



सत्यमेव जयते

Government of Rajasthan

RAJASTHAN BIOMASS AND WASTE TO ENERGY POLICY, 2023



*RISING
RAJASTHAN*



Government of Rajasthan

Energy Department

F-20 (09)Energy/2009

Jaipur, dated:29.09.2023

NOTIFICATION

Rajasthan Biomass and Waste to Energy Policy, 2023

1. Introduction

- 1.1 India in response to the INDC (Intended Nationally Determined Contribution), has assured to reduce the carbon emission by 33 to 35% and to achieve 50% of installed capacity from non-conventional energy till 2030. As a part of its commitment to mitigate the effect of climate change the Government of India has set a target of achieving of renewable energy 500 GW capacity by 2030.
- 1.2 To keep pace with changing needs of the renewable energy sector, Government of Rajasthan has decided to issue **“Rajasthan Biomass and Waste to Energy Policy, 2023”**.
- 1.3 The State will promote both the Biomass Programme, facilitating the establishment of biomass-based power projects, briquette/pellet manufacturing plants, and supporting biomass-based co-firing projects, as well as Waste-to-Energy based Power Projects for the utilization of waste such as MSW/RDF/Industrial/Medical waste or any other wastes as per the guidelines of the State Government and Government of India
- 1.4 This policy will come into effect from Notification and will remain in force until superseded by another Policy. The State Government may amend/modify/review this Policy as and when required.

2. Vision and Objective

- 2.1 To be a major contributing State for achieving the national target of 500 GW through non fossil fuels by 2030 as a global commitment.
- 2.2 Utilization of Biomass waste as a fuel for energy generation as a sustainable source of energy and also solving problem of Stubble burning to address the environmental impacts caused by burning of open crop residue/biomass.
- 2.3 To facilitate and promote disposal of MSW/RDF/Industrial waste/Medical waste in more environment friendly manner and utilization of MSW/RDF as renewable resource for generation of electricity.
- 2.4 Biomass energy plantation can stimulate the development of agricultural/rural sector with an additional stream of income

3. Project based provisions

3.1 Biomass Projects

- 3.1.1 The State will promote setting up of Biomass projects including Cogeneration. The Power Producers may use such power for captive consumption or for sale to third party/licensees including Discoms.

3.1.2 Discom may purchase the power from Biomass projects to fulfill their Renewable Purchase Obligation (RPO) and beyond RPO as per their requirement and commercial viability. Discom shall execute Power Purchase Agreement (PPA) with Developers/Power Producer.

3.2 Waste to Energy projects:

3.2.1 The State will promote setting up of the Waste to Energy plant for generation of power by utilizing MSW (Municipal Solid Waste), RDF (Refuse Derived Fuel), Industrial and medical waste.

3.2.2 The urban/rural Local Bodies may allocate project through competitive biddings or through PPP mode. The winning bidder shall develop the project.

3.3 Co-firing in Coal/Lignite based thermal power plants:

3.3.1 The state will facilitate co-firing of biomass in coal/lignite based Thermal Power Plants for power generation as per guidelines issued by Ministry of Power, Government of India and as amended from time to time.

3.3.2 The Percentage of blending of Biomass shall be as per the guidelines issued by Ministry of Power, Government of India. Provided further that for smaller capacity of coal/lignite plants, where required percentage of blending generates less than 20 MW of power from Biomass component such plants shall be allowed to blend in higher percentage, subject to the upper cap that Biomass power component shall not exceed 20 MW.

4 Incentives

4.1 All Biomass including Briquette/Pellet Manufacturing Projects and Waste to Energy based projects shall be eligible to avail incentives as per the prevailing Rajasthan Investment Promotion Scheme (RIPS).

4.2 The Power Producer shall be allowed to use water from sources of Water Resource Department subject to the availability of water for power generation.

4.3 Projects registered under this policy shall be also eligible to avail Central Financial Assistance (CFA) as per the schemes of the Ministry of New and Renewable Energy (MNRE) on successful commissioning of projects.

4.4 No fee will be charged by the Pollution Control Board for issuing Consent to Establish (CTE) and Consent to Operate (CTO) for Waste to Energy Projects anywhere in the State. However, these projects will be set up as per the prevalent pollution control norms of the Government

5 Project facilitation

RREC as a Nodal Agency will facilitate the developers for setting up of their Projects and coordinate with various agencies to obtain requisite clearance.

5.1 Land Allotment for Setting Up Biomass Based Power Plant

5.1.1 Allotment of Government Land -The Government land for setting up of Biomass based Power Plant shall be allotted to Developer/Power Producer as per Rajasthan land Revenue (Allotment of Land for setting up of Power Plant based on Renewable Energy Sources) Rules, 2007 as amended from time to time.

