

**Chhattisgarh State Electricity Regulatory Commission**

**Irrigation Colony, Shanti Nagar,**

**Raipur, Dated 30<sup>th</sup> December, 2025**

**Chhattisgarh State Electricity Regulatory Commission (Terms and conditions for  
determination of tariff for Biomass based power plants) Regulations, 2025**

**No. D-26/CSERC/2025** - Govt. of India is giving thrust to develop renewable source of energy being environment friendly in nature. The Electricity Act 2003 (EA 2003) provides for policy formulation by the Government of India and mandates State Electricity Regulatory Commissions (SERCs) to take steps to promote renewable sources of energy within their area of jurisdiction. Biomass is also one of the renewable resources available in abundance in Chhattisgarh.

The study, on availability of Biomass fuel and its use for various purposes in the State of Chhattisgarh, conducted by IIM Raipur on behalf of the Commission in the year 2019 reports that State's dominance on paddy production, byproducts of rice production is an eminent source of the Biomass in the State for power generation. In the year 2018-19 they have estimated potential of 0.7 million MT whereas the requirement by the existing Biomass power plant estimated as 0.9 million MT and hence recommended that Government should not promote more Biomass based power plant in the State. As many of the power plants are in the verge of completion of their useful life in coming years, the Commission is of the opinion that provisions for tariff for new Biomass based power plants/ existing Biomass plants extending their life after some renovation and modernization or refurbishment should be specified.

Further, Ministry of New and Renewable Energy (MNRE), New Delhi in its study report conducted by Centre for Energy Studies (CES) Administrative Staff College of India (ASCI), Hyderabad has also identified that rice crop has major contributor for Biomass power potential in Chhattisgarh for FY 2019-20 is Rice with 326.71 MWe followed by Maize (12.19 MWe), Arhar/Tur (7.87 MWe), Wheat (7.79 MWe) and Soyabean (3.55 MWe).

The Commission vide its remark dated 03.11.2025, while deciding the terms and condition for tariff for other renewable energy resources for FY 2025-26 onwards, decided to keep the tariff for Biomass based power plants separately. The remark of the Commission is reproduced below.

*“Prayas Energy Group (Prayas) has requested the Commission to mandate Competitive Bidding for procuring power from Solar, Wind, Large hydro, Hybrid RE, PSP, and BESS projects, and limit the scope of the Regulations to Biomass, Bagasse, Small Hydro, and Waste-to-Energy projects. The Commission had considered these aspects before publishing the draft Regulations. The Commission is of the view that*

*provisions for tariff determination under Section 62 of the EA 2003 are required to provide assurance to investors for cost recovery in those sectors where power Generation of the State has not reached the desired level. However, in case of biomass projects with extended PPA or new PPAs with the Distribution Licensee, the Commission needs to further assess if the Tariff determination should be under Section 62 of the EA 2003 or Tariff should be discovered through Competitive Bidding under Section 63 of the EA 2003. Hence, the Commission has decided to address the Terms and Conditions Tariff for Biomass Power Projects based on Rankine Cycle Technology separately.”*

Keeping the above in view and in exercise of powers vested under Section 61 and 86 read with Section 181 of the Electricity Act 2003 (36 of 2003) and all other powers enabling it in this behalf, the Chhattisgarh State Electricity Regulatory Commission (the Commission) hereby makes the following Regulations specifying terms and conditions for determination of tariff for Biomass based power plants for the purpose of sale of power to distribution licensees.

## **1. Short title and commencement**

- 1.1 These Regulations may be called the Chhattisgarh State Electricity Regulatory Commission (Terms and conditions for determination of tariff for Biomass based power plants) Regulations, 2025.
- 1.2 These Regulations shall come into force from April 01, 2026 and shall remain in force for a period of 5 years from the date of commencement.
- 1.3 These Regulations shall extend to the whole of the State of Chhattisgarh and shall be applicable to renewable energy based generating stations established in the State.

