

The State Government targets to meet the supply and demand of energy and to provide 24 hours electricity supply to rural and urban households by year 2018-19. A complete transformation of power sector scenario in Uttar Pradesh including tapping huge solar energy potential is required for attaining such an ambitious target. Additionally, solar energy deployment in the state will also attract investments creating many jobs in the state. The solar industry provides both one-time jobs during pre-commissioning/ construction phase and regular operations and maintenance positions over the life of the project. Investments in the solar industry as well as domestic manufacturing of solar panels will help create direct and indirect employment opportunities in both skilled and unskilled sector.

Thus, keeping in view vast potential of solar power in the state and to improve the power availability, the Government is keen in establishing solar energy based power plants in the state. To achieve this objective, State Government of Uttar Pradesh hereby declares and adopts **Solar Power Policy, 2017**.

2. Title

This policy shall be known as “**The Uttar Pradesh Solar Power Policy 2017**”.

3. Objectives

- (i) Encourage participation of Private Sector and provide investment opportunities to set up solar power projects in the state.
- (ii) Support in providing environment friendly and affordable Power for All.
- (iii) Promote Research & Development, innovations and skill development in the State

- (iv) Achieve target of 8% Solar Renewable Purchase Obligation (Solar RPO) by 2022.

4. Operative Period

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.

The Solar Power Projects (SPPs) that are taken up during the operative period shall continue to be eligible for the incentives declared under this policy, for the period as envisaged in this policy wherever the period is not mentioned for the entire useful life of the project.

5. Applicability of the Policy

Solar Power Policy shall be applicable for the following solar projects set up within the state.

5.1 Utility Scale Solar Power Projects (SPPs)

Utility scale grid-connected solar power projects based on both Photo Voltaic (PV) as well as Solar Thermal technologies in which the following projects will be included:

- Projects set up for sale of power to Uttar Pradesh Electricity Distribution company
- Projects set up for sale of power to third parties within the State or outside the State
- Projects set up for 100% captive use/ Group captive use or to sell part generation to Electricity Distribution Company or Third party.

5.2 Solar Rooftop Projects

State shall encourage the development of solar rooftop projects to meet the target of 4300MW capacity fixed for the State by Ministry of New and Renewable Energy, Government of India by year 2022.

5.3 Off-Grid Applications:

- Solar Street Lights
- Solar powered agricultural pump sets
- Any other off grid solar product.

6. Regulatory Framework

The Electricity Act 2003, as amended from time to time, authorizes the State Electricity Regulatory Commission, to adopt tariffs received of Renewable energy through competitive bidding route, to issue regulations pertaining to renewable power purchase obligation (RPO), and fix charges for wheeling, transmission and distribution of electricity.

7. Policy Targets

The State Government will endeavor to achieve 8% of total electricity consumption from solar energy (as defined in the Tariff Policy). For attaining this, installation of 10700 megawatt capacity of solar power is targeted till 2022 of which 4300megawatt capacity will be achieved through installation of Rooftop Solar Power Plant.

8. Implementation Plan:

The State shall encourage implementation of the Solar Power Projects under the categories as mentioned below

8.1 Utility scale Grid-Connected Solar Projects

During the operative period of the policy targeted capacity for Utility Scale Grid connected solar power projects will be 6400 megawatt. Keeping in view the Renewable Purchase Obligation, UPPCL through its Discoms will try to purchase as much as possible solar energy. As per the present estimated Renewable Purchase Obligation (RPO), UPPCL through its Discoms will purchase 100 % solar power generated from first 2000 megawatt capacity of solar projects and these solar projects will be provided “must run status”. Thereafter as per UPPCL/SLDC scheduling of solar power projects will be done on merit order basis. This arrangement will be subject to Grid safety and Grid stability. In case of increase in Renewable Purchase obligation then as per Grid capacity, 100% generated solar power may be purchased from projects of more capacity. These projects will be provided “must run status”.

8.1.1 Category-1 Solar Park:

State Government will promote the development of integrated solar parks for utilizing waste lands in the State for generation of power. To encourage private participation in development of Solar Parks, project developers will be provided “plug and play” options in Solar Parks being set up. Solar Parks of minimum size 100 MW capacity will be set up on contiguous lands. Minimum capacity stipulated for development of Solar parks will be subject to minimum capacity size fixed for development of Solar Park by Ministry of New and Renewable Energy (MNRE), Government of India for providing Central Financial Assistance (CFA).

