ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION

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THURSDAY, THE ELEVENTH DAY OF SEPTEMBER,

TWO THOUSAND AND TWENTY-FIVE

(11.09.2025)

Present:

Sri P.V.R. Reddy,
Member & Chairman i/c

In the matter of The Andhra Pradesh Electricity Regulatory Commission (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulation, 2025 **(Regulation No.6 of 2025).**

Statement of Reasons (SOR)/ Order

In exercise of power conferred under Sections 61, 62, 86(1)(b) read with Section 181 (2) (zd) of the Electricity Act, 2003, and all powers enabling it in that behalf, the Andhra Pradesh Electricity Regulatory Commission issued a draft Andhra Pradesh Electricity Regulatory Commission (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulation, 2025. Accordingly, a Public Notice and a copy of the Draft Regulation were placed on the Commission's website on 27.05.2025, inviting comments/ suggestions/ objections from all stakeholders and interested parties for consideration by the Commission. In response, the Commission received comments/ suggestions/ objections on the draft Regulation from 16 stakeholders. Before finalising the Regulation, the Commission considered all the comments/suggestions/ objections received on the draft Regulation. The following paragraphs discuss the comments/suggestions/ objections received on the draft Regulation and the Commission's analysis and decisions on the same.

Comments/suggestions/objections received and the Commission's analysis and decisions on the same

1. Applicability/ Control Period

Draft

> *"(3) These Regulations shall come into force on the date of their publication in the Andhra Pradesh Gazette and, unless reviewed earlier or extended by the Commission, shall remain in force up to 31.03.2030."*

Objections/views/comments

Small Hydro Power Developers Association (SHPDA) and Others requested that the tariff applicability be extended beyond 31.03.2030 until new Regulations are framed, to avoid regulatory gaps and uncertainty.

Commission's analysis and decision

After considering the suggestion, the draft is modified as follows.

> *"(3) This Regulation shall come into force on the date of its publication in the Andhra Pradesh Gazette and, unless reviewed earlier or extended by the Commission, shall remain in force up to 31.03.2030.*
>
> *Provided that, if subsequent Regulations are not notified and brought into effect by the Commission before the expiry of this Regulation, this Regulation shall continue to remain in force until such subsequent Regulations are duly notified and brought into effect, unless the Commission, by an Order, amendment, or through any statutory mechanism, determines that this Regulation shall cease to have effect."*

2. Definitions

Objections/views/comments

Manihamsa Power Projects Limited suggested explicitly including and recognising "Hydel-Solar" Power Plants as "Renewable Hybrid Energy Projects" in the final Regulation, given their proven feasibility, grid reliability advantages, and consistency with clean energy objectives

Andhra Pradesh Southern Power Distribution Company Limited (APSPDCL) suggested the inclusion of bagasse-based cogeneration and industrial waste-based projects.

Commission's analysis and decision

As regards the suggestion to explicitly include Hydel-Solar power plants, as the same is covered under Renewable Hybrid Energy Projects in the Regulation, there is no need to include them explicitly again.

As regards the proposal to include bagasse-based cogeneration projects, it shall be noted that this category is already recognised as a renewable energy source under the existing provisions. In particular, Chapter 6 of this Regulation, under Clauses 42 and 43, clearly provides parameters for bagasse-based cogeneration projects.

Regarding industrial waste-based projects, the Commission notes that in its previous tariff orders, it has considered the tariff parameters for such projects on par with those applicable to biomass-based projects. The Commission intends to continue the same principle under this Regulation. Therefore, the Commission does not consider it necessary to provide separate parameters for industrial waste-based projects.

3. Scope and extent of application

Draft

"3. Scope and extent of application

The Licensees shall preferably endeavour to procure energy from all renewable energy sources as per the Ministry of Power/MNRE, the Government of India, notified competitive guidelines under section 63 of the Act, wherever applicable. However, in all cases, these Regulations shall apply where the tariff, for a grid-connected generating station or a unit thereof commissioned during the Control Period and based on renewable energy sources, is to be determined by the Commission under Section 62, read with Section 86 of the Act:

Provided that in cases of wind power projects, small hydro projects, biomass power projects with Rankine cycle technology, non-fossil fuel based co-generation projects, solar PV power projects, floating solar projects, solar thermal power projects, renewable hybrid energy projects, renewable energy with storage projects, biomass gasifier based power projects, biogas based power projects, municipal solid waste based power projects, refuse derived fuel based municipal solid waste power projects, and pumped storage power (PSP) projects, these

Regulations shall apply subject to the fulfilment of eligibility criteria specified in Regulation 4 of these Regulations"

Objections/views/comments

National Solar Energy Federation of India (NSEFI) and **Indian Wind Power Association (IWPA)** requested the inclusion of standalone energy storage.

Commission's analysis and decision

The Commission observes that the term "Storage" is already defined under Clause 2(ff) of this Regulation, which adequately covers its application within the regulatory framework. Hence, elaborating on every renewable energy technology under the scope is unnecessary, as broader categories have already been covered. Further, it shall be noted that the Commission issued a separate draft APERC (Planning, Procurement, Deployment and Utilisation of Battery Energy Storage Systems (BESS) Regulations 2025) to address the aspects of battery storage comprehensively.

4. Capital Cost

Draft

"11. Capital Cost

Norms for capital cost, as specified in relevant chapters of these Regulations, shall include land cost, pre-development expenses, all capital work, including plant and machinery, civil work, erection, commissioning, financing cost, interest during construction, and evacuation infrastructure up to an interconnection point"

Objections/views/comments

May Encons Pvt. Ltd. requested that the capital cost be determined on a project-specific basis rather than adopting normative values, as they argued that site conditions and project parameters vary significantly.

SHPDA and several others requested the adoption of CERC's indexation mechanism for capital cost over the control period, so that variations in costs due to inflation and market conditions can be fairly captured. In this context, it was highlighted that APERC's control period of 5 years is longer than CERC's.

APSPDCL suggested that capital cost should be determined on a project-specific basis for each renewable energy source (such as wind, hydro, etc.)

Sri. Venugopala Rao and **Others** inter alia opposed project-specific capital cost determination, contending that it undermines transparency and consumer interest. He argued that "considering prevailing market trends" should mean adopting capital costs and tariffs discovered through competitive bidding, which is the most prudent mechanism to ensure fair and competitive tariffs.

Commission's analysis and decision

While some stakeholders sought project-specific capital cost determination, others pointed to the trend of declining costs based on declining tariffs in competitive bidding. The draft specified the capital cost only for selected technologies after careful examination of the market conditions of various technologies. The adoption of normative capital cost for technologies such as Small Hydro Projects, biomass-based projects using Rankine cycle technology, non-fossil fuel-based cogeneration projects, biomass gasifier projects, and biogas-based power projects is necessary to provide a balanced regulatory framework. It ensures uniformity, predictability, and transparency in tariff determination, while simultaneously establishing a ceiling capital cost that mandates developers to optimise project costs. This approach safeguards consumer interests by preventing inflated capital claims and promoting regulatory certainty.

Regarding the suggestion to adopt an indexation mechanism, the CERC (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2024, do not provide for the escalation of capital costs during the control period. While determining the base normative parameters for FY 2024-25, CERC duly considered the escalation in the Wholesale Price Index (WPI), Manufacturing Index, and Infrastructure Industry Index for the period FY 2020–2023. Hence, the Commission has adopted the normative capital cost parameters from the CERC RE Tariff Regulations, 2024, for the base year FY 2024-25 and applied them for FY 2025-26 without further escalation. However, it is true that the control period for the APERC RE Tariff Regulation, 2025, is 5 years, which is longer compared to CERC's three years. If there is a drastic change in capital cost for any renewable energy technology, the Commission may amend the norms specified in this Regulation through an amendment to this Regulation. The Commission is therefore not inclined to adopt either an indexation mechanism or capital cost levels directly derived from tariffs discovered in competitive bidding. Accordingly, the proposed clause is retained without any change.

5. Project Specific Tariff/ Generic Tariff/ Competitive Bidding

Draft

> *"6. Project-specific tariff*
>
> *The Commission shall determine the project-specific tariff on a case-by-case basis. The financial and operational norms specified in these Regulations, except for capital cost, shall be the ceiling norms while determining the project-specific tariff."*

Objections/views/comments

SHPDA requested that the Commission determine a generic tariff prior to the commencement of each year, rather than relying solely on project-specific tariff determinations. According to SHPDA, a generic approach would provide certainty and ease of implementation for smaller developers who may otherwise face procedural difficulties and delays in tariff determination.

APSPDCL also suggested that project-specific tariff determination could be cumbersome, especially for smaller capacity renewable energy projects. APSPDCL therefore suggested that the Commission notify a generic tariff for each category of renewable energy projects, which would streamline the process, reduce administrative burden, and provide clarity to both developers and DISCOMs.

In contrast, several stakeholders, including **Prayas Energy, CPI (M), Centre for Liberty, Tax Payers' Association, AP United Citizens Forum, Vidhyuth Viniyogadarula Ikyavedhika, Pattana Poura Samkshema Sangham, People's Monitoring Group on Electricity Regulation, and Sri. Venugopala Rao** opposed the concept of project-specific tariff determination, particularly for Solar, Wind, and Storage projects. They emphasised that tariffs for these technologies should continue to be discovered only through competitive bidding under Section 63 of the Electricity Act, 2003, which has consistently demonstrated significant efficiency in cost discovery while ensuring transparency and protection of consumer interests.

Commission's analysis and decision

As provided under Clause 3 (Scope) of this Regulation, procurement of power from renewable energy sources is to be undertaken preferably through the competitive bidding framework. The Commission intends to determine tariffs under Section 62 of the Electricity Act, 2003, strictly in accordance with this Regulation, and only in cases where the projects to be commissioned during the control period have taken place due to legacy policy issues or for any other reasons, since the Hon'ble Supreme Court in TATA Power Company Limited Transmission Vs MERC & ors (judgment dated 23 Nov 2022 in CA no 1933 of 2022) concluded that the non-obstante clause in Section 63 cannot be interpreted to mean that Section 63 would take precedence over Section 62 at the stage of choosing the modality to determine tariff. The Commission or the Integrated Clean Energy (ICE) policy of GoAP did not envisage the generic tariff concept for any RE technology.

6. Levelised Tariff

Draft

> *"(1) The tariff shall be determined, on a levelized basis, considering the year of commissioning of the project, for the tariff period of the project:"*

Objections/views/comments

APSPDCL suggested that the levelised tariff determined by the Commission should be applicable for the entire useful life of the project or the full PPA tenure to avoid uncertainty and to give long-term clarity to both developers and DISCOMs.