## **2. Definitions and Interpretation**

2.1 In these Regulations, unless the context otherwise requires:

- a) "**Act**" means the Electricity Act, 2003 (36 of 2003), as amended from time to time;
- b) "**Auxiliary Energy Consumption**" or "**AUX**" in relation to a period in case of a generating station means the quantum of energy consumed by auxiliary equipment of the generating station, and transformer losses within the generating station, expressed as a percentage of the sum of gross energy generated at the generator terminals of all the units, combined or separately of the generating station;
- c) "**Biomass**" means wastes produced during agricultural and forestry operations (for example straws and stalks) or produced as a by-product of processing operations of agricultural produce (e.g., husks, shells, de-oiled cakes, etc.); wood produced in dedicated energy plantations or recovered from wild bushes/weeds, and the wood waste produced in some industrial operations including such other wastes as may be recognized by the Central Government as being part of biomass;

- d) **“Capital Cost”** means as defined in the Regulation 10 for the respective renewable energy source;
- e) **“CERC”** means the Central Electricity Regulatory Commission;
- f) **“Commission”** means the Chhattisgarh State Electricity Regulatory Commission;
- g) **“Commissioning”** means testing and operation of systems and components of generating plant as may be required for successful synchronization of the generating plant:  
 Provided that, the commissioning process may be applied not only to new projects but also to existing units and systems subjected to expansion, renovation or revamping;
- h) **“Control Period”** or **“Review Period”** means the period during which the norms for determination of tariff specified in these Regulations shall remain valid;
- i) **“Date of Commercial Operation”** or **“COD”** means the date of commissioning declared by a Generating Company in relation to a Unit of its Generating Station in line with the provisions of the Indian Electricity Grid Code/ State Grid Code:  
 Provided that, the date of commissioning shall be certified based on joint inspection by RE Generator and concerned Distribution Licensee or SLDC as may be applicable;
- j) **“Financial Year”** means a period commencing on 1<sup>st</sup> day of April of a calendar year and ending on 31<sup>st</sup> March of the subsequent calendar year;
- k) **“Firm Power”** means any electricity supplied from and after the COD of project;
- l) **“Gross Calorific Value”** or **“GCV”** in relation to a fuel used in generating station means the heat produced in kcal by complete combustion of one kilogram of solid fuel or one litre of liquid fuel or one standard cubic meter of gaseous fuel, as the case may be;
- m) **“Gross Station Heat Rate”** or **“GSHR”** means the heat energy input in kcal required to generate one kWh of electrical energy at generator terminals;
- n) **“Infir Power”** means electricity generated prior to declaration of date of commercial operation of generating station/ unit;
- o) **“Installed Capacity”** or **“IC”** means the summation of the name plate capacities of all the units of the generating station or the capacity of the generating station (reckoned at the generator terminals):
- p) **“Inter-connection Point”** shall mean interface point of Biomass based power generating facility with the transmission system or distribution system, shall be line isolator on outgoing feeder on HV side of generator transformer.
- q) **“Licensee”** means a distribution licensee operating in the State;
- r) **“Maximum Continuous Rating”** or **“MCR”** in relation to a unit of the thermal generating

station based on Biomass means the maximum continuous output at the generator terminals, guaranteed by the manufacturer at rated parameters;

- s) **“MNRE”** means the Ministry of New & Renewable Energy of Government of India;
- t) **“Plant Load Factor”** or **“PLF”** for a given period, means the total electricity corresponding to actual generation (gross generation) during the reference period, expressed as a percentage of gross generation electricity corresponding to installed capacity in that reference period and shall be computed in accordance with the following formula:

$$\text{PLF} = \frac{\text{Gross generation over the reference period}}{\text{Installed capacity} \times \text{total hours during the reference period}} \times 100\%$$

(including outage hours);

- u) **“Project/Plant”** means a generating station including the evacuation system up to inter-connection point.
- v) **“Renewable Energy Sources”** means renewable sources such as hydro, wind, solar including its integration with combined cycle, biomass, bio fuel cogeneration, urban or municipal waste and other such sources as approved by the Central Government;
- w) **“Scheduled Generation”** at any time or for any period or time block means schedule of generation in MW or MU at inter-connection point as agreed by the generator and licensee;
- x) **“State”** means the State of Chhattisgarh;
- y) **“State Nodal Agency”** means the Chhattisgarh Renewable Energy Development Agency, which has been designated by the Ministry of New and Renewable Energy to promote efficient use of renewable energy in the State of Chhattisgarh;
- z) **‘Useful Life’** in relation to a unit of Biomass based generating station including evacuation system shall be 25 years.
- aa) **‘Year’** means a financial year;

2.2 Words and expressions used in these Regulations and not defined shall have the same meaning as they have in the Act or in the other Regulations notified by the Commission.

