

## POLICY FOR PROMOTING GENERATION OF ELECTRICITY THROUGH NON-CONVENTIONAL ENERGY SOURCES

(Issued vide Energy Deptt. Letter No. F 20(4) Energy/2004 dated 25.10.2004)

### 1. Objectives:

- 1.1 Whereas with a view to promote generation of power from non-conventional energy sources, Government of Rajasthan promulgated a policy on 11.3.1999. This policy known as "Policy for Promoting Generation of Power through Non-Conventional Energy Sources" ended on 31<sup>st</sup> March, 2004. A separate policy was however, issued on 4<sup>th</sup> February 2000 exclusively for promoting generation of electricity from wind. This policy known as "Policy for Promotion of Electricity Generation from Wind" too ended on 31<sup>st</sup> March 2004. During the currency of Wind Policy 2000 a new policy was promulgated in April 2003 for period upto 31<sup>st</sup> March 2009.
- 1.2 And whereas, the new Central Electricity Act 2003 has come into effect from 10.06.2003
- 1.3 And whereas, clause 4 of Policy 2003 provides for supersession of the same.
- 1.4. And whereas, among the non-conventional sources of energy, Solar, Wind, Minin-Small hydel and Bio-mass have good potential for generation of electricity in Rajasthan and after having gathered the experiences, from the earlier policies and identifying the impediments in the process of generation of electricity from non-conventional sources, State Government has decided to issue a comprehensive policy for generation of electricity from various sources of non-conventional energy which offers solution to various problems faced by developers, investors and utilities, this policy is being promulgated.

### 2. Title and enforcement:

- 2.1 This policy will be known as Policy for Promoting Generation of Electricity through Non-conventional Energy Sources 2004.
- 2.2 The policy will come into operation with effect from 25.10.2004 and will remain in force until superseded or modified by another policy.

### 3. Definitions:-

- 3.1 Following expressions used in the policy would have meanings assigned to them as defined hereunder:-

- (i) Act means Electricity Act 2003 (Central Act No.36 of 2003)
- (ii) “Biomass” means forestry based & agro-based industrial residues, energy plantations, forestry and agro-residues.
- (iii) “COD” means Commercial Operation Date.
- (iv) .. means Collector of a district as defined in the Rajasthan Land Revenue Act and includes every officer authorised to discharge the duties of Collector under the Act/Rules/executive orders of the Government of Rajasthan.
- (v) “Developer” means a person which develops Wind Farms and transfers it to investors.
- (vi) ‘:DLC” means “District Level Committee’ to fix the price of land for purposes of registration.
- (vii) Discon: means a distribution licensee, such as Discon Jaipur, Discom Jodhpur and Discom Ajmer.
- (viii) Financial year means year starting on 1<sup>st</sup> April of Calendar year and ending on 31<sup>st</sup> March of next calendar year.
- (ix) Investor: - A person investing for generation of electricity from non-conventional sources of energy.
- (x) “IREDA” means Indian Renewable Energy Development Agency.
- (xi) Licensee means a person who has been granted license under Section 14 of the Act.
- (xii) “Manufacturer” means manufacturer of Non-conventional Energy Sources in India.
- (xiii) “MNES” means Ministry of Non-conventional Energy Sources a Central Government Ministry promoting the use of Non-conventional Energy Sources in India.
- (xiv) Person: Person means an individual or a firm/company registered under the Companies Act, 1956.
- (xv) “Power Producers” means investors/developers generating grid-grade electricity from Non-conventional Energy Sources.
- (xvi) “Pooling Station” means sub-station developed by the developer for interface with the receiving station.
- (xvii) “Power” means electricity produced using the non-conventional sources of energy.

- (xviii) "Policy-1999" means Policy for Promoting Generation of Power through Non-conventional Energy Sources issued on 11<sup>th</sup> March 1999.
- (xix) "Policy-2000" means Policy for Promoting Generation of Power from Wind issued on 4<sup>th</sup> February 2000.
- (xx) "Policy-2003" means policy for Promotion of Electricity Generation from Wind issued on 30<sup>th</sup> April, 2003.
- (xxi) "PLF" means Plant Load Factor
- (xxii) "PPA" means Power Purchase Agreement.
- (xxiii) "Receiving Station" EHV Sub-Station developed by RVPNL/Discom for evacuation of power generated from Non-conventional Energy Sources.
- (xxiv) "RERC" means 'Rajasthan Electricity Regulatory Commission.'
- (xxv) "RREC" means Rajasthan Renewable Energy Corporation.
- (xxvi) "RIICO" means Rajasthan Industrial & Investment Corporation.
- (xxvii) "RVPN" means the Rajasthan Vidyut Prasaran Nigam.
- (xxviii) Solar Plant means a power plant or system utilizing solar thermal energy through solar photo-voltaic or concentrated solar thermal devices including its integration into conventional fossil fuel for generation of electricity.
- (xxix) "State" and "Government" means respectively, the State of Rajasthan and the Government of Rajasthan.
- (xxx) "WBA" means Wheeling and Banking Agreement.

