

# RAJASTHAN RENEWABLE ENERGY POLICY, 2023



# Government of Rajasthan Energy Department

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

#### **NOTIFICATION**

# Rajasthan Renewable Energy Policy, 2023

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

#### 1. Preamble

- 1.1. Growing concerns of global warming and climate change requires emphasis on clean and green energy. The Renewable Energy sources lay foundation for planners in developing the policy framework to ensure energy security and equity along with achieving the goals of reducing carbon emission and pollution mitigation.
- 1.2. Utility scale power producers, small power generators, state utilities such as generation, transmission and distribution companies, regulatory and power management agencies, Government and consumers are major stakeholders in the Renewable Energy (RE) sector. This policy is envisaged for the facilitation of the stakeholders for promoting Renewable energy sector while safeguarding the interests of the end consumer.
- 1.3. Over the past several decades, the demand for power has grown and the State has added conventional power capacity on large scale. The State has achieved self-reliance in availability of power. Furthermore, Renewable energy has become commercially viable; therefore, State Utilities and other stakeholders have increased interest and focus on renewable energy.
- 1.4. Renewable energy like solar energy can be deployed in a decentralised manner which brings benefit of reduced transmission & distribution losses and savings in cost of establishing additional transmission infrastructure because of generation of power at load centres. Decentralized generation through solar rooftop systems, off-grid applications and small solar power plants at consumers end is efficient way of utilization of solar energy.
- 1.5. On a life cycle basis, Electric Vehicles are environmentally cleaner than fossil fuel-based vehicles. It is right time to push for a rapid transition of transport sector based primarily on Electric Vehicles, requiring further policy interventions to align Electric Vehicles charging by Renewable Energy based systems.
- 1.6. The State has vast and largely untapped potential in terms of intense solar radiation, one of the highest numbers of sunny days in a year and availability of vast barren/un-cultivable unutilized government/private land. This has the potential to make Rajasthan a highly preferred destination for solar energy at the Global level.
- 1.7. Moreover, National Institute of Wind Energy (NIWE), Government of India, has assessed wind power potential of 284GWat 150 Mtr height and National Institute of Solar Energy assessed the Solar Potential of 142 GW for Rajasthan State.
- 1.8. To meet the global commitment, Government of India, has fixed a national target of 500 GW Renewable Energy capacity, this will reduce the dependence on conventional sources of energy by promoting non-conventional energy sources.

- 1.9. Notably, Solar and Wind resources are complementary to each other and hybridization of these two technologies would help in minimizing the variability and would lead to optimum utilization of infrastructure including land and transmission system. Superimposition of wind and solar resources map exhibits high to moderate Wind and Solar energy potential areas in the State.
- 1.10 In light of this, it is desirable to have suitable policy interventions for developing new hybrid projects and also for encouraging hybridization of existing wind and solar power plants.
- 1.11 Appropriate capacity storage systems are also required to match the demand curve with generation profile of wind-solar hybrid power projects.
- 1.12 To keep pace with the changing needs of the Renewable Energy Sector, State Government has decided to review the existing Rajasthan Solar, Wind & Hybrid Policies, 2019.

#### 2. Vision and objectives:

- 2.1 To develop RE sector in the State with "Stakeholder-Driven" policy.
- 2.2 To be a major contributing State for achieving the national target of 500 GW capacity of Renewable energy as a part of global commitment.
- 2.3 To achieve "optimal energy mix "of conventional and renewable power ensuring energy security of the State, efficient grid management and protecting interests of all stakeholders.
- 2.4 To encourage new technologies, methods and way outs involving combined generation of wind & solar power and other emerging technologies like storage systems including pump storage plants, battery storage systems etc. To facilitate development of infrastructure in generation, transmission, distribution and manufacturing sector of renewable energy.
- 2.5 Human Resource Development with particular reference to renewable energy and generation of employment opportunities.
- 2.6 To facilitate and support Research &Development activities in the field of RE. Nurturing better products, processes, and systems to promote growth of Renewable Energy
- 2.7 To deploy ancillary services for making the grid flexible for RE Power integration by various modes like Demand Side Management, Time of Day Tariff, Scheduling & Forecasting, Storage Systems, Reactive Power Management, Grid Reserve/Balancing Capacity etc.
- 2.8 Productive use of abundant wasteland, thereby utilizing the un-utilized/underutilized land for creation of Wind energy hub. Promoting "Repowering" of Wind Power Projects and conducting Wind Resource Assessment Programme.
- 2.9 Attract investors to set-up RE equipment manufacturing facilities by promoting manufacturing ecosystem.
- 2.10 Hybridization of Wind & Solar technologies to meet the challenges of grid security and stability along with optimum utilization of land resources and transmission systems and also Hybridization of existing conventional thermal power plants with Renewable Energy for reducing fuel consumption and carbon emission. To promote setting up of the RE Power Projects for sale of power to Distribution Companies of Rajasthan/Rajasthan Urja Vikas Nigam Ltd. to meet their RPO and beyond RPO as per their requirement and commercial viability and also for captive use and 3<sup>rd</sup> party sale.

