Draft

RAJASTHAN
SOLAR POLICY, 2010

Issued by:
Government of Rajasthan
Energy Department
....., 2010

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(Issued vide Energy Deptt. letter no. F.20 (4) Energy/2010 dated_____)

1.1 Vision:

1.1.1 India is blessed with abundant Solar Energy and if harnessed efficiently, the Country is capable of producing trillion-kilowatts of electricity. Solar energy is extremely beneficial as it is non-polluting and its generation can be decentralized. There is need to come together and take initiatives to create technologies for a greater use of these sources to combat climate change by reducing the emission of green house gases.

1.1.2 Rajasthan is bestowed with significant amount of solar energy potential and an overwhelming response from Developers/IPPs has already been received for establishing solar power projects. Rajasthan Government is fully committed to the promotion of solar energy. Conducive Government of India Policy will yield astonishing achievements in energy generation in next 5-10 years.

1.1.3 The State of Rajasthan is poised to establish itself as a leader in solar power generation and a pioneer in providing energy security and sustainable growth to India. Endowed with conducive conditions with perennial and abundant solar radiation, Rajasthan has the potential to become the hub for solar power technologies and generation of sunrise green energy.

1.1.4 Rajasthan is favorably placed to become the largest provider of solar power among all sources of energy in India at a competitive cost and achieve the scale on solar power generation, which can change face of the state and transform the complete economic situation for betterment of the masses.

1.1.5 This Policy document is aimed at giving a direction to the above stated ambition of the Rajasthan state.

1.2 Preamble:

1.2.1 The State of Rajasthan receives maximum solar radiation intensity in India but the average rainfall is quite lesser, hence best suited for solar power generation. It also has land available in abundance at very low cost. As a result, Rajasthan is likely to emerge as the global hub for solar power in the country**.**

1.2.2 Government of Rajasthan has already issued a Policy for harnessing Renewable Energy in Rajasthan in year 2004. Based on the progressive views adopted in past five years in respect of solar generation under this Policy, Rajasthan State is in the advanced stage of preparedness for installation of Grid Interactive Solar Power Plants of more than 500 MW in next 2-3 years.

1.2.3 Government of Rajasthan has also prepared land banks in various Districts for setting up of Grid Interactive Solar Power Projects in Rajasthan. The private sector

developers can access these land banks for selection of sites for development of Grid Interactive Solar Power Project in Rajasthan.

1.2.4 The State Transmission utility (RVPN) has developed strong transmission system comprising of 400 kV GSS at Barmer, Jaisalmer, Merta, Jodhpur, Bikaner and Ratangarh along with associated 400 kV lines network duly supported by 220 kV and 132 kV strong transmission line and sub-station network in desert area. Therefore, suitable transmission system already exists for evacuating solar power in desert area, where the potential of solar energy is maximum. This infrastructure is being further enhanced by RVPN to meet the capacity build-up requirements for evacuating solar power in desert area in the next financial years.

1.2.5 Challenge of climate change and global warming continuously threaten the world community, and Rajasthan Government has also recognized the urgent need to tackle such challenges. Under the vision of National Action Plan on Climate Change (NAPCC), launched on June 30, 2008, the Jawaharlal Nehru National Solar Mission has been launched on dated 19.11.2009, under the brand name "Solar India".

1.2.6 To tap the potential of the emerging revolution in solar energy in Rajasthan and to set up ambitious target under the Jawaharlal Nehru National Solar Mission, the State Government has decided to issue a comprehensive Solar Policy for use of solar energy.

2. Title and enforcement:

2.1 This Policy will be known as Rajasthan Solar Policy, 2010

2.2 The Policy will come into operation with effect from …. 2010 and will remain in force until superseded or modified by another Policy.

2.3 State Government may undertake review of this Policy as and when the need arises in view of any technological breakthrough or to remove any inconsistency with Electricity Act 2003, Rules & Regulation made there of or any Government of India Policy/State Electricity Regulatory Commission's order.

3. Definitions:-

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

(1) "Act" means Electricity Act 2003, including amendments there to.

(2) "CEA" means Central Electricity Authority.

(3) "CERC" means the Central Electricity Regulatory Commission of India, constituted under sub-section(1) of Section 76 of the Electricity Act, 2003, or its successors.

(4) “Ceiling Act, 1973” means the Rajasthan Imposition of Ceiling on Agricultural Holdings Ordinance, 1973.

(5) "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.

(6) "Discom" means a distribution licensee, such as Discom Jaipur, Discom Jodhpur and Discom Ajmer.

(7) "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.

(8) "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 and which results in Solar Power Producers 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, lightening, 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.

(9) “Government" and “State" means the Government of Rajasthan and the State of Rajasthan respectively.

(10) “Inter-connection Point” shall mean interface point of solar energy generating facility with the transmission system or distribution system, as the case may be, which shall be line isolator on outgoing feeder on HV side of the pooling sub-station.

(11) "IREDA" means Indian Renewable Energy Development Agency.

(12) "Licensee" includes a person deemed to be a licensee under Section 14 of the Act.

(13) "MNRE" means Ministry of New and Renewable Energy, a Central Government Ministry responsible to develop and deploy new and renewable energy for supplementary energy requirement of the country.

(14) “National Solar Mission or Solar Mission” means Jawaharlal Nehru National Solar Mission 2009 launched by Government of India under the brand name “Solar India”

(15) “Nodal agency” means Rajasthan Renewable Energy Corporation Limited (RREC) or any other agency designated by Government of Rajasthan for promotion of electricity generation from renewable energy sources.

(16) “NVVN” means NTPC Viduit Vyapar Nigam wholly subsidiary company of NTPC.

(17) “Phase-1” means remaining period of the 11^{th} Plan & first year of 12^{th} Plan (2012-13) as expressed in National Solar Mission.

(18) “Phase-2” means remaining four year of the 12th Plan (2013-17) as expressed in National Solar Mission.

(19) Policy-2004 means Policy for Promoting Generation of Electricity through Non-Conventional Energy Sources issued on 25.10.2004.

(20) "Generating Station" means sub-station developed by the Solar Power Producer for interface with the receiving station.

(21) "Power/Energy" means electricity produced using the renewable energy sources.

(22) "PPA" means Power Purchase Agreement.

(23) "Receiving Station" means EHV/HV Sub-Station developed by RVPNL/Discom for evacuation of power generated from renewable energy sources.

(24) “Renewable Energy Power Plants” means the power plants other than the conventional power plants generating grid quality electricity from renewable energy sources.

(25) “Renewable Energy Sources” means and includes non-conventional renewable generating sources such as solar including its integration with combined cycle, as approved by the Ministry of New & Renewable Energy, Government of India.

