

**Government of -----
Department of New & Renewable Energy**

Notification

No.

Date: xx/xx/201x

Preamble

In order to reduce the dependence on fossil fuel based generation, it is essential to explore all possible alternative sources of generation. Under these circumstances, the generation based on renewable energy resources as well as adopting energy efficiency measures to fulfil the electricity requirement shall play a significant role in meeting our future demands of electricity.

To achieve a sustainable development route that provides for advancement in economic as well as environmental objectives, the Government of ----- is determined and taking necessary steps to encourage the generation based on renewable energy resources. The State has an average solar insolation of about ----- kWh/m²/day which the State intends to harness to support the energy requirements of the State.

Due to the decline in the upfront capital cost, the cost of generation of solar power generation plant has become competitive with many conventional power generation technologies. It is also witnessed that the consumer tariff in various segments have achieved parity with the cost of generation of electricity generated from solar power plants and consequently, the decentralised mode for generation of electricity has increasingly accepted by all set of stakeholders. Further with the technological advancement, solar energy applications have widely accepted in off-grid mode of electricity generation as well as in thermal applications.

Accordingly, the Government progresses to introduce this policy to harness the incident solar insolation on the State and to realise the potential benefit to the environment by deploying of solar plants.

1. Title of the Policy

The policy shall be known as the **Solar Policy, 201x**.

2. Objectives

The State Government introduces the **Policy** with the objective to optimally utilize the available solar resources incident over the State and support Government in achieving targets envisaged for deployment of solar energy.

3. Legislative Framework for Policy

Several provisions under the Electricity Act, 2003 mandates the Electricity Regulatory Commissions' and the Governments' to take necessary steps for promotion of renewable energy. The Section 108 of the Act mandates the Government to give directions to the State Commission in the matter of Policy involving public interest. Accordingly, the State Government in exercise of its powers formulates this policy.

4. Operative Period

1. The policy shall come into effect from ----- and shall remain valid, until superseded or modified by another Policy, till -----.
2. The Government may undertake review of this Policy at regular time intervals and modify, amend the provisions of the Policy as and when required with a view of any technological advancement and/or to remove difficulties.

5. Eligible Entities

Any person which shall include any company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person shall be eligible to set up plant and receive benefits under this policy.

6. Minimum Target

The State shall strive to achieve the objectives of the policy and aim at implementing minimum targets, elaborated below, within the Operative Period,

Description	Unit	FY 16	FY 17	FY 18	FY 19	FY 20
Solar Photovoltaic Power Plants	MW					
Solar Thermal Power Plants	MW					
Rooftop Solar Power Plants	MW	-	-	-	-	-
Decentralized & Off Grid Solar Power Plants	MW	-	-	-	-	-
Solar Thermal Collectors	m ²	-	-	-	-	-

*The minimum size of the plant at single location shall be determined by the Nodal Agency.

7. Implementation Plan for Utility Scale Power Plants

The State shall aims at developing utility scale solar power plants under following segments to realize the minimum targets,

Segment I: Development Solar Power Plants under the schemes announced by Government of India

The State Government shall endeavor all its cooperation to the project developers participating in the schemes announced by the Ministry of New and Renewable Energy, from time to time. The Nodal Agency shall actively participate in the discussions/public consultations and arrange & submit the recommendations, in timely manner, to the Ministry of New and Renewable Energy, required for finalization of such scheme. The Electricity Regulatory Commission shall also announce suitable framework for the implementation of such scheme, if required, in a time bound manner.

Segment II: Development Solar Power Plants for Sale of Electricity to the Distribution Licensee

To support complying with the renewable (solar) purchase obligation target announced by the Electricity Regulatory Commission, the State Government shall promote development of solar power plants for sale of electricity generated to the Distribution Licensee. The Nodal Agency shall formulate

suitable provisions for the allotment of capacity to the project developers and shall organize competitive bidding for the selection of project developers. The Electricity Regulatory Commission while formulating the regulatory framework shall include necessary provisions to adopt the tariff discovered in the competitive bidding process, if the discovered tariff is lower than or equal to the specified feed-in tariff following regulatory process.