Commission's analysis and decision

Clause 9 (1) of the draft Regulation already provides that the levelised tariff determined by the Commission is applicable for the tariff period of the project. As per Clause 2 (gg), the 'Tariff period' for renewable energy projects will be the same as their Useful Life, and the tariff period shall be considered from the date of commercial operation of such power projects. Therefore, the suggestion has already been sufficiently addressed in the draft. and the clause is retained without any modification.

7. Treatment for Over-Generation & CUF

Draft

> *"10. Treatment for Over-Generation*
>
> *In case a renewable energy project, in a given year, generates energy in excess of the capacity utilisation factor or plant load factor, as the case may be, specified under these Regulations, the tariff for such excess energy shall be 50 paise per unit. However, in preceding years, if the generated energy is lower than the capacity utilisation or plant load factor, such shortfall energy shall be paid at the normal tariff*

determined in the Order before arriving at an excess energy payment of 50 paise per unit.

Provided that the cumulative energy at the end of any given year shall not exceed the CUF for payment of the normal tariff."

Objections/views/comments

Sri. Venugopala Rao and **Others** objected to the 50-paise incentive per unit for excess generation and suggested removing the incentive altogether. They suggested that if the generated energy is lower than the CUF or PLF, such shortfall energy shall be paid at the normal tariff by the developers to the DISCOMS as a penalty.

NSEFI, IWPA, SHPDA, and **May Encons** objected to the ceiling of 50 paise per unit for excess generation and suggested adoption of the CERC model, permitting sale of excess energy in the open market with DISCOMs having the first right of refusal, and sought removal of the CUF/PLF ceiling with payment at the applicable tariff for all delivered energy.

SHPDA and **May Encons Pvt. Ltd.** requested that tariff payment be made for all energy delivered beyond the contracted capacity, including excess over-delivered energy, instead of capping settlement at a fixed rate.

SHPDA and **May Encons Pvt. Ltd.** requested that the CUF for small hydro projects shall be fixed at 30% in line with CERC norms.

APSPDCL proposed a CUF of 45% for small hydro projects and a PLF of 55% for bagasse-based cogeneration projects.

Commission's analysis and decision

The stipulation of 50 paise per unit for excess generation has been incorporated in line with the Commission's stand in its adjudicatory Orders on RE issues. However, in preceding years, if the generated energy is lower than the capacity utilisation or plant load factor, such shortfall energy shall be paid at the normal tariff determined in the Order before arriving at an excess energy payment of 50 paise per unit. Whereas the CERC has adopted a different approach, and the two are not comparable. Removal of the CUF/PLF ceiling and providing a full tariff for all excess energy would impose an undue burden on consumers, as tariffs for cost recovery are determined at the normative CUF/PLF.

Regarding CUF/PLF norms for small hydro projects, CERC has prescribed a CUF of 30% for such projects. The higher CUF norm considered in this Regulation is based on operating realities within the State. The CUF of 45%

for small hydro and PLF of 55% for bagasse-based projects suggested by APSPDCL is not supported by the ground realities. Accordingly, the proposed clauses are retained without any modification.

8. Return on Equity

Draft

"15. Return on Equity

(1) The value base for equity shall be as determined under Regulation 12.

(2) The normative Return on Equity for renewable energy projects other than small hydro projects shall be 14%, and that for the small hydro projects shall be 15%. 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."

Objections/views/comments

SHPDA requested that the Return on Equity (RoE) be fixed at 16%, with MAT/Income Tax to be allowed as per APTEL's judgment dated 20.12.2012.

Sri. Venugopal Rao and **CPI (M)** submitted that renewable energy generators must pay income tax out of their profits. They opposed the grossing up of RoE by MAT or corporate tax rates, arguing that such rates vary over time and should not be fixed in the Regulation. They stated that only the actual tax paid on RoE, duly verified, may be considered.

Commission's analysis and decision

It is observed that the normative Return on Equity (RoE) specified at 15% for SHP is in line with the prevailing CERC norms and provides an adequate return for renewable energy developers. The APTEL judgment relied on by SHAPD has no relevance to the framing of this Regulation. However, considering the suggestion of Sri Venugopala Rao and Others on actual pass-through of income tax, in line with the existing tariff Regulation of APERC, the draft is modified as follows.

"15. Return on Equity

(1) The value base for equity shall be as determined under Regulation 12.

(2) The normative Return on Equity for renewable energy projects other than small hydro projects shall be 14%, and that for small hydro projects shall be 15%.

(3) Actual income tax paid on the income corresponding to the regulated renewable energy business shall be claimed by the generating company along with the monthly energy bills, subject to submission of documentary evidence of payment.

(4) Any penalty, interest, or tax liability arising out of delay or default in payment of tax, or from activities other than the regulated renewable energy business, shall not be considered."

9. Late payment surcharge

Draft

"20. Late payment surcharge

In case the payment of any bill for charges payable under these Regulations is delayed beyond 45 days from the date of presentation of bills, the generating company shall levy a late payment surcharge as specified in the Ministry of Power—Electricity (Late Payment Surcharge and Related Matters) Rules, 2022, as amended from time to time"

Objections/views/comments

May Encons Pvt. Ltd. requested that the payment mechanism for DISCOMs be specified.

Commission's analysis and decision

The Regulation already specifies that the provisions relating to the payment mechanism shall be governed by the Late Payment Surcharge (LPS) Rules, which adequately provide for the payment framework. Hence, the proposed clause is retained without any modifications.

10. Subsidy

Draft

"21. Subsidy or incentive by the Central or the State Government

(1) The Commission shall take into consideration any incentive, grant or subsidy from the Central or State Government, including accelerated depreciation benefit, availed by the project while determining the tariff under these Regulations"

Objections/views/comments

SHPDA and **May Encons Pvt. Ltd.** requested that expenses incurred with respect to the release of subsidy (such as testing costs and bank penalties) be considered as part of the tariff determination.

Commission's analysis and decision

The cost of mandatory testing required for projects, if any, must be accounted for under capital cost and does not warrant separate consideration. Penalties, if any, are imposed only in cases of default by the developer and therefore cannot be passed on to consumers. The stakeholders have not demonstrated any prudent expenses that would reasonably arise specifically due to the subsidy release. Hence, the Commission finds no merit in amending the clause to allow such charges to be passed on to consumers. Accordingly, the clause is retained without modification.

11. Generation-based incentives

Draft

> *"(3) If the central or State Government or their agencies provide any generation-based incentive that is specifically over and above the tariff, such incentive shall be taken into account while determining the tariff and deducted by the licensee in subsequent bills raised by the particular Renewable energy project"*

Objections/views/comments

NSEFI, **IWPA**, and **May Encons Pvt. Ltd.** opposed factoring GBI into tariff determination and requested that the clause be aligned with the CERC RE Tariff Regulations, 2024, where GBIs are treated as separate incentives and not deducted from tariff payments, stating that GBI is an additional benefit extended by the Government and should not be netted off in tariff computation.

Commission's analysis and decision

Under the procedure consistently followed by the Commission, any generation-based incentive (GBI) provided by the Central or State Government or their agencies is factored into tariff determination and deducted from the subsequent bills of the generating company if such GBI is granted post-tariff determination. This ensures that such incentives, which are over and above the tariff, ultimately benefit the consumers. The Commission has, in its various earlier Orders, held that GBI should be treated as a pass-through to consumers. Those Orders are presently under challenge before the Hon'ble High Court and the Hon'ble Supreme Court. Hence, the Commission has maintained the same approach in this Regulation. Accordingly, the proposal to exclude GBI from tariff adjustment is not considered necessary, and the clause is retained without modification.

12. Statutory Charges

Draft

"22. Statutory Charges

The renewable energy project developer shall recover from the licensees the statutory charges imposed by the State and Central Government, such as electricity duty on auxiliary consumption, subject to the maximum normative auxiliary consumption"

Objections/views/comments

SHPDA and **May Encons Pvt. Ltd.** proposed that DISCOMs reimburse electricity duty, water royalty, and other statutory charges to generators along with monthly bills.

Commission's analysis and decision

The Commission is inclined to accede to the suggestion, recognising that reimbursement of statutory charges is essential to ensure that renewable energy developers are not burdened with obligations beyond their control. It is further noted that such treatment is in line with the prevailing practice in Andhra Pradesh. Accordingly, the draft is modified as follows.

"22. Statutory Charges

The renewable energy project developer shall recover from the licensees the statutory charges imposed by the State and Central Government, such as royalty on water, electricity duty, etc., for the applicable period mentioned in the respective policies."

13. Wind power projects

Draft

"(1) above shall be measured at a 100-meter hub height. For wind hub heights above 100 meters, the developers may indicate the CUF"

Objections/views/comments

APSPDCL proposed that wind project developers be mandated to include the hub height in their Tariff Petitions.

Commission's analysis and decision

The Commission is of the view that such fundamental project particulars, including hub height, are inherently required to be furnished by petitioners. In cases where the information is not submitted, the Commission seeks it during the data gap process, and it may not be required to be expressly included in the Regulation.

14. Operation and Maintenance expenses

Objections/views/comments

SHPDA and **May Encons Pvt. Ltd.** requested that the Commission adopt the CERC normative O&M expenses together with the escalation mechanism.

Commission's analysis and decision

The Commission is inclined to accede to the suggestion. In the Draft Regulation, the proposed O&M expenses for FY 2025-26 were directly adopted from the CERC RE Tariff Regulations, 2024, specified for FY 2024-25. Consequently, the increase in O&M expenses between FY 2024-25 and FY 2025-26 was not taken into account. Adoption of an escalation mechanism ensures that O&M expenses remain reflective of cost inflation over the Control Period. Accordingly, the O&M expenses specified by CERC for FY 2024-25 have been escalated by 5.25%, and the resultant O&M expenses (Rs. Lakh/ MW) for FY 2025-26 have been incorporated in the final Regulation under Clauses 29, 34, 44, 53, and 58.

15. Use of Fossil Fuel

Draft

> *"35. Use of Fossil Fuel*
>
> *The use of fossil fuels shall not be allowed:*
>
> *Provided that for biomass power projects based on Rankine cycle technology, the use of fossil fuels to the extent of 15% in terms of gross calorific value on an annual basis shall be allowed for the Useful Life of the project from the date of commercial operation"*

Objections/views/comments

APSPDCL proposed that the use of fossil fuel in renewable energy projects be permitted for projects commissioned up to March 31, 2017, in alignment with the CERC Regulations.

