RAJASTHAN INTEGRATED CLEAN ENERGY POLICY, 2024

सत्यमेव जयते
Government of Rajasthan

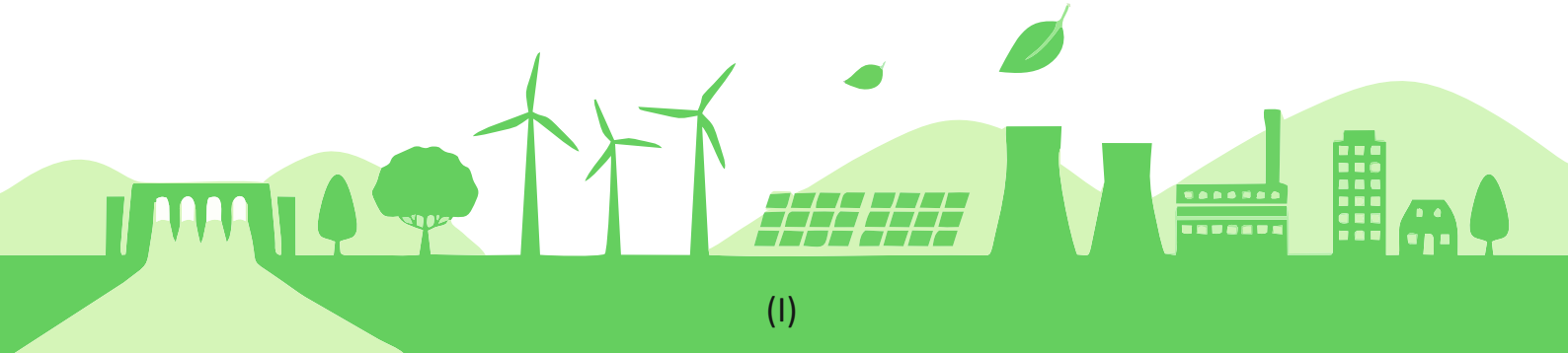


Wind Energy | Battery Energy Storage | Solar Energy | Bio Mass | Energy Efficiency | Pump Storage | Green Hydrogen | Solar Pumps | E-Chargers

सत्यमेव जयते

RAJASTHAN
INTEGRATED CLEAN ENERGY POLICY, 2024

Energy Department
Government of Rajasthan



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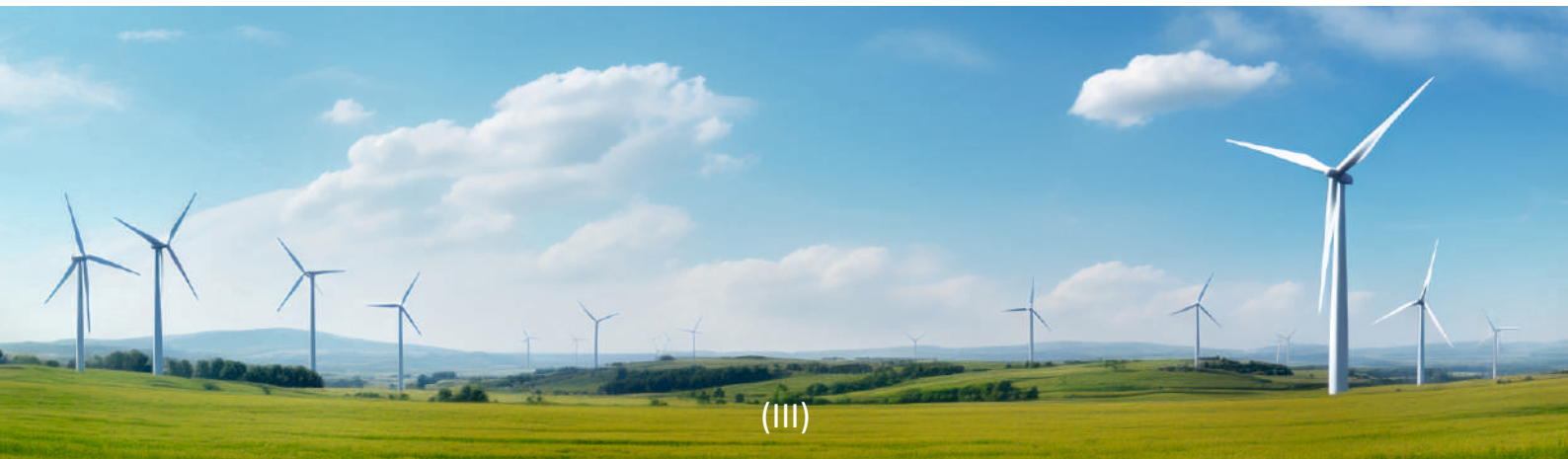
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SHRI BHAJAN LAL SHARMA

Chief Minister, Rajasthan

India's deep commitment to aspirational Climate Goals has been widely acknowledged worldwide. As India has set its sight on achieving Net Zero by 2070, we recognize the critical role of Clean Energy.

Rajasthan, with its vast renewable energy resources, also has the opportunity to produce substantial Green Energy and play a key role in achieving India's Intended Nationally Determined Contributions (INDC).

I am happy to launch the "Rajasthan Integrated Clean Energy Policy 2024", which marks a significant milestone in our journey towards a sustainable energy future.

This Policy aims to provide a comprehensive action plan for establishing a Green Energy ecosystem and catalyzing a systemic response to the opportunities and challenges of this sunrise sector.

This Policy is in line with the changing energy dynamics, contemporary requirements and includes multi-dimensional vision for the development of sector.

With the target of 125 GW of Renewable Power by 2029-30, Rajasthan has potential to play a key role in developing low-carbon and self-reliant economic pathways. Given the environmental concerns facing the world today, harnessing this potential is more of a responsibility for us towards our future generations than an opportunity.

I invite all the stakeholders to partner with Rajasthan to be the forerunner in development of Clean Energy in the country.

Bhajan Lal Sharma



SHRI HEERALAL NAGAR

Hon'ble Energy Minister

Rajasthan has been a leader in RE generation and poised to play a key role in the country's transition towards greener energy and in meeting the goal of Net Zero emissions.

In this series, I am glad to announce that, we have formulated the Rajasthan Integrated Clean Energy Policy, 2024, which will pave way for the next round of growth in Rajasthan's Renewable Energy sector.

With the State's right policy environment, we envisage that non-fossil fuel based economy can enable utilization of domestically abundant renewable energy resources across regions, seasons, and sectors, feeding multiple usage streams, either as a fuel or as an industrial feedstock. However, we recognize that the transition to a low-carbon economy requires a concerted effort from all stakeholders.

This Mission policy is expected to facilitate deployment of Clean Energy ecosystem and create opportunities for innovation and investments across the Green Energy value chain, translating into investments, jobs and economic growth.

I invite the developers in power sector to benefit from the provisions of this forward looking Policy and deepen their engagement with Rajasthan for a brighter future.

Heeralal Nagar

01 Preamble

1.1 Growing concerns of global warming and climate change require emphasis on clean energy. The Renewable Energy Sources are the bedrock that laying the foundation for planners in developing the policy framework to ensure energy security and equity and are imperative for 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 designed to facilitate the promotion of the Renewable and Clean Energy Sector while safeguarding the interests of the end consumer.

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

1.4 Renewable Energy, such as Solar Energy can be deployed in a decentralised manner bringing benefits of reduced transmission & distribution losses and savings in cost of establishing additional transmission infrastructure on account of generation of power at load centres. Decentralized generation through solar rooftop systems, off-grid applications and small solar power plants at consumers end are efficient way of utilization of Solar Energy.



Wind Farm, Jaisalmer

1.5 The State has a huge 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. These attributes have the potential to make Rajasthan a highly preferred destination for Solar Energy at the Global level.

1.6 Additionally, National Institute of Wind Energy (NIWE), Government of India, has assessed wind power potential in Rajasthan at 284GW at 150 Mtr height and National Institute of Solar Energy assessed the Solar Potential in Rajasthan is 142 GW.

1.7 To meet the global commitments, 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 a non-conventional alternative.

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

1.9 In light of these, 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 in the State.

1.10 Appropriate capacity storage systems are also required in sync with generation profile of Wind-Solar Hybrid Power Projects.

1.11 The State will also promote the Energy Storage Program. The Energy Storage System (ESS) enhances grid stability, reliability and facilitates better load management, reducing the dependency on fossil fuel-based peaking power plants. Energy Storage Technologies such as batteries and pumped hydro storage are essential for addressing the intermittency of Renewable Energy sources.

1.12 Utilization of Biomass waste as a fuel for energy generation is yet another sustainable source of energy. This reduces the environmental impact caused by open crop residue/ biomass burning.

1.13 State will promote 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.

1.14 Further, Green Hydrogen is a non-fossil fuel which can fulfil the requirements of Industrial, Power, Transportation and Aviation sectors while reducing carbon emissions and is useful to produce Green Ammonia.

1.15 To keep pace with the changing needs of the Renewable Energy Sector, State Government has decided to review the existing Rajasthan Renewable Energy Policy, 2023.

02 Vision and objectives

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

2.2 To ensure that Rajasthan emerges as a major contributing State in order to achieve the national target of 500 GW capacity of Renewable Energy as a part of India's global commitment.

2.3 To achieve an "Optimal Energy Mix" of conventional and renewable power ensuring energy security in the State and efficient grid management while protecting the interests of all stakeholders.

2.4 To encourage the use of new technologies and methods involving combined generation of Wind & Solar Power and other emerging technologies like storage systems including pump storage plants, battery storage systems etc. To facilitate the development of infrastructure in generation, transmission, distribution and manufacturing sector of Renewable Energy.

2.5 To boost Human Resource Development with particular reference to Renewable Energy and to drive generation of employment opportunities in the State.

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

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

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

2.9 To attract investors to set-up RE equipment manufacturing facilities by promoting the development of a manufacturing ecosystem in the State.

2.10 Hybridization of Wind & Solar technologies to meet the challenges of grid security and stability while ensuring optimum utilization of land resources and transmission systems. Also pushing Hybridization of existing conventional thermal power plants with Renewable Energy in order to reduce fuel consumption and carbon emission.



Site - PM Kusum - CAT A

2.11 To promote setting up of the RE Power Projects for sale of power to Distribution Companies of Rajasthan/Rajasthan Urja Vikas & IT Services Ltd. to meet the State's RPO and beyond RPO as per requirements and commercial viability and also towards captive use and 3rd party sale.

2.12 To support the development of Energy Storage Systems (ESS) to enhance the grid stability and reduce the reliance on fossil fuel. These will also promote energy independence in remote and isolated areas/ communities.

2.13 To 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.

2.14 Utilization of Biomass Waste as a fuel for energy generation as a sustainable source of energy and also for reducing the problem of Stubble burning in order to address the environmental impact caused by burning of open crop residue/biomass.

2.15 To develop a Green Hydrogen Manufacturing Ecosystem (Electrolyser, compressor, storage and transport infrastructure etc. The Policy also promote the development of Green Hydrogen Parks, Green Hydrogen based mobility, Green Hydrogen equipment manufacturing industries, research in cutting edge technology and the Promotion of Green Hydrogen generation for storage and generation of RTC (round the clock) power etc.

03 Title and Enforcement

3.1 This Policy will be known as Rajasthan Integrated Clean Energy Policy, 2024.

3.2 The Policy will become effective from the date of Notification and will remain in force untill March 29, 2029 or until superseded by another Policy.

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

04 Target

4.1 The Policy aims to achieve a target of 1,25,000MW Renewable Power Projects up to 2029-30 in the State as under: -

S.No.	Particulars	Capacity
1	Solar	90,000 MW
2	Wind & Hybrid	25,000 MW
3	Hydro, Pumped 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 The State will endeavour to develop Renewable Power Projects for sale of power to parties other than DISCOMs of Rajasthan for captive consumption, within and outside the State.

4.4 This policy also aims to promote Renewable Energy and other clean energy sources as follows:

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 the 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 for Captive use/3rd Party Sale within and outside the State.

v. Promotion of Renewable Energy Projects with Storage Systems, Hydro Projects, Pumped Storage Plants and Battery Energy Storage Systems.

vi. Promotion of setting up of Electric Vehicles (EV) Charging Stations using Renewable Energy.

vii. Development of RE Parks/ UMREPPs.

viii. Strengthening of the 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.

xi. Promotion of Energy Storage Systems for reliable RE Power & grid stability.

xii. Promotion of Bio-energy (Biomass/Co-firing/Waste to Energy/CBG/Bio-CNG/Bio-coal/Bio-Ethanol etc.) for reducing carbon footprint.

xiii. Promotion of use of Non fossil fuels through production of Green Hydrogen and its derivatives.

Site - Solar plant : Chittorgarh capacity 3 MW



05 RREC to act as Nodal Agency

RREC will act as a Nodal Agency for:

I. Registration of projects.

ii. Approval of projects.

iii. Development of RE Parks/ UMREPPS;

iv. Selection of projects through a process of competitive bidding on the request of RUVNL/DISCOMs;

v. Facilitating the allotment of Government land;

vi. Facilitating approval of power evacuation plans & connectivity at CTU/STU/Discoms network and allocation of bays and other related facilities on behalf of State;

vii. Facilitating approval of power evacuation plans & connectivity at CTU/STU/DISCOMS network and allocation of bays and other related facilities on behalf of State;

viii. Arranging, any other statutory clearances/ approvals;

ix. Facilitating water allocation for Hydro, Pumped Storage Plants, 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 the control of MNRE/Central Agency/Other Relevant Agency;

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

Section-A: Renewable Energy

PROJECT BASED PROVISIONS AND INCENTIVES

Solar Energy

6. Rooftop PV Solar Power Systems

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

The State government will facilitate the 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' through the 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 a Net Metering arrangement. The DISCOMs will allow Solar Rooftop capacity addition up to 80% of the capacity of the Distribution Transformer in the area.

ii) Rooftop Solar Power Plants will be promoted by encouraging setup of the same Government Building through various modes including HAM/RESCO Mode.



Solar Rooftop Plant

iii) The DISCOMs will develop suitable and comprehensive consumer friendly IT applications for facilitating online timely approvals and monitoring of projects for rooftop solar power plants.

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

S.No.	Activity (Below 10 kW NOC not required)	Maximum time period
1	Issuance of NOC above 10 kW	7 days from receipt of application
2	Solar & Net Meter Testing	7 days from depositing of meters
3	Execution of Net Metering Agreement	3 days from the submission of the 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. **Virtual Net Metering (VNM) and Group Net Metering (GNM):**

Virtual net Metering (VNM) arrangement allows multiple consumers operating within the same licensee area to establish a collective physical RE plant to meet their power demand whereas Group Net Metering (GNM) arrangements cater to a single consumer having multiple service connections across various locations within the same licensing area by installing a RE Plant at single location.

To enable more access of solar power, Virtual Net Metering and Group Net Metering schemes will be promoted in the State to allow access to renewable energy to all consumers not having sufficient space in their premises.

6.4. Small wind turbines will be allowed with Solar Rooftop under Net Metering Scheme.

6.5. Government Buildings will be solarised through installation of Solar Rooftop Plants.

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

7. Decentralized Grid Connected Solar Power Projects:

Decentralized Grid Connected Solar Power Projects provide an opportunity to meet the power requirement close around 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 a maximum capacity of 5 MW in the premises and in the vicinity of 33 kV Grid Sub-Stations in order to promote 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. The State aims to increase participation of farmers in the Solar Energy sector to augment their sources of income through generation and sale of Solar Energy to DISCOMs, in the following manner.

7.2.1 Farmers, on their own or through a developer, can set up decentralized power projects on their un-cultivable agriculture land as per clause 7.1.

7.2.2 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 Government.

7.3. The 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.

8.2 The State will promote the setting up of Solar Power Plants by persons for sale of power to consumers through the State distribution system/local solar grid.

8.3 The State will also promote the setting up of Stand-Alone Solar Systems to provide electricity to households in remote Villages /Hamlets(Dhanis).

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



Off Grid Stand Alone Solar Pump

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 a competitive bidding process

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

ii) DISCOM/RUVITL may purchase Solar Power beyond RPO limit and would be able to 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 the premises of a consumer of Rajasthan;

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

9.3.3 Solar Power Projects set up in the State for captive use outside Rajasthan through open access.

9.3.4 The Maximum permissible capacity of individual Solar Plant for captive use within the State will be limited as per RERC Regulations. The Generating plant capacity for 3rd Party sale can be any capacity, however the consumer of the State will be allowed to take power from such plant up to the limit prescribed as per RERC Regulations.

Bhadla Solar Park, Phalodi



9.4. **Grid connected Solar Power Projects for Third Party Sale:**

The State will promote setting up of solar power projects for third party sale within/ outside the State as under:

9.4.1 Solar Power Projects within premises of a consumer of Rajasthan (Under RESCO Mode);

9.4.2 Solar Power Projects set up for sale of power within State through open access;

9.4.3 Solar Power Projects set up for sale of power outside State through open access/power exchange.

9.5. The Projects set up under clause 9.3 & 9.4 will also be eligible for RE (Solar) Certificate as per Orders/Regulations of the appropriate Commission issued in this regard.

Development of RE Parks

10. **RE Park**

The RE Park is a concentrated zone for development of RE power projects. It provides a well demarcated area with proper civil and power system infra-structure to a power producer, where the risk in projects is minimized and a fast approval process is facilitated. The RE Power Park Developer creates supporting infrastructure and facilities including power evacuation system, water arrangements, internal roads and administrative facilities.

10.1 **RE Parks by RREC:**

Rajasthan Solar Park Development Company Ltd., a Special Purpose Vehicle (SPV) in the form of a subsidiary company of RREC, has been established for development of infrastructure and management of RE/Solar Parks. RREC will develop RE Parks in Rajasthan on its own or through any other SPV which may be created as required.

10.2 **Development of RE Parks by Private Sector:**

(I) The State will promote development of RE Parks (Solar park/Wind Park/Hybrid Parks) by the Private Sector. The Private Sector RE Power Park Developer (REPPD) will submit an application in the prescribed online format to RREC for development of RE Park along with a non-refundable Registration charge as per clause 15.3.RREC will complete the processing of Registration applications within a period of 30 days.

(ii) The Private Sector RE Power Park Developer(s) shall be obliged to create common infrastructure facilities for development of RE Park(s) These will include creation of power evacuation systems, development of roads, lights, water supply systems and other administrative support systems.

Bhadla Solar Park, Phalodi



(iii) The REPPD will be allowed to acquire agriculture land from title holder (Khatedar) for developing RE Park(s) in excess of ceiling limit in accordance with the provisions of Rajasthan Imposition of Ceiling on Agriculture Holding Act, 1973.

(iv) Land conversion will not be required in accordance with the provisions of Rajasthan Tenancy Act 1955 and Rajasthan Land Revenue Act 1956 and the Rules made thereunder for the development of RE Park on Private Agriculture Land.

(v) Allotment of Government land to Private Sector RE Power Park Developer(s) for development of RE Park(s) will be considered on recommendation of RREC.

(vi) The Private Sector RE Power Park Developer(s) shall be responsible for registration of RE power projects within their park with RREC as per the provisions of this policy. Already registered RE Park/Solar Park prior to commencement of this Policy shall be continued with the same number and will be implemented under the provision of this policy.

(vii) The necessary SoP will be developed by RREC for development of RE Park in the State.

10.3 **Development of RE Parks through Joint Venture Companies (JVCs):**

10.3.1 The State will promote development of RE Parks through Joint Venture with private developers investing up to 50% equity or any other percentage of equity participation as decided by the state government. The cost of land allotted by state government would be part of its equity participation in the Joint Venture Company.

10.4 The applicant will submit a proposal to RREC for formation of Joint Venture Company with the State Government. RREC after examining the same will submit the proposal to Energy Department, which after conurrence of the Finance Department will be given final approval.