3.2 Ther terms not defined above will have their usual meaning.

4. Use of power for captive purposes/sale:

4.1 The power producers may use the power for captive consumption or for sale to consumers/licensees including Discoms.

4.2 The Discoms will inter into PPA upto 400 MW including the PPAs already signed under Policy 1999, Policy 2000 and Policy 2003.

5. Grid Interfacing:

- 5.1 Except in case of solar power not exceeding 220 kW the grid interfacing arrangements for power using non-conventional sources of energy will be made by Developer/RVPN/Discom as under;-

5.1.1 Pooling Station:

Interfacing arrangements such as transformers, panels, kiosks, protection, metering, HT lines from the points of generation to the pooling station including the pooling station shall be developed and maintained by the Power Producer as per the specifications and requirements of the RVPN/Discom, and the entire cost for this will be borne by the power producer.

5.1.2 Receiving Station

RVPN/Discom shall finalize the location of receiving station in consultation with RREC on which the electricity generated will be received at minimum 33 kV level. For creation of proper facility for receiving power the developer shall pay Rs.2 lacs per MW to RVPN/Discom as the case may be.

5.1.3 Transmission from Pooling Station to Receiving Station:

The transmission system from pooling station to receiving station shall be developed by the power producer at his own cost. This will, however, be deemed to have been transferred to RVPN/ Discom for O&M as soon as interconnection between pooling station and receiving station is established.

5.1.4 Transmission and Distribution Network Augmentation

For augmentation of transmission / distribution systems to evacuate the power from receiving station, RVPN / Discom shall develop/augment the necessary transmission/distribution network within mutually agreed timeframe. For this the developer shall pay Rs.15 lac/MW to RVPN/Discom as the case may be.

- 5.2 RVPN/ DISCOM shall grant the inter-connection facility, wherever adequate power evacuation capacity is available, within one month of intimation or COD, whichever is later.

- 5.3 The power producer shall install metering device at the receiving station at his own cost. Such metering device must conform to standards of metering code.

- 5.4 The power producer shall install necessary current limiting devices such as Thyristors in the generating equipment, Capacitors of sufficient rating shall also be provided in the Wind Farm to ensure that the average power factor is maintained as per requirements of

State Load Despatch Centre, measured at metering point of the Wind Farm.

- 5.5 The power Producer shall comply with Grid code including Load Despatch and System Operation Code, Metering Code, Protection Code, Safety Code etc., as applicable from time to time in the State of Rajasthan.

6. Wheeling and Banking:

- 6.1 Except in case of power sold to Discoms, the power producer shall pay wheeling charges @ 10% of the energy billed into the grid irrespective of the distance from the generating station and such charges will be inclusive of the T&D losses.
- 6.2 The power producer may have the facility of power banking with the Discom. The Discoms at the end of 31<sup>st</sup> December of every calendar year, will pay to the power producer for the energy billed into the grid but has remained unutilised (after self use or sale to consumers/licensees other than Discoms) by the power producer during the said calendar year at the pooled rate for procurement of power by the Discom in the preceding financial year.

Provided that, if at the end of the calendar year it is found that the power producer has drawn more electricity than that billed by him into the system, he shall be liable to pay the cost of the same at the HT tariff prevailing at the end of the preceding financial year.

- 6.3 The power producer shall execute an agreement (Wheeling and Banking Agreement) with the Discom for such banking. However, the wheeling agreement with RVPN will be executed separately if the power producer intends to use the system of RVPN for wheeling power.

7. Price of Power: -

- 7.1 The price of power to be sold by the eligible producer to consumers/licensees other than Discoms will be determined by the mutual understanding/agreement between the seller and the purchaser.
- 7.2 For the discoms price of such power will be as per the schedule appended.

8. Power Purchase Agreement:-

- 8.1 The sale of electricity by power producer to Discoms will be governed by the Power Purchase Agreement executed between the concerned Discom and power producer and witnessed by RREC.

