

Arunachal Pradesh State Electricity Regulatory Commission

Itanagar

Petition No. TP- 09 of 2024 (Suo-Motu)

Coram:

**Shri R. K. Joshi, Chairperson
Shri Nich Rika, Member (Law)**

Date of Order: 23.08.2024

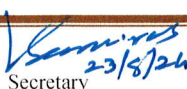
IN THE MATTER OF

Determination of levelised generic tariff for the Small Hydro Projects up to one MW for FY 2024-25 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.


23/8/24
Secretary

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 determines the generic tariff of the Small Hydro Projects below 500 kW and 500 kW to 1 MW for the FY 2024-25 in this order in accordance with the RE Tariff Regulations as given in **Annexure**.

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 levelised 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 | Levelling Tariff (₹/kWh) |
|--------------------|--------------------------|
| Below 500 kW | 6.86 |
| 500 kW- Below 1 MW | 5.76 |

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 | Levelling Tariff (₹/kWh) |
|--------------------|--------------------------|
| Below 500 kW | 1.70 |
| 500 kW- Below 1 MW | 2.26 |

6. The levellised generic tariff for Small Hydro Projects below 500 kW and 500 kW to 1 MW for the FY 2018-19 and FY 2019-20 was approved by the Commission vide order dated 19.7.2018 and 24.7.2019. The tariff order for the 2020-21, 2021-22, 2022-23 and 2023-24 could not be issued due to non-availability of the Commission during the said period. Therefore, we extend the tariff approved by the Commission vide order dated 24.7.2019 for the year 2019-20 for the period 2020-24.

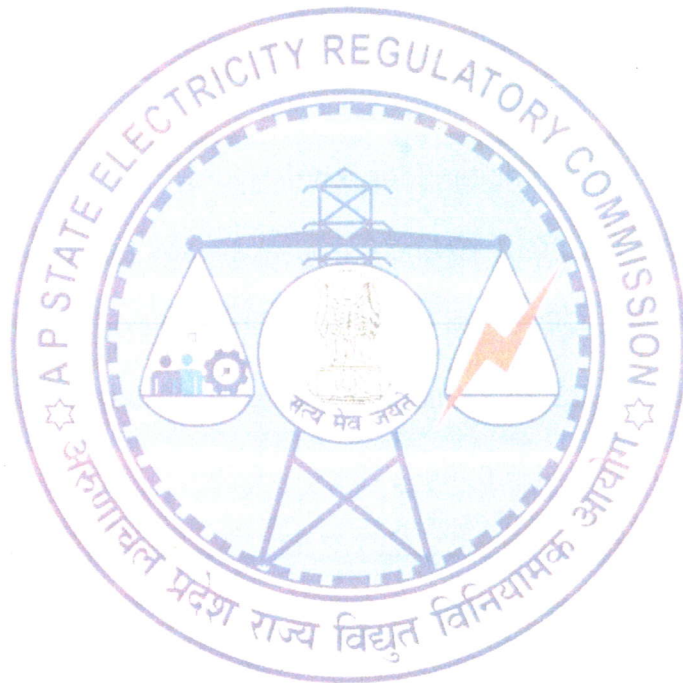
Ordered Accordingly.

S/d-
Nich Rika
Member

S/d-
R. K. Joshi
Chairperson

Date: 23 /08 /2024

Place: Itanagar



Annexure**APPROVAL OF LEVELLISED GENERIC TARIFF FOR SMALL HYDRO POWER PROJECT**

Levellised generic tariff for Small Hydro Projects below 500 kW and 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 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. 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 first 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 10.70%. 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 34.94%. Accordingly, the discount factor derived by this method for Small Hydro Projects is 9.22% $\{[(10.70\% \text{ (Interest Rate)} \times 0.70 \text{ (Debt)}) \times (1 - 34.94\% \text{ (income tax rate)})] + [14.5\% \text{ (normative ROE rate)} \times 0.30 \text{ (ROE)}]\}$.