10.5 Solar Parks/UMREPPs under MNRE Scheme:

10.5.1 The State Government will promote setting up of Solar Parks/Ultra Mega Renewable Energy Power Parks (UMREPPs) as per the MNRE guidelines/schemes through agencies designated by MNRE.

10.5.2 Such developer will submit an application in the prescribed online format to RREC for registration of Solar Park/UMREPP along with a non-refundable Registration charge of Rs. 10,000/MW+GST subject to maximum of Rs. 20 Lac+ GST for each Park.

Solar Plant, Bikaner



11. Promotion of setting up of Renewable Energy based Electric Vehicle Charging Station:

The shift to clean transport has become necessary due to increase in carbon emission from fossil fuel which leads to global warming and climate change. The rapid increase in fossil fuel consumption due to rising vehicular movement has led to increase in pollution and also has an adverse impact on Balance of Payments situation because of the rising import bill.

The above factors are main reasons for adoption of Electric Vehicles (EV)and supporting technologies. The requirement of suitable grid-grade electricity is seen as a major challenge for establishing sufficient charging stations for the EVs. Charging of EVs from electricity generated from fossil fuel based conventional sources does not reduce emissions. For further reduction of carbon footprint, it is essential that the EVs are charged using Renewable Energy Sources. In view of the above, the State will promote the use of Renewable energy for charging of EVs in the following manner:

i. The Charging Infrastructure will be developed as per the guidelines and standards issued by Ministry of Power and Central Electricity Authority.

ii. The EV Charging Stations may be established by the State/Central Public Sector Undertakings, Private Operators or Operators under the Public Private Partnership models.

iii. The Charging Station Service Providers may set up Renewable Energy Generation Plants within their premises for captive use and may also draw renewable power through open access from Generation Plants located within the State to avail the benefits as provided under clause 17 of this policy.

iv. The aforesaid benefits would also be available to chain of EV Charging Stations owned by a Single Service Provider.

v. The State will support Research and Development activities regarding promotion and use of Renewable Energy by EV charging stations and also for Research and Development activities to study the impact of EV charging infrastructure on the grid.



EV Charging Station



Wind Farm, Jaisalmer

Wind Power Projects

12. Generation of Power from Wind :-

12.1 **Wind Power Plants for sale of power to DISCOM(s) of Rajasthan:**

The State will promote setting up of Wind Power Projects for sale of power to DISCOMs of Rajasthan on the tariff discovered through competitive bidding process to fulfil Renewable Purchase Obligation (RPO) target fixed by RERC. DISCOMs/RUVNL may procure Wind Energy beyond RPO as per their requirement and commercial viability.

12.2 Utility Grid Power Projects for Captive use /3rd Party sale within and outside the State of Rajasthan:

12.2.1 The State will promote setting up of Wind Power Projects for captive use/3rd party sale for consumers within the State.

12.2.2 The State will allow setting up of Wind Power Projects of any capacity for captive use/third party sale outside the State or sale through the Power Exchange.

12.2.3 The Maximum permissible capacity of individual Wind Plant for captive use within the State will be limited as per RERC Regulations. The Generating plant capacity for 3rd Party sale can be any capacity; however the consumer of the State will be allowed to take power from such plant up to the limit prescribed as per RERC Regulations.

12.2.4 Such Power Producers (under clause 12.2.1&12.2.2) will also be eligible for RE (Non-Solar) Certificate as per Orders/Regulations of the appropriate Commission.

12.3 Repowering of Wind Power Projects:

The State will promote Repowering of existing wind turbines which have completed at least 10 years in operation. Other provisions will be as per the guidelines/policies issued by MNRE from time to time.

12.3.1 In case of power being procured by State DISCOMs through existing PPA, the power generated corresponding to average of last three years generation prior to Repowering would continue to be procured on the terms of PPA in-force and remaining additional generation may be purchased by DISCOMs at a tariff discovered through competitive bidding in the State at the time of commissioning of the Repowering Project.

12.3.2 The Wind Power Producer shall also be allowed to use the additional generated power for captive use/third party sale.

12.3.3 In case of Repowering, the power evacuation facility for new pooling station or augmentation of existing substation will be provided by RVPN/DISCOMs based on Load Flow Studies.

12.4 Wind Resource Assessment(WRA) Programme:

For utilization of Wind as an Energy Source, Wind Resource Assessment (WRA) studies have been carried out by MNRE at various locations in the State. MNRE has also permitted independent private participation for WRA. WRA studies have been done at limited locations. With a view to further assessing wind resources potential, RREC will also allow/undertake Wind Energy Resource Assessment studies by private developers for exploring additional locations for such studies.

12.5 Registration for establishment of Wind Monitoring Station for Wind Resource Assessment studies-

12.5.1 For carrying out Wind Resource Assessment Studies, The Developer shall select the location for establishing the Wind Monitoring Station and shall register the application with RREC in prescribed online format along with the required documents.

12.5.2 Along with application, the Developer shall deposit an amount of Rs. 10,000/- per site with RREC towards registration charge, which shall be non-refundable. Goods and Services Tax (GST) will also be payable as applicable. Fee, if any, to NIWE will also be payable as applicable.

12.5.3 Non requirement of No Objection Certificate (NOC) from Gram Panchayat for allotment of land for establishment of Wind Monitoring Station-

N.O.C. from Gram Panchayat will not be required for allotment of Government land (SiwaiChak land) for establishment of Wind Monitoring Station.

12.6 General Guidelines for Wind Resource Assessment Studies -

12.6.1 The Developer shall follow the guidelines for Wind Resource Assessment studies issued by Ministry of New & Renewable Energy.

12.6.2 The Developer will bear all costs including the costs of installation of Wind Monitoring Station along with necessary accessories and will also include its O&M expenses.

12.6.3 The Developer shall submit NIWE report to RREC on completion of Wind Resource Assessment studies.

12.6.4 The Developer shall not be entitled to claim any cost/charges, expenses and incidental charges incurred in connection with the studies for submission of NIWE report to RREC.

12.6.5 Purchase and Acquisition of private land, if any, shall be sole responsibility of the Developer.

12.6.6 The Developer shall take necessary permissions of Forest Department, wherever required under Forest Conservation Act before installation of Wind Monitoring Station. The wind monitoring station would be installed by the Developer after completing various formalities requested by Forest Department. Compliances of various orders passed by Hon'ble Courts would also be ensured by the Developer.



Hybrid Power Projects

13. Generation of Power from Wind-Solar Hybrid Projects:

13.1 The State will promote setting up of Wind-Solar Hybrid Power Projects for optimal and efficient utilization of infrastructure and land, and to achieve better grid stability, under the following categories:

a) Sale of Power to DISCOMs at tariff discovered through transparent bidding process.

b) Captive Use and Sale to Third Party within and outside State through open access/Power Exchange.

c) The Maximum permissible capacity of individual Hybrid plant for captive use within the State will be limited as per RERC Regulations. The Generating plant capacity for 3rd Party sale can be any capacity, however the consumer of the State will be allowed to take power from such plant up to the limit prescribed as per RERC Regulations.

The Power procured from the Hybrid Project may be used for fulfilment of solar RPO and non-solar RPO in proportion to the rated capacity of solar and wind power in the hybrid plant respectively or as per the Orders/Regulations issued by appropriate Commission.

13.2 The sizing of the Wind/Solar capacity would be assessed by the Developer on the basis of local resource characteristics. However, a Wind-Solar Power Plant will be recognized as hybrid plant if the rated power capacity of one resource (Wind/Solar) is at least 25% of the rated power capacity of other resource (Solar/Wind).

13.3 For the purpose of this policy, the plants are classified into two categories:

Type A Projects: Hybridization of existing Wind/Solar Projects-

This category includes conversion of existing/under construction Wind or Solar Power Plants into Hybrid Projects.

Type B Projects: New Wind-Solar Hybrid Projects-

This includes new Wind–Solar Hybrid power generation projects which are not registered with RREC till the date of commencement of this policy.

All fiscal and financial incentives available to Wind and Solar power projects will also be made available to Wind-Solar Hybrid projects.

13.4 Hybridization of existing Conventional Thermal Power Plants

13.4.1 The State will promote hybridization of existing Conventional Thermal Power Plants by allowing setting up of Renewable Power Plants by the Conventional Power Generators for using its Thermal power or Renewable Power to meet its scheduled generation from the specific thermal generating station. This flexibility will provide the thermal Power generators an opportunity to optimally utilize generation

from RE sources and also help in reducing emissions. DISCOMs will also receive firm power including Renewable power, which will help them to meet their Renewable Purchase Obligations.

13.4.2 The Generating Companies will be allowed to utilize such Renewable capacities for supplying power against existing commitments to supply the power from its Thermal Power Plants to DISCOMs.

13.4.3 Any net gain realized by the generator by blending Renewable power with Thermal power shall be shared equally between the generator and DISCOMs after the approval of the Regulator.

13.4.4 The DISCOMs will be eligible to fulfil their RPO requirement against such RE procurement. The Generators will also be eligible to fulfil their Renewable Generation Obligations, through such RE Power Generation, if applicable in future.

14. Newer technologies based RE projects

14.1 Hydro Power Projects

Energy generated from Hydro Power Project has been recognized as Renewable Energy (RE) across the world. Large Hydro Power Projects (LHPs) including Pumped Storage Project, having capacity more than 25 MW and Energy from all small Hydro Storage (SHPs), commissioned after 8thMarch, 2019 will be considered as part of RE.

The Sites for these projects will be allocated to the developer through a transparent mechanism.

RREC will recommend the request of water allocation to the Water Resources Department for these projects.

14.2 Floating Solar

The State will also promote setting up of Floating / Reservoir Top/ Canal Top Solar Power Projects for sale of power to DISCOMs through Competitive bidding or for captive use/3rd party sale.

The Potential Sites for developing Floating Solar Project will be allocated to the developer/Power Producer through a transparent mechanism. Separate Guidelines will be issued by Energy Department for Floating Solar Projects.

RREC will recommend the requests of water allocation to the Water Resources Department for such projects.



Site - Floating Solar Plant - Udaipur

Registration and Approvals

15. Registration of RE Power Projects:

15.1 All RE projects installed in State on CTU/STU/DISCOMs network shall be required to be registered with RREC.

15.2 The Developer/Power Producer will submit an online application for registration to RREC in the prescribed format along with requisite documents.

15.3 Each Developer/ Power Producer will deposit non-refundable registration charge with RREC as under:

S.No.	Project/Park Capacity	Rate
1	For RE Project/Park≤10 MW capacity	Rs5,000/- per project
2	For RE Project/Park>10MW and up to 100 MW capacity	Rs20,000 Per MW
3	For RE Project/Park>100MW capacity	Rs. 20 Lac + Rs 10,000 Per MW

Note: The Project to be established under any new RE Parks registered after commencement of this policy will not be required to deposit registration charges in RREC.

15.4 The GST and other charges, as applicable, shall be payable in addition to the registration charge. Registration will not confer any right to the Developer/Power Producer and will not create any obligation on the part of RREC.

15.5 In case of registration of the Solar/Wind/ Hybrid Projects, registered under the policies prior to this Policy and three years before the commencement of this policy, for which project developer has not applied for in-principle clearance, the registration of such projects shall be allowed to be re-validated by depositing Rs.2,000 per MW subject to maximum 10 Lac per project with applicable GST, otherwise the registration of such projects shall be deemed to have been cancelled. Such re-validated Projects will be required to apply for in-principle clearance within 1 year from the date of re-validation, failing which the registration shall be deemed to be cancelled.

15.6 The Power Projects registered under the Rajasthan Renewable Energy Policy, 2023 or registered under Solar Energy Policy, 2019/Wind & Hybrid Energy Policy, 2019, three years prior to the date of commencement of this Policy, shall be deemed to be registered under this Policy with the same registration number allotted earlier. The power producers of such projects shall have to apply for in-principle clearance within 2 year from the date of commencement of this Policy, failing which the registration shall be deemed to be cancelled.

15.7 The Solar/Wind/Hybrid Projects registered under this Policy shall have to apply for in-principle clearance within a period of 2 years from date of registration, failing which the registration shall be deemed to be cancelled.

15.8 For the projects already commissioned under RE (Solar) certificate mechanism, the Developer/Solar Power Producer will have to deposit Accreditation/ Registration fee with State Agency/Central Agency as per the procedure laid down by the regulations/ orders of the appropriate Commission.

The installation of Power Plants not registered with RREC and without prior approval of competent authority as per policy provisions will be liable to be disconnected from the Grid. The Developer/Power Producer will be required to submit certificate of registration of project with RREC to the Sub-Registrar or any other officer authorized by the Government for the registration of sale/lease deed of the land.

15.9 No prior registration with RREC will be required by Developer for participation in bidding. Only successful bidders will be required to register their projects with RREC.

15.10 No registration will be required for Solar/RE Power projects connected to grid under Net/Gross Metering Scheme.

15.11 Developer/Power Producer can transfer their registered capacity or part thereof to their 'holding', 'subsidiary', 'fellow subsidiary' or 'ultimate holding' company with the prior approval of RREC on payment of an amount equal to 50% of the Registration Charge. However, the provisions of clause 15.5 & 15.6 shall be applicable to the transferee.

15.12 Developer/Power Producer can transfer the registered capacity or part there of from one registration to another registration by with then prior approval of RREC on payment of an amount equal to 25% of the Registration Charges.

16. Allotment / Procurement of Land:

16.1 Allotment of Government Land to Power Projects/RE Park/UMREPP:

Government land will be allotted to RE Park/UMREPPand Solar/Wind /Hybrid/Hydro Power Projects including PSP/Storage Plants as per the provisions of 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. Developer shall be allowed to sub-lease the allotted land as per the aforesaid rules.

16.2 RREC will recommend, on a case-to-case basis, to the concerned District Collector for allotment of government land only on submission of following security deposit in favour of RREC, Jaipur:

i. For Project/Park of capacity < 2000 MW, Rs. 1 Lac/MW by demand draft/RTGS in favour of RREC.

ii. For Project/Park of capacity≥ 2000 MW, Rs. 1 Lac/MW up to 2000 MW by DD/RTGS and for exceeding capacity, Rs. 1 Lac/MW in form of Bank Guarantee.

The security deposit will be refunded to the developer in proportion to the commissioned capacity of the project on 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. If land is not allotted, security deposit will be refunded on the written request of the applicant.

16.2.1 The allotment of Government land identified by Energy Department or State Power Companies or Joint Venture Companies of State PSUs will be kept on priority for projects for fulfillment of State Power demand.

16.2.2 The Government Land will be allotted to the Developer/Power Producers keeping in view of the projects to be set up for Sale of Power to State Power Utilities/Discoms, Projects granted connectivity at STU/Discoms Networks, Projects granted connectivity at CTU Networks, Projects to be set up for Captive use/3rdParty Sale /Green Hydrogen generation for use within State & outside State, and Projects not granted connectivity at STU/CTU Networks yet etc.

In case, Developers apply for allotment of same land, the priority in allotment of the land will be accorded to RE Projects on above basis.

16.2.3 The Developer/Power Producer setting up RE Manufacturing Unit along with RE Project will be given priority in allotment of Government Land for developing RE Projects. Minimum eligibility criteria for RE Manufacturing unit will be specified by Energy Department as and when required.

16.2.4 In case of extension of the period of utilization of land beyond 2 years from the allotment, the security amount deposited towards allotment of land shall be deducted as per Rajasthan Land Revenue (Allotment of land for setting up of Power Plants based on Renewable Energy Sources) Rules, 2007 and deposited in Government account under head Land Revenue Account.

16.2.5 In case of special circumstance, the land recommended or allotted to the Developer/ Power Producer for setting up of a specific RE project will be allowed for setting up of other RE projects by its SPV, subsidiary company or group company or subleased on same terms and conditions. Such transactions will be allowed in the first 2 years from the date of recommendation/Allotment of land whichever is later.

16.3 For setting up of Power Plants based on different technologies, maximum land area which can be allotted to the Developer/ Power Producer will be as under:

S.No.	Technology	Maximum land area for Solar Plant	Maximum land area for Hybrid Plant
1	SPV on Crystalline Technology	2.0Hect./MW	2.5 Hect./MW
2	SPV on Crystalline Technology with tracker.	2.5Hect./MW	2.5Hect./MW
3	SPV on Thin Film/Amorphous Technology with or without tracker.	2.25Hect./MW	3.0Hect./MW
4	Solar Thermal (CSP)- Parabolic Trough / Tower/Other Technology with and without storage	a) Up to PLF of 21%: 3.0 Hect./MW b) For every 1% increase in PLF, 0.15 Hect./MW additional land will be allotted	–
5	Maximum land area for Wind Plant	2.5 Hect/MW	

Note: For power projects with storage system, additional land will be allotted as per the rules prescribed by the Revenue Department, GoR.

16.4 Power Projects on Private Land:

16.4.1 The State will promote setting up of Power Project/Park on private land. Developer shall be permitted to set-up Power Project/Park on private agriculture land without the requirement of land conversion in accordance with the provisions of Rajasthan Tenancy Act 1955 and Rajasthan Land Revenue Act 1956 and the rules made thereunder.

16.4.2 Developer/Power Producers shall also be allowed to acquire/hold private land from the title holders (Khatedar) for setting up of Power Plant in excess of ceiling limit in accordance with the provisions of Ceiling Act, 1973.

16.4.3 Allotment of land for setting up of Wind Monitoring Station:

Government Land up to 100 Mtr x 100 Mtr required for setting up of Wind Monitoring Station will be allotted on temporary basis to the Developer/Power Producer for maximum period of 3 years at DLC rates. The allotment for such land will be done at the level of concerned District Collector on the recommendation of RREC. After completion of wind assessment studies, the Wind Monitoring Station shall be dismantled at the cost of Developer and land shall revert back to the State Government free from all encumbrances.

16.4.4 Land Tax:

Land tax on the land utilized for setting up of RE Projects/Parks will be as per the Notification/Order of the State Government.

17. Incentive/facilities available to RE Power Projects

RE Power Plant registered under this policy can avail these incentives available as per eligibility under the prevailing Rajasthan Investment Promotion Scheme (RIPS) as amended from time to time.

17.1 Grant of incentive under RIPS

17.1.1 Under clause 4.1.1.2 of RIPS-2024, Renewable Energy Units are eligible for the following Incentives:

1. Exemption & Reimbursements: The following exemptions and reimbursement are applicable to RE Units:
   - Exemption from payment of 100% electricity duty for 7 years.
   - Exemption from payment of 75% stamp duty and reimbursement of 25% stamp duty.
   - Exemption from payment of 75% conversion charges and reimbursement of 25% conversion charges.
   - Reimbursement of 100% mandi fee/market fee for 7 years.
2. Waiver of PCB Fees to obtain Consent to Establish (CTE) and Consent to Operate (CTB) certification.

17.1.2 Under Clause 3.1.3.2.3 of RIPS, 2024,enterprises availing Anchor Booster(Regional Anchors- and Sectoral Anchor)shall be eligible to avail 100% Banking, Wheeling and Transmission Charges waived off/reimbursement (for Captive Power Plants set up.) provided energy generated is used for captive consumption only and no third-party sale will be allowed:

- There shall be a ceiling of 200% on the size of the captive power plant
- 100% banking, allowed with no restrictions on withdrawals during peak hours.
- For 'Behind the Meter' RE Plants, there should be no ceiling on the maximum capacity of RE generation and ED exemptions should be applicable on perpetuity, provided no power is injected into the grid during off-peak hours.

17.2 Availability of Water:

Water Resources Department will allocate required quantity of water from IGNP canal/the nearest available source for auxiliary consumption for Solar PV Power Plants including cleaning of solar panels and allocation of water for Solar Thermal Power Plants subject to the availability of water. The Developer/Power Producer will intimate estimated water requirement to RREC along with details of the source of water. After assessment/scrutiny, case of water requirement shall be forwarded to the Water Resources Department. The modifications(s) required, if any, in the existing canal system will be done by the Water Resources Department at the cost of the Developer/Power Producer.