The Electricity Regulatory Commission shall announce separate feed-in tariff applicable for utility scale solar photovoltaic power plants and utility scale solar thermal power plants, after considering the State specific parameters. The feed-in tariff shall act as a ceiling limit in the competitive bidding process organized by the Nodal Agency.

Segment III: Development Solar Power Plants for Sale of Electricity to any Person other than the Distribution Licensee

The State shall promote development of solar power plant for sale of electricity to any Person other than the Distribution Licensee. The Nodal Agency shall extend its support for implementation of solar power plants under this segment.

The Electricity Regulatory Commission shall announce suitable provisions for the development of the plants under this category.

Segment IV: Development Solar Power Plants under Renewable Energy Certificate Mechanism

The State Government shall promote the development of solar power plants under the renewable energy certificate mechanism specified by the Central Electricity Regulatory Commission. The Nodal Agency shall extend its support for the accreditation of the power plant and recommending its registration with the Central Agency in a time bound manner. In carrying out its role, the Nodal Agency shall be guided by any directions given to it by the Electricity Regulatory Commission for the implementation of the framework, from time to time.

Segment V: Development Solar Parks

The Nodal Agency shall undertake assessment of non-productive Government land and submit its report to the State Government for the development of Solar Parks on such land. While formulating the framework for the development of Solar Park, the Nodal Agency shall undertake public consultation and accordingly specify provisions. The Electricity Regulatory Commission shall develop suitable framework to ensure successful development of Solar Parks in the State.

In addition, the Nodal Agency shall also support the prospective power plant developers for the development of plants in the Parks. The Nodal Agency shall charge nominal fee, after approval by the Government.

Segment VI: Development Solar Power Plants on Canals

The State shall promote development of Solar Power Plants on the Canal Top and on the banks of canal, after undertaking its technical feasibility. In addition, the Nodal Agency shall coordinate with the Ministry of New and Renewable Energy for implementation of its scheme announced from time to time.

Segment VII: Development Solar Power Plants under any other scheme of Central or State Government

The State shall promote development of Solar Power Plants under any other scheme announced by the Central Government or the State Government, from time to time.

8. Implementation Plan for Rooftop Solar Photovoltaic Power Plants Connected with Electricity System

The State shall encourage implementation of the minimum target specified for rooftop solar photovoltaic power plants, connected with electricity system, under below mentioned segments,

Segment I: Generation and Sale of Electricity to the Distribution Licensee of the State

In order to reap the benefits and to enable obligated entities complying with the solar purchase obligation targets specified by the Electricity Regulatory Commission, the State would encourage deploying rooftop solar photovoltaic power plant for generation and sale of electricity to the Distribution Licensee of the State. The Nodal Agency shall formulate suitable approach, after due public consultation process and organize a competitive bidding for allotment of the capacities to the suitable eligible entities.

The Electricity Regulatory Commission shall announce separate feed-in tariff applicable to rooftop solar photovoltaic power plants, after considering the State specific parameters. The feed-in tariff shall act as a ceiling limit in the competitive bidding process organized by the Nodal Agency.

Segment II: Generation and Sale of Electricity to a Person other than Distribution Licensee

The State shall promote implementation of solar power plant and sale of electricity generated to a Person other than the Distribution Licensee. The Nodal Agency shall extend its support for implementation of solar power plants under this segment.

The Electricity Regulatory Commission shall announce suitable provisions for the development of the plants under this category.

Segment III: Generation, Captive Consumption and injection of surplus Electricity under Net Energy Metering Mechanism

The State shall promote development of rooftop solar photovoltaic power plants implemented by any Person for meeting its own electricity requirements and injecting surplus electricity into the distribution system.

A suitable framework for the implementation of net energy metering mechanism shall be specified by the Electricity Regulatory Commission for the development of plants to promote captive consumption of electricity.

The State shall encourage implementation of grid interactive rooftop solar photovoltaic power plants as under,

Government/Public Institutions

- i) The State Government shall promote deployment of rooftop solar photovoltaic power plants for captive/self-consumption on the offices of the government organisations, government owned or

aided hospitals, research institutions, educational institutions, hostels & training institutions, libraries, rest houses, holiday homes, inspection houses etc.