(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, 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 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:

| Small Hydro Projects | (₹ in lakh) | |
|----------------------|-------------|--------|
| | Debt | Equity |
| Below 500 kW | 980 | 420 |
| 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) |
|---|---|
| 15/02/2024 -15/03/2024 | 8.65% |
| 15/03/2024 -15/04/2024 | 8.65% |
| 15/04/2024 -15/05/2024 | 8.65% |
| 15/05/2024 -15/06/2024 | 8.65% |
| 15/06/2024 -15/07/2024 | 8.75% |
| 15/07/2024 -15/08/2024 | 8.85% |
| Avg. for last Available 6 months | 8.70% |

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

18. Accordingly, considering the average MCLR of 8.7%, interest rate for loan component has been determined as 10.70 % 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 ₹41.78 lakh/MW and ₹31.34 lakh/MW are approved for the Small Hydro Projects below 500 kW and 500 kW to 1 MW respectively for the first 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 11.95%). 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 (%) | 11.95% |

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 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 500 kW to 1 MW in this order.

29. The generic tariff approved for the Small Hydro Projects below 500 kW and 500 kW to 1 MW for the financial year 2024-25 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 | Levellised Tariff (₹/kWh) |
|--------------------|---------------------------|
| Below 500 kW | 6.86 |
| 500 kW- Below 1 MW | 5.76 |

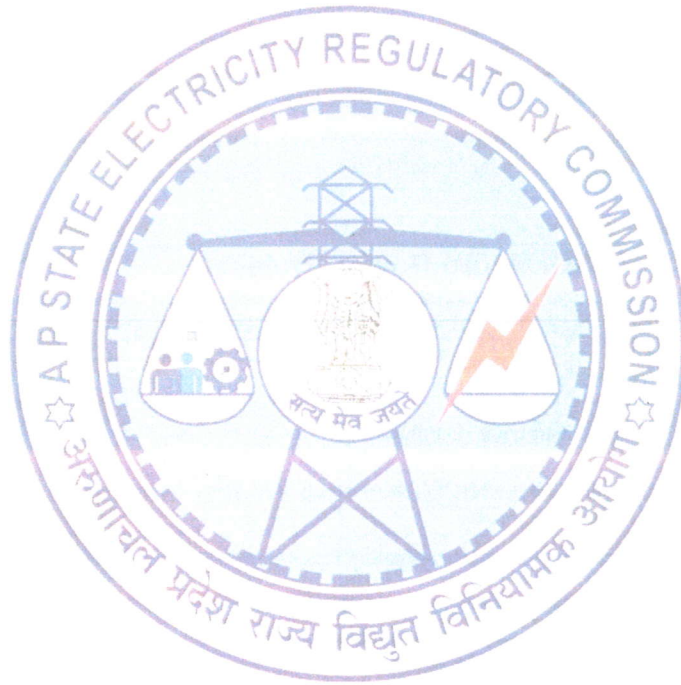
For projects which are funded by 100% incentive, grant or subsidy received from the State or Central Government

| Particular | Levelling Tariff (₹/kWh) |
|--------------------|--------------------------|
| Below 500 kW | 1.70 |
| 500 kW- Below 1 MW | 2.26 |

30. 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).

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 | 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 | 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 | % | 10.70% |
| | | Equity Component | | | |
| | | | Equity amount | Rs Lacs | 420.00 |
| 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 | | % | 11.95% |
| 7 | Operation & Maintenance | O&M Expenses (2024-25) | | Rs Lacs | 41.78 |
| | | Total O & M Expenses Escalation | | % | 5.89% |
| 8 | Generation and Sale Of Energy | | | Hrs | 8766 |
| | | Total No. of Hours | | | |