- 8.2 The Power Purchase Agreement for wind power will be for 20 years and the power other than wind power will be for 10 years.

Provided that at the end of the period of Power Purchase Agreement the new PPA can be executed at mutually agreed rates.

9. 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 except in case of price of power under banking arrangements which will be settled within one month of the closing of every calendar year.

10. Merit order Dispatch:

The power plants commissioned under the policy would not be subject to Merit order dispatch regulations.

11. Incentive by the State Government:

11.1 Exemption from Electricity Duty – Consumption of electricity generated by Eligible producers for its captive use or for sale to a nominated third party will be exempted from Electricity Duty @ 50% for a period of 7 years from COD.

11.2 Grand of Incentives available to industries – Generation of electricity from Non-conventional Energy Sources shall be treated as eligible industry under the schemes administered by industries Department and incentives available to industrial units under such schemes shall also be available to the power producers.

11.3 Single Window Clearance – A state Level Empowered Committee consisting of following will provide single window clearance on proposals received for developing the power plants based on Non-Conventional Energy Sources:

1. Addl. Chief Secretary, Forest & Environment	Chairman.
2. Principal Secretary, Revenue,	Member
3. Principal Secretary, Energy,	Member
4. CMD, Rajasthan Vidyut Prasaran Nigam	Member
5. MD, Rajasthan Renewable Energy Corporation Limited	Member Secretary

The Collector/Collectors in whose jurisdiction the land is proposed for allotment shall be special invitee.

11.4 Allotment of land on concessional rates: The Government land required for power projects based on non-conventional sources of energy shall

be allotted to developer at concessional rates viz. 10% of DLC rates as per procedure prescribed below.

Provided that –

- (a) The site for wind power project will be chosen by the developer after ascertaining the wind parameters.
- (b) The land other than the Government land will be procured by the power producer / developer at his own cost.

12. RREC to be Nodal Agency:-

RREC will be Nodal Agency for power projects based on non-conventional sources of energy it will also play the role of facilitator for:-

- (i) Execution of PPA/WBA with RVPN/Discoms
- (ii) Loans from IREDA / PFC/REC/Financial Institutions / Commercial Banks

13. Registration for Power Project:-

13.1 The Developer shall register the application with RREC in prescribed proforma appended with the policy along with the required project report, documents, attachments and the interfacing scheme etc.,

13.2 Along with his application the Developer shall deposit an amount of Rs.50,000/- per MW with RREC towards processing fee which shall be non-refundable.

13.3 The Developer shall select the site for establishing the power project and shall also submit the application to RREC for allotment of Government land if any.

13.4 Every application would be given a registration number by RREC. The list of registered applications shall be displayed on the notice board of RREC.

14 Approval of Power Projects:

14.1 RREC shall forward land allotment application for the identified govt. land to the concerned District Collector within a period of 7 days from the receipt of the application.

Provided that the land application in case of wind farm can be forwarded only if the same for which wind parameters are certified by C-Wet.

- 14.2 RREC shall forward the grid interfacing plan submitted by the applicant to RVPN/Discom for technical acceptance.
- 14.3 RREC shall issue in principal clearance for the project on verification of following:-
- 14.3.1 The Plan/layout of the project is strictly in accordance with Standard guidelines of MNES/C-WET.
- 14.3.2 The suggested grid interfacing arrangement as submitted by the applicant is accepted and approved by RVPN/Diccom.
- 14.4 The project proposal “in principle cleared” by RREC and meeting the Above requirements shall be put up before the State Level Empowered Committee.
- 14.5 The decision for single window clearance (approval of project) will be Taken by the SLEC within one month.
- 14.6 The developer would initiate activities on the identified / allotted land Only after approval is granted by the State Level Empowered Committee.

**15 Security Deposit and Its Forfeiture:-**

15.1 The Developer shall deposit with RREC a refundable amount of RS.5.00 lacs (Rs.five lacs) per MW as security deposit towards completion of the project within the prescribed time frame as under:

1. Wind Power Projects - 6 to 8 Months
2. Biomass Power Projects - 28 to 30 Months

2. Provided that RREC may extend the time schedule and provide new schedule if:-

- a) The developer makes an application giving convincing reasons for delay in the completion of the project atleast 15 days before the expiry of the prescribed period and the application is accompanied with the amount prescribed below

	Amount payable for extension
One-month extension after the date of scheduled commissioning	Rs.50000/MW
Two – month extension after the date of scheduled commissioning	Rs.100000/MW
Three – month extension after the date of scheduled commissioning	Rs.200000/MW
More than Three month extension after the date of scheduled commissioning	Rs.500000/MW

b) The reasons given by the developer in the application are found convincing.

