

Provided also that the Competitive Bidding for procurement of power from Re-powering of Wind Power Projects shall be carried out in accordance with the policy issued by State Government from time to time with suitable deviations approved by the Commission.

8 Generic Tariff

- 8.1 The generic tariff shall be determined by the Commission on annual basis in accordance with these Regulations for the following types of renewable energy projects:
- a) Biomass power project with Rankine cycle technology;
 - b) Biogas based power project; and
 - c) Biomass gasifier based power project.

Provided that the generic tariff determined for the year, in which a RE project is commissioned, shall be applicable for such RE Projects of same type and shall remain valid for the tariff period.

9 Project Specific Tariff

- 9.1 The Commission may determine project specific tariff, on case to case basis for the following types of new projects:
- a) Wind power projects (both on-shore and off-shore);
 - b) Solar PV power projects and solar thermal power projects;
 - c) Biomass Gasifier based projects; if a project developer opts for project specific tariff;
 - d) Biogas based projects; if a project developer opts for project specific tariff;
 - e) Small Hydro projects;
 - f) Non-fossil fuel-based co-generation project;
 - g) Floating Solar PV Projects;
 - h) Municipal Solid Waste and Refuse Derived Fuel based projects with Rankine cycle technology;
 - i) Renewable hybrid energy projects;
 - j) Renewable Energy with Storage projects;
 - k) Any other new renewable energy technologies approved by MNRE.

- 9.2 Financial norms and operational norms, except Capital cost, specified in these Regulations, shall be the ceiling norms while determining such project-specific tariff.

10 Procurement of Power from Renewable Energy Projects during Extended Period

- 10.1 The Distribution Licensees at their own discretion may procure power from Renewable Energy Projects during extended period considering the following aspects:
- a) Overall Energy Requirement and Energy Availability from various sources;
 - b) To meet the RPO targets for the year;
 - c) Reasonableness of tariff for procurement of power from such projects (equivalent to or lower than the latest tariff discovered through competitive bidding).

- 10.2 For procurement of power from such projects, the Distribution Licensees may enter into an agreement with Renewable Energy Project Developer during extended period at mutually agreed terms, to be approved by the Commission, and it will not be mandatory for Distribution Licensees to procure power from such Renewable Energy Projects during extended period.

11 Petition and proceedings for determination of tariff

- 11.1 In case of Renewable Energy projects for which generic tariff has to be determined as per these Regulations, the Commission shall determine such generic tariff on suo-motu basis at the beginning of each year of the Control Period.

Provided that for first year of Control Period i.e., from 1.4.2020 to 31.3.2021, the Generic Tariff Order shall be issued after notification of these Regulations.

- 11.2 A petition for determination of project specific tariff shall be accompanied by such fee as specified in applicable Regulations and shall be accompanied by:
- a) Information in forms 1.1, 1.2, 2.1, 2.2 and 2.3 as the case may be, and as appended in these regulations;
 - b) Detailed project report outlining technical and operational details, site specific aspects, premise for capital cost and financing plan, details of installation, manufacturer's/supplier's guaranteed and other technical particulars, recommended O&M practices and public safety requirements, etc. etc.
 - c) A statement of all applicable terms and conditions and expected expenditure for the period for which tariff is to be determined.
 - d) A statement containing full details of calculation of any 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.
 - e) Consent from Distribution Licensee or beneficiary for procurement of power from Renewable Energy Project at tariff approved by the Commission, in the form of Initialled Power Purchase Agreement;
Provided that the consent from Distribution Licensee shall also include the following:
 - i) Status of compliance of RPO Obligation by Distribution Licensee
 - ii) Impact of Project Specific Tariff on Distribution Licensee's overall power purchase cost
 - f) Following documents in case of petition for determination of project specific tariff by renewable energy projects, where tariff from such renewable energy sources is generally determined through competitive bidding process in accordance with provisions of Section 63 of the Act:
 - i) Rationale for opting project specific tariff instead of competitive bidding
 - ii) Competitiveness of the proposed tariff vis-à-vis tariff discovered through Competitive Bidding/tariff prevalent in the market.
 - g) Any other information that the Commission requires the petitioner to submit.
- 11.3 The proceedings for determination of tariff shall be in accordance with the RERC (Transaction of Business) Regulations, 2005 as amended from time to time.