#### 3. Title and Enforcement:

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

- 3.2 The Policy will come into operation with effect from the date of notification and will remain in force until superseded by another Policy.
- 3.3 State Government may amend/ modify/review this Policy as and when required.

#### 4. Target: -

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

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

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

#### 5. RREC to act as Nodal Agency for:

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

- Solar PV Plants:
- x. Coordination with MNRE/DISCOMs of Rajasthan/RVPN/Various agencies under control of MNRE/Central Agency/Other Relevant Agency;
- xi. Accreditation and recommendation of the Power Projects for registration with Central Agency under REC Mechanism.

# PROJECT BASED PROVISIONS AND INCENTIVES

# A. Solar Energy

#### 6. Rooftop PV Solar Power Systems

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

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

- i) The State will promote setting up of grid connected Rooftop PV Solar Power Plants under Net metering arrangement. The DISCOMs will allow Solar Rooftop capacity addition up to 50% of the capacity of the distribution transformer of the area.
- ii) Rooftop Solar Power Plants can be setup on Government Building on RESCO Mode.
- iii) The DISCOMs will develop a suitable and comprehensive consumer friendly IT application for facilitating online timely approvals and monitoring of these projects.
- iv) Rooftop consumers will be provided subsidies/incentives as per the guidelines of MNRE/State Government.
- v) Start-ups will be promoted for installation of Rooftop Solar Systems.
- vi) Maximum time period for execution of various activities in respect of Solar Rooftop Systems under Net Metering by DISCOMs will be as under:

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

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

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

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

#### 7. Decentralized Grid Connected Solar Power Projects:

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

- 7.1. The State will promote setting up of decentralized solar power projects with a minimum capacity of 0.5 MW and maximum capacity of 5 MW in the premises and vicinity of 33 kV Grid Sub-Stations for sale of power to DISCOMs. The sub-stations for which decentralized solar power projects are to be established will be selected by RUVNL/DISCOMs. The tariff for these projects will be determined on basis of tariff based competitive bidding process or as per the guidelines of State Government/ Government of India.
- 7.2. State aims to increase participation of farmers in solar energy sector to augment their sources of income by production and sale of solar energy to DISCOMs, in following manner:
  - 7.1.1 Farmers, on their own or through a developer, can set up decentralized power project on their un-cultivable agriculture land as per clause8.1.
  - 7.1.2 The State will promote solarization of existing grid connected agriculture pumps as per the provisions/guidelines issued by DISCOMs based on Regulations of RERC/Guidelines of Central/State Govt.
- 7.3. State Government will issue schemes/programs for promotion of decentralized solar generation in the State.

#### 8. Off-Grid Solar Applications:

- 8.1. The State will promote and incentivize off-grid solar applications, including hybrid systems, as per the guidelines issued by MNRE to meet various electrical and thermal energy requirements for domestic and commercial use.
- 8.1 The State will promote setting up of solar power plants by persons for sale of power to consumers through its own distribution system/local solar grid.
- 8.2 The State will also promote setting up of stand-alone solar systems to provide electricity to households in remote Villages /Hamlets (Dhanis).
- 8.3 The State will promote installation of Solar PV Pumps for pressure irrigation systems.

#### 9. Utility Grid Power Projects-

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

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

- i) To fulfil Renewable Purchase Obligation (RPO) target fixed by RERC.
- ii) DISCOM/RUVNL may purchase solar power beyond RPO limit and can avail the benefit of REC as per CERC Regulations/ NLDC guidelines.

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

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

## 9.3 Solar Power Projects for captive use:

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

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

- 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 to "Contract demand" of the consumer as per RERC Regulations. The Generating plant capacity for 3<sup>rd</sup> Party sale can be any capacity, however the consumer of the State will be allowed to take power from such plant up to the contract demand only.

#### 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 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 &9.4will also be eligible for RE (Solar) Certificate as per Orders/Regulations of the appropriate Commission issued in this regard.