- ii) All the aforementioned institutions shall implement grid interactive rooftop solar photovoltaic power plant and generate & consume some percentage of their annual electricity consumption from such plant.

Private Institutions

- i) The State Government shall promote deployment of rooftop solar photovoltaic power plants on the premises of residential buildings/colonies/townships, societies, hotels, private guest houses, private transit hostels, private students' hostels, marriage houses, commercial establishments, cinema & theatres, private hospitals, private ware-houses, industries etc. All the aforementioned institutions shall be encouraged to implement rooftop solar photovoltaic power plant, of suitable capacity, on the roof of their premises/area, generate the electricity for sale to the distribution licensee or for their self-consumption.

The State Government shall encourage the local urban bodies for making suitable amendments in the existing building bye-laws to encourage rooftop solar photovoltaic power plants.

9. Implementation Plan for Decentralized & Off-Grid Solar Applications

The Government will also promote decentralized and off grid solar applications, to meet the requirements of electricity and thermal energy, as per the guidelines issued by Ministry of New and Renewable Energy.

To comply with the minimum targets envisaged under the policy the Nodal Agency shall identify priority areas/sectors for deployment of decentralized and off grid solar photovoltaic power plants include solar photovoltaic standalone power plants, solar home lighting systems, street lighting system, solar pumps etc. and take necessary action, in time bound manner, to implement the off grid solar systems in those priority areas/sectors with the approval of the Government.

Further, for the utilization of solar energy for thermal applications, the Nodal Agency shall take necessary action to proliferate its application in feasible sectors including residential (solar water heaters, solar cookers, in-door air heating etc.), commercial & industrial sector (solar cooling, solar air dryers, large scale solar water heaters, large scale solar cooking utilizing solar concentrator technology, process heating etc.).

The Electricity Regulatory Commission shall assess the benefit of the deployment of decentralized and off grid solar application for electricity and thermal applications on the overall electricity system of the State and shall introduce provision of offering suitable incentive to the eligible entities for large scale adoption in different sectors.

10. Incentives

The following incentives shall be available to the solar plant implemented by the eligible entities, as applicable, during the Operative Period of the policy,

A) Exemption from the payment of Electricity Duty and Cess

The electricity generated from solar power generating plant and consumed for its own use by any Person, shall be exempted from payment of the Electricity Duty and Cess as specified by the State Government, for a period of 10 years from the date of commissioning of the power plant. Provided the categories exempted from payment of the electricity duty as specified under The Electricity Duty Act and/or Rules or any other guideline, if announced, by the State Government shall be applied.

B) Industry Status

All solar plants shall be treated as 'industry' under the schemes administered by the State Industrial Department and incentives available to industrial units shall be available to the solar plant developers.

C) Payment of Open Access Charges

The applicability of payment of Open Access Charges and Losses will be following the terms and conditions specified by the Electricity Regulatory Commission, from time to time. The Electricity Regulatory Commission shall consider for exemption of payment of Open Access Charges for a suitable term if the Electricity is Generated and Consumed within the State.

D) Exemption from payment of Conversion Charges

The implementation of rooftop solar photovoltaic power plant shall be permitted by the State planning department, after necessary scrutiny. The residential consumers opting for implementation of rooftop solar photovoltaic power plant under sale to grid shall be exempted from conversion of house tax to commercial tax.

E) Exemption from the payment of VAT & Entry Tax

The equipment purchased for installation of solar plants shall be exempted from payment of VAT and entry tax.

F) Wheeling Charges

The applicability of payment of wheeling charges and losses will be following the terms and conditions specified by the Electricity Regulatory Commission, from time to time. The Electricity Regulatory Commission shall consider for exemption of payment of Wheeling Charges for a suitable term.

G) Cross Subsidy Surcharge

For a period of 10 years from the date of commissioning of the power plant, the cross subsidy surcharge shall not be levied for Sale of electricity to a Person other than Distribution Licensee. Provided that the Sale of electricity is taking place within the State boundary. Provided also that the buyer is maintaining its contracted demand with the Distribution Licensee.