### 3. Scope and extent of application

3.1 All new procurement of power by the distribution licensee from biomass based generating stations in future and also from existing biomass based generating stations which have completed twenty years of commercial operation, shall be undertaken through competitive bidding in accordance with Section 63 of the Electricity Act, 2003 and the guidelines issued by the Central Government from time to time.

Provided that biomass based generating stations having PPA with distribution licensee which have been in commercial operation for a period of less than twenty years as on the date of commencement of these Regulations, tariff will be governed through respective tariff orders issued by the Commission from time to time.

Provided further that procurement of power from biomass based generating stations which have been in commercial operation for a period of less than twenty years as on the date of commencement of these Regulations and for which tariff period completes, tariff parameters shall be in accordance with these Regulations and tariff determination shall be under Section 62 of the Electricity Act, 2003.

Provided further that in respect of biomass generating stations having subsisting Power Purchase Agreements and who could not achieve Commercial Operation Date till 31<sup>st</sup> March, 2026, the tariff for such generating stations shall be determined under Section 62 of the Electricity Act, 2003 in accordance with parameters specified in these Regulations, for the capacity and tenure approved by the Commission. However, such plants should essentially achieve Commercial Operation by 31<sup>st</sup> March, 2029.

Provided further that any extension, renewal, or procurement of power beyond the approved tenure of such Power Purchase Agreements, or procurement of additional capacity thereunder, shall be treated as fresh procurement and shall be undertaken only in accordance with Section 63 of the Electricity Act, 2003 and these Regulations.

- 3.2** Biomass based generating stations which have been in commercial operation for a period of less than twenty years as on the date of commencement of these Regulations and for which tariff period is over by 31<sup>st</sup> March, 2025, fixed cost determined for FY 2024-25 shall be continued for FY 2025-26 also.
- 3.3** Energy charges for the Biomass based generating stations for FY 2025-26 shall be same as specified for FY 2024-25.
- 3.4** Use of fossil fuel shall be allowed up to the limits specified in Regulation 21 of these Regulations.

## **Chapter 1: General Principles**

### **4. Control Period or Review Period**

The Control Period or Review Period under these Regulations shall be of five years, commencing from April 01, 2026:

Provided further that, the Regulations for next Control Period shall be undertaken six months prior to the end of the present Control Period and in case Regulations for the next Control Period are not notified until commencement of next Control Period, the tariff norms as per these Regulations shall continue to remain in force until notification of the revised Regulations subject to adjustments as per revised Regulations:

### **5. Project Specific Tariff**

#### **5.1** Determination of Project specific tariff for Biomass based plants shall be in accordance with terms and conditions as stipulated under relevant provisions of the Regulations/orders:

Provided that, any project for which project-specific tariff has been determined based on previous Regulations, project-specific tariff shall be continued.

#### **5.2** In case of projects which have been awarded provisional tariff before commencement of these Regulations and who opt for generic tariff, payments already made to developers towards provisional tariff shall be adjusted in six equal monthly instalments after deducting the statutory charges paid to State Government:

Provided that, if such project opts for project specific tariff, then such revenue earned shall be set off against the capital cost incurred on the project.

#### **5.3** The project-specific tariff shall be determined in accordance with the norms specified in these Regulations, except for capital cost, which shall be examined for prudence.

#### **5.4** In case of biomass projects having fuel cost component, rate of infirm power shall be Rs. 1.0 per kWh.

Provided that, such infirm power shall qualify for renewable purchase obligations requirement of the licensee.

#### **5.5** Projects may be allowed to switch from generic tariff to project specific tariff dispensation, only if such switching is opted for not later than 2 years from COD.

### **6. Petition and proceedings for determination of tariff**

#### **6.1** A petition for determination of project specific tariff shall be accompanied by such fee as may be determined by relevant Regulations and shall be accompanied by

- (i) Information in Forms 1.1, 1.2 as the case may be, and as appended in these Regulations;
- (ii) Detailed Project Report outlining technical and operational details, site specific aspects, premise for capital cost and financing plan, etc.:

Provided that, for the existing Biomass plants, the previous Tariff Order shall form the basis for capital cost and financing:

- (iii) Certified copy from the practising Chartered Accountant / Cost Auditor as proof of capital cost incurred towards Gross fixed Asset (GFA) clearly indicating sources of funds, debt, equity & subsidies /if any;
- (iv) A Statement of all applicable terms and conditions and expected expenditure for the period for which tariff is to be determined;
- (v) A statement containing full details of calculation of any grant, subsidy and incentive received, due or assumed to be due from the Central Government and/or State Government. This statement shall also include the proposed tariff calculated without consideration of the subsidy and incentive;
- (vi) Technical data including data regarding PLF;
- (vii) Any other information that the Commission requires the Petitioner to submit for disposal of the Petition.

