Government of Rajasthan
Energy Department

No. F.20(13) Energy/2023 Dated: 6.10.2023

NOTIFICATION

Rajasthan Renewable Energy Policy, 2023

In order to promote renewable energy and its integration with grid, the State Government hereby notifies the Rajasthan Renewable Energy Policy, 2023 as under:

1. Preamble

1.1. Growing concerns of global warming and climate change requires emphasis on clean and green energy. The Renewable Energy sources lay foundation for planners in developing the policy framework to ensure energy security and equity along with achieving the goals of reducing carbon emission and pollution mitigation.

1.2. Utility scale power producers, small power generators, state utilities such as generation, transmission and distribution companies, regulatory and power management agencies, Government and consumers are major stakeholders in the Renewable Energy (RE) sector. This policy is envisaged for the facilitation of the stakeholders for promoting Renewable energy sector while safeguarding the interests of the end consumer.

1.3. Over the past several decades, the demand for power has grown and the State has added conventional power capacity on large scale. The State has achieved self-reliance in availability of power. Furthermore, Renewable energy has become commercially viable; therefore, State Utilities and other stakeholders have increased interest and focus on renewable energy.

1.4. Renewable energy like solar energy can be deployed in a decentralised manner which brings benefit of reduced transmission & distribution losses and savings in cost of establishing additional transmission infrastructure because of generation of power at load centres. Decentralized generation through solar rooftop systems, off-grid applications and small solar power plants at consumers end is efficient way of utilization of solar energy.

1.5. On a life cycle basis, Electric Vehicles are environmentally cleaner than fossil fuel-based vehicles. It is right time to push for a rapid transition of transport sector based primarily on Electric Vehicles, requiring further policy interventions to align Electric Vehicles charging by Renewable Energy based systems.

1.6. The State has vast and largely untapped potential in terms of intense solar radiation, one of the highest numbers of sunny days in a year and availability of vast barren/un-cultivable unutilized government/private land. This has the potential to make Rajasthan a highly preferred destination for solar energy at the Global level.

1.7. Moreover, National Institute of Wind Energy (NIWE), Government of India, has assessed wind power potential of 284GWat 150 Mtr height and National Institute of Solar Energy assessed the Solar Potential of 142 GW for Rajasthan State.

1.8. To meet the global commitment, Government of India, has fixed a national target of 500 GW Renewable Energy capacity, this will reduce the dependence on conventional sources of energy by promoting non-conventional energy sources.

1.9. Notably, Solar and Wind resources are complementary to each other and hybridization of these two technologies would help in minimizing the variability and would lead to optimum utilization of infrastructure including land and transmission system. Superimposition of wind and solar resources map exhibits high to moderate Wind and Solar energy potential areas in the State.

1.10 In light of this, it is desirable to have suitable policy interventions for developing new hybrid projects and also for encouraging hybridization of existing wind and solar power plants.

1.11 Appropriate capacity storage systems are also required to match the demand curve with generation profile of wind-solar hybrid power projects.

1.12 To keep pace with the changing needs of the Renewable Energy Sector, State Government has decided to review the existing Rajasthan Solar, Wind & Hybrid Policies, 2019.

2. Vision and objectives:

2.1 To develop RE sector in the State with "Stakeholder-Driven" policy.

2.2 To be a major contributing State for achieving the national target of 500 GW capacity of Renewable energy as a part of global commitment.

2.3 To achieve "optimal energy mix "of conventional and renewable power ensuring energy security of the State, efficient grid management and protecting interests of all stakeholders.

2.4 To encourage new technologies, methods and way outs involving combined generation of wind & solar power and other emerging technologies like storage systems including pump storage plants, battery storage systems etc. To facilitate development of infrastructure in generation, transmission, distribution and manufacturing sector of renewable energy.

2.5 Human Resource Development with particular reference to renewable energy and generation of employment opportunities.

2.6 To facilitate and support Research &Development activities in the field of RE. Nurturing better products, processes, and systems to promote growth of Renewable Energy

2.7 To deploy ancillary services for making the grid flexible for RE Power integration by various modes like Demand Side Management, Time of Day Tariff, Scheduling & Forecasting, Storage Systems, Reactive Power Management, Grid Reserve/Balancing Capacity etc.

