

**HARYANA GOVERNMENT
NEW & RENEWABLE ENERGY DEPARTMENT
HARYANA SOLAR POWER POLICY, 2023**

Notification (DRAFT)

Dated, 2023

No. xxxxxxxxxxxx**Energy**.-The Government of Haryana has formulated Haryana Solar Power Policy 2016 to promote the generation of power from solar energy. Now by exercising the powers conferred to amend the policy, the policy has been amended in the form of new policy document with title "**Haryana Solar Power Policy 2023**". For giving effect to this Policy, necessary amendments in various policies, rules and regulations, wherever necessary, shall be expeditiously undertaken by the concerned department/authority.

**CHAPTER-I
INTRODUCTION**

1.1 Need of Solar Energy:

Solar energy is emerging as a major source of energy for the future which is pollution free & a green source of energy. India is blessed with tremendous potential for solar energy generation. Government of India has set ambitious target of 500 GW of renewable capacity by 2030, comprising 280 GW of solar capacity by 2030. Considering the power growth trajectory, Haryana will need about 6000 MW solar power to align with national targets.

The Government of Haryana considers solar energy as vital form of energy in the State to address the growing impacts of climate change at local and national levels. It has the potential of not only lowering the state's expenditure on energy but also have potential to reduce transmission & distribution losses.

Government of Haryana envisages a new policy framework to align with latest regulations and India's ambitious solar energy capacity extension program.

1.2 Title and Implementation:

- a) This policy will supersede the Haryana Solar Power Policy, 2016.
- b) This policy will be known as Haryana Solar Power Policy, 2023.
- c) The policy will come into operation with effect from the date of its notification and will remain in force till a new Policy is notified.
- d) The State Government may review this policy as and when the need arises in view of any technological breakthrough or to remove any inconsistency with Electricity Act,

Rules & Regulation made thereof or any Government of India policy/State Electricity Regulatory Commission's order.

1.3 Vision & Objectives:

The state seeks to:

- a) To increase share of the solar power in the energy mix of the State in alignment of national policies, programmes and targets.
- b) To create conducive environment for the participation of the private as well as public sector in setting up of solar energy projects in the State.
- c) To encourage adoption of latest/new technologies/concepts such as battery storage and RE-based EV charging, net metering; gross metering, Virtual net metering & Group net metering.
- d) To increase income of farmers by installation of solar power plants for sale of power and also by providing solar power in day time for agricultural activities.
- e) Enabling solar equipment manufacturing and provision for solar waste management.
- f) Training and skill development/ R&D Activities through a learning ecosystem.
- g) Promotion of Off-Grid Solar applications like Solar Water Pumps, home lighting systems, etc.
- h) To take a holistic approach for faster and wider solar deployment- such as development of Solar Parks and Solar Power Projects for sale of power to DISCOMs of Haryana and/or for captive consumption/third party sale/merchant sale by Independent Power Producers, within and outside the State.
- i) Productive use of wastelands / non – agricultural lands thereby leading to socio-economic transformation and a reduction in regional disparities in development.

1.4 Target:

Haryana's Solar Policy 2023 aims to install cumulative 6000 MW of solar capacity in Haryana by 2030 as per detail below:

- (i) 1600 MW capacity of rooftop solar power plants shall be installed.
- (ii) 3200 MW capacity of Ground mounted Solar Power Plants with/without Energy Storage and shall be installed
- (iii) Solarisation of irrigation pumps of 1200 MW capacity.

CHAPTER-II GROUND MOUNTED/UTILITY SCALE POWER PROJECTS

2.1. Ground mounted megawatt/Utility scale power plants:

a. Ground Mounted MW Scale Solar Power Projects for Sale of Power to Discoms:

- (i) Solar power projects with or without storage and / or blended with other RE sources shall be set up by the independent power producers (IPP) for sale of power to DISCOMs. The storage system may be in form of battery storage or any other storage system. Discoms may do reverse bidding separately for solar power projects with storage and without storage with the lowest / last discovered tariff lowest of competitive bidding by HPPC or SECI or as allowed by HERC as base tariff.

To promote solar power projects with storage in form of battery storage, or any other grid interactive storage system, Government may provide subsidy on storage system of utility scale solar power projects for sale of power to DISCOMs.

