stage-I Unit-I & II are ready after repair but as their BGs were not released, the process has got stalled due to lack of fund and therefore requested to expedite the release of the BGs.
- In reply, GM, KLHEP vide letter dated 17.07.2021, categorically rejected their request for release of BG citing specific clause of the Contract agreement accordingly to which release of the BGs are subject to satisfactory completion of the work, expiry of defect liability period and issue of Last Final Acceptance Certificate and their release at this junction will violate the contract agreement.
- As present M/s SEPL has completed the rectification work against unit 1 & 2 of Stage-I, MSHEP. Both the units have been erected, tested and commissioned on 30.01.2022 for Unit-I and 07.01.2022 for Unit-II, Stage-I, MSHEP.

Annexure – 5: Copies of relevant excerpts from CERC Order

CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 128/2009 with I.A. 53/2009

Coram

- 1. Dr. Pramod Deo, Chairperson
- 2. Shri R.Krishnamoorthy, Member
- 3. Shri S. Jayaraman, Member
- 4. Shri V.S.Verma, Member

DATE OF HEARING: 14.10.2009 DATE OF ORDER: 11.1.2010

In the matter of

Approval of revised fixed charges for the period 2004-09, after considering the impact of additional capital expenditure incurred during 2006-07, 2007-08 and 2008-09 for Korba Super Thermal Power Station, (2100 MW).

And in the matter of

NTPC Ltd, New Delhi

.....Petitioner

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- 1. Madhya Pradesh Power Trading Company Ltd, Jabalpur
- 2. Maharashtra State Electricity Distribution Company Ltd, Mumbai
- 3. Gujarat Urja Vikas Nigam Ltd, Vadodara
- 4. Chhattisgarh State Electricity Board, Raipur
- 5. Electricity Department, Govt. of Goa, Panaji
- 6. Electricity Department, Administration of Daman & Diu, Daman
- 7. Electricity Department, Administration of Dadra & Nagar Haveli, Silvassa

.....Respondents

The following were present:

- Shri V.K.Padha, NTPC
- 2. Shri A.S.Pandey, NTPC
- 3. Shri S.K.Sharma, NTPC
- 4. Shri Deepak Srivastava, MPPTCL
- 5. Shri P.V.Sajeev, CSPDCL

1



Liabilities to meet award of arbitration or for compliance of the order or decree of a court- 18(2) (ii):

- The total claim of Rs. 157.54 lakh by the petitioner is considered as under:
 - (a) The petitioner has claimed an amount of Rs.27.01 lakh, for 2006-07, towards payments made to contractors in respect of award pertaining to arbitration cases adjudged against the petitioner. This amount has been allowed for the purpose of tariff.
 - (b) The petitioner has claimed an amount of Rs.5.30 lakh, for 2007-08, towards payments made in respect of land related arbitration cases adjudged against the petitioner. This amount has been allowed for the purpose of tariff.
 - (c) The petitioner has claimed an amount of Rs.125.23 lakh for 2008-09, towards payments made to contractors in respect of arbitration award relating to civil works for "starter ash dyke" adjudged against the petitioner. This amount has been allowed for the purpose of tariff.
- Summing up, the total claim of Rs.157.54 lakh for the period 2006-09 has been allowed to be capitalized under this head.

On account of change in law [18(2)(iii)]

34. The petitioner has claimed an amount of Rs.94.83 lakh for the year 2006-07, under this head. The asset/works covered relates to the installation of energy meters in township for measuring and monitoring power consumption. As the provisions of the Electricity Act, 2003, mandate the installation and supply of electricity through meters, the expenditure is allowed for the purpose of tariff.

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- 62. The annual fixed charges determined in this order is subject to the outcome of Civil Appeal Nos. 4112-4113/2009 and Civil Appeal Nos. 6286 to 6289/2009 and other connected appeals pending before the Hon'ble Supreme Court.
- 63. Petition No.128/2009 stands disposed of in terms of the above.

