



HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION

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Public Notice

Subject: Determination of Generic Levellised Tariff for Biomass Gasifier based Power Projects upto 5.00 MW for FY 2026-27 under the HPERC (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2017 as amended from time to time.

The Commission has in accordance with Regulation 18 of RE Tariff Regulations, 2017 come out with the proposal in the matter of determination of generic levellised tariff for Biomass Gasifier based Power Projects upto 5.00 MW for FY 2026-27 vide Suo-Motu Petition No.: **04/2026**. The proposed tariff order is available on the HPERC's website www.hperc.org.

Suggestions/objections, specific to the aforesaid proposal, together with the supporting material may be sent to the Secretary, Himachal Pradesh Electricity Regulatory Commission, Vidyut Aayog Bhawan, Block No. 37, SDA Complex, Kasumpti, Shimla- 171009, so as to reach on or before **11th May, 2026**.

The suggestions/objections so filed should carry the full name and postal address, fax number and e-mail address, if any. Alternatively the suggestions/objections can also be filed through e-mail followed by six hard copies. The suggestions/objections received after the due date may not be considered while finalizing the above said order.

Place: Shimla

Dated: 07.04.2026

By order of the Commission


Secretary

HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION, SHIMLA

Suo-Motu Petition No.: **04/2026**

Date of Order: 07.04.2026

**CORAM: Sh. Yashwant Singh Chogal, Member(Law)-Cum-Chairman
Sh. Shashi Kant Joshi, Member**

IN THE MATTER OF:-

Determination of Generic Levellised Tariff for Biomass Gasifier based Power Projects upto 5 MW for FY 2026-27 under the Himachal Pradesh Electricity Regulatory Commission (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2017 as amended from time to time.

ORDER

The Himachal Pradesh Electricity Regulatory Commission (HPERC/ Commission for short) has notified the Himachal Pradesh Electricity Regulatory Commission (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2017 vide Notification No. HPERC/428 dated 16th November, 2017 and published in the Rajpatra, Himachal Pradesh on 23rd November, 2017. These Regulations were amended from time to time and the 7th Amendment Regulations were notified vide Notification No. HPERC/428 dated 22nd September, 2023 and published in the Rajpatra, Himachal Pradesh on 26th September, 2023 which came into force from 01.10.2023. The Regulations including its amendments are jointly referred to as the “HPERC RE Tariff Regulations, 2017”).

2. In 7th Amendment of the HPERC RE Tariff Regulations, 2017, the financial principles for RE technologies for 4th control period i.e. 01.10.2023 to 31.03.2027 have been specified.
3. The provision of Regulation 3 read with clause (f) of Regulation 4 of the HPERC RE Tariff Regulations, 2017, provide that these Regulations shall apply, inter alia, to Biomass Gasifier based Power Projects which qualify as renewable energy projects subject to fulfillment of the specified eligibility criteria and, as such, the Biomass Gasifier based Power Projects are to be treated as renewable energy projects covered under these Regulations.
4. Sub-regulation (2) of Regulation 18 of the HPERC RE Tariff Regulations, 2017, provide that where the technological specific parameters and other terms and conditions including the tariff period and useful life of the project, have not been specified, the Commission, by order, at any time and at such intervals as it considers appropriate to do so, may fix the same. Further, in order to promote such technologies for smaller capacities, the Commission may, upto the limits as

it may consider necessary, for each such technology but not exceeding 5 MW, follow, mutatis mutandis, any or all of the technological specific parameters, including capital cost, and other terms and conditions or the tariff, in respect of the relevant part of the control period for the relevant renewable energy technology, as specified or adopted by the Central Commission, or the rate discovered through competitive bidding undertaken by any Government Agency, or the inputs available from any other sources, as the Commission may find appropriate.

5. Sub-regulation (3) of the Regulation 18 of the HPERC RE Tariff Regulations, 2017, provides that the Commission may, after having fixed the norms/parameters and other related terms and conditions as per sub-regulation (2) determine, or otherwise fix, by order, either generic levelled tariff(s) for any or for all categories of such renewable energy technology(ies).
6. The Commission, therefore, in due discharge of the mandate under the RE Tariff Regulations, 2017, proposes to determine the generic levelled tariff of Biomass Gasifier based Power Projects and associated terms and conditions for FY 2026-27 as per Annexure-A.
7. The comments and suggestions of the stakeholders on the above proposal are ordered to be invited by **11th May, 2026**.

Sd/-

(Shashi Kant Joshi)
Member

Sd/-

(Yashwant Singh Chogal)
Member (Law)-cum-Chairman

Annexure-“A”

Generic Levellised Tariff for Biomass Gasifier based Power Projects for FY 2026-27 (for a period w.e.f. 01.04.2026 to 31.03.2027) under the Himachal Pradesh Electricity Regulatory Commission (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2017.-