**6.2** The proceedings for determination of tariff shall be in accordance with the Conduct of Business Regulations of this Commission.

**6.3** Project specific tariff for new Biomass projects shall be determined for the Useful Life of the project for the fixed cost component on levelized basis (considering the year of COD of the project) and while the fuel cost component shall be specified year to year basis.

## **7. Tariff Structure**

**7.1** The tariff for renewable energy technologies shall be single-part tariff consisting of the following fixed cost components:

- I. Return on equity;
- II. Interest on loan capital;
- III. Depreciation;
- IV. Interest on working capital;
- V. Operation and maintenance expenses:

Provided that for biomass power projects with Rankine cycle technology fixed cost component and fuel cost component, shall be determined.

## **8. Tariff Design**

**8.1** The generic tariff shall be determined considering the year of COD of the project, on levelized basis for the entire useful life of the project:

**8.2** For the purpose of levelized tariff computation, the discount factor equivalent to Post Tax weighted average cost of capital shall be considered.

**8.3** In case a Biomass project, in a given year, generates energy in excess of the PLF, as the case may be specified under these Regulations, the Biomass project may sell such excess energy in the market under bilateral or collective transactions, provided that the first right of refusal for such excess energy shall vest with the concerned beneficiary:

Provided that in case the concerned beneficiary purchases the excess energy, the tariff for such excess energy shall be equal to the variable charges applicable for that year.

## **9. Dispatch Principles for electricity generation from Biomass based power plants**

**9.1** All Biomass based power plants shall be treated as 'MUST RUN' power plants and shall not be subjected to 'merit order despatch' principles.

**9.2** Biomass power generating stations shall be subjected to scheduling and deviation settlement mechanism as specified by the Commission in its Deviation Settlement Regulations.

## **Chapter 2: Financial Principles and Technology specific parameters for Biomass Power Projects based on Rankine Cycle Technology**

### **10. Capital Cost**

- 10.1** The Capital Cost shall be inclusive of land cost, all capital work including plant and machinery, civil work, erection and commissioning, financing costs, preliminary and pre-operative expenses, interest during construction, and evacuation infrastructure up to inter-connection point. The generating company shall submit the break-up of capital cost items along with its petition in the manner specified under Regulation 6.
- 10.2** Capital cost for Biomass projects as specified for first year of Control Period shall remain valid for the entire duration of the Control Period unless reviewed by the Commission.

### **11. Debt Equity Ratio**

- 11.1** For the tariff determination the debt equity ratio shall be considered as 70:30.
- 11.2** If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

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

Provided further that, the debt/equity invested in foreign currency shall be denominated/ 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 Biomass energy project.

- 11.3** 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 Biomass energy project.

### **12. Interest on Loan and Finance Charges**

- 12.1** For the purpose of determination of tariff, loan/debt tenure of 15 years shall be considered.

- 12.2** The loans/debts arrived at in accordance with Regulation 11, shall be considered as gross normative loan for calculation of interest on loan:

Provided that, the normative loan outstanding as on April 1<sup>st</sup> of every year shall be worked out by deducting the cumulative repayment up to March 31<sup>st</sup> of previous year from the gross normative loan.

- 12.3** For the purpose of determination of tariff, the normative interest rate of two hundred (200) basis points above the average State Bank of India Marginal Cost of Funds based Lending Rate (MCLR) (one-year tenor) prevalent during the last available six months shall be considered.

- 12.4** Notwithstanding any moratorium period availed by the generating company, 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:

Provided that, if the existing biomass plants having power purchase agreement (PPA) with State DISCOM for which the Commission has determined preferential tariff, opt for the project specific tariff, loan and finance charges will be considered as specified in the relevant orders.

### **13. Depreciation**

- 13.1** The value base for the purpose of depreciation shall be the Capital Cost of the asset admitted by the Commission.

- 13.2** The Salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the Capital Cost of the asset.

- 13.3** The depreciation rate for the first 15 years of the Tariff Period shall be 4.67% per annum and the remaining depreciation shall be spread over the remaining useful life of the project from 16<sup>th</sup> year onwards on 'Straight Line Method'.