Green Energy corridor will be developed with financial assistance from Government of India to facilitate evacuation of power from solar projects being set up in solar parks. Financial assistance will be sought from Government of India for development of Green Energy corridor and upto the limit financial assistance is received from Government of India remaining amount will be obtained by Solar Park developer in the form of connectivity charges per annum per megawatt for the useful life of the Solar Plant.

The solar parks will be set up as following:-

A. Public Sector Solar Parks:

The State Government shall promote the development of solar parks and keeping in view the land availability potential mega solar Park will be set up in Bundelkhand region.

State Government will support development of Solar Parks under any of the following modes

A.1 Solar Parks developed and managed by Central/ State Government Public Sector Undertaking (PSU) or a Special Purpose Vehicle (SPV) of the State Government

A.2 Solar Parks developed and managed by Lucknow Solar Power Development Corporation Limited, a joint venture company formed between U.P New and Renewable Energy Development Agency and Solar Energy Corporation of India (SECI) .

A.3 Solar Parks developed and managed by Solar Energy Corporation of India (SECI) on behalf of State Government on mutually agreed terms.

Government of U.P will provide the following Incentives on development of Solar Parks:-

- (i) Land on lease or Right to use basis for development of Solar Park.
- (ii) Connectivity of Solar Park to the nearest transmission Substation.
- (iii) Support for strengthening of Grid network
- (iv) Uttar Pradesh Power Corporation / Electricity Distribution Company to offer purchase of 100 % power generated from solar park out of which at least 50% of generated power will have to be mandatorily sold to UPPCL/Distribution Licensee.

Location of the Solar Park shall be finalized in consultation with State Transmission utility to optimize the cost of transmission. Allocation of the Solar Power Projects inside the Solar Park will be done through competitive bidding as per guidelines of Ministry of New and Renewable Energy (MNRE), Government of India .

B Private Sector Solar Parks

Development of Solar Parks by private companies shall be promoted in the State.

Government of U.P will provide the following Incentives for development of Solar Parks in private sector:

- (i) Support for strengthening of Grid network
- (ii) Uttar Pradesh Power Corporation / Electricity Distribution Company to offer purchase of 100 % power generated from solar park.
- (iii) full sale to third party allowed.

8.1.2 Category-2 Large scale stand-alone solar projects set up for sale of power to Distribution Licensee:

UPNEDA will be the nodal agency for setting up of Solar Power of this category. Minimum capacity of these projects at one location will be 05 megawatt. Solar Power Projects will be awarded through competitive bidding process as per Ministry of New and Renewable Energy (MNRE), Government of India guidelines.

Incentives:

1. For grid connectivity of Solar projects of capacity 5 MW and above proposed to be set up in Bundelkhand and Purvanchal region, State Government will bear the cost for construction of maximum transmission line length as follows:-

For 05 to 10 Megawatt capacity-10 Kilometer

For >10 megawatt to 50 megawatt capacity -15 Kilometer

For >50 megawatt capacity - 20 Kilometer.

Project Developer will bear the remaining cost for construction of transmission line, bay and substation. This incentive will be available only in case of construction of transmission line and bay by State Transmission Utility (STU)/Electricity Distribution company.

Other charges will be applicable as per the UP Electricity Regulatory Commission (UPERC) regulations, as amended from time to time.

2. Power Pooling arrangement will be allowed in case of small capacity projects.

8.1.3 Category-3 Large scale solar power projects set up on canals/lake for sale of solar power to Distribution Licensee:

Keeping in view the potential for installation of Solar Power Projects on canals, solar power projects will be setup on canals identified by Irrigation department. Allocation of solar Power Projects will be through competitive bidding as per Ministry of New and Renewable Energy (MNRE), Government of India guidelines.

8.1.4 Category-4 Large scale stand-alone solar projects set up for sale of power to Third party or Captive use:

Projects may be set up by the developers with the intention to sell power to third party or for 100% captive use or part captive use and sell part generation to third party or Electricity distribution Company.

- (i) Exemption of 50 % on wheeling charges/transmission charges on Intrastate Sale of Power to third party or in case of Captive use. This exemption will be applicable as per technical feasibility and U.P. Electricity Regulatory Commission (UPERC) regulations, as amended from time to time. Distribution/Transmission losses and cross subsidy surcharge will be applicable as per U.P. Electricity Regulatory Commission (UPERC) regulations, as amended from time to time.