#### DEVELOPMENT OFRE 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 the fast approval process is facilitated. The RE Power Park Developer creates supporting infrastructure and facilities including power evacuation, 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:

State will promote development of RE Parks by 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 following non-refundable Registration charge:

| S.No | Park Capacity             | Rate                             |
|------|---------------------------|----------------------------------|
|      |                           |                                  |
| 1    | For Park ≤100 MW capacity | Rs 10,000/- per MW               |
| 2    | For Park                  | 10 Lac +Rs 1ac per 100 MW beyond |
|      | >100MWand≤500MW capacity  | 100 MW or part thereof           |
| 3    | For Park                  | 15 Lac +Rs.40,000 per 100 MW     |
|      | > 500 MW and              | beyond 500 MW or part thereof    |
|      | ≤1000MW capacity          |                                  |
| 4    | For Park                  | 17 Lac+ Rs. 20,000 per 100 MW    |
|      | >1000 MW capacity         | beyond 1000 MW or part thereof   |

- RREC will complete the processing of Registration application 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) such as creation of power evacuation systems, development of roads, lights, water supply systems and other administrative support systems.
- (iii) The REPPD will be allowed to acquire agriculture land from title holder (Khatedar) for developing Solar 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 1956and the rules made there under 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 "Rajasthan Renewable Energy Policy, 2023".
- (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 in Joint Venture with private developers by 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 Applicant will submit 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 concurrence of 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 it.
- 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.

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

The shift to clean and green 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 an adverse impact on Balance of Payment 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 from 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 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 19of this policy.
- iv. The aforesaid benefits would also be available to the 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 the impact of EV charging infrastructure on the grid.

#### 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 fulfill 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 /3rdParty sale within and outside the State of Rajasthan:

- 12.2.1 The State will promote setting up of Wind Power Projects for captive use/3<sup>rd</sup> 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 to "Contract demand" of the consumer as per RERC Regulations. The Generating plant capacity for 3<sup>rd</sup> Party sale can be any capacity, however the consumer of the State will be allowed to take power from such plant up to the contract demand only.
- 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 year's 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 had been carried out by MNRE at various locations in the State. The MNRE has also permitted independent private participation for WRA. WRA studies were done in 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.

# 12.5 Registration for establishment of wind monitoring station for wind resource assessment studies-

- 12.5.1 For carrying out wind resource assessment studies, 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 stationN.O.C. from Gram Panchayat will not be required for allotment of Government land (Siwai Chak 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 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 with the 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 to "Contract demand" of the consumer as per RERC Regulations. The Generating plant capacity for 3<sup>rd</sup> Party sale can be any capacity, however the consumer of the State will be allowed to take power from such plant up to the contract demand only.

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 the 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.

## Newer technologies based RE projects

#### 14 Hydro Power Projects including Pump Storage Plant.

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 8<sup>th</sup> March, 2019 will be considered as part of RE.

The Sites of these projects will be allocated to the developer through a transparent mechanism. Separate Guidelines will be issued by Energy Department for implementation of Pump Storage Plants in the State.

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

#### 15 Storage Plants

#### 15.1 Projects with Storage Systems:

- 15.1.1 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.
- 15.1.2 The State will promote RE Power Projects with storage systems for captive use/third party sale.
- 15.1.3 The minimum rated energy capacity of an Energy Storage System (ESS) shall be equal to 'X/2' MWh, where 'X' is the installed capacity of the Project in MW. For example, in case the installed capacity of a Project is 50 MW, then minimum energy rating of the ESS installed shall be 25 MWh.
- 15.1.4 The State will facilitate Research and Development (R&D) of Storage Technologies.
- 15.1.5 State will also endeavour to promote Storage systems in Decentralized Rooftop Solar plants and Grid Scale RE Project to meet the demand of the consumer.

#### 15.2 Standalone Battery Energy Storage System

Energy supplied from Standalone Battery Energy Storage System will be considered as part of RE. Provided that at least 85% of the total energy stored in the Battery Energy Storage System, on an annual basis, is procured from Renewable Energy Sources will be considered for Energy Storage Obligation as specified by appropriate Regulators/ Ministries of GoI.

#### 16 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 Guideline will be issued by Energy department for Floating Solar.