Sd/- Sd/- Sd/- Sd/(V.S.VERMA) (S. JAYARAMAN) (R.KRISHNAMOORTHY) (DR.PRAMOD DEO)
MEMBER MEMBER MEMBER CHAIRPERSON

31

CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 120/2009 with Interlocutory Application No.43/2009

Coram: 1. Dr. Pramod Deo, Chairperson

Shri S. Jayaraman, Member
 Shri V.S.Verma, Member

DATE OF HEARING: 25.2.2010 DATE OF ORDER: 21.1.2011

IN THE MATTER OF

Determination of revised fixed charges due to additional capital expenditure incurred during 2006-07, 2007-08 and 2008-09 at National Capital Thermal Power Station, Dadri, Stage-I (840 MW).

AND IN THE MATTER OF

NTPC Ltd, New Delhi

...Petitioner

Vs

- Uttar Pradesh Power Corporation Limited, Lucknow
- Delhi Transco Ltd, New Delhi
- BSES-Rajdhani Power Ltd, New Delhi
- 4. BSES-Yamuna Power Ltd, Delhi
- 5. North Delhi Power Ltd, Delhi

....Respondents

The following were present:

- 1. Shri V.K.Padha, NTPC
- Shri Manoj Saxena, NTPC
- Shri Sameer Agarwal, NTPC
- 4. Shri Manish Garg, UPPCL

ORDER

The petitioner, NTPC has made this application for determination of revised fixed charges due to capital expenditure incurred during the years 2006-07, 2007-08 and 2008-09 for National Capital Thermal Power Station, Dadri, Stage-I (840 MW) (hereinafter referred to as "the generating station") based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004



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Award of arbitration or for compliance of the order or decree of a court [18(2) (ii)]

34. The petitioner has claimed an amount of (-) ₹14.86 lakh for the year 2006-07 in respect of adjustment towards land finally allotted by Government and payment

under arbitration in respect of fire station. As the said expenditure is incurred in

terms of award, the same is allowed, under this head.

The petitioner's claim for expenditure of ₹75.48 lakh for the year 2007-08.

towards payment in terms of Arbitration Award in respect of assets like carpeting

road, railway siding, siding mgr, AHP pkg., fire proof cabling is allowed under this

head.

Additional works/services necessary for efficient and successful operation of the

generating station, but not included in the original project cost {Regulation 18 (2)(iv)}

36. The petitioner has claimed expenditure of ₹390.02 lakh and ₹1104.11 lakh for

the years 2006-07 and 2007-08 respectively, under this head. The petitioners claim is

in respect of assets like "Muradnagar assets & land, supply/installation of microwave

link, jaws for windows talking software for blinds, people soft HRMS, up-gradation of

GDAMS" for the year 2006-07 and on assets like "de-capitalization of 2 nos. H-type &

3 semi-storage sheds, supply & commissioning of energy monitoring system, heating

ventilation and air-conditioning system of administration building auditorium,

generator transformer supply and erection, multitech make MVP-410 -supply, CCTV

with DVR, CCTV systems, fibre network NCPS hospital supply erection/testing /

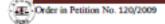
communication fibre network - supply/erection" for the year 2007-08.

The petitioner was directed to clarify the claim for an amount of ₹363.91 lakh.

in respect of Muradnagar assets & land for the year 2006-07. The petitioner has

clarified that these assets were used to cater the co-ordination activities of many

generating stations of the petitioner. Thus, it is evident from the petitioner's



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- 65. The petitioner's claim for reimbursement of filing fees is not allowed in terms of the Commission's general order dated 11.9.2008 in Petition No.129/2005 wherein it was directed that filing fee during the period 2004-09 would not be reimbursed, as the same has been factored in the normalized O&M expenses under the 2004 regulations.
- 66. This order is however subject to the final outcome of the said Civil Appeals pending before the Hon'ble Supreme Court of India.
- Petition No.120/2009 along with interlocutory application 43/2009 stands disposed of in terms of the above.

