

Uttar Pradesh Solar Energy Policy -2022

(Draft)

Table of Contents

1.	Preamble.....	3
2.	Vision & Objectives	4
3.	Title & Operative Period.....	4
4.	Definitions	5
5.	Policy Targets.....	9
6.	UPNEDA as Nodal Agency.....	11
7.	Rooftop Solar PV Projects.....	13
8.	Off Grid Solar Applications.....	18
9.	Utility Scale Grid Solar Power Projects.....	19
10.	Development of Solar Parks	23
11.	Solar Power Projects with Storage System	25
12.	Allotment & Procurement of Land.....	26
13.	Incentives& Facilities available to Solar Power Projects.....	28
14.	Approval Mechanism	32
15.	Uttar Pradesh Solar Energy Development Fund.....	34
16.	Time Frame for completion of Solar Projects	34
17.	Manufacturing of Solar Equipment.....	34
18.	Employment Generation & Skill Development	35
19.	Power to amend & Interpret the policy.....	35

1. Preamble

Growing concerns of global warming and climate change require emphasis on clean and green energy.

Over past several decades, demand for power has grown and renewable energy has become commercially viable, therefore, the state utilities and other stakeholders like Regulatory, power management companies, Government and consumers have increased interest and focus on renewable energy. To achieve a sustainable development route that provides for advancement in economic as well as environmental objectives, the Government of Uttar Pradesh is determined and is taking necessary steps to encourage the generation based on renewable energy sources.

The State has vast and largely untapped potential and availability of vast barren/un-cultivable unutilized government/private land in Bundelkhand. This has potential to make Uttar Pradesh a highly preferred destination for solar energy at the global level.

To meet the global commitment Government of India has fixed a national target of 500 GW installations from Non Fossil Fuels. Out of which as per CEA report on "Optimal Generation Capacity mix for 2029-30", 280 GW will come from Solar Energy. This will reduce dependence on conventional sources of energy by promoting non-conventional energy sources.

Although Solar Energy is a day time energy it becomes necessary to promote storage systems to ensure Round the clock power supply at the same time this is also necessary to ensure grid stability in a long run. Uttar Pradesh values the commitment to develop Round the clock Power using Non conventional Energy sources.

To align with India's ambitious solar PV capacity expansion program, the State envisages to accelerate the deployment of solar power by means of implementation of large-scale

projects, small scale distributed systems, establishment of ultra-mega solar parks and Rooftop solar PV projects. These targets will be achieved by introducing new mechanism that will support consumers, businesses and developers in the sector.

Accordingly, State Government of Uttar Pradesh hereby declares and adopts **Solar Energy Policy, 2022**.

2. Vision and Objectives

- a. To provide low cost and reliable power to the people of Uttar Pradesh.
- b. To reduce the dependence on fossil fuels and achieve “optimal energy mix” of conventional and renewable power, ensuring energy security in the State.
- c. To provide hassle free conducive environment for private sector investment in the field of solar Energy generation and storage Encourage participation of Private Sector and provide investment opportunities for harnessing solar energy.
- d. Human resource development particularly to renewable energy skill enhancement and generation of employment opportunities.
- e. To spread awareness about solar power technologies amongst all the electricity consumers.

3. Title and Operative period

- 3.1 This policy shall be known as “**The Uttar Pradesh Solar Energy Policy 2022**”
- 3.2 This policy shall come into operation from date of issuance and shall remain in operation for a period of five (5) years or till the Government notifies the new policy whichever is earlier.
- 3.3 State Government may amend/modify/review his Policy as and when required.