(ii) Projects for sale of power to the Discoms upto 2 MW:

Discoms may reserve 20% of total capacity of ground mounted MW scale Solar Power Project for small generators up to 2 MW capacity. Separate tenders may be floated for 20% reserved capacity of the tendered quantity and tariff for small generators up to 2MW capacity shall be decided on the basis of these tenders.

b. Ground Mounted MW Scale Solar Power Projects for Captive/ Third Party sale:

- There shall not be any capacity limit for installation of solar power plants, by entities for their own consumption and such plants may be set up at any location in India and power shall be transmitted by using open access: Provided that the generating plant may be set up by the entity itself or by a developer with which the entity enters into a power purchase agreement.

2.2 Development of Solar Parks:

To boost the economy, Solar Parks shall be set up in the State as per Guidelines of Ministry of New and Renewable Energy (MNRE), Government of India or State Govt. issued from time to time.

In the solar parks, the Solar Power Park Developer (SPPD) has to provide plug and play facility/ all infrastructures as per MNRE/ State Govt. guidelines to the solar power projects to be established in the solar park. Development of Solar power projects by the independent power producers (IPP) for their captive consumption/for merchant sale/ for sale to third party shall be promoted.

2.3 Solar Power Projects set up on Canal tops/banks:

The setting up of MW scale Solar Power Plants on canals tops/banks/water bodies shall be encouraged as per the guidelines and incentives issued by MNRE, Government of India, from time to time. For that the sites for shadow free space available on canal banks shall be identified in consultation with Irrigation Department, Haryana. HPGCL

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will be designated Nodal Agency for setting up of solar projects on canal tops/banks under the policy.

2.4 Solar Power Projects in Agriculture Sector for irrigation purpose

The State Government shall adopt and implement the schemes and programmes of MNRE, Government of India including PM KUSUM and solar cities/village, issued from time to time.

- (i) PM Kusum Component A: Setting up of MW Ground Mounted Grid Connected Solar or other Renewable Energy based Power Plants Under this component, solar or other renewable energy based power plants (REPP) of capacity 500 kW to 2 MW will be setup by individual farmers/ group of farmers/ cooperatives/ panchayats/ Farmer Producer Organisations (FPO)/Water User associations (WUA) hereinafter called Renewable Power Generator (RPG).

Discoms will be designated Nodal agency for PM Kusum Component A under the policy. Selection criteria, guidelines and procedure mentioned under PM KUSUM of MNRE/HERC Regulations under the Scheme will be adopted.

Provided further that for each unit (kWh) of energy generated and injected into the grid by eligible consumer/prosumer shall be paid by the DISCOMs at rate determined by the HERC under PM Kusum Scheme wherein the cost of land/lease rental and higher O & M expenses are included.

- (ii) PM Kusum Component B: Under this Component, individual farmers will be supported to install standalone solar Agriculture pumps of capacity up to 10 HP for replacement of existing diesel Agriculture pumps / irrigation systems in off-grid areas, where grid supply is not available. Installation of new pumps shall also be permitted under this scheme except in dark zone areas. Water User Associations and community/cluster based irrigation system will also be covered under this component. However, priority would be given to small and marginal farmers. In order to minimize the water usage for irrigation purpose, preference will be given to the farmers using Micro irrigation systems or covered under Micro irrigation schemes or who opt for micro irrigation system. The size of pump would be selected on the basis of water table in the area, land covered and quantity of water required for irrigation.

To promote installation of pumps under PM Kusum Component B, the State Government may provide capital subsidy in addition to subsidy provided under by MNRE,GOI.

New and Renewable Energy Department will be designated Nodal agency for PM Kusum component B under the policy.

- (iii) PM Kusum Component C: Under this component, there will be two type of solarisation as below:

- (a) Individual pump level solarisation (ILS): Under this Component, individual farmers having grid connected agriculture pump will be supported to

solarise pumps. Solar PV capacity up to two times of pump capacity in kW is allowed under the scheme. However, State may specify lower solar PV capacity in kW, which in any case shall be not be less than pump capacity in HP e.g. for 2 HP pump it will not be less than 2 kW. The farmer will be able to use the generated solar power to meet the irrigation needs and the excess solar power will be sold to DISCOMs. Water User Associations and community/cluster based irrigation system will also be covered under this component. However, priority would be given to small and marginal farmers. In order to minimize the water usage for irrigation purpose, preference will be given to the farmers using Micro irrigation systems or covered under Micro irrigation schemes or who opt for Micro irrigation systems. This component will be applicable to farmers already connected to grid. The DISCOMs will ensure "must-run" status to the solarised pumps and will keep such feeders 'ON' during sunshine hours of a day.