Commission's analysis and decision

Considering the suggestion, the draft is modified as follows:

> *"35. Use of Fossil Fuel*
>
> *The use of fossil fuels shall not be allowed in renewable energy projects."*

16. Fuel Cost

Draft

> *"(1) For use of biomass other than bagasse in non-fossil fuel-based cogeneration projects, the biomass prices as specified under Regulation 38 shall be applicable"*

Objections/views/comments

APEPDCL proposed that Clause 43(1) be removed.

Commission's analysis and decision

It is noted that Clause 43(1) is essential for providing a normative basis for determining fuel costs in non-fossil fuel-based cogeneration projects and is linked to the parameters under Regulation 37. Its removal would create regulatory ambiguity and adversely affect tariff determination. Accordingly, Clause 43(1) is retained without any modification.

17. Biogas Projects Tariff Determination

Draft

> *"60. Fuel Cost (Feedstock Price)*
>
> *Feedstock price during the first year of the Control Period, i.e. financial year 2025-26, shall be Rs.1,702/MT 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 specifically reviewed by the Commission. For the purpose of determining levelized tariff, a normative escalation factor of 3.45% per annum shall be applicable."*

Objections/views/comments

APSPDCL suggested that, for Biogas projects, the income generated from the sale of manure should be factored into the tariff determination.

Commission's analysis and decision

The income, if any, from the incidental sale of manure is highly project-specific and variable and therefore cannot be uniformly applied in tariff determination. Such aspects may, however, be considered by the

Commission on a case-by-case basis while determining the tariff for such projects. Accordingly, no modification to the Regulation is considered necessary.

18. Other suggestions

Objections/views/comments

SHPDA and **May Encons Pvt. Ltd.** requested that injection from Small Hydro Projects (SHP) be considered as deemed scheduled and that SHPs be treated as must-run stations. They further suggested that generators be compensated for loss of generation due to unavailability of the grid, and even proposed a formula for such compensation.

Centre for Liberty suggested that the Commission facilitate open access and direct power purchase agreements (PPAs), enabling consumers and generators to negotiate freely. It further proposed the introduction of market-linked mechanisms for hybrid and storage-based projects to encourage innovation and flexibility.

Commission's analysis and decision

Suggestions relating to scheduling, despatch, must-run status, and compensation for deemed generation loss due to grid unavailability do not fall within the scope of the tariff of this Regulation. Similarly, proposals concerning open access and direct PPAs pertain to policy and market design issues that lie beyond the scope of this Regulation. Further, it shall be noted that the capital cost for hybrid and storage projects, as provided in this Regulation, is to be determined on a project-specific basis, taking into account the prevailing market conditions, and is therefore already linked to market considerations. Accordingly, no modification to the Regulation is considered necessary.

19. Public hearing

Objections/views/comments

Pattana Poura Samkshema Sangham, CPI (M), Tax Payers' Association, Vidhyuth Viniyogadarula Ikyavedhika, AP United Citizens Forum, and Sri. Venugopala Rao emphasised the need for public hearings, transparency, and protection of consumer interests. They further objected to what they termed arbitrary tariff fixation and requested that procurement of renewable energy should be done only through competitive bidding rather than through regulatory determination.

Commission’s analysis and decision

The concerns raised pertain to broader issues of transparency and procurement methodology. It is clarified that the framing of Regulation is undertaken strictly in accordance with the provisions of the Electricity Act, 2003, but does not mandate the conduct of public hearings in every case. The Commission, therefore, considers that a separate public hearing for this Regulation is not required. Regarding the competitive procurement, the Regulation adequately emphasises the same.

20. Municipal Solid Waste

Commission’s analysis and decision

The Commission is of the view that it is appropriate to provide enabling provisions to address such projects being developed in the State during the Control Period, if any. It is noted that in the CERC RE Tariff Regulations, 2024, standalone MSW-based plants were not explicitly recognised, keeping in view the Solid Waste Management Rules, 2016, which mandate that only non-recyclable combustible waste with a minimum calorific value of 1500 kcal/kg may be used for energy generation.

In light of these statutory requirements, the Commission considers that any MSW-based project that complies with the Solid Waste Management Rules, 2016, should not be excluded from the scope of this Regulation. Accordingly, instead of prescribing detailed normative provisions at this stage, an enabling clause is incorporated in the Regulation to provide for tariff determination of MSW-based projects on a case-by-case basis, as shown below:

> *“Municipal Solid Waste (MSW) based projects, if proposed within the State during the Control Period, shall be considered for tariff determination by the Commission on a case-by-case basis, taking into account normative parameters, tipping fees, calorific value of the waste, and compliance with the Solid Waste Management Rules, 2016, as amended from time to time.”*

21. Except for the changes discussed above, the remaining provisions in the draft were adopted in the final Regulation without modification. The list of objectors is attached as **Annexure I**, and the final Regulation is attached as **Annexure II.**

Sd/-

Sri P.V.R.Reddy,
Member & Chairman i/c

Annexure-1

List of Objectors

Sl.	Name Of Stakeholders
1.	Sri. Movva Srinivas, Managing Director, May Encons Pvt. Ltd.
2.	Indian Wind Power Association
3.	Sri. G. Nagesh Babu, President, Small Hydro Power Developers Association
4.	Sri. Subrahmanyam Pulipaka, CEO, National Solar Energy Federation of India
5.	APSPDCL
6.	Sri. Ashwin Gambhir, Sri. Saumendra Aggrawal, Sri. Sreekumar Nhalur, Prayas (Energy Group)
7.	Sri. M. Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies, Hyderabad
8.	Sri. Kandharapu Murali, Secretariat Member, CPI(M), Tirupati District Committee, Tirupati
9.	Sri. M. Thimma Reddy, Convenor, People's Monitoring Group on Electricity Regulation
10.	Sri. Nalamotu Chakravarthy, President, Centre for Liberty, Hyderabad
11.	Sri. Ch. Baburao, State Secretariat Member, CPI(M), Vijayawada
12.	Manihamsa Power Projects Limited
13.	Tax Payers' Association
14.	General Secretary, Andhra Pradesh United Citizens Forum, Ananthapur
15.	Pattana Poura Samkehsma Sangam
16.	Sir. M.V. Anjaneyulu, Convener, Vidyuth Viniyogadharula Ikyavedhika

Annexure-II

The Andhra Pradesh Electricity Regulatory Commission (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulation, 2025.

Regulation No. 6 of 2025

Preamble

Section 62 and Section 86 (1) (b) of the Electricity Act, 2003 (for short **"the Act**"), require the Commission to determine the tariff for supply of electricity by a generating company to a distribution licensee and to regulate electricity purchase and procurement process of distribution licensee including the price at which electricity shall be procured, from the generating companies or licensee or from other sources through agreements for purchase of power for distribution and supply within the State. Section 61 of the Act requires the Commission to specify the terms and conditions for such a determination of tariff. Accordingly, the Commission issued Regulation 1 of 2008, the Andhra Pradesh Electricity Regulatory Commission (Terms and conditions for determination of tariff for supply of electricity by a generating company to a distribution licensee and purchase of electricity by distribution licensees) Regulation, 2008. This Regulation is applicable to all generating companies supplying or intending to supply electricity to a Distribution Licensee, and all Distribution Licensees for the purchase of electricity from generating companies, other licensees, including trading licensees, captive generating plants and any other source. However, this Regulation states that the determination of tariff for supply of electricity to a distribution licensee from non-conventional sources of generation shall be in accordance with such terms and conditions as stipulated in relevant separate Orders of the Commission. The above Regulation was adopted by this Commission by the APERC (adaptation) Regulation 2014.

Whereas the Commission issued Regulation 1 of 2015, the Andhra Pradesh Electricity Regulatory Commission (Terms and Conditions for Tariff Determination for Wind Power Projects) Regulations, 2015, for FY2015-16 to FY2019-20. However, the Commission by Order dated 13.07.2018 in OP.No.5 of 2017 has curtailed the applicable period from 5 years to 2 years, and the Regulation ceased to be in force from 01.04.2017, keeping in view the falling wind power prices, the competitive bidding guidelines issued by the Government of India for wind power procurement under Section 63 and the consumer's interest. However, the Commission held that the DISCOMS may procure power from wind power projects in accordance with Sections 61, 62, 64 and 86 (1) (b) of the Electricity Act, 2003 and Sections 21 and 26 of the Andhra Pradesh Electricity Reform Act, 1998 and rules, Regulations, practice directions and orders issued there under until an appropriate Regulation in that behalf is made by this Commission and any Power Purchase Agreement or tariff thereunder for such procurement shall be guided by the principles contained in the provisions of the Central Electricity Regulatory Commission (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2017.

Whereas the Hon'ble APTEL in its Order dated 08.03.2022 in Appeal No.250 of 2014 & batch, inter alia, has directed APERC & TGERC to initiate a study for determining the normative parameters for Biomass and Bagasse-based Power Plants under their jurisdiction and located in the State of Andhra Pradesh and Telangana and frame Tariff Regulation as per directions given in the said Order.