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

#### REGISTRATION AND APPROVALS

#### 17 Registration of Power Projects:

- **17.1** All RE projects installed in State shall be required to be registered with RREC.
- **17.2** The Developer/Power Producer will submit an online application for registration to RREC in the prescribed format along with requisite documents.
- **17.3** Each Developer/ Power Producer will deposit non-refundable registration charge with RREC as under:

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

- **17.4** 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.
- 17.5 The Solar Power 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 within 6 months from the commencement of this policy by depositing Rs.5,000per MW 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.
- 17.6 The Power Projects registered under the Rajasthan Solar Energy Policy, 2019 and Rajasthan Wind and Hybrid Energy Policy, 2019 in the period of 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, and, the power producers of such projects shall have to apply for in-principle clearance within 3 years from the date of original registration or within 1 year from the date of commencement of this Policy whichever is later, failing which the registration shall be deemed to be cancelled.
- **17.7** The Solar 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.
- 17.8 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.
- **17.9** 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.
- **17.10** No registration will be required for Solar Power projects connected to grid under Net/Gross Metering Scheme.
- **17.11** Developer/Power Producer can transfer its registered capacity or part thereof to its '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 17.5&17.6shall be applicable to the transferee.

- **17.12** Developer/Power Producer can transfer the registered capacity or part thereof from one registration to its another registration with the prior approval of RREC on payment of an amount equal to 25% of the Registration Charges.
- 18 Allotment / Procurement of Land:
- 18.1 Allotment of Government Land to Power Projects/Solar/RE-Park/UMREPP:

Government land will be allotted to Solar/RE-Park/UMREPP and 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. Park Developer shall be allowed to sub-lease the allotted land as per the aforesaid rules.

- **18.2** RREC will recommend, on 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 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 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.

**18.3** 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<br>area for Hybrid<br>Plant |
|--------|--|--|--|
| i      | SPV on Crystalline Technology.   | 2.0Hect./MW  | 3.0Hect./MW                              |
| ii     | SPV on Crystalline Technology with tracker.  | 3.0 Hect./MW   | 3.0 Hect./MW                             |
| iii    | SPV on Thin Film/Amorphous<br>Technology with or without<br>tracker.                             | 3.5 Hect./MW   | 3.5 Hect./MW                             |
| iv     | Solar Thermal (CSP)- Parabolic<br>Trough / Tower/Other<br>Technology with and without<br>storage | a) Up to PLF of 21%: 3.5 Hect./MW b) For every 1% increase in PLF, 0.15 Hect./MW additional land will be allotted. | -  |
| v      | Maximum land area for Wind<br>Plant  | 3 Hect/MW  |  |

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

#### 18.4 Power Projects on Private Land:

- 18.4.1 The State will promote setting up of Power Project/ Farm on private land. Developer shall be permitted to set-up Power Project/ Farm 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 there under
- 18.4.2 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.

## 18.4.3 Allotment of land for setting up of Wind Monitoring Station-

The Government land up to 100m by 100m 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.

#### 18.4.4 **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.

#### 19 Incentive/facilities available to RE Power Projects

#### 19.1 Grant of incentive available to Industries

Generation of electricity from RE Power Plant registered under this policy shall be treated as eligible industry under the schemes administered by the Industries Department and for incentives available to industrial units under the prevailing Rajasthan Investment Promotion Scheme (RIPS).

#### 19.2 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 Hydro/ Pump Storage Plant/ Solar Thermal Power Plants subject to the availability of water. Developer/Power Producer will intimate estimated water requirement to RREC along with 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.

#### 19.3 Banking:

Banking facility and charges will be governed as per the prevailing RERC Regulation as amended from time to time. The State will provide any benefit of banking through prevailing RIPS.

#### 19.4 Exemption/Relaxation from Electricity Duty-

The exemption/relaxation from payment of Electricity Duty by the Power Producer for captive use within the State will be exempted under the 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.

#### 19.5 Transmission and Wheeling Charges

Transmission and Wheeling charges will be governed by the prevailing RERC Regulation, as amended from time to time. The State will provide any benefit towards Transmission and Wheeling charges through prevailing RIPS.

#### APPROVAL MECHANISM

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

#### 20.1 State Level Sanction Committee (SLSC)

- i) Principal Secretary/Secretary, Energy, GoR (Chairman)
- ii) Chairman & Managing Director, RVPN
- iii) Managing Director, RREC
- iv) Managing Director JVVNL/AVVNL/JdVVNL/RUVNL
- v) Director (Finance), RREC
- vi) Director (Technical), RREC Convener

## 20.2 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).

#### 21 Approval/ Clearance of RE Power Projects:

# 21.1 For Bidding Projects under Clause 9.1,9.2,12.1, 12.3.1,13.1(a),15.1, 15.2 & 16

These projects will be governed by the provisions of the bid document and will not require approval/clearance from SLSC/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.