- 13.4** Depreciation shall be chargeable 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.

- 13.5** Depreciation shall not be allowed to the extent of grant or capital subsidy received for the project.

### **14. Return on Equity**

- 14.1** The value base for the equity shall be 30% of the capital cost or actual equity (in case of project specific tariff determination) as determined under Regulation 11.

**14.2** The normative Return on Equity for renewable energy projects shall be 14%, to be grossed up by latest available notified Minimum Alternate Tax (MAT) rate for the entire Tariff Period:

**15. Interest on Working Capital**

**15.1** The Working Capital requirement in respect of biomass power projects with Rankine cycle technology shall be computed as per followings:

- I. Fuel costs for four months equivalent to normative PLF;
- II. Operation & Maintenance expense for one month;
- III. Receivables equivalent to 45 days of fixed and variable charges for sale of electricity calculated on the target PLF;
- IV. Maintenance spares @ 15% of operation and maintenance expenses

**15.2** Interest on Working Capital shall be at interest rate equivalent to the normative interest rate of three hundred twenty-five (325) basis points above the average State Bank of India MCLR (one-year tenor) prevalent during the last available six months for the determination of tariff.

**16. Operation & Maintenance Expenses**

**16.1** Operation and Maintenance or O&M expenses shall comprise repair and maintenance (R&M) expenses, establishment including employee expenses, and administrative and general expenses including insurance.

**16.2** Normative O&M expenses for the first year of the Control Period (i.e., FY 2026-27) shall be Rs. 60.59 Lakh per MW.

**16.3** Normative O&M expenses allowed at the commencement of the Control Period shall be escalated at the rate of 5.25% per annum for the subsequent years of the Control Period.

**17. Plant Load Factor**

For the purpose of determination of tariff, the Plant Load Factor shall be considered as 80%.

**18. Auxiliary Consumption**

The auxiliary power consumption shall be considered as 10% for the determination of tariff.

**19. Station Heat Rate**

The station heat rate shall be considered as 4000 kcal/kWh for the biomass power projects.

## **20. Fuel**

- 20.1** The biomass power plant shall be designed in such a way that it uses different types of non-fossil fuels available within the vicinity of biomass power project such as crop residues, agro-industrial residues, forest residues, etc. and other biomass fuels as may be approved by the Central Government.
- 20.2** The biomass power generating companies shall ensure fuel management plan to ensure adequate availability of fuel to meet the respective project requirements and submit the same to the beneficiary.

## **21. Use of Fossil Fuel – Fuel Mix**

The use of fossil fuels shall not be allowed:

Provided that for the biomass power projects commissioned on or before 31.03.2026, the use of fossil fuels to the extent of 15% or as prescribed by the Central Government in terms of calorific value on annual basis shall be allowed for the Tariff Period from the date of COD.

## **22. Monitoring Mechanism for the use of biomass fuel**

- 22.1** The project developer shall furnish a monthly fuel procurement statement and monthly fuel usage statement duly certified by Chartered Accountant/Cost Accountant to the beneficiary, with complete details as may be required to the satisfaction of the beneficiary, with whom the power purchase agreement has been made (with a copy to the State Nodal Agency, i.e., CREDA, appointed by the Commission for the purpose of monitoring the fossil and non-fossil fuel consumption) for each month, along with the monthly energy bill. The statement shall cover details such as –
- i. Sources of fuel procurement
  - ii. Opening fuel stock quantity (in tonnes), for each type of fuel,
  - iii. Receipt of fuel quantity (in tonnes) at the power plant site for each type of fuel during the month,
  - iv. Quantity of fuel (in tonnes) for each fuel type (biomass fuels and fossil fuels) consumed during the month for power generation purposes,
  - v. Closing fuel stock quantity (in tonnes) for each fuel type (biomass fuels and fossil fuels) available at the power plant site at the end of the month,
  - vi. Cumulative quantity (in tonnes) of each fuel type (biomass and fossil fuel) procured till the end of that month during the financial year,