17.3 Banking:

Banking Facility and Charges will be governed as per the prevailing RERC Regulation as amended from time to time. The State will provide applicable benefit to the enterprises eligible under prevailing RIPS.

17.4 Exemption/Relaxation from Electricity Duty:

Power Producers shall be exempted from Payment of Electricity Duty for Captive use within the State for the enterprises eligible under prevailing RIPS.

The consumer of Solar Power under clause 6.1(Rooftop Solar Plant) and Wind Power Projects will be exempted from Electricity Duty as per the Order/Notifications of the Government of Rajasthan issued from time to time under the provisions of Rajasthan Electricity (Duty) Act.

17.5 Transmission and Wheeling Charges

Transmission and Wheeling charges will be governed by the prevailing RERC Regulations, as amended from time to time. The State will provide applicable benefit towards Transmission and Wheeling charges, to the enterprises eligible under prevailing RIPS.

Approval Mechanism

18. The constitution of the committees for approvals/Clearance of RE projects will be as under:

18.1 State Sanction Committee (SSC)

I) ACS/Principal Secretary/Secretary, Energy, GoR(Chairman)

ii) Chairman & Managing Director, RVPN

iii) Managing Director, RREC

iv) Managing Director JVVNL/AVVNL /JdVVNL/RUVNL

v) Representative of Finance department not below the rank of Joint Secretary, GoR.

vi) Director (Finance), RREC

vii) Director (Technical), RREC - Convener

18.2 State Level Monitoring & Coordination Committee (SLMCC)

i) Chief Secretary, GoR (Chairman)

ii) ACS/Principal Secretary/Secretary, Energy, GoR.

iii) ACS/Principal Secretary/Secretary, Industries, GoR.

iv) ACS/Principal Secretary/ Secretary, Revenue, GoR.

v) ACS/Principal Secretary/Secretary, Water Resources Department, GoR.

vi) CMD, Rajasthan Rajya Vidyut Prasaran Nigam Ltd.

vii) Chairman Discoms

viii) Chairman, Rajasthan Renewable Energy Corporation Ltd.

ix) District Collector of concerned District (Special Invitee)

x) MD, Rajasthan Renewable Energy Corporation Ltd., (Member- Secretary)

19. Approval/ Clearance of RE Power Projects:

19.1 For Bidding Projects under Clause 9.1,9.2,12.1,12.3.1,13.1(a), &14

These projects will be governed by the provisions of the bid document and will not require approval/clearance from SSC/SLMCC. However, the Developer/Power Producer will obtain all other necessary clearance/approvals and shall submit quarterly status report and will also submit all necessary clearances/approvals before commissioning of the project in RREC.

19.2 Approval/Clearance of Power Projects under Clause 9.3,9.4,11,12.2,12.3.2, 13.1(b), 14

Approval/Clearance of projects for captive use/3rd party sale under 9.3, 9.4,11,12.2,12.3,13.1(b)&14 will be granted after evaluating/examining the project proposals on the following criteria:

- Detailed project report
- Availability of land
- Availability of power evacuation system for proposed project
- Availability of water for Solar thermal plant, if required
- Documentary evidence of power purchase agreement or an undertaking in case of sale to third Party through open access or undertaking for sale of power in the power exchange

On fulfilment of the above criteria, the project will be considered as In-principally cleared and after deposition of Security Deposit; the project will be conveyed Final approval by RREC.

Note: Developers who have already submitted documents of financial capability in last one year will not be required to resubmit the same.

19.3 WBA/Open access Agreement Execution

On fulfilment of the criteria under clause 19.2 such projects will be recommended by RREC to DISCOMs/RVPN/CTUIL for execution of WBA/Open Access agreement as the case may be.

19.4 Timeline for approval/Clearance:

The Developer/Power Producer to whom Government land is allotted will have to apply for approval/clearance of the project within three months from the date of signing of lease deed of the allotted Government land. If Developer/Power Producer fails to apply for approval/clearance within the time prescribed, RREC will recommend for cancellation of allotment of Government land with the approval of SSC.

19.5 RREC will develop an online portal for sanction/approval of the proposals of RE Projects. RVPN & DISCOMs will communicate requisite permissions/ clearances to the RE Projects through the online portal and decision of the Committees will be communicated to the applicants through this portal in a time bound manner.

20. Security Deposits:

20.1 For projects (excluding Bidding Projects) set up under Clause 9.3, 9.4, 11, 12.2, 12.3.2, 13.1(b),14:

After approval/clearance of the projects under clause 9.3,9.4,11,12.2,12.3.2, 13.1(b) and 14, the Developer/Power Producer will be required to deposit following security amount-

i. For Project of capacity ≤2000 MW, Rs. 1 Lac/MW by demand draft/RTGS in favour of RREC.

ii. For Project of capacity> 2000 MW, Rs. 1 Lac/MW up to 2000 MW by DD/RTGS and for exceeding capacity, Rs. 1 Lac/MW in form of Bank Guarantee.

The Developer/Power Producer will have to deposit aforesaid Security Deposit in RREC within one month without interest and within 3 months with interest @ 9% per annum from the date of issue of approval/clearance. In case Developer/Power Producer fails to deposit security money within stipulated time as mentioned above, then the Approval/Clearance shall be deemed to be cancelled without any notice.

The Developers/Power Producers who have already deposited Security Deposit for allotment of Government Land will not be required to deposit aforesaid Security Deposit.

20.2 In case the Developer/Power Producer wants to withdraw his project within 6 months of depositing the security deposit 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.

20.3 The security amount deposited by the Developer/ Power Producers shall be non-convertible and non-transferable.

20.4 The security deposit shall be refunded, on the written request of the Developer/ Power Producer in proportion to the capacity commissioned after the commissioning of such capacity. The remaining amount shall be forfeited after the expiry of the scheduled commissioning period including extension as per Clause 23.2.

20.5 For Bidding projects under clause 9.1,9.2,12.1, 12.3.1,13.1(a) &14

The security deposit will be governed by the provisions of bid document and Power Purchase Agreement.

Power Purchase Agreement:

The Power Purchase Agreement between the Developer/Power Producer and Procurer of power will be executed in the following manner:

21.1 Bidding Projects sanctioned under clause 9.1,9.2,12.1, 12.3.1,13.1(a)&14

For the projects sanctioned under these clauses, the Power Purchase Agreement / Power Sale Agreement will be executed as per the provisions of the bid document.

21.2 Power Projects for Captive use/ 3rdParty Sale:

For the projects sanctioned under clause9.3,9.4,11,12.2,12.3.2,13.1(b),14the Developer/Power Producer will execute Agreement for Wheeling and Banking etc. with DISCOM(s). In case, transmission system of RVPN/CTUIL is also used then power producer will execute separate Transmission Agreement with RVPN/CTUIL.

21.3 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;

iii. On payment of Rs. 2.00 lac per application to RREC (GST will be payable as applicable).

In case the project is financed by any Financial Institution/lender, the name of financial institute/lender may be included in PPA on request of Developer/ Power Producer.

22. Renewable Energy Development and Facilitation Charges (REDFC):

The developers utiize Solar and Wind resources of the State for RE Generation. State facilitates developers for utilization of Land for setting up of Renewable Energy Project to harness the RE Potential. Wind and Solar power are unpredictable and variable in nature and their large-scale integration to the grid is a challenging task having both technical and financial implications.

Transmission and distribution infrastructure requires continuous up gradation, for which power utilities require investments in the system for efficient RE injection into the grid. Further, the RE Project installation in a particular area also impacts the area and there is need and responsibility of the State to develop the local area and basic infrastructure of the area particularly in the health and education sector.

In view of above, charges will be required to be contributed by RE Developers. Therefore, Rajasthan Renewable Energy Facilitation charges is imposed on RE Developer to be collected in a Fund which is being utilized as per the plan approved by the State Level Steering Committee constituted under the chairmanship of Additional Chief Secretary, Energy, Government of Rajasthan. This development fund will be raised in the following manner:

22.1 In case of Power Project set up in Rajasthan for sale of power to parties other than DISCOMs of Rajasthan, Rajasthan Renewable Energy Facilitation charges shall be deposited by the power producer towards Solar components of the project, from the date of commissioning, as under:

S. No.	Period	Rate of Contribution
1	Project commissioned on or after commencement of the Policy till project life	Rs.50,000/ Hectare/Year

The Developer/Power Producer will have an option of either paying REDFC charges or supplying 7% of power generated to Rajasthan Discoms free of Cost by installing additional capacity to that extent.

22.2 REDFC as above shall be levied on the projects which will be commissioned on or after the commencement of this policy and for the entire life cycle of the project, from the date of commissioning of the project.

22.3 There will be no requirement to pay REDFC for the Solar Power Projects commissioned on or after the date of commencement of this Policy, for sale of power to DISCOMs of Rajasthan either directly or through any other Agency/Trader.

22.4 There will be no requirement to pay REDFC for the Solar Power Projects commissioned on or after the date of commencement of this Policy for captive consumption within State.

22.5 Developer/Power Producer shall deposit the Renewable Energy Development and Facilitation Charges by 30th April in every financial year without interest and up to 30th June with interest @ 9% per annum. If it is not deposited up to 30th June, then RVPN/DISCOM or any other Central/State Govt. entity will take suitable action, such as but not limited to recovery of dues from the power bill of the Power Producer or disconnection from Grid till the depositing of dues with interest, on recommendation of RREC.

23. Time frame for completion of Power Projects:

23.1 The time schedule for completion of Power Projects allocated through Bidding process will be governed by provisions of bid document and Power Purchase Agreement.

23.2 The time schedule for completion of the Power Projects, sanctioned under 9.3,9.4,11,12.2,12.3.2,13.1(b)&14 will be as per table 1 & 2 (Annexure-A2)

Provided that extension in time schedule may be granted by RREC on case-to-case basis after depositing penalty amount along with applicable GST as in Table 3 (Annexure-A2):

In case of delays beyond 15 months Board of RREC, upon its satisfaction, regarding commissioning of the project, may provide further extension by imposing a penalty @ Rs. 2,000 per day per MW for each day beyond the period of 15 months. This penalty for each day of delay would be over and above the penalty of Rs. 2,00,000 per MW for the delay up to 15 months.

24. Manufacturing of Solar/Wind Energy Equipment:

The Government aims to promote manufacturing facilities for solar and wind energy equipment in Rajasthan, leading to both the development of solar and wind energy eco-system and facilitating employment generation in the State. Applicable incentives under Manufacturing Standard Package or MSME Package will be available for the enterprises eligible under the prevailing RIPS. Further, within Manufacturing Standard Package, these enterprises will be offered Thrust sector benefits.

Eligible RE Manufacturing units can avail benefits of Micro, Small and Medium Enterprises (MSME) Policy/Act.

The State will support RE Manufacturing units through various incentives & facilities. To promote RE manufacturing, this will be linked with RE generations in the State.

25. Power Evacuation, Grid Interfacing, Forecasting & Scheduling and Dispatch of RE Power:

Power Evacuation, Grid Interfacing, Forecasting & Scheduling and Dispatch of RE Power for RE Projects will be governed as per the provisions of this policy (Section-E) and relevant Regulations of RERC.



Under Construction Pooling Sub Station, Nokh Jaisalmer

Other initiatives

26. Project Management Consultancy (PMC):

RREC will work as a Project Management Consultant, on chargeable basis, for implementation of Renewable Energy based projects taken up by various Government Departments and Agencies. RREC may also take up the works related to Renewable Energy sector in the non-government domain/Government agencies/Government organizations.

27. RREC to undertake following studies in Renewable Energy for further policy interventions:

i. Estimating the impact of promoting Solar Rooftop Capacity addition on the grid and the state power utilities

ii. Assessment of various implementation models for setting up of EV Charging Stations

iii. Improving the cost competitiveness of Solar Manufacturing Plants

iv. Analysing and identifying suitable technologies and implementation models for Ancillary Services

v. Identification of actual requirement of storage capacity and suitable technologies considering the demand curve and generation profile of the state

vi. Identifying the requirement for training and holding workshops for capacity building of human resource of RREC regarding regulatory framework and market reforms

vii. Identifing optimal generation capacity mix of Renewable and Conventional Energy Sources, considering possible technology options, to match the future demand curve and energy requirement with the generation profile of the State.viii. Analysing the methodology for forecasting and scheduling, efficient accounting, metering and settlement of transactions of Renewable Energy for making grid operations RE friendly

ix. Assessing the technical and financial impact of making the conventional power plants flexible for ensuring large scale RE integration

x. Integrated planning leading to convergence between Transmission Infrastructure Development and the location of Renewable Energy project

xi. Studying the Business life cycle of Solar Power Projects in context of their impact on Environment.

xii. The matters referred by DISCOMs for promotion of RE in agriculture sector.

28. Research and Development

The State will promote research in Renewable Energy. RREC will provide facilitation including land allotment and funding for establishment for R&D/training centre and research work to the premier Research institutes, Universities, Associations etc.

29. Virtual RE Power Generation

State government will promote solar projects based on virtual PPAs or contract for differentials wherever such contracts are in compliance with applicable laws. Such projects would be required to deposit 10% of revenue generated from carbon credits to RREC in lieu of Government land allotment and other facilitation by RREC.

30. Carbon Trading

30.1 The State will promote carbon trading for RE Sector through various national and international mechanisms in line with guidelines/directions issued by GoI. The Plant to be established for carbon trading, benefit of carbon trading will be shared by the generators with the Discoms.

30.2 State government will promote RE projects based on third party sale where the consumer is not using electricity to meet RPO compliance and such projects will be entitled to avail carbon credits. Such projects would be required to deposit 10% of revenue generated from carbon credits to RREC in lieu of Government land allotment and other facilitation by RREC.

30.3 Promotion of Energy Efficiency

The State will promote energy efficiency/ conservation in Residential, Industries (MSME) and Commercial Building sectors. The Government will reward exemplary energy efficiency initiatives.

31. Net Zero Buildings

The State will promote Net Zero Buildings and such buildings will be awarded/ incentivized by the State.

32. Greening of supply chain

To enable consumers to adopt renewable energy, DISCOM may supply 100% renewable energy upon requisition for RE power made by such consumers at a Green Power Supply Tariff, as determined by RERC from time to time.

Distribution companies shall give Green Certificate on a yearly basis to the consumers for green energy supplied to the consumers on their request beyond the Renewable Purchase Obligation of the consumers.



33. Green Energy Open access & Energy Accounting

The Consumers would be allowed to use RE Power by installing RE Plants at any location in the State. Otherwise they can avail RE power from any developer either directly or indirectly.

The size of the plant for open access of RE Power, energy accounting, banking facility and open access chargesetc. for all Renewable Energy Projects, including rooftop projects, shall be as per the regulations framed by RERC from time to time in accordance with the Green Energy Open Access Rules 2022 notified by the Ministry of Power, GoI as amended from time to time.

RVPN will endeavour to get concessional transmission charges determined from RERC to evacuate RE power into CTU Network from RVPN's GSS directly connected to CTU Network.

34. Power to remove difficulties:

SLMCC is authorized to issue necessary clarification and amendments of this section & section-E of the policy as and when required. If any doubt, dispute, difference or issue arises with regard to interpretation/ implementation of this section of the Policy, or pertaining to any interdepartmental issues, the State Level Monitoring & Coordination Committee (SLMCC) 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.

In order to implement this policy and to remove difficulties of stakeholders, Energy Department shall issue necessary guidelines/schemes/orders as and when required.

SSC will resolve the disputes related to RE Projects in the state regarding implementation of the RE project/Parks in the State.

RREC will work towards simplification of various approvals required for setting up of RE facility in State, as a step towards ensuring ease of doing business.

Annexure-A1

The Power Producers desirous of setting up Solar/Wind/Hybrid Power Plant in State of Rajasthan under captive use/sale to 3rd party within and outside the State must fulfil the following minimum financial criteria:

Qualification Criteria for Solar PV/Thermal/ Wind/Hybrid Projects:

Net Worth

The "Net Worth" of the company should be equal to or greater than the value calculated at the rate of Rs 1 Crore or equivalent US$ per MW of the project capacity. The computation of Net Worth shall be based on unconsolidated audited/unaudited accounts of the company. For the purpose of the computation of net worth, the best year in the last four years including current running year shall be considered. The Company would thus be required, to submit annual audited accounts for the last three financial years and for part of the current running year (Un-Audited), while indicating the year, which should be considered for evaluation, along with a certificate from a Chartered Accountant to demonstrate the fulfilment of the criteria.

For companies, which are newly incorporated, the Net Worth criteria should be met seven days prior to the date of submission of application by the Project Developer. To demonstrate fulfilment of the criteria, the Project Developer shall submit a certificate from a Chartered Accountant certifying the Net Worth on the date seven days prior to submission of application. Further, the Project Developer shall submit the un-audited financial statements of the company for the date on which the Certificate of Chartered Accountant has been obtained.

{Note: For the Qualification Requirements, if data is provided by the Project Developer in foreign currency, equivalent rupees of Net Worth will be calculated using bills selling exchange rates (card rate) USD/INR of State Bank of India prevailing on the date of closing of the accounts for the respective financial year as certified by the Project Developer's banker.

For currency other than USD, Project Developers shall convert such currency into USD as per the exchange rates certified by their banker prevailing on the relevant date and used for such conversion.}

Net Worth calculation for an individual/ partnership firm

Net-Worth = Proprietors/Partner's Capital reflecting in the Audited Balance Sheet

Add: Free Reserves (Including the Credit balance of Reserve and Surplus appearing in the Balance Sheet)

Subtract: Intangible Assets

Subtract: Miscellaneous Expenditures to the extent not written off and carry forward losses.

Net Worth calculation for a Company

Net-Worth = Paid up Share capital which includes

1. Paid up Equity share capital and
2. Fully, compulsorily and mandatorily convertible Preference Shares and

3. Fully, compulsorily and mandatorily convertible Debentures)

Add: Free Reserves

(Including share premium provided it is realized in Cash or Cash equivalents.)

Subtract: Revaluation Reserves

Subtract: Intangible Assets

Subtract: Miscellaneous Expenditures to the extent not written off and carry forward losses.

For the purposes of meeting financial requirements only unconsolidated audited annual accounts shall be used. However, audited consolidated annual accounts of the Project Developer may be used for the purpose of financial requirements provided the Project Developer has at least twenty six percent (26%) equity in each company whose accounts are merged in the audited consolidated account and

Annexure-A2

Time line of project completions

Table 01

Type of Projects	Time schedule for completion from the date of Clearance/Approval
SPV:	
Up to 20 MW capacity	Within 15 Months
More than 20 MW and up to 50 MW capacity	Within 18 Months
More than 50 MW capacity	Within 24 Months
CSP:	
Up to 25 MW capacity	Within 24 months
More than 25 MW and up to 100 MW capacity	Within 36 months
More than 100 MW and up to 200 MW capacity	Within 42 months
More than 200 MW capacity	Within 48 months

Wind & Hybrid Projects

Table 02

Project Capacity	Time schedule for completion from the date of Clearance/Approval
Up to 25 MW	8 Months
Above 25 MW- 50 MW	14 Months
Above 50 MW - 75 MW	18 Months
Above 75 MW - 100 MW	22 Months
Above 100 MW	26 Months

Note: Time lines of the other projects shall be specified by the Energy department separately

Penalty for delay in commissioning beyond Scheduled period of commissioning

Table 03

S.No.	Period of delay	Penalty on un-commissioned capacity
I.	For delay up to 1 month	Rs 25,000 per MW
ii.	For delay up to 3 months	Rs 50,000 per MW
iii.	For delay up to 6 months	Rs 1,00,000 per MW
iv.	For delay up to 9 months	Rs 1,50,000 per MW
v.	For delay up to 15 months	Rs 2,00,000 per MW



Bisalpur Dam

Section B: Storage Plant (PSP & BESS)

1. Introduction

1.1 India is undertaking a significant energy transition with a goal to have 50% of its electricity generation capacity from non-fossil fuel sources by 2030 and to achieve net zero emissions by 2070. To meet these objectives and ensure energy self-reliance, the country is prioritizing the optimization of its domestically available renewable energy resources. A crucial component of this strategy is the development and integration of advanced Energy Storage Systems (ESS). Energy Storage Technologies, such as batteries and Pumped Hydro Storage, are essential for addressing the intermittency of renewable energy sources like Solar and Wind. By storing excess energy generated during periods of high production and utilizing it during times of high demand, these systems enhance grid stability and reliability. Additionally, Energy Storage facilitates better load management and reduces dependency on fossil fuel-based peaking Power Plants. As India accelerates its Renewable Energy deployment, robust Energy Storage Solutions will play a pivotal role in ensuring a sustainable and resilient energy infrastructure.