5.1.2 RREC will recommend on case-to-case basis, the Government land for allotment to the concerned district collector on deposition of land security

@ Rs 1 Lac/MW by DD/NEFT/RTGS in favor of RREC, Jaipur. The security deposit will be refunded to the developer within 2 months of commissioning of the project by written request of applicant. The security deposit shall be forfeited in case the allotted land is not used within the specified period as per allotment rules.

5.1.3 The private land will be procured by the Developer/Power Producer(s) directly from the private parties. The conversion of the land will be done by the competent authority.

5.2 **Land Allotment for Setting up Waste to Energy Projects:-**

Developer will select eligible site in proximity to the landfill sites or any other suitable land, in consultation with the Directorate of Local Bodies, Rajasthan, Municipal Corporation, Municipalities etc. as case may be. The Land may be allotted as per rules of concerned Department.

5.3 **To promote the development of Energy Plantation on Government/Private land:-**

(a) Govt. Land: The state government may allow the development of energy plantations on waste land, barren land, saline land, fallow land, ravine land and degraded forest land that are suitable for energy plantation through concerned department or its authorized subordinate Institute/Committee such as Gram Panchayat /JFM Committee. Any other land such as pasture land may also be made available with consent of concerned department provided it will generate fodder for cattle.

(b) Private Land: Power producers allowed to execute lease from private Khatedari land for the development of Energy Plantation

5.3.1 **Identification of Suitable Land for Energy Plantation:-**

- The eligible Biomass Power Producer/Co-firing Power Plants shall identify suitable land for development of Energy plantation for power plant.
- Maximum 50 hectares/MW of land in all categories shall be permissible for the development of Energy Plantation. Any value addition in energy plantation, such as fodder, fruit, food, medicinal plants shall be encouraged.
- Land permissible for energy plantation for co-firing with thermal power plants will be as per the blending percentage notified by Ministry of Power, Government of India, vide its prevailing policy on 'Biomass Utilization for Power generation through Co-Firing in Coal-Based Power Plants,' and also in accordance with 'Clause 3.3' of this policy, subject to a maximum permissible land area up to 1000 hectares.
- The eligible Biomass power producer/Co-Firing Power Plants shall apply online for identified land for development of Energy plantation in the prescribed format with resolution of the concerned department or its authorized subordinate Institute/Committee.

- The SLSC will recommend the land requirement of Biomass power producer/Co-firing Power Plants for development of energy plantation to concerning District Authority.
- The ownership and title of the land shall not be changed as a result of approval for use of land for development of Energy Plantation. The land shall be made available to the concerned department or its authorized subordinate Institute/Committee for development of energy plantation for a period of 20 years, which can be extended for another 10 years by District Authority.
- A agreement among power producer/Co-Firing Power Plants, concerned department or its authorized subordinate Institute/Committee shall be executed with respect to the identified land in prescribed format.

5.4 Sale/ Auction mechanism for weeds (such as Prosopis- Juliflora, Lantana, Parthenium /Energy Plants) grown on Govt. Land: -

Unutilized, uncultivated Govt. land are prone for weeds. All concerned departments are advised to device a transparent sale auction mechanism on periodic basis.

6 Registration of Power Project and Biomass Briquettes /Pellet manufacturing units

Biomass Power Plant and Waste to Energy based Power Project in the State shall be registered online with deposition of Rs. 30,000/-per MW plus GST with RREC towards processing fee, which shall be non-refundable. Biomass Power Plant up to 20 MW capacity shall be allowed under this Policy.

No registration charges shall be applicable to the Biomass Briquettes /Pellet manufacturing unit registration.

7 Approval of Power Projects:

7.1 Projects meeting the following requirement will be considered as “In principle cleared” project, subject to:

- i. Availability of Land
- ii. Approval of Power Evacuation System for evacuation of power into grid by RVPN/Discom/ISTS Network.
- iii. NOC for allocation of water by the concerned Department/Authority.

7.2 The "**In-principle cleared**" project proposals meeting the above requirements shall be put up for final approval before the State Level Screening Committee (SLSC) consisting of the members as **Annexure- 1**.

8 Project Security Deposit:

8.1 After In-principle Clearance, the Developer/Power Producers are required to submit project Security Deposit @ Rs. 1 lac/MW in cash within 1 month without interest and within 3 months with interest @9% per annum from the date of issue of In-Principle Clearance. Non deposition of the Security Deposit within stipulated period shall lead to deemed cancellation of In-principle Clearance without any notice.

