

Arunachal Pradesh State Electricity Regulatory Commission

Itanagar

Petition No. TP- 05 of 2026 (Suo-Motu)

Coram:

Shri R. K. Joshi, Chairperson

Shri Nich Rika, Member (Law)

Date of Order: 31.03.2026

IN THE MATTER OF

Determination of levelled generic tariff for the Small Hydro Projects up to one MW for FY 2026-27 under Regulation 7 of the Arunachal Pradesh State Electricity Regulatory Commission (Terms and Conditions for Determination from Renewable Energy Tariff) Regulations, 2024.

ORDER

The Commission has issued the Arunachal Pradesh State Electricity Regulatory Commission (Terms and Conditions for Determination from Renewable Energy Tariff) Regulations, 2024, on 11.03.2024 (hereinafter referred to as "the RE Tariff Regulations"), which provide for terms and conditions and the procedure for determination of tariff for the following categories of Renewable Energy (RE) generating stations:

- a) Wind Power Project;
- b) Small Hydro Projects;
- c) Solar PV Power Project;
- d) Biogas based Power Project;
- e) Municipal Solid Waste based Power Projects;
- f) Renewable hybrid energy Project;

- g) Renewable Energy with Storage Project; and
- h) Any other renewable energy technology as approved by MNRE.

2. As per Regulation 7 of the RE Tariff Regulations, the Commission shall determine the generic tariff on annual basis in accordance with norms specified in the RE Tariff Regulations for the Small Hydro Projects up to 1 MW capacity and Biogas based power projects.

3. The Commission, in due discharge of the mandate under Regulation 7 of the RE Tariff Regulations, is required to determine the generic tariff of the RE projects for the third year of the control period. Accordingly, for this purpose, the Commission hereby determines the generic tariff of the Small Hydro Projects below 500 kW and from 500 kW to 1 MW for the FY 2026-27 through this order, in accordance with the provisions of the RE Tariff Regulations, as detailed in the **Annexures**.

4. As per Regulation 24 of the RE Tariff Regulations, the incentive, grant or subsidy, if any, received by the project developer will be deducted by the Commission while determining the tariff of the power generated from the renewable energy power sources. In this order we have determined levelised generic tariff for Small Hydro Projects below 500 kW and 500 kW to 1 MW in two scenarios of 100% incentive/subsidy or nil incentive/subsidy received from the Central or State Government. Therefore, the levelised generic tariff approved in this order shall not be applicable to the Small Hydro Projects below 500 kW and 500 kW to 1 MW which are partially funded by incentive, grant or subsidy before its commissioning or after its commissioning. In such cases, the project developer shall file a petition along with the details of incentive, grant or subsidy received from the Central or State government for approval of tariff by deducting the incentive, grant or subsidy received as specified in Regulation 24 of the RE Tariff Regulations.

5. The levellised generic tariff approved for Small Hydro Projects below 500 kW and 500 kW to 1 MW, which have not received any incentive, grant or subsidy is as follows and the details are shown in **Annexure 1A and 1B**.

Particular	Levellised Tariff (₹/kWh)
Below 500 kW	7.14
From 500 kW- Below 1 MW	5.97

The levellised generic tariff approved for Small Hydro Projects below 500 kW and 500 kW to 1 MW, which have been 100% funded by the incentive, grant or subsidy received from the Central or State Government is as follows and the details are shown in **Annexure 2A and 2B**.

Particular	Levellised Tariff (₹/kWh)
Below 500 kW	2.53
From 500 kW- Below 1 MW	1.90

Ordered Accordingly.

**S/d-
Nich Rika
Member**

**S/d-
R. K. Joshi
Chairperson**

Date: 31/03/2026

Place: Itanagar

Annexure

APPROVAL OF LEVELLISED GENERIC TARIFF FOR SMALL HYDRO POWER PROJECT

Levellised generic tariff for Small Hydro Projects below 500 kW and from 500 kW to 1 MW is approved in accordance with the RE Tariff Regulations as discussed below.