(26) “RERC”/"Commission" means Rajasthan Electricity Regulatory Commission.

(27) "RREC" means Rajasthan Renewable Energy Corporation Ltd.

(28) “RVPN" means the Rajasthan Rajya Viduit Prasaran Nigam Limited.

(29) “SLEC” means State Level Empowered Committee constituted under the provisions of this Policy.

(30) “RPO” means Renewable Purchase Obligation.

(31) “SLSC” means State Level Screening Committee constituted under the provisions of this Policy.

(32) "Solar Power Producer" means an entity which owns facilities to generate electric power for sale to Discoms/Licensees/NVVN and to third party/captive use.

(33) “Solar Plant/Solar Power Plant” means a power plant or system utilizing solar thermal energy through solar photo-voltaic or concentrated solar thermal devices including its integration into conventional fossil fuel for generating of electricity.

(34) “Solar PV Power” means the Solar Photo Voltaic Power Project that uses sunlight for direct conversion into electricity through Photo Voltaic technology.

(35) “Solar Thermal power” means the Solar Thermal Power Project that uses sunlight for direct conversion into electricity through Concentrated Solar Power technology based on either line focus or point focus principle.

(36) “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 of the Electricity Act, 2003.

(37) "Screening Committee" means a committee constituted by Govt. of Rajasthan for selection of Solar Power Producers for setting up the solar power plant.

(38) "Tariff" means the schedule of charges for generation, transmission, wheeling and supply of electricity together with terms and conditions for application thereof.

(39) "Useful Life" in relation to a unit of a generating station including evacuation system shall mean 25 years from the date of commercial operation (COD) of such generation facility, namely: Solar PV/Solar thermal power plants.

(40) "WBA" means Wheeling and Banking Agreement.

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

4. Objectives:

The objective of this Policy is to establish Rajasthan as a National leader in solar energy in phased manner by creating the policy frame work for promoting use of solar energy in various applications and move towards achieving following objective:

a. Developing a global hub of solar power of 10000-12000 MW capacity in next 10-12 years to meet energy requirements of Rajasthan and India.

b. Contributing to Rajasthan's long term energy security as well as ecological security of Rajasthan and neighboring States by reduction in carbon emissions

c. Providing a long term sustainable solution and considerably reducing dependence on depleting fossil fuel resources like coal, oil and gas.

d. Productive use of abundant wastelands, thereby utilizing the non-industrialized desert area for creation of an industrial hub.

e. Creating favorable conditions to solar manufacturing capabilities by providing fiscal incentives.

f. Generating large direct and indirect employment generation opportunities in solar and allied industries like glass, metals, heavy industrial equipments etc.

g. Creation of skilled and semi-skilled manpower resources through promotion of technical and other related training facilities.

h. Creating an R&D hub for deployment of various combinations of solar technologies and solar based hybrid co-generation technologies which will focus on improving efficiency in existing applications, reducing cost of balance of system.

i. To achieve the grid parity in next 5-10 years, the State will encourage the Solar Power Developers to establish manufacturing plant of their technology in Rajasthan.

j. Establishment of an industrial set-up involving both domestic and foreign manpower participation which will promote Rajasthan as a global tourist destination.

5. Targets:

To achieve the objectives of this Policy, targets are as under:

5.1 Grid Interactive Solar Power Project:

5.1.1 Under MNRE Generation Based Incentive Scheme (Ongoing Scheme):

The State Government has sanctioned two power projects of 5 MW capacity each to two Power Producers for setting up their Solar Power Plant by 2010-11 as per GOI guidelines for Generation Based Incentive for grid interactive solar power generation projects issued by MNRE vide 32/61/2007-08/ PVSE dated 24.1.2008 . The State shall support early execution of MNRE sanctioned solar power projects.

5.1.2 Solar Power Plants sanctioned under the orders of RERC:

The State has sanctioned 66 MW solar power projects in compliance of the RERC's orders. The projects sanctioned by State Govt. have now been migrated to National Solar Mission. The power produced from these solar power plants shall be procured by NVVN as per mechanism provided under National Solar Mission Phase-1. The State Discoms shall purchase this solar power from NVVN along with the equivalent amount of MW capacity from the unallocated quota of NTPC stations allotted to NVVN by Ministry of Power.

5.1.3 Development of 50 MW SPV and 50 MW Solar Thermal Power Plants by selection of developer through tariff based competitive bidding process on concept of bundling of Solar Power with equivalent amount of MW capacity of conventional power:

State will develop 50 MW SPV and 50 MW Solar Thermal Power Plants through selection of developer(s) by the tariff based competitive bidding process on concept of bundling of Solar Power with equivalent amount of MW capacity of conventional power. The successful bidder will set up Solar Power Plant in Rajasthan and supply equivalent amount of MW capacity of conventional power from Power Plants located anywhere in India. The entire power from the Solar Power Plant and equivalent amount of MW capacity of conventional power plant shall be purchased by State Discoms on tariff determined by process of competitive bidding and approved by RERC. The power purchased from these solar power projects shall be over and above the RPO prescribed by RERC.

5.1.4 Setting up of Solar Power Plants under National Solar Mission (NSM) for promotion of investment in Rajasthan:

Under the guidelines of National Solar Mission, the State will promote deployment of utility grid power to be connected at 33 kV & above level. The power produced from the power plants commissioned in phase-1 of National Solar Mission shall be sold to NVVN as per the guidelines issued by MNRE/NVVN. NVVN will subsequently sell this power along with equivalent amount of MW capacity of conventional power from unallocated quota of NTPC stations to the States for meeting their RPO. The mechanism for power purchase for subsequent phases of NSM shall be as per guidelines issued by MNRE. The State Discoms shall have first right of refusal to the total energy generated from these power plants.

5.1.5 Setting up of Solar Power Plants in Rajasthan for direct sale to distribution utilities of Rajasthan:

The State shall promote setting up of solar power projects for direct sale to State distribution utilities. The power purchased from these solar power projects shall be over and above the RPO prescribed by RERC. The total capacity under this category shall be distributed equally between SPV and CSP based power plants. The total maximum capacity under this category for phase-1 (up to 2013) and phase-2 (2014-2017) would be as follows:-

	Phase-1 (up to 2013)	Phase-2 (2014-2017)
Maximum Capacity to be developed	100 MW	250 MW (Additional)

5.1.6 Utility Grid Power Projects for Captive use /direct sale to 3rd Party/other States through Open Access and sale through RE Solar Certificate mechanism for promotion of investment in Rajasthan:

The State shall promote Solar Power Producers to set up power plants of unlimited capacity for captive use or sale through RE Solar Certificate mechanism or sale of power to 3rd party/States other than Rajasthan. The state Discoms would have the first right of refusal of the total energy generated from these power plants.