Sd/-(V.S.VERMA) MEMBER Sd/-(S.JAYARAMAN) MEMBER Sd/-(DR.PRAMOD DEO) CHAIRPERSON



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CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 310/GT/2018

Coram:

Shri P.K.Pujari, Chairperson Dr. M.K. Iyer, Member

Date of Order: 9th April, 2019

In the matter of

Revision of annual fixed charges of Nathpa Jhakri Hydro Power Station (1500 MW) for the period from 1.4.2004 to 31.3.2009

And

In the matter of

SJVN Limited SJVN Corporate Office Complex, Shanan, Shimla-171006, Himachal Pradesh

.....Petitioner

٧s

- Punjab State Power Corporation Ltd. The Mall, Patiala - 147001
- Haryana Power Purchase Centre, Shakti Bhawan, Sector VI, Panchkula - 134019,
- 3. Delhi Transco Ltd, Shakthi Sadan, Kotla Road New Delhi -110002
- Tata Power Delhi Distribution Ltd.
 KV Sub-station, Hudson Lines,
 Kingsway Camp, Delhi 110009
- BSES Rajdhani Power Ltd.
 2nd Floor, B Block, Nehru Place, New Delhi 110019
- BSES Yamuna Power Limited Shakti Kiran Building, Karkardooma, Delhi- 110032
- Ajmer Vidyut Vitran Nigam Ltd.
 Old Power House, Hathi Bhata,
 Jaipur Road, Ajmer

Order in Petition No. 310/GT/2018

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accounting policy, but the same is being claimed as a part of capital cost for purpose of tariff.

22. We have considered the submissions. The Petitioner has furnished copy of the agreement and proof of payment of amounts towards Arbitral award in support of their claim. The Petitioner has also shown the treatment of the same expenditure in the books. In terms of Regulation 34 of the 2004 Tariff Regulations, the Liabilities to meet award of arbitration or in compliance of the order or decree of a court' is permitted for capitalization, before and after cut-off date. In terms of this, the amount which form part of the arbitral award, as claimed by the Petitioner, is allowed for the purpose of tariff.

FERV

23. In the instant petition, the Petitioner has revised FERVs to be adjusted from gross blocks at various relevant dates. The final position vis-a-vis earlier position submitted in petition no.20/2008, is as follows:

(₹ in lakh)

							(ar rainy
	6.5.2004	18.5.2004	31.3.2005	2005-06	2006-07	2007-08	2008-09
FERV proposed to	590	1264	2659	1092	3112	3112	4025
be reduced from							
gross block							
considered in							
the instant							
petition							
FERV proposed to	435	1021	2415	3982	6002	6002	6002
be reduced from							
gross block							
already							
considered in							
Order dated							
31.12.2008 in							
Petition No.							
20/2008							
Differential FERV	155	243	243	(-) 2890	(-) 2890	(-) 2890	(-) 1977
claimed		2		() 20/0	(, 20,0	() 2010	()

Order in Petition No. 310/GT/2018

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- 77. The Petitioner's claim for reimbursement of filing fees is not allowed in terms of the Commission's general order dated 11.9.2008 in Petition No. 129/2005.
- 78. There is reduction in tariff of the generating station for the period 2004-09 as determined above. The tariff recovered from the respondents in accordance with the earlier orders of this Commission shall be adjusted in light of the final tariff now approved by us.
- 79. This order disposes of Petition No. 310/GT/2018.

sd/-(Dr. M.K. lyer) Member sd/-(P.K. Pujari) Chairperson

Order in Petition No. 310/GT/2018



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Annexure – 6: Copies of Certificate towards Grant & Loan conversion to Equity

FINANCIAL SANCTION



Financial Sanction



Power (Electricity) Department

Sanction Date: 31-12-2021 Sanction No: FS/42_2021-22(I)_05

To,

Accountant General (A&E) Assam, Maidamgaon, Beltola, Guwahati-29

PURPOSE/SCHEME Conversion of Govt. of Assam Loan to APGCL into Equity (as on 31.03.2021) Book Adjustment only

Proposal No.: FS-42-2021-22-00005 Administrative Approval : Not Applicable Dept. File No: PEL.57/2021/Pt-II