1. The Commission has notified the Himachal Pradesh Electricity Regulatory Commission (Promotion of Generation from the Renewable Energy Sources and Terms and Conditions for Tariff Determination) Regulations, 2017, vide Notification No. HPERC/428 dated 16th November, 2017 and published in the Rajpatra, Himachal Pradesh on 23rd November, 2017. In 7th amendment of the HPERC RE Tariff Regulations, 2017, the financial principles for RE technologies for 4th control period i.e. 01.10.2023 (hereinafter referred to as RE Technologies) for 4th control period i.e. 01.10.2023 to 31.03.2027 have been specified (hereinafter jointly referred to as the "HPERC RE Tariff Regulations, 2017").
2. Regulation 18 of the HPERC RE Tariff Regulations, 2017, provides that:
 - “18. Tariff for renewable energy projects, other than small hydro projects.—
 - (1) The renewable energy projects, other than small hydro projects, may include the following:—
 - (i) Wind power project;
 - (ii) Biomass based power project based on Rankine cycle technology;
 - (iii) Non-fossil fuel based co-generation project;
 - (iv) Biomass gasifier based power project;
 - (v) Municipal Solid Waste (MSW) based power projects and Refuse Derived Fuel (RDF) based power projects;
 - (vi) Solar PV and solar thermal power projects;
 - (vii) Hybrid projects other than Hybrid solar thermal power plants including renewable-renewable or renewable-conventional sources, for which renewable technology is approved by the MNRE;
 - (viii) Biomass project other than that based on Rankine cycle technology application with water cooled condenser;
 - (ix) Any other renewable energy technology which may be approved by the MNRE.
 - (2) Where the technological specific parameters and other terms and conditions, including the tariff period and useful life of the project, have not been specified, the Commission may, by an order, at any time and at such intervals as it considers appropriate to do so, fix the same:
Provided that.....xxxxxxx.....
Provided further that the Commission may, by order, categorise the renewable energy projects, other than small hydro projects, under the respective renewable energy technologies specified in sub-regulation (1), based on the capacity of projects, the available subsidy schemes and such other factors as may be considered appropriate by it:
Provided further that the Commission may, in order to promote such technologies for smaller capacities, follow, mutatis mutandis, upto the limits as it may consider necessary separately for each such technology but not exceeding 5 MW for any such technology, any or all of the technological

specific parameters, including capital cost, and other terms and conditions or the tariff, in respect of the relevant part of the control period for the relevant renewable energy technology, as it may deem fit -

- (a) as specified or adopted by the Central Commission for determining project specific tariff for any project(s) or generic levellised tariff for any category of project(s); or*
- (b) the rate discovered through competitive bidding undertaken by any Government agency; or*
- (c) the inputs available from any other sources, as the Commission may find appropriate:*

Provided further that the financial norms, except for capital cost, as specified under Chapter-IV of these Regulations shall also be considered as ceiling norms.

- (3) The Commission may, after having fixed the norms/parameters and other related terms and conditions as per sub-regulation (2), determine, or otherwise fix, by order, either generic levellised tariff(s) for any or all categories of such renewable energy technology(ies):*

Provided that the Commission may, by order, fix, at such time intervals as it may consider appropriate, the ceiling rates and associated terms and conditions to be used by the licensee for reverse bidding for procurement of power from the projects based on such technologies.

(4)xxxxxxxxxxxxx.....

(5)xxxxxxxxxxxxx.....”

- 3. Therefore, in terms of Regulation 18 of the HPERC RE Tariff Regulations, 2017, the Commission proposes to fix the technology-specific norms and other terms and conditions and to determine the generic levellised tariff for the financial year 2026-27 for procurement of power by the Distribution Licensee from Biomass Gasifier based Power Projects, as detailed in the succeeding paragraphs.

- 4. For the purpose of determination of tariff under the HPERC RE Tariff Regulations, 2017, the words and expressions specific to the Biomass Gasifier based Power Projects, which are not defined in the HPERC RE Tariff Regulations, 2017, shall have the meanings as defined under the Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2024 (hereinafter referred to as "CERC RE Regulations, 2024").

5. **Technology Specific Parameters**

- 5.1 Sub-regulation(2) of Regulation 18 of the HPERC RE Tariff Regulations, 2017 provides that where the technology specific parameters and other terms and conditions including the tariff period and useful life of the project, have not been specified, the Commission may, by order, at any time and at such intervals as it considers appropriate, fix the same and, in order to promote such technologies for smaller capacities, may, up to the limits as it may consider necessary separately for each such technology but not exceeding 5 MW for any such technology, follow, mutatis mutandis, any or all of the technology specific

parameters, including capital cost, and other terms and conditions or the tariff, in respect of the relevant part of the control period for the relevant renewable energy technology, as it may deem fit, as specified or adopted by the Central Commission, or the rate discovered through competitive bidding undertaken by any Government agency, or the inputs available from any other sources, as the Commission may find appropriate.

- 5.2 The Commission observed that the Commission in HPERC RE Tariff Regulations, 2017 has specified most of the financial parameters for Biomass Gasifier based Power Projects under Chapter-IV (PART-IV: Financial Principles Applicable from 01-10-2023 to 31-03-2027). However, certain technology-specific parameters, particularly Capital Cost, Normative Plant Load Factor (PLF), Auxiliary Consumption, Specific Fuel Consumption (SFC), Fuel Cost and O&M Charges have not been specified for this technology in the HPERC RE Tariff Regulations, 2017. The Commission, therefore, proposes to adopt the technology-specific parameters namely; Capital Cost, Normative Plant Load Factor (PLF), Auxiliary Consumption, Specific Fuel Consumption (SFC), Fuel Cost and Operation and Maintenance (O&M) Charges for Biomass Gasifier based Power Projects, as specified by the Central Commission for FY 2025-26 in its Tariff Order dated 09.07.2025 issued under the CERC RE Regulations, 2024, with suitable escalation in Fuel Cost and O&M Charges for FY 2026-27.

6. Normative Capital Cost:

- 6.1 Regulation 50 of the CERC RE Regulations, 2024, under heading “Parameters for biomass gasifier based power projects”, provides that normative capital cost for biomass gasifier based power projects shall be Rs.677 lakhs/MW during the first year of the Control Period and will remain valid for the entire duration of the Control Period unless reviewed earlier by the Commission.