USEFUL LIFE

2. The “useful life” of the Small Hydro Projects below 500 kW and from 500 kW to 1 MW including the evacuation system as per Clause (xxxii) of Regulation 2.1 of the RE Tariff Regulations, as amended on 16.5.2024 is 40 years from the date of commercial operation (COD) of such Small Hydro Projects.

CONTROL PERIOD

3. As per Regulation 5 of the RE Tariff Regulations the control period for determination of tariff for renewable energy projects (RE projects) shall be three years (2024-27) of which the first year of the control period is FY 2024-25, the second year of the control period is FY 2025-26 and the third year of the control period is FY 2026-27. As per the first proviso to the said regulation, the tariff determined for the RE projects commissioned during the control period shall continue to be applicable for the entire duration of the tariff period as specified in Regulation 6 of the RE Tariff Regulations.

Accordingly, the tariff determined for the projects commissioned during the third year of the control period shall be in accordance to this order.

TARIFF STRUCTURE

4. The Regulation 11 of the RE Tariff Regulations stipulates that the tariff for RE projects shall be single part tariff consisting of the following fixed cost components:

- a) Return on equity;
- b) Interest on loan capital;
- c) Depreciation;
- d) Interest on working capital;
- e) Operation and maintenance expenses;

For Renewable Energy technologies like municipal solid waste, biogas power projects having fuel cost component, single-part tariff with two components i.e. fixed cost component and fuel cost component, is to be determined

TARIFF DESIGN

5. The Regulation 12 of the RE Tariff Regulations outlines the principles for tariff design for RE generating stations as follows:

“12.1 The generic tariff shall be determined considering the year of commissioning of the project, on levelised basis for the Tariff Period:

Provided that for Renewable Energy technologies having single-part tariff with two components, tariff shall be determined on levelised basis considering the year of commissioning of the project for fixed cost component while the fuel cost component shall be determined on the basis of year of operation (i.e. financial year wise). The fuel cost for each financial year shall be applicable for all projects operational during the year, irrespective of its date of commissioning.

12.2 For the purpose of levelised tariff computation, the discount factor equivalent to Post Tax weighted average cost of capital shall be considered and Levelization shall be carried out for the ‘useful life’ of the Renewable Energy project.

12.3 The above principles shall also apply for project specific tariff.”

LEVELLISED TARIFF

6. As per Regulation 12.1 of the RE Tariff Regulations generic tariff shall be determined considering the year of commissioning of the project on levelised basis for the tariff period, which is 40 years in case of the Small Hydro Projects. The levelised tariff is calculated by carrying out levelisation for 'useful life' of each technology considering the discount factor for time value of money.

DISCOUNT FACTOR

7. The discount factor is calculated as provided in Regulations 12(2) of the RE Tariff Regulations for the purpose of levelised tariff computation. Accordingly, the discount factor considered for this exercise is equal to the post tax weighted average cost of capital on the basis of normative debt: equity ratio (70:30) specified in the Regulations. Considering the normative debt equity ratio and weighted average of the post-tax rates for debt and equity component, the discount factor is calculated.

8. Interest Rate considered for the loan component (i.e.,70% of capital cost) is 10.73%. For equity component (i.e.,30% of capital cost), the rate of Return on Equity (ROE) is considered for Small Hydro Projects is considered at post-tax 14.5%. Further, Corporate tax rate has been considered as 34.16%. Accordingly, the discount factor derived by this method for Small Hydro Projects is 9.23% [{{(10.73% (Interest Rate) x 0.70 (Debt)) x (1 – 34.94% (income tax rate))} + (14.5 % (normative ROE rate) x 0.30 (ROE))}].

(Income tax rate @ 34.94% (30% IT rate+ 12% surcharge on IT rate +4% Health and Education cess on IT rate and surcharge).

CAPITAL COST

9. The Regulation 14 of the RE Tariff Regulations defines the capital cost of the RE Projects as follows:

“14. Capital Cost

Norms for capital cost, as specified in relevant chapters of these regulations, shall be inclusive of land cost, pre-development expenses, all capital work including plant & machinery, civil work, erection, commissioning, financing cost, interest during construction, and evacuation infrastructure up to inter-connection point.”