To promote installation of pumps under PM Kusum Component C (ILS), the State Government may provide capital subsidy in addition to subsidy provided under by MNRE, GOI.

New and Renewable Energy Department will be designated as Nodal agency for PM Kusum component C (ILS) under the policy.

- (b) Feeder level solarisation (FLS) : Under this component, all agriculture pumps in a feeder will be solarised, however, Discom may impose a minimum solarisation requirement for a feeder in terms of minimum % of pumps solarized on that feeder. DISCOMs will purchase excess power from the farmer at the rate decided by HERC. The DISCOMs will ensure "must-run" status to the solarised feeders and will keep such feeders 'ON' during sunshine hours of a day.

Discoms will be designated Nodal agency for PM Kusum component C (FLS) under the policy. Selection criteria, guidelines and procedure mentioned under PM KUSUM of MNRE/HERC Regulations under the Scheme will be adopted. This component can be implemented through RESCO Renewable Energy Service Company (RESCO) or CAPEX mode.

2.5 Panchayat Land on Lease /Rent basis:

For the purpose of setting up of Ground Mounted Solar Power Plants/parks to be set up by Government Departments/Corporation/Board/ Company or agency fully owned by the Government, Panchayat land may be leased at rates decided by Development and Panchayat Department as per instruction dated 19.07.2018 and amendment made time to time for period of 30 years. HPGCL may be designated as Nodal agency for setting up of solar projects on Panchayat Land under the policy

2.6 Applicability of Land Ceiling Act for setting up of MW scale ground mounted Solar Power Projects:

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The area of land wherein Solar power projects are setup or planned to be setup shall be out of the purview of the Land Ceiling Act of the Government till the operation of the project.

CHAPTER-III ROOFTOP POWER PROJECTS

3.1 Rooftop Grid connected / off-grid solar power projects:

- (i) The rooftop solar power plants may be installed either on CAPEX mode or on RESCO mode with or without net metering facility as per the HERC Regulations.
- (ii) The distribution licensees shall continue to allow roof top solar system to eligible consumers as long as the total capacity (in MW) of rooftop solar systems does not exceed the target capacity determined by the Commission; Provided a maximum cumulative capacity up to 500 MW, including the RTSS capacity already installed, shall be allowed to the eligible consumers under net metering/gross metering in the State as a whole and this may be reviewed yearly by the HERC Suo-motto or on an application filed by the DISCOM(s) or any other stake holders.
- (iii) The maximum rated capacity of rooftop solar system, to be installed by any eligible consumer in his premises, shall not exceed its connected load/sanctioned load in case of Low-Tension connection and contract demand in case of High Tension connection. Provided that net metering to the consumer shall be allowed for the loads up to 500 kW or up to sanctioned load/contracted demand, whichever is lower and in case of gross metering for the loads up to sanctioned load/contracted demand of the eligible consumer. Provided further that minimum rated capacity of rooftop solar system that can be set up under net metering/gross metering arrangement shall not be less than 1 kW. Provided also that a variation in the rated capacity of the system within a range of five percent shall be allowed with reference to the capacity caps given above provided also that distribution licensee shall accept SPV Power as per useful life of SPV System.
- (iv) Any consumer may install the solar power plant within its campus of any capacity to meet out its captive requirement without injection of the solar power into the grid, subject to condition that it does not violate any HERC Regulations.
- (v) No permission is required from the building plan sanctioning authority for setting up of rooftop solar power plants. The grid connected Rooftop Solar Power Plants shall also be eligible for RPO benefits as per HERC Net Metering Regulations, 2021 and amendments thereof.

Following interpretation shall be considered for the rooftops solar power plants:

- (i) The Solar Power Plants installed on solid structure/ solid walls/shelter/periphery sheds/any part of the building/any structure/ground within the building/complex premises shall be counted as rooftop solar power plant.
- (ii) The Solar Power Plants installed on the agricultural land may not be counted as the rooftop solar power plant. However, the solar power plant installed on the roof of the building constructed on the agricultural land may be counted as rooftop solar power plant, besides counting rooftop as per Sr. No. (i) also.

To promote installation of rooftop solar power plants, the State Government may provide capital subsidy. Discoms will be designated Nodal agency for grid connected rooftop solar projects under the policy and New and Renewable Energy Department will be designated Nodal agency for off grid rooftop solar projects and other solar devices.