12 Tariff Structure

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

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

Provided that for renewable energy projects having fuel cost component, like biomass based power projects based on rankine cycle technology, biomass gasifier based power projects, biogas based power projects, non-fossil fuel based co- generation projects and refuse derived fuel based power projects, single part tariff with two components, fixed cost component and fuel cost component, shall be determined.

13 Tariff Design

13.1 The generic tariff shall be determined, on levellised basis, considering the year of commissioning of the power project, for the tariff period of the project:

Provided that for renewable energy projects having single part tariff with two components, fixed cost component shall be determined on levellised basis considering the year of commissioning of the project, while fuel cost component shall be determined on year of operation basis in the Tariff Order to be issued by the Commission.

13.2 For the purpose of levellised tariff computation, the discount factor equivalent to post tax weighted average cost of capital shall be considered.

13.3 The above principles shall also apply for project specific tariff determination.

14 Despatch principles for electricity generated from Renewable Energy Sources:

14.1 Wind, Solar, Wind Solar Hybrid plants and Municipal Solid Waste based plants shall be treated as 'MUST – RUN' power plants and shall not be subjected to 'merit order despatch' principles.

14.2 The despatch principles for electricity generated from wind and solar energy plants shall be as per the provisions of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010, as amended from time to time, except where specific provisions have been made under the Rajasthan Electricity Regulatory Commission (Rajasthan Electricity Grid Code) Regulation, 2008 and RERC (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2017 and amendments thereto.

14.3 The despatch principles for electricity generated from other renewable energy plants shall be as per the provisions of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010, as amended from time to time, except where specific provisions have been made under the Rajasthan Electricity Regulatory Commission (Rajasthan Electricity Grid Code) Regulation, 2008 and amendments thereto.

14.4 Biomass, Biogas and Biomass Gasifier based power plants with installed capacity of 2 MW and above, commissioned after notification of these Regulations, shall not be

treated as 'Must Run' power plants and shall be subjected to 'Merit Order Despatch' principles.

- 14.5 All Biomass, Biogas and Biomass Gasifier based power plants commissioned before notification of these Regulations, shall be treated as 'Must Run' power plants and shall not be subjected to 'Merit Order Despatch' principles.

Part -III
Financial principles for computing costs and return

15 Capital Cost

15.1 The normative Capital Cost shall be as specified in the subsequent technology specific chapters:

Provided that for project specific tariff determination the generating company shall submit the break-up of capital cost items along with its petitions in the manner specified under Regulation 11.

16 Debt Equity Ratio

16.1 For determination of generic tariff and project specific tariff, the debt equity ratio shall be 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 further that the equity invested in foreign currency, if any, 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 reserves, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the Renewable Energy project.

17 Loan and Finance Charges

17.1 Loan Tenure

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

17.2 Interest Rate

a) The loans arrived at in the manner indicated in Regulation 16 shall be considered as gross normative loan for calculation for interest on loan. The normative loan outstanding as on April 1st of every year shall be worked out by deducting the cumulative repayment up to March 31st of previous year from the gross normative loan.

b) For the purpose of computation of tariff, normative interest rate of two hundred (200) basis points above Base Rate prevalent during the last available six months shall be considered.

- c) Notwithstanding any moratorium period availed by the generating company or 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.

18 Depreciation

- 18.1 The value base for the purpose of depreciation shall be the Capital Cost determined by the Commission (for generic tariff) or the capital cost admitted by the Commission (for project specific tariff), as the case may be.
- 18.2 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.
- 18.3 Depreciation rate of 4.67% per annum for first 15 years and remaining depreciation shall be spread over the remaining useful life of the project considering the salvage value of the project as 10% of the project cost shall be considered.
- 18.4 Depreciation shall be chargeable from the first year of commercial operation:
Provided that, in case of determination of project specific tariff, if commercial operation of the asset is for part of the year, depreciation shall be computed on pro rata basis.

19 Return on Equity

- 19.1 The value base for the equity shall as determined under Regulation 16.
- 19.2 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 entire Tariff Period.