10. In case of the Small Hydro Projects, the Commission has specified the normative capital cost for the Small Hydro Projects applicable for the first year of control period i.e. FY 2024-25 in Regulation 26 of the RE Tariff Regulations. Further, the capital cost specified for the first year of control period will remain valid for the entire duration of the control period unless reviewed earlier by the Commission. The Regulation 26 of the RE Tariff Regulations provides as follows:

“26. Capital Cost

The normative capital cost for small hydro projects during first year of Control Period (FY2024-25) shall be as follows:

Region	Project Size	Capital Cost (₹ Lakh /MW)
Arunachal Pradesh	Below 500 kW	1400
	500 kW to 1 MW	1236

The capital cost for small hydro projects as specified for first year of the Control Period shall remain valid for the entire duration of the Control Period unless reviewed earlier by the Commission.”

11. Accordingly, for third year of the control period, we have considered the capital cost of Rs.1400/MW and Rs.1236/MW for working out the levelised generic tariff for Small Hydro Projects below 500 kW and from 500 kW to 1 MW respectively, in accordance with financial principles laid down in Chapter-3 and the regulations specified in respect of Small Hydro Projects in Chapter-4 of the RE Tariff Regulations.

DEBT-EQUITY RATIO

12. As per Regulation 15 of the RE Tariff Regulations the debt-equity-ratio of 70:30 is to be considered for determination of tariff for RE Projects including the Small Hydro Projects. The Regulation 15 of the RE Tariff Regulations provides as follows:

“15. Debt Equity Ratio

15.1 For determination of generic tariff and project specific tariff, the debt equity ratio shall be considered as 70:30:

Provided that, for project specific tariff, where the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan;

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

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

Provided also that debt equity ratio shall be considered after deducting the amount of grant or capital subsidy received for the project for arriving at the amount of debt and equity.

Explanation-The premium, if any, raised by the generating company, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid-up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the renewable energy project.

15.2 The project developer shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the renewable energy project.”

13. Based on the debt equity ratio of 70:30, the debt and equity components of the normative capital cost for determination of tariff for the Small Hydro Projects have been worked out as follows:

	(₹ in lakh)	
Small Hydro Projects	Debt	Equity
Below 500 kW	980	420
from 500 kW- Below 1 MW	865	370

RETURN ON EQUITY (ROE)

14. As regards the rate of ROE, sub-regulation (2) of Regulation 18 of the RE Tariff Regulations, specifies as follows:

“18. Return on Equity

18.2. The normative Return on Equity shall be 14% and that for small hydro project is 14.5%. The normative Return on Equity shall be grossed up by the latest available notified Minimum Alternate Tax (MAT) rate for the first 20 years of the Tariff Period and by the latest available notified Corporate Tax rate for the remaining Tariff Period.”

15. For computation of rate of ROE, MAT Rate of 17.47% and Corporate Tax rate of 34.94% has been considered. Accordingly, rate of ROE for Small Hydro Projects has been computed as 17.57% for first 20 years and 22.29% after 20 years.

INTEREST ON LOAN

16. As per Regulation 16 of the RE Regulations, the loan tenure of 15 years is considered for the purpose of determination of generic tariff for RE projects. Further, Regulation 16.2 of the said Regulation provides for computation of interest on loan. Regulation 16 of the RE Tariff Regulations provides as follows:

“16.1 Loan Tenure

For determination of generic tariff and project specific tariff, loan tenure of 15 years shall be considered.

16.2 Interest on Loan

- i. The loans arrived at in the manner indicated in Regulation 12 shall be considered as gross normative loan for calculation for interest on loan. For project specific tariff, the normative loan outstanding as on 1st of April of every year shall be worked out by deducting the cumulative repayment up to 31st March of previous year from the gross normative loan.*
- ii. For the purpose of computation of tariff, 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 shall be considered.*
- iii. Notwithstanding any moratorium period availed by project developer, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.”*

17. As specified in Regulation 16.2 of the RE Tariff Regulations, the MCLR of one-year tenor of the last available six months of State Bank of India has been considered for arriving at the average MCLR as shown below.