# 21.2 Approval/Clearance of Power Projects under Clause 9.3,9.4,11,12.2,12.3.2, 13.1(b), 14,15.1,15.2,16

Approval/Clearance of projects for captive use under 9.3, 11,12.2,12.3,13.1(b),14,15.1,15.2&16 and Projects up to 20 MW capacity for 3<sup>rd</sup> Party Sale under clause 9.4,11,12.2,12.3,13.1(b), 14,15.1,15.2 and 16 will be granted by the SLS<sup>c</sup> 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 Hydro including PSP/ 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

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

#### 21.3 Exemptions

Projects setting up for 3<sup>rd</sup> Party Sale up to 20 MW capacity, under clause 9.4,11,12.2,12.3,13.1(b),14,15.1,15.2,16 shall not be required to get approval/clearance from SLSC. Such projects will be recommended by RREC to DISCOMs/RVPN for execution of WBA/Open Access agreement as the case may be.

#### 21.4 Timeline for approval/Clearance:

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 SLSC.

**21.5** 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.

#### 22 Security Deposits:

#### 22.1 For projects under Clause 9.3,9.4,11,12.2,12.3.2, 13.1(b), 14,15.1,15.2,16:

After approval/clearance of the projects under clause 9.3,9.4,11,12.2,12.3.2, 13.1(b), 14,15.1,15.2 and 16by the State Level Screening Committee (SLSC), 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.

- **22.2** 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.
- **22.3** The security amount deposited by the Developer/ Power Producers shall be non-convertible and non-transferable.
- **22.4** 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.

# 22.5 For Bidding projects under clause 9.1,9.2,12.1, 12.3.1,13.1(a),15.1, 15.2 & 16

The security deposit will be governed by the provisions of bid document and power purchase agreement.

#### 23 Power Purchase Agreement:

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

# 23.1 Bidding Projects sanctioned under clause 9.1,9.2,12.1, 12.3.1,13.1(a),15.1, 15.2 & 16

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

#### 23.2 Power Projects for Captive use/ 3rdParty Sale:

For the projects sanctioned under clause 9.3, 9.4, 11, 12.2, 12.3.2, 13.1(b), 14, 15.1, 15.2 & 16 the Developer/Power Producer will execute Agreement for Wheeling and Banking etc. with DISCOM(s). In case, transmission system of RVPN is also used then power producer will execute separate Transmission Agreement with RVPN.

#### 23.3 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.

#### 24 Renewable Energy Development and Facilitation Charges (REDFC):

The developers utilize 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 its 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 requires investments in the system for the efficient RE injection into the grid. Further, the RE Project installation in a particular area also affects the locality of the area and there is need and responsibility of the State to develop the local area and basic infrastructure of the area particularly 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 Chief Secretary, Government of Rajasthan. This development fund will be raised in the following manner:

**24.1** 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:

#### 24.2

| S. N. | Period                                       | Rate of Contribution    |
|-------|--|-------------------------|
| 1     | Project commissioned on or after             | Rs.50,000 /Hectare/Year |
|       | commencement of the Policy till project life |                         |

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.

- **24.3** 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.
- **24.4** 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 sale of power to DISCOMs of Rajasthan either directly or through any other Agency/Trader.
- **24.5** 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.
- **24.6** Developer/Power Producer shall deposit the Renewable Energy Development and Facilitation Charges by 30<sup>th</sup> April in every financial year without interest and up to 30<sup>th</sup> June with interest @ 9% per annum. If it is not deposited upto 30<sup>th</sup> 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.

## 25 Time frame for completion of Power Projects:

- **25.1** The time schedule for completion of Power Projects allocated through Bidding process will be governed by provisions of bid document and Power Purchase Agreement.
- **25.2** The time schedule for completion of the Power Projects, sanction under **9.3**, **9.4**, **11**, **12.2**, **12.3.2**, **13.1**(b), **14**, **15.1**, **15.2** & **16**will be, will as per table-1 & 2 (Annexure-3)
- **25.3** 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 Table 3 (Annexure-3):

In case of delays beyond 15 months Board of RREC on 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.