20 Interest on Working Capital

- 20.1 The Working Capital requirement in respect of wind power projects, small hydro projects, solar PV power projects, floating solar PV projects, solar thermal power projects, and renewable energy with storage projects shall be computed in accordance with the following:
 - a) Operation & Maintenance expenses for one month;
 - b) Receivables equivalent to one and half (1.5) months of tariff for sale of electricity calculated on the normative Capacity Utilisation Factor (CUF);
 - c) Maintenance spare @ 15% of operation and maintenance expenses.
- 20.2 The Working Capital requirement in respect of biomass power projects with Rankine cycle technology, biogas power projects, biomass gasifier based power projects, non-fossil fuel based co-generation projects, municipal solid waste based power projects and refuse derived fuel based power projects shall be computed in accordance with the following clause:
 - a) Fuel costs for four months equivalent to normative Plant Load Factor (PLF);
 - b) Operation & Maintenance expenses for one month;
 - c) Receivables equivalent to one and half (1.5) months of tariff for sale of electricity calculated at the normative PLF;
 - d) Maintenance spare @ 20% of operation and maintenance expenses.

- 20.3 In case of renewable hybrid energy projects, the Working Capital requirement shall be sum of the Working Capital requirement determined as per norms applicable for renewable energy sources, in proportion to their rated capacity in the project.

Interest on Working Capital shall be at interest rate equivalent to the normative interest rate of three hundred (300) basis points above Base Rate prevalent during the last available six months for the determination of tariff.

21 Operation and Maintenance Expenses

- 21.1 Operation and maintenance expenses shall be determined for the Tariff Period based on the normative O&M expenses specified by the Commission subsequently in these Regulations for the first Year of Control Period.
- 21.2 Normative O&M expenses allowed during first year of the Control Period (i.e. FY 2020-21) under these Regulations shall be escalated at the rate of 3.84% per annum over the Tariff Period.

22 Rebate

- 22.1 For payment of bills of the generating company effected through letter of credit or by cash/cheque or through electronic transfer within 5 working days of presentation of bills, a rebate of 1.5 % shall be allowed.

Explanation: In case of computation of '5 days', the number of days shall be counted consecutively without considering any holiday. However, in case the last day or 5th day is official holiday, the 5th day for the purpose of Rebate shall be construed as the immediate succeeding working day (as per the official State Government's calendar, where the Office of the Authorised Signatory or Representative of the Beneficiary, for the purpose of receipt or acknowledgement of Bill is situated).

- 22.2 If payments of bills of the generating company are made beyond 5 working days through Letter of Credit or by cash/cheque or through electronic transfer but within a period of 30 days of presentation of bills, a rebate of 1% shall be allowed.

23 Late payment surcharge

In case the payment of bills of renewable energy tariff is delayed beyond a period of 45 days from the date of presentation of bills, a late payment surcharge equivalent to Base Rate as on 1st April of the respective year plus 400 basis points per annum on daily basis shall be levied by the Generating Company.

24 Subsidy or incentive by the Central / State Government

- 24.1 The Commission shall take into consideration any incentive or subsidy 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 tariff under these Regulations:

Provided that the following principles shall be considered for ascertaining income tax benefit on account of accelerated or higher depreciation, if availed, for the purpose of tariff determination:

- a) Assessment of benefit shall be based on normative capital cost, accelerated or higher depreciation rate as per relevant provisions under Income Tax Act and corporate income tax rate.
- b) Capitalization of renewable energy projects during second half of the fiscal year.
- c) Per unit benefit shall be derived on levelled basis at discount factor determined as per Regulation 13 of these Regulations:

Provided further that in case the generating company is not claiming accelerated or higher depreciation benefit, the Power Purchase Agreement entered into with the generating company shall include an undertaking by the generating company that accelerated or higher depreciation benefit would not be availed for the project:

Provided further that if accelerated or higher depreciation benefit has been claimed despite submission of the undertaking, then distribution licensee shall be entitled to recover amount wrongly claimed along with penal charges @ 1.50 % per month calculated on daily basis.

- 24.2 Any grant, subsidy or incentives availed by renewable energy project, which is not considered at 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.
- 24.3 In case the Central or State Government or their agencies provide any generation based incentive, which is specifically over and above the tariff, such incentive shall neither be taken into account while determining the tariff nor be deducted by the beneficiary in subsequent bills raised by the particular Renewable energy project.