Whereas the Hon'ble Supreme Court in its judgement dated 23.11.2022 in Civil Appeal No. 1933 of 2022, the TATA Power Company Limited Transmission Vs Maharashtra Electricity Regulatory Commission & Ors, inter alia, affirmed that *"Sections 62 and 63 stipulate the modalities of tariff determination. The non-obstante clause in Section 63 cannot be interpreted to mean that Section 63 would take precedence over Section 62 at the stage of choosing the modality to determine the tariff. The criteria or guidelines for the determination of the modality of tariff determination ought to be notified by the Appropriate State Commission either through Regulations under Section 181 of the Act or guidelines under Section 61 of the Act*". The Hon'ble Supreme Court also directed SERCs *"to frame Regulations under Section 181 of the Act on the terms and conditions for determination of tariff. While framing these guidelines on determination of tariff, the Appropriate Commission shall be guided by the principles prescribed in Section 61, which also includes the NEP and NTP. Where the Appropriate Commission(s) has already framed Regulations, they shall be amended to include provisions on the criteria for choosing the modalities to determine the tariff, in case they have not been already included. The Commissions, while being guided by the principles contained in Section 61, shall effectuate a balance that would create a sustainable model of electricity Regulation in the States.* ***The Regulatory Commission shall curate to the specific needs of the State while framing these Regulations.*** *Further, the Regulations framed must be in consonance with the objective of the Electricity Act 2003, which is to enhance the investment of private stakeholders in the electricity regulatory sector so as to create a sustainable and effective system of tariff determination that is cost-efficient so that such benefits percolate to the end consumers."*

Whereas paragraph 6.4 (2) of the National Tariff Policy 2016 issued by the Government of India under Section 3 of the Act states that "*the States shall* *endeavour to procure power from renewable energy sources through competitive bidding to keep the tariff low, except from the waste-to-energy plants. Procurement of power by Distribution Licensee from renewable energy sources from projects above the notified capacity shall be done through competitive bidding process, from the date to be notified by the Central Government. However, till such notification, any such procurement of power from renewable energy sources projects may be done under Section 62 of the Electricity Act, 2003. While determining the tariff from such sources, the Appropriate Commission shall take into account the solar radiation and wind intensity, which may differ from area to area to ensure that the benefits are passed on to the consumers.*"

Whereas the Government of Andhra Pradesh, through the Special Chief Secretary Energy Department, by letter dated 05.02.2025, inter alia, has informed the Commission that "*the Government of Andhra Pradesh, through the AP ICE Policy, 2024 has been committed to promoting sustainable and clean energy solutions to meet the growing energy demands while minimising environmental impact. The AP ICE Policy, 2024 aims to enhance the adoption of renewable energy sources and ensure the reliable and affordable supply of electricity to all consumers.*" The letter further communicated that *"under Section 108 of the Electricity Act, 2003, the State Government is empowered to issue policy directions to the State Electricity Regulatory Commission in matters involving public interest. Invoking this provision, the Government of Andhra Pradesh requests the Andhra Pradesh Electricity Regulatory Commission (APERC) to adopt the Andhra Pradesh Integrated Clean Energy Policy, 2024, and undertake the necessary regulatory amendments to facilitate its seamless implementation.*" The GoAP, also requested the APERC to *"determine the tariff in accordance with Section 62 of the Electricity Act, 2003 for various technologies i.e. Solar, Wind, Wind-Solar Hybrid projects and PSP projects, Mini and Small Hydro Projects without imposing any ceiling on Capacity Utilization Factor (CUF) or Plant Load Factor (PLF) and such determined tariff shall be applicable for all such projects that will come up during the operative period (5 years from the date of issuance of the policy) of the Integrated Clean Energy Policy.*"

Whereas under Section 61 of the Act, the SERCs shall, subject to the provisions of the Act, specify the terms and conditions for the determination of tariff, and in doing so, inter alia, shall be guided by the principles and methodologies specified by the Central Commission for the determination of the tariff applicable to generating companies and transmission licensees;

In light of the above, after issuing the draft Regulation and following the previous publication under Sub-section (3) of Section 181 of the Electricity Act, 2003, read with the Electricity (Procedure for Previous Publication) Rules, 2005, after stakeholder consultation as discussed in the Order dated 11.09.2025, in exercise of powers conferred under Sections 61, 62, 86(1)(b) read with Section 181 (2) (zd) of the Electricity Act, 2003, and all other powers enabling in this behalf, the Andhra Pradesh Electricity Regulatory Commission hereby makes the following final Regulation, namely:

1. Short title and commencement

(1) This Regulation may be called the Andhra Pradesh Electricity Regulatory Commission (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulation, 2025.

(2) This Regulation shall extend to the whole of the State of Andhra Pradesh

(3) This Regulation shall come into force on the date of its publication in the Andhra Pradesh Gazette, and, unless reviewed earlier or extended by the Commission, shall remain in force up to 31.03.2030.

Provided that, if subsequent Regulations are not notified and brought into effect by the Commission before the expiry of this Regulation, this Regulation shall continue to remain in force until such subsequent Regulations are duly notified and brought into effect, unless the Commission, by an Order, amendment, proceedings or otherwise, determines that this Regulation shall cease to have effect.

2. Definitions and Interpretation

(1) In this Regulation, unless the context otherwise requires,

a) **'Act'** means the Electricity Act, 2003 (36 of 2003);

b) '**Auxiliary energy consumption**' or '**AUX**' in relation to a period in the 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 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); wood produced in dedicated energy plantations or recovered from wild bushes or weeds; and the wood waste produced in some industrial operations; including such other wastes as may be recognised by the Central Government, as being part of biomass;

d) **‘Biomass gasification’** means the process of incomplete combustion of biomass resulting in the production of combustible gases consisting of a mixture of carbon monoxide (CO), hydrogen (H_2) and traces of methane (CH_4);

e) **‘Biogas’** means a gas produced when organic matter like crop residues, sewage, and manure breaks down (ferments) in an oxygen-free environment.

f) **‘Capital cost’** means the capital cost of a project as referred to in clauses 11, 23, 26, 30, 38, 45, 49, 55, 61, 66, 70 and 74;

g) '**Commission**' means the Andhra Pradesh Electricity Regulatory Commission referred to in sub-section (1) of section 86 of the Act;

h) **‘Conduct of Business Regulations’** means the Andhra Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, or any subsequent amendment thereof;

i) **‘Control Period’** means the period during which the norms for the determination of tariff specified in this Regulation shall remain valid;

j) **‘Floating solar project’** or **‘FPV’** means a solar PV power project where the arrays of photovoltaic panels on the structure of the project float on top of a body of water, such as an artificial basin or lake, with the help of a floater, anchoring, and mooring system;

k) **‘Grid Code’** means the Indian Electricity Grid Code Regulations, 2023, issued by CERC as amended from time to time or any subsequent re-enactment thereof;

l) **‘Gross calorific value’** or **‘GCV’** in relation to a fuel used in a generating station means the heat produced in kCal by the complete combustion of one kilogram of solid fuel, or one litre of liquid fuel or one standard cubic metre of gaseous fuel, as the case may be;

m) **‘Gross station heat rate’** or **‘Gross SHR’** means the heat energy input in kCal required to generate one kWh of electrical energy at the generator terminals of a generating station;

n) **‘Installed capacity**' or '**IC’** means the summation of the nameplate capacities of all the units of the generating station or the capacity of the generating station (reckoned at the generator terminals). In the case of solar PV power projects and floating solar projects, installed capacity shall be the sum of the nameplate capacities (Nominal AC power) of the project inverters.

o) **'Inter-connection point'** shall mean the interface point of a renewable energy generating facility with the transmission system or distribution system, where the energy is injected, as the case may be, and include:

  i. In relation to wind power projects, solar PV power projects, renewable hybrid energy projects and renewable energy with storage Projects, a line isolator on the outgoing feeder on the HV side of the pooling sub-station; and

  ii. In relation to small hydro projects, biomass gasifier-based power projects, non-fossil fuel-based cogeneration projects, and solar thermal power projects, a line isolator on the outgoing feeder on the HV side of the generator transformer.

p) **'MNRE'** means the Ministry of New and Renewable Energy of the Government of India;

q) **'Municipal solid waste'** or **'MSW'** means and includes commercial and residential wastes generated in a municipal or notified area in either solid or semi-solid form, and excludes industrial hazardous wastes, but includes treated bio-medical wastes;

r) **'Non-fossil fuel-based co-generation project'** means a generating station that uses a process in which more than one form of energy (such as steam and electricity) is produced in a sequential manner by use of biomass;

s) '**Operation and Maintenance expenses'** or **'O&M expenses'** means the expenditure incurred on operation and maintenance of the project, or part thereof, and includes the expenditure on manpower, repairs, spares, consumables, insurance and overheads;

t) '**Project**' means a generating station or an evacuation system up to an inter-connection point, as the case may be, and in the case of a small hydro project, includes all components of the generating facility such as a dam, intake water conductor system, power generating station and generating units of the scheme, as apportioned to power generation;

u) '**Pumped storage hydro project**' means a hydropower project which generates power through water stored as potential energy, pumped from a lower elevation reservoir to a higher elevation reservoir;

v) **‘Refuse derived fuel’** or **‘RDF’** means a segregated combustible fraction of solid waste other than chlorinated plastics in the form of pellets or fluff produced by drying, de-stoning, shredding, dehydrating, and compacting combustible components of solid waste that can be used as fuel;

w) **‘Renewable energy’** or **‘RE’** means the electricity generated from renewable energy sources;

x) **‘Renewable energy project’** means a generating station that produces electricity from renewable energy sources;

y) **‘Renewable energy source’** means and includes sources of renewable energy such as hydro, wind, and solar, including their integration with combined cycle, biomass, biofuel cogeneration, urban or municipal waste, and such other sources as recognised or approved by the Central Government;

z) **‘Renewable energy with storage project’** means a combination of renewable energy projects with storage or a combination of renewable hybrid energy projects with storage at the same interconnection point;

aa) **‘Renewable hybrid energy project’** means a renewable energy project that produces electricity from a combination of renewable energy sources connected at the same interconnection point;

bb) **‘Small hydro project’** means a hydropower project with an installed capacity up to and including 25 MW or, as defined by the Government of India, from time to time at a single location;

cc) **‘Solar PV power project’** means a project that uses sunlight for direct conversion into electricity through photovoltaic technology and is based on technologies such as crystalline silicon, thin film, or any other technology as approved by MNRE;

dd) **‘Solar thermal power project’** means a project that uses sunlight for direct conversion into electricity through concentrated solar power technology and is based on line focus or point focus principle;

ee) **‘State Nodal Agency’** means the agency in a State as may be designated by the Ministry of New and Renewable Energy to promote efficient use of renewable energy in that State;

ff) **‘Storage’** means an energy storage system utilising methods and technologies like solid state batteries, flow batteries, pumped storage, compressed air, fuel cells, hydrogen storage or any other technology to store various forms of energy and to deliver the stored energy in the form of electricity;

gg) **'Tariff period'** for renewable energy projects will be the same as their Useful Life, and the tariff period shall be considered from the date of commercial operation of such power projects.

hh) **'Useful Life'** in relation to the project, including a dedicated evacuation system, from the date of commercial operation of such project, shall mean the following: -

i	Wind power project	25 years
ii	Biomass power project with Rankine cycle technology	25 years
iii	Non-fossil fuel-based cogeneration project	25 years
iv	Small Hydro Project	40 years
v	Municipal solid waste-based power project / Refuse-derived fuel-based power project	20 years
vi	Solar PV power / Floating solar project/Solar thermal power project	25 years
vii	Biomass gasifier-based power project	25 years
viii	Biogas-based power project	25 years
ix	Renewable hybrid energy project	Minimum of the Useful Life of different RE technologies combined for the Renewable Hybrid Energy Project for the Composite Tariff as specified under clause 69.
x	Renewable energy with storage project	Same as the Useful Life of the project, assuming that there is no storage
xi	Pumped Storage Power (PSP) Project	40 Years

ii) **'Year'** means a financial year.