#### 26 Manufacturing of Solar/Wind Energy Equipment:

The Government aims to promote manufacturing facilities for solar/wind energy equipment in Rajasthan leading to the development of Solar Energy Eco-system and facilitates employment generation in the State with following concessions:

- i. Benefits of Micro, Small and Medium Enterprises (MSME) Policy to eligible manufacturers.
- ii. Benefits will be provided to the manufacturing units as per prevailing Rajasthan Investment Promotion Scheme (RIPS) and/or RIPS amended from time to time.
- iii.State will support RE manufacturing units through various incentive & facilities and to promote RE manufacturing, it will be linked with RE generations in the State.

#### 27 Evacuation and Grid Interfacing of Renewable Energy:

# 27.1 Evacuation and Grid Interfacing through Inter State Transmission System:

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

# 27.2 Evacuation and Grid Interfacing through Intra State Transmission System:

#### 27.3 Development of Power Evacuation System in RE Potential Areas:

RVPN will prepare 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.
- **27.4** Evacuation of RE power generated shall be made through the transmission and distribution network being maintained by RVPN and DISCOMs respectively.

#### 27.5 Grid Interfacing:

The grid interfacing arrangements for power using solar as 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 in consultation with RREC on which the electricity generated will be received at minimum 33 kV level.

#### 27.6 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:

| Sr. No. | Voltage level | Capacity |
|---------|---------------|----------|
| 1       | 11 kV         | 3 MW     |
| 2       | 33kV          | 15MW     |
| 3       | 132kV         | 50MW     |
| 4       | 220kV         | 132MW    |
| 5       | 400kV         | 515MW    |

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.

#### 27.7 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 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 on depositing amount of penalty, if any, on account of delay in the utilization of the system.
- iii. In case line bay and grid connectivity 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 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/decommissioned.
- 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 substation 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, 15.1, 15.2 & 16

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

ix. The DISCOMs will endeavour to get the wheeling charges determined from RERC on per unit (kWh) basis, payable on actual energy wheeled by the open

- access consumer of RE Power.
- x. 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.
- 27.8. 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.
- 27.9. The Developer/Power Producer who is seeking power evacuation approval on STU/CTU networks will have to submit land documents/details in RREC, duly verified by Revenue Authorities/RREC authorized agencies. The Land Status of the parks/Projects will be available on RREC portal and can be accessed by STU/CTU, before granting connectivity.

#### 27.10. Reactive Power Charges:

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

#### 27.11. Common Pooling Sub-Station:

Power Producers may build Common Pooling Sub-Station to evacuate the generated solar 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.

#### 28. 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 of 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 SLSC 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.

#### 29. Measures for Grid Stability:

- 29.1.RVPN/DISCOMs shall take appropriate technical measures for ensuring grid stability and safety.
- 29.2.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.

#### 30. 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.

# **OTHER INITIATIVES**

#### 31 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.

# 32 RREC to undertake following studies in Renewable Energy for further policy interventions:

- vi. Estimating the impact of promoting Solar Rooftop Capacity addition on the grid and the state power utilities
- vii. Assessment of various implementation models for setting up of EV Charging Stations
- viii. Improving the cost competitiveness of solar manufacturing plants
- ix. Analysing and identifying suitable technologies and implementation models for Ancillary Services
- x. Identification of actual requirement of storage capacity and suitable technologies considering the demand curve and generation profile of the state
- xi. Identifying the requirement for training and workshops for capacity building of human resource of RREC regarding regulatory framework and market reforms
- xii. To identify 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
- xiii. Analysing the methodology for forecasting and scheduling, efficient accounting, metering and settlement of transactions of Renewable Energy for making grid operations RE friendly
- xiv. Assessing the technical and financial impact of making the conventional power plants flexible for ensuring large scale RE integration
- xv. Integrated planning leading to convergence between Transmission Infrastructure Development and the location of Renewable Energy projects
- xvi. Study the Business life cycle of Solar Power Projects in context to impact on Environment.
- xvii. The matters referred by DISCOMs for promotion of RE in agriculture sector.

#### 33 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.

## 34 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.

#### 35 Regulation

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

#### 36 Power to remove difficulties:

If any doubt, dispute, difference or issue arises in regard to interpretation/implementation of this Policy, or any interdepartmental issues arises, 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 as and when required.

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

By Order of the Governor

(R.K. Sharma)

Dy. Secretary to Government

Copy to the following for information and necessary action: -

- 1. Secretary, Ministry of Power, Government of India, Shram Shakti Bhawan, Rafi Marg, New Delhi.
- 2. Secretary, Ministry of New & Renewable Energy, Government of India, CGO Complex, Lodhi Road, New Delhi.