Part - IV

Technology specific parameters for Wind Power Project

25 Capital Cost

25.1 The Commission shall determine only project specific capital cost considering the prevailing market trends.

26 Capacity Utilisation Factor

26.1 The Capacity Utilisation Factor (CUF) for wind power plants shall be as follows:

Sr.No	Districts	CUF
1	Jaisalmer, Jodhpur & Barmer	21%
2	Other Districts	20%

27 Operation and Maintenance (O&M) Expenses

27.1 The Commission shall determine only project specific O&M expenses considering the prevailing market trends.

28 Tariff Determination in case of Re-powering of Wind Power Project

28.1 In case of Re -powering of Wind Energy Project, the Tariff shall be governed by provisions of Regulation 7 subject to the following conditions:

- (a) Any existing wind project that have completed at least 10 years in operation shall be considered for Re-powering.
- (b) In case of power being procured by Distribution Licensee through existing PPA, the energy generated corresponding to average of last three year's generation prior to re-powering would continue to be procured on the terms of PPA in-force and remaining additional generation may be purchased by Distribution Licensee at a tariff discovered through competitive bidding in the State at the time of commissioning of the re-powering project.

Part -V

Technology specific parameters for Solar PV Power Project

29 Capital Cost

29.1 The Commission shall determine only project specific capital cost considering the prevailing market trends.

30 Capacity Utilisation Factor

30.1 The minimum Capacity Utilisation Factor for Solar PV plants shall be 20%.

31 Operation and Maintenance (O&M) Expenses

31.1 The Commission shall determine only project specific O&M expenses considering the prevailing market trends.

32 Auxiliary Consumption

32.1 The maximum auxiliary consumption factor shall be 0.75%.

Part -VI

Technology specific parameters for Solar Thermal Power Project

33 Capital Cost

33.1 The Commission shall determine only project specific capital cost considering the prevailing market trends.

34 Capacity Utilisation Factor

34.1 The minimum Capacity Utilisation Factor for Solar Thermal power plants shall be 23%.

35 Operation and Maintenance (O&M) Expenses

35.1 The Commission shall determine only project specific O&M expenses considering the prevailing market trends.

36 Auxiliary Consumption

36.1 The maximum auxiliary consumption factor shall be 6.5%.

Part -VII

Technology specific parameters for Biomass Power Plant based on Rankine Cycle

37 Capital Cost

- 37.1 The normative Capital Cost for Biomass power plants shall be inclusive of all capital works including plant and machinery, civil works, erection and commissioning, financing and interest during construction etc., and evacuation infrastructure up to the interconnection point.
- 37.2 The normative Capital Cost for Biomass power plants for FY 2020-21 shall be Rs. 527.78 Lakh/MW with water cooled condenser and Rs. 561.98 Lakh/MW for Biomass power plants with air cooled condenser. The capital cost is inclusive of Rs. 15 Lakh/MW towards cost of transmission system upto the interconnection point and this Rs. 15 Lakh/MW also includes Rs. 2 Lakh/MW for grid connectivity charges payable to Transmission Licensee and Distribution Licensee as the case may be.
- 37.3 The capital cost as specified for FY 2020-21 of the control period will remain valid for the entire remaining duration of control period unless reviewed earlier by the Commission.

38 Plant Load Factor

- 38.1 For the purpose of determination of tariff, the Plant Load Factor (PLF) shall be considered as 80%.

39 Auxiliary Consumption

- 39.1 The normative auxiliary consumption shall be as follows:
- a) For project using water- cooled condenser: 10%.
 - b) For project using air- cooled condenser: 12%.

40 Station Heat Rate

- 40.1 The normative Station Heat Rate shall be as follows:
- a) For project using travelling grate boilers: 4200 kcal/kWh.
 - b) For project using AFBC boilers: 4125 kcal/kWh

41 Calorific Value

- 41.1 The calorific value of the biomass fuel used for the purpose of determination of tariff shall be 3400 kCal/kg.

42 Operation and Maintenance (O&M) Expenses

- 42.1 The normative O&M expenses for the first year of the Control Period, i.e., FY 2020-21 shall be Rs. 46.46 Lakh per MW for water cooled condenser and Rs. 49.53 Lakh/MW for air cooled condenser
- 42.2 Normative O&M expenses allowed under these Regulations shall be escalated at the rate of 3.84% per annum over the Tariff Period to compute the levellised tariff.