5.1.7 Setting up of Rooftop PV and other Small Solar Power Plants connected to LT/11kV Grid under National Solar Mission (RPSSG Programme):

The State will promote deployment of Roof top and other Small Solar Power Plants connected to LT/11kV Grid as per guidelines of MNRE under NSM and orders of

appropriate Regulatory Commission. . The power purchased from these solar power projects shall be over and above the RPO prescribed by RERC.

5.2 Decentralized and Off-Grid Solar Applications under National Solar Mission:

The State will also promote Decentralized and Off Grid Solar Applications, including hybrid system as per guidelines issued by MNRE to meet various electrical and thermal energy requirements. Some of the major applications of solar thermal technologies include solar water heaters, solar cooling systems, air drying, steam cooking, power generation, sterling engine. The off grid photovoltaic applications include solar PV home lighting, police stations, communication and lighting, Small Powered Looms, Solar inverter, Solar PV pumps, Powering computers in schools, Small milk chilling plants, Refrigeration for medicine in primary health centers and Hybrid systems for Powering telecom towers etc. The off grid Solar applications shall be promoted for replacement of Diesel based generators sets. Guidelines and incentives issued by MNRE time to time shall be followed in State for promotion of decentralized and off-Grid Solar Applications.

5.3 Setting up of Pilot Demonstration Projects under National Solar Mission's R& D initiatives in Phase – 1 of Solar Mission:

Under the Mission, MNRE is supporting to promote technology development and cost reduction by setting up of following demonstration projects:

(1) 50-100 MW Solar thermal plant with 4-6 hours storage (which can meet both morning and evening peak load and double plant load factor up to 40%)
(2) A 100 MW Parabolic trough technologies based solar thermal plant.
(3) A 100-150 MW Solar hybrid plant with coal, gas or bio-mass to address variability and space-constraints.
(4) 20-50 MW Solar plant with or without storage, based on central receiver technology with molten salt/steam as working fluid and other emerging technologies.
(5) Grid connected rooftops PV systems on selected Government buildings and installations, with net metering.
(6) Solar based space cooling and refrigeration systems to meet day time and summer season peak load. These could be installed on selected Government building and installations.

The State shall support setting up of as many demonstration projects as possible in consultation with MNRE as per the guidelines issued in this regard.

5.4 Development of Solar Parks in State:

5.4.1 The State shall develop Solar Parks of more than 1000 MW capacity in identified areas of Jaisalmer, Bikaner, and Barmer and Jodhpur districts in various stages. The

State Government, under this policy, will act as the facilitator to attract global investment in Rajasthan and will provide the necessary infrastructure, regulatory and other Government support required through a Nodal Agency to rapidly ramp up Solar Power generation capacity in the State. The State will extend all facilities and fiscal incentives provided by Central Government/Solar Mission to manufacturers in Solar Parks.

5.4.2 Rajasthan Renewable Energy Corporation Ltd., (RRECL) will act as a Nodal Agency for development of Solar Parks in Rajasthan. A special purpose vehicle (SPV) in form of a subsidiary company of RRECL will be established for development of infrastructure and management of Solar Parks.

5.4.3 The SPV shall formulate Policy and Rules in respect of land allotment, sharing of development cost by the Solar Power producers.

5.4.4 RRECL will allocate budget for development of infrastructure in Solar Parks to SPV. The SPV will develop the initial infrastructure from the funds allocated by RRECL, which will be subsequently recouped from Project Developers whose project are located in Solar Parks by levying development charges.

5.4.5 The State shall evolve a separate special package of additional fiscal incentives for solar based industries in Solar Park in consultation with Finance Department & Industries Department, Govt. of Rajasthan.

5.4.6 The arrangement for sale/purchase of power generated from the power plants located in the Solar Parks shall be governed by the relevant provisions of this Policy. The State shall endeavor to get special allocation from NSM for Solar Parks.

5.5 Promotion of solar thermal collectors

5.5.1 Solar Water Heating System (SWHS)

The State shall promote Solar Water heating system by adopting the key strategy of making necessary policy changes for mandatory use of solar water heating system (SWHS) in the following potential categories :-

a) All Industrial buildings where hot water is required for processing.
b) All Government/Private Hospitals and Nursing homes.
c) All Hotels, Resorts, Motels, Banquet halls, Catering Units and Industrial Canteens.
d) Residential buildings built up on a plot size of 500 sq yard and above within the limits of Municipal Board/Council/Corporations including Housing Complexes set up by Group Housing Societies/ Housing Boards.
e) Hostels in educational institutions / Pvt. Hostels.

f) Barracks of Police, Paramilitary Forces and Jails.
g) Private/Government Guest Houses, Govt. Tourist Hotels, Dak Bungalow, Circuit House and retiring rooms of Railways.
h) Health Centres, Sports Complex.
i) All weather swimming pools.

5.5.2 Solar Steam systems

The State shall promote the use of solar steam systems for wider applications such as

a) Community cooking in residential institutions, industrial mess, Hotels, Barracks, mid day meal program, Hospitals etc.
b) Industrial application of steam in process industries such as Textile/Food industry etc.
c) Laundries
d) Space conditioning using Vapour absorption machines (VAM's).

5.5.3 Industrial Applications

The State shall promote the use of Solar Water Heating System (SWHS), Solar Steam Systems etc for Industrial applications such as:

a) Process requirements of Hot water.
b) Process requirements of Steam.
c) Pre-heating applications in variety of Industries.
d) Drying Applications.
e) Steam press and laundry units
f) Space conditioning using Vapour absorption machines.
g) Solar steam cooking applications in industrial mess, Hotels etc

6. Minimum/Maximum Capacity allocation to each Solar Power Producer

6.1 The minimum/maximum capacity allocation to each Solar Power Producer for their Grid connected Solar Power Plant under National Solar Mission Phase-1 shall be as per MNRE guidelines and detailed as under:

S.No.	Technology	Minimum capacity	Maximum capacity
1.	Solar Photovoltaic (PV)	5 MW	25 MW
2.	Solar Thermal (CSP)	20 MW	100 MW

6.2 The capacity allocation for pilot demonstration project shall be finalized in consultation with MNRE.

6.3 The minimum and maximum limit of capacity allocation for development in Solar Mission Phase-2 shall be decided at the time of capacity allocation for phase-2 project. .

6.4 The minimum / maximum capacity allocation to each Solar Power Producer for power projects sanctioned under Clause 5.1.5 will be as per table given in clause 6.1 above.