- 6.2 The Commission observed that till now no Biomass Gasifier based Power Project has been commissioned in the State of Himachal Pradesh and that no project-specific capital cost data, duly supported by audited accounts or other authentic documentary evidence is available on the record of the Commission for this RE technology. In the absence of such actual cost data in respect of the Himachal Pradesh, the Commission considers it appropriate to be guided by the normative capital cost norms as specified by the Central Commission for Biomass Gasifier based Power Projects for the control period under the CERC RE Tariff Regulations, 2024 and accordingly, proposes to adopt the same Normative Capital Cost of Rs. 677 lakh/MW for FY 2026-27 for the State of Himachal Pradesh.

7. Normative Plant Load Factor (PLF):

- 7.1 The Plant Load Factor is a critical parameter for determining the normative energy generation from a power project. Regulation 51 of the CERC RE

Regulations, 2024, under heading "Parameters for biomass gasifier based power projects", provides as under:-

"51.Plant Load Factor.-*The plant load factor for determination of tariff shall be considered as 85%."*

- 7.2 The Commission also observed that the HPERC RE Tariff Regulations, 2017 do not specify the PLF for Biomass Gasifier based Power Projects. Having regard to the operating profile of Biomass Gasifier technology and in the absence of any State specific normative data in this regard, the Commission considers it appropriate to be guided by the normative Plant Load Factor norms, as specified by the Central Commission, for Biomass Gasifier based Power Projects for the control period under the CERC RE Tariff Regulations, 2024, and accordingly proposes to adopt the same normative Plant Load Factor of 85% for FY 2026-27 in the State of Himachal Pradesh.

8 Normative Auxiliary Consumption.-

- 8.1 Regulation 52 of the CERC RE Regulations, 2024, under heading "Parameters for biomass gasifier based power projects", provides as under:-

"52.Auxiliary consumption.-*The auxiliary consumption for the biomass gasifier-based power projects shall be 10%."*

- 8.2 Auxiliary consumption covers the energy consumed by equipments within the generating station and transformer losses, and is a key parameter for determining the net energy available for sale from a power project. The Commission observed that the HPERC RE Tariff Regulations, 2017 do not specify the Auxiliary Consumption for Biomass Gasifier based Power Projects. In the absence of any State-specific normative data in this regard, the Commission considers it appropriate to be guided by the normative Auxiliary Consumption norm, as specified by the Central Commission, for Biomass Gasifier based Power Projects for the control period under the CERC RE Tariff Regulations, 2024 and proposes to adopt the similar normative Auxiliary Consumption of 10% of gross generation for FY 2026-27 for the State of Himachal Pradesh which shall also include transformation and project line losses upto the interconnection point.

9 Normative Specific Fuel Consumption (SFC).-

- 9.1 Regulation 53 of the CERC RE Regulations, 2024, under heading "Parameters for biomass gasifier based power projects", provides as under:-

"53.Specific fuel consumption.-*Normative specific fuel consumption shall be 1.25 kg per kWh."*

- 9.2 This parameter determines the quantity of biomass fuel required per unit of electricity generated and is critical for computing the fuel cost component of the tariff.

- 9.3 The Commission observed that the HPERC RE Tariff Regulations, 2017 do not specify the Specific Fuel Consumption (SFC) for Biomass Gasifier based

Power Projects. In the absence of any State-specific normative data in this regard, the Commission considers it appropriate to be guided by the normative SFC norm, as specified by the Central Commission, for Biomass Gasifier based Power Projects for the control period under the CERC RE Tariff Regulations, 2024 and accordingly proposes to adopt the same normative SFC of 1.25 kg per kWh for FY 2026-27 for the State of Himachal Pradesh.

10 Normative Operation and Maintenance (O&M) Expenses:

10.1 Regulation 54 of the CERC RE Regulations, 2024, under heading "Parameters for biomass gasifier based power projects", provides as under:-

*"**54.Operation and Maintenance expenses.**-Normative O&M expenses for the first year of the Control period, i.e. financial year 2024-25, shall be Rs. 72.25 lakhs per MW and shall be escalated at the rate specified in Regulation 19 of these Regulations for the Tariff Period."*

10.2 Further, sub-regulation (3) of Regulation 28-C of the HPERC RE Tariff Regulations, 2017, provides as under:

*"**28-C. Operation and maintenance expenses.**— (3) Normative O&M expenses allowed under these Regulations shall be escalated over the tariff period at the rate of 3.84% per annum."*

10.3 The Commission observed that the HPERC RE Tariff Regulations, 2017 do not specify the Operation and Maintenance expenses for Biomass Gasifier based Power Projects. In the absence of any State-specific normative data in this regard, the Commission considers it appropriate to be guided by the normative Operation and Maintenance expenses, as specified by the Central Commission, for Biomass Gasifier based Power Projects for the first year of the control period under the CERC RE Tariff Regulations, 2024 and accordingly, proposes to adopt the Operation and Maintenance expenses for FY 2026-27, for the State of HP, after applying an annual escalation of 3.84%, as provided in Regulation 28-C of the HPERC RE Tariff Regulations, 2017 and the same works out as Rs. 77.905 Lakhs per MW.

Accordingly, the Commission proposes to adopt the normative O&M expenses of Rs. 77.905 Lakhs per MW for FY 2026-27, with an annual escalation of 3.84% per annum over the tariff period as specified under Regulation 28-C of the HPERC RE Tariff Regulations, 2017.

11 Biomass Fuel Price:

11.1 Regulation 55 of the CERC RE Regulations, 2024, under heading "Parameters for biomass gasifier based power projects", provides as under:-

*"**55. Fuel Cost.**-Biomass fuel price for biomass gasifier-based power projects shall be the same as for biomass power projects based on Rankine cycle technology as mentioned in Regulation 38."*

11.2 Regulation 38 of the CERC RE Regulations, 2024, provides as under:-

*"**38. Fuel Cost** .- Biomass fuel price during the first year of the Control Period, i.e. financial year 2024-25 shall be as specified in the table below and shall be*

escalated at the rate of 3.45% per annum to arrive at the base price for subsequent years of the Control Period unless reviewed earlier by Commission. For the purpose of determining levelized tariff, a normative escalation factor of 3.45% per annum shall be applicable on biomass fuel price.