4. Definitions

4.1 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. **"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;
6. **"CERC"** means the Central Electricity Regulatory Commission, constituted under sub-section (1) of Section 76 of the Electricity Act, 2003;
7. **"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;
8. **"Contract Demand"** means regular contract demand plus standby contract demand, if any, of the Consumer with DISCOM;
9. **"COD"** means Commercial Operation Date, i.e. the date when the Power Plant gets commissioned as per rules/provisions;
10. **"CPP" or "Captive Power Plant"** means Captive Power Plant as defined in Electricity Act, 2003 and Electricity Rules, 2005;
11. **"DISCOM of Uttar Pradesh"** means a distribution licensee of the State, such as MVVNL, DVNL, PVVNL and PuVNL;
12. **"Financial Year"** means a period commencing on 1st April of a calendar year and ending on 31st March of the subsequent calendar year;
13. **"Generating Plant Sub-station/Pooling Sub-Station"** means Sub-station developed by the Solar Power Producer/Developer for interfacing with the receiving sub-station;

14. **“Government” and “State”** mean Government of Uttar Pradesh and the State of Uttar Pradesh respectively;
15. **“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;
16. **“GST”** means Goods and Services Tax;
17. **"IREDA"** means Indian Renewable Energy Development Agency;
18. **“ISTS”** means Inter State Transmission System;
19. **"Licensee"** includes a person deemed to be a licensee under Section 14 of the Electricity Act, 2003;
20. **"MNRE"** means Ministry of New and Renewable Energy of Government of India, responsible to develop and deploy new and renewable energy for supplementary energy requirement of the country;
21. **Net Metering”** means the methodology under which electricity generated by the Rooftop/Ground mounted Solar PV System setup 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;
22. **“Nodal Agency”** means UP New and Renewable Energy Development Agency (UPNEDA)
23. **“Person”** means an individual or a firm/ company registered under the Companies Act 1956;
24. **"PPA"** means Power Purchase Agreement;
25. **"Pooling Station"** means sub-Station developed by the Developer for interface with the Receiving Sub-station;
26. **“Project Capacity”** shall mean the maximum Alternating Current (AC) capacity at the delivery point;
27. **“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;

28. **“UPERC”/“Commission”** means Uttar Pradesh Electricity Regulatory Commission;
29. **“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;
30. **“RPO”** means Renewable Purchase Obligation;
- 31 **“SECI”** means the Solar Energy Corporation of India;
- 32 **“Solar Farm/Park”** means a group of solar power plants in the same location used for the generation of electric power;
- 33 **“Solar Power Park Developer”** means a person who develops and/or maintains solar parks and the related common infrastructure facilities;
- 34 **“Solar Power Producer/Developer”** means a person that makes an investment for setting up of solar power project and generating electricity from solar energy;
- 35 **“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
- 36 **Solar PV Power Plant** means Solar Photo Voltaic (SPV) Power Plant that uses sunlight for direct conversion into electricity through Photo Voltaic technology;
- 37 **Tariff** means the schedule of charges for generation, transmission, wheeling and supply of electricity together with terms and conditions for application thereof;
38. **“State Agency”** means Uttar Pradesh New and Renewable Energy

Development Agency 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;

39. “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;

40 WBA" means Wheeling and Banking Agreement.

The terms not defined above will have their usual meanings.

5. Policy Target

- i) The Policy aims to achieve at argetof16000MW Solar Power Projects up to 2026-27 in the Stateasunder:

S.No.	Particulars	Capacity
1	Utility/Grid Scale Solar Projects/Parks	10000 MW
2	Solar Rooftop	4,000MW
3	Distributed Solar Generation	2000 MW
4	Employment Generation	10000 No's

- ii)Uttar Pradesh Power Corporation Ltd (UPPCL) through its DISCOMs will purchase solar energy as per the Renewable Purchase Obligation (RPO)as determined by UPERC.
- iii) State will endeavor to develop Solar Power Projects for captive consumption and sale of power to third parties other than Uttar Pradesh Power Corporation Ltd, Interstate and Intrastate.

This Policy also aims to promote Solar Energy asunder:

- Development of Solar Parks.
- Promotion of small Decentralized Grid Connected Solar Power Projects by solarization of segregated agriculture feeders.
- Promotion of solar installations along expressways and Railway tracks.
- Promotion of floating/canal top/ reservoir top solar power projects.
- Promotion of Solar Energy projects with storage systems.
- 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 UPERC.
- Promotion of Off-Grid Solar applications like Solar Water Pumps, home lighting systems, water heater, etc.
- Strengthening of Transmission Network for evacuation of Solar Projects by development of Green Energy Corridor in Bundelkhand region.

- i) Promotion of manufacturing industries of solar energy equipment.