1.2 The National Electricity Plan (NEP) 2023 of the Central Electricity Authority (CEA) projects a significant increase in energy storage capacity requirements. By the year 2026-27, the requirement is projected to be 16.13 GW (82.37 GWh), with 7.45 GW (47.65 GWh) from Pumped Storage Plants (PSP) and 8.68 GW (34.72 GWh) from Battery Energy Storage Systems (BESS). This requirement is expected to further rise to 60.63 GW (336.4 GWh) by the year 2029-30, comprising 18.98 GW (128.15 GWh) from PSP and 41.65 GW (208.25 GWh) from BESS.

1.3 Moreover, CEA has projected that by the year 2047, the requirement of energy storage is expected to increase to 320 GW (90 GW PSP & 230 GW BESS) with storage capacity of 2380 GWh (540 GWh PSP & 1840 GWh BESS) due to the addition of a large amount of Renewable Energy in light of the net zero emission target set for 2070.

1.4 To meet the evolving needs of the Energy Storage System, the Government of India has periodically issued various directives. In 2021, the Department of Heavy Industries introduced the Production Linked Incentive (PLI) scheme for Advanced Chemistry Cell (ACC) Battery Storage. In 2022, the Ministry of Power set out the Renewable Purchase Obligation (RPO) and Energy Storage Obligation (ESO) Trajectory until 2029-30. In 2023, the Ministry of Power released guidelines for Pump Storage Projects (PSP) and the National Framework for Promoting Energy Storage Systems, along with operational guidelines for Viability Gap Funding for Battery Energy Storage Systems. Additionally, the Ministry of Environment, Forest and Climate Change issued the Battery Waste Management Rules in 2022

1.5 The State of Rajasthan will promote the Energy Storage Program by simplifying regulatory processes and offering financial incentives. This initiative aims to enhance energy reliability, support the integration of renewable energy, and reduce dependency on conventional energy sources. It is expected to attract investments, stimulate technological advancements, and contribute to the state's sustainable energy goals, in alignment with the guidelines of both the State Government and the Government of India.

1.6 Among all energy storage technologies, Battery Energy Storage Systems (BESS) and Pumped Hydro Storage Projects (PSPs) are well-established and mature technologies, and these technologies can play a pivotal role in enhancing energy security and aiding the transition to a more affordable, low-carbon electricity market. They provide flexible, dispatchable, and peak power capacity.

2. Vision and Objective

2.1. To become a major contributing state for achieving the national target of 500 GW through non fossil fuels by 2030.

2.2. To ensure 24×7 Dispatchable Renewable Energy, to achieve round-the-clock Renewable Energy availability.

2.3. To reduce emissions and costs by decreasing the greenhouse gas emissions and overall energy costs by incentivizing ESS deployment, reducing reliance on fossil fuels.

2.4. The state will promote the enhancement of grid stability by improving reliability through ESS, this will also provides, services such as frequency regulation and voltage support, ramping and other ancillary support services.

2.5. The state will promote energy independence in remote and isolated communities through the deployment of ESS.

2.6. To promote the policy of ESS to attract investment in the clean energy sector, to increase the local employment opportunities and in turn lead to development of the State Economy.

2.7. The state will promote the creation of an environment that enables industry and research institutions to focus on cutting-edge research and innovation to enhance ESS performance, safety, and cost-effectiveness.

2.8. Support DISCOMs in meeting their Renewable Purchase Obligation (RPO), Hydro Purchase Obligations (HPO), and Energy Storage Obligation (ESO) as per regulations.

3. Application and use of ESS in Power Sector

3.1. ESS have a multitude of applications in the energy sector and can be used independently or as a part of power system infrastructure across various levels, including generation, transmission, and distribution.

3.2. Integration of Renewable Energy involves managing intermittency by storing excess energy generated during peak production times, such as sunny or windy periods, for use when generation is low. Additionally, Energy Storage Systems help smooth the output of Renewable Energy sources, reducing variability and making their output more predictable and manageable.

3.3. ESS contribute to grid stability and reliability by providing frequency regulation to balance energy supply and demand, ensuring stable grid frequency. They also offer voltage support by supplying reactive power to maintain required voltage levels, and act as backup power sources during outages or disruptions, enhancing overall grid reliability.

3.4. Energy independence and security are enhanced by Energy Storage Systems, which enhance the resilience of energy systems against disruptions such as natural disasters and cyber-attacks. Additionally, they reduce dependence on imported fuels by maximizing the use of local and Renewable Energy Sources, contributing to greater resource independence.

4. Pumped Storage Hydro Projects (PSP)

Energy generated from hydro power project has been recognized as renewable energy across the world. Large hydropower projects including pumped storage projects having capacity more than 25 MW and energy from all small hydro projects commissioned after 08 March 2019 will be considered as of RE projects.

4.1. The state will envisage the development of PSP projects on their own through Hybrid Annuity Model (HAM). The guidelines for the same will be notified separately by the Energy Department.

4.2.The State can also allocate PSP sites to developers through the following modes:-

Mode I: Nomination of CPSUs or SPSUs:

I. State may award Pumped Storage Projects directly to the CPSUs or SPSUs on a nomination basis.

ii. Interested CPSUs/SPSUs may submit their proposals along with PFR to RREC detailing the execution timelines and methodology for implementation. Due consideration will be given to the timeline for execution, track record of projects executed in the past, financial strength of the entity and current projects of the entity in the pipeline.

iii. These proposals shall be presented before the High Level Screening Committee (HLSC) in order to seek permission to initiate the project.

iv. The Projects may also be allotted to Joint Ventures (JVs) between CPSUs and / or SPSUs for development of such PSPs.

v. In such Projects the State Govt. power utilities shall be given the right of first refusal of up to 80% of the project capacity. The tariff for this portion will be determined by the State Commission in accordance with Section 62 of the Electricity Act 2003 or discovered through bidding of remaining power, whichever is lower.

vi. The Developer shall submit the Letter of Offer for at least 80% of the project capacity to the State Govt. after receiving the cost estimate approval from the CEA. If State Govt. does not provide acceptance on full or part of offered capacity within 8 weeks of Letter of Offer, the Developer would be free to sell the balance project capacity.

Mode II: Allotment through Competitive Bidding:

I. For PSP sites identified by State, a detailed proposal will be prepared, which shall be presented before the High Level Screening Committee (HLSC) in order to seek permission to initiate the project.

ii. The State Govt may conduct a competitive bidding for these state identified sites for allocating the projects to the private developers.

iii. The CPSUs and State PSUs can also participate in the bidding.

The State Govt. may adopt one of the below methodologies of bidding:

1. Two Stage Competitive Bidding:

i. The first stage shall be for pre-qualification based on criteria such as financial strength, experience in developing power projects of a similar scale, past track record in project development, turnover, and the capability to meet Performance Guarantees.

ii. In the second stage, bids are to be called based on quantifiable parameters, such as "Maximum amount per MW per year to be paid to State" or any other parameter as specified by the Central/State Government

iii. The State Utility shall have the first right of refusal for up to 80% of the project capacity. The tariff for this portion will be determined by the State Commission in accordance with Section 62 of the Electricity Act 2003 or discovered through bidding of remaining power, whichever is lower.

iv. This refusal will be mentioned in the bid document.

Site - Jawai Dam



2. Tariff Based Competitive Bidding (TBCB):

PSPs may also be awarded on a TBCB basis to developers. For this purpose, the task of carrying out S&I and preparation of DPR may be given to an SPV under a CPSU/State PSU. SPV may be responsible for pre-construction activities such as preparation of project report, land acquisition, environment and forest clearance etc. The DPR may be subsequently bid out for construction and SPV will be transferred to the successful bidder and the bids may be invited based on:

i. Composite tariff (including the cost of input power) in case input power is arranged by the Developer, Or

ii. Tariff for storage on a per Megawatt Hour basis if the input power is to be arranged by the State power utilities.

iii. The Rajasthan Electricity Regulatory Commission (RERC) shall adopt the above tariff under section 63 of Electricity Act, 2003



Mahi Dam

Mode III: Allotment of Self-Identified Off-stream closed loop sites:

i. The State Govt. shall promote identification and development of off stream closed loop sites of PSPs by encouraging Developers to self-identify sites. RREC shall open a window inviting proposals for self-identified sites from time to time.

ii. Developers shall submit the proposal with complete details of the identified site, storage potential and techno-commercial viability along with pre-feasibility report for the State Govt.'s evaluation.

iii. A developer can submit only one proposal within the duration of a particular window.

iv. These proposals for particular sites shall be entertained on the "First Come First Served" basis.

v. These proposals shall be presented before the High Level Screening Committee (HLSC). HLSC's decision shall be final regarding these proposals.

vi. The state utility shall have the first right of refusal for up to 50% of the project capacity. The tariff for this portion will be determined by the State Commission in accordance with Section 62 of the Electricity Act 2003 or discovered through bidding of remaining power, whichever is lower.

vii. The Developer shall submit the Letter of Offer for at least 50% of the project capacity to the State Govt. after receiving the cost estimate approval from the CEA. If State Govt. does not provide acceptance on full or part of offered capacity within 8 weeks of Letter of Offer, the Developer would be free to sell the balance project capacity.

4.3. Approval of Pumped Storage Projects:

1. To facilitate the seamless allocation of sites, a High-Level Screening Committee (HLSC)will be constituted under the chairmanship of ACS/Principal Secretary, Energy, GOR. This committee shall permit the initiation of the project after a thorough evaluation/examination of the project proposals.

2. Final Approval/clearance for Pumped Storage Projects will be conferred by the State Level Monitoring and Coordination Committee (SLMCC) after evaluating / examining the project proposals on the on the following criteria:

   - Detailed Project Report (DPR)
   - Availability of water/ Water Allotment Certificate accorded by WRD
   - Environment Clearance
   - Forest Clearance
   - Availability of land
   - Availability of power evacuation system
   - Documentary evidence of PPA or an undertaking in case of 3rd party / power exchange sale

   The Developer should obtain the final approval of DPR and other clearances within Two(2) years from the date of Registration of the project. Relaxation of 1 year may be granted to those projects where delay in start of construction is attributable to pending Environment Clearance (EC) and Forest Clearance (FC), provided that the applications are submitted to concerned authorities within time lines agreed at the time of award of the project. Otherwise, the developer shall be liable to cancellation of project site.

   The storage projects registered with RE project prior to this policy has to obtain all clearances including final approval of DPR within two year from registration date or one year from the date of notification of this policy.

The constitution of the committees for approvals/Clearance of PSP projects will be as follows:-

A. High Level Screening Committee (HLSC):

1. ACS/Pr.Secy/Secretary, Energy, GoR- Chairman
2. ACS/Pr.Secy/Secretary, WRD or their representative (Not below the rank of Chief Engineer)– Member
3. ACS/Pr.Secy/Secretary, Forest & Environment or their representative– Member
4. ACS/Pr.Secy/Secretary, Revenue or their representative – Member
5. ACS/Principal Secretary/Secretary, Industries, GoR
6. CMD/MD, RVPN or their representative– Member
7. Chairman Discoms or their representative– Member
8. CMD/Managing Director, Rajasthan Renewable Energy Corporation Ltd.– Member
9. District Collector of concerned District (Special Invitee).
10. Director (Technical), Rajasthan Renewable Energy Corporation Ltd - Convener

B. State Level Monitoring and Coordination Committee (SLMCC):

1. Chief Secretary, Rajasthan (Chairman)
2. ACS/Principal Secretary/Secretary, Energy, GoR.
3. ACS/Principal Secretary/Secretary, Water Resources Department, GoR.
4. ACS/Principal Secretary/Secretary, Forest & Environment, GoR.
5. ACS/Principal Secretary/ Secretary, Revenue, GoR.
6. ACS/Principal Secretary/Secretary, Industries, GoR
7. CMD, Rajasthan Rajya Vidyut Prasaran Nigam Ltd
8. Chairman, Discoms.
9. Chairman, Rajasthan Renewable Energy Corporation Ltd.
10. MD, Rajasthan Renewable Energy Corporation Ltd., (Member – Secretary)

4.4. Obligations:

4.4.1. Obligation towards the state DISCOM

• Developers are mandated to make power available to the state as and when required from their power share reserved for sale in Day Ahead Market of Power exchange(s).

• This power shall be made available to the state at the tariff discovered in the PPA(s) of the project or the price discovered in the power exchange for that particular period, whichever is lower.

4.4.2. Regulatory compliances

• Developer shall mandatorily follow the guidelines issued by the Government of India and State government from time to time on Local Area Development and Rehabilitation & Resettlement policies applicable for Pumped Storage or Hydro Projects.

• Developer shall mandatorily comply with the Grid Code including Load Dispatch & System Operation Code, Metering Code, Safety Code & relevant regulations / orders issued by CERC and RERC as per applicability.

4.4.3. Progress assessment

• The developer shall submit monthly progress report to the nodal agency. Moreover, a review of the progress of the PSPs shall be undertaken every 6 months by the HLSC and if it is found that there is no substantial progress in the development of project for two continuous review meetings, HLSC may cancel the registration and project site.

4.4.4. Land charges

• Developer shall pay lease charges for the allotted Govt. land as per the provisions of 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.

• For the sustenance of livelihood of people in the local vicinity, the developer shall pay minimum Rs. 25,000/acre/year (With an increase of 5% every third year) rental charges to the owner for the acquired private land.

4.4.5. Obligations in case state opts for procurement of power

• In case the State opts for procurement of power, the developer shall be required to deposit bank guarantee of Rs. 1 lac / MW by DD/RTGS corresponding to the capacity to be procured by the state. Such bank guarantee shall be deposited 6 months prior to the scheduled date of start of procurement of power.

• In case the developer fails/delays to deliver the committed power to the state from the date of procurement, it shall be liable to pay the differential amount incurred in procuring such power for the period of delay.

4.5. Operational Period

4.5.1. The Pumped Storage Projects shall be offered for a maximum period of forty-five (45) years from the Date of Allotment at the end of which they shall revert to the State Govt. or be extended further upto thirty (30) more years in line with the prevailing rules & regulations and applicable charges after approval of the state government.

4.5.2. At the end of the Concession Period, the projects without any encumbrances shall be ordinarily transferred to the State Government.

4.6. Land allotment

4.6.1. Allotment of land for the project shall be as per the provisions of 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.

4.6.2. Govt. land, if any, will be recommended by RREC on case to case basis after acceptance of non-forest land for Compensatory Afforestation (CA) by Forest Department or after getting Stage-I forest clearance.

5. Battery Energy Storage System (BESS)

5.1.1. The state will promote the establishment of BESS, where each individual project must have a minimum power rating of 1 MW or higher, an appropriate energy rating based on the specific application, and be located at a single site with a minimum bid capacity of 1 MW.

5.1.2. Energy supplied from Standalone BESS will be considered as RE power. Moreover, if 85% or more of the total energy stored in the BESS, on an annual basis, is procured from RE Sources, such energy shall be considered for ESO as specified by appropriate Regulators/Ministries of GoI.

5.1.3. The State will promote setting up of BESS under the Guidelines/ schemes of MNRE or BESS allocated through competitive bidding by/for other State Utilities/Entities.

The State will promote the setting up of BESS for sale of power to DISCOMs of Rajasthan on the tariff discovered through competitive bidding process in order to fulfil ESO and RPO target fixed by RERC. DISCOM/RUVNL may purchase solar power beyond ESO/RPO limit and can avail the benefit of REC as per CERC Regulations/ NLDC guidelines.



Battery Bank

5.2. Approval Mechanism:-

Approval/Clearance of projects of BESS will be granted after evaluating/examining the project proposals on the following criteria:

- Detailed Project Report
- Availability of land
- Availability of Power Evacuation System for proposed project
- Documentary evidence of Power Purchase Agreement or an undertaking in case of sale to third Party/ power exchange through open access.

On fulfilment of the above criteria, the project will be conveyed Final approval by RREC.



The State Level Monitoring & Coordination Committee (SLMCC) will be constituted to resolve inter departmental issues:

1. Chief Secretary, Rajasthan (Chairman)
2. ACS/Principal Secretary/Secretary, Energy, GoR-Member.
3. ACS/Principal Secretary/Secretary, Industries, GoR-Member.
4. ACS/Principal Secretary/ Secretary, Revenue, GoR-Member.
5. CMD, Rajasthan RajyaVidyutPrasaran Nigam Ltd-Member.
6. Chairman, Renewable Energy Corporation Ltd. - Member.
7. Chairman, DISCOMs-Member.
8. District Collector of concerned District (Special Invitee)
9. MD, Rajasthan Renewable Energy Corporation Ltd., (Member – Secretary)

5.3. Obligations :-

5.3.1. Regulatory compliances

- Developer shall mandatorily follow the guidelines applicable for Energy Storage Projects issued by the Government of India and State Government from time to time. It shall comply with the relevant environmental laws, regulations, and orders.
- Developer shall mandatorily comply with the Grid code including Load Dispatch & System Operation Code, Metering Code, Safety Code & relevant regulations/orders issued by CERC and RERC as per applicability.

5.3.2. Obligations in case state opts for procurement of power

- In case the State opts for procurement of power, the developer shall be required to deposit bank guarantee of Rs. 1 lac / MW by DD/RTGS corresponding to the capacity to be procured by the State. Such bank guarantee shall be deposited 6 months prior from the scheduled date of start of procurement of power.

- In case developer fails / delays to deliver the committed power to the state from the date of procurement, it shall be liable to pay the differential amount incurred in procuring such power for the period of delay.

5.4. Land Allotment

Govt. land, if any, shall be recommended by RREC on case to case basis. For bidding projects, Govt. land, if any, shall be recommended by RREC only after submission of LOA.

5.5. BESS projects through Hybrid Annuity Model:

The state will envisage the development of BESS projects on its own Hybrid Annuity Model (HAM). The guidelines for the same will be notified separately by the energy department.

6. Energy Storage Projects integrated with Renewable Energy Projects

State requires reliable power during peak hours of the day which has to be fulfilled by Distribution Companies through available non-fossil power sources or from power exchange at market price. High demand of power during peak hours increases market power whereas Solar Power Evacuation Systems remain idle during non-solar hours.During non-solar hours, this idle power evacuation system can be utilized for supply of firm RE Power into grid by installing BESS with RE power. This initiative will help to reduce the cost of power during peak hours and ensure grid stability without expanding power evacuation system.

6.1. The State will promote Solar/Wind/Hybrid Power Projects with storage systems to reduce the variability of output of RE power into the grid and to ensure availability of firm power for a particular period.

6.2. In the case of Integrated Projects, the Wind and Solar part will be governed by Section A of this policy and the related ESS will be governed as per the provisions of this Section B of this policy.