(2) Words and expressions used and not defined in this Regulation but defined in the Act shall have the meanings assigned to them in the Act. Expressions used herein but not specifically defined in this Regulation or

in the Act, but defined under any law passed by a competent legislature and applicable to the electricity industry in the State, shall have the meaning assigned to them in such law.

3. Scope and extent of application

The Licensees shall preferably endeavour to procure energy from all renewable energy sources as per the Ministry of Power/MNRE, the Government of India, notified competitive guidelines under section 63 of the Act, wherever applicable. However, in all cases, this Regulation shall apply where the tariff, for a grid-connected generating station or a unit thereof commissioned during the Control Period and based on renewable energy sources, is to be determined by the Commission under Section 62, read with Section 86 of the Act:

Provided that in cases of wind power projects, small hydro projects, biomass power projects with Rankine cycle technology, non-fossil fuel based co-generation projects, solar PV power projects, floating solar projects, solar thermal power projects, renewable hybrid energy projects, renewable energy with storage projects, biomass gasifier based power projects, biogas based power projects, municipal solid waste based power projects, refuse derived fuel based municipal solid waste power projects, and pumped storage power (PSP) projects, this Regulation shall apply subject to the fulfilment of eligibility criteria specified in Regulation 4 of this Regulation.

4. Eligibility Criteria

a) Wind power project – The project that uses new wind turbine generators and is located at sites, on-shore or off-shore, approved by the State Nodal Agency or Appropriate Government.

b) Small hydro project – The project that uses new plant and machinery and is located at sites approved by the State Nodal Agency or Appropriate Government.

c) Biomass power project with Rankine cycle technology – The project that uses new plant and machinery is based on Rankine cycle technology and does not use any fossil fuel.

d) Non-fossil fuel-based cogeneration project – The project that uses new plant and machinery and is based on the topping cycle mode of cogeneration.

Topping cycle mode of cogeneration – Any facility that uses non-fossil fuel input for power generation and also utilises the thermal energy generated for useful heat applications in other industrial activities simultaneously:

Provided that for the cogeneration facility to qualify under topping cycle mode, the sum of useful power output and one-half the useful thermal output must be greater than 45% of the facility’s energy consumption during the crushing season. Explanation- For the purposes of this clause,

(a) **‘Useful power output’** is the gross electrical output from the generator. The cogeneration plant will have an auxiliary consumption (e.g., the boiler feed pump and the FD/ID fans). To compute the net power output, it would be necessary to subtract the auxiliary consumption from the gross output. For simplicity of calculation, the useful power output is defined as the generator's gross electricity (kWh) output.

(b) **‘Useful Thermal Output’** is the useful heat (steam) that is provided to the process by the cogeneration facility.

(c) **‘Energy Consumption’** of the facility is the useful energy input that is supplied by the fuel (normally bagasse or other such biomass).

(d) '**Topping Cycle**' means a cogeneration process in which thermal energy produces electricity, followed by a useful heat application.

e) Solar PV power project, floating solar project, and solar thermal power project—The projects are based on technologies approved by MNRE.

Provided that floating solar projects installed with existing renewable energy projects, other than ground-mounted Solar PV projects, shall be treated as renewable hybrid energy projects.

f) Renewable hybrid energy project – The rated capacity of generation from one renewable energy source is at least 25% of the rated power capacity of the other resource, which operates at the same point of interconnection:

Provided that energy is injected into the grid at the same interconnection point and metering is done at such a common interconnection point accordingly.

Provided further that each 1 (one) MW of contracted Wind Solar Hybrid Project shall achieve a minimum CUF of 40%.

g) Biomass gasifier-based power project—The project uses new plant and machinery and has a grid-connected system that uses a 100% producer gas engine coupled with gasifier technologies approved by MNRE.

h) Biogas-based power project—The project uses new plant and machinery and has a grid-connected system that uses a 100% biogas-fired engine, coupled with biogas technology for co-digesting agriculture residues, manure, and other biowaste, as approved by MNRE.

i) Municipal solid waste-based power projects—The project uses new plant and machinery based on Rankine cycle technology and municipal solid waste as fuel.

j) Refuse-derived fuel-based municipal solid waste power projects—The project uses new plant and machinery based on Rankine cycle technology and refuse-derived fuel as fuel.

k) Renewable energy with storage project—This includes a renewable hybrid energy project that uses, partly or fully, renewable energy generated from such a project to store energy in a storage facility connected at the same point of interconnection as the renewable energy project.

Chapter 1

General Principles

5. Control Period

The Control Period under this Regulation shall be from 01.04.2025 to 31.03.2030:

The tariff determined as per this Regulation for the RE projects commissioned during the Control Period shall remain valid for the tariff period. Further, the tariff norms specified in this Regulation shall remain applicable subject to such conditions as may be stipulated by the Commission until notification of the revised norms through subsequent re-enactment of this Regulation.

6. Project-specific tariff

The Commission shall determine the project-specific tariff on a case-by-case basis. The financial and operational norms specified in this Regulation, except for capital cost, shall be the ceiling norms while determining the project-specific tariff.

7. Petition and proceedings for the determination of the tariff

(1) A petition for the determination of project-specific tariff shall be accompanied by such fee as may be specified in the Andhra Pradesh Electricity Regulatory Commission (Fees) Regulation, 2005, as amended from time to time or any subsequent re-enactment thereof, 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, as appended to this Regulation;

b) Detailed project report outlining technical and operational details, site-specific aspects, basis for capital cost, detailed break-up of capital cost and financing plan;

c) A statement of all applicable terms and conditions and anticipated expenditure for the period for which the tariff is to be determined;

d) A statement containing details of the calculation of any grant, subsidy, or incentive received, due or assumed to be due, from the Central Government or State Government or both. This statement shall also include the proposed tariff calculated without such subsidy or incentive.

e) Consent from the licensee; and

f) The following documents, in case of a petition for the determination of project-specific tariff by renewable energy projects, where the tariff from such renewable energy sources is generally determined through a competitive bidding process in accordance with provisions of Section 63 of the Act:

   i. Rationale for opting for a project-specific tariff instead of competitive bidding; and

   ii. Competitiveness of the proposed tariff vis-à-vis the tariff discovered through competitive bidding/ tariff prevalent in the market.

g) Any other information directed by the Commission.

(2) The proceedings for determining the tariff shall be in accordance with the provisions of the Conduct of Business Regulations. On submission of a complete petition accompanied by all requisite information and particulars, the petitioner shall, within 3 (three) working days of an intimation given to him, publish a notice in at least 1 (one) English daily newspaper in English language and 1 (one) Telugu daily newspaper in Telugu language having wide circulation in the area to which the application pertains, outlining the proposed capital cost and tariff structure, as the case may be, and such other matters as may be stipulated by the Commission, and invite suggestions and objections from the public:

(3) The Commission shall, as far as possible, pass an Order determining the

tariff within 120 (one hundred and twenty) days of receiving a complete petition for tariff determination and after considering all suggestions and objections received from the public.

8. Tariff Structure

The tariff for renewable energy sources shall consist of the following components:

(a) Return on equity.

(b) Interest on loan;

(c) Depreciation;

(d) Interest on working capital, and

(e) Operation and Maintenance expenses;

Provided that for renewable energy projects having a fuel cost component, like biomass power projects with Rankine cycle technology, biomass gasifier-based power projects, biogas-based power projects, and non-fossil fuel-based cogeneration projects, a single-part tariff with two components, a fixed cost component and a fuel cost component, shall be determined.

9. Tariff Design

(1) The tariff shall be determined, on a levelised basis, considering the year of commissioning of the project, for the tariff period of the project:

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

(2) A discount factor equivalent to the post-tax weighted average cost of capital shall be considered for levelised tariff computation.

10. Treatment for Over-Generation

In case a renewable energy project, in a given year, generates energy in excess of the capacity utilisation factor or plant load factor, as the case may be, specified under this Regulation, the tariff for such excess energy shall be 50 paise per unit. However, in preceding years, if the generated energy is lower than the capacity utilisation or plant load factor, such shortfall energy shall be paid at the normal tariff determined in the Order before arriving at an excess energy payment of 50 paise per unit.

Provided that the cumulative energy at the end of any given year shall not exceed the CUF for payment of the normal tariff.

Chapter 2

Financial Principles

11. Capital Cost

Norms for capital cost, as specified in relevant chapters of this Regulation, shall include land cost, pre-development expenses, all capital work, including plant and machinery, civil work, erection, commissioning, financing cost, interest during construction, and evacuation infrastructure up to an interconnection point.

12. Debt Equity Ratio

(1) For determining a tariff, the debt-equity ratio shall be considered as 70:30, provided that:

i. The project-specific tariffs, where the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as a normative loan.

ii. The project specific tariffs where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for the determination of tariff;

iii. The equity invested in foreign currency shall be designated in Indian rupees on the date of each investment;

iv. The debt-equity ratio shall be considered after deducting the amount of grant or capital subsidy received for the project to arrive at the amount of debt and equity; and

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

(2) The project developer shall submit the resolution of the company's Board or the approval of the competent authority in other cases regarding the infusion of funds from internal resources in support of the utilisation made or proposed to be made to meet the capital expenditure of the

renewable energy project.

13. Loan Tenure and Interest on Loan

(1) Loan Tenure

To determine the tariff, the loan tenure of 15 years shall be considered.

(2) Interest on Loan

(a) For the calculation of interest on loans, the loans arrived at in the manner indicated in Clause 12 shall be considered gross normative loans. The normative loan outstanding as of April 1st of every year shall be worked out by deducting the cumulative repayment up to March 31st of the previous year from the gross normative loan.

(b) 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.

(c) Notwithstanding any moratorium period availed by the project developer, the loan repayment shall be considered from the first year of the project's commercial operation and shall be equal to the annual depreciation allowed.

14. Depreciation

(1) The value base for the purpose of depreciation shall be the capital cost of the project approved by the Commission. The salvage value of the project shall be considered as 10%, and depreciation shall be allowed up to a maximum of 90% of the capital cost of the project:

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

(2) A depreciation rate of 4.67% per annum shall be considered for the first 15 years, and the remaining depreciation shall be evenly spread during the remaining Useful Life of the project.

(3) Depreciation shall be computed from the first year of commercial operation:

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

15. Return on Equity

(1) The value base for equity shall be as determined under Clause 12.

(2) The normative Return on Equity for renewable energy projects other than small hydro projects shall be 14%, and that for the small hydro projects shall be 15%.