6.5 There will be no upper ceiling for power projects sanctioned under Clause 5.1.6.

6.6 The upper ceiling for power project sanctioned under Clause 5.1.7 will be as per the guidelines issued by MNRE.

7. Renewable Purchase Obligation of Solar Power for State Discoms:

7.1 The minimum Renewable Purchase Obligation (RPO) of Solar Power for State Discoms shall be as per the orders issued by RERC. The State Discoms shall be free to purchase solar power under National Solar Mission mechanism or directly from solar power producer for fulfillment of their Renewable Purchase Obligation or through purchase of Renewable Energy Solar Certificate. .

7.2 The State Discoms shall be under obligation to purchase power produced by the projects sanctioned under Clause 5.1.1, 5.1.2, 5.1.3, 5.1.5 and 5.1.7 of this Policy.

7.3 The State Discoms shall be under obligation to purchase power produced from demonstration projects mentioned at Clause 5.3 as per NSM guidelines.

7.4 The power purchased under Clause 5.1.1, 5.1.3, 5.1.5, 5.1.7 and 5.3 shall be over and above the RPO prescribed by RERC and the power purchased from these projects shall not be counted towards meeting the RPO.

8. Registration of Power Project:

8.1 The Solar Power Producer shall submit the application to RREC in prescribed Performa appended with the Policy at **Annexure-I** along with following required documents, as applicable.

i. A certified copy of the Memorandum & Article of Association of the Company.
ii. Certified copy of the registration certificate.
iii. Certified copy of the partnership deed.
iv. Certified copy of the Authority conferring powers on the person(s) who are competent to execute the MOU/the agreement with GoR/RREC/RVPN /DISCOM/NVVN
v. Solar Data Assessment Report for the station where the plant is to be developed.
vi. Detailed Project Report (in two hard copies and one soft copy).
vii. Demand Draft for processing fees **Rs.50000** per MW + Service Tax in favor of Rajasthan Renewable Energy Corporation Ltd. payable at Jaipur.
viii. Annual Report of the Company for last three years.

8.2 The Solar Power Producer shall deposit an amount of **Rs.50000/-** per MW with RREC towards processing fee, which shall be non-refundable. The service taxes etc. shall also be payable extra as applicable from time to time.

8.3 The Power Projects, which have been registered under Policy, 2004, shall be deemed to have been registered under this Policy-2010 on the same registration Number allotted earlier.

8.4. For projects under Clause 5.1.4 & 5.1.7, if there is any requirement of registration with NVVN/MNRE/IREDA for sanction of project under National Solar Mission guidelines, the Solar Power Producer shall have to register his project with NVVN/MNRE/IREDA as per their guidelines.

9. RREC to act as Nodal Agency for single window clearance of projects:

RREC shall act as Nodal Agency for single window clearance of the projects for following activities:

a) Registration of projects.
b) Allocation of capacity to projects under Clause 5.1.6
a. Selection of projects under clause 5.1.3 & 5.1.5 by process of tariff based bidding.
c) Loans from IREDA/PFC/REC/Financial Institutions/ Commercial Banks.
d) Allotment of revenue land.
e) For Solar Thermal Power Plants, water allocation from concerned department.
f) Approval of power evacuation plan and allocation of bays etc.
g) Arranging other statutory clearances/approvals.
h) Execution of PPA/WBA with RVPN/Discoms/NVVN (as applicable)
i) Co-ordination with MNRE/NVVN/Discoms/RVPN and other State Agencies.

10. State level Screening Committee (SLSC):

The State Level Screening Committee (SLSC) consisting of the followings shall be constituted for in principle clearance of the projects:-

(i) Principle Secretary/ Secretary, Energy, Government of Rajasthan
(ii) Chairman & Managing Director, RREC
(iii) Chairman & Managing Director RVPN
(iv) Chairman & Managing Director/Managing Director JVVNL / AVVNL / JDVVNL.
(v) Director (Technical)/Executive Director, RREC – Convener

11. In principle clearance of Projects:

11.1 **In principle clearance of Solar Power Projects under Clause 5.1.6:**

The in principle clearance of projects under clause 5.1.6 will be granted by the State Level Screening Committee after evaluating/examining the project proposals on the following criteria:

i. Detailed Project Report.
ii. Financial Capability of the Power Producer.
iii. Technical Capability of the Power Producer.
iv. Status of Technical Collaboration with proven technology supplier.
v. Capability for execution of projects.
vi. Status of land identification & its availability.
vii. Status of Power Evacuation System for proposed project.
viii. For solar thermal plant, availability of Water, if required.
ix. Documentary evidence of power purchase arrangements.

The detailed criteria of (ii) and (iii) are given at **Annexure-II**.

11.2 In principle clearance of Projects under Clause 5.1.4:

The projects under clause 5.1.4 will be considered as in principle cleared on sanction of projects by NVVN/MNRE as per the guidelines of NSM**.**

11.3 In principle clearance of Projects under Clause 5.1.3 & 5.1.5:

The in principle clearance of the projects will be granted by SLSC. RREC will be nodal agency for carrying out the tariff based bidding process on behalf of State Discoms as per guidelines of Ministry of Power, Govt. of India. The bid process will be conducted by RRECL under guidance of SLSC. SLSC will be empowered committee for granting all necessary approvals related to bid process. Approval from RERC will be taken where ever necessary.

11.4 In principle clearance of projects under clause 5.1.7:

The projects under clause 5.1.7 will be recommended to MNRE/IREDA by RREC after screening by SLSC on the basis of criteria/guidelines prescribed by the State Government. These projects will be considered as in-principle cleared on sanction by MNRE/IREDA.

12. Security Deposit:

12.1 **For project under Clause 5.1.1, 5.1.2, 5.1.4 & 5.1.7:**

The Solar Power Producers shall deposit security amount with concerned Agencies viz. NVVN, IREDA, MNRE etc. as per terms & conditions of the guidelines issued by MNRE/NVVN/IREDA.

12.2 For projects under Clause 5.1.6:

After in principle clearance of the projects by the State level Screening Committee as per clause 11.1 , the Solar Power Producers are required to deposit security amount @ Rs. 5.00 lac per MW by Demand Draft and Rs.20.00 lacs per MW in the form of Bank Guarantee within one month from the date of issue of in principle clearance. In case Power Producer fails to deposit security money within stipulated time, the in-principle clearance shall be cancelled without any notice. The security amount deposited by the Solar Power Producers shall not be convertible or transferable and shall only be refunded to the Solar Power Producer on his written request after commissioning of the Project. In case Power Producer fails to commission the Power Plant in time schedule including extension as per Clause 23.5, the security deposit shall be forfeited.

12.3 For projects under clause 5.1.3 & 5.1.5

The security deposit shall be governed by provision of bid document and power purchase agreement.

13. <u>Allotment of land</u>:

13.1 The allotment of land to the Solar Power Projects shall be done as per the provisions of Rajasthan Land Revenue (Allotment of Land for setting up of Power plant based on Renewable Energy Sources) Rules, 2007, (**Annexure -III**).