- vii. Cumulative quantity (in tonnes) for each fuel type (biomass and fossil fuel) consumed till end of that month during the financial year,
  - viii. Actual (gross and net) energy generation (denominated in lakh of units) during the month,
  - ix. Cumulative actual (gross and net) energy generation (denominated in lakh of units) until the end of that month during the financial year.
- 22.2** In case the State Nodal Agency is satisfied that the generator has reached a stage whereby compliance of the fuel mix criterion on annualised basis (financial year) is not possible, it will intimate the concerned beneficiaries and generators the details of such conclusions.
- 22.3** Thereafter, the beneficiary shall issue notice to the generator with reasons and instead of paying the preferential tariff, shall deal with the issue in accordance to express provisions given in Regulations 22.5.
- 22.4** Appropriate mechanism shall be incorporated in the power purchase agreement between the parties with due approval of the Commission for the compliance of fuel mix ratio as prescribed by the Central Government.
- 22.5** Non-compliance with the condition of fossil fuel usage by the project developer during any financial year, shall render such biomass power project to be ineligible to avail preferential tariff determined as per these Regulations in the year of default during such financial year when such default occurs:
- Provided that, such defaulting Biomass Power Project shall continue to sell power to concerned distribution licensee even during the period of default:
- Provided further that, the rate of supply to distribution licensee will be weighted average pooled price at which the distribution licensee has purchased the electricity including cost of self-generation, if any, (in the defaulting year of biomass plant) from all the long-term and short-term energy suppliers, but excluding those based on renewable energy sources, as the case may be, for the entire year of default and additional payment arrived to such power project will be adjusted in future bills in six equal monthly instalments.
- 23. Power to require statistics and returns by the State Nodal Agency**
- 23.1** The Chhattisgarh Renewable Energy Development Agency (CREDA) shall be responsible for monitoring compliance of fuel mix ratio of biomass projects.
- 23.2** CREDA shall also maintain such data, including technical and commercial details (including year of CoD, prescribed fuel mix ratio, source of fuel, etc.) of biomass projects in the State and shall make the data available in the public domain by publishing the same on its website with quarterly updation.

- 23.3** The project developer shall submit the information to CREDA as required under Regulation 23.1 in the format as specified in schedule Format 2.1 and 2.2.
- 23.4** CREDA shall submit an annual report on an affidavit duly notarised, for the entire financial year to the Commission for each biomass power plant (achieved CoD before and after April 01, 2026) on the use of fossil fuel and biomass fuel by the biomass based plant during the preceding year, by the end of April every year.
- 23.5** CREDA shall also submit the same annual report (as mentioned in Regulation 23.4) for the entire financial year to the beneficiary for each biomass power plant (achieved CoD before and after April 01, 2026) on the use of fossil fuel and biomass fuel by the biomass based plant during the preceding year, by the end of April every year:

Provided that, non-compliance of the stipulation with regard to use of fossil fuel by any generating plant and use of such fuel in excess of the specified percentage during any financial year shall render the plant to be treated as any other thermal generator and all benefits given to such plants including tariff as renewable energy source shall stand withdrawn:

Provided further that, the Beneficiary shall issue notice to such generators for non-compliance with regard to usage of fossil fuel and instead of paying the preferential tariff, shall deal with the issue in accordance to express provisions given in Regulations 22.5.

- 23.6** The project developer shall submit documents related to long term fuel supply arrangement to the beneficiary as well as to CREDA.

## **24. Calorific Value**

The average Calorific Value of the biomass fuel(s) used for the purpose of determination of tariff for biomass power projects shall be 3100 kcal/kg.

## **25. Fuel Cost**

- 25.1** Biomass fuel price for the 1<sup>st</sup> year of the Control Period (i.e., FY 2026-27) shall be Rs. 4559 per MT.
- 25.2** Biomass fuel price shall be escalated at 3.45% to arrive at the base price for subsequent years of the Control Period.

## **26. Rebate**

For payment of bills of the generating company through letter of credit or otherwise on presentation or through National Electronic Fund Transfer (NEFT) or Real Time Gross Settlement (RTGS) payment mode within a period of 7 days of presentation of bills, a rebate of 1% on bill amount shall be allowed.

**27. Late Payment Surcharge**

Unless otherwise specifically provided through any other order the late payment surcharge in case the payment of any bill for charges payable under these Regulations is delayed beyond a period of 45 days from the date of presentation of bills, a late payment surcharge as specified in the Electricity (Late Payment Surcharge and Related Matters) Rules, 2022 notified by the Ministry of Power, and as amended from time to time, shall be levied by the Generating Company.

**28. Norms of Operation and Parameters to be Ceiling Norms**

Norms and parameters specified in these Regulations are ceiling norms and shall not preclude the project developer or the beneficiary from agreeing to the improved norms of operation and in case the improved norms are agreed to, such improved norms/parameters shall be applicable for determination of project specific tariff.