Month	1 Year Tenor MCLR Rates (Source: SBI Monthly Press Releases)
15/01/2026 -15/02/2026	8.7%
15/12/2025 -15/01/2026	8.7%
15/11/2025 -15/12/2025	8.7%
15/10/2024 -15/11/2025	8.75%
15/09/2024 -15/10/2024	8.75%
15/08/2024 -15/09/2024	8.75%
Avg. for last Available 6 months	8.73%

Source: <https://www.sbi.co.in/web/interest-rates/interest-rates/mclr-historical-data>

18. Accordingly, considering the average MCLR of 8.73%, interest rate for loan component has been determined as 10.73 % in accordance to sub-regulation (ii) of Regulation 16.2 of the RE Regulations.

DEPRECIATION

19. Regulation 17 of the RE Tariff Regulations provides for computation of depreciation and it is as follows:

“17. Depreciation

17.1 *The value base for the purpose of depreciation shall be the capital cost of the project admitted by the Commission. The salvage value of the project shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the project:*

17.2 *Depreciation rate of 4.67% per annum shall be considered for the first 15 years and remaining depreciation shall be evenly spread during remaining Useful Life of the project.*

17.3 *Depreciation shall be computed from the first year of commercial operation:*

Provided that, for determination of project specific tariff, in case of commercial operation of the project for part of the year, depreciation shall be computed on pro-rata basis.

Provided that, no depreciation shall be allowed to the extent of grant or capital subsidy received for the project.”

20. In accordance with the above, the rate of depreciation for the first 15 years has been considered as 4.67% and the rate of depreciation from the 16th year onwards has been spread over the balance useful life of the RE project as follows:

Details	Small Hydro Projects
Useful Life (in years)	40
Rate of depreciation for 15 years (%)	4.67%
Rate of depreciation after first 15 years (%)	0.80

OPERATION AND MAINTENANCE EXPENSES (O&M Expenses)

21. The Regulation 21 of the RE Tariff Regulations provides for the O&M Expenses in respect of RE projects, including the Small Hydro Projects and it is as follows:

"21. Operation and Maintenance Expenses

21.1 Operation and Maintenance expenses shall be determined for the Tariff Period of the project based on normative O&M expenses specified in these regulations for the first year of the Control Period.

21.2 Normative O&M expenses allowed during first year of the Control Period under these regulations shall be escalated at the rate of 5.89% per annum for the Tariff Period".

22. The Regulation 29 of the RE Tariff Regulations provides for the following normative O&M Expenses for Small Hydro Projects below 500 kW and 500 kW to 1 MW:

"29. Operation and Maintenance Expenses

29.1 The normative O&M Expenses for the first year of the Control Period, shall be as given below

Region	Project Size	O&M expenses (₹ lakh /MW)
Arunachal Pradesh	Below 500 kW	41.78
	500 kW to 1 MW	31.34

29.2 Normative O&M expenses allowed under these Regulations shall be escalated at the rate of 5.89% per annum for the Tariff Period for the purpose of determination of levelled tariff.”

23. Accordingly, the O&M Expenses of ₹46.85 lakh/MW and ₹35.14 lakh/MW are approved for the Small Hydro Projects below 500 kW and from 500 kW to 1 MW respectively for the third year of the control period, which has been escalated at the rate of 5.89% per for the tariff period of 40 years for the purpose of determination of the levelled tariff.

INTEREST ON WORKING CAPITAL (IWC)

24. Regulation 19.1 of the RE Tariff Regulations provides for the working capital requirements of the Small Hydro Projects, besides other RE projects and it as follows:

“19. Interest on Working Capital

19.1 The Working Capital requirement in respect of wind power projects, small hydro projects, solar PV power projects, solar wind hybrid projects shall be computed in accordance with the following:

- a) Operation and Maintenance expenses for one month;
- b) Receivables equivalent to 45 days of tariff for sale of electricity calculated on normative Capacity Utilization Factor or Plant Load Factor, as the case may be; and
- c) Maintenance spares equivalent to 15% of Operation and Maintenance expenses.”