3.2 Cluster of rooftops of public/ Private buildings:

For optimal use of the space on rooftops, installation of grid connected rooftop solar power plants on rooftops on cluster of buildings shall be promoted.

Some percentage capacity (to be fixed from time to time) for the setting up of ground mounted megawatt scale grid connected power plants shall be developed by setting up of grid connected rooftop solar power plants. For that the offers shall be invited by Renewable Energy Department, Haryana/HAREDA from the independent power producers for development of grid connected rooftop solar power plants, of capacity ranging from 250 kWp to 1 MW, on a cluster of public private buildings on the last lowest tariff discovered and conveyed by HPPC.

The entire power produced by power producers who set up plants within four years from the date of notification of this policy shall be purchased by the HPPC or any entity of Haryana Govt. Alternatively, the developer can also supply/provide the power for the captive use of the premises where the system is installed along with net meter and can sell the remaining power to HPPC or any entity of Haryana Govt. on the last lowest tariff discovered and conveyed by HPPC or to third party as per HERC regulations.

The rooftop space available in the government organization, institutions, buildings or vacant land of the same can also be provided on lease/rent to the Independent Power Producer/ RESCO developer for setting up of solar power projects. For such sites the lease/rent rate shall be decided by a Committee of Deputy Commissioner of concerned district, PWD (B&R) Department and the Department owning the building. The developer can also supply/provide the power for the captive use of the premises where the system is installed along with net meter and can sell the remaining power to HPPC on the minimum last tariff discovered and conveyed by HPPC or to third party as per the HERC Regulations.

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3.3 Solar Energy Based EV Charging:

EV charging infrastructure shall be developed as per the guidelines and standards issued by Haryana Electricity Regulatory Commission (Terms and Conditions for setting up Charging Infrastructure, Tariff and other Regulatory issues for Electric Vehicles), Regulations, 2021. The Public EV Charging Stations may also be set up with rooftop solar facility and DISCOMs shall provide net-metering connection at solar-based EV charging stations under applicable HERC Regulations. For monitoring and records, the public charging station shall mandatorily register with NRE department /HAREDA or national portal.

3.4 Certification of Solar Power Plant:

Inspection/certification of Electrical Inspector of the solar power plants, for the purpose of commissioning, shall be in accordance with the instructions of Ministry of Power (GoI) notification no. SO.1779(E) dated 16.05.2016 or issued/amended from time to time.

3.5 Decentralized and Off Grid Solar Applications:

The State shall promote the installation of decentralized and off-grid solar applications, including hybrid systems, as per guidelines issued by MNRE, Government of India, to meet various electrical and thermal energy requirements for domestic and commercial use by providing financial assistance.

For that the State shall promote setting up of local solar grid and stand-alone systems like solar inverter, solar home lighting systems, solar street lighting systems etc. to meet the lighting energy needs of villages/dhanis.

For meeting the hot water requirement in the residential, industrial, commercial and social sector the installation of solar water heating system shall be promoted.

To meet the Community cooking energy needs in residential institutions/industrial mess/Hotels/Barracks/ mid-day meal program/Hospitals etc., Industrial Application of steam in process industries such as Textile/Food industry etc., Laundries & Process steam requirements in industries etc. the Department/ HAREDA shall promote the use of solar steam systems.

3.6 Solar adoption through novel metering arrangements like net metering, VNM, & GNM :

The Net Metering Regulations issued by Haryana Electricity Regulatory Commission (HERC) from time to time shall be implemented in the State.

To promote and facilitate the eligible consumers, especially located in the urban centres of Haryana and having constraints like access to adequate rooftop area/inaccessible

rooftops, etc. one specific metering arrangement, Virtual Net Metering (VNM), Group Virtual Net Metering, Gross metering may be promoted.

CHAPTER-IV PERQUISITES

The following incentives/benefits shall be provided to the Solar Power Projects on 'Must Run Status and Operational Projects:

4.1 Power Evacuation Facility:

The State transmission utility or the Transmission/Distribution Licensee shall bear the cost of Extra High Voltage (EHV)/ High Voltage (HV) transmission line up to a distance of 10 km. from the interconnection point, in case power is supplied to DISCOMs under PPA. In case the distance between the inter connection point and point of grid connectivity is more than 10 KMs then the cost of transmission line for the distance beyond the 10 KMs shall be borne equally between the Independent Power Producer and the licensee. However, for canal based solar power projects, the transmission lines shall be provided by the utilities, free of cost, irrespective of the distance of the project from the substation, subject to the conditions that the solar power is generated and utilized within the state of Haryana and is counted towards RPO of the Distribution Licensee(s).