43 Fuel Price

- 43.1 Biomass fuel price shall be Rs. 2,958.25/MT for FY 2020-21. This price shall be subject to revision prospectively during the course of the year through a separate order based on recommendation of the State Level Committee constituted by the Commission

consisting of representatives of Nodal Agency, State Government, Distribution Licensee and any other organisation as decided by the Commission. The Committee shall recommend biomass fuel price once in every two years based on the fuel study conducted by RRECL. The State Level Committee shall also recommend the annual escalation in the Biomass fuel price for the year immediately following the year for which the fuel price has been recommended by it based on the fuel study conducted by RRECL. Thereafter, the fuel cost including annual escalation would again be revisited by the Committee taking into account the prevailing market conditions, and the cycle would continue till the end of the control period.

- 43.2 Provided that the fuel cost arrived at as above shall be applicable to the Biomass power plants commissioned during the current control period and also during the earlier control period FY 2009-15 and FY 2015-20.

44 Use of fossil fuel or Solar Power

- 44.1 For new biomass power projects based on Rankine cycle technology installed after notification of these Regulations, use of fossil fuels or solar power shall not be allowed.
- 44.2 For existing biomass power projects based on Rankine cycle technology installed prior to notification of these Regulations, use of fossil fuels to the extent of 15% in terms of gross calorific value on annual basis or solar power within the limit of 15% on annual basis, shall be allowed for the Useful Life of the project from the date of commercial operation:

Provided further that in case of usage of solar power, the project developer shall furnish to the RRECL and to the distribution licensee, the details of solar power generation and consumption for each month, along with the monthly energy bill.

45 Monitoring Mechanism for use of fossil fuel

- 45.1 In case of Biomass power projects based on Rankine cycle technology commissioned on or before 31.03.2020, the Project developer shall furnish to the RRECL and to the beneficiary, a monthly fuel usage statement and monthly fuel procurement statement duly certified by Chartered Accountant (with a copy to appropriate agency 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 –
- a) Opening fuel stock quantity (in tonne),
 - b) Receipt of fuel quantity (in tonne) at the power plant site,
 - c) Quantity of fuel (in tonne) for each fuel type (biomass fuels and fossil fuels) procured and consumed during the month for power generation purposes,
 - d) Closing fuel stock quantity (in tonne) for each fuel type (biomass fuels and fossil fuels) available at the power plant site,
 - e) Cumulative quantity (in tonne) of each fuel type procured and consumed till the end of that month during the year,
 - f) Actual (gross and net) energy generation (denominated in units) during the month,
 - g) Cumulative actual (gross and net) energy generation (denominated in units) until the end of that month during the year.
- 45.2 Non-compliance with the condition of fossil fuel usage the project developer, during any financial year, shall result in withdrawal of applicability of tariff as per these Regulations for such biomass based power project.

46 Variable Charges

46.1 The variable charges for the relevant year shall be determined as under:

$$VC = [\text{Station Heat Rate (SHR)/Gross Calorific Value (GCV)}] \times [1/(1 - \text{Aux Consum. Factor})] \times (P/1000)$$

P = Fuel price in Rs. per Metric Tonne applicable for the relevant year and as determined as per Regulation 43.

Part -VIII
Technology specific parameters for Biogas Power Plant

47 Capital Cost

- 47.1 The normative Capital Cost for Biogas power plants shall be inclusive of all capital works including plant and machinery, civil works, erection and commissioning, financing and interest during construction etc., and evacuation infrastructure upto the inter-connection point.
- 47.2 The normative Capital Cost for Biogas power plants for FY 2020-21 shall be Rs. 1156.77 Lakh/MW. This capital is inclusive of evacuation of generated energy upto interconnection point and this capital cost also includes Rs. 2 Lakh/MW for grid connectivity charges payable to Transmission Licensee or Distribution Licensee as the case may be. After taking into account of capital subsidy, net project cost shall be Rs. 856.77 Lakh/MW for FY 2020-21.
- 47.3 The capital cost as specified for FY 2020-21 of the control period will remain valid for the entire remaining control period unless reviewed by the Commission.

48 Plant Load Factor

- 48.1 The Plant Load Factor (PLF) for determining the fixed charges shall be 90%.

49 Auxiliary Consumption

- 49.1 The auxiliary power consumption factor shall be 12%.

50 Specific Fuel Consumption

- 50.1 The specific fuel consumption shall be 3 kg of substrate mix per kWh.

51 Operation and Maintenance (O&M) Expenses

- 51.1 The normative O&M expenses for the first year of the control period, i.e., FY 2020-21 shall be Rs. 61.62 Lakh/MW.
- 51.2 Normative O&M expenses allowed under these Regulations shall be escalated at the rate of 3.84% per annum over the Tariff Period to compute the levelled tariff.