- 3. Chairman & Managing Director, Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Jaipur.
- 4. Chairman, DISCOMS, Jaipur.
- 5. Chairman & Managing Director, Rajasthan Rajya Vidyut Utpadan Nigam Ltd., Jaipur
- 6. Chairman, Rajasthan Renewable Energy Corporation Ltd., Jaipur.
- 7. Managing Director, Rajasthan Renewable Energy Corporation Ltd., Jaipur.
- 8. Managing Director, Rajasthan Urja Vikas Nigam Ltd., Jaipur
- 9. Managing Director, Jaipur/Ajmer/Jodhpur Vidyut Vitaran Nigam Limited., Jaipur/Ajmer/Jodhpur.
- 10. Secretary, Rajasthan Electricity Regulatory Commission, Jaipur
- 11. Director, Printing & Stationary, Government of Rajasthan with the request to get it published in Extra Ordinary Gazette of Govt. of Rajasthan.
- 12. Guard File.

Dy. Secretary to Government

The Power Producer desirous to set up Solar Power Plant in State of Rajasthan under captive use/sale to 3<sup>rd</sup> party within and outside the State must fulfil the following minimum financial criteria:

Qualification Criteria for Solar PV/Thermal 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 the 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.

\*\*\*

#### **Definitions:**

In this Policy, unless the context otherwise requires: -

- 1. "Act" means Electricity Act 2003, including amendments thereto;
- 2. "ABT" means Availability Based Tariff;
- 3. **"CAPEX Mode"** means the mode under which entire investment is to be incurred by the power consumer for installation of solar power plant;
- 4. "CEA" means Central Electricity Authority;
- 5. **"Ceiling Act, 1973"** means the Rajasthan Imposition of Ceiling on Agricultural Holdings Act, 1973;
- 6. **"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;
- 7. **"CERC"** means the Central Electricity Regulatory Commission, constituted under sub-section (1) of Section 76 of the Electricity Act, 2003,
- 8. "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;
- 9. **"Contract Demand"** means regular contract demand plus standby contract demand, if any, of the Consumer with DISCOM or maximum connected load of the consumer premises in case of non discom's consumer;
- 10. **"COD"** means Commercial Operation Date i.e., the date when the Power Plant gets commissioned as per rules/provisions;
- 11. "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;
- 12. **"CPP" or "Captive Power Plant"** means Captive Power Plant as defined in Electricity Act, 2003 and Electricity Rules, 2005;
- 13. "CSP" means Concentrated Solar Power;
- 14. "**DISCOM of Rajasthan**" means a distribution licensee of the State, such as Jaipur DISCOM, Jodhpur DISCOM and Ajmer DISCOM;
- 15. "**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;
- 16. **"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;
- 17. **"Financial year"** means a period commencing on 1stApril of a calendar year and ending on 31st March of the subsequent calendar year;
- 18. **"Force Majeure"** means any event or circumstance which is beyond the reasonable direct or indirect control and without the fault or negligence of the Solar Power Producer or Developer and which results in Solar Power 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;
- 19. "Generating Plant Sub-station/Pooling Sub-Station" means Sub-station developed by the Solar Power Producer/Developer for interfacing with the

- receiving sub-station;
- 20. **"Government"** or **"State"** means Government of Rajasthan or the State of Rajasthan respectively;
- 21. **"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;
- 22. **"Gross Metering"** means methodology under which the entire electricity generated by the Rooftop/ Ground mounted Solar PV System set up in the premises of the consumer is delivered to the distribution system of the Licensee:
- 23. "GST" means Goods and Services Tax:
- 24. "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.
- 25. "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;
- 26. **"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;
- 27. "IREDA" means Indian Renewable Energy Development Agency;
- 28. "ISTS" means Inter State Transmission System;
- 29. "**Licensee**" includes a person deemed to be a licensee under Section 14 of the Electricity Act,2003;
- 30. "MNRE" means Ministry of New and Renewable Energy of Central Government, responsible to develop and deploy new and renewable energy for supplementary energy requirement of the country;
- 31. "MoP" Ministry of Power, Government of India.
- 32. "National Solar Mission or Solar Mission" means Jawaharlal Nehru National Solar Mission 2009 launched by Government of India;
- 33. "Net Metering" means the methodology under which electricity generated by the Rooftop/ Ground mounted Solar PV System 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;
- 34. **"Nodal Agency"** means Rajasthan Renewable Energy Corporation Limited (RREC);
- 35. **"NVVN"** means NTPC Vidyut Vyapar Nigam, a wholly owned subsidiary company of NTPC;
- 36. **"Person"** means an individual or a firm / company registered under the Companies Act1956/2013;
- 37. "**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;
- 38. "PPA" means Power Purchase Agreement;
- 39. **"Pooling station"** means sub-station developed by the Developer for inter face with the Receiving Sub-station;
- 40. "Power Producer/Developer" means a person that makes an investment for