State	Biomass Fuel
Andhra Pradesh	3983
Haryana	4534
Maharashtra	4637
Punjab	4742
Rajasthan	3958
Tamil Nadu	3918
Telangana	3983
Uttar Pradesh	4053
Other States	4260:

Provided that the Commission may review the biomass fuel price based on a study, consequent to which the table of biomass fuel price as provided in this Regulation shall stand modified with effect from the date of notification of the revised prices, by the Commission.”

11.3 The CERC vide its Tariff Order dated 09.07.2025, for FY 2025-26, has also specified State-wise biomass fuel prices wherein a fuel price of Rs. 4,406.97 per MT has been specified for FY 2025-26 for "Other States". Further, the fuel price is subject to an annual escalation factor of 3.45% per annum.

11.4 In the absence of any cost data for Biomass Fuel, available in the State of Himachal Pradesh, the Commission considers it appropriate to be guided by the Biomass Fuel Price, as specified by the Central Commission, for Biomass Gasifier based Power Projects for FY 2025-26, vide its Tariff Order dated 09.07.2025 and accordingly proposes to fix the normative Biomass Fuel Price for FY 2026-27, for the State of Himachal Pradesh, after applying an annual escalation of 3.45% in the following manner:-

Biomass Fuel Price for FY 2026-27

Biomass Fuel Price for FY 2025-26 (Other States)	Rs. 4,406.97/MT
Escalation Factor	3.45%
Escalated Price for FY 2026-27	Rs. 4,559.01/MT

11.5 Accordingly, the Commission proposes to adopt a biomass fuel price of Rs. 4,559.01 per MT for FY 2026-27 for Himachal Pradesh. This fuel price shall be valid up to 31.03.2027.

12 Useful Life and Tariff Period:

12.1 Sub-clause (b) of clause (ac) of sub-regulation (1) of Regulation 2 of the HPERC RE Tariff Regulations, 2017, specifies that the useful life in relation to "Biomass power project, non-fossil fuel based cogeneration" shall be 20 years from the date of commencement of operation of the project. However, sub-clause (vii) of clause (hh) of sub-regulation (1) of Regulation 2 of the CERC RE Regulations, 2024 specifies that the useful life for Biomass Gasifier-based power projects shall be 25 years.

The Commission also observed that most of the Electricity Regulatory Commissions across India, including Uttarakhand ERC and Haryana ERC, have adopted a useful life of 25 years for Biomass Gasifier based Power Projects.

12.2 The HPERC RE Tariff Regulations, 2017, provides useful life of 20 years for "Biomass power project" and "non-fossil fuel based cogeneration" without making a specific distinction for different Biomass technologies. Further it was observed that,-

- (i) Sub-regulation (2) of Regulation 18 of the HPERC RE Tariff Regulations, 2017 provides as under:-

"18. Tariff for renewable energy projects, other than small hydro projects.—

- (2) Where the technological specific parameters and other terms and conditions, including the tariff period and useful life of the project, have not been specified, the Commission may, by an order, at any time and at such intervals as it considers appropriate to do so, fix the same:*

Provided that in case of renewable technologies, other than small hydro projects, such parameters and terms conditions may also include other suitable provisions as the Commission may feel necessary to address the situations covered under regulations 16 and 17:

Provided further that the Commission may, by order, categorise the renewable energy projects, other than small hydro projects, under the respective renewable energy technologies specified in sub-regulation (1), based on the capacity of projects, the available subsidy schemes and such other factors as may be considered appropriate by it:

Provided further that the Commission may, in order to promote such technologies for smaller capacities, follow, mutatis mutandis, upto the limits as it may consider necessary separately for each such technology but not exceeding 5 MW for any such technology, any or all of the technological specific parameters, including capital cost, and other terms and conditions or the tariff, in respect of the relevant part of the control period for the relevant renewable energy technology, as it may deem fit –

- (a) as specified or adopted by the Central Commission for determining project specific tariff for any project(s) or generic levellised tariff for any category of project(s); or*
(b) the rate discovered through competitive bidding undertaken by any Government agency; or

(c) the inputs available from any other sources, as the Commission may find appropriate:

Provided further that the financial norms, except for capital cost, as specified under Chapter-IV of these Regulations shall also be considered as ceiling norms.”

Therefore, Regulation 18(2) specifically empowers the Commission to adopt parameters as specified by the Central Commission for technologies where specific parameters have not been fixed in the HPERC RE Tariff Regulations, 2017;

- (ii) Regulation 44 of the HPERC RE Tariff Regulations, 2017, provides as under:-

“44. Power to remove difficulties.—*If any difficulty arises in giving effect to these Regulations, the Commission may, of its own motion or otherwise, by an order, and after giving a reasonable opportunity to those likely to be affected by such order, make such provisions, not inconsistent with these Regulations, as may appear to be necessary for removing the difficulty.”;*

- (iii) Regulation 45 of the HPERC RE Tariff Regulations, 2017, provides as under:-

“45. Power to relax.—*The Commission may, by general or special order, for reasons to be recorded in writing and after giving an opportunity of hearing to the parties likely to be affected, may relax any of the provisions of these Regulations on its own motion or on an application made before it by an interested person.”*

- (iv) The regulatory precedents set by the CERC in its RE Tariff Regulations, 2024 and also other State Commissions recognize 25 years as the appropriate useful life for this specific technology.