Transmission/Distribution Licensee shall bear the cost of Extra High Voltage (EHV)/ High Voltage (HV) transmission line up to a distance of 10 km and shared cost after 10KM, only in the case where the power is to be supplied to DISCOMs under approved PPA. RE Power producers installed by Independent Power Producers (IPP) for merchant sale or captive consumption, should bear the cost themselves. It is further clarified that the terms & conditions for cost of evacuation of power in respect of PPA entered into by DISCOMs/HPPC with RE Power Producers under competitive bidding, shall be governed by the terms of such PPA.

For connectivity with grid, the IPPs shall connect the Solar Power Plant with the nearest Sub-Station of Transmission/Distribution Licensee and inject the electricity at appropriate voltage of the Sub-Station, by following procedure for connectivity & open access approved by HERC with its amendment issued from time to time.

All expenses for power evacuation, Transmission, distribution line and synchronizing equipment required for installation shall be as per the orders of the Haryana Electricity Regulatory Commission for Electricity on Renewable energy Tariff & other issues, as modified from time to time.

4.2 Exemption of Wheeling, Transmission, cross subsidy charge and additional surcharges:

Wheeling of power for captive consumption / third party sale shall be allowed on payment of transmission charges, transmission losses, wheeling charges and wheeling losses, as applicable to normal open access consumers, and as determined by HERC from time to time. If the generated solar energy is consumed within the same premises without use of grid, no transmission / wheeling charges and losses shall be applicable. The cross

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subsidy surcharges and additional surcharges may not be applicable for Captive Solar Power Projects

For the power produced by Government Producers and used by Government entities there shall be no open access charges like wheeling and transmission charges and losses, point of connection charges and losses, cross subsidy charges or additional surcharge.

4.3 Banking:

Solar based captive generating plants of owner / consumer may bank power, up to contract demand for captive/own use on payment of the banking charges along with the transmission and distribution losses (Technical loss) for availing the open access on the transmission or distribution network of the licensees for banking and drawl of banked power from the Discoms after entering into the banking agreement with the Discoms concerned at the terms and condition as per HERC RE Regulations issued from time to time. The eligibility, procedure, banking and charges for open access of solar power shall be as prescribed in Haryana Electricity Regulatory Commission (Green Energy Open Access) Regulations, 2023 and HERC RE Regulation, 2021 with its amendment issued from time to time.

4.4 Capacity upgradation:

Power utilities shall keep on upgrading the capacity of transformer/evacuation facility including the substation from time to time as per the generation requirement.

4.5 Status of Industry:

All new projects of MW scale generating solar energy shall be treated as "Industry" in terms of Industrial Policy of the State. Thus all the incentives available to industrial units under the industrial policy from time to time, shall also be available to the solar power producers/units.

4.6 Renewable Energy Certificate:

A generating company engaged in generation of electricity from Solar Power Plant shall be eligible to avail the Renewable Energy Certificates as per regulations of the Central Electricity Regulatory Commission.

4.7 Exemption from Land use approval, External Development Charges, scrutiny fee and infrastructure development charges:

These projects of Power Utility scale shall not require any change of Land Use approval from Town & Country Planning Department. The project shall also be exempted from External Development Charges(EDC),scrutiny fee and infrastructure development charges but if special service is required for the solar project then EDC charges shall be charged on pro-rata basis. The details of such projects will be intimated to the Town &

Country Planning Department.

However, after the expiry of purchase power agreement period or when plant ceases to operate on the land, land use will revert to the original (time of installation of plant) master plan of the area/city/town(i.e.it will convert to the original status of land).

4.8 Exemption of Environment Clearance:

These projects shall not require any clearance from the Haryana Pollution Control Board.

4.9 Exemption of the Clearance from Forest Department:

Wherever not expressly prohibited and wherever possible, if clearance from Forest Department, Haryana under their Act/Notification is required the same shall be facilitated by New and Renewable Renewable Energy Department.

4.10 Exemption in Stamp Duty for lease of land for projects:

There shall be 100% exemption of stamp duty on Lease deed of land or purchase of land and any further sub-lease(s) for the land required for establishment of Solar Project within the state. However, if the independent power producer /project developer does not implement the projects or abandons the project prior to its life span (i.e. 25 years w.e.f. date of commissioning) except under force majeure conditions, then it shall have to pay the exempted stamp duty failing which land purchase deed shall be cancelled.