**29. Subsidy or incentive by the Central/State Government**

**29.1** The Commission shall take into consideration any capital subsidy/ incentive/grant offered by the Central or State Government, including accelerated depreciation benefit if availed by the generating company for the renewable energy power plants, while determining the project specific tariff under these Regulations:

Provided that, in case any Central Government or State Government notification specifically provides for any Generation based Incentive over and above tariff, the same shall not be factored in while determining Tariff.

**29.2** Any grant, subsidy or incentive availed by the renewable energy project, which is not considered at the time of determination of tariff, shall be deducted by the beneficiary in subsequent bills after receipt of such grant, subsidy or incentive in suitable instalments or within such period as may be stipulated by the Commission.

**30. Cess, Duties and Water charges/statutory charges**

**30.1** Tariff determined under these Regulations shall be exclusive of cess and duties on generation, auxiliary consumption and sale of electricity as may be levied by the appropriate Government:

Provided that, the cess and duties levied by the appropriate Government shall be allowed as pass through on actual incurred basis.

### **Chapter 3: Miscellaneous**

**31. Deviation from norms**

Tariff for sale of electricity by the Generating Company may also be determined in deviation from the norms specified in these Regulations subject to the condition that the reasons for deviation from the norms specified under these Regulations shall be recorded in writing.

**32. 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.

**33. 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.

**By Order of the Commission**

**(S.P. Shukla)**

**Secretary**

**Form 1.1: Template for (Biomass power): Parameter Assumptions: Related to sub-clause (i) of clause 6.1 of Regulation 6**

Form 1.1: Template for Biomass Parameter Assumptions					
S. No.	Assumption Head	Sub-Head	Sub-Head (2)	Unit	Parameter Values
<b>1</b>	<b>Power Generation</b>				
		Capacity			
			Installed Power Generation Capacity	MW	
			Auxiliary Consumption factor	%	
			PLF during first six months of COD	%	
			PLF in next six months upto one year of COD	%	
			PLF from 2nd Year of COD onwards	%	
			Commercial Operation Date	mm/yyyy	
			Useful Life	Years	
<b>2</b>	<b>Project Cost</b>				
		Capital Cost / MW			
			Normative Capital Cost	Rs. Lakh /MW	
			Capital Cost	Rs. Lakh	
			Capital Subsidy, if any	Rs. Lakh	
			Net Capital cost	Rs. Lakh	
<b>3</b>	<b>Financial Assumptions</b>				
			Tariff period	years	
		Debt Equity			
			Debt	%	
			Equity	%	
			Total Debt Amount	Rs. Lakh	
			Total Equity Amount	Rs. Lakh	
		Debt component			
			Loan amount	Rs. Lakh	
			Moratorium Period	years	
			Repayment period (incl'd Moratorium)	Years	
			Interest Rate	%	
		Equity component			
			Equity amount	Rs. Lakh	
			Return on Equity for first 10 years	% p.a.	
			Return on Equity 11th year onwards	% p.a.	
		Depreciation			
			Depreciation rate for first 12 years	%	
			Depreciation rate 13th year onwards	%	
<b>4</b>	<b>Operation &amp; Maintenance</b>				
		Normative O&M expense		Rs. Lakh / MW	
		O&M expenses per annum		Rs. Lakh	

		Escalation factor for O&M expenses		%	
<b>5</b>	<b>Working Capital</b>				
		O&M expense		Months	
		Maintenance Spare	(% of O&M expenses)	%	
		Receivables		Months	
		Biomass stock		Months	
		Interest on working capital		% p.a.	
<b>6</b>	<b>Fuel related assumptions</b>				
		Station Heat Rate	During stabilisation	kcal/kWh	
			Post stabilisation	kcal/kWh	
		Fuel types & mix	Biomass fuel type-1	%	
			Biomass fuel type-2	%	
			Fossil Fuel (coal)	%	
			GCV of Biomass fuel type-1	kCal/kg	
			GCV of Biomass fuel type-2	kCal/kg	
			GCV of fossil fuel (coal)	kCal/kg	
			Biomass Price (fuel type-1): Yr-1	Rs. /MT	
			Biomass Price (fuel type-2): Yr-1	Rs. /MT	
			Fossil Fuel price (coal): Yr-1	Rs. /MT	
			Fuel price escalation factor	% p.a.	