| RE Tariff (SIP) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|------|
| Units Generation | Unit | Year | 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 | | | |
| 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 | | |
| 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 |
| 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 |
| 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 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fixed Cost | Unit | Year | 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 | | | |
| O&M Expenses | Rs Lakh | | 41.78 | 44.24 | 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 | 232.60 | 246.30 | 260.81 | 276.17 | 292.44 | 309.66 | 327.90 | 347.22 | 367.67 | 389.32 | | | |
| Depreciation | Rs Lakh | | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | 65.38 | |
| Interest on term loan | Rs Lakh | | 101.36 | 94.37 | 87.38 | 80.39 | 73.40 | 66.41 | 59.42 | 52.43 | 45.44 | 38.45 | 31.46 | 24.47 | 17.48 | 10.49 | 3.50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Interest on working Capital | Rs Lakh | | 5.46 | 5.46 | 5.47 | 5.49 | 5.51 | 5.54 | 5.57 | 5.62 | 5.67 | 5.73 | 5.81 | 5.89 | 5.98 | 6.09 | 6.21 | 5.57 | 5.83 | 6.09 | 6.38 | 6.68 | 7.29 | 7.63 | 7.99 | 8.36 | 8.76 | 9.18 | 9.63 | 10.11 | 10.61 | 11.14 | 11.70 | 12.30 | 12.93 | 13.59 | 14.30 | 15.05 | 15.84 | 16.68 | 17.57 | 18.51 | | | |
| Return on Equity | Rs Lakh | | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | 73.79 | |
| Total Fixed Cost | Rs Lakh | | 287.78 | 283.25 | 278.88 | 274.66 | 270.61 | 266.74 | 263.06 | 259.59 | 256.32 | 253.29 | 250.49 | 247.94 | 245.66 | 243.67 | 241.98 | 189.12 | 195.18 | 201.60 | 208.39 | 215.58 | 243.32 | 251.39 | 259.93 | 268.98 | 278.55 | 288.69 | 299.43 | 310.80 | 322.84 | 335.59 | 349.09 | 363.39 | 378.53 | 394.56 | 411.53 | 429.50 | 448.54 | 468.69 | 490.03 | 512.63 | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Per Unit Cost of Generation | Unit | Year | 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 | | | |
| O&M expn | Rs/kWh | | 1.07 | 1.13 | 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 | 3.55 | 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 | | | |
| Depreciation | Rs/kWh | | 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 | 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 | | |
| Int. on term loan | Rs/kWh | | 2.60 | 2.42 | 2.24 | 2.06 | 1.88 | 1.70 | 1.52 | 1.34 | 1.16 | 0.98 | 0.81 | 0.63 | 0.45 | 0.27 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 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 | | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.16 | 0.16 | 0.14 | 0.15 | 0.16 | 0.16 | 0.17 | 0.19 | 0.20 | 0.20 | 0.21 | 0.22 | 0.24 | 0.25 | 0.26 | 0.27 | 0.29 | 0.30 | 0.31 | 0.33 | 0.35 | 0.37 | 0.39 | 0.41 | 0.43 | 0.45 | 0.47 | | | |
| RoE | Rs/kWh | | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | 1.89 | |
| Total COG | Rs/kWh | | 7.37 | 7.25 | 7.14 | 7.03 | 6.93 | 6.83 | 6.74 | 6.65 | 6.56 | 6.49 | 6.41 | 6.35 | 6.29 | 6.24 | 6.20 | 4.84 | 5.00 | 5.16 | 5.34 | 5.52 | 5.72 | 5.94 | 6.17 | 6.41 | 6.66 | 6.89 | 7.13 | 7.39 | 7.67 | 7.96 | 8.27 | 8.59 | 8.94 | 9.31 | 9.69 | 10.10 | 10.54 | 11.00 | 11.49 | 12.03 | 12.55 | 13.13 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Discount Factor | | | 1.000 | 0.916 | 0.838 | 0.767 | 0.703 | 0.643 | 0.589 | 0.539 | 0.494 | 0.452 | 0.414 | 0.379 | 0.347 | 0.318 | 0.291 | 0.266 | 0.244 | 0.223 | 0.204 | 0.187 | 0.171 | 0.157 | 0.144 | 0.131 | 0.120 | 0.110 | 0.101 | 0.092 | 0.085 | 0.077 | 0.071 | 0.065 | 0.059 | 0.054 | 0.050 | 0.046 | 0.042 | 0.038 | 0.035 | 0.032 | | | |
| Discounted Tariff | | | 7.369 | 6.641 | 5.986 | 5.389 | 4.869 | 4.394 | 3.968 | 3.585 | 3.241 | 2.932 | 2.655 | 2.406 | 2.182 | 1.982 | 1.802 | 1.289 | 1.218 | 1.152 | 1.090 | 1.033 | 1.067 | 1.009 | 0.966 | 0.905 | 0.858 | 0.815 | 0.774 | 0.735 | 0.699 | 0.665 | 0.634 | 0.604 | 0.576 | 0.550 | 0.525 | 0.502 | 0.480 | 0.459 | 0.439 | 0.421 | | | |
| Levelised Tariff | Rs/Unit | | 6.86 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Sanjay
23/8/24