- (ii) As Uttar Pradesh is a power importing State cross subsidy surcharge and wheeling charges/Transmission charges will be exempted 100 % for Intrastate Transmission system on Interstate sale of solar power
- (iii) Metering for sale of solar power shall be done at STU/Distribution licensee substation end.

8.2 Grid-Connected Solar Rooftop Projects:

As per Rooftop Solar PV Grid Interactive systems Gross/Net Metering Regulations, 2015 issued by UPERC and amended from time to time implementation of the grid connected rooftop solar photovoltaic power plants systems in State shall be encouraged through following arrangements

8.2.1 Implementation Arrangement:

a) Net Metering:

In this arrangement energy generated from Rooftop solar Photovoltaic Power Plant installed at eligible Consumers premises is consumed by the consumer and surplus electricity, if any, is delivered to the Discom after off-setting the electricity supplied by the Discom during the applicable billing period .

b) Gross Metering:

In this arrangement energy in a system is measured under which entire energy generated from a rooftop Solar PV system installed at eligible consumer premises is delivered to the distribution system of the licensee.

8.2.2 Implementation Plan:

8.2.2.1 Government/Semi Government/Public Institutions:

- i) The Government of Uttar Pradesh shall promote deployment of rooftop solar photovoltaic plants for captive/self-consumption on the offices of the government organizations/Semi Government organizations/State government owned or aided institutions under Net metering mechanism. Installation of Rooftop solar photovoltaic plants through third party (RESCO mode) {Renewable Energy Supply Company} will be encouraged in these organizations .In this arrangement power purchase agreement between consumer and Third Party and Net-Metering interconnection agreement between consumer and electricity distribution company will be executed .
- (ii) The State shall endeavor to participate and avail benefits under the MNRE's scheme on Grid Connected Rooftop and Small Power Plants Programme. Further, the State shall take active part in the Ministry of New and Renewable Energy (MNRE) scheme on implementation of rooftop solar power plants on the roofs of the State Government department and State Public Sector Units namely 'Achievement-Linked Incentive' for Government Sector or any other incentive available under any Government scheme from time to time.
- (iii) All the public institutions such as government owned or aided hospitals, research institutions, educational institutions, hostels & training institutions, libraries, establishments of Indian railways, in the State, such as ticket reservation center, Railway stations, research and development organization, rest houses, holiday homes, inspection

houses etc those who come under the government ambit shall endeavor to install grid connected rooftop solar photovoltaic power plant and generates & consume some percentage of their annual electricity consumption from such plant. Capacity of Grid connected rooftop solar photovoltaic power plant to be installed will be as UPERC RSPV Regulations 2015.

- (iv) Nodal Agency, UPNEDA will play an active role in collection of demand for installation of Grid connected Solar Rooftop Power Plants from Government departments. UPNEDA will finalize model contract conditions, Standard PPA's and carry out competitive bidding for discovery of tariff and selection of RESCO's for implementation of Grid connected Solar Rooftop projects on Government buildings.
- (v) State Government may make budgetary provisions for providing payment security in case any State Government, Semi Government, Government aided organizations ,Government owned corporations and statutory bodies etc decides to implement Solar Rooftop project through RESCO. However depending on the response generated some budgetary support may also be provided by Government of U.P. for installation of Rooftop Solar Power Plants in State Government, Semi Government, and Government aided organizations and corporations.

8.2.2.2 Residential & Private Institutions:

The Government of Uttar Pradesh shall encourage installation of suitable capacity Grid connected rooftop solar power plant by Residential buildings, Commercial and Industrial units on the roof of their premises/area, the regulations as notified by Uttar Pradesh Electricity Regulatory Commission from time to time.

8.2.3 Incentives :

The following incentives shall be available to the Grid connected Rooftop Solar PV Plants implemented by the eligible entities, as applicable, during the Operative Period of the policy.

- (i) To promote large scale installation of Grid connected Rooftop systems under Net-Metering arrangement in private residential sectors in addition to central financial assistance available from Government of India , State Government will provide subsidy of Rs 15000/KW to a maximum limit of subsidy Rs 30000/- per consumer on first come first basis for the first 100 MW applications submitted online to UPNEDA. Subsidy will be disbursed to beneficiary after successful installation and commissioning of Rooftop solar systems with net metering and submission of all documents to the State Nodal agency (UPNEDA). In case the project installation is delayed for more than 6 months, the subsidy shall be withdrawn by UPNEDA. This subsidy will be in addition to any Central Financial Assistance available from Ministry of New and Renewable Energy, Government of India which would be dispersed by State Nodal Agency.