13.2 The Government land required for Solar Power Plant shall be allotted to Solar Power Producer at concessional rate of 10% of DLC rate.

13.3 After registration of projects, RREC will recommend to the concerned District Collector for allotment of land. However, there will be a ceiling of 50 MW for allotment of land in initial Phase. In case, the Power Producer has registered for more than 50 MW, the remaining land identified by the Power Producer shall be kept reserved by the concerned District Collector on recommendation of RREC for future expansion. The allotment of land from the reserved land shall be done only after utilization of land allotted earlier.

13.4 For setting up Solar Power Plant on different technology, maximum allotable land to the Solar Power Producer shall be as follows:

i.	SPV on Crystalline Technology	2.5 Hac./MW
ii.	SPV on Thin Film/Amorphous Technology	3.5 Hac./MW
iii	Solar Thermal (CSP)	2.5 Hac./MW
iv	Solar Thermal with Storage facility/ (CSP)	Shall be decided by RREC, on case to case basis.

13.5 Power Producers shall be allowed to purchase private land from the Khatedar for setting up of Solar Power Plants in excess of ceiling limit prescribed in the Ceiling Act, 1973. Conversion of such land to industrial use shall be required for setting up of Solar Power Plant before start of works.

13.6 Conversion of private land to industrial use shall be required for setting up of Solar Power Plant. The conversion charges shall be 10% of charges levied for Industrial purpose.

14. SLEC Clearance of Power Projects:

14.1 All in principle cleared projects will be presented to the State Level Empowered Committee (SLEC) for final approval. The State Level Empowered Committee will consist of following members:-

1. Chief Secretary, GoR (Chairman)
2. Principal Secretary, Revenue, GoR (Member)
3. Principal Secretary/Secretary, Energy, GoR (Member)
4. Principal Secretary, Water Resources Department, GoR (Member)
5. CMD, Rajasthan Viduit Prasaran Nigam Ltd, (Member)
6. CMD, Rajasthan Renewable Energy Corporation Ltd., (Member- Secretary).
7. District Collector of concerned District- Special Invitee.

15. Power Purchase Agreement:

The Power Purchase Agreement between the Solar Power Producer and Procurer of power shall be executed in the following manner:-

15.1 Project Sanctioned under MNRE Generation Based Scheme (Clause - 5.1.1):

Under this scheme, the Power Purchase Agreement will be executed between the concerning Discom and the Solar Power Producer on the tariff as determined by the RERC as per the guidelines of MNRE.

15.2 Solar Power Project connected to grid at 33 kV & above level under the Clause 5.1.2:

Under this scheme, the Power Purchase Agreement shall be executed between NVVN and the Solar Power Producer as per guidelines of MNRE and tariff order of the CERC. The State Discom shall enter into PPA with NVVN for purchase of solar power generated from these power plants along with equivalent MW of conventional power as per the mechanism provided in NSM phase 1.

15.3 Solar Power Project connected to grid at 33 kV & above level under the Clause 5.1.3:

Under this scheme, the State Discom shall enter into PPA with successful bidder for purchase of solar power generated from these power plants along with equivalent amount of MW capacity of conventional power as per the mechanism provided in bidding documents on the lowest tariff arrived after tariff based competitive bidding process and approved by the RERC.

15.4 Solar Power Project connected to grid at 33 kV & above level under the National Solar Mission (Clause – 5.1.4):

For the projects sanctioned under phase-1 of NSM, the Power Purchase Agreement shall be executed between the NVVN and the Power Producer as per guidelines of MNRE and the tariff as agreed with NVVN. The NVVN shall sell the solar power generated from these power plants along with equivalent amount of MW capacity of conventional power as per the mechanism provided in NSM Phase-1 to the States distribution utilities. The power purchase agreement for projects sanctioned in phase-2 &3 of NSM will be as per guidelines issued by MNRE.

15.5 Solar Power Project sanctioned under clause 5.1.5:

For the projects sanctioned under clause 5.1.5, the Power Purchase Agreement shall be executed between Discoms and successful bidders as per the provisions of bid documents on the tariff arrived by the process of tariff based bidding and approved by RERC.

15.6 Third party sale / captive use/ sale to other States through Open Access (Clause – 5.1.6):

In case of third party sale/captive use/sale to other States, the Power Purchase Agreement shall be executed between the Power Producer and the procurer on mutually agreed rates. In case of sale through Renewal Energy Certificate (Solar) mechanism, the PPA shall be signed as per the guidelines/orders of appropriate commission.

A separate agreement shall be executed for Wheeling and banking of power with Discom(s) for such banking. The wheeling agreement with RVPN will be executed separately, if the Solar Power Producer intends to use the system of RVPN for wheeling power.

15.7 Rooftop PV and other Small Solar Power Plants connected to LT/11 kV under NSM (clause 5.1.7):

Under this scheme, the Power Purchase Agreement shall be executed between the concerned Discom and the operator of small solar power plant as per guidelines of MNRE/IREDA and tariff orders of RERC **(Annexure-IV)**. A generation-based incentive will be admissible to the Discom to cover the difference between the solar tariff and base price as per the guidelines issued by MNRE and orders of appropriate Commission.

15.8 Pilot Demonstration projects under the Mission's R & D initiatives (Clause–5.3):

For Demonstration projects set up in consultation with MNRE (Clause 5.3)**,** the Power Purchase Agreement shall be executed between the procurer and the Power producer as per MNRE guidelines. The Power Producer will receive the tariff as fixed by the appropriate Commission.

16. **Creation of "Rajasthan Green Energy Development Fund":-**

State Government shall create a separate Rajasthan Green Energy Development Fund for promotion of solar / renewable energy in Rajasthan. Suitable funding mechanism for generating regular financial resources for this fund shall be evolved by the State Government. This fund will be utilized for creation of infrastructure and promotion of solar energy / renewable energy as per the guidelines issued by State Government in this regard.

17. <u>Open Access for Third Party Sale within States</u>:

Open access will be granted to any Solar Power Producer or beneficiary. They shall have to pay the applicable open access charges and losses as approved by RERC/ CERC from time to time.

18 **<u>Sale of power to State other than Rajasthan through open access:</u>**

The sale of Solar Power to States other than Rajasthan through open access shall be permitted subject to following conditions :-

(i) The state Discoms would have the first right of refusal to the total energy generated from these power plants.

(ii) An Green Energy Development Cess @ 5% percent per unit sale price of electricity generated by the plant or Rs. 1.00 per unit whichever is less shall be payable by the Developer to the Rajsathan Green Energy Fund.

(iii) 15% of total energy generated from power plants commissioned after 31.3.2017 shall be made available to Discoms of Rajasthan free of cost.