Therefore, in exercise of the powers vested in the Commission under Regulations 18(2), 44 and 45 of the HPERC RE Tariff Regulations, 2017, and having regard to the distinct technological characteristics of Biomass Gasifier based Power Projects, the Commission proposes to adopt a useful life of 25 years for Biomass Gasifier based Power Projects, in alignment with the norms specified by the Central Commission and other regulatory precedents for this technology.

13 **Financial Parameters:**

The financial parameters for determination of tariff for Biomass Gasifier based Power Projects are specified in the HPERC RE Tariff Regulations, 2017, (applicable from 01.10.2023 to 31.03.2027). These parameters shall be applicable for generic levellised tariff determination for Biomass Gasifier based Power Projects for FY 2026-27, as discussed below.

13.1 **Tariff Structure:**

- (a) Sub-regulation (1) of Regulation 12 of the RE Tariff Regulations, 2017 provides that,-

"The single part levelled tariff structure shall be followed for the renewable energy technologies:

Provided that for renewable energy technologies having fuel cost component, like biomass power projects and non-fossil fuel based cogeneration, single part tariff with two components, i.e. fixed cost component and fuel cost component, shall be determined."

- (b) Since Biomass Gasifier based Power Projects involve fuel cost (biomass consumption), the tariff shall comprise,-
- (i) Fixed Cost Component (levelled basis); and
 - (ii) Variable Cost Component/Fuel Cost Component (year of operation basis).
- (c) As per sub-Regulation (1) of Regulation 12 of the RE Tariff Regulations, 2017, the fixed cost component shall include,-
- (i) Return on Equity;
 - (ii) Interest on loan capital;
 - (iii) Depreciation;
 - (iv) Interest on working capital; and
 - (v) Operation and maintenance expenses.
- (d) The Variable Cost component/Fuel Cost component shall be computed based on,-
- (i) Specific fuel consumption (kg/kWh);
 - (ii) Biomass fuel price (Rs./MT); and
 - (iii) Annual escalation factor.

13.2 Debt-Equity Ratio:

- (a) Sub-regulation (1) of Regulation 23-C of the RE Tariff Regulations, 2017, provides as under:-
- "The normative debt-equity ratio shall be 70:30."
- (b) Accordingly, for a normative capital cost of Rs. 677 Lakh per MW, the Debt and Equity Component of normative capital cost shall be as under:-

Total Capital Cost	Rs. 677.00 Lakh/MW
Debt Component (70%)	Rs. 473.90 Lakh/MW
Equity Component (30%)	Rs. 203.10 Lakh/MW

13.3 Return on Equity:

- (a) Regulation 26-C of the RE Tariff Regulations, 2017 provides as under:-
- "(1) The value base for the equity (on which return on equity shall be calculated) shall be equal to the equity component computed in accordance with the provisions of Regulation 23-C.
- (2) The normative Return on Equity shall be 14%. 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."

- (b) Accordingly, the normative return on equity is proposed to be taken as 14% (post-tax). The grossed-up rates are:-

- (i) For first 20 years: MAT rate of 16.70% is applicable (15% MAT + 7% Surcharge + 4% Health & Education Cess). The grossed-up RoE works out to 16.81%; and
- (ii) For years 21 to 25: Corporate tax rate of 27.82% is applicable (25% tax + 7% Surcharge + 4% Health & Education Cess). The grossed-up RoE works out to 19.40%.

13.3 Interest on Loan:

- (a) Sub-regulation (1) and (2) of Regulation 24-C of the RE Tariff Regulations, 2017 provides as under:-

"24-C. Loan and Finance Charges.—(1) For the purpose of determination of tariff, loan tenure of 15 years shall be considered:

(2) Interest Rate.—

(a) The loan amount (i.e. the debt component) arrived at in the manner indicated in the regulation 23-C shall be considered as gross normative loan for calculation of interest on loan. The normative loan outstanding as on 1st 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.

(b) For the purpose of computation of tariff(s) under these Regulations, 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, prior to the respective date(s) from which such tariff(s) the respective generic levellised tariffs are to be made applicable, shall be considered:

Provided that in case where the project specific tariff is to be determined, such average rate of SBI, as prevalent during the respective periods in which the loan has been availed, shall be taken into account on weighted average basis and the rate so worked out on this basis or the weighted average rate at which the loan has been availed, whichever is lower, shall be considered.

(c) Notwithstanding any moratorium period availed by the renewable energy generator, the repayment of loan shall be considered from the first year of the tariff period and shall be equal to the annual depreciation allowed.

(d) The loan repayment for a financial year or the relevant part period thereof shall be considered to have been done in the middle of that financial year or the relevant part period thereof, as the case may be."

- (b) The loan tenure of 15 years shall be considered for the purpose of determination of tariff for RE projects.

- (c) The average MCLR (1-year tenor) of State Bank of India for the last six months (ending February 2026) is calculated as follows:-

MCLR Data for Interest Calculation

Month	MCLR (1-Year)
September, 2025	8.75%
October, 2025	8.75%
November, 2025	8.75%
December, 2025	8.70%
January, 2026	8.70%
February, 2026	8.70%
Average	8.725%

- (d) Considering above, the Interest Rate works out to be 10.73% per annum, as detailed hereunder:-

Interest Rate = Average MCLR + 200 basis points = 8.725% + 2.00% = 10.725% per annum.

- (e) Further, as per clause (c) of sub-regulation (2) of Regulation 24-C, the repayment of loan shall be considered from the first year of the tariff period and shall be equal to the annual depreciation allowed.

13.4 Depreciation:

- (a) Regulation 25-C of the RE Tariff Regulations, 2017 provides that,-

“25-C. Depreciation.—For the purpose of tariff determination, depreciation shall be computed in the following manner, namely:-

(a) the value base for the purpose of depreciation shall be equal to sum total of the debt and equity components as per the provisions of regulation 23-C;

(b) the salvage value shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the value base as per clause (a) of this regulation:

Provided that no depreciation shall be allowed to the extent of incentive, grant and capital subsidy available for the project.