6.3. In order to encourage storage capacity to supply reliable power, new RE projects integrated with BESS under with minimum capacity of X/2 MWh (where "X" is the installed capacity of RE project) shall be exempted 50% from registration charges for the RE capacity and on installation of BESS beyond X/2 MWh capacity, registration charges shall be exempted up to 100% on pro rata basis corresponding to the storage capacity added.

6.4. In order to ensure adequate storage capacity to supply reliable power, new RE projects on STU network (excluding Hydro Projects) with an installed capacity of over 5 MW or as specified by the central Government will be mandated to install ESS (of at least 2 Hour storage) for minimum 5% of the RE capacity.

6.5. RE Generators would be allowed to set up BESS along with their existing RE Plant to supply peak power/RTC power into the Grid for optimum utilization of existing evacuation system. The RE Generators can enhance the RE capacity for storage of RE Power through BESS by itself or owned by any other entity for injection into grid. Discoms can procure such power from the generators at a tariff determined by RERC/ through a transparent mechanism as per their requirement and commercial viability.

6.6. State will encourage setting up BESS and supplying power during peak hours to Discoms at a ceiling tariff decided by appropriate commission/authority. Such Projects can also supply power to Captive/Open Access consumers at mutually agreed tariff. Remaining capacity after meeting Discom Load, shall be allowed to avail GNA for injection into ISTS Grid.

6.7. Captive consumers and Open Access consumers will be allowed to store surplus RE power through BESS and such power can be utilized by the consumer itself or can be used for sale to Power exchange etc.

6.8. The state will promote ESS in decentralized Rooftop Solar Plants and Grid Scale RE Project to meet power demand of the consumers.

6.9. The BESS will be also promoted to set up at GSS end or at Distribution Load Centre, particularly where infirm RE injection is very high in comparison to load demand.

6.10. Integrated projects (ESS with RE) already registered prior to notification of the present policy will not be required to re-register under this policy.



RE Integrated BSS

7. Project Facilitation:

7.1. The Nodal Agency shall assist the Project Developer in obtaining the consents, clearances and permits by providing letters of recommendation to the concerned authorities, as may be requested by the Project Developer. However, the Nodal Agency shall not be accountable for any delays in obtaining the consents, clearances and permits required for development of RE projects.

7.2. All Government of India initiatives under MNRE (or any others), such as Central Finance Assistance, VGF, Budgetary support towards cost of enabling infrastructure, waiver off interstate & intrastate transmission & wheeling charges, Benefits under Rajasthan Industrial Policy etc. as applicable shall be extended to the Project Developer and the Nodal Agency may facilitate seamless transfer of such benefits.

7.3. The Nodal Agency may assist or facilitate Pumped Storage Project developers in availing applicable incentives offered to enterprises eligible under the prevailing RIPS

7.4. (Incentives as specified under clause 4.1.1.2 of RIPS, 2024)

Transmission & Wheeling charges shall be exempted on supply of power from BESS during peak hours or non-solar hours for a capacity of 2000 MW capacity or capacity installed by 2030 whichever is earlier for the followings:

i. RE Integrated Storage project with a capacity of 5% of RE capacity will be eligible for exemption of 75% on Transmission and Wheeling charges for a period of 7 years. For BESS beyond 5% of RE capacity will be eligible for extra exemption of additional 1% Transmission and Wheeling charges on enhancement of each 1% capacity of storage system up to 30% capacity. For BESS beyond 30% of RE capacity, will be exempted from 100% Transmission & Wheeling charges.

ii. Standalone Battery Energy Storage System (BESS) will be exempted 100% transmission and wheeling charge on supply of power from BESS during peak hours or non-solar hours for a period of 7 years.

iii. BESS connected at 11 kV or 33 kV grid sub stations will be exempted 100% transmission and wheeling charges

7.5. State Government may allocate Government land at concessional rates to BESS projects supplying power to the Discoms of the Rajasthan.

a. The Nodal Agency will provide support and assistance to the project in obtaining grants for special category projects under Central Government schemes.

b. Under this Policy, registered or upcoming projects shall also be eligible to avail Viability Gap Funding (VGF) as per the schemes of the Ministry of Power, Government of India

c. ESS projects may receive applicable incentives offered to enterprises eligible under the prevailing RIPS

8. Registration of ESS Projects

a. All ESS projects installed in the state of Rajasthan shall be required to be registered with RREC.

b. The Developer will submit an online application to RREC for registration in the prescribed format along with requisite documents, net worth criteria as specified at annexure-A1 and details regarding capacity of BESS and PSP Projects

c. The ESS project of Pumped Storage Hydro (PSP) will be registered after getting approval from HLSC.

d. Each Developer of PSP and BESS will deposit non-refundable registration charges of Rs.10 Lakh/per project with RREC.

e. GST and other charges, as applicable, shall be payable in addition to the Registration Charges. Registration will not confer any right to the Developer/Power Producer and will not create any obligation on the part of RREC.

f. The ESS Projects registered (Other than PSPs) under this Policy shall have to apply for in-principal clearance within a period of 2 years from date of registration, failing which the registration shall be deemed to be cancelled.

g. No prior registration with RREC will be required by Developer for participation in bidding. Only successful bidders will be required to register their projects with RREC.

h. Developer can transfer its registered capacity or part thereof to its 'holding', 'subsidiary', 'fellow subsidiary' or 'ultimate holding' company with the prior approval of RREC.

I. Developer can transfer the registered capacity or part thereof from one registration to its other registration with the prior approval of RREC.

Jawai Dam



9. Power to Remove Difficulties

State Level Monitoring and Coordination Committee (SLMCC) is authorized to issue necessary clarifications and amendments under this section of the Policy as and when required. In the event of any doubt, dispute, difference, or issue concerning the interpretation or implementation of this section of the Policy, the SLMCC may make decisions on such matters. These decisions must align with the provisions of the Policy and aim to resolve difficulties, whether initiated by the Committee itself or based on a written request from stakeholders.

The Energy Department in consultation with other department shall issue necessary guidelines/ schemes/orders for the implementation of this Policy.



Jaisamand Dam

Annexure-B1

Particulars in Pre-feasibility Report

Upper and Lower Reservoir Details: -

- Availability of Upper/Lower Reservoirs with geological coordinates.
- Land area required with details such as Revenue/Forest/Private
- Storage capacity of Reservoirs with Live and Dead Storage.
- Full Reservoir Level (FRL) and Minimum Draw Down Level (MDDL) of the available Reservoir(s)
- Gross Head available at Site with Length to Height (L/H) Ratio of the Reservoir.
- Deepest Foundation level and Maximum height of Rockfill Embankment.

Location Details: -

- District/Tehsil/Village name in which the site is located and Status of the approach roads
- Geological coordinates of existing transmission &/or distribution network and GSS with distance from site
- Detail of Interference with Wildlife Sanctuary & National Park or any other restricted Area
- Geographical Maps & Pictures of location
- Forest and non-forest land required

Survey & Investigation: -

- Reconnaissance topographical survey
- Hydro Meteorological data with Seismicity
- Water availability and water requirement at project location
- Designated route for source of one time water requirement.
- Evaporation and Sedimentation
- Design Flood and Flood absorption
- Area of Submergence / Land Acquisition

Other Details: -

- Total estimated potential of PSP in MW and MWh
- Cycle Efficiency
- Capacity of reservoir required to be constructed if any
- Power Evacuation Plan
- Environmental Aspects
- Economic Financial Analysis



Biomass Plant - Chattargarh, Bikaner



Section C: Biomass and Waste to Energy Projects

The State will promote the Biomass Programme, facilitating the establishment of biomass-based power projects, Bio CNG/CBG (Compressed Bio Gas), Briquette/Pellet manufacturing units 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. Project based provisions

1.1 Biomass Projects

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.

Discom may purchase the power from Biomass projects to fulfil 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.

1.2 Waste to Energy projects:

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

1.3 Biogas Generation

Agriculture Waste, Dairy Waste, Household Waste, Animal Waste (Poultry farm, Gaushalas) Sewage Waste Disposal is a major concern. This waste can be utilized to generate Biogas which can be used for cooking, lighting, power generation, heating etc.

Farmers, Dairy Farms, Poultry Farms, Farmers Producers Organizations (FPO), Self help Groups (SHG), Industries etc. can set up Biogas plants. This will help to earn revenue and generate employment in rural areas.

Biogas generation will be promoted by the State and such plants shall be eligible to avail incentives as per schemes/ programs of GoI and State Government. The additional incentives will be provided by the State.



Biomass Plant - Uniara, Tonk

The State will support the distribution mechanism for organic manure produced in biogas plant.

Programs/Schemes will be run at the level of Gram Panchayat to promote Biogas for waste utilization.

In rural areas, energy transition initiatives will be undertaken to shift from fossil fuel to non-fossil fuel. These initiatives will include installation of Rooftop Plants, RE plant with Storage systems and biogas generation to meet 100% energy requirement.

1.4 Compressed Biogas (CBG/Bio-CNG)

To promote the MNRE biogas program for power generation and to meet the mandate by Ministry of Petroleum and Natural Gas for blending Compressed Biogas (CBG) in Compressed Natural Gas (CNG) for transport and domestic use, the state will promote Compressed Biogas (CBG/Bio-CNG) plant in Rajasthan.

The developers who have already been issued LOI under SATAT and other bio-energy projects based on compressed Biogas (CBG) will be registered under this policy.

The Energy Department will issue separate Guidelines for implementation and promotion of CBG/Bio-CNG projects in the State.

1.5 Bio-Ethanol

To promote initiatives of GoI for mandate to blend Bio-Ethanol in petrol, the State will promote the Co-generation power plants associated with Bio-Ethanol plants in Rajasthan.

The Energy Department will issue separate Guidelines for implementation and promotion of Bio-Ethanol projects in the State.

1.6 Bio-Coal

To address the issue of Biomass Waste burning at the local level, the production of Bio Coal will be promoted for carbon mitigation from coal burning and to generate revenue and employment generation in rural area.

1.7 Co-firing in Coal/Lignite based Thermal Power Plants

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.

For this purpose Biomass Pellet/Briquettes Manufacturing units will be promoted.



Waste to Energy Plant, Langadiyawas, Jaipur

2. Incentives

2.1 All Biomass Projects including Briquette/Pellet Manufacturing units and Waste to Energy based projects may avail incentives as per the eligible criteria defined in the prevailing RIPS.

Grant of incentive under RIPS

Under clause 4.1.1.2 of RIPS,2024, Renewable Energy units are eligible for the following Incentives:

1. Exemption & Reimbursements: The following exemptions and reimbursement are applicable to RE Units:

- Exemption from payment of 100% electricity duty for 7 years.
- Exemption from payment of 75% stamp duty and reimbursement of 25% stamp duty.
- Exemption from payment of 75% conversion charges and reimbursement of 25% conversion charges.
- Reimbursement of 100% Mandi fee/Market fee for 7 years.

2. Waiver of PCB Fees to obtain Consent to Establish (CTE) and Consent to Operate (CTB) certification.

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

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

2.4 Project shall be eligible to avail incentives/benefits under the schemes/programs of Central Government. The State shall facilitate the developer to avail such benefits.

3. Land allotments

3.1 Land Allotment for Setting Up Biomass Based Power Plant

i. Allotment of Government Land - 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.

ii. RREC will recommend 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 on case-to-case basis. The Security Deposit will be refunded to the Developer within 2 months of commissioning of the project on a 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.

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

3.2 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.

3.3 Land allotment for setting up of CBG/ Biogas/ Bio-coal/ Bio- Ethanol:

For establishment of CBG plant, a maximum of 10 Acre land would be allowed for a plant of 10 MTPD capacity and 25 Acres land for storage of feedstock. For Bio coal plant on a maximum of 2 Acre land would be allowed for 100 MTPD. 1.5 Acres of land would be allowed for a 100 kilo Litre Bio Ethanol Plant.

Such Projects would be provided Revenue Land 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. Developer will have to deposit Security amount of Rs. 1 Lac/MTPD by DD/NEFT/RTGS in favor of RREC for CBG plant towards land allotment. Such SD amount will be refunded on successful commissioning of the project and forfeited if land not utilized within prescribed timeline as per aforesaid Revenue Rules.

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

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

4. Registration of Power Project, Biomass Briquettes/Pellet manufacturing units

4.1 Biomass Power Plant and Waste to Energy based Power Project in the State shall be registered online upon 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 capacities shall be allowed under this Policy.

4.2 No registration charges shall be applicable to the Biomass Briquettes/Pellet manufacturing units, Biogas & Bio Coal plants.

4.3 CBG, Bio-Ethanol plant will be required to register their project with RREC upon deposition of the following charges:

- **CBG Plant @ Rs. 30,000/ Metric Ton Per Day (MTPD)**
- **Bio-Ethanol @ 3,000/Kilo Litre Per Day (KLPD)**

Under the Sustainable Plan of the Ministry of Petroleum and Natural Gas, Government of India, the developers who have already been issued LOI and other bio-energy units will be registered under the current policy.



Bio Pellet

5. Approval/Clearance of projects

5.1 Approval/Clearance of Projects will be granted after evaluating/examining the project proposals on the following criteria:

- Detailed project report
- Availability of land
- Availability of power evacuation system for proposed project
- Documentary evidence of power purchase agreement or an undertaking in case of sale to third Party through open access or undertaking for sale of power in the power exchange
- NOC for allocation of water by the concerned Department/Authority

5.2 Upon fulfilment of the above criteria, the project will be considered as In-principally cleared and after deposition of Security Deposit; the project will be conveyed a Final approval by RREC.

6. Project Security Deposit

6.1 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.

6.2 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.

6.3 In case Developer/Power Producer fails to commission the project within scheduled commissioning period including extension as per clause 7.2, the Project Security amount shall be forfeited.

6.4 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.

6.5 If power producer withdraws the project after six months of depositing the project security, then the entire project security shall be forfeited.

Biomass Plant - Chattargarh, Bikaner



7. Time frame for completion of different activities:

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

7.1 Developer/Power Producer shall commission the Biomass based/Waste to Energy Power Project within 36 months from the date of approval of the Project.

7.2 Provided that extension in time schedule may be granted by the RREC after depositing penalty amount as under plus GST as applicable: -

S.No.	Delay Period	Penalty Amount
(a)	For delay upto 3 months	Rs. 25,000 per MW
(b)	For delay upto 6 months	Rs. 50,000 per MW
(c)	For delay upto 9 months	Rs. 75,000 per MW
(d)	For delay upto 15 months	Rs. 1,00,000 per MW
(e)	For delay upto 24 months	Rs. 1,25,000 per MW

SSC 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 SSC on case-to-case basis.

7.3 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.

7.4 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 final approval. Financial closure shall be completed by Power Producer within 4 months from date of final approval. Incentives allowed by RERC for early completion shall be applied as per tariff orders issued by RERC.

7.5 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 approvals arranged. The representative of RREC shall be present during commissioning of Power Project and commissioning report shall be issued by RREC. The incentives 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.

7.6 Obligations of the Power Producer under this Policy shall be relaxed during the period of Force Majeure. Post-registration, the time frame for completion of different activities is subject to Force Majeure conditions.

8. Grid Interfacing:

Power Evacuation, Grid Interfacing, Forecasting & Scheduling and dispatch of the Power for Bio Power Projects will be governed as per the provisions of this policy (Section-E) and relevant Regulations of RERC.

9. Power Purchase Agreement:

9.1 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.

9.2 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.

9.3 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.

9.4 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

10. Development of Waste Supply Chain:

State will establish the mechanism through which Waste Supply Chain ensured to the CBG plants

11. Settlement of Accounts:

Accounts of all transactions between the Power Producer and the Discoms/ RVPN regarding Price of Power and Wheeling Charges shall be settled on a monthly basis.

12. Power to Remove Difficulties

SLMCC is authorized to issue necessary clarification and amendments with regard to this section of the policy as and when required. If any doubt, dispute, difference or issues arise with regard to interpretation/implementation of this section of the Policy, State Level Sanction 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. The Energy Department shall issue necessary guidelines/ schemes/orders for the implementation of this Policy.



Sub Station

13. Members of the State Sanction Committee (SSC)

Below is list of members of SSC

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 Department, Member or their representative-Member
4. ACS/Pr.Secy./Secretary, Secretary, Revenue, or their representative–Member
5. ACS/Principal Secretary/Secretary, Industries, GoR
6. ACS/Principal Secretary/Secretary, Agriculture Deptt, GoR (Applicable only for CBG projects)
7. ACS/Principal Secretary/Secretary, Animal Husbandry Deptt, GoR (Applicable only for CBG projects)
8. ACS/Principal Secretary/Secretary, Rural Deptt, GoR (Applicable only for (Applicable only for CBG projects)
9. ACS/Pr.Secy./Secretary, Secretary, ULB/UDA, or their representative-Member (Applicable only for waste to Energy projects)
10. Chairman Discoms. -Member
11. Chairman, RREC-Member
12. MD, RREC-Member Secretary



Green Hydrogen Plant, Bherukheda, Bikaner



Section D: Green Hydrogen

1. Introduction

To meet its global commitment, Government of India has set a national target of 500 GW Renewable Energy generation by the year 2030. This will reduce dependence on conventional sources of energy. Rajasthan has added a generation capacity of more than 30 GW of Renewables in the last 2 decades which is the highest in India. Now, the State is exploring other options for development of non-fossil fuels.

Green Hydrogen is a non-fossil fuel which can fulfil the requirements of Industrial, Power, Transportation and Aviation sectors while reducing carbon emissions. It is also useful to produce Green Ammonia and could help in reducing the country's import bill. Ministry of Power, Government of India has also issued a National Green Hydrogen Policy in Feb 2022".

In the light of these, the State of Rajasthan aims to promote Green Hydrogen production through a series of incentives and simplified procedures.

2. Objectives

2.1. To become the pioneer state for Green Hydrogen Production and its derivatives. To reduce the dependency on import of Ammonia and Fossil Fuels.

2.2. To develop an ecosystem for production of Green Hydrogen for Refineries, Fertilizers and other Industries requiring Hydrogen as an input.

2.3. To create an environment for Industry and Research Institutions to focus on cutting edge research and to make Rajasthan the preferred destination for development of Green Hydrogen.

2.4. To develop a Green Hydrogen Manufacturing ecosystem (Electrolyser, compressor, storage and transport infrastructure.).

2.5. This section of the policy will focus mainly on:

i. Promoting Generation of Hydrogen and its derivatives/by products through RE Power
ii. Development of Green Hydrogen Parks.
iii. Promote Green Tourism in the State using of Green Hydrogen-based mobility.
iv. Promotion of Green Hydrogen Fuel Cells for transportation. Explore and support distributed applications of green hydrogen across Residential, Commercial, Industrial and Mobility sectors
v. Promotion of Green Hydrogen Equipment Manufacturing Industries.
vi. Promotion of research in cutting edge technology for Green Hydrogen.
vii. Promotion of Green Hydrogen generation for storage and generation of RTC (round the clock) power.
viii. Support the development of pilots across the Green Hydrogen Value Chain.

3. Targets

I. Producing 2000 kilo Tonnes per Annum (kTPA) of Green Hydrogen by 2030.
ii. Commission at least one Green Hydrogen Valley to cater to the demand from fertiliser plants and refineries within Rajasthan and in other States.
iii. Develop at least one Gigafactory for electrolyser manufacturing. The state should also aim to export these domestically manufactured electrolysers across the globe.
iv. Cater to at least 20 per cent of Green Hydrogen exports from India either as fuel, chemicals derived from Green Hydrogen or as technology products like electrolysers.
v. A minimum share of consumption will be met through Green Hydrogen by designated consumers in the State as per mandate prescribed in National Green Hydrogen Mission which shall be extended in phased manner.
vi. Blend up to 10 per cent Green Hydrogen (on a volume basis) in Natural Gas Pipelines for gas produced within Rajasthan by 2030.