25. The O&M Expenses of one month, maintenance spares equivalent to 15% of the O&M Expenses and receivables equivalent to 45 days of actual fixed cost have been considered for computation of the IWC as provided in Regulation 19.1 of the RE Tariff Regulations. Interest rate has been computed as average of State Bank of India MCLR (One Year Tenor) prevalent during the last available six months plus 325 basis points (equivalent to interest rate of 11.98 %). The IWC has been worked out as specified below:

Details	Small Hydro Projects
O&M Expenses	1 month
Maintenance spares	15 % of O&M Expenses
Receivables	45 Days
Interest On Working Capital (%)	11.98 %

CALCULATION OF CAPACITY UTILIZATION FACTOR (CUF)/ PLANT LOAD FACTOR (PLF)

26. Regulation 20 of the RE Tariff Regulations specifies the number of hours for calculation of CUF/PLF as 8766 and it is follows:

“20. Calculation of capacity utilization factor and plant load factor:

The number of hours in a year for calculation of capacity utilization factor and plant load factor, as the case may be, shall be considered as 8766.”

27. Further, as per Regulation 27 of the RE Tariff Regulations, the CUF of the Small Hydro generating stations as 45%. Accordingly, we have considered the CUF of 45% for computation of the levelised generic tariff for the tariff period of 40 years for the Small Hydro Projects below 500 kW and from 500 kW to 1 MW in this order.

AUXILIARY POWER CONSUMPTION (APC)

28. As per Regulation 28 of the RE Tariff Regulations, the normative APC for small Hydro Projects shall be 1%. Accordingly, we have considered APC of 1% for computation of the levelised generic tariff for the tariff period of 40 years for the Small Hydro Projects below 500 kW and from 500 kW to 1 MW in this order.

29. As per the Arunachal Pradesh Small Hydro Power Policy 2007, a project developer shall pay 1 (one) paise per unit of power sold during every financial year

to the State Government for raising local area development fund effected by the project(s).

30. The generic tariff approved for the Small Hydro Projects below 500 kW and from 500 kW to 1 MW for the financial year 2026-27 in the light of the above discussion is as follows:

GENERIC TARIFF FOR SMALL HYDRO PROJECTS

For projects which have not received any incentive, grant or subsidy

Particular	Levelling Tariff (₹/kWh)
Below 500 kW	7.14
From 500 kW- Below 1 MW	5.97

For projects which are funded by 100% incentive, grant or subsidy received from the State or Central Government

Particular	Levelling Tariff (₹/kWh)
Below 500 kW	2.53
From 500 kW- Below 1 MW	1.90

31. The detailed computations for the generic tariff for Small Hydro Power project have been enclosed herewith as per the details given hereunder

Sl. No	Small Hydro Power Projects	Annexure
<u>For projects which have not received incentive, grant or subsidy</u>		
1	Below 500 kW	Annexure 1A
2	From 500 kW- Below 1 MW	Annexure 1B
<u>For projects which are 100% funded by the incentive, grant or subsidy received from the State or Central Government</u>		
1	Below 500 kW	Annexure 2A
2	From 500 kW- Below 1 MW	Annexure 2B