52 Fuel cost (Feed stock price)

- 52.1 Feed stock price for the first year of the control period (i.e. FY 2020-21) shall be Rs 1273.06/MT (net of any cost recovery from digester effluent):

Provided for the years beyond 2020-21 of the control period, the biogas price for FY 2020-21 will change in the same proportion of change in Biomass fuel price determined based on the recommendations of the State Level Committee constituted under Regulation 43 of these Regulations unless specifically reviewed by the Commission.

53 Variable Charges

- 53.1 The variable charges for Biogas based power projects shall be determined as under:

$$VC = [\text{specific fuel consumption (kg/Unit)}] \times [1/(1 - \text{Aux Consum. Factor})] \times (P/1000)$$

P = Fuel cost in Rs. per Metric Tonne.

Part -IX

Technology Specific Parameters for Biomass Gasifier based Power Plants

54 Capital Cost

- 54.1 The normative Capital Cost for Biomass Gasifier based power plants shall be inclusive of all capital works including plant and machinery, civil works, erection and commissioning, financing and interest during construction etc. and evacuation infrastructure up to the inter-connection point.
- 54.2 The normative Capital Cost for Biomass Gasifier based power plants for FY 2020-21 shall be Rs. 593.49 Lakh/MW. The capital cost is inclusive of evacuation of generated energy upto interconnection point and this capital cost also includes Rs. 2 Lakh/MW for grid connectivity charges payable to Transmission Licensee or Distribution Licensee as the case may be. After taking into account of capital subsidy, net project cost shall be Rs. 443.49 Lakh/MW for FY 2020-21.
- 54.3 The capital cost as specified for FY 2020-21 shall be the same for subsequent years of the control period unless reviewed earlier by the Commission.

55 Plant Load Factor

- 55.1 The Plant Load Factor (PLF) for determining the fixed charges shall be 85%.

56 Auxiliary Consumption

- 56.1 The auxiliary power consumption factor shall be 10%.

57 Specific Fuel Consumption

- 57.1 The normative specific fuel consumption shall be 1.25 kg per kWh.

58 Operation and Maintenance (O&M) Expenses

- 58.1 The normative O&M expenses for the first year of the control period i.e. FY 2020-21 shall be Rs. 61.62 Lakh/MW.
- 58.2 Normative O&M expenses allowed under these Regulations shall be escalated at the rate of 3.84% per annum over the Tariff Period to compute the levelled tariff.

59 Fuel cost (Feed stock price)

- 59.1 Feed stock price for the first year of the control period (i.e. FY 2020-21) shall be as per Regulation 43 of these Regulations.

60 Variable Charges

- 60.1 The variable charges for Biomass Gasifier based power plants shall be determined as under:

$$VC = [\text{specific fuel consumption (kg/Unit)}] \times [1/(1 - \text{Aux Consum. Factor})] \times (P/1000)$$

P = Fuel cost in Rs per Metric Tonne.

Part -X
Technology Specific Parameters for Small Hydro Projects

61 Capital Cost

61.1 The Commission shall determine only project specific capital cost considering the prevailing market trends.

62 Capacity Utilisation Factor

62.1 Normative capacity utilisation factor for the small hydro projects shall be 30%.

Explanation: For the purpose of this Regulation, normative capacity utilisation factor is net of free power to the home State, if any.

63 Auxiliary Consumption

63.1 Normative auxiliary consumption for the small hydro projects shall be considered as 1.0%.

64 Operation and Maintenance expenses

64.1 The Commission shall determine only project specific O&M expenses considering the prevailing market trends.

Part -XI

Technology Specific Parameters for non-fossil fuel based co-generation projects

65 Capital Cost

65.1 The normative capital cost for the non-fossil fuel based co-generation projects shall be Rs. 492 lakhs/MW for the first year of Control Period i.e. financial year 2020-21 and will remain valid for the entire duration of the Control Period unless reviewed earlier by the Commission.

66 Plant Load Factor

66.1 The Plant Load Factor (PLF) for determining the fixed charges shall be 53%.

67 Auxiliary Consumption

67.1 The auxiliary consumption shall be considered as 8.5% for the computation of tariff.

68 Station Heat Rate

68.1 The Station Heat Rate of 3600 kCal/ kWh for power generation component alone shall be considered for computation of tariff for non-fossil fuel based co-generation projects.