| 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 |
| | | | Interest Rate | % | 10.70% |
| | | 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) | | 9.22% |
| 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 | | % | 11.95% |
| 7 | Operation & Maintenance | O&M Expenses (2024-25) | | Rs Lacs | 31.34 |
| | | Total O & M Expenses Escalation | | % | 5.89% |
| 8 | Generation and Sale Of Energy | | | | |
| | | Total No. of Hours | | Hrs | 8766 |

Secretary

| RE Tariff (SHP) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|--|---------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Units Generation | | Unit | Year | 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 | | |
| 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 | | |
| 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 | |
| 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 | |
| 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 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fixed Cost | | Unit | Year | 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 | | |
| O&M Expenses | | Rs Lakh | | 31.34 | 33.19 | 35.14 | 37.21 | 39.40 | 41.72 | 44.18 | 46.78 | 49.54 | 52.46 | 55.55 | 58.82 | 62.28 | 65.95 | 69.83 | 73.95 | 78.30 | 82.92 | 87.80 | 92.97 | 98.45 | 104.24 | 110.38 | 116.89 | 123.77 | 131.06 | 138.78 | 146.95 | 155.61 | 164.78 | 174.48 | 184.78 | 195.64 | 207.16 | 219.36 | 232.29 | 245.97 | 260.45 | 275.80 | 292.04 | | |
| Depreciation | | Rs Lakh | | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 | 57.72 |
| Interest on term loan | | Rs Lakh | | 89.49 | 88.32 | 77.15 | 70.98 | 64.80 | 58.63 | 52.46 | 46.29 | 40.12 | 33.94 | 27.77 | 21.60 | 15.43 | 9.26 | 3.09 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Interest on working Capital | | Rs Lakh | | 4.58 | 4.57 | 4.56 | 4.56 | 4.56 | 4.57 | 4.58 | 4.60 | 4.62 | 4.66 | 4.70 | 4.75 | 4.80 | 4.87 | 4.95 | 4.95 | 4.54 | 4.74 | 4.95 | 5.18 | 5.68 | 5.93 | 6.20 | 6.48 | 6.78 | 7.10 | 7.44 | 7.79 | 8.17 | 8.57 | 8.99 | 9.43 | 9.91 | 10.41 | 10.94 | 11.50 | 12.10 | 12.72 | 13.39 | 14.10 | | |
| Return on Equity | | Rs Lakh | | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | 65.15 | |