Small Hydro Projects					Annexure 1A
Small Hydro: Assumptions Parameters					
S. No.	Assumption Head	Sub-Head	Sub-Head (2)	Unit	Arunachal Pradesh
Below 500 kW					
1			Installed Power Generation Capacity	MW	1
			Capacity Utilization Factor	%	45%
			Auxiliary Consumption	%	1%
			Useful Life	Years	40
2	Project Cost	Capital Cost/MW	Power Plant Cost	Rs Lacs/MW	1400.00
			Capital Subsidy (if any)		
			Net Capital Cost		1400.00
3	Period		Tariff Period	Years	40
4	Sources of Fund	Debt: Equity	Debt	%	70%
			Equity	%	30%
			Total Debt Amount	Rs Lacs	980.00
			Total Equity Amount	Rs Lacs	420.00
		Debt Component	Loan Amount	Rs Lacs	980.00
			Moratorium Period	years	0
			Repayment Period (including Moratorium)	years	15
			Interest Rate	%	10.73%
		Equity Component	Equity amount	Rs Lacs	420.00
			Return on Equity (upto 20 years)	% p.a.	17.57%
			Return on Equity (after 20 years)	% p.a.	22.29%
Discount Rate (equ. To WACC)			9.23%		
5	Financial Assumptions	Fiscal Assumptions	Mat Rate	%	17.47%
			Income Tax	%	34.94%
		Depreciation	Allowed Depreciation	%	90%
			Depreciation Rate for first 15 years	%	4.67%
			Depreciation Rate 16th year onwards	%	0.80%
6	Working Capital	For Fixed Charges			
		O&M Charges	Months	1	
		Maintenance Spare (% of O&M expenses)		15%	
		Receivables for Debtors	Months	1.50	
		Interest On Working Capital	%	11.98%	
7	Operation & Maintenance				
		O&M Expenses (2026-27)	Rs Lacs	46.85	
		Total O & M Expenses Escalation	%	5.89%	
8	Generation and Sale Of Energy				
		Total No. of Hours	Hrs	8766	

Small Hydro Projects					Annexure 1B	
Small Hydro: Assumptions Parameters						
S. No.	Assumption Head	Sub-Head	Sub-Head (2)	Unit	Arunachal Pradesh	
					500 kW - Below 1MW	
1			Installed Power Generation Capacity	MW	1	
			Capacity Utilization Factor	%	45%	
			Auxiliary Consumption	%	1%	
			Useful Life	Years	40	
2	Project Cost	Capital Cost/MW	Power Plant Cost	Rs Lacs/MW	1236.00	
			Capital Subsidy (if any)			
			Net Capital Cost		1236.00	
3	Period		Tariff Period	Years	40	
4	Sources of Fund	Debt: Equity				
			Debt	%	70%	
			Equity	%	30%	
			Total Debt Amount	Rs Lacs	865.20	
			Total Equity Amount	Rs Lacs	370.80	
		Debt Component				
			Loan Amount	Rs Lacs	865.20	
			Moratorium Period	years	0	
			Repayment Period (including Moratorium)	years	15	
					Intrest Rate	%
Equity Component						
	Equity amount	Rs Lacs	370.80			
	Return on Equity (upto 20 years)	% p.a.	17.57%			
	Return on Equity (after 20 years)	% p.a.	22.29%			
			Discount Rate (equ. To WACC)		9.23%	
5	Financial Assumptions	Fiscal Assmptions	Mat Rate	%	17.47%	
			Income Tax	%	34.94%	
		Depreciation				
			Allowed Depreciation	%	90%	
			Depreciation Rate for first 15 years	%	4.67%	
			Depreciation Rate 16th year onwards	%	0.80%	
6	Working Capital	For Fixed Charges				
		O&M Charges		Months	1	
		Maintenance Spare	(% of O&M exepenses)			15%
		Receivables for Debtors		Months	1.50	
		Intrest On Working Capital		%	11.98%	
7	Operation & Maintenance					
		O&M Expenses (2026-27)		Rs Lacs	35.14	
			Total O & M Expenses Escalation	%	5.89%	
8	Generation and Sale Of Energy					
		Total No. of Hours		Hrs	8766	