(3) Actual income tax paid on the income corresponding to the regulated renewable energy business shall be claimed by the generating company along with the monthly energy bills, subject to submission of documentary evidence of payment.

(4) Any penalty, interest, or tax liability arising out of delay or default in payment of tax, or from activities other than the regulated renewable energy business, shall not be considered.

16. Interest on Working Capital

(1) The Working Capital requirement in respect of wind power projects, small hydro projects, solar PV power projects, floating solar projects, solar thermal power projects, municipal solid waste-based power projects and refuse-derived fuel based power projects and renewable energy with storage projects shall be computed in accordance with the following:

a) Operation and Maintenance expenses for one month;

b) Receivables equivalent to 45 days of tariff for the sale of electricity, calculated on the normative Capacity Utilisation Factor or Plant Load Factor, as the case may be; and

c) Maintenance spares equivalent to 15% of Operation and Maintenance expenses.

(2) The Working Capital requirement in respect of biomass power projects with Rankine cycle technology, biogas power projects, biomass gasifier-based power projects and non-fossil fuel-based cogeneration projects shall be computed in accordance with the following:

a) Fuel costs for two months equivalent to the normative Plant Load Factor;

b) Operation and Maintenance expenses for one month;

c) Receivables equivalent to 45 days of tariff for the sale of electricity, calculated on the plant load factor; and

d) Maintenance spares equivalent to 15% of Operation and Maintenance expenses.

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

(4) Interest on Working Capital shall be at an interest rate equivalent to the normative interest rate of three hundred and twenty-five (325) 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.

17. Calculation of capacity utilisation factor and plant load factor:

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

18. Operation and Maintenance Expenses

(1) Operation and Maintenance expenses shall be determined for the project's Tariff Period based on normative O&M expenses specified in this Regulation for the first year of the Control Period.

(2) Normative O&M expenses allowed during the first year of the Control Period, i.e. financial year 2025-26, under this Regulation, shall be escalated at the rate of 5.25% per annum for the Tariff Period.

19. Rebate

(1) A 1.5% rebate on the bill amount shall be allowed for payment of the generating company's bills through a revolving and valid letter of credit on presentation or through National Electronic Fund Transfer (NEFT) or Real Time Gross Settlement (RTGS) payment mode within 7 days of bill presentation.

Explanation: In the computation of “7 days”, the number of days shall be counted consecutively without considering any holiday. However, in case the last day or the 7th day is an official holiday, the 7th day for the purpose of rebate shall be construed as the immediate succeeding working day.

(2) Where payments are made on any day after 7 days within a period of one month from the date the generating company presents bills, a rebate of 1% shall be allowed.

20. Late payment surcharge

In case the payment of any bill for charges payable under this Regulation is delayed beyond 45 days from the date of presentation of bills, the generating company shall levy a late payment surcharge as specified in the Ministry of Power—Electricity (Late Payment Surcharge and Related Matters) Rules, 2022, as amended from time to time.

21. Subsidy or incentive by the Central or the State Government

(1) The Commission shall take into consideration any incentive, grant or subsidy from the Central or State Government, including accelerated depreciation benefit, availed by the project while determining the tariff under this Regulation:

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

i. Assessment of benefit shall be based on normative capital cost, accelerated depreciation rate and corporate income tax rate as per relevant provisions of the Income Tax Act, 1961, as amended from time to time; and

ii. Capitalisation of renewable energy projects during the second half of the fiscal year.

iii. Per unit benefit shall be derived on a levelised basis at a discount factor equivalent to the weighted average cost of capital.

(2) Any grant, subsidy, or incentive availed by a renewable energy project that is not considered at the time of tariff determination shall be deducted by the beneficiary in subsequent bills after receipt of such grant, subsidy, or incentive in suitable installments or within such period as may be stipulated by the Commission.

(3) If the Central or State Government or their agencies provide any generation-based incentive that is specifically over and above the tariff, such incentive shall be taken into account while determining the tariff and deducted by the licensee in subsequent bills raised by the particular Renewable energy project.

22. Statutory Charges

The renewable energy project developer shall recover from the licensees the statutory charges imposed by the State and Central Government, such as royalty on water, electricity duty, etc., for the applicable period mentioned in the respective policies.

Chapter 3

Parameters for wind power projects

23. Capital Cost

Considering the prevailing market trends, the Commission shall determine only project-specific capital costs.

24. Capacity Utilisation Factor

(1) Capacity utilisation factor norms for this Control Period shall be as follows:

Annual Mean Wind Power Density (W/m2)	Capacity Utilisation Factor
Up to 220	22%
221-275	24%
276-330	28%
331-440	33%
> 440	35%

(2) The annual mean wind power density specified in sub-clause(1) above shall be measured at a 100-meter hub height. For wind hub heights above 100 meters, the developers may indicate the CUF.

(3) Wind power projects shall be classified into particular wind zone sites as per MNRE guidelines for wind measurement. Based on the validation of the wind mast by the National Institute of Wind Energy, the State Nodal Agency should certify the zoning of the proposed wind farm complex.

25. Operation and Maintenance expenses

Considering the prevailing market trends, the Commission shall determine only project-specific O&M expenses.

Chapter 4

Parameters for small hydro projects

26. Capital Cost

(1) The normative capital cost for small hydro projects during the first year of the Control Period, i.e. the financial year 2025-26, shall be as follows:

Maximum capital cost for small hydro projects for FY2025-26	Below 5 MW	890 (Rs. lakh/ MW)
	5 MW to 25 MW	1,027 (Rs. lakh/ MW)

(2) The capital cost for small hydro projects as specified for the first year of

the Control Period shall remain valid for the entire duration of the Control Period unless reviewed earlier by the Commission.

27. Capacity Utilisation Factor

It shall be project specific and shall not be less than 40% (Project specific).

28. Auxiliary Consumption

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

29. Operation and Maintenance expenses

(1) Normative O&M Expenses for the first year of the Control Period, i.e. financial year 2025-26, shall be as under:

Description	Project Size	O&M Expenses (Rs. lakh/ MW)
O&M Expenses	Below 5 MW	41.74
	5 MW to 25 MW	30.23

(2) Normative O&M Expenses allowed at the commencement of the Control Period, i.e. financial year 2025-26 under this Regulation, shall be escalated at the rate specified in Clause 18 of this Regulation for the Tariff Period.

Chapter 5

Parameters for biomass power projects based on Rankine cycle technology

30. Capital Cost

(1) The normative capital cost for the first year of the Control Period, i.e. financial year 2025-26, shall be as under:

Biomass power projects based on Rankine cycle technology	Maximum Capital Cost (Rs. lakhs/ MW)
Projects with a water-cooled condenser	595
Projects with an air-cooled condenser	607

(2) The capital cost for biomass power projects based on Rankine cycle technology, as specified for the first year of the Control Period, shall remain valid for the entire duration of the Control Period unless reviewed earlier by the Commission.

31. Plant Load Factor

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

32. Auxiliary Consumption

The normative auxiliary consumption shall be as follows: -

a) For projects using water-cooled condenser: 10%

b) For projects using air-cooled condenser: 12%

33. Station Heat Rate

The Station Heat Rate shall be:

a) For projects using travelling grate boilers: 4,200 kCal/kWh

b) For projects using AFBC boilers: 4,125 kCal/kWh.

34. Operation and Maintenance expenses

Normative O&M Expenses for the first year of the Control Period, i.e. financial year 2025-26, shall be Rs. 57.75 lakhs per MW and shall be escalated at the rate specified in Clause 18 of this Regulation for the Tariff Period.

35. Use of Fossil Fuel

The use of fossil fuels shall not be allowed.

36. Gross Calorific Value

The gross calorific value of biomass fuel, for the purpose of determination of tariff, shall be 3100 kCal/kg.

37. Fuel Cost

Biomass fuel price during the first year of the Control Period, i.e. financial year 2025-26, shall be Rs.4262 per MT 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 the Commission. For the purpose of determining levelised tariff, a normative escalation factor of 3.45% per annum shall be applicable on the biomass fuel price.

Provided that the Commission may review the biomass fuel price based on a study, consequent to which the 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.

Chapter 6

Parameters for non-fossil fuel-based cogeneration projects

38. Capital Cost

Normative capital cost for the non-fossil fuel-based cogeneration projects shall be Rs. 562 lakhs/MW (Maximum) for the first year of the Control Period, i.e. financial year 2025-26 and will remain valid for the entire duration of the Control Period unless reviewed earlier by the Commission.

39. Plant Load Factor

The plant load factor shall be 53%.

40. Auxiliary Consumption

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

41. Station Heat Rate

The Station Heat Rate of 3,600 kCal/ kWh for the power generation component alone shall be considered for the computation of the tariff for non-fossil fuel-based cogeneration projects.

42. Gross Calorific Value

The gross calorific value for bagasse shall be considered as 2,250 kCal/kg. For the use of biomass fuels other than bagasse, gross calorific value as specified under Clause 36 shall be applicable.

43. Fuel Cost

The price of bagasse for the first year of the Control Period, i.e. financial year 2025-26, shall be Rs. 2,408 per MT 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 specifically reviewed by the Commission. For the purpose of determining levelised tariff, a normative escalation factor of 3.45% per annum shall be applicable on bagasse prices.

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

(1) For the use of biomass other than bagasse in non-fossil fuel-based cogeneration projects, the biomass prices as specified under Clause 37 shall be applicable.

44. Operation and Maintenance expenses

Normative O&M expenses during the first year of the Control Period, i.e. financial year 2025-26, shall be Rs. 30.42 lakhs per MW and shall be escalated at the rate specified in Clause 18 of this Regulation for the Tariff Period.

Chapter 7

Parameters for solar PV power projects, solar thermal power projects and floating solar projects

45. Capital Cost

The Commission shall determine only project specific capital costs, considering the prevailing market trends.

46. Capacity Utilisation Factor

The Commission shall only approve capacity utilisation factors for project specific tariffs:

Provided that the minimum capacity utilisation factor for solar PV power projects shall be 21%:

Provided further that the minimum capacity utilisation factor for solar thermal power projects shall be 23%:

Provided also that the minimum capacity utilisation factor for floating solar projects shall be 19%.

47. Operation and Maintenance expenses

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

48. Auxiliary Consumption

The Commission shall only approve auxiliary consumption for project specific:

Provided that the maximum auxiliary consumption for solar PV power projects shall be 0.75%;

Provided further that the maximum auxiliary consumption for solar thermal power projects shall be 10%;

Provided also that the maximum auxiliary consumption for floating solar projects shall be 0.75%.