(iv) Applicable open access charges and losses shall be paid by the Solar Power Developer as approved by RERC/CERC from time to time.

19. Forecasting and Scheduling:

The Solar Power Generation shall not be covered under scheduling procedure for Intra-State ABT. However, the actual energy injected in the grid during particular time block of 15 minutes shall be post-facto considered in drawl schedule for sale of power to licensee/third party or for giving set-off against the consumption of recipient unit in case of wheeling.

20. Metering of Power from Solar Power Plants, Rooftop and Small Solar Power Plants.

Installation of meters, metering testing, meter calibration & meter reading and all other matters incidental thereto shall confirm to the Central Electricity Authority (Installation & Operation of Meters) Regulations, 2006, the grid code, the metering code and other relevant regulations issued by RERC/CERC in this regard.

21. Grid Interfacing:

21.1 The grid interfacing arrangements for power using Solar as Renewable Energy Sources will be made by Solar Power Producer/RVPN/ Discom as under:-

21.2 **Generating Plant Sub-Station:**

21.2.1 The Generating Plant Sub-station shall be developed and maintained by the Solar Power Producer as per the Grid Code applicable from time to time and the entire cost for this will be borne by them. Plant should be integrated by installing RTUs by solar power producers so that the fed power can be monitored at receiving Sub-station by the SLDC on real time basis.

21.2.2 The Solar Power Producer shall furnish the requisite (i) Steady State Load Flow studies and (ii) Short circuit studies etc. for seeking connectivity with the Grid in reference to the provisions of the clause no. 6 "General Connectivity Conditions" of the Central Electricity Authority's "Technical Standards for Connectivity to the Grid Regulation, 2007."

21.2.3 Capacitors of sufficient rating shall also be provided by the Solar Power Producers to ensure that the average power factor is maintained as per requirements of State Load Dispatch Centre, measured at metering point of the Solar Power Plant.

21.3 **Receiving Station:**

21.3.1 **33kV and above grid connected solar power plants**:

RVPN shall finalize the location of receiving station in consultation with RREC on which the electricity generated will be received at minimum 33 kV level of 132/33 kV Sub-station or 400/220/132/33 kV Sub-station.

21.3.2 **11kV grid connected solar power plants**:

Discom shall finalize the location of receiving station for small solar power plant in consultation with RREC on which the electricity generated will be received at minimum 11 kV level of 33/11 kV Sub-station

21.3.3 **LT connected solar power plants**:

Discom shall allow interconnections of solar power plants connected to LT voltage i.e. 400 V (3 phase) or 220 V (1 phase) as per standard /norms fixed by Central Electricity Authority / guidelines of MNRE / relevant RERC order.

21.4 Grid Connectivity:

21.4.1 **Grid connected solar power plants**:

For creation of proper facility for receiving power, the Solar Power Producer shall pay Grid Connectivity charges as finalized by RERC from time to time to Discoms/RVPN as applicable. These charges will be paid by the Solar Power Producer to RVPN/Discoms within 3 months of final approval of project. These charges include cost of complete line bay (including civil works) and its interconnection with existing electrical system. Line Bay includes breakers, CTs, CVT / PTs, isolators, protection and metering equipments, bus bar material and other allied materials as applicable.

21.5 **Transmission and Distribution Network Augmentation:**

The commission under regulation 89 of the RERC Tariff regulation 2009 has specified that capacity augmentation and of a substation and backup transmission system for power evacuation from RE power station to the load centre shall be planned and carried out by the state transmission utility (STU). For augmentation of transmission / distribution systems to evacuate the power from receiving station, RVPN/Discom shall develop/augment the necessary transmission /distribution network within mutually agreed timeframe.

21.6 Transmission line from Generating Plant Sub-station to Receiving Station:

21.6.1 **Grid connected solar power plants commissioned under Clause 5.1.1, 5.1.2, 5.1.3, 5.1.5 & 5.1.7**:

The power evacuation transmission line beyond the point of interconnection to the RVPN/Discom receiving Sub-station shall be laid by STU as per the prevailing orders of RERC.

21.6.2 **Grid connected solar power plants commissioned under Clause 5.1.4 & 5.1.6**:

The power evacuation transmission line beyond the point of interconnection to the RVPN/Discom receiving Sub-station shall be laid by Solar Power Producer or the procurer of power or STU as per provisions of PPA /Guidelines/ Regulations of appropriate Commission.

22. Incentive by the State Government:

22.1 **Exemption from Electricity Duty**:

Consumption of electricity generated by Power Producers for its captive use will be exempted Electricity Duty @ 50% for a period of 7 years from COD.

22.2 **Grant of incentives available to industries**:

Generation of electricity from Solar Power Plants shall be treated as eligible industry under the schemes administered by the Industries Department and incentives available to industrial units under such schemes shall also be available to the Solar Power Producers.

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

22.3.1. Water Resource Department will allocate 60 Cusec water from IGNP canal for development of Solar Thermal based power plants. In case, the Power Producer proposes to use ground water for power generation, the permission will be granted by the Ground Water Department/Water Resource Department. 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 concerned Ground Water Deptt. /Water Resource department as the case may be. The modifications(s) required, if any, in the existing canal system shall be done by the Water Resources Department at the cost of the Power Producer.

22.3.2 The consumption of water in Solar Thermal Power Plants using Air Cooled Technology is very less as compared to Water Cooled Condenser Technology. Similarly water requirement for power plant based on SPV technology is also less. Ground Water Department shall accord similar status

to Solar Power Plant using SPV technology and for Solar thermal power plant using Air Cooled Technology as granted to drinking water scheme while granting NOC for drilling bore well/tube well for fulfilling water requirement of these projects.

23. Sharing of Clean Development Mechanism:

The Solar Power Producer will pass benefits of CDM to the distribution licensee with whom PPA has been signed as per appropriate Commission's order.

24. The Completion Time schedule for the Projects:

24.1 The completion time schedule for the projects sanctioned under the MNRE generation based scheme (Clause 5.1.1) shall be governed by the guidelines of the scheme issued by MNRE.

24.2 The completion time schedule for the Solar Power Plants sanctioned under migration scheme of NSM shall be governed by the guidelines issued by MNRE / NVVN.

24.3 The completion time schedule for the Solar Power Plants Projects under the Clause 5.1.3 shall be governed by provision of bid document and power purchase agreement.

24.4 The completion time schedule for the Solar Power Plants sanctioned covered under National Solar Mission (clause 5.1.4 & 5.1.7) shall be as per guidelines issued by MNRE/NVVN/IREDA.