(c) depreciation per annum shall be based on ‘Differential Depreciation Approach’. For tariff purposes, the depreciation shall be allowed @ 4.67% per annum of the value base as per clause (a) of this regulation till such time the requirement for repayment of loan component of the capital cost as per regulations 21-C, 23-C and 24-C is fully provided and the remaining depreciation shall be spread over the residual useful life of the project on straight line method;

(d) depreciation shall be chargeable from the first year of commencement of operation of the project:

Provided that in case of operation of the asset for part of the year, depreciation shall be charged on pro rata basis for the purposes of project specific determination of tariff.”

- (b) Accordingly, 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 as under:-

Depreciation Parameters	
Depreciable Base	100% of Capital Cost
Maximum Depreciable Portion	90% of Depreciable Base
Depreciation Rate (Years 1-15)	4.67% p.a.
Depreciation Rate (Years 16-25)	2.00% p.a.

13.5 Interest on Working Capital:

- (a) Sub-regulations (2) and (4) of Regulation 27-C of the RE Tariff Regulations, 2017 provides as under:-

"(2) The working capital in respect of biomass power projects with Rankin Cycle technologies, biomass gasifier based power projects, non-fossil fuel based cogeneration projects, Municipal Solid Waste power projects and Refused Derived Fuel project shall be computed in accordance with the following:—

- (a) Fuel costs for four months equivalent to normative Plant Load Factor;*
- (b) operation and maintenance expenses for one month;*
- (c) receivables equivalent to 45 days of energy charges (fixed and variable charges) for sale of electricity calculated on the net saleable design energy on normative basis; and;*
- (d) maintenance spare @ 15% of operation and maintenance expenses.*

(4) Interest on Working Capital shall be at interest rate equivalent to the normative interest rate of three hundred and fifty (350) 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, prior to the respective date(s) from which the generic tariff(s) are to be made applicable:"

- (b) Considering above, the Interest Rate on Working Capital works out to be 12.23% per annum, as detailed hereunder:-

Interest Rate on Working Capital = Average MCLR + 350 basis points =
8.725% + 3.5% = 12.225% per annum.

- (c) Working capital components shall be as under:-

Working Capital Parameters	
O&M Expenses	1 Month
Maintenance Spares	15% of Annual O&M
Receivables Period	1.5 Months (45 days)
Fuel Cost (Fuel Stock)	4 Months
Interest Rate on WC	12.23% p.a.

13.6 Discount Rate:

- (a) In accordance with sub-regulation (4) of Regulation 12 of the RE Tariff Regulations, 2017, the discount factor equivalent to the post-tax weighted

average cost of capital has been considered for the purpose of levellised tariff computation.

(b) The discount factor is calculated based on,-

- (i) Normative debt-equity ratio: 70:30;
- (ii) Interest rate on debt: 10.73%;
- (iii) Post-tax RoE: 14%; and
- (iv) Corporate tax rate: 27.82% (25% IT rate + 7% Surcharge + 4% Health & Education Cess).

Based on weighted average cost of capital (post-tax), the Discount Rate works out to be 9.62%.

13.7 Incentive and/or subsidy and/or grant/budgetary support by the Central/ State Government:

(a) Regulation 22-C of the RE Tariff Regulations, 2017 provides as under:-

“(1) While determining the generic levellised or project specific levellised tariff, as the case may be, for the renewable energy project(s) under these Regulations, the Commission shall take into consideration any incentive and/or subsidy and/or grant and/or budgetary support available, irrespective of whether the same is actually availed or not, under the schemes of the Central or State Government or their agencies, but excluding accelerated depreciation benefit under the Income Tax Act:

Provided that the capital subsidy under the schemes of the Central or State Government or their agencies shall be adjusted in the normative capital cost and the cost so arrived, after such adjustment, shall be considered for computing Debt-Equity Components for the purposes of determination of generic levellised tariffs:

Provided further that where the Central Government or the State Government notifies, or has notified, any generation based incentive (GBI) scheme for a particular kind of renewable technology, such technology based generating station shall be assumed to have availed the benefit of such a scheme and their tariffs shall be reduced by the amount of generation based incentive (GBI) per unit for the period during which such incentive remains applicable.

(2) Where any additional project specific grant or budgetary support is available to any project, apart from the incentive and/or subsidy and/or grant available under Sub-regulation (1) of this regulation, the Commission shall account for such budgetary support also, while determining project specific levellised tariff.

(3) The amount of subsidy shall be considered for each renewable source as per the applicable policy of the MNRE/State Government/Central Government and if the amount and/or mechanism of subsidy is changed by the MNRE/State Government/Central Government, consequent corrections in tariffs may be carried out by the Commission in accordance with Regulation 20.”

(b) No adjustment of incentive and/or subsidy and/or grant is being made in the tariff calculations. However, adjustment to be made in the rate on the basis of per million (rupees) of subsidy for each MW capacity has been worked out and mentioned in the attached calculation sheet of the project and adjustment, if any, on account of the same shall be made at appropriate stage while applying the tariff after taking into account the eligibility conditions in each case. Similarly, adjustment on account of any other subsidy Scheme(s) available under the Central/State Government shall also be made at appropriate stage(s) after taking into account the extent of subsidy(ies) available under such Scheme(s). The adjustments on account of subsidies, where available, are to be made at the

rates indicated in the calculation sheet on normative basis by considering the provisions of Regulations 20, 22-C, 23-C, 24-C, 25-C and 26-C. For this purpose the total amount (in million rupees) of incentive and/or subsidy and/or grant etc., shall be divided by the installed capacity of the projects and per MW amount (in million rupees) so arrived at, shall be multiplied by the rate indicated in the calculation sheet.