- 8.2 The Project security deposit will be refunded to the Developer/Power Producer within 2 months of commissioning of the project after recovery of penalty, if any.
- 8.3 In case Developer/Power Producer fails to commission the project within scheduled commissioning period including extension as per clause 9.2, the Project Security amount shall be forfeited.
- 8.4 In case the Developer/Power Producer wants to withdraw his project within 6 months of depositing of Project Security, then 25% security deposit will be forfeited, and balance 75% amount of the security will be refunded to the developer/Power Producer on his written request.

9 Time frame for completion of different activities:

Time frame for completion of different activities, subject to force majeure conditions, would be as follows: -

- 9.1 Developer/Power Producer shall commission the Biomass based/Waste to Energy Power Project within 36 months from the date of approval of the Project.
- 9.2 Provided that extension in time schedule may be granted by the RREC after depositing penalty amount as under plus GST as applicable: -

SN	Delay Period	Penalty Amount
(a)	For delay up to 3 months	Rs. 25,000per MW
(b)	For delay up to 6 months	Rs. 50,000 per MW
(c)	For delay up to 9 months	Rs. 75,000per MW
(d)	For delay up to 15 months	Rs. 1,00,000 per MW
(e)	For delay up to 24 months	Rs. 1,25,000per MW

SLSC may consider extension beyond 24 months where there is a reasonable certainty of commissioning of the project. In such cases, extended completion schedule and penalties shall be decided by SLSC on case to case basis.

- 9.3 Power Producer shall furnish online quarterly progress/status report of Waste to Energy /Biomass based power plant from the date of approval of the Project. Non-compliance may lead to forfeiting of security money and cancellation of project approval.
- 9.4 Copy of Work Order along with cost, delivery schedule of supplies, civil works execution and erection & commissioning schedule shall be supplied by the Power Producer as proof of execution of project within 3 months of the SLSC approval. Financial closure shall be completed by Power Producer within 4 months from date of SLSC approval. Incentives allowed by RERC for early completion shall be applied as per tariff orders issued by RERC.
- 9.5 After completion of project and before commissioning, the Power Producer shall furnish the complete updated project report based on the technology used, order placed, actual cost and various approval arranged. The representative of RREC shall be present while commissioning of Power Project and commissioning report shall be issued by RREC. The incentive tariff, as allowed by RERC order to the Waste to Energy /Biomass based

power plant for early commissioning shall be applicable after examining the date of financial closure and commissioning date by RREC.

- 9.6 Obligations of the Power Producer under this Policy shall be excused for the period of force majeure. Post-registration, the time frame for completion of different activities is subject to force majeure conditions

10 Grid Interfacing:

The grid interfacing arrangements for power Plants using Waste to Energy /Biomass based power plants Renewable Energy Sources will be made by Power Producer/RVPN/ Discom as under:

10.1 Generating Plant Sub Station

Generating Plant Sub Station shall be developed and maintained by the Developer/Power Producer as per the Grid Code applicable from time to time and the entire cost for this will be borne by them.

10.2 Receiving Station:

Developer/Power Producer will terminate their 33kV (minimum voltage level) power evacuation feeder to nearby RVPN's 132/33kV or 220/132/33kV GSS or any other RVPN's GSS in consultation with RREC.

10.3 Grid Connectivity:

For creation of proper facility for receiving power, the Developer/Power Producer shall pay Grid Connectivity charges as finalized by RERC from time to time to RVPN/Discom as the case may be. These charges will be paid by the Developer/Power Producer to RVPN/Discom as the case may be within 3months of signing of Power Purchase Agreement. These charges include cost of complete line bay (including civil works) and its interconnection with existing electrical system at RVPN GSS. Line Bay includes breakers, CTs, CVT/PTs, isolators, protection and metering equipment's, bus bar material and other allied materials.

10.4 Transmission from Generating Plant Sub Station to Receiving Station:

The evacuation system beyond Generating Plant Sub Station till the nearest RVPN's 220/132/33kV or 132/33kVgrid sub-station shall be developed by Developer/Power Producer as per RERC regulation as amended time to time.

11 Power Purchase Agreement:

- 11.1 The sale of electricity by Developer/Power Producer to Discoms will be governed by the Power Purchase Agreement executed between the concerning Discom and the Power Producer. The price for sale of power generated from the Biomass Power Project/Waste to Energy based project to the Discoms and other charges/conditions shall be as specified by the RERC from time to time
- 11.2 In case of third party sale or for captive use within the State, the Developer/Power Producer shall execute a Wheeling Agreement with Discom. However, the Transmission Agreement with RVPN will be executed separately if the Developer/Power Producer intends to use the system of RVPN for wheeling power.