24.5 The time schedule for completion, for the Solar Power Plants, sanctioned under Clause 5.1.6 subject to force majeure conditions, shall be as under:

Type of Projects	-	Completion Time schedule
SPV:		
Up to 5 MW capacity	-	Within 15 months from the date of SLEC approval
More than 5 MW and up to 10 MW capacity	-	Within 24 months from the date of SLEC approval
More than 10 MW and up to 25 MW capacity	-	Within 30 months from the date of SLEC approval
CSP:		
Up to 25 MW capacity	-	Within 27 months from the date of SLEC approval
More than 20 MW and up to 100 MW capacity	-	Within 40 months from the date of SLEC approval

Provided that extension in time schedule may be granted by the SLEC on case to case basis after depositing penalty amount as under:-

(a)	For delay upto 3 months	Rs.1,00,000 per MW
(b)	For delay more than 3 months but upto 6 months	Rs.2,00,000 per MW
(c)	For delay more than 6 months but upto 9 months	Rs.3,00,000 per MW
(d)	For delay more than 9 months but upto 15 months	Rs.4,00,000 per MW

Normally SLEC will not grant any extension beyond 15 months, but SLEC may consider extension beyond 15 months where there in a reasonable certainty of commissioning of the project. In there cases extended completion schedule & penalties shall be decided by SLEC on case-to-case basis.

25. Reactive Power Charges:

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

26. The Solar Power Producer shall comply with Grid Code including Load Dispatch and System Operation Code, Metering Code, Protection Code, Safety Code etc. as applicable from time to time in the State of Rajasthan.

27. Power to remove difficulties:

If, any difficulties arise in giving effect to this Policy, the State Level Screening Committee is authorized to issue clarification as well as interpretation to such provisions, as may appear to be necessary for removing the difficulty either on its own motion or after hearing of those parties who have represented for change in any provision.

28. Notwithstanding anything contained in this Policy, the provision of the Electricity Act-2003 and the applicable CERC/RERC Regulations /Orders as issued from time to time shall prevail for the purpose of implementation of this Policy.

Annexure-I

Form-A

RAJASTHAN RENEWABLE ENERGY CORPORATION LIMITED

(Government of Rajasthan Undertaking)

E-166, Yudhisthir Marg, C-Scheme, Jaipur

Tel: 2225859 / 2229341 / 2221650 / 2229055 Fax: 0141-2226028

Website: www.rrecl.com

APPLICATION FORM FOR SUBMITTING PROPOSALS UNDER RAJASTHAN SOLAR POLICY, 2010

(Issued vide Energy Deptt. letter no. F. ( ) Energy/10 dated …… 2010)

I. COMPANY DETAILS

1. Name of the applicant / organization :

2. State whether the applicant /organization is a

   a) Company registered under Indian Companies Act 1956; :
   b) Co-operative Society; :
   c) Any other corporate entity. :

3. **Address:**
   i) Office :

   a) Telephone No. :
   b) Fax No. :

   c) Email Address :

   ii) Name and Address of the authorized person :
   a) Name :
   b) Address :

   c) Telephone No. :
   d) Fax No. :
   e) Email Address :

4. In case of any other corporate entity, give details of partners / directors/ owners :

5. Whether income tax assessee. If yes, please state the year up to which assessment made (copies of assessment for last three years to be enclosed) :

6. If answer to 5 is No, state whether the promoter is an assessee. :

7 Income tax permanent A/c. No. :

8. Present activity/business carried on by the applicant/ organization. :

9. Give details of the turn over of the organization in last three years (copies of the profit and loss account and Balance Sheet / Annual Report to be enclosed). :

10. Do you propose to set up the plant in the name of existing company or propose some sister concern. :

II. <u>PROPOSED POWER PROJECT</u>

1. a) Proposed Gross Capacity (MW). :
   b) Auxiliary Consumption (MW) :
   c) Net Capacity (MW) :
   d) Plant Load Factor (PLF) % :
   e) Net expected power generation per annum : ……. lacs kWh

2. a) Location of proposed site with details. :
   b) Land details of the power plant site :

   i) Name of village :
   ii) Khasra Nos. :
   iii) Area of land from each Khasra No. :
   iv) Land map with clear markings of land required for the project. :
   v) Is it Govt. land or Pvt. land :

3. Nearest Railway Station :

4. Name of the manufacturer with address for supply, installation and commissioning of the power generation system, if identified. :

5. Financing Arrangement: :
   a) Own funds (promoters) :
   b) IREDA/ PFC/REC/ Financial Institution / Commercial Banks :
   c) Equity :
   d) Others :

6. Time frame and pert chart for major activities.
   i) Acquisition of land :
   ii) Signing of PPA :
   iii) Expected financial closure :
   iv) Date of commissioning / synchronization :
   v) Proposed Commercial Operation Date (COD) :

7. Power Plant proposed to be set up for
   a) Captive use :
   b) Sale to RVPN/DISCOM on approved rate :
   c) Third party sale at mutually agreeable rates on payment of approved wheeling charges to RVPN. :
   d) Under National Solar Mission (please specify the name of scheme under which the power plant proposed to be set up) :
   e) Any other (please specify)

III DETAILS OF PROPOSED POWER PROJECTS

a) Solar Photovoltaic Power Plant (SPV)

i) Name of Solar Technology Proposed :
ii) No. of Solar Modules proposed :
iii) Capacity of PCU :
iv) Battery bank proposed : Yes/ No
v) If yes, its capacity :
vi) Duration and time of day during which supply of power is proposed

b) SPV – Wind Hybrid

i) No. of Solar Modules proposed :
ii) Capacity of PCU :
iii) Battery bank proposed : Yes/ No
iv) If yes, its capacity :
v) Duration and time of day during which supply of power is proposed :

c) Solar Thermal

i) Name of Solar Technology Proposed :
ii) With storage/without storage :
iii) If, storage, total hours of storage :
iv) Requirement of Water (Cusec.) :
v) Duration and time of day during which supply of power is proposed :

IV. ELECTRICAL DETAILS

1. Transmission of Power & Evacuation plan/interconnection facility for the proposed plan :
2. Interfacing scheme proposed :

3. For captive power plant

   i) Present consumption of Electricity:

      a) From Vidyut Vitaran Nigam :

      b) Captive Generation :

   ii) Connected load of the company :

   iii) HT/LT consumer. :

   iv) Nearest Sub-station of RVPN/VVN and distance from the proposed power plant. :

   v) Voltage ratio of the Sub-station :

V. <u>FINANCIAL DETAILS</u>

1. Estimated cost of the project proposed :

2. Cost of power generation per unit (Please enclose Cash Flow Chart also). : …….. Rs./kWh

3. How do you propose to raise the required finance for the project: :

   a) Equity share capital :

   b) Promoters contribution :

   c) Term Loans :

4. Do you envisage any foreign collaboration, if so please furnish the details

5. Details of the application/processing fee remitted: (as per clause 8.2) :

   a) Amount Rs. :

   b) Demand Draft/Cheque No. :

   c) Date :

   d) Banker's Name and Address

6. Can you help access bilateral grants/ concessional loans from GoR to provide soft loan for your project (if yes, give details of the agency and preliminary terms and conditions) :

VI. <u>ANY OTHER RELEVANT INFORMATION</u>

VII. **DECLARATION**

(ii) I/We certify that all information furnished is true to the best of my/our knowledge.