For captive consumption, cross subsidy surcharge shall not be levied.

H) Banking

The banking of electricity, under which a captive generating power plant supplies electricity to the grid with the sole intention of exercising his eligibility to draw back this power from

the grid for its own use, shall be as per the directions of Electricity Regulatory Commission. The Electricity Regulatory Commission shall consider for exemption of payment of Banking Charges for a suitable term.

I) Height of the module structure

The height of the module structure carrying rooftop solar panels, in addition to the building height, shall not be counted towards total height of the building as permitted by building bye laws.

11. Role of Nodal Agency

The Nodal Agency shall facilitate the eligible entities in implementing the solar plant and undertake following activities,

A) Announcement of Scheme

The Nodal Agency shall bring out a comprehensive scheme to implement the targets specified under the policy. The scheme should elaborate the appropriate process for invitation of bids/applications, incentives and central financial assistance, if any, targets, implementation mechanisms etc.

B) Allotment of the Solar Power Capacities

The Nodal Agency shall, from time to time, undertake the process for allotment of solar power capacities to the project developers. The Nodal Agency in consultation with the related stakeholders shall announce the process for allotment of solar power capacities.

C) Facilitation in Development of Power Plant

The Nodal Agency shall, facilitate the project developers in arranging right of way, supply of water, obtaining necessary clearances and approvals from different Government departments.

D) Identification of Government Land Banks and facilitation of its allotment for Solar Power Plant development

The Nodal Agency shall identify government land banks and shall coordinate with the Government departments, prepare transparent procedure, take necessary approvals and clearances for the allotment of Government Land to the project developers for the development of power plant. The Nodal Agency may specify suitable fee payable by the project developers, after due approval by the Government.

E) Support in establishing Protocols/Procedures for easy adoption of Solar Power

The Nodal Agency shall also support the distribution licensee in developing the protocols and procedures for metering, connectivity with the electricity system, and power purchase agreements etc. for easy adoption of rooftop solar photovoltaic power plants by the stakeholders.

F) Identification of Sites for Deployment of Rooftop Solar Photovoltaic Power Plants

The Nodal Agency shall facilitate the project developers in identifying the technically feasible sites/roofs under jurisdiction of the State Government for deployment of rooftop solar photovoltaic and other small scale solar power projects. The Nodal Agency may charge nominal fee for extending its services. The Nodal Agency shall also encourage deployment of solar power projects on sites/roofs under jurisdiction of private institutions/buildings.

G) Support in availing the Subsidy

The Nodal Agency shall facilitate the solar plant developer(s) to avail the subsidy available from Central and/or State Government.

H) Amendment in Bye-Laws

The Nodal Agency shall coordinate with the Housing and Urban Planning Department, identify and recommend necessary amendments in the Bye-Laws to facilitate extensive adoption of rooftop solar photovoltaic power plants.

I) Capacity Building & Awareness

The Nodal Agency shall organize Capacity Building & Training Sessions for participation by the segment stakeholders. The Nodal Agency shall also take necessary steps in creating awareness among the citizens of the State.

J) Strategy for the development of Solar Segment

The Nodal Agency shall arrange to formulate a strategy for the overall development of solar segment in the State with special emphasis on creating market for service providers, small and medium enterprises etc. The report shall be submitted for the consideration of the State Government on yearly basis. The Nodal Agency shall also ensure accessibility of quality equipment as per standards specified by appropriate agencies including Ministry of New and Renewable Energy.

K) Coordination with MNRE for Technical Specification

The State shall follow the technical specifications and standards as specified by the Ministry of New and Renewable Energy, from time to time. The Nodal Agency shall provide its inputs to the Ministry of New and Renewable Energy for specifying standard new or amending existing technical specifications for different component of solar plant (photovoltaic and thermal).

12. Roles of the Electricity Regulatory Commission

The Electricity Regulatory Commission shall on priority basis, notify appropriate regulatory framework for the promotion and deployment of utility scale solar power plants and grid connected rooftop solar photovoltaic power plants in the State. The regulatory framework shall include the enabling provisions for the implementation of the policy.