- setting up of RE power project and generating electricity from Renewable energy as per this policy;
- 41. **"Project Capacity"** shall mean the maximum Alternating Current (AC) capacity at the delivery point;
- 42. **"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.
- 43. "**Receiving Sub-station**" means EHV/HV Sub-Station developed by RVPN/DISCOM of Rajasthan for evacuation of power generated from Renewable Energy Sources;
- 44. "RE" means Renewable Energy;
- 45. "Renewable Energy Certificate" or "REC" means the Renewable Energy (Solar) Certificate 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;
- 46. **"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;
- 47. "Renewable Energy Power Plants" means the power plants other than the conventional power plants generating grid quality electricity from Renewable Energy Sources and/or power plants as defined by MNRE, GoI;
- 48. **"RE Power Park Developer"** means a person who develops and / or maintains RE parks and the related common infrastructure facilities;
- 49. "**RE Power Producer/Developer**" means a person that makes an investment for setting up of RE power project and generating electricity from renewable energy;
- 50. **"RE Plant/RE Power Plant"** means a power plant or system utilizing Renewable Energy for generating electricity;
- 51. **"Renewable Energy Sources"** means and includes non-conventional renewable generating sources as approved by the Ministry of New & Renewable Energy, Government of India;
- 52. "RERC"/"Commission" means Rajasthan Electricity Regulatory Commission;
- 53. **"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;
- 54. "RPO" means Renewable Purchase Obligation;
- 55. "RREC/RRECL" means Rajasthan Renewable Energy Corporation Ltd;
- 56. "RVPN" means the Rajasthan Rajya Vidyut Prasaran Nigam Limited;
- 57. **"RVUN**" means the Rajasthan Rajya Vidyut Utpadan NigamLimited;
- 58. "RUVN"/RUVNL" means the Rajasthan Urja Vikas Nigam Limited;
- 59. **"SECI"** means the Solar Energy Corporation of India;
- 60. **"SLMCC"** means State Level Monitoring & Coordination Committee constituted under the provisions of this Policy;
- 61. **"SLSC"** means State Level Sanction Committee constituted under the provisions of this Policy;
- 62. **"SoP"** means Standard Operating Procedure;
- 63. **"Solar Farm/Park"** means a group of solar power plants in the same location used for the generation of electric power;

- 64. **"Solar Power Park Developer"** means a person who develops and / or maintains solar parks and the related common infrastructure facilities;
- 65. "**Solar Power Producer/Developer**" means a person that makes an investment for setting up of solar power project and generating electricity from solar energy;
- 66. **"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;
- 67. **"Solar PV Power Plant"** means the Solar Photo Voltaic (SPV) Power Plant that uses sunlight for direct conversion into electricity through Photo Voltaic technology;
- 68. **"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;
- 69. **"Scheduled Commissioning Period"** means the scheduled period of the completion of the project counted from the date of "final approval" from SLSC/SLEC to the date of "COD";
- 70. **"Stand alone Battery Energy Storage System"** means Battery Energy Storage System installed standalone used for storage of power and supply power at later stage.
- 71. **"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;
- 72. **"State Load Dispatch Centre"** or "**SLDC**" means the Centre established by the State Government for the purposes of exercising the powers and discharging the functions under Section 31&32 of the Electricity Act, 2003;
- 73. **"Tariff"** means the schedule of charges for generation, transmission, wheeling and supply of electricity together with terms and conditions for application thereof;
- 74. "WBA" means Wheeling and Banking Agreement.
- 2. The terms not defined above will have their usual meanings.

#### Annxure-3

Table-1

## Time line of project completions

| 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   |
| <u>CSP</u> :                              |  |
| Up to 25                                  | Within 24 months   |
| MW capacity                               |  |
| More than 25 MW and up to 100 MW capacity | Within 36 months   |
| More than 100 MW and up to 200 MW         | Within 42 months   |
| capacity                                  |  |
| More than 200 MW capacity                 | Within 48 months   |

#### Table-2

#### Wind & Hybrid Projects

| Project Capacity     | Completion Schedule |
|----------------------|---------------------|
| 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.

#### Table-3

## Penalty for delay in commissioning

| 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                  |