15.2 The security deposit shall stand forfeited by RRCE in the event of failure of the developer to adhere to the prescribed time schedule.

15.3 The allotment of land shall also stand cancelled if the wind power project is not completed within the time frame specified in Clause 15.1 of the policy and the developer shall not be considered for allotment of land thereafter.

**16. Special Concessions /conditions for Biomass Projects.**

**16.1 Reservation of Area for biomass collection:**

If the State Government is satisfied with the progress achieved in the setting up of a Biomass based power plant of aggregate capacity of 7.5 MW at a duly approved site no other biomass power plant shall be allowed within a radial distance of (i) 20KM in the district of Kola, Bundi, Baran, Srinanganagar, Hanumangarh and command areas of India Gandhi Canal Project in Bikaner and jaisalmer districts of Rajasthan (ii) 30KM remaining part of Rajasthan, of the site of the first Power plant However, projects cleared under policy dated 11.3.99 and complying with conditions laid down vide amendment dated 28.2.03 shall continue to enjoy 50 Km reservation facility. The demonstration projects under MNES Gasifier programme upto 1 MW capacity i.e. Gaifier coupled with 100% producer gas engine shall have no reservation area.

Further, if Eligible Producer desires to install lower/higher capacity plant or wants to enhance the capacity of the power plant above 7.5MW the reservation area could be reduced/ extended by RREC to meet proportionate biomass requirement for the plant.

**16.2 Use of Conventional Fuel:**

To ensure generation of power in the event of reduced biomass availability in the district in a drought year, a power Developer could be permitted to use conventional fuel upto 30% computed on the basis of declared heat rate linked to PLF.

Explanation : "Drought is defined as 50% of the villages in the relevant area being declared as drought affected by the Revenue Department"

**16.3 Availability of Water for Power Generation:**

The Eligible Producers shall be allowed to use water for power generation, wherever possible. The modifications(s) required, if

any, in the existing canal system shall be done by the irrigation Department at the cost of the producer. For use of ground water, specific approval from concerned authorities shall have to be taken.

17. Savings :

17.1 Power projects established under the Policy-1999, Policy- 2000 and Policy-2003 will continue to be governed as per the terms & conditions already agreed and approved under the concerned policies. However, renewal of terms & conditions, if any, will be guided by this policy or any other policy prevalent at that time.

17.2 The power projects for which PPAs have been signed before the Promulgation of this policy will also be treated under the terms & conditions of the policy under which approval was accorded to the same provided the power projects get commissioned before 31<sup>st</sup> March, 2005.

Provided that for power projects based on bio-mass the period of commission will be upto 31<sup>st</sup> March, 2006.

17.3 The wind power project proposals for which RREC has accorded approval, land has been allotted, settings have been approved by RREC before promulgation of this policy and substantial investment (50% of the proposed capital investment) has already been made by power producer will be governed by the Policy-2003.

(Clarification – The limit of 250 MW on PPAs to be signed by Discoms under Policy-2003 shall be observed by the Committee while considering such cases)

Provided that a committee constituted hereunder will determine whether the substantive investment has been made:-

- |      |                                 |              |
|------|---------------------------------|--------------|
| i)   | Principal Secretary, Energy     | -Chairman    |
| ii)  | Secretary, Finance, Expenditure | -Member      |
| iii) | Managing Director, RREC         | -Member Secy |

Provided further that the committee mentioned above, shall consider only those cases where the developer/investor has submitted application within 10 days of the notification of this policy.

**Tariff Schedule for Non-conventional Energy Sources (Clause no:7.2)**

S.No	Finacial Year of COD	Wind Rs. Per KWh	Other than wind including Biomass Rs. Per KWh
1	2004-05	2.91	3.32
2	2005-06	2.96	3.39
3	2006-07	3.01	3.45
4	2007-08	3.06	3.52
5	2008-09	3.11	3.59
6	2009-10	3.16	3.65
7	2010-11	3.21	3.72
8	2011-12	3.26	3.78
9	2012-13	3.31	3.85
10	2013-14	3.36	3.92
11	2014-15	3.36	3.92
12	2015-16	3.36	3.92
13	2016-17	3.36	3.92
14	2017-18	3.36	3.92
15	2018-19	3.36	3.92
16	2019-20	3.36	3.92
17	2021-21	3.36	3.92
18	2021-22	3.36	3.92
19	2022-23	3.36	3.92
20	2023-24	3.36	3.92