13. Role of State Transmission & Distribution Licensee

The State Electricity Transmission and Distribution Licensees shall extend their support and guidance to the eligible entities in installing solar power plants and their connectivity with their electricity system. They shall comply with the regulatory framework specified by the Electricity Regulatory Commission and provision contained in this Policy.

14. Metering Arrangement

The metering arrangement should comply Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, Central Electricity Authority (Installation and Operation of Meters)

Amendment Regulations, 2010 and Central Electricity Authority (Installation and Operation of Meters) Amendment Regulations, 2014, as applicable.

15. Evacuation Facility and Connectivity with the Electricity System

The voltage of evacuation of electricity generated, from the solar power plant, shall be governed by the directions of the Electricity Regulatory Commission. The evacuation infrastructure for the solar power plants shall be developed and augmented, wherever necessary, by the State Transmission Licensee and/or the Distribution Licensee, as the case may be.

The connectivity of the solar power plant with the electricity system at voltage level 33kV and above shall be governed by the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 and amendment thereof whereas the connectivity of the solar power plant with the electricity system at voltage level below 33kV shall be governed by the Central Electricity Authority (Technical Standards for Connectivity of Distributed Generation Resources) Regulations, 2013.

16. Procedure for Interconnectivity with the Electricity System

The procedure for interconnectivity of solar power plant with the electricity system of the licensee shall be in accordance with the provisions laid by licensee and approved by the Electricity Regulatory Commission. The licensee within one (1) month, from the date of publication of this policy under official gazette, shall establish the procedure for interconnectivity of solar power plants its electricity system.

17. Financial Arrangement & Support

The following financial arrangements shall be available for the promotion of solar power plant,

A) Budgetary Support

The Nodal Agency shall undertake detailed assessment of the support required for encouraging implementation of targets identified under this policy for implementation of solar plants and submit the fund requirements for consideration of the Government for budgetary support.

B) Creation of Green Fund

The State Government shall devise creation of a Green Fund through imposition of suitable cess on the consumption of electricity. The fund so created shall be utilized for organizing capacity building and training programme, creating awareness, offsetting the upfront capital cost, interest subvention through Banks and any other aspect deemed necessary for the easy adoption of solar plants in the State.

C) Through Private Investment

State Government shall attract private investments for installation of solar plants. The Nodal Agency shall facilitate and provide clearances and approvals from concerned departments.

18. Monitoring of Parameters

All solar power plant developers reaping benefit under this policy shall need to install equipment to monitor solar irradiance, wind speed, ambient air temperature, and electricity generated and injected into the electricity system or self-consumed furnish from such solar power plant. The solar thermal plant developers shall need to install equipment to monitor solar insolation, thermal heat generated and related parameters. The monitoring report shall be submitted to the Nodal Agency on regular time period for the useful life of the plant through online mechanism. The Nodal Agency shall develop necessary infrastructure to record such parameters.

19. Empowered Committee

To oversee, monitor and resolve various issues arising out of this policy, 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
Secretary /Principal Secretary Urban Development	- Member
Secretary /Principal Secretary, Renewable Energy	- Member
Secretary /Principal Secretary, Finance	- Member
Secretary /Principal Secretary, Planning	- Member
Secretary /Principal Secretary, Irrigation	- Member
Secretary /Principal Secretary, Revenue	- Member
Secretary /Principal Secretary, Energy	- Member
Managing Director, Concerned Distribution Licensee	- Member
Director, Nodal Agency	- Member Secretary

The Chairman of the Committee is empowered to co-opt subject matter expert/s, if required. The Committee shall be authorized to deliberate and decide on aspects related to implementation of this policy on its own motion or on the written representations by the Stakeholder.

The Empowered Committee shall therefore provide their recommendations on,

- a. Approval of the project(s) with capacities more than 50 MW at single location
- b. Resolving key bottlenecks in implementation of solar power plants
- c. Deliberating on aspects to create fund for the development of grid connected rooftop solar photovoltaic power plants
- d. Issues regarding facilitation of framework for interconnection with the network of distribution licensee
- e. Resolve any other Inter departmental issue that arise from time to time
- f. Any other relevant aspect

Principal Secretary
(Government of -----)