| Total Fixed Cost | | Rs Lakh | | 248.28 | 243.94 | 239.72 | 235.61 | 231.63 | 227.79 | 224.09 | 220.54 | 217.15 | 213.93 | 210.89 | 208.04 | 205.39 | 202.95 | 200.74 | 198.74 | 196.95 | 195.36 | 193.95 | 192.71 | 191.64 | 190.74 | 189.99 | 189.38 | 188.91 | 188.56 | 188.33 | 188.21 | 188.20 | 188.30 | 188.50 | 188.80 | 189.20 | 189.69 | 190.38 | 191.26 | 192.34 | 193.62 | 195.10 | 196.78 | 198.66 | 200.74 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Per Unit Cost of Generation | | Unit | Year | 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 | | |
| O&M expn | | Rs/KWh | | 0.80 | 0.85 | 0.90 | 0.95 | 1.01 | 1.07 | 1.13 | 1.20 | 1.27 | 1.34 | 1.42 | 1.51 | 1.59 | 1.69 | 1.79 | 1.89 | 2.01 | 2.12 | 2.25 | 2.38 | 2.52 | 2.67 | 2.83 | 2.99 | 3.17 | 3.36 | 3.55 | 3.76 | 3.98 | 4.22 | 4.47 | 4.73 | 5.01 | 5.30 | 5.62 | 5.95 | 6.30 | 6.67 | 7.06 | 7.48 | | |
| Depreciation | | Rs/KWh | | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | |
| Int. on term loan | | Rs/KWh | | 2.29 | 2.13 | 1.98 | 1.82 | 1.66 | 1.50 | 1.34 | 1.19 | 1.03 | 0.87 | 0.71 | 0.55 | 0.40 | 0.24 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 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 | | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.11 | 0.12 | 0.12 | 0.13 | 0.13 | 0.15 | 0.15 | 0.16 | 0.17 | 0.17 | 0.18 | 0.19 | 0.20 | 0.21 | 0.22 | 0.23 | 0.24 | 0.25 | 0.27 | 0.28 | 0.29 | 0.31 | 0.33 | 0.34 | 0.36 | | |
| RoE | | Rs/KWh | | 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 | 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 | |
| Total CUG | | Rs/KWh | | 6.36 | 6.25 | 6.14 | 6.03 | 5.93 | 5.83 | 5.74 | 5.65 | 5.56 | 5.46 | 5.40 | 5.33 | 5.26 | 5.20 | 5.14 | 5.09 | 5.04 | 4.99 | 4.94 | 4.89 | 4.84 | 4.79 | 4.74 | 4.69 | 4.64 | 4.59 | 4.54 | 4.49 | 4.44 | 4.39 | 4.34 | 4.29 | 4.24 | 4.19 | 4.14 | 4.09 | 4.04 | 3.99 | 3.94 | 3.89 | 3.84 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Discount Factor | | | | 1.000 | 0.916 | 0.838 | 0.767 | 0.703 | 0.643 | 0.589 | 0.539 | 0.494 | 0.452 | 0.414 | 0.379 | 0.347 | 0.318 | 0.291 | 0.266 | 0.244 | 0.223 | 0.204 | 0.187 | 0.171 | 0.157 | 0.144 | 0.131 | 0.120 | 0.110 | 0.101 | 0.092 | 0.085 | 0.077 | 0.071 | 0.065 | 0.059 | 0.054 | 0.050 | 0.046 | 0.042 | 0.038 | 0.035 | 0.032 | | |
| Discounted Tariff | | | | 6.368 | 5.719 | 5.145 | 4.630 | 4.168 | 3.762 | 3.380 | 3.045 | 2.745 | 2.476 | 2.235 | 2.019 | 1.825 | 1.651 | 1.495 | 1.045 | 0.995 | 0.930 | 0.878 | 0.830 | 0.787 | 0.747 | 0.709 | 0.673 | 0.639 | 0.607 | 0.577 | 0.549 | 0.523 | 0.498 | 0.474 | 0.451 | 0.429 | 0.408 | 0.387 | 0.367 | 0.347 | 0.327 | 0.307 | 0.287 | 0.267 | |
| Levelised Tariff | | Rs/Unit | | 5.76 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Sd/-
23/10/24