[Signature]
Secretary

Small Hydro Projects					Annexure 2A	
Small Hydro: Assumptions Parameters						
S. No.	Assumption Head	Sub-Head	Sub-Head (2)	Unit	Arunachal Pradesh	
					Below 500 kW	
1			Installed Power Generation Capacity	MW	1	
			Capacity Utilization Factor	%	45%	
			Auxiliary Consumption	%	1%	
			Useful Life	Years	40	
2	Project Cost	Capital Cost/MW	Power Plant Cost	Rs Lacs/MW	1400.00	
			Capital Subsidy (if any)		1400.00	
			Net Capital Cost		0.00	
3	Period		Tariff Period	Years	40	
4	Sources of Fund	Debt: Equity	Debt	%	70%	
			Equity	%	30%	
			Total Debt Amount	Rs Lacs	0.00	
			Total Equity Amount	Rs Lacs	0.00	
		Debt Component	Loan Amount	Rs Lacs	0.00	
			Moratorium Period	years	0	
			Repayment Period (including Moratorium)	years	15	
			Interest Rate	%	10.73%	
		Equity Component	Equity amount	Rs Lacs	0.00	
			Return on Equity (upto 20 years)	% p.a.	17.57%	
			Return on Equity (after 20 years)	% p.a.	22.29%	
Discount Rate (equ. To WACC)			9.23%			
5	Financial Assumptions	Fiscal Assmptions	Mat Rate	%	17.47%	
			Income Tax	%	34.94%	
		Depreciation	Allowed Depreciation	%	90%	
			Depreciation Rate for first 15 years	%	4.67%	
			Depreciation Rate 16th year onwards	%	0.80%	
6	Working Capital	For Fixed Charges				
		O&M Charges		Months	1	
		Maintenance Spare	(% of O&M exepenses)			15%
		Receivables for Debtors		Months	1.50	
		Intrest On Working Capital		%	11.98%	
7	Operation & Maintenance	O&M Expenses (2026-27)		Rs Lacs	46.85	
		Total O & M Expenses Escalation		%	5.89%	
8	Generation and Sale Of Energy			Hrs	8766	
		Total No. of Hours				

RETariff (SHP)		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40						
Units Generation	Unit	Year																																													
Installed Capacity	MW	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	1	1	1	1	1	1	1	1	1		
Gross Generation	MU	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94	3.94		
Auxiliary Consumption	MU	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04		
Net Generation	MU	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	3.91	
Fixed Cost	Unit	Year																																													
Capex	Rs Lakh	46.85	49.61	52.53	55.62	58.90	62.37	66.04	69.93	74.05	78.41	83.03	87.92	93.10	98.58	104.39	110.54	117.05	123.94	131.24	138.97	147.16	155.82	165.00	174.72	185.01	195.91	207.45	219.67	232.50	246.30	260.81	276.17	292.44	309.66	327.90	347.22	367.67	389.32	412.26	436.54						
Depreciation	Rs Lakh	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Interest on term loan	Rs Lakh	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Interest on working Capital	Rs Lakh	2.04	2.16	2.29	2.42	2.57	2.72	2.88	3.05	3.23	3.42	3.62	3.83	4.06	4.29	4.55	4.82	5.10	5.40	5.72	6.05	6.41	6.79	7.19	7.61	8.05	8.53	9.04	9.57	10.13	10.73	11.36	12.03	12.74	13.49	14.28	15.13	16.02	16.96	17.96	19.02						
Return on Equity	Rs Lakh	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Total Fixed Cost	Rs Lakh	48.89	51.77	54.82	58.04	61.46	65.08	68.92	72.98	77.27	81.83	86.65	91.75	97.15	102.88	108.93	115.35	122.15	129.34	136.96	145.02	153.57	162.61	172.19	182.33	193.07	204.44	216.48	229.23	242.74	257.09	272.17	288.20	305.18	323.15	342.19	362.34	383.69	406.28	430.21	455.55						
Per Unit Cost of Generation	Unit	Year																																													
Capex	Rs/kWh	1.20	1.27	1.35	1.42	1.51	1.60	1.69	1.79	1.90	2.01	2.13	2.25	2.38	2.52	2.67	2.83	3.00	3.17	3.36	3.56	3.77	3.99	4.23	4.47	4.74	5.02	5.31	5.62	5.96	6.31	6.68	7.07	7.49	7.93	8.40	8.89	9.41	9.97	10.56	11.18						
Depreciation	Rs/kWh	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Int. on term loan	Rs/kWh	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Int. on working capital	Rs/kWh	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.08	0.08	0.09	0.10	0.10	0.11	0.12	0.12	0.13	0.14	0.15	0.16	0.16	0.17	0.18	0.19	0.21	0.22	0.23	0.25	0.26	0.27	0.29	0.31	0.33	0.35	0.37	0.39	0.41	0.43	0.46	0.49							
RoE	Rs/kWh	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Total COG	Rs/kWh	1.25	1.33	1.40	1.48	1.57	1.67	1.76	1.87	1.96	2.10	2.22	2.35	2.49	2.65	2.82	2.99	3.17	3.37	3.57	3.77	3.99	4.16	4.41	4.67	4.94	5.24	5.54	5.87	6.22	6.59	6.97	7.38	7.81	8.27	8.76	9.28	9.80	10.40	11.02	11.63						
Discount Factor		1.000	0.915	0.838	0.767	0.702	0.643	0.589	0.539	0.493	0.452	0.413	0.378	0.346	0.317	0.290	0.266	0.243	0.223	0.204	0.187	0.171	0.155	0.143	0.131	0.120	0.110	0.101	0.092	0.084	0.077	0.071	0.065	0.059	0.054	0.050	0.045	0.042	0.038	0.035	0.032						
Discounted Tariff		1.252	1.214	1.176	1.140	1.105	1.072	1.039	1.007	0.976	0.946	0.917	0.888	0.862	0.836	0.810	0.785	0.761	0.738	0.715	0.693	0.672	0.652	0.632	0.612	0.594	0.575	0.558	0.541	0.524	0.508	0.493	0.477	0.463	0.449	0.435	0.422	0.409	0.395	0.384	0.372						
Levelized Tariff	Rs/Unit	2.53																																													