4. Green Hydrogen Projects

4.1. Eligibility of Developers for Green Hydrogen Projects Developers, as defined below shall be covered under the provisions of this section of the Policy:

Category 1:
Develops Co-located Renewable Energy and Green hydrogen Generation Plant

Category 2:
Develops Green Hydrogen Generation Plant and remotely located RE Plant.

Category 3:
Develops Green Hydrogen Park/Hub/ Cluster/Valley

4.2. Green Hydrogen Generation Projects: -

4.2.1. The State will promote Generation of Hydrogen and its derivatives/ by products through Renewable Energy by setting up of Green Hydrogen Generation Plants and RE Plants in the State.

4.2.2. Green Hydrogen and its derivatives/by products can be generated through a Hydrogen Generation Plant by using Renewable Energy from a co-located Renewable Energy plant or from a remotely located Renewable Energy Plant within the State.

4.2.3. The remotely located Renewable Energy Plant can be set up by Green Hydrogen generators themselves within the State or can procure Renewable Energy from Third Party within the State.

4.2.4. Green Hydrogen Generators will be allowed to obtain renewable energy through Open Access from existing/new RE Projects as per relevant RERC Regulations and State Policies.

4.2.5. The State shall also promote Green Hydrogen Generation for power generation purposes. The Power Generation Plant can supply assured power to the grid using green hydrogen as per the requirements of the grid.

4.2.6. The overall target of 2000 kTPA can be taken with following allowable capacities in various categories for Green Hydrogen Projects:

1. RE Power Injection and Withdrawal at CTU (PGCIL) Network within State (No upper Cap)
2. Co-located Green Hydrogen Project with RE Projects (Up to 700 kTPA)
3. Green Hydrogen Projects with Round the Clock RE Power Supply (Up to 800 kTPA)
4. Green Hydrogen Project with normal RE Project at STU (RVPN) Network (Up to 500kTPA)



Site - Bherokheda Bikaner

5. Parks/Hubs/Clusters/Valley

The Green Hydrogen Generation Park is a concentrated zone/hub for development of Green Hydrogen Generation Plant with/without co-located Renewable Energy Generation Plant which provides developers, a well demarcated area with proper civil and power system infra-structure where the risk of projects is minimized, and a fast approval process is facilitated. The Green Hydrogen Park Developer creates supporting infrastructure and facilities including power evacuation, water arrangements, internal roads and administrative facilities

6. Development of Green Hydrogen Generation Park

1. The State shall promote development of Green Hydrogen Generation Parks. The Park Developer will submit an application in the prescribed online format to RREC for development of Green Hydrogen Generation Park along with a non-refundable process fee @ Rs. 10,000/ MW + GST subject to a maximum of Rs 10 Lac +GST for each Park. Registration of park will be carried out by RREC within a period of 30 days from the submission of application, complete in all respects

2. The Park Developer(s) shall be obliged to create common infrastructure facilities for development of Green Hydrogen Generation Plants(s) viz creation of power evacuation system, development of roads, road lights, water supply systems etc.

3. The Park Developer will be allowed to acquire agricultural land from landowners (Khatedars) for developing Green Hydrogen Generation Park(s) in excess of the ceiling limits in accordance with the provisions of Rajasthan Imposition of Ceiling on Agriculture Holding Act, 1973.

4. Allotment of Government land to Park Developer(s) for development of Green Hydrogen Generation Park will be considered on the recommendation of RREC.

5. The Park Developer(s) shall be responsible for registration of Green Hydrogen Plants within their park with RREC as per the provisions of this policy.

6. The State will also develop a Green Hydrogen Valley/Cluster at suitable location in State for facilitating all infrastructure required for Generation of Green Hydrogen and its derivatives without any upper cap on individual developers

7. Manufacturing of Equipment:

The Government intends to promote manufacturing facilities for Green Hydrogen equipments in Rajasthan that can help develop an ecosystem and support job creation in the State. The manufacturing equipment for Generation of Green Hydrogen like Electrolyser and other equipment as notified in the prevailing Rajasthan Investment Promotion Scheme (RIPS) from time to time.

8. Research

The State shall promote and facilitate Research and Development (R&D) of technologies related to generation of hydrogen, fuel cell technologies, and storage technologies.

The State shall facilitate industries with a robust ecosystem for Green Hydrogen manufacturing and to provide a cost-effective manufacturing environment. Research and Development (R&D) Centres with testing, skilling and incubation facilities shall be promoted.

9. Incentives/ facilities available to Green Hydrogen Generation projects

Green Hydrogen Generation Plants, Parks and Equipment Manufacturing Plants shall be treated as per the prevailing Rajasthan Investment Promotion Scheme (RIPS) as amended from time to time.

Benefit provided under RIPS, 2024

Clause 3.3.1.1 (RIPS, 2024)

Eligible Sunrise sector (Green Hydrogen) may choose to avail benefits from either the Sunrise Booster on Asset Creation Incentives or the Anchor Booster. Furthermore, the total value of all incentives and booster under the Investment Subsidy (SGST Reimbursement) must not exceed 100% of the State tax due and deposited each year, for a period of 7 years.

Clause 3.3.2.1 (RIPS, 2024)

A Sunrise Booster of 25% shall be applicable on the Asset Creation Incentive chosen by the eligible Enterprises (applicable for the first three units as defined under section 3.3.1)

Clause 3.3.2.2.2 - (RIPS, 2024)

Interest subvention

Eligible Sunrise sector (Green Hydrogen) are eligible for 5% interest subvention on term loan taken by Enterprises from financial institutional or State financial institutional or Banks recognised Banks recognized by Reserve Bank of India. The loan can be taken for an investment in plant & machinery, for a period of five years subject to maximum of 2.5% of the EFCI distributed equally over 5 years.

Clause 3.3.2.4 (RIPS, 2024)

Exemption & Reimbursements

- Exemption from payment of 100% electricity duty for 7 years;
- Reimbursement of 100% mandi fee/market fee for 7 years;
- Exemption from payment of 75% stamp duty and reimbursement of 25% stamp duty;
- Exemption from payment of 75% conversion charges and reimbursement of 25% conversion charges.

The following Incentives and facilitations for green hydrogen initiatives in Rajasthan:

9.1. Green Hydrogen Projects/Parks

Benefits prescribed under the prevailing Rajasthan Investment Promotion Scheme may be applicable to developers covered by categories 1,2& 3 as listed in Clause 4.1 of this section of the policy as amended from time to time.

9.1.1. Availability of Water:

Water Resource Department will allocate required quantity of water from IGNP canal/the nearest available source for cleaning of solar panels and auxiliary consumption for Solar PV Power Plants and water requirement for Green Hydrogen Generation Plants subject to the availability of water. In case of use of Brine water/Treated waste water for generation of Green Hydrogen, water will be allocated on priority basis.

Developer will intimate estimated water requirement to RREC along with the proposed source of water. After assessment/scrutiny, the case of water requirement shall be forwarded to the Water Resource Department. The modifications(s) required, if any, in the existing water resource system will be done by the Water Resources Department on the cost of the Developer/Power Producer.

9.1.2. Special Incentives

The following facilities, will be available on individual Green Hydrogen Plant capacity of maximum 50 kTPA, as covered by Categories 1 & 2 as listed in Clause 5.1 of this section of the policy for the first 500 kTPA (Kilo tons per annum with maximum 12,500 MW RE capacity @25 MW per kTPA) capacity established within the state or plants established up to 31stMarch, 2029 within the State, whichever is earlier. In case, after allocation of 500 kTPA capacity among developers @ 50kTPA, if capacity is not exhausted completely, the spare capacity will be allocated by SLEC to the developer beyond 50kTPA individually.

The Date of Commissioning of the plant shall be treated as the date established for the above purpose. These benefits will be applicable for 7 years from the Date of Commissioning of the projects

i. 50% waiver of Intra-state Transmission and Wheeling Charges, Electricity Duty for the power produced from Solar/ Wind plants (with/without storage) to be established for the aforesaid Green Hydrogen plants. Transmission losses and Wheeling Losses shall be applicable as determined by the State Regulatory Commission.

ii. The additional surcharge and cross subsidy charges shall be waived on the energy drawn from Wind/ Solar energy Plants (with and without storage facility) established as Captive Plant or from plant owned by their subsidiary/ other company for use in Green Hydrogen production plant within state.

iii. The facilities/Incentives, if not modified/changed in above, as available under prevailing state's Solar/Wind/Hybrid Energy Policy as amended from time to time shall be available to the Wind/Solar generation plant (with and without storage facility) to be established for green hydrogen production plant.

iv. The aforesaid benefits will be limited to the Green Hydrogen quantum in case of Green Hydrogen is generated with other byproducts collectively.

9.1.3. Banking

Banking of renewable power generated from solar/wind energy plant (with and without storage facility) established for green hydrogen generation plant shall be up to1/3rdof the energy injected during 15 minute time block basis at the consumption end. The energy shall be allowed to be banked for a period of 30 days.

Banking charges shall be the cost differential between the average tariff of renewable energy (Solar & Wind) discovered through competitive bidding for procurement by the distribution licensee during the previous year and the average market clearing price of the energy procured in Day Ahead Market (DAM) for distribution licensees during the month in which the renewable energy has been banked.

In case, there is no price discovery for procurement of RE (Solar & Wind) power in the previous year then the latest available average tariff of renewable energy (Solar & Wind) discovered through competitive bidding for procurement by the distribution licensee shall be considered.

The losses of power will also be adjusted during banking of the RE as per regulatory provisions.

The above provisions will be applicable for a duration of 25 years from the Date of Commissioning of a Green Hydrogen Generation Plant setup under the provisions of this policy.

9.1.4. RE Plant Size

The peak power generation capacity of Wind/Solar/Hybrid plant (with or without storage facility) shall be allowed up to 2.5 times of the contracted capacity of power connection for the associated Green Hydrogen Plant.

9.1.5. Incentives for Green Hydrogen generation through Brine Water/ Treated wastewater

Green Hydrogen Generation Plant through Brine water/Treated wastewater with co-located RE sources Government land will be provided on priority basis.



GH_2 Fuel Station

10. Role of RREC

RREC will act as a Nodal Agency for:

i. Registration of Green Hydrogen Generation projects;
ii. Approval of Hydrogen plant along with RE Projects;
iii. Development of Green Hydrogen Parks;
iv. Facilitating allotment of Government land;
v. Facilitating water allocation for Green Hydrogen Generation Plant/for auxiliary consumption and cleaning of Solar PV Plants;
vi. Facilitating approval of power evacuation plan, connectivity at STU/CTU and allocation of bays etc on behalf of State;
vii. Facilitating execution of PPA/WBA with Discom(s) of Rajasthan /RVPN/NVVN/SECI/RUVNL (as may be applicable); viii.Coordination with MNRE/NIWE/Industries department/Water Resources Department/Discoms of Rajasthan/RVPN/Central Agency/Other Relevant Agency.

11. Registration of Green Hydrogen Generation Projects

11.1. All projects as covered by Clause 4.1 of the policy installed in the State shall be required to be registered with RREC.
11.2. The Developer will submit an online application for registration to RREC in the prescribed format with requisite documents and details regarding capacity of Hydrogen Plant and RE Plant Capacity.
11.3. Each Developer/ Power Producer will deposit following non-refundable registration charge for RE Capacity with RREC (For 1 KTPA Green Hydrogen Plant, maximum 25 MW RE capacity will be considered).

S.No.	Project Capacity	Rate
1	For Project ≤100 MW capacity	Rs 30,000/- per MW
2	For Projects >100MWand≤500MW capacity	30 Lac +Rs 2.5 lac per 100 MW beyond 100 MW or part thereof
3	For Projects > 500 MW and ≤1000MW capacity	40 Lac +Rs.2 lac per 100 MW beyond 500 MW or part thereof
4	For Projects >1000 MW capacity	50 Lac+Rs.1 lac per 100 MW beyond 1000 MW or part thereof subject to maximum Rs. 80Lakh per project

11.4. GST and other charges, as applicable, shall be payable in addition to the registration charge. Registration will not confer any right on the Developer and will not create any obligation on the part of RREC.

11.5. Installation of Green Hydrogen Generation plant not registered with RREC and set up without prior approval of the Competent Authority as per policy provisions will be liable to be disconnected from the Grid. The Developer will be required to submit a certificate of registration of project with RREC to the Sub-Registrar or any other officer authorised by the Government for the registration of sale/lease deed of the land.

However, Registration of projects done under the aegis of Solar and Wind&Hybrid Policies, 2019 prior to the commencement of this policy shall be deemed to be valid and operative.

11.6. In case an existing Solar/Wind/Hybrid Project is being used exclusively for Hydrogen Generation, the existing registration number in the category will be assigned to the Green Hydrogen Project. In such case, Developer shall deposit difference of registration fees in RREC as mentioned at clause 11.3 and already paid registration charges, if any.

11.7. Developers can transfer their registered capacity or part thereof, to their 'holding', 'subsidiary', 'fellow subsidiary' or 'ultimate holding' company with the prior approval of RREC upon payment of an amount equal to 50% of the Registration Charges. However, the provisions of clause 11.5&11.6shall be applicable on the transferee.

11.8. Developers can transfer the registered capacity or part thereof, from one registration to another registration, with the prior approval of RREC upon payment of an amount equal of 25% of Registration Charges.

11.9. Developers can transfer their registered capacity or part thereof, to other Companies with the prior approval of RREC on payment of an amount equal to 60% of the Registration Charges.

12. Approval Mechanism

(See flow chart in Annexure-D1)

12.1. State Level Empowered Committee (SLEC):

i) Chief Secretary, GoR (Chairman).

ii) ACS/Principal Secretary/Secretary, Industries, GoR.

iii) ACS/Principal Secretary/Secretary, Energy, GoR.

iv) ACS/Principal Secretary/ Secretary, Revenue, GoR.

v) ACS/Principal Secretary/Secretary, Water Resources Department, GoR.

vi) CMD, Rajasthan Rajya Vidyut Prasaran Nigam Ltd.

vii) Chairman Discoms.

viii) Chairman, Rajasthan Renewable Energy Corporation Ltd.

ix) MD, Rajasthan Renewable Energy Corporation Ltd., (Member- Secretary).

12.2. In-principle clearance of Green Hydrogen Generation Projects:

In principle clearance of projects will be granted by the State Level Empowered Committee after evaluating/examining the project proposals on the following criteria:

- Detailed Project Report of Hydrogen Plant and RE Plant.
- Financial Capability of the Power Producer (Annexure-D5).
- Availability of land for RE Plants & Hydrogen Plant.
- Availability of water for Green Hydrogen Generation Plant.
- Availability of Power Evacuation System for proposed RE project.
- Documentary Evidence of Power Purchase Agreement or an undertaking in case of purchase of RE power from 3rd Party.

12.3. The Developer shall obtain requisite clearance /approvals from Industries department, Water Resources Department and other department /agencies required for setting up of Hydrogen Generation Plant as per their relevant Rules/ Regulations/ Policies.

12.4. The Developer shall ensure compliance of safety and operational norms/Standards as prescribed by competitive authority of State Government/Central Government.

12.5. Timeline for In-principle Clearance:
Developers to whom Government land is allotted will have to apply for in-principle clearance of the project within 3months from the date of signing of the lease Deed of the allotted Government land. If Developers fail to apply for in-principle clearance within the time prescribed, RREC will recommend for cancellation of allotment of Government land with the approval of SLEC.

13. Security Deposits (see Annexure-D2):

13.1. For projects under Clause 12.2:
After In-principle clearance of the projects under clause 12.2by the State Level Empowered Committee (SLEC), the Developer will be required to deposit a security amount specified at Annexure-D2. Provided that in case the Green Hydrogen Developer purchases RE power from 3rd Party, no security will be required to be submitted. In case developer has deposited Security amount for allotment of Government Land, no security will be required to be deposited

In case, the Developer fails to deposit the security money within the stipulated time as above, the In-principle clearance shall be deemed to be cancelled without any notice.

13.2. The Developer, who has submitted the project security within the prescribed time period, shall be required to apply for final approval within 6 months from the date of issue of In-principle clearance, failing which, in-principle clearance shall be deemed to be cancelled without any notice.

13.3. In case the Developer wants to withdraw his project within 6 months of depositing the security deposit, or In-principle clearance has been cancelled under deemed provision of Clause 13.2, then 25% Security amount will be forfeited and balance 75% amount of the Security will be refunded to the Developer/Power Producer on his written request. This clause will be applicable only for new projects registered under this policy.

13.4. The security amount deposited by the Developer shall be non-convertible and non-transferable.

13.5. The security deposit shall be refunded to the Developer in proportion to the capacity commissioned after commissioning of such capacity. The remaining amount shall be forfeited after the expiry of the scheduled commissioning period including extension as per Clause 15.

14. Final Approval:

All In-principle cleared projects will be conveyed final approval by RREC on submission of Security Deposit under clause 13.

15. Time frame for completion of Green Hydrogen Generation Project:

15.1. The time schedule for completion of projects under Clause 13.2 will be as per Table-5 subject to Force Majeure conditions provided that extension in time schedule maybe granted by the RREC on case to case basis after depositing penalty amount as mentioned in Annexure-D3.

15.2. SLEC may consider extension beyond 15 months where there is a reasonable certainty of commissioning of the project. In such cases, extended completion schedule and penalties shall be decided by SLEC on a case-to-case basis.

16. Power Purchase Agreement (PPA)

16.1. Developer as defined in Clause 4.1 of this section of the Policy, will execute Power Purchase Agreement with RE Developer/ Power Producer in case of purchase of RE power at mutually agreed terms and conditions.

16.2. The Green Hydrogen Generator may execute PPA with Discoms for sale of firm power to Discoms, in case hydrogen is being used to generate power and to supply firm power, as per the requirement of Discoms. The Discoms will select the Green Hydrogen Generator through a transparent mechanism including competitive bidding process.

17. Wheeling and Banking Agreement (WBA)

Green Hydrogen Developer/Power Producer shall execute a Wheeling and Banking Agreement (WBA) with DISCOM(s). In case, the transmission system of RVPN is also used then power producer will execute a separate Transmission Agreement with RVPN.



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18. Assignment of PPA/WBA:

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

i. After completion of the project and its connectivity to the grid;
ii. Consent of RREC & RVPN/Discom(s) and related parties;
iii. On payment of Rs. 2.00 lac per application to RREC (GST will be payable as applicable).

18.2. In case the project is financed by any Financial Institute/Lender, name of the Financial Institute/Lender may be included in PPA/WBA on request of Developer/ Power Producer.

19. Renewable Energy Development and Facilitation Charges (REDFC):

In case the Developer purchases Solar/Hybrid Power for generation of Green Hydrogen from parties other than Discoms, then Solar/Hybrid Power Generator shall contribute Renewable Energy Development and Facilitation Charges (REDFC) for Solar Components as per the provision of this policy as amended from time to time or such charges as per RE Policies prevailing at the relevant time.

20. Land:

20.1. Allotment of Government Land to Green Hydrogen Generation Plant:

20.1.1. Government land will be allotted for setting up of Green. Hydrogen Generation Plant in RIICO Industrial area or Revenue land as per Land allotment rules of RIICO and Revenue Department respectively.

20.1.2. Land will be allotted by RIICO or Revenue Department to the developers on priority within 6 months from the date of recommendation by SLEC.

20.2. Allotment of Government Land to Renewable Energy Plant:

20.2.1. The Government land will be allotted to Developers for setting up of Renewable Energy Plant as per the provisions of 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.

20.2.2. RREC will recommend, on a case to case basis, to the concerned District Collector for allotment of Government land only on submission of cash security deposit by demand draft/RTGS in favour of RREC, Jaipur.