Secretary
State Electricity Regulatory Commission
Arumachal Pradesh

| 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 | % | 10.70% |
| | | 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) | | 9.22% |
| 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 exepenses) | | 15% |
| | | Receivables for Debtors | | Months | 1.50 |
| | | Interest On Working Capital | | % | 11.95% |
| 7 | Operation & Maintenance | | | | |
| | | O&M Expenses (2024-25) | | Rs Lacs | 41.78 |
| | | Total O & M Expenses Escalation | | % | 5.89% |
| 8 | Generation and Sale Of Energy | | | | |
| | | Total No. of Hours | | Hrs | 8766 |

Secretary

State Electricity Regulatory Commission
Arunachal Pradesh

| Unit | Year | 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 | | | |
|-----------------------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|------|--|
| Fixed Cost | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rs. Lakh | | 41.78 | 44.24 | 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 | 232.60 | 246.30 | 260.81 | 276.17 | 292.44 | 309.66 | 327.90 | 347.22 | 367.67 | 389.32 | | | |
| 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 | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Interest on working Capital | Rs. Lakh | 1.82 | 1.92 | 2.04 | 2.16 | 2.28 | 2.42 | 2.56 | 2.71 | 2.87 | 3.04 | 3.22 | 3.41 | 3.61 | 3.82 | 4.05 | 4.29 | 4.54 | 4.81 | 5.09 | 5.39 | 5.71 | 6.04 | 6.40 | 6.77 | 7.17 | 7.60 | 8.04 | 8.52 | 9.02 | 9.55 | 10.11 | 10.71 | 11.34 | 12.01 | 12.71 | 13.46 | 14.25 | 15.09 | 15.98 | 16.92 | | | |
| 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 | |
| Total Fixed Cost | Rs. Lakh | 43.60 | 46.16 | 48.88 | 51.76 | 54.81 | 58.04 | 61.46 | 65.08 | 68.91 | 72.97 | 77.27 | 81.82 | 86.64 | 91.74 | 97.14 | 102.87 | 108.93 | 115.34 | 122.13 | 129.33 | 136.95 | 145.01 | 153.55 | 162.60 | 172.17 | 182.31 | 193.05 | 204.42 | 216.46 | 229.21 | 242.72 | 257.01 | 272.15 | 288.18 | 305.15 | 323.13 | 342.16 | 362.31 | 383.55 | 405.25 | | | |

| | Year | 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 | | | |
|-----------------------------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|
| Per Unit Cost of Generation | Unit | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | RskW/h | 1.07 | 1.13 | 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 | | | |
| | RskW/h | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | RskW/h | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | RskW/h | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.09 | 0.09 | 0.10 | 0.10 | 0.11 | 0.12 | 0.12 | 0.13 | 0.14 | 0.15 | 0.15 | 0.16 | 0.17 | 0.18 | 0.19 | 0.21 | 0.22 | 0.23 | 0.24 | 0.26 | 0.27 | 0.29 | 0.31 | 0.33 | 0.34 | 0.36 | 0.39 | 0.41 | 0.43 | | | | |
| | RskW/h | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 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 | RskW/h | 1.12 | 1.18 | 1.25 | 1.33 | 1.40 | 1.49 | 1.57 | 1.67 | 1.76 | 1.87 | 1.99 | 2.10 | 2.22 | 2.35 | 2.48 | 2.63 | 2.79 | 2.95 | 3.13 | 3.31 | 3.51 | 3.71 | 3.93 | 4.16 | 4.41 | 4.67 | 4.94 | 5.23 | 5.54 | 5.87 | 6.22 | 6.59 | 6.97 | 7.38 | 7.81 | 8.27 | 8.76 | 9.28 | 9.82 | 10.40 | | | |

[illegible]

| 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 | % | 10.70% |
| | | 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) | | 9.22% |
| 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% |
| 6 | Working Capital | | | | |
| | | For Fixed Charges | | | |
| | | O&M Charges | | Months | 1 |
| | | Maintenance Spare | (% of O&M expenses) | | 15% |
| | | Receivables for Debtors | | Months | 1.50 |
| 7 | Operation & Maintenance | | | | |
| | | O&M Expenses (2024-25) | | Rs Lacs | 31.34 |
| | | Total O & M Expenses Escalation | | % | 5.89% |
| 8 | Generation and Sale Of Energy | | | | |
| | | Total No. of Hours | | Hrs | 8766 |