Signature

Small Hydro Projects				Annexure 2B	
Small Hydro: Assumptions Parameters					
S. No.	Assumption Head	Sub-Head	Sub-Head (2)	Unit	Arunachal Pradesh
					500 kW - Below 1MW
1			Installed Power Generation Capacity	MW	1
			Capacity Utilization Factor	%	45%
			Auxiliary Consumption	%	1%
			Useful Life	Years	40
2	Project Cost	Capital Cost/MW	Power Plant Cost	Rs Lacs/MW	1236.00
			Capital Subsidy (if any)		1236.00
			Net Capital Cost		0.00
3	Period		Tariff Period	Years	40
4	Sources of Fund	Debt: Equity	Debt	%	70%
			Equity	%	30%
			Total Debt Amount	Rs Lacs	0.00
			Total Equity Amount	Rs Lacs	0.00
		Debt Component	Loan Amount	Rs Lacs	0.00
			Moratorium Period	years	0
			Repayment Period (including Moratorium)	years	15
			Interest Rate	%	10.73%
		Equity Component	Equity amount	Rs Lacs	0.00
			Return on Equity (upto 20 years)	% p.a.	17.57%
			Return on Equity (after 20 years)	% p.a.	22.29%
Discount Rate (equ. To WACC)			9.23%		
5	Financial Assumptions	Fiscal Assmptions	Mat Rate	%	17.47%
			Income Tax	%	34.94%
		Depreciation	Allowed Depreciation	%	90%
			Depreciation Rate for first 15 years	%	4.67%
			Depreciation Rate 16th year onwards	%	0.80%
6	Working Capital	For Fixed Charges			
		O&M Charges	Months	1	
		Maintenance Spare (% of O&M expenses)		15%	
		Receivables for Debtors	Months	1.50	
		Intrest On Working Capital	%	11.98%	
7	Operation & Maintenance	O&M Expenses (2026-27)	Rs Lacs	35.14	
		Total O & M Expenses Escalation	%	5.89%	
8	Generation and Sale Of Energy				
		Total No. of Hours	Hrs	8766	