2.8 Productive use of abundant wasteland, thereby utilizing the un-utilized/under-utilized land for creation of Wind energy hub. Promoting "Repowering" of Wind Power Projects and conducting Wind Resource Assessment Programme.

2.9 Attract investors to set-up RE equipment manufacturing facilities by promoting manufacturing ecosystem.

2.10 Hybridization of Wind & Solar technologies to meet the challenges of grid security and stability along with optimum utilization of land resources and transmission systems and also Hybridization of existing conventional thermal power plants with Renewable Energy for reducing fuel consumption and carbon emission. To promote setting up of the RE Power Projects for sale of power to Distribution Companies of Rajasthan/Rajasthan Urja Vikas Nigam Ltd. to meet their RPO and beyond RPO as per their requirement and commercial viability and also for captive use and 3rd party sale.

3. Title and Enforcement:

3.1 This Policy will be known as Rajasthan Renewable Energy Policy, 2023.

3.2 The Policy will come into operation with effect from the date of notification and will remain in force until superseded by another Policy.

3.3 State Government may amend/ modify/review this Policy as and when required.

4. Target: -

4.1. The Policy aims to achieve a target of 90,000MW Renewable Power Projects up to 2029-30 in the State as under: -

S.No.	Particulars	Capacity
1	Solar	65,000 MW
2	Wind & Hybrid	15000 MW
3	Hydro, Pump Storage Plant(PSP), Battery Energy Storage System	10,000 MW

4.2. The State DISCOMs will purchase Renewable energy as per the Renewable Purchase Obligation (RPO) as determined by RERC.

4.3. State will endeavour to develop Renewable Power Projects for sale of power to parties other than DISCOMs of Rajasthan and for captive consumption, within and outside the State.

4.4. This policy also aims to promote Renewable Energy as under:

i. Promotion of small Decentralized Grid Connected Solar Power Projects at load centres.
ii. Promotion of Rooftop Solar Projects through Net Metering and Gross Metering mechanism or in any other manner as per the provisions of Electricity Act, 2003 and relevant Regulations/Orders issued by RERC/CERC.
iii. Promotion of Off-Grid Solar applications like Solar Water Pumps, home lighting systems, water heater etc.
iv. Promotion of Renewable Energy Projects for sale of power to Discoms and Captive use/3rd Party Sale within and outside State.
v. Promotion of Renewable Energy Projects with Storage Systems, Hydro Project, Pump Storage Plants and Battery Energy Storage Systems.
vi. Promotion of Electric Vehicles (EV) Charging Stations by Renewable Energy.
vii. Development of Solar Parks/UMREPPs.
viii. Strengthening of Transmission and Distribution Network for Renewable Energy.
ix. Promotion of manufacturing industries of solar/Wind energy equipment and storage systems.
x. Promotion of floating/ canal top/reservoir top solar power projects.

5. RREC to act as Nodal Agency for:

i. Registration of projects.
ii. Approval of projects;
iii. Development of Solar Parks/UMREPPS;
iv. Selection of projects by process of competitive bidding on request of RUVNL/DISCOMs;
v. Facilitating allotment of Government land;
vi. Facilitating approval of power evacuation plan and allocation of bays and other related facilities;
vii. Facilitating execution of PPA/WBA with DISCOMs of Rajasthan/RVPN/NVVN/SECI/RUVNL (as may be applicable);
viii. Arranging any other statutory clearances/approvals;
ix. Facilitating water allocation for Hydro, Pump Storage Plants and Solar Thermal Power Plant and RE plants/Parks for auxiliary consumption and cleaning of

Solar PV Plants;

x. Coordination with MNRE/DISCOMs of Rajasthan/RVPN/Various agencies under control of MNRE/Central Agency/Other Relevant Agency;

xi. Accreditation and recommendation of the Power Projects for registration with Central Agency under REC Mechanism.