13.8 Rounding:

The tariff so worked out for Biomass Gasifier based Power Projects is proposed to be rounded off to the nearest paise per kWh. A fraction of 0.5 paise per kWh or above shall be rounded off to the next higher paise, and any fraction of less than 0.5 paise per kWh shall be ignored.

14 Generic Levellised Tariff and Associated Terms & Conditions.-

After having proposed the technology specific parameters and financial parameters as above and in light of the discussions made in the preceding paragraphs, the generic levellised tariff and the associated terms and conditions for Biomass Gasifier based Power Projects for FY 2026-27 under the RE Regulations, 2017 are proposed to be arrived at and are proposed to be determined as under:-

Generic Levellised Tariff for FY 2026-27

Year of Operation/ Tariff Period	Year-wise Tariff (Rs./kWh)		
	Fixed Cost Component	Variable Cost Component	Total Tariff
Year 1	3.535	6.332	9.87
Year 2	3.535	6.550	10.09
Year 3	3.535	6.776	10.31
Year 4	3.535	7.010	10.54
Year 5	3.535	7.252	10.79
Year 6	3.535	7.502	11.04
Year 7	3.535	7.761	11.30
Year 8	3.535	8.029	11.56
Year 9	3.535	8.306	11.84
Year 10	3.535	8.592	12.13
Year 11	3.535	8.889	12.42
Year 12	3.535	9.195	12.73
Year 13	3.535	9.513	13.05
Year 14	3.535	9.841	13.38
Year 15	3.535	10.180	13.72
Year 16	3.535	10.532	14.07
Year 17	3.535	10.895	14.43
Year 18	3.535	11.271	14.81
Year 19	3.535	11.660	15.19
Year 20	3.535	12.062	15.60
Year 21	3.535	12.478	16.01
Year 22	3.535	12.909	16.44
Year 23	3.535	13.354	16.89
Year 24	3.535	13.815	17.35
Year 25	3.535	14.291	17.83

14.1 The Fixed Cost component of Rs. 3.53 per kWh shall remain constant (levellised) throughout the 25-year tariff period.

14.2 The Variable Cost component shall be Rs. 6.33 per kWh for Year 1 (FY 2026-27).

15 **Associated Terms and Conditions:**

A. Applicability.-

- (i) This tariff shall be applicable to Biomass Gasifier based Power Projects of capacity upto 5.0 MW which are using new plant and machinery and having a grid connected system that uses 100% producer gas engine, coupled with gasifier technologies approved by the MNRE;
- (ii) This tariff shall be subject to the RE Tariff Regulations, 2017 and the Orders as may be issued by the Commission thereunder, from time to time;
- (iii) This tariff shall be applicable in cases where the project achieves its commissioning on or before 31.03.2027 (i.e. during FY 2026-27);
- (iv) This generic levellised tariff shall cease to apply to a project if its actual annual PLF remains below 10 per cent of the normative PLF of 85%; and
- (v) This tariff shall not be applicable in cases where the distribution licensee procures power through competitive bidding at its level in accordance with section 63 of the Electricity Act, 2003.

B. Subsidy and Incentives:

This tariff has not taken into account any capital subsidy or any incentive or grant/budgetary support etc. and the adjustment in this regard shall be carried out in accordance with the RE Regulations, 2017. The adjustments, if any, to be made at the rate per kWh by considering Rs. 100.00 Lakh/MW subsidy have however been indicated in the tariff calculation sheets.

16 The Summary of Assumption Parameters and the detailed computations for generic levellised tariff for FY 2026-27, without considering any subsidies/incentives/grants as well as illustrations thereof are attached as per Appendix-I and Sheet to Appendix-I.

Appendix – I

The key assumption parameters for Biomass Gasifier based Power Projects for FY 2026-27 are summarized as under:-

Sr. No.	Assumption Head	Sub-Head	Sub-Head(2)	Unit	Value
1	Power Generation	Capacity	Installed Capacity	MW	1.00
			Capacity Utilization Factor (CUF)/ Normative Plant Load Factor (PLF)	%	85.00
		Losses & Useful Life	Auxiliary consumption (including transformation and project line losses)	% of Gross Generation	10.00
			Useful Life	Years	25.00
			Tariff Period	Years	25.00
2	Project Cost	Capital Cost per MW	Capital Cost	Lakh Rs/MW	677.00
3	Financial Parameters	Debt: Equity	Debt Ratio	%	70.00
			Equity Ratio	%	30.00
			Total Debt Amount	Lakh Rs/MW	473.90
			Total Equity Amount	Lakh Rs/MW	203.10
		Debt Parameters	Moratorium Period	Years	0.00
			Loan Repayment Period	Years	15.00
			Interest Rate on Debt	% p.a.	10.73
		Equity Parameters	Annual Rate of Return on Equity (RoE) (Post-tax)	%	14.00
			Grossed-up Annual Rate of RoE for Years 1-20	%	16.81
			Grossed-up Annual Rate of RoE for Years 21-25	%	19.40
		Depreciation	Depreciable Base	% of Capital Cost	100.00
			Maximum Depreciable Portion	% of Depreciable Base	90.00
			Depreciation Rate (Years 1-15)	% p.a.	4.67
			Depreciation Rate (Years 16-25)	% p.a.	2.00
		Discount Rate	Discount Rate	%	9.62
		O&M	Annual O&M Expense (Year 1)	Lakh Rs/MW	80.03
			Escalation on Annual O&M Expenses	% p.a.	3.84