11.3 The price of power to be sold by the Developer/Power Producer to consumers/ licensees other than Discoms will be determined by the mutual understanding/agreement between the seller and the purchaser.

11.4 Assignment of PPA

PPA/WBA will be allowed to be assigned in parts or full to other parties under following conditions:

- i. After completion of the project and its connectivity to the grid.
- ii. Consent of RREC & RVPN/Discom(s) and related parties

12 Settlement of Accounts:

The account of all transactions between the Power Producer and the Discoms/ RVPN regarding price of power and wheeling charges shall be settled on monthly basis.

13 Regulations

The Provisions of this Policy shall be guiding principle for Rajasthan Electricity Regulatory Commission.

14 Savings

The Power Plants already approved and/or commissioned before commencement of this Policy will continue to be governed by the policy/regulations prevailing at the relevant time

15 Power to Remove Difficulties

If any doubt, dispute, difference or issue arises in regard to interpretation/implementation of this Policy, State Level Screening Committee may take decision in such matters, not inconsistent with the provisions of the Policy, as may appear to be necessary and expedient for removing the difficulties either on its own motion or on a written representation from the stakeholders. Energy department shall issue necessary guideline for implementation of this policy.

By the Order of Governor,

(R. K. Sharma)

Deputy Secretary to the Government

Copy to the following for information and necessary action:-

1. Secretary, Ministry of Power, Government of India, Shram Shakti Bhawan, Rafi Marg, New Delhi.
2. Secretary, Ministry of New & Renewable Energy, Government of India, CGO Complex, Lodhi Road, New Delhi.
3. Chairman and Managing Director, Rajasthan Urja Vikas Nigam Ltd., Jaipur
4. Chairman, Discoms of Rajasthan, Vidyut Bhawan, Jaipur.
5. Chairman & Managing Director, Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Jaipur.
6. Chairman, Rajasthan Renewable Energy Corporation Ltd., Jaipur.
7. Managing Director, Rajasthan Renewable Energy Corporation Ltd., Jaipur.
8. Managing Director, Jaipur/Ajmer/Jodhpur Vidyut Vitaran Nigam Limited., Jaipur/Ajmer/Jodhpur.

9. Director, Printing & Stationary, Government of Rajasthan with the request to get it published in extra ordinary gazette of Rajasthan.
10. Guard File.

Deputy Secretary to the Government

16. Definitions: -

(A) Following expressions used in the Policy would have meanings assigned to them as defined hereunder: -

1. "Act" means Electricity Act 2003 (36 of 2003), including amendments there to.
2. "Biomass" means forestry based & agro-based industrial residues, energy plantations, forestry and agro- residues.
3. Biomass Co-Firing - stands for adding biomass as a partial substitute fuel in high-efficiency coal/lignite based boilers
4. " Biomass Power Plant" means the power plant which generates electricity from biomass sources.
5. "Biomass Power Producer"/"Co-Firing Power Producers"/"Power Producers"/"Waste to Energy Power Producers" means an entity which owns facilities to generate electric power for sale to Discoms/Licensees and to third party/captive use.
6. "Briquettes" - Biomass briquettes are a biofuel substitute made of biodegradable green waste with lower emissions of greenhouses gases and carbon dioxide than traditional fuel sources
7. "CEA" means Central Electricity Authority.
8. "CERC" means the Central Electricity Regulatory Commission
9. "Commission"/"RERC" means the Rajasthan Electricity Regulatory Commission.
10. "COD" means Commercial Operation Date.
11. "Ceiling Act, 1973" means The Rajasthan Imposition of Ceiling on Agricultural Holdings Ordinance, 1973.
12. "Collector" means Collector of a district as defined in the Rajasthan Land Revenue Act and includes every officer authorized to discharge the duties of Collector under the Act / Rules / executive orders of the Government of Rajasthan.
13. "Discom" means a distribution licensee, such as Discom Jaipur, Discom Jodhpur and Discom Ajmer.
14. "District Level Committee" or "DLC" means the committee constituted by the State Government for a District from time to time under clause (b) of sub-rule (1) of rule 2 of the Rajasthan Stamps Rules, 2004.
15. "DLEC" means District Level Empowered Committee constituted under the provisions of this Policy.
16. "Energy Plantation" means the cultivation of specific plant species, often fast-growing and high-yield, with the primary purpose of harvesting them for the production of energy excluding invasive species such as Lantana, Parthenium, Prosopis-Juliflora etc.
17. "Financial year" means a period commencing on 1st April of a calendar year and ending on 31st March of the subsequent calendar year.
18. "Form" means a form appended to this Policy.
19. "Force Majeure" means any event or circumstance which is beyond the reasonable direct or indirect control and without the fault or negligence of the power developer and which results in Power developer's inability, notwithstanding its reasonable best efforts, to perform its obligations in whole or in part and may include rebellion, mutiny, civil unrest, riot, strike, fire, explosion, flood, cyclone, lightning, earthquake, act of foreign enemy, war or other forces, theft, burglary, ionizing radiation or contamination, Government action, inaction or restrictions, accidents or an act of God or other similar causes".
20. "Gram Panchayat" means Panchayat established under the Rajasthan Panchayat Raj Act, 1994 (Rajasthan Act No. 13 of 1994).
21. "Interconnection Point" means a point at EHV substation of transmission licensee or HV sub-station of distribution licensee, as the case may be, where the electricity produced from the generating station is injected into the Rajasthan Grid