20.2.3. The security deposit will be refunded to the developer in proportion to the commissioned capacity of the project on written request of the applicant. The security deposit shall be forfeited in case the allotted land is not put to use within the specified period as per allotment rules. If land is not allotted, security deposit will be refunded, on the written request of the applicant.

20.2.4. For setting up Renewable Power Plant based on a different technology, maximum land area which can be allotted to the Power Developer/Producer shall be as per Annexure-D3

20.2.5. For RE Power Projects with storage systems, additional land will be allotted as per the rules prescribed by the Revenue Department, Government of Rajasthan (GoR).

20.3. Project on Private Land:

The State shall promote setting up of Green Hydrogen Plant and/ or Power Project / RE Farm/Green Hydrogen Valley on private land. Developers shall be permitted to set-up Project/Plant on private agriculture land without the requirement of land conversion in accordance with the provisions of Rajasthan Tenancy Act 1955 and Rajasthan Land Revenue Act 1956 and the rules made thereunder.

Developers shall also be allowed to acquire/hold private land from the title holders (Khatedar) for setting up of Solar Power Plant in excess of ceiling limit in accordance with the provisions of Ceiling Act, 1973.

21. Power Evacuation, Grid Interfacing, Forecasting & Scheduling and dispatch of RE Power:

Power Evacuation, Grid Interfacing, Forecasting & Scheduling and dispatch of RE Power for Green Hydrogen Projects will be governed as per the provisions of this policy (Section-E)and relevant Regulations of RERC.

22. Power to remove difficulties:

SLEC is authorized to issue necessary clarifications and amendments under this section of Policy as and when required. If any doubt, dispute, difference or issue arises in regard to interpretation/implementation of this Policy, State Level Empowered 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 the written representation from the stakeholders. In order to implement this Policy and to remove difficulties being faced by Stakeholder, the Energy Department in consultation with other Departments shall issue necessary guideline/schemes from time to time.

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Section E: General Provisions

1. Evacuation and Grid Interfacing:

1.1 Evacuation and Grid Interfacing through InterState Transmission System:

Inter State Transmission System is being developed in the State for evacuation of RE power to other States.

1.2 Evacuation and Grid Interfacing through Intra State Transmission System:

1.3 Development of Power Evacuation System in RE Potential Areas:

RVPN will prepare an action plan for development of Power Evacuation Network taking into consideration-

(I) Existing and forthcoming evacuation system of ISTS

(ii) Existing State Transmission Utility Network

(iii) RE potential of the area

(iv) Future energy demand and RE integration with conventional power.

1.4 Evacuation of RE power generated shall be made through the transmission and distribution network being maintained by RVPN and DISCOMs respectively.

1.5 Grid Interfacing:

The grid interfacing arrangements for power Renewable Energy Sources will be made by Developer/RVPN/DISCOM as under:

i. Pooling Sub-station-

Interfacing arrangements such as transformers, panels, kiosks, protection, metering, HT lines from the points of generation to the Pooling Sub-station including the Pooling Sub-station shall be developed and maintained by the Developer/ Power Producer as per the Grid Code applicable from time to time and will also bear its entire cost.

ii. Receiving Sub-station-

RVPN/Concerned DISCOM shall finalize the location of Receiving Station on which the electricity generated will be received at minimum 33 kV level in consultation with RREC.

1.6 Grid Connectivity

For creation of proper facility for receiving power at the receiving sub-station of RVPN/DISCOM on request of Developer/ Power Producer, the Developer/Power Producer shall pay grid connectivity charges, as finalized by RERC from time to time to RVPN/DISCOM for which minimum capacity to be considered for various voltage level be as under:

SN	Voltage level	Capacity
1	11 kV	3 MW
2	33 kV	15 MW
3	132 kV	50 MW
4	220 kV	132 MW
5	400 kV	515 MW

These charges will be paid by the Developer/Power Producer to RVPN/DISCOM. The charges will include cost of complete line bay (including civil works) and its interconnections with existing electrical system.

Note: The Power Producer at 11 kV voltage will have the option to deposit aforesaid charges to Discom or create bay infrastructure by themselves.

1.7 Transmission and Distribution Network

i. For augmentation of transmission/ distribution systems to evacuate the power from receiving Sub-station, RVPN/DISCOM shall develop/augment the necessary transmission/ distribution network within mutually agreed timeframe.

ii. For grid connectivity/construction of line to be arranged by RVPN/DISCOM on request of Developer/ Power Producer, the Developer/Power Producer shall submit a time frame for construction of their plant along with bank guarantee equivalent to the cost of bay and dedicated transmission/distribution line along with an undertaking to use the system within prescribed time period. RVPN/DISCOM(s) will provide the Power Evacuation facilities within the scheduled time frame. The bank guarantee shall be returned to the Developer/Power Producer after commissioning of the project upon depositing amount of penalty, if any, on account of delay in the utilization of the system.

iii. In case line bay and grid has been built by RVPN at a particular system voltage (say 33kV), and Power Producer at a later date wants to supply the power on higher voltage (say 132kV), the requisite modification, like addition of line bay on higher voltage, interconnection with main bus etc. shall be done by RVPN as a deposit work on behalf of the Power Producer subject to its feasibility.

iv. In case a Power Producer initially connects its feeder to DISCOM's substation and later on desires to connect the feeder to RVPN's Sub-station, the additional line shall be constructed by Power Producer and the addition of line bay in RVPN substation shall be done by RVPN as deposit work on behalf of Power Producer.

v. RVPN/DISCOM shall provide the inter-connection facility one month before the scheduled COD as intimated by the Developer subject to condition that the grid connectivity charges are deposited by the Developer/Power Producer, and sufficient time is available with RVPN/DISCOM for creating the interconnection facility.

vi. The Developer/Power Producer shall install necessary current limiting devices such as Thyristor in the generating equipment. Capacitors of sufficient rating shall be provided to ensure the maintenance of average power factor as per the requirement of State Load Dispatch Centre, measured at metering point.

vii. In case the Developer/Power Producer injects amount of power which is more than the approved/contracted power into the Grid, then excess power will not be adjusted/accounted for by DISCOM/RVPN. Such power plant will be liable to be disconnected till such time the excess installed capacity is removed/de-commissioned.

viii. **Transmission line from Pooling Sub-station to Receiving Sub-station:**

The evacuation system beyond Pooling Sub-station till the nearest Receiving Sub-Station shall be developed as under:

a. Grid Connected Power Plants commissioned under Tariff Based Bidding for sale of power to DISCOMs of Rajasthan

The power evacuation transmission line from generating plant substation/pooling sub-station to the receiving RVPN/ DISCOMs sub-station will be laid as per terms & conditions of bid document and Power Purchase Agreement.

b. Grid connected Power Plants commissioned under clause 9.3, 9.4, 11, 12.2, 12.3.2, 13.1(b) & 14 of Section-A or Section B, C &D.

The power evacuation transmission line from the generating plant sub-station/pooling sub-station to RVPN/DISCOMs receiving sub-station will be laid as per regulations of RERC.

ix. The DISCOMs of Rajasthan will develop power systems as per the requirement of Rooftop Solar Systems in line with the guidelines/ orders issued by RERC.

1.8 The Developer/Power Producer shall comply with the Grid Code including Load Dispatch and System Operation Code, Metering Code, Safety Code, relevant regulations/orders of the Commission etc. as applicable from time to time in the State of Rajasthan.

1.9 The Developer/Power Producer who is seeking power evacuation approval on STU/CTU networks will have to submit land documents/ details as per the procedure prescribed by CTU/STU for granting connectivity.

1.10 Reactive Power Carges:

The drawl of reactive power shall be charged by RVPN/DISCOMs as per the RERC Regulations, as amended from time to time.

1.11 Common Pooling Sub-Station:

Power Producers may build Common Pooling Sub-Station to evacuate the generated solar/ wind/hybrid power to RVPN/DISCOM substation through common transmission line with separate metering system at the Common Pooling Sub-Station, and main metering system at RVPN/ DISCOM Sub-Station.

1.12 Timeline for utilization of Power Evacuation facilities

i. For providing evacuation facilities to the Developers/Power Producers, RVPN/DISCOMs will update the availability of transformation capacity and bay availability on its website and the approval will be disposed within one month by RVPN/DISCOMs.

ii. In case of non-approval of power evacuation by RVPN/DISCOM(s) within specified time frame, the case will be put up before SSC for suitable decision, on the request of the Developer/Power Producer.

iii. The Power Evacuation facilities granted by DISCOMs/RVPN as per the grid connectivity procedure/guidelines of DISCOMs/RVPN, will be utilized by Developers/ Power Producers within 3 years from the date of approval, otherwise power evacuation approval may be allocated to other Developer/Power Producers on priority basis.

iv. In that case, the developer/power producers need to apply for revalidation of the power evacuation approval which shall be evaluated and approved by RVPN/DISCOMs as per available evacuation capacity.

2. Measures for Grid Stability:

2.1 RVPN/DISCOMs shall take appropriate technical measures for ensuring grid stability and safety.

2.2 RVPN will develop a plan for storage system requirement for Rajasthan State to mitigate un-predictability and variability of renewable energy.

(i) RVPN will study impact of un-predictability and variability of RE power on the grid and requirement of storage system at grid end to reduce the same.

(ii) A plan for examining financial and technical viability for development of storage system at the Grid Sub-Station level will also be prepared by RVPN.

3 Forecasting & Scheduling:

I. All Power Projects shall forecast and schedule their generation as per Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010, RERC (Intra-state ABT) Regulations, 2006, RERC (Rajasthan Electricity Grid Code) Regulations, 2008 and RERC (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2017 as amended from time to time.

ii. SLDC will ensure MUST RUN Status of RE Plants in the State and maintain the data of RE Power Curtailment in transparent manner.

iii. SLDC will develop infrastructure for Forecasting Scheduling with financial support from Rajasthan Renewable Energy Development Fund for access of real time generation data.

iv. A Committee consisting of following members under the Chairmanship of Chairman & Managing Director, RVPN shall be constituted for monitoring of Solar & Wind generation, forecasting & scheduling and curtailment issues:

1. Director (Operation), RVPN.
2. Director (Technical), RVPN.
3. Director (Technical), RREC.
4. Chief Engineer, RUVNL
5. Chief Engineer (LD), RVPN – Convener.
6. Two members appointed by the State Government from the persons of eminence in power sector and representatives of Solar & Wind Power Industry.

The Energy department will be the Administrative Department of this Committee.

v. For the stability of Grid, the State will initiate steps to achieve accurate forecasting & scheduling of RE Power Projects with the technical support from MNRE/NIWE. RVPN/SLDC will collaborate with NIWE for such technical support.

4 Commissioning of the Projects

The Project under bidding mode will be commissioned as per the procedure prescribed under Bid documents/PPA, if specified. Otherwise such projects and Projects covered under non bid category (Captive/3rd Party sale/any other mode) will be commissioned as per policy provision. Discoms/RUVITL will ensure commissioning of the project in a single stage for all activities such as connectivity with grid, synchronization and Commissioning etc on receipt of request from RREC for commissioning.

5 Savings

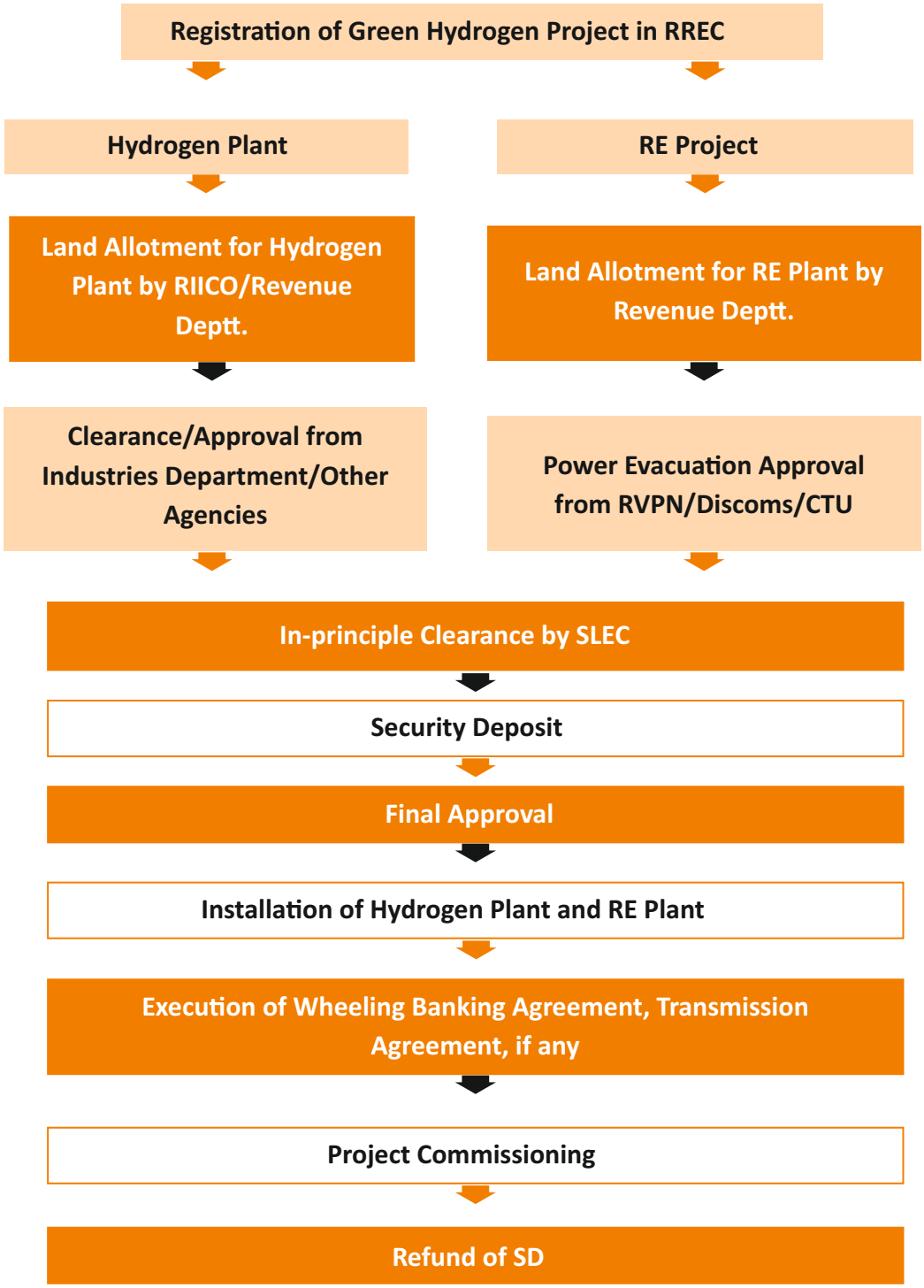
The Power Plants already approved and/or commissioned before commencement of this Policy will continue to be governed by the Policy/Regulations prevailing at the relevant time.

6 Regulation

The provisions under this section of this policy shall be the guiding principles for Rajasthan Electricity Regulatory Commission.

Annexure-D1

Flow Chart of Green Hydrogen Project Establishment



Annexure-D2

Various Charges

1. Green Hydrogen Registration Charges:

Table-1

1	Project Registration	S.No.	Project Capacity	Rate
		1	For Project ≤100 MW capacity	Rs 30,000/- per MW
		2	For Projects >100MWand ≤500MW capacity	30 Lac +Rs 2.5 lac per 100 MW beyond 100 MW or part thereof
		3	For Projects > 500 MW and ≤1000MW capacity	40 Lac +Rs.2 lac per 100 MW beyond 500 MW or part thereof
		4	For Projects >1000 MW capacity	50 Lac+Rs.1 lac per 100 MW beyond 1000 MW or part there of subject to maximum Rs. 80Lakh per project
2.	Park Registration		Rs. 10,000 per MW RE capacity plus GST subject to Maximum Rs. 10 Lac per park	

2. Security Deposit

If Green Hydrogen Developer sets up own RE plant for Green Hydrogen Generation Security Deposit:

Table-2

Project Capacity	< 2000 MW	≥ 2000 MW,
Solar	Rs. 1 Lac/MW by demand draft/RTGS in favour of RREC.	Rs. 1 Lac/MW up to 2000 MW by DD/RTGS and for exceeding capacity, Rs. 1 Lac/MW in form of Bank Guarantee.
Hybrid	Rs. 1 Lac/MW by demand draft/RTGS in favour of RREC.	Rs. 1 Lac/MW up to 2000 MW by DD/RTGS and for exceeding capacity, Rs. 1 Lac/MW in form of Bank Guarantee.
Wind	Rs. 1 Lac/MW by demand draft/ RTGS in favour of RREC.	Rs. 1 Lac/MW up to 2000 MW by DD/RTGS and for exceeding capacity, Rs. 1 Lac/MW in form of Bank Guarantee.

i. In case, Green Hydrogen Developer procures RE Power from 3rd Party Security Deposit-NIL

3. Extension fees:

In case of delay in scheduled commissioning period:

Table-3

a)	For delay up to 1 month	Rs 25,000 per MW RE Capacity plus GST
b)	For delay up to 3 months	Rs 50,000 per MW RE Capacity plus GST
c)	For delay up to 6 months	Rs 1,00,000 per MW RE Capacity plus GST
d)	For delay up to 9 months	Rs 1,50, 000 per MW RE Capacity plus GST
e)	For delay up to 15 months	Rs 2,00,000 per MW plus GST

Annexure-D3

Land requirement and Extension in Timelines

1. Maximum Land area allotable to the RE Projects

Table-4

S. No.	Technology	Maximum land area for Solar Plant	Maximum land area for Hybrid Plant
I	SPV on Crystalline Technology.	2.0Hect./MW	2.5 Hect./MW
ii	SPV on Crystalline Technology with tracker.	2.5Hect./MW	2.5Hect./MW
iii	SPV on Thin Film/Amorphous Technology with or without tracker.	2.25Hect./MW	3.0Hect./MW
iv	Solar Thermal (CSP)- Parabolic Trough / Tower/Other Technology with and without storage	a) Up to PLF of 21%: 3.0 Hect./MW b) For every 1% increase in PLF, 0.15 Hect./MW additional land will be allotted.	-
v	Maximum land area for Wind Plant	2.5 Hect/MW	

2. Project Completion Time schedule from approval/Clearance

Table-5

Type of RE Projects/ Hydrogen	Completion Time schedule
Up to 25MW RE capacity and/or 1 kTPA Hydrogen Plant	Within 15 months from the date of final approval
More than 25MW and up to 100 MW RE capacity and/or >1 kTPAto4 KTPA Hydrogen Plant	Within 18 months from the date of final approval
More than 100 MW and up to 200 MW RE capacity and/or >4 KTPA to 8 kTPA Hydrogen Plant	Within 24 months from the date of final approval
More than 200 MW RE capacity and/ or >4 KTPA to 8 kTPA Hydrogen Plant	Within 36 months from the date of final approval

Annexure-D4

Net Worth Criteria

The Developer/Power Producer desirous of setting up of Green Hydrogen Project along with RE Power Plant in State of Rajasthan must fulfil the following minimum financial criteria.

A. Qualification Criteria for RE Projects:

Net Worth

The "Net Worth" of the company should be equal to or greater than the value calculated at the rate of Rs 1 Crore or equivalent US$ per MW of the project capacity subject to maximum ceiling of net worth of Rs. 10,000 Cr for the project. The computation of Net Worth shall be based on unconsolidated audited/unaudited accounts of the company. For the purpose of the computation of net worth, the best year in the last four years including current running year shall be considered. The Company would thus be required, to submit annual audited accounts for the last three financial years and for part of the current running year (Un-Audited), while indicating the year, which should be considered for evaluation, along with a certificate from a Chartered Accountant to demonstrate the fulfilment of the criteria.