(iii) I/We agree that Govt. of Rajasthan is the final authority to allot us the project.

(iv) I/We shall not have any dispute with GoR/RREC/NVVN for non-allotment of the project.

(v) I/We agree to sign necessary agreement with Govt. of Rajasthan/RREC/NVVN.

(vi) I/We agree to comply with the terms and conditions of Rajasthan Solar Policy, 2010

Signature of the authorized Signatory
of the Organization with Seal

Place:
Date:

VIII. DOCUMENTS ENCLOSED:-

i. A certified copy of the Memorandum & Article of Association of the Company.
ii. Certified copy of the registration certificate.
iii. Certified copy of the partnership deed.
iv. Certified copy of the Authority conferring powers on the person(s) who are competent to execute the MOU/the agreement with GoR/RREC/RVPN /DISCOM.
v. Pre feasibility Report/Detailed Project Report
vi. Processing fee in the form of D.D. No. …….. Dated …… payable to RREC, payable at Jaipur for Rs…
vii. Annual Report of the Company for last three years.

Receipt of Application

Received an application to set up …… MW Solar Power Plant at ……..from M/s…… …… along with processing fee of Rs. ……. (Rs. 50,000/- per MW plus service tax as applicable), paid through D.D. No. …… dated ……

Authorized signatory
RREC, Jaipur

Annexure-II

The Power Producer desirous to set up Solar Power Plant in State of Rajasthan must fulfill the following minimum financial and technical criteria:

A. <u>Financial Criteria</u>:

i) Internal Resource Generation: Rs.0.3 crore or equivalent US$* per MW of the capacity, computed as five times the maximum internal resources generated during any of the last five years business operations.

ii) Net Worth: Rs.5.0 crore or equivalent US$* per MW of the capacity. The above computation shall be derived from any of the past three years annual accounts.

iii) Annual Turnover: Rs.1.2 crore or equivalent US$* per MW of the capacity. The above computation shall be derived from any of the past three years annual accounts.

* The US$-Indian Rupee Exchange rate shall be considered as the corresponding TT buying rate specified by the State Bank of India seven days before the last date of submission of proposal to RREC.

Above financial parameters shall be defined and computed in following manner:

- Internal Resources Generation

=	Profit After Tax (PAT)
Add:	Depreciation and Amortization
Add:	Decrease in Net Current Assets (excluding cash)
Add:	Any other non cash expenditure (including deferred tax)
Subtract:	Scheduled Loan repayments and increase in net current assets (excluding cash)

Provided, when an existing loan has been repaid through the proceeds of a new loan, then to the extent the proceeds of the new loan have been used to repay the existing loan, such repayment of existing loan shall not be considered for the purposes of computation of Internal Resource Generation.

- Net Worth =

	Equity Share Capital
Add:	Reserves
Subtract:	Revaluation Reserves
Subtract:	Intangible Assets
Subtract:	Miscellaneous Expenditures to the extent not written off and carry forward losses

- Annual Turnover : Annual Gross Revenue Earned

For the purposes of financial criteria only unconsolidated audited annual accounts shall be used. Company shall furnish documentary evidence duly certified by qualified auditors in support of their financial capability.

B. <u>Technical Criteria</u>:

A **Solar Power Producer** to qualify for setting up of SPV/CSP solar power plant must meet following **technical qualification requirements**

1. Solar Power Producer firm must be registered with RREC and shall have established office in India.
2. Solar Power Producer firm must meet the minimum financial criteria given at (A) above.

3 (I) For Solar Photovoltaic technology power plants:

Solar Power Producer must fulfill either of following three requirements:-

1. (i) Solar Power Producer must be manufacturer of offered technology viz SPV crystalline module/thin film Module and having facilities and capacity and procedures including quality control who must have designed, manufactured and type tested and supplied such modules of total capacity 5MW which must be in satisfactory operation for a period of at least 1 (one) year as on the specified cutoff date

And

(ii) should have tie up with System Integrator cum EPC contractor who have designed, engineered, installed tested and commissioned at least one Solar Power plant of offered technology of minimum 1 MW (SPV technology) globally in last five years at a single location along with all required associated, allied, auxiliary equipment complete in all respect as single point responsibility so as to generate and export power to state grid Which should be in successful commercial operation for minimum period of one year as on the specified cut of date

Or

2 Solar Power Producer must be System Integrator cum EPC contractor as per 1(ii) above

And

Tie-up with manufacturer of offered technology as per details given at 1 (i) above

Or

3 Solar Power Producer must have

(a) Tie-up with manufacturer of offered technology as per details given at 1 (i) above.

And

(b) Tie-up with System Integrator cum EPC as per details given at 1(ii) above.

3 (II) For Concentrated Solar power technology (CSP) viz Solar Thermal Parabolic Troughs/ Dish/ Sterling/ Fresnel/ Tower technology thermal power plants:

Solar Power Producer must fulfill either of following three requirements:

1 (i) Solar Power Producer must be manufacturer of offered Concentrated Solar power technology viz Solar Thermal Parabolic Troughs/ Dish/ Sterling/Fresnel/Tower and having facilities and capacity and procedures including quality control who must have designed, manufactured and type tested and supplied requisite modules of at least 5MW capacity which must be in satisfactory operation for a period of at least 1 (one) year as on the specified cutoff date

And

(ii) should have tie up with System Integrator cum EPC contractor who have designed, engineered, installed tested and commissioned at least one Solar Power plant of offered Concentrated Solar power technology viz Solar Thermal Parabolic Troughs/ Dish/ Sterling/Fresnel/Tower technology of minimum 5 MW (CSP technology) globally in last five years at a single location along with all required associated, allied, auxiliary equipment complete in all respect as single point responsibility so as to generate and export power to state grid Which should be in successful commercial operation for minimum period of one year as on the specified cut of date

Or

2 Solar Power Producer must be System Integrator cum EPC contractor as per 1(ii) above

And

Tie-up with manufacturer of offered technology as per details given at 1 (i) above

Or

3 Solar Power Producer must have

(a) Tie-up with manufacturer of offered technology as per details given at 1 (i) above.

And

(b) Tie-up with System Integrator cum EPC as per details given at 1(ii) above.