[Signature]
Secretary

| RE Tariff (SIP) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|------|
| Units Generation | Unit | Year | 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 | |
| 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 | |
| Gross Generation | MJ | 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 | MJ | 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 | MJ | 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 | 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 |
| O&M Expenses | Rs Lakh | 31.34 | 33.19 | 35.14 | 37.21 | 39.40 | 41.72 | 44.18 | 46.78 | 49.54 | 52.46 | 55.55 | 58.82 | 62.28 | 65.95 | 69.83 | 73.95 | 78.30 | 82.92 | 87.80 | 92.97 | 98.45 | 104.24 | 110.38 | 116.89 | 123.77 | 131.06 | 138.78 | 146.95 | 155.61 | 164.78 | 174.48 | 184.76 | 195.64 | 207.16 | 219.36 | 232.29 | 245.97 | 260.45 | 275.80 | 292.04 | | |
| 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 |
| 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 |
| Interest on working Capital | Rs Lakh | 1.36 | 1.44 | 1.53 | 1.62 | 1.71 | 1.81 | 1.92 | 2.03 | 2.15 | 2.28 | 2.41 | 2.56 | 2.71 | 2.87 | 3.04 | 3.21 | 3.40 | 3.60 | 3.82 | 4.04 | 4.28 | 4.53 | 4.80 | 5.08 | 5.38 | 5.70 | 6.03 | 6.39 | 6.76 | 7.16 | 7.58 | 8.03 | 8.50 | 9.01 | 9.54 | 10.10 | 10.69 | 11.32 | 11.99 | 12.70 | | |
| 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 |
| Total Fixed Cost | Rs Lakh | 32.70 | 34.63 | 36.67 | 38.83 | 41.11 | 43.54 | 46.10 | 48.82 | 51.69 | 54.74 | 57.96 | 61.37 | 64.99 | 68.82 | 72.87 | 77.16 | 81.71 | 86.52 | 91.62 | 97.01 | 102.73 | 108.78 | 115.18 | 121.97 | 129.15 | 136.76 | 144.81 | 153.34 | 162.37 | 171.94 | 182.07 | 192.79 | 204.14 | 216.17 | 228.90 | 242.38 | 256.66 | 271.78 | 287.78 | 304.73 | | |
| Per Unit Cost of Generation | | Unit | Year | 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 |
| O&M expn | Rs/kWh | 0.80 | 0.85 | 0.90 | 0.95 | 1.01 | 1.07 | 1.13 | 1.20 | 1.27 | 1.34 | 1.42 | 1.51 | 1.59 | 1.69 | 1.79 | 1.89 | 2.01 | 2.12 | 2.25 | 2.38 | 2.52 | 2.67 | 2.83 | 2.99 | 3.17 | 3.36 | 3.55 | 3.76 | 3.98 | 4.22 | 4.47 | 4.73 | 5.01 | 5.30 | 5.62 | 5.95 | 6.30 | 6.67 | 7.06 | 7.48 | | |
| 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 |
| 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 |
| Int. on working capital | Rs/kWh | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.09 | 0.09 | 0.10 | 0.10 | 0.11 | 0.12 | 0.12 | 0.13 | 0.14 | 0.15 | 0.16 | 0.17 | 0.18 | 0.19 | 0.21 | 0.22 | 0.23 | 0.24 | 0.26 | 0.27 | 0.29 | 0.31 | 0.33 | | |
| 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 |
| Total COG | Rs/kWh | 0.84 | 0.89 | 0.94 | 0.99 | 1.05 | 1.11 | 1.18 | 1.25 | 1.32 | 1.40 | 1.48 | 1.57 | 1.65 | 1.76 | 1.87 | 1.98 | 2.09 | 2.22 | 2.35 | 2.48 | 2.63 | 2.79 | 2.95 | 3.12 | 3.31 | 3.50 | 3.71 | 3.93 | 4.16 | 4.40 | 4.66 | 4.94 | 5.23 | 5.54 | 5.86 | 6.21 | 6.57 | 6.96 | 7.37 | 7.81 | | |
| Discount Factor | | | 1.000 | 0.916 | 0.838 | 0.767 | 0.703 | 0.643 | 0.589 | 0.539 | 0.494 | 0.452 | 0.414 | 0.379 | 0.347 | 0.318 | 0.291 | 0.266 | 0.244 | 0.223 | 0.204 | 0.187 | 0.171 | 0.157 | 0.144 | 0.131 | 0.120 | 0.110 | 0.101 | 0.092 | 0.085 | 0.077 | 0.071 | 0.065 | 0.059 | 0.054 | 0.050 | 0.046 | 0.042 | 0.038 | 0.035 | 0.032 | |
| Discounted Tariff | | | 0.837 | 0.812 | 0.787 | 0.763 | 0.740 | 0.717 | 0.695 | 0.674 | 0.654 | 0.634 | 0.614 | 0.595 | 0.577 | 0.560 | 0.543 | 0.526 | 0.510 | 0.494 | 0.479 | 0.465 | 0.451 | 0.437 | 0.423 | 0.411 | 0.398 | 0.386 | 0.374 | 0.363 | 0.352 | 0.341 | 0.330 | 0.320 | 0.311 | 0.301 | 0.292 | 0.283 | 0.274 | 0.266 | 0.258 | 0.250 | |
| Levelised Tariff | | Rs/Unit | 1.70 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Secretary
23/6/24