4.11 Use of unutilized space:

The developers setting up the ground mounted MW scale solar power plants may also use the space in between the installed solar panels for commercial floriculture/horticulture related activities provided that it does not affect solar power generation and also keeping in view all the safety and security measures as required for the installed equipments as per the provisions of Electricity Act 2003.

4.12 Metering:

Metering equipments for the power generation & its sale shall be installed at site by the user at their own cost as per specification of Power Utilities of State/ HERC Grid Code/ Central Electricity Authority (Installation and Operation of meters) Regulations, 2006 and its subsequent amendments.

The testing of these equipments shall be carried out by Power utilities, at the user's cost. Power utilities shall develop necessary infrastructure at locations where more than one project is installed.

The Metering equipments& the allied equipments be installed in the following manner:-

- a) Main meter at the interconnection point shall be provided by the IPP.

- b) Check meter at the interconnection point shall be provided by the Nigam/DISCOM.
- c) Main Meter at the substation of the Nigam/DISCOM shall be provided by the Nigam/DISCOM.
- d) Check meter at the substation of the Nigam shall be provided by the company.

Metering of the power produced shall be done at sub-station of the Nigam/DISCOM.

4.13 Tenure of Power Purchase Agreement:

The Power Purchase Agreement (PPA) to be signed between IPP and HPPC shall be valid for a period of 25 years. After this period, the PPA can be renegotiated between the power producer and concerned power utilities/ licensee.

4.14 Earnest Money Deposit:

For grid connected solar power projects, installed for sale of power to HPPC, the Earnest Money Deposit (EMD) shall be deposited by the developers with HPPC while for other projects, the EMD shall be deposited with HVPNL. Maximum limit of the EMD shall be fixed by HVPNL/HPPC as per guidelines/instructions issued by HERC/MNRE from time to time.

4.15 Minimum Equity to be held by the Promoter:

The project developer may be company/firm/group of companies or a Joint venture/Consortium of more than one company/firm who shall comply the provision of the Electricity Act 2003/Electricity rules issued by Ministry of Power, GoI, with amendments from time to time. Individual may also develop the solar power project. There shall be no change in the ownership or shareholding of the entity (company/firm/group of companies or a Joint venture/Consortium) for minimum five years for the date of commissioning of the project. For financial closure, debt: equity ratio shall be 70:30 of the project cost. Financial closure can go upto 90:10 of the project cost for solar power projects by Govt. Entity/PSUs.

Further, only new plant and machinery shall be allowed under this policy.

4.16 Inter State Transmission of solar power:

Inter State Transmission of solar power produced or consumed by the industrial/commercial establishment/ IPP shall be allowed as per National Tariff Policy of Government of India.

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CHAPTER-V INITIATIVES

To promote rooftop solar power projects, the State Government has taken the following initiatives:

5.1 Implementation of Mandatory notifications:

The notifications issued by the State Government/central Government from time to time shall be implemented in the State.

5.2 Lease of Government buildings/Land:

The rooftop space available in the Government organization, institutions, buildings or vacant land of the same can also be provided on lease/rent to the Independent Power Producer/ RESCO developer for setting up of solar power projects.

For such sites the lease/rent rate shall be decided by a Committee of Deputy Commissioner of concerned district, PWD (B&R) Department and the Department owning the building. The developer can also supply/provide the power for the captive use of the premises where the system is installed along with net meter and can sell the remaining power to HPPC on the minimum last tariff discovered and conveyed by HPPC or to third party as per the HERC Regulations.

5.3 Must Run Status:

SLDC may ensure that Solar Power projects in the State and maintain the data of Solar Power curtailment in transparent manner as prescribed in and HERC RE Regulation, 2021 with its amendment issued from time to time.

5.4 Research and Development (R&D), Innovation and Training & skill development through a learning ecosystem:

- a) The uptake of solar PV systems in the State presents an opportunity for job creation. Skilled human resource would be required for various activities including (but not limited to) rooftop assessment, installation, servicing, repair and maintenance of the systems. Haryana shall create a Centre of Excellence (CoE) for solar energy in partnership/JV with various department/institution and youths shall be trained through this CoE.
- b) The State shall facilitate and promote Research and Development (R&D) in solar energy Sector including Solar Power Projects with Storage.
- c) Recognising rapid development and improvement in efficiency of PV cell and thermal technologies, R&D in the sector shall be the top priority area.
- d) The State Government shall also organise outreach programmes, trainings and workshops for capacity building of human resource.