or the point of interconnection between the transmission network and distribution network i.e. the point after the service line isolator and circuit breakers with required protection before connectivity to the bus bar of the receiving station of RVPN/Discom (line end of Isolator).

22. "IREDA" means Indian Renewable Energy Development Agency.
23. "JFM Committee" means Joint Forest Management committee.
24. "Licensee" means a person deemed to be a licensee under Section 14 of the Act.
25. "MNRE" means Ministry of New and Renewable Energy Sources, a Central Government Ministry responsible to develop and deploy new and renewable energy for supplementary energy requirement of the country.
26. "MSW" Municipal Solid Waste
27. "Nodal agency" means Rajasthan Renewable Energy Corporation Limited (RREC) or any other agency designated by Government of Rajasthan for promotion of electricity generation from renewable energy sources.
28. Pellets - Pellet fuels (or pellets) are a type of solid fuel made from compressed organic material.
29. "Person" means an individual or a firm/company registered under the Companies Act, 1956.
30. "Policy-1999" means Policy for Promoting Generation of Power through Non-Conventional Energy Sources issued on 11th March, 1999.
31. Policy-2004 means Policy for Promoting Generation of Electricity through Non-Conventional Energy Sources issued on 25.10.2004.
32. "Generating Plant Sub Station" means sub-station developed by the Power Producer for interface with the receiving station.
33. "Power" means electricity produced using the Biomass energy sources.
34. "PPA" means Power Purchase Agreement.
35. "Receiving Station" means EHV/HV Sub-Station developed by RVPNL/Discom for evacuation of power generated from Biomass energy sources.
36. "Renewable Energy Sources" means and includes non-conventional renewable generating sources such as mini hydel, wind, solar including its integration with combined cycle, biomass, bio fuel cogeneration, urban/municipal waste and other such sources as approved by the Ministry of Non-conventional Energy Sources, Government of India, excluding the nuclear power stations and hydel power stations of capacity above 25 MW.
37. "RDF" means Refuse Derived Fuel. This fuel is produced from combustible components of Municipal Solid Waste (MSW). This waste, usually taken from industrial or commercial sites, is shred, dried, baled and then finally burned to produce electricity.
38. "RREC" means Rajasthan Renewable Energy Corporation Ltd.
39. "RVPN" means the Rajasthan Rajya Vidyut Prasaran Nigam Limited.
40. "State" and "Government" means, respectively, the State of Rajasthan and the Government of Rajasthan.
41. "State Load Dispatch Centre" or "SLDC" means the centre established by the State Government for purposes of exercising the powers and discharging the functions under Section 31 of the Act;
42. SLSC -means State Level Screening Committee
43. "Tariff" means the schedule of charges for generation, transmission, wheeling and supply of electricity together with terms and conditions for application thereof.

(B) The terms not defined above will have their usual meaning.

Members of the State Level Screening Committee

Below is list of members of SLSC Committee

1. ACS/Pr. Secy./Secretary, Energy- Chairman
2. ACS/Pr. Secy./Secretary, Forest & Environment, or their representative- Member
3. ACS/Pr. Secy./Secretary, Water Resources, Member or their representative- Member
4. ACS/Pr. Secy./Secretary, Secretary, Revenue, or their representative - Member
5. ACS/Pr. Secy./Secretary, Secretary, ULB/UDA, or their representative - Member (**Applicable only for waste to Energy projects**)
6. Chairman Discoms.
7. Chairman, RREC -Member
8. MD, RREC-Member Secretary