PROJECT BASED PROVISIONS AND INCENTIVES

A. Solar Energy

6. Rooftop PV Solar Power Systems

6.1. **Rooftop PV Solar Power Systems with Net Metering:**

The State government will facilitate installation of Rooftop PV Solar Power Systems in the State. It will endeavour to develop all district headquarters and other important areas as 'Green Energy Cities' by installation of Solar Rooftop Systems in the following manner:

i) The State will promote setting up of grid connected Rooftop PV Solar Power Plants under Net metering arrangement. The DISCOMs will allow Solar Rooftop capacity addition up to 50%of the capacity of the distribution transformer of the area.

ii) Rooftop Solar Power Plants can be setup on Government Building on RESCO Mode.

iii) The DISCOMs will develop a suitable and comprehensive consumer friendly IT application for facilitating online timely approvals and monitoring of these projects.

iv) Rooftop consumers will be provided subsidies/incentives as per the guidelines of MNRE/State Government**.**

v) Start-ups will be promoted for installation of Rooftop Solar Systems.

vi) Maximum time period for execution of various activities in respect of Solar Rooftop Systems under Net Metering by DISCOMs will be as under:

S. No.	Activity	Maximum time period
1.	Issuance of NOC	7days from receipt of application
2.	Solar & Net Meter Testing	7 days from depositing of meters
3.	Execution of Net Metering Agreement	3 days from submission of draft agreement
4.	Commissioning/Connection of Rooftop system	3 days from receipt of application

6.2. **Rooftop PV Solar Power Systems with Gross Metering:**

Solar Rooftop Systems can also be set up under Gross Metering Scheme as per the guidelines prescribed by the State Government/Government of India. The entire generated power will be supplied to DISCOMs at a tariff determined by RERC. Solar Rooftop Systems up to 1 MW capacity will be allowed under this Scheme.

6.3. Appropriate provisions would be made in Urban Building Byelaws to promote and facilitate use and installation of Solar Rooftop Systems.

7. Decentralized Grid Connected Solar Power Projects:

Decentralized Grid Connected Solar Power Projects provides an opportunity to meet power requirement close to the load centres. Such generation will help the utilities to reduce their T & D losses and optimize the cost of transmission and distribution system.

7.1. The State will promote setting up of decentralized solar power projects with a minimum capacity of 0.5 MW and maximum capacity of 5 MW in the premises and vicinity of 33 kV Grid Sub-Stations for sale of power to DISCOMs. The sub-stations for which decentralized solar power projects are to be established will be selected by RUVNL/DISCOMs. The tariff for these projects will be determined on basis of tariff based competitive bidding process or as per the guidelines of State Government/ Government of India.

7.2. State aims to increase participation of farmers in solar energy sector to augment their sources of income by production and sale of solar energy to DISCOMs, in following manner:

7.1.1 Farmers, on their own or through a developer, can set up decentralized power project on their un-cultivable agriculture land as per clause8.1.

7.1.2 The State will promote solarization of existing grid connected agriculture pumps as per the provisions/guidelines issued by DISCOMs based on Regulations of RERC/Guidelines of Central/State Govt.

7.3. State Government will issue schemes/programs for promotion of decentralized solar generation in the State.

8. Off-Grid Solar Applications:

8.1. The State will promote and incentivize off-grid solar applications, including hybrid systems, as per the guidelines issued by MNRE to meet various electrical and thermal energy requirements for domestic and commercial use.

8.1 The State will promote setting up of solar power plants by persons for sale of power to consumers through its own distribution system/local solar grid.

8.2 The State will also promote setting up of stand-alone solar systems to provide electricity to households in remote Villages /Hamlets (Dhanis).

8.3 The State will promote installation of Solar PV Pumps for pressure irrigation systems.

9. Utility Grid Power Projects-

9.1 Solar Power Projects in Rajasthan for sale of power to DISCOMs of Rajasthan:

The State will promote setting up of solar power projects for sale of power to DISCOMs of Rajasthan on the tariff discovered through competitive bidding process:

i) To fulfil Renewable Purchase Obligation (RPO) target fixed by RERC.

ii) DISCOM/RUVNL may purchase solar power beyond RPO limit and can avail the benefit of REC as per CERC Regulations/ NLDC guidelines.

9.2 Solar Power Projects sanctioned under guidelines/schemes of MNRE:

The State will promote setting up of Solar Power Projects under the Guidelines/Schemes of MNRE or Solar Power Projects allocated through competitive bidding by/for other State Utilities/Entities.

9.3 Solar Power Projects for captive use:

The State will promote setting up of solar power projects for captive use as under:

9.3.1 Solar Power Projects within premises of a consumer of Rajasthan;

9.3.2 Solar Power Projects outside the premises of consumer of Rajasthan;