For companies, which are newly incorporated, the Net Worth criteria should be met seven days prior to the date of submission of application by the Project Developer. To demonstrate fulfilment of the criteria, the Project Developer shall submit a certificate from a Chartered Accountant certifying the Net Worth on the date seven days prior to submission of application. Further, the Project Developer shall submit the un-audited financial statements of the company for the date on which the Certificate of Chartered Accountant has been obtained.

{Note: For the Qualification Requirements, if data is provided by the Project Developer in foreign currency, equivalent rupees of Net Worth will be calculated using bills selling exchange rates (card rate) USD/INR of State Bank of India prevailing on the date of closing of the accounts for the respective financial year as certified by the Project Developer's banker.

For currency other than USD, Project Developers shall convert such currency into USD as per the exchange rates certified by their banker prevailing on the relevant date and used for such conversion.}

Net Worth calculation for an individual/ partnership firm

Net-Worth = Proprietors/Partner's Capital reflecting in the Audited Balance Sheet

Add: Free Reserves (Including the Credit balance of Reserve and Surplus appearing in the Balance Sheet)

Subtract: Intangible Assets

Subtract: Miscellaneous Expenditures to the extent not written off and carry forward losses.

Net Worth calculation for a Company

Net-Worth = Paid up Share capital which includes

1. Paid up Equity share capital and
2. Fully, compulsorily and mandatorily convertible Preference Shares and
3. Fully, compulsorily and mandatorily convertible Debentures)

Add: Free Reserves
(Including share premium provided it is realized in Cash or Cash equivalents.)

Subtract: Revaluation Reserves

Subtract: Intangible Assets

Subtract: Miscellaneous Expenditures to the extent not written off and carry forward losses.

For the purposes of meeting financial requirements only unconsolidated audited annual accounts shall be used. However, audited consolidated annual accounts of the Project Developer may be used for the purpose of financial requirements provided the Project Developer has at least twenty six percent (26%) equity in each company whose accounts are merged in the audited consolidated account and provided further that the financial capability of such companies (of which accounts are being merged in the consolidated accounts) shall not be considered beyond the equity participation of Project Developer.

In case of a Consortium the financial requirement to be met by each Member of the Consortium shall be computed in proportion to the equity commitment made by each of them in the Project Company. Any consortium, if selected shall incorporate a Project Company with equity participation by the Members in line with consortium agreement before signing the PPA/WBA/Wheeling Agreement. The Project Developer may seek qualification on the basis of financial capability of its Parent Company.

In case of land/any other asset, only the book value will be considered. The value of land/any other assets will not be re-valued for calculating net worth. Any reserve created due to this shall not be counted for calculating Net worth.

Annexure-D5

Other Benefits under RIPS, 2024

Clause 3.3.2.3.4 Additional benefits for Power Intensive Sectors

Sunrise Enterprises operating in Power Intensive Sectors under Annexure-9.6 (which includes Solar Cell Manufacturing & New Battery Tech)shall be eligible for additional benefits.

Additional reimbursement for Power Intensive Sectors

The Enterprises shall be eligible to avail additional 5% reimbursements on State tax due and deposited for a period of years.

OR

The Enterprises shall be eligible to avail 5%- point VAT reimbursement on PNG for a period of 7 years.

Inclusion of investment in Captive Power Plants/Group Captive Power Plants in EFCI

Enterprises investing in captive renewable power plants will be eligible to include 51% of the said investment in their EFCI. Asset Creation Incentives basis their respective slabs will be applicable on the EFCI

Enterprises entering into group captive arrangements (12+ years) shall be eligible to include 100% of their said investment in their EFCI. Asset Creation Incentive basis their respective slabs shall be applicable on the EFCI

Annexure-9 (Clause 9.1.2)

Pumped Hydro Storage manufacturing and ElectrolyzerManufacturing included in Manufacturing Sectors eligible to be considered for the Sectoral Anchor benefit

Annexure-9.4 :List of manufacturing Thrust Sectors

This includes Renewable Manufacturing, Pumped Hydro Storage manufacturing &Electrolyzer Manufacturing.

Clause 3.1.3.2.2

Eligible Manufacturing Enterprises which operated in Thrust Sector (annexure 9.4) shall be eligible for a Thrust Booster of 10% over the Asset Creation Incentives amount.

Ceiling mentioned in Section 3.1.3.1 with respect to specific Asset Creation Incentivesare inclusive of additional benefits received from thrust booster.

Clause 3.2.2.2- Interest subvention

5% interest subvention shall be allowed on term loan taken by Manufacturing Enterprises from financial institutional or State financial institutional or Banks recognised Banks recognized by Reserve Bank of India, for making an investment in plant & machinery or equipment/plant related apparatus (constituted a part of the EFCI) for a period of 5 years subject to maximum of 2.5% of the EFCI distributed equally over 5 years.

Annexure-D6

Definitions

1. **ABT means** Availability Based Tariff;

2. **ACC means** Advanced Chemistry Cell Battery Storage as are the new generation advance energystorage technologies that can store electric energy either as electrochemical or as chemical energy and convert it back to electric energy as and when required.

3. **Act means** Electricity Act 2003, including amendments thereto.

4. **BESS means** Battery Energy Storage Systems shall mean the system(s)/projects utilizing methods and technologies such as electrochemical batteries (Lead Acid, Li-ion, solid state batteries, flow batteries, etc.), providing a facility that can store chemical energy and deliver the stored energy in the form of electricity, including but not limited to ancillary facilities (grid support., for example). Such systems may be co-located with RE Generating Stations, or may be operated on standalone basis (as defined under the Guidelines for Procurement and Utilization of Battery Energy Storage Systems as part of Generation, Transmission and Distribution assets, along with Ancillary Services)

5. **Biomass Power Plant means** the power plant which generates electricity from biomass sources.

6. **Biomass Co-Firing - stands** for adding biomass as a partial substitute fuel in high- efficiency coal/lignite-based boilers.

7. **Biomass means** forestry based & agro-based industrial residues, energy plantations, forestry and agro-residues.

8. **Biomass Power Producer/ Co-Firing 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 by these sources.

9. **"Bio-Ethanol" means** a type of alcohol that is produced by fermenting biological matter, such as crops or waste products, to create a fuel alternative to petrol

10. **"Bio-coal" a solid fuel** that is produced from biomass through a process called pyrolysis or torrefaction.

11. **"Bio-Gas" is a renewable energy source** that is produced when organic matter is broken down by microorganisms in the absence of oxygen.

12. **Briquettes - Biomass briquettes are a biofuel substitute** made of bio degradable green waste with lower emissions of greenhouses gases and carbon dioxide then traditional fuel sources.

13. **"Compressed Biogas (CBG)" is a renewable fuel made** from purified biogas that has a high methane content produced from biomass/bio-waste including energy plantation or as defined by MNRE, GoI

14. **CAPEX Mode means** the mode under which entire investment is to be incurred by the power consumer for installation of solar power plant

15. **CEA means** Central Electricity Authority.

16. **CTUIL means** Central Transmission Utility of India Limited

17. **"Ceiling Act, 1973" means** the Rajasthan Imposition of Ceiling on Agricultural Holdings Act, 1973;

18. **Central Agency means** National Load Dispatch Centre (NLDC) as designated by the Central Electricity Regulatory Commission vide Order dated 29.01.2010 for the purposes of the REC Regulations;

19. **"CERC" means** the Central Electricity Regulatory Commission, constituted under sub-section (1) of Section 76 of the Electricity Act, 2003;

20. **CERC REC Regulations means** Central Electricity Regulatory Commission (Terms & Condition for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 notified by CERC vide Notification dated 14.01.2010 as amended from time to time;

21. **COD means** Commercial Operation Date i.e., the date when the Power Plant gets commissioned as per rules/provisions;

22. **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;

23. **Commission/RERC means** the Rajasthan Electricity Regulatory Commission.

24. **Contract Demand means** regular contract demand plus standby contract demand, if any, of the Consumer with Discom.

25. **CPP or Captive Power Plant means** Captive Power Plant as defined in Electricity Act, 2003 and Electricity Rules, 2005;

26. **CPSU means** Central Public Sector Undertaking.

27. **CSP means** Concentrated Solar Power;

28. **CTE means** Consent to Establish.

29. **CTO means** Consent to Operate.

30. **Discom means** a distribution licensee, such as Discom Jaipur, Discom Jodhpur and Discom Ajmer.

31. **Developer means** a person who set up RE Plant, developer infrastructure and generate electricity from Renewable energy as per this policy;

32. **DISCOM of Rajasthan means** a distribution licensee of the State, such as Jaipur Discom, Jodhpur Discom and Ajmer Discom.

33. **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(I) of rule 2 of the Rajasthan Stamps Rules, 2004.

34. **DPR means** Detailed Project Report.

35. **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.

36. **Energy Storage Systems or ESS shall mean** the system(s) installed in addition to the solar PV and/or wind power capacity as part of the

project, that can capture energy produced at one time for use at a later time or any system storage energy as defined by MNRE, GoI;

37. **ESO means** Energy Storage Obligation

38. **"Financial year" means** a period commencing on 1stApril of a calendar year and ending on 31st March of the subsequent calendar year;

39. **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 Producer or Developer and which results inPower Producer's/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;

40. **Form means** a form appended to this Policy.

41. **Generating Plant Sub Station means** substation developed by the Power Producer for interface with the receiving station.

42. **Government or State means** Government of Rajasthan or the State of Rajasthan respectively

43. **Government Land means** Revenue land which can be allotted/allowed to use for setting up of Renewable Energy Projects (Solar/Wind/ Hybrid/Biomass/CBG/Green Hydrogen including land usable for energy plantation etc) or for RE Parks as per applicable revenue rules of the Government.

44. **Gram Panchayat means** Panchayat established under the Rajasthan Panchayat Raj Act, 1994 (Rajasthan Act No. 13 of 1994).

45. **Green Hydrogen means** hydrogen generated using renewable energy sources as defined by MNRE, GoI.

46. **Green Hydrogen Developer/Producer means** person who develops Green Hydrogen Generation Plant through RE Power.

47. **Green Hydrogen Generation Plant means** the plants generating Hydrogen through electrolysis of water/brine water/waste treatable water or from biomass through thermo-chemical and biochemical routes or through any suitable technology as defined by GoI by using renewable including banking of renewable energy.

48. **Green Hydrogen Park developer means** an entity which is involved in the development of Green Hydrogen Parks/Valley/Hub and related infrastructure.

49. **Green Hydrogen Project/Plant means** the plants generating Green Hydrogen as a main product by electrolysis of water using Renewable Energy Sources or as a by product through any chemical process using Renewable Energy or as defined by Ministry of New & Renewable Energy, GoI;"

50. **Grid Code means** Rajasthan Electricity Regulatory Commission (Rajasthan Electricity Grid Code) Regulations, 2008 / Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 as amended from time to time;

51. **Gross Metering means** methodology under which the entire electricity generated by the Rooftop/ Ground mounted Solar PV

System/Any other RE Plant set up in the premises of the consumer is delivered to the distribution system of the Licensee;

52. **GST means** Goods and Services Tax;

53. **"HLSC" means** High Level Screening Committee.

54. **HAM means** Hybrid Annuity Model

55. **Hydro Power Projects means** Large Hydro Power Projects (LHP) having capacity more than 25 MW and all Small Hydro Projects (SHPs), commissioned after 8th March, 2019 or as defined by MNRE/MoP, GoI.

56. **"Hybrid Project" means** a power project which generates power by combining conventional and non conventional energy sources or combining of two or more non-conventional (wind & Solar) energy sources and feeding the generated power into electricity grid through a common pooling station. The Project capacity will be the maximum AC capacity that would be injected into Grid. However, in case of source wise power injected into grid from different location, the project capacity will be considered sum of all power source capacity injected from different location.

57. **Interconnection Line means** Transmission/ Distribution Line connecting Generating Plant Sub-station/Pooling Sub-station of Developer /Power Producer to Receiving Sub-station of ISTS/RVPN/Discoms of Rajasthan.

58. **Inter-connection Point shall mean** a point at Extra High Voltage (EHV) substation of Transmission Licensee or High Voltage (HV) substation of distribution licensee, as the case may be, where the electricity produced from the RE generating station is injected into the Grid;

59. **IREDA means** Indian Renewable Energy Development Agency;

60. **ISTS means** Inter State Transmission System;

61. **JFM Committee means** Joint Forest Management committee.

62. **Licensee includes a person** deemed to be a licensee under Section 14 of the Electricity Act,2003;

63. **MNRE means** Ministry of New and Renewable Energy, Government of India;

64. **MoP Means** Ministry of Power, Government of India.

65. **MSW** Municipal Solid Waste

66. **National Solar Mission or Solar Mission means** Jawaharlal Nehru National Solar Mission 2009 launched by Government of India;

67. **Net Metering means** the methodology under which electricity generated by the Rooftop/ Ground mounted Solar PV System/any other RE Plant set up in the premises of a consumer under the CAPEX/ RESCO mode is primarily for self-consumption, and the surplus generated electricity, if any, is delivered to the distribution licensee which will be off-set against the electricity supplied by the distribution licensee to the consumer during the billing cycle;

68. **Nodal Agency means** Rajasthan Renewable Energy Corporation Limited (RREC);

69. **NVVN means** NTPC VidyutVyapar Nigam, a wholly owned subsidiary company of NTPC;

70. Pellets - Pellet fuels (or pellets) are a type of solid fuel made from compressed organic material.

71. Person means an individual or a firm (Proprietorship Firm /Partnership Firm/LLP) or company registered under the Companies Act 1956 or 2013;

72. Policy - 1999 means Policy for Promoting Generation

73. Policy – 2004 means Policy for Promoting Generation of Electricity through Non-Conventional Energy Sources issued on 25.10.2004 as amended from time to time.

74. Pooled Cost of Power Purchase means the weighted average price at which the distribution licensee has purchased the electricity including the cost of self-generation, if any, in the previous year from all the energy suppliers excluding short-term power purchases and those based on renewable energy;

75. Pooling station means sub-station developed by the Developer/Power Producer for interface with the Receiving Sub-station of Discoms/RVPN/CTUIL;

76. Power means electricity produced using the energy sources.

77. Power Producer means a person who set up RE Plant and generate electricity from Renewable energy as per this policy;

78. PPA means Power Purchase Agreement;

79. Project Capacity shall mean the total generation capacity of Green Hydrogen Project in KTPA and/or equivalent Alternating Current (AC) capacity of RE Plant capacity in MW required for Hydrogen generation plant per KTPA at the delivery points subject to maximum 25 MW per KTPA;

80. Pumped Storage Plant means Pumped Hydro Storage Plant having capacity more than 25 MW stand alone or with RE sources used for supply of power at later stage as defined by MNRE/MoP, Government of India.

81. 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.

82. RE means Renewable Energy as defined by MNRE, GoI;

83. RE Parks means a group of Solar/Wind/ Hybrid/Hydro including PSP/Storage Plants or its combinations in the same location used for the generation of electric power;

84. RE Plant/RE Power Plant means a power plant or system utilizing Renewable Energy for generating electricity

85. RE Power Park Developer means a person who develops and / or maintains RE parks and the related common infrastructure facilities;

86. Receiving Station means EHV/HV Sub-Station developed by RVPNL/ Discom for evacuation of power generated from Biomass energy sources.

87. Receiving Sub-station means EHV/HV Sub-Station developed by RVPN/DISCOM of Rajasthan/PGCIL for evacuation of power generated from Renewable Energy Sources;

88. **Renewable Energy Certificate or REC means** the Renewable EnergyCertificate issued by the Central Agency in accordance with the procedure prescribed by it and under the provisions specified in this regard by the Central Electricity Regulatory Commission (Terms & Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010.

89. **Renewable Energy Plants/RE Plants means** the power plants other than the conventional power plants generating grid quality electricity from Renewable Energy Sources as defined by MNRE, GoI;

90. **"RE Parks" means** a group of Solar/Wind/ Hybrid/Hydro including PSP/ Storage Plants or its combinations in the same location used for the generation of electric power;

91. **Renewable Energy Sources"means** an dincludesnon-conventional renewable generating sources such as mini hydel, wind, solar including its integration withcombined cycle, biomass, biofuel cogeneration, urban/ municipal waste and othersuch sources as approved by the Ministry of New and Renewable Energy, Government of India.

92. **"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 toproduceelectricity.

93. **"RERC"/"Commission means** Rajasthan Electricity Regulatory Commission;

94. **RESCO Mode means** the methodology in which entire investment is to be incurred by a company/individual other than the consumer for setting up of the solar power project in the consumer premises and the consumer pays for the electricity generated from such solar power project at mutually agreed tariff to such investor company/ individual;

95. **RIICO means** Rajasthan State Industrial Development and Investment Corporation Limited

96. **RIPS means** Rajasthan Investment Promotion Scheme issued by State Government.

97. **RPO means** Renewable Purchase Obligation;

98. **RREC/RRECL means** Rajasthan Renewable Energy Corporation Ltd;

99. **RTC power means** Round the Clock power

100. **RUVN/RUVNL/RUVITL means** the Rajasthan UrjaVikasand ITServices Limited;

101. **RVPN/RVPNL means** the Rajasthan RajyaVidyutPrasaran Nigam Limited;

102. **RVUN/RRVUNL/RVUNL means** the Rajasthan RajyaVidyutUtpadan Nigam Limited;

103. **Scheduled Commissioning Period means** the scheduled period of the completion of the project counted from the date of "final approval" issued by RREC to the date of "COD" as per this policy provision;

104. **SECI means** the Solar Energy Corporation of India;

105. **SLEC means** State Level Empowered Committee constituted under the provisions of this Policy;

106. **SLMCC means** State Level Monitoring & Coordination Committee constituted under the provisions of this Policy

107. **SSC means** State Sanction Committee constituted under the provisions of this Policy;

108. **Solar Farm/Park means** a group of solar power plants in the same location used for the generation of electric power;

109. **Solar Plant/Solar Power Plant means** a power plant or system utilizing solar energy through solar photo-voltaic or concentrated solar thermal devices for generating electricity;

110. **Solar Power Park Developer(SPPD) means** a person who develops and / or maintains solar parks and the related common infrastructure facilities;

111. **Solar Power Producer/Solar Developer means** a person that makes an investment for setting up of solar power project and generating electricity from solar energy;

112. **Solar PV Power Plant means** the Solar Photo Voltaic (SPV) Power Plant that uses sunlight for direct conversion into electricity through Photo Voltaic technology;

113. **Solar Thermal Power Plant means** the Solar Thermal Power Plant that uses sunlight through Concentrated Solar Power (CSP) technology based on either line focus or point focus principle for conversion into heat/ steam which can be used for producing electricity;

114. **SoP means** Standard Operating Procedure;

115. **SPSU means** State Public Sector Undertaking

116. **Stand alone Battery Energy Storage System means** Battery Energy Storage System installed standalone used for storage of power and supply power at later stage.

117. **State Agency means** Rajasthan Renewable Energy Corporation Ltd. or any other agency designated by the Rajasthan Electricity Regulatory Commission for accreditation and recommending the Renewable Energy Project for registration with Central Agency in accordance with the procedure prescribed by it and under the provisions specified in the CERC REC Regulations;

118. **State and Government means,** respectively, the State of Rajasthan and the Government of Rajasthan.

119. **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

120. **Tariff means** the schedule of charges for generation, transmission, wheeling and supply of electricity together with terms and conditions for application thereof;

121. **Water means** available water in any form pure water/demineralised water/ brine water/Waste treatable water suitable for Green Hydrogen generation.

122. **WBA means** Wheeling and Banking Agreement. The term not defined above will have their usual meanings.

Rajasthan Integrated Clean Energy Policy 2024

Energy Department

Government of Rajasthan

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RRECL | RVPN | JVVN | AVVN | JDVVN | RVUN | RUVITL

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