**Form 1.2: Template for (Biomass): Determination of Tariff Components: Related to sub-clause (i) of clause 6.1 of Regulation 6**

<b>Form 1.2: Template for Biomass power: Determination of Tariff Components</b>						
<b>Units Generation</b>	<b>Unit</b>	<b>Year-1</b>	<b>Year-2</b>	<b>Year-3</b>	<b>Year-4</b>	<b>Year-5</b>
Installed capacity	MW					
Net Generation	MU					
<b>Tariff Components (Fixed charge)</b>	<b>Unit</b>	<b>Year-1</b>	<b>Year-2</b>	<b>Year-3</b>	<b>Year-4</b>	<b>Year-5</b>
O&M Expenses	Rs. Lakh					
Depreciation	Rs. Lakh					
Interest on term loan	Rs. Lakh					
Interest on working capital	Rs. Lakh					
Return on Equity	Rs. Lakh					
<b>Total Fixed cost</b>	<b>Rs. Lakh</b>					
<b>Tariff Components (Variable charge)</b>	<b>Unit</b>	<b>Year-1</b>	<b>Year-2</b>	<b>Year-3</b>	<b>Year-4</b>	<b>Year-5</b>
Biomass fuel type-1	Rs. Lakh					
Biomass fuel type-2	Rs. Lakh					
Fossil fuel (coal)	Rs. Lakh					
<b>Subtotal (Fuel costs)</b>	<b>Rs. Lakh</b>					
Fuel cost allocable to power	%					
<b>Total Fuel costs</b>	<b>Rs. Lakh</b>					
<b>Per Unit Tariff Components (Fixed)</b>	<b>Unit</b>	<b>Year-1</b>	<b>Year-2</b>	<b>Year-3</b>	<b>Year-4</b>	<b>Year-5</b>
PU O&M Expenses	Rs. /kWh					
PU Depreciation	Rs. /kWh					
PU Interest on term loan	Rs. /kWh					
PU Interest on working capital	Rs. /kWh					
PU Return on Equity	Rs. /kWh					
<b>PU Tariff Components (Fixed)</b>	<b>Rs. /kWh</b>					
<b>PU Tariff Components (Variable)</b>	<b>Rs. /kWh</b>					
<b>PU Tariff Components (Total)</b>	<b>Rs. /kWh</b>					

**Form 2.1: Template for Biomass: Fuel usage Statement (1/2): Related to clause 23.3 of Regulation 23**

**Sources of Power:**

1..... 2..... 3..... 4.....

Sl. No.	Month	Biomass Fuel-1 Consumptions (in tonnes)			Biomass Fuel-2 Consumptions (in tonnes)			Biomass Fuel-1 Consumptions (in tonnes)			Fossil Fuel (Coal) consumption (in tonnes)			% Fossil Fuel consumption of Total Fuel Consumption (%)		Energy Generation (kWh) during month		Cumulative Energy Generation (kWh) during FY_ till end of month	
		Type of Fuel	During current month	Calorific Value, Kcal/kg	Type of Fuel	During current month	Calorific Value, Kcal/kg	Type of Fuel	During current month	Calorific Value, Kcal/kg	Grade of coal used	During current month	Calorific Value, Kcal/kg	During current month	Cumulative last 12 months	Gross	Net	Gross	Net
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	April																		
2	May																		
3	June																		
4	July																		
5	August																		
6	September																		
7	October																		
8	November																		
9	December																		
10	January																		
11	February																		
12	March																		

**Form 2.2: Monthly Fuel Usage Statement (2/2): Related to clause 23.3 of Regulation 23**

**Monthly Update**

Name of the Project

FY:

(Location, District)

Statement Date

CREDA / Utility Ref. No.

Project Code

Installed Capacity (MW)

Date of Commissioning

S.N.	Month	Biomass Fuel-1 Consumption (in tonnes)			Biomass Fuel-2 Consumption (in tonnes)			Biomass Fuel-3 Consumption (in tonnes)			Biomass Fuel-4 Consumption (in tonnes)		
		Opening stock	Received at power plant site	Closing stock	Opening stock	Received at power plant site	Closing stock	Opening stock	Received at power plant site	Closing stock	Opening stock	Received at power plant site	Closing stock
1	2	3	4	5	7	8	9	11	12	13	15	16	17
1	April												
2	May												
3	June												
4	July												
5	August												
6	September												
7	October												
8	November												
9	December												
10	January												
11	February												
12	March												