Chapter 8

Parameters for biomass gasifier based power projects

49. Capital Cost

Normative capital cost for biomass gasifier based power projects shall be Rs.677 lakhs/MW (Maximum) during the first year of the Control Period, i.e. the financial year 2025-26, and will remain valid for the entire duration of the Control Period unless reviewed earlier by the Commission.

50. Plant Load Factor

The plant load factor for the determination of tariff shall be considered as 85%.

51. Auxiliary consumption

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

52. Specific fuel consumption

Normative specific fuel consumption shall be 1.25 kg per kWh.

53. Operation and Maintenance expenses

Normative O&M expenses for the first year of the Control period, i.e. financial year 2025-26, shall be Rs. 76.04 lakhs per MW and shall be escalated at the rate specified in Clause 18 of this Regulation for the Tariff Period.

54. 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 Clause 37.

Chapter 9

Parameters for biogas based power projects

55. Capital Cost

Normative capital cost for biogas based power projects shall be Rs.1,354 lakhs/MW (Maximum) for the first year of the Control Period, i.e. financial year 2025-26 and shall remain valid for the entire duration of the Control Period unless reviewed earlier by the Commission.

56. Plant Load Factor

Plant load factor shall be considered as 90% for the determination of the tariff.

57. Auxiliary Consumption

The auxiliary consumption shall be considered as 12% for the determination of the tariff.

58. Operation and Maintenance Expenses

Normative O&M expenses for the first year of the Control Period, i.e. financial year 2025-26 shall be Rs. 76.04 lakhs per MW and shall be escalated at the rate specified in Clause 18 of this Regulation for the Tariff Period.

59. Specific Fuel Consumption

Normative specific fuel consumption shall be 3 kg of substrate mix per kWh.

60. Fuel Cost (Feedstock Price)

Feedstock price during the first year of the Control Period, i.e. financial year 2025-26, shall be Rs.1,702/MT 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 specifically reviewed by the Commission. For the purpose of determining levelised tariff, a normative escalation factor of 3.45% per annum shall be applicable.

Chapter 10

Parameters for refuse-derived fuel (RDF) based municipal solid waste (MSW) power projects

61. Capital Cost

The Commission shall determine only project specific capital costs, considering the prevailing market trends.

62. Plant Load Factor

(1) Plant load factor for determining tariff for refuse-derived fuel-based municipal solid waste power projects shall be:

Sl. No.	Plant load factor	RDF
a)	During the stabilisation period	65%
b)	During the remaining period of the first year (after the stabilisation period)	65%
c)	2nd year onwards	80%

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

63. Auxiliary Consumption

The auxiliary consumption for the determination of tariff shall be considered as 10% -15% based on technology.

64. Operation and Maintenance Expenses

Normative O&M expenses for the first year of the Control Period shall be 5% to 8.5% of the Capital Cost based on boiler and technology.

65. Fuel Cost

No Fuel/Variable Cost shall be considered for the determination of tariffs for RDF power projects.

Provided that for the purpose of start-up and shut down activity and temperature stabilisation during monsoon, alternate fuel from any other renewable energy source up to a ceiling of 5% of RDF consumed annually, shall be allowed without any additional impact on tariff.

Municipal Solid Waste (MSW) based projects, if proposed within the State during the Control Period, shall be considered for tariff determination by the Commission on a case-by-case basis, considering appropriate parameters, tipping fees, calorific value of the waste, and compliance with the Solid Waste Management Rules, 2016, as amended from time to time.

Chapter 11

Parameters for Renewable Hybrid Energy Projects

66. Capital Cost

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

67. Capacity Utilisation Factor

(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 sources, as the case may be:

Provided that the Wind-Solar Hybrid Project means a hybrid project if the rated power capacity of one resource is at least 25% of the rated power capacity of the other resource.

Provided that the minimum capacity utilisation factor for renewable hybrid energy projects shall be 40% when measured at the interconnection point, where the energy is injected into the grid.

68. Operation and Maintenance expenses

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

69. Tariff

The tariff for a renewable hybrid energy project shall be a composite levelised tariff for the project as a whole by factoring in the tariff components up to 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 the RE hybrid project is left with a further useful life, the levelised tariff for the remaining useful life of such RE technology shall be determined separately by factoring in the tariff components for the remaining useful life.

Chapter 12

Parameters for a renewable energy with storage project

70. Capital Cost

The Commission shall determine only project specific capital costs for renewable energy with storage projects, considering the prevailing market trends

71. Storage Efficiency

(1) The Commission shall approve the storage efficiency only for project specific tariffs:

Provided that the minimum efficiency for storage based on the technology of solid-state batteries shall be 85%:

(2) The efficiency of the storage component of renewable energy with a storage project shall be measured as the ratio of output energy received from storage and input energy supplied to the storage component of such a project on an annual basis.

72. Operation and Maintenance expenses

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

73. Tariff determination for Energy Storage

The tariff for the renewable energy with storage project shall be a composite tariff or differential tariff based on the time of day, determined for energy supplied from the Project, including the energy supplied from the storage facility:

Provided that such tariff may be determined for the supply of power on round the clock basis or for time periods as agreed by the Project Developer and Beneficiary.

Chapter 13

Parameters for Pumped Storage Power (PSP) Projects

74. Capital Cost

The Commission shall determine only project specific capital costs for pumped storage power (PSP) projects, considering the prevailing market trends

75. Storage Efficiency

(1) The Commission shall approve the pumped storage power (PSP) projects only for project specific tariffs:

(2) Provided that the minimum efficiency for pumped storage power (PSP) Projects shall be 80%

(3) The efficiency of the storage component of energy with a storage project shall be measured as the ratio of output energy received from storage and input energy supplied to the storage component of such project on an annual basis.

76. Operation and Maintenance expenses

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

77. Tariff determination for Energy Storage

The tariff for Pumped Storage Power (PSP) Projects shall be a differential tariff based on the time of day/ round the clock tariff.

Chapter 14

Miscellaneous

78. All issues arising in relation to the interpretation of terms in this Regulation shall be a matter for the Commission's decision, and on all such issues, the Commission's decision shall be final.

79. Deviation from norms

Tariff for electricity generated from a generating station based on renewable energy sources may also be agreed upon between the generating company and licensee, in deviation from the norms specified in this Regulation:

Provided that the levelised tariff of the project calculated on the basis of the norms specified in this Regulation shall be the ceiling levelised tariff.

80. Power to dispense with the requirement of the Regulation

The Commission shall have the power, for reasons to be recorded in writing, to dispense with the requirements of any provision of this Regulation in a specific case or cases.

81. 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, relax any of the provisions of this Regulation on its own motion or on an application made before it by an interested person.

82. Power to remove difficulty

If any difficulty arises in giving effect to the provisions of this Regulation, the Commission may, by general or specific order, make such provisions not inconsistent with the provisions of the Act, as may appear to be necessary for removing the difficulty.

83. Issue of orders and practice directions

Subject to the provisions of the Electricity Act, 2003 and this Regulation, the Commission may, from time to time, issue orders and practice directions about the implementation of the Regulation and procedure to be followed and various matters which the Commission has been empowered by this Regulation to specify or direct.

84. Power to Amend

The Commission may, at any time, add, vary, alter, modify, or amend any provisions of this Regulation.

APPENDIX

Form-1.1: Template for (Wind power projects/ Small hydro projects/ Solar PV power projects/ Solar thermal power projects/ Renewable energy hybrid power projects /Renewable energy with storage projects/PSP Projects/MSW/RDF)

Sl.	Assumption Head	Sub-head	Sub-head (2)	Unit	Parameter
1	Power Generation	Capacity	Installed Power Generation Capacity	MW	
			Capacity utilisation Factor (CUF)	%	
			Auxiliary Consumption	%	
			Commercial Operation Date (COD)	dd/mm/yyyy	
			Useful Life	Years	
2	Project Cost	Capital Cost	Normative Capital Cost	Rs. Crore/ MW	
			Capital Cost	Rs. Crore	
			Capital Subsidy, if any	Rs. Crore	
			Net Capital Cost	Rs. Crore	
3	Financial Assumption	Debt Equity	Tariff Period	Years	
			Debt	%	
			Equity	%	
		Debt Component	Total debt amount	Rs. Crore	
			Total equity amount	Rs. Crore	
			Loan Amount	Rs. Crore	
			Moratorium Period	Years	
			Repayment Period (incl. moratorium)	Years	
			Interest Rate	%	
		Equity Component	Equity Amount	Rs. Crore	
			Return on Equity for the First 20 Years	% p.a.	
			Return on Equity after 20 years	% p.a.	
			Discount Rate	%	
		Depreciation	Dep Rate for 1st 15 years	%	
			Dep rate 16th year onwards	%	
		Incentives	GBI, if any	Rs. Crore	
			Period for GBI	Years	
4	O& M Expenses	Normative O&M Expense		Rs. Lakh/ MW	
		O&M Expenses p.a.		Rs. Crore	
		Escalation Factor		%	
5	Working Capital	O&M Expenses		Month	
		Maintenance Spares	% of O&M Expenses	%	
		Receivables		Days	
		Interest on Working Capital		% p.a.	

Form-1.2: Template for (Biomass)

Sl.	Assumption Head	Sub-head	Sub-head (2)	Unit	Parameter
1	Power Generation	Capacity	Installed Power Generation Capacity	MW	
			Aux Consumption	%	
			PLF (1st year)	%	
			PLF (2nd year onwards)	%	
			Commercial Operation Date	dd/mm/yyyy	
			Useful Life	Years	
2	Project Cost	Capital Cost/ MW	Normative Capital Cost	Rs. Crore /MW	
			Capital Cost	Rs. Crore	
			Capital Subsidy, if any	Rs. Crore	
			Net Capital Cost	Rs. Crore	
3	Financial Assumption	Debt Equity	Tariff Period	Years	
			Debt	%	
			Equity	%	
		Debt Component	Total debt amount	Rs. Crore	
			Total equity amount	Rs. Crore	
			Loan Amount	Rs. Crore	
			Moratorium Period	Years	
			Repayment Period (including moratorium)	Years	
			Interest Rate	%	
		Equity Component	Equity Amount	Rs. Crore	
			Return on Equity for the First 20years	% p.a.	
			Return on Equity after 20 years	% p. a.	
			Discount Rate	%	
		Depreciation	Dep Rate for 1st 15 years	%	
			Dep rate 16th year onwards	%	
		Incentives	GBI, if any	Rs. Crore	
			Period for GBI	Years	
4	O&M Expenses	Normative O&M Expenses		Rs. Lakh/MW	
		O&M Expenses p.a.		Rs. Crore	
		Escalation Factor		%	
5	Working Capital	O&M Expenses		Month	
		Maintenance Spares	% of O&M Expenses	%	
		Receivables		Days	
		Interest on WC		%	
6	Fuel Related	Station Heat	During 1st year	kcal/kWh	

Sl.	Assumption Head	Sub-head	Sub-head (2)	Unit	Parameter
	assumptions	Rate	2nd year onwards	kcal/kWh	
		Fuel Type and mix	Biomass Fuel Type-1	%	
			Biomass Fuel Type-2	%	
			Fossil Fuel (Coal)	%	
			GCV of Biomass Fuel Type-1	kcal/kWh	
			GCV of Biomass Fuel Type-2	kcal/kWh	
			GCV of Fossil Fuel (Coal)	kcal/kWh	
			Biomass Price (Fuel Type-1)/Yr 1	Rs. /MT	
			Biomass Price (Fuel Type-2)/ Yr 1	Rs. /MT	
			Fossil Fuel (Coal) Price)/ Yr 1	Rs. /MT	
			Fuel Price Escalation Factor	% p.a.	