69 Gross Calorific Value

69.1 The gross calorific value for bagasse shall be considered as 2250 kCal/kg. For the use of biomass fuels other than bagasse, gross calorific value as specified under Regulation 41 shall be applicable.

70 Fuel Cost

70.1 The price of bagasse for first year of the Control Period i.e. financial year 2020-21 shall be Rs. 2274 per MT and shall be escalated at the rate of 5% per annum to arrive at the base price for subsequent years of the Control Period, unless specifically reviewed by Commission. For the purpose of determining levelled tariff, a normative escalation factor of 5% per annum shall be applicable on bagasse prices.

70.2 For use of biomass other than bagasse in non-fossil fuel based co-generation projects, the biomass prices as specified under Regulation 43 shall be applicable.

71 Operation and Maintenance expenses

71.1 The normative O&M expenses during the first year of the Control Period, i.e. financial year 2020-21, shall be Rs. 24.52 lakhs per MW and shall be escalated at the rate of 3.84% per annum for the Tariff Period.

Part -XII

Technology Specific Parameters for municipal solid waste based power projects and refuse derived fuel based power projects

72 Capital Cost

72.1 The Commission shall determine only project specific capital cost considering the prevailing market trends.

73 Plant Load Factor

73.1 Plant load factor for determining tariff for municipal solid waste based power projects and refuse derived fuel based power projects shall be:

Sl. No.	Plant Load Factor	MSW	RDF
a)	During Stabilisation Period	65%	65%
b)	During the remaining period of the first year (after stabilization period)	65%	65%
c)	2 nd year onwards	75%	80%

73.2 The stabilisation period shall not be more than 6 months from the date of commercial operation of the project.

74 Auxiliary Consumption

74.1 The auxiliary consumption for determination of tariff shall be considered as 15%.

75 Station Heat Rate

75.1 The Station Heat Rate for determination of tariff shall be considered as 4200 kcal/kWh.

76 Operation and Maintenance Expenses

76.1 The Commission shall determine only project specific O&M expenses considering the prevailing market trends.

77 Gross Calorific Value

77.1 The gross calorific value of RDF for the purpose of determination of tariff shall be at 2500 kcal/kg.

77.2 The gross calorific value of MSW shall be determined by the Commission on a case to case basis while determining the project specific tariff.

78 Fuel Cost

78.1 Price of refuse derived fuel during financial year 2020-21 shall be considered as Rs. 2084 per MT and shall be escalated at the rate of 5% per annum to arrive at the base price for subsequent years of the Control Period, unless specifically reviewed by Commission. For the purpose of determining levelled tariff, a normative escalation factor of 5% per annum shall be applicable.

78.2 Fuel cost shall be considered as nil for municipal solid waste:

Provided that the Commission may consider allowing transportation cost of such fuel while determining the project specific tariff:

Provided further that the tipping fee/ Royalty received by the project shall be adjusted in the fuel price while working out the tariff:

Provided also that the grant/ capital subsidy received shall be adjusted in accordance with the provision of Regulation 24.

Part -XIII
Technology Specific Parameters for Renewable Hybrid Energy Projects

79 Capital Cost

79.1 The capital cost shall be determined on project specific basis considering the prevailing market trends.

80 Capacity Utilisation Factor

80.1 The Commission shall determine only project specific capacity utilisation factor in respect of renewable hybrid energy projects taking into consideration the proportion of rated capacity of each renewable energy source, as the case may be, and applicable capacity utilisation factor for such renewable energy source, as the case may be:

Provided that the minimum capacity utilisation factor for renewable hybrid energy project shall be 30% when measured at the inter-connection point, where the energy is injected into the grid.

81 Operation and Maintenance expenses

81.1 The Commission shall determine only project specific O&M expenses considering the prevailing market trends.

82 Tariff

82.1 The tariff for a renewable hybrid energy project shall be a composite levelled tariff for the project as a whole by factoring in the tariff components upto the minimum of the useful life of the RE technologies combined for such RE hybrid Project:

Provided that, in case any of the RE technologies combined for RE hybrid project is left with further useful life, the levelled tariff for remaining useful life of such RE technology shall be determined separately, by factoring in the tariff components for the remaining useful life.