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- e) The State Government shall also promote through awards any innovation in the field of solar energy.
 - f) The State Government shall also promote innovative solar technologies and applications such as in cold chain, fishery, agriculture, and livelihood applications etc.

5.5 Solar equipment manufacturing and provision for solar waste management:

a) Solar Equipment Manufacturing:

The Government of Haryana aims to promote manufacturing facilities for solar energy equipment in the state leading to the development of a solar energy ecosystem, and to facilitate employment generation. For setting up of manufacturing for solar energy equipment, HSIIDC may provide the industrial plot on priority.

b) Solar Waste Management:

The state shall endeavour to create an ecosystem for recycling components of solar PV system at the end of their life to prevent negative environmental externalities. After the use of the system, the disposal of solar modules, inverter and other electronic/electrical part shall be done as per as per E-Waste (Management) Rules, 2022 of Ministry of Environment, Forest and Climate Change, Government of India notified vide no. CG-DL-E-02112022-239987 dated 2nd November 2022 with amendment thereof.

HSIIDC may reserve a space for developing the Energy Manufacturing Hub and solar waste management in the State in industrial areas.

5.6 Data Monitoring:

All the solar power plants shall be equipped with remote monitoring systems which shall be synchronised with a software, link of which shall be provided to New & Renewable Energy Department and HVPNL.

CHAPTER-VI GENERAL

6.1 Technical Requirements:

The Independent Power Producers and the users producing power from Grid tied /Grid connected solar power plants as well as users of off-grid solar devices would be required to strictly adhere to the national/international standards/specifications specified by the Ministry of New & Renewable Energy, Govt. of India or as amended from time to time and relevant IEC/ BIS standards and / or applicable standards as specified by the Central Electricity Authority/ Bureau of Energy Efficiency, as the case may be.

6.2 Other schemes of MNRE, Govt. of India:

Various programmes/schemes of the Ministry of New & Renewable Energy/ Ministry of Power, Govt. of India, related to Solar Energy, issued from time to time shall be implemented/promoted in the State in letter and spirit.

6.3 Nodal Agency:

The New & Renewable Energy Department, Haryana shall be the nodal agency for the facilitation and implementation of the Haryana Solar Power Policy-2023 on behalf of the Govt. of Haryana.

All project developers shall be required to submit monthly reports with regard to parameter like energy generated, revenue earned and plant load factor achieved, reasons for non-achievement of full generation and any other information so called for by New & Renewable Energy Department/HAREDA so as to maintain and update data bank on solar power generation in the state and also for the purpose of monitoring of generation under RPO regulations.

The Nodal Agency shall facilitate and assist the project developers to undertake the following activities in achieving the objectives of the policy:

- Registration of Projects
- Respond to queries and problems of Developers of Solar Power Projects
- Accreditation and recommending Solar Power Projects for registration with Central Agency under REC mechanism.
- Certifying the Commissioning of Solar Projects.

6.4 Amendments/ Relaxation/ Interpretation of provisions of the Policy

The Administrative Secretary to Govt. of Haryana, New & Renewable Energy Department shall have the powers to issue clarification, if any, on any matter related to interpretation of any provisions under the policy.

The Council of Minister shall have the powers to amend /relax any provisions under the policy.

6.5 Applicability of the Solar Policy

If any clause of this policy contradicts/ not in consistence with any Act passed by the Parliament/Vidhan Sabha of the State, then Act passed by the Parliament/Vidhan Sabha of the State, as the case may be, shall be considered applicable.

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CHAPTER-VII GLOSSARY

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

- i. "Act" means Electricity Act 2003, including amendments there to.
- ii. "APPC" means Average Power Purchase Cost.
- iii. "Canal" means feeder, canal, rajbahas, minors, drains, channels and Minor Irrigation Tubewells, Corporation (MITC) Nalas
- iv. "CEA" means Central Electricity Authority.
- v. "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.
- vi. "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.
- vii. "Conventional Power Plants" means lignite; coal, fossil fuel or gas based thermal generating power stations and hydro generating stations of more than 25 MW capacities.
- viii. "DISCOM of Haryana" means a distribution licensee, such as UHBVNL, Panchkula, and DHBVNL, Hisar.
- ix. "Government" and "State" means the Government of Haryana and the State of Haryana respectively.
- x. "Licensee" includes a person deemed to be a licensee under Section 14 of the Act.
- xi. "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.
- xii. "MOU" means Memorandum of Understanding.