Form-2.1: Template for (Wind power projects or Solar PV power projects /Solar thermal power projects/ MSW/ RDF): Determination of Tariff Components

Units Generation	Unit	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Yr-11	Yr-12
Installed Capacity	MW												
Net Generation	MU												

Units Generation	Unit	Yr-13	Yr-14	Yr-15	Yr- 16	Yr- 17	Yr- 18	Yr- 19	Yr- 20	Yr- 21	Yr- 22	Yr- 23	Yr- 24	Yr- 25
Installed Capacity	MW													
Net Generation	MU													

Tariff Components (Fixed charge)	Unit	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Yr-11	Yr-12
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												
Total Fixed Cost	Rs Lakh												

Tariff Components (Fixed charge)	Unit	Yr-13	Yr-14	Yr-15	Yr-16	Yr-17	Yr-18	Yr-19	Yr-20	Yr-21	Yr-22	Yr-23	Yr-24	Yr-25
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													
Total Fixed Cost	Rs Lakh													

Per Unit Tariff components	Unit	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Yr-11	Yr-12
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												
PU Tariff Components	Rs/kWh												

Per Unit Tariff components	Unit	Yr-13	Yr-14	Yr-15	Yr-16	Yr-17	Yr-18	Yr-19	Yr-20	Yr-21	Yr-22	Yr-23	Yr-24	Yr-25
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													
PU Tariff Components	Rs/kWh													

Levelised Tariff	Unit	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Yr-11	Yr-12
Discount Factors													
Discounted Tariff components	Rs/kWh												
Levelised Tariff	Rs/kWh												

Levelised Tariff	Unit	Yr-13	Yr-14	Yr-15	Yr- 16	Yr-17	Yr-18	Yr-19	Yr-20	Yr-21	Yr-22	Yr-23	Yr-24	Yr-25
Discount Factors														
Discounted Tariff components	Rs/kWh													
Levelised Tariff	Rs/kWh													

Form-2.2: Template for (Biomass power projects or non-fossil fuel based cogeneration plants): Determination of Tariff Components

Units Generation	Unit	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Yr-11	Yr-12
Installed Capacity	MW												
Net Generation	MU												

Units Generation	Unit	Yr-13	Yr-14	Yr-15	Yr-16	Yr- 17	Yr- 18	Yr- 19	Yr- 20	Yr- 21	Yr- 22	Yr-23	Yr-24	Yr- 25
Installed Capacity	MW													
Net Generation	MU													

Tariff Components (Fixed charge)	Unit	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Yr-11	Yr-12
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												
Total Fixed Cost	Rs Lakh												

Tariff Components (Fixed charge)	Unit	Yr-13	Yr-14	Yr-15	Yr-16	Yr-17	Yr-18	Yr-19	Yr-20	Yr-21	Yr-22	Yr-23	Yr-24	Yr-25
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													
Total Fixed Cost	Rs Lakh													

Tariff Components (Variable Charge)	Unit	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Yr-11	Yr-12
Biomass Fuel Type-1	Rs Lakh												
Biomass Fuel Type-2	Rs Lakh												
Fossil Fuel (coal)	Rs Lakh												
Municipal Solid Waste	Rs Lakh												
Refuse Derived Fuel	Rs Lakh												
Sub-total (Fuel Costs)	Rs Lakh												
Fuel cost allocable to power	%												
Total Fuel Costs	Rs Lakh												

Tariff Components (Variable Charge)	Unit	Yr-13	Yr-14	Yr-15	Yr-16	Yr-17	Yr-18	Yr-19	Yr-20	Yr-21	Yr-22	Yr-23	Yr-24	Yr-25
Biomass Fuel Type-1	Rs Lakh													
Biomass Fuel Type-2	Rs Lakh													
Fossil Fuel (coal)	Rs Lakh													
Municipal Solid Waste	Rs Lakh													
Refuse Derived Fuel	Rs Lakh													
Sub-total (Fuel Costs)	Rs Lakh													
Fuel cost allocable to power	%													
Total Fuel Costs	Rs Lakh													

Per Unit Tariff components (Fixed)	Unit	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Yr-11	Yr-12
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												
PU Tariff Components (Fixed)	Rs/kWh												
PU Tariff Components (Variable)	Rs/kWh												
PU Tariff Components (Total)	Rs/kWh												

Per Unit Tariff components (Fixed)	Unit	Yr-13	Yr-14	Yr-15	Yr-16	Yr-17	Yr-18	Yr-19	Yr-20	Yr-21	Yr-22	Yr-23	Yr-24	Yr-25
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													

Per Unit Tariff components (Fixed)	Unit	Yr-13	Yr-14	Yr-15	Yr-16	Yr-17	Yr-18	Yr-19	Yr-20	Yr-21	Yr-22	Yr-23	Yr-24	Yr-25
PU Tariff Components (Fixed)	Rs/kWh													
PU Tariff Components (Variable)	Rs/kWh													
PU Tariff Components (Total)	Rs/kWh													

Levelised Tariff	Unit	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Yr-11	Yr-12
Discount Factors													
Discounted Tariff components (Fixed)	Rs/kWh												
Discounted Tariff components (Variable)	Rs/kWh												
Discounted Tariff components (Total)	Rs/kWh												
Levelised Tariff (Fixed)	Rs/kWh												
Levelised Tariff (Variable)	Rs/kWh												
Levelised Tariff (Total)	Rs/kWh												

Levelised Tariff	Unit	Yr-13	Yr-14	Yr-15	Yr-16	Yr-17	Yr-18	Yr-19	Yr-20	Yr-21	Yr-22	Yr-23	Yr-24	Yr-25
Discount Factors														
Discounted Tariff components (Fixed)	Rs/kWh													
Discounted Tariff components (Variable)	Rs/kWh													
Discounted Tariff components (Total)	Rs/kWh													
Levelised Tariff (Fixed)	Rs/kWh													
Levelised Tariff (Variable)	Rs/kWh													
Levelised Tariff (Total)	Rs/kWh													

Form-2.3: Template for (Small Hydro projects/PSP Project): Determination of Tariff Components

Units Generation	Unit	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Yr-11	Yr-12	Yr-13
Installed Capacity	MW													
Net Generation	MU													

Units Generation	Unit	Yr-14	Yr-15	Yr-16	Yr-17	Yr-18	Yr-19	Yr-20	Yr-21	Yr-22	Yr-23	Yr-24	Yr-25	Yr-26
Installed Capacity	MW													
Net Generation	MU													

Units Generation	Unit	Yr-27	Yr-28	Yr-29	Yr-30	Yr-31	Yr-32	Yr-33	Yr-34	Yr-35	Yr-36	Yr-37	Yr-38	Yr-39	Yr-40
Installed Capacity	MW														
Net Generation	MU														

Tariff Components (Fixed charge)	Unit	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Yr-11	Yr-12	Yr-13
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													
Total Fixed Cost	Rs Lakh													

Tariff Components (Fixed charge)	Unit	Yr-14	Yr-15	Yr-16	Yr-17	Yr-18	Yr-19	Yr-20	Yr-21	Yr-22	Yr-23	Yr-24	Yr-25	Yr-26
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													
Total Fixed Cost	Rs Lakh													

Tariff Components (Fixed charge)	Unit	Yr-27	Yr-28	Yr-29	Yr-30	Yr-31	Yr-32	Yr-33	Yr-34	Yr-35	Yr-36	Yr-37	Yr-38	Yr-39	Yr-40
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														
Total Fixed Cost	Rs Lakh														

Per Unit Tariff components	Unit	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Yr-11	Yr-12	Yr-13
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													
PU Tariff Components	Rs/kWh													

Per Unit Tariff components	Unit	Yr-14	Yr-15	Yr-16	Yr-17	Yr-18	Yr-19	Yr-20	Yr-21	Yr-22	Yr-23	Yr-24	Yr-25	Yr-26
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													
PU Tariff Components	Rs/kWh													

Per Unit Tariff components	Unit	Yr-27	Yr-28	Yr-29	Yr-30	Yr-31	Yr-32	Yr-33	Yr-34	Yr-35	Yr-36	Yr-37	Yr-38	Yr-39	Yr-40
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														
PU Tariff Components	Rs/kWh														

Levelised Tariff	Unit	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	Yr-6	Yr-7	Yr-8	Yr-9	Yr-10	Yr-11	Yr-12	Yr-13
Discount Factors														
Discounted Tariff components	Rs/kWh													
Levelised Tariff	Rs/kWh													

Levelised Tariff	Unit	Yr-14	Yr-15	Yr-16	Yr-17	Yr-18	Yr-19	Yr-20	Yr-21	Yr-22	Yr-23	Yr-24	Yr-25	Yr-26
Discount Factors														
Discounted Tariff components	Rs/kWh													
Levelised Tariff	Rs/kWh													

Levelised Tariff	Unit	Yr-27	Yr-28	Yr-29	Yr-30	Yr-31	Yr-32	Yr-33	Yr-34	Yr-35	Yr-36	Yr-37	Yr-38	Yr-39	Yr-40
Discount Factors															
Discounted Tariff components	Rs/kWh														
Levelised Tariff	Rs/kWh														

(By Order of the Commission)

Sd/-11.09.2025

Place: Kurnool
Date: 11.09.2025.

P.KRISHNA
Commission Secretary i/c