Finandal Year: 2021-22

Finance Concurrence No:-N/A-

Sanctioned to: DIS/SAD/001, SA(Accounts)Dept. Sanctioned by: F R LASKAR, JT SECRETARY HOA: 4801-80-190-2062-501-20-99-SOPD-ODS-V-GA

Issued under DFP Rules:

Financial Sanction of the competent authority is hereby accorded for an amount not exceeding Rs.64799.25000 Lakhs (Rupees Six Hundred and Forty Seven Crore Ninety Nine Lakh Twenty Five Thousand only) towards the payment subject to the following terms and conditions:

TERMS & CONDITIONS

- All norms in Assam Financial Rules, AFRBM Act 2005, CVC Guidelines, Assam Public Procurement Act 2017, Assam
 Public Procurement Rules 2021 and similar directives from Finance Department Issued from time to time is to be strictly
- The admissible deductions can be deducted and deposited into the Govt. Account by the Concerned Authority as per ruler Govt. Instructions.
- 3. Work to be completed within the estimated cost in all respect without involving cost and time over run.

BENEFICIARY DETAILS

#	Name	Account Number	Amount (In Lakha)	Remarks
1	ASSAM POWER GENERATION CORPORATION LIMITED	10566984166	64799.25000	BOOK ADJUSTMENT ONLY

COPY FORWARDED TO

- 1. The Accountant General (A&E) Assam, Maldamgaon, Beltola, Guwahati-29.
- 2. The Accountant General (Audit), Assam, Maldamgaon, Guwahati-29
- 3. The Power (Electricity) Department, Assam.
- 4. Finance (EC-I/II/III) Dept.
- 5. Finance (Budget) Dept.
- SA(Accounts)Dept.
- 7. Treasury Officer, Dispur

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FINANCIAL SANCTION



Financial Sanction



Power (Electricity) Department

Sanction Date: 31-12-2021 Sanction No: FS/42_2021-22(I)_06

Accountant General (A&E) Assam, Maidamgaon, Beltola, Guwahati-29

PURPOSE/SCHEME Conversion of Govt. of Assam Grants to APGCL into Equity (as on 31.03.2021) Book Adjustment only.

Proposal No.: FS-42-2021-22-00006 Administrative Approval : Not Applicable

Dept. File No : PEL.57/2021/Pt-II Finandal Year: 2021-22

Finance Concurrence No:-N/A-

Sanctioned to : DIS/SAD/001 , SA(Accounts)Dept. Sanctioned by: F R LASKAR, JT SECRETARY HOA: 4801-80-190-2062-501-20-99-SOPD-ODS-V-GA

Issued under DFP Rules:

Financial Sanction of the competent authority is hereby accorded for an amount not exceeding Rs.132486.07000 Lakhs (Rupees One Thousand Three Hundred and Twenty Four Crore Eighty Six Lakh Seven Thousand only) towards the payment subject to the following terms and conditions:

TERMS & CONDITIONS

- All norms in Assam Financial Rules, AFRBM Act 2005, CVC Guidelines, Assam Public Procurement Act 2017, Assam Public Procurement Rules 2021 and similar directives from Finance Department Issued from time to time is to be strictly followed invariably.
- The admissible deductions can be deducted and deposited into the Govt. Account by the Concerned Authority as per rule/ Govt. Instructions.
- 3. Work to be completed within the estimated cost in all respect without involving cost and time over run.

BENEFICIARY DETAILS

#		Name	Account Number	Amount (In Lakha)	Remarks	
	1	ASSAM POWER GENERATION CORPORATION LIMITED	10566984166	132486.07000	Book Adjustment Only	

COPY FORWARDED TO

- The Accountant General (A&E) Assam, Maldamgaon, Beltola, Guwahati-29.
- 2. The Accountant General (Audit), Assam, Maldamgaon, Guwahati-29
- 3. The Power (Electricity) Department, Assam.
- 4. Finance (EC-I/II/III) Dept.
- 5. Finance (Budget) Dept.
- SA(Accounts)Dept.
- 7. Treasury Officer, Dispur

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