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- xiii. "National Solar Mission or Solar Mission" means Jawaharlal Nehru National Solar Mission 2009 launched by Government of India.
 - xiv. "Nodal agency" means Haryana Renewable Energy Development Agency (HAREDA) or any other agency designated by Government of Haryana for promotion of electricity generation from renewable energy sources.
 - xv. "PPA" means Power Purchase Agreement.
 - xvi. "REC Regulation" or "CERC REC Regulation" means Central Electricity Regulatory Commission (Terms & Condition for recognition and issuances of Renewable Energy Certificate for Renewable Energy Generation) Regulation, 2010 notified by CERC vide Notification dated 14.1.2010 and amended from time to time.
 - xvii. "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 provision specified in the Central Electricity Regulatory Commission (Terms & Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulation, 2010.
 - xviii. "HERC"/"Commission" means Haryana Electricity Regulatory Commission.
 - xix. "RPO" means Renewable Purchase Obligation.
 - xx. "SECI" means Solar Energy Corporation of India.
 - xxi. "Solar Power Producer" means an entity, which owns facilities to generate electric power for sale to DISCOM of Haryana/Licensees/NVVN /NTPC/ to third party/captive use.
 - xxii. "Solar Plant/Solar Power Plant" means a power plant or system utilizing solar energy through solar photo-voltaic or concentrated solar thermal devices including its integration into conventional fossil fuel for generating of electricity.
 - xxiii. "Solar PV Power Plant" means the Solar Photo Voltaic (SPV) Power Plant that uses sunlight for direct conversion into electricity through Photo Voltaic technology.
 - xxiv. "Tariff" means the schedule of charges for generation, transmission, wheeling and supply of electricity together with terms and conditions for application thereof.

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- xxv. "UI Charges" means unscheduled Interchange charges.
- xxvi. "EHV" means Extra High Voltage.
- xxvii. "HV" means High Voltage.
- xxviii. "MW" means Mega Watt.
- xxix. "kWp" means Kilo Watt Peak.
- xxx. "LOI" means Letter of Intent.
- xxxi. "HPPC" means Haryana Power Purchase Centre.
- xxxii. "Project Capacity" shall mean the maximum Alternating Current (AC) capacity at the delivery point in MW.
- xxxiii. "Storage" means energy storage system utilizing methods and technologies like, solid state batteries, flow batteries, pumped storage, compressed air, fuel cells, hydrogen storage or any other technology, to store various forms of energy and to deliver the stored energy in the form of electricity;
- xxxiv. "Captive generating plant" means a power plant set up by any person to generate electricity primarily for his own use and includes a power plant set up by any co-operative society or association of persons for generating electricity primarily for use of members of such cooperative society or association, and shall meet the conditions as per Electricity Rules of Ministry of Power, GoI.
- xxxv. "Merchant sale" means sale of power through SLDC/CLDC through open access.
- xxxvi. "Third party sale" means sale of power directly to any other party.
- xxxvii. "Gross Metering" means the arrangement of measurement of energy in a system under which entire energy generated from rooftop solar PV system installed at eligible consumer premises is delivered to the distribution system of the Licensee;
- xxxviii. "Gross Meter" means an energy meter installed at interconnection point at which electricity generated by Solar Photo Voltaic (SPV) system, is delivered to distribution licensee.
- xxxix. "EV" means a vehicle that can be powered by an electric motor that draws electricity from a battery and is capable of being charged from an external source.

- xli. "Virtual Net Metering" is an arrangement whereby entire energy generated/injected from a Renewable Energy System or Battery Energy Storage System (BESS) charged through Renewable Energy System is exported to the grid from renewable energy meter/ gross meter and the energy exported is adjusted in more than one electricity service connection(s) of participating consumers located within the same distribution licensee's area of supply
- xli. "Group Net Metering" has an arrangement whereby surplus energy generated/injected from a Renewable Energy System or Battery Energy Storage System (BESS) charged through Renewable Energy System is exported to the grid through Net Meter and the exported energy is adjusted in more than one electricity service connection(s) of the same consumer located within the same distribution licensee's area of supply.

7.2 All other words and expressions used herein and not defined shall have the meanings respectively assigned to them in The Electricity Act-2003 and/or Electricity Rules.