- (ii) The height of the module structure of rooftop solar panels, will not be considered additional in computing the total height of the building as permitted under building bye laws. In case of installation of solar rooftop project, no additional permission will be required from the local development authorities/local bodies on this account.
- (iii) In case of multi storied buildings, residential colonies, commercial buildings, etc, Solar Rooftop Systems could be located at common facility area; the same could supply to the bulk power connection or connection for common facilities therein, and, in other cases, without hindering or encroaching upon the lawful rights of the other occupants.
- (iv) Grid connected Solar Power Plants of capacity up to 10 kW, will be exempted from the inspection by the State Electrical Inspector.

8.2.4 Metering Arrangement, Evacuation Voltage & Interconnection with the distribution system:

Metering arrangement, evacuation voltage of electricity generated from Solar Power Plants and interconnection of the Rooftop Solar Power Plant with the network of the distribution licensee will be as per UPERC RSPV Regulations 2015 and as amended from time to time.

8.3 Other Off-Grid Applications:

Installation of Off Grid applications like Solar Street Lights and Solar Water Pumps for irrigation purpose on subsidy in State will be encouraged. Government of UP will encourage off grid applications in rural areas of the State .State Government will review from time to time and take appropriate decision in regard to subsidy. Government of U.P. has declared “Mini grid Policy U.P. -2016” which is annexed with this policy which may be reviewed by State Government as required from time to time.

9. Ease of doing Business-Enabling Provisions:

The State Government with the objective to encourage Solar Power generation in the State will make following provisions to facilitate the installation of Solar Power Projects. However to avail these facilities the project developer has to ensure the installation of project within the time limit stipulated in the PPA or within a maximum period of 2 years from the date of application whichever is earlier, failing which the provisions under this policy will automatically stand cancelled. The following provisions will be applicable as such in place for Solar Power Projects (SPP) and solar parks.

(i) Single Window Clearance System:

The nodal agency will implement online single window clearance system for all Solar Power Projects.

(ii) Energy Banking:

Banking of energy in every financial year shall be permitted, subject to verification by the officials of the concerned State Distribution Company as per banking provisions of UPERC CRE Regulations 2014 and as amended from time to time.

(iii) Electricity Duty

Electricity duty for ten years shall be exempted for sale to Distribution licensee, captive/Group captive consumption and third party sale in respect of all solar projects set up within the state.

10. Incentives available from Government of India :

Various incentives allowed by Ministry of New and Renewable Energy (MNRE) for solar projects like exemption in excise duty and concession in customs duty shall be allowed to the project developer.

11. Empowered Committee

To resolve key bottlenecks in implementation of this policy and resolve any other Inter departmental issues that may arise from time to time, an Empowered committee will be constituted under the chairmanship of the Chief Secretary of the State. The committee will have the following members:-

Chief Secretary	-Chairman
Infrastructure & Industrial Development Commissioner	-Member
Additional Chief Secretary/ Principal Secretary Energy	-Member
Secretary /Principal Secretary, Additional Sources of Energy	-Member
Secretary /Principal Secretary, Finance	-Member
Secretary /Principal Secretary, Planning	-Member
Secretary /Principal Secretary, Revenue	-Member
Secretary /Principal Secretary, Housing	-Member
Managing Director, UPPTCL	-Member
Managing Director, Concerned DISCOM	-Member
Director, UPNEDA – Secretary	-Member

12 Nodal Agency

Uttar Pradesh New and Renewable Energy Development Agency (UPNEDA) will be the nodal agency for implementation of this policy. Strengthening and extension of Nodal agency will be done.

12.1 Role of Nodal Agency:

undertake the activities to achieve the objectives of the policy. The Nodal Agency will facilitate and assist the project developers and

12.1.1 Bidding of Projects:

The Nodal agency will be responsible for carrying out all the tasks related to bidding process for Solar Power Projects in the state.

12.1.1.2. For utility scale Solar Energy Projects Government of U.P. shall provide funds for activities like hiring of consultants for Bid process management, Outsourcing of single window system and other incentives to be made available directly under this policy or on any other activity or works which are required for implementation of Solar Policy in the State.

12.1.1.3For projects being set up under other departmental budgets, concerned departments will bear the cost related to feasibility report preparation and bid process management. Nodal Agency may charge a nominal facilitation charge for providing this service.

12.1.2 Facilitation for Government Land/Space

Facilitate allotment of suitable land/space in control of State Government or its agencies.