Sr. No.	Assumption Head	Sub-Head	Sub-Head(2)	Unit	Value
4	Working Capital		O&M Expenses	Months	1.00
			Maintenance Spares	% of annual O&M	15.00
			Receivables	Months	1.50
			Fuel Cost (Fuel Stock)	Months	4.00
			Interest Rate on Working Capital	% p.a.	12.23
5	Fuel Cost Parameters	Fuel Specifications	Specific Fuel Consumption	kg/kWh	1.25
		Fuel Price	Base Year Biomass Fuel Price (FY 2026-27)	Rs/MT	4,559.01
			Annual Fuel Price Escalation	% p.a.	3.45
			Fuel Cost for 1 Month	Lakh Rs	35.39
6	Generation & Sale of Energy	Total No. of Hours		Hrs.	8766

Determination of Tariff for Biomass Gasifier Power Projects upto 5.00MW capacity for FY 2026-27																										
Year of Tariff Period->		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
Generation																										
Gross Generation per MW	MUs	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45	7.45
Auxiliary consumption (including transformation and project line losses) Per MW	MUs	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Net Saleable Energy per MW	MUs	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71
Variable Cost																										
Biomass Cost	Rs. Lakh	424.62	439.27	454.42	470.10	486.32	503.10	520.46	538.41	556.99	576.20	596.08	616.65	637.92	659.93	682.70	706.25	730.62	755.82	781.90	808.87	836.78	865.65	895.51	926.41	958.37
Per unit Variable Cost	Rs./kWh	6.33	6.55	6.78	7.01	7.25	7.50	7.76	8.03	8.31	8.59	8.89	9.20	9.51	9.84	10.18	10.53	10.89	11.27	11.66	12.06	12.48	12.91	13.35	13.81	14.29
Per MW Fixed Cost of Generation (CoG)																										
O&M Expences	Rs. lakh	80.03	83.10	86.29	89.61	93.05	96.62	100.33	104.19	108.19	112.34	116.65	121.13	125.79	130.62	135.63	140.84	146.25	151.86	157.69	163.75	170.04	176.57	183.35	190.39	197.70
Depreciation	Rs. lakh	31.62	31.62	31.62	31.62	31.62	31.62	31.62	31.62	31.62	31.62	31.62	31.62	31.62	31.62	31.62	13.54	13.54	13.54	13.54	13.54	13.54	13.54	13.54	13.54	13.54
Interest on Term Loan	Rs. lakh	49.13	45.74	42.35	38.97	35.58	32.19	28.80	25.41	22.02	18.64	15.25	11.86	8.47	5.08	1.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Return on Equity (Pre-tax)	Rs. lakh	34.13	34.13	34.13	34.13	34.13	34.13	34.13	34.13	34.13	34.13	34.13	34.13	34.13	34.13	34.13	34.13	34.13	34.13	34.13	34.13	39.39	39.39	39.39	39.39	39.39
Interest on Working Capital	Rs. lakh	29.50	30.42	31.37	32.36	33.38	34.44	35.54	36.69	37.87	39.09	40.36	41.68	43.05	44.46	45.93	47.19	48.82	50.50	52.25	54.05	56.00	57.93	59.93	62.00	64.15
Total Annual CoG	Rs. lakh	224.41	225.02	225.77	226.68	227.76	229.00	230.43	232.03	233.83	235.82	238.01	240.42	243.05	245.91	249.00	235.70	242.74	250.04	257.61	265.47	278.97	287.43	296.21	305.33	314.78
Per Unit Fixed CoG	Rs./kWh	3.35	3.36	3.37	3.38	3.40	3.41	3.44	3.46	3.49	3.52	3.55	3.59	3.62	3.67	3.71	3.51	3.62	3.73	3.84	3.96	4.16	4.29	4.42	4.55	4.69
Discounting																										
Discounted Factor	%	1.00	0.91	0.83	0.76	0.69	0.63	0.58	0.53	0.48	0.44	0.40	0.36	0.33	0.30	0.28	0.25	0.23	0.21	0.19	0.17	0.16	0.15	0.13	0.12	0.11
Discounted Per Unit Variable CoG	Rs./kWh	6.33	5.98	5.64	5.32	5.02	4.74	4.47	4.22	3.98	3.76	3.55	3.35	3.16	2.98	2.81	2.66	2.51	2.37	2.23	2.11	1.99	1.88	1.77	1.67	1.58
Discounted Per Unit Fixed CoG	Rs./kWh	3.35	3.06	2.80	2.57	2.35	2.16	1.98	1.82	1.67	1.54	1.42	1.31	1.20	1.11	1.03	0.89	0.83	0.78	0.74	0.69	0.66	0.62	0.59	0.55	0.52
Year of Tariff Period->		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
Variable Cost	Rs./kWh	6.332	6.550	6.776	7.010	7.252	7.502	7.761	8.029	8.306	8.592	8.889	9.195	9.513	9.841	10.180	10.532	10.895	11.271	11.660	12.062	12.478	12.909	13.354	13.815	14.291
Levellized Fixed Tariff	Rs./kWh	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535	3.535
Year-wise Total Tariff	Rs./kWh	9.87	10.09	10.31	10.54	10.79	11.04	11.30	11.56	11.84	12.13	12.42	12.73	13.05	13.38	13.72	14.07	14.43	14.81	15.19	15.60	16.01	16.44	16.89	17.35	17.83

Generic Levellised Fixed Component Tariff (without Subsidy) at Capital Cost of Rs.677 Lakh/MW = Rs.3.53/kWh

Indicative Generic Levellised Fixed Component Tariff by considering Subsidy/Incentive/Grant of Rs 100 Lakh/MW = Rs.3.34/kWh

Adjustment to be made in the Generic Levellised Fixed Component Tariff per 100 Lakh of Subsidy/Incentive/Grant per MW= Rs.0.19/kWh