

## **Solar Rooftop Policy/ Guidelines**

### **I. Eligible Developers**

All registered companies, Government entities, partnership companies/ firms/ individuals and all consumers of AP Discom(s) will be eligible for setting up of Solar Rooftop Projects (SRP) for sale of electricity to Discom/captive use or for self-consumption, in accordance with the Electricity Act-2003, as amended from time to time.

Group of persons/societies will also be eligible for setting up Solar Rooftop Projects (SRP) with SPV Technology for sale of electricity to Discom/captive use or for self-consumption.

SRP with installed capacity lower than 56 kW shall be eligible to get connected to either LT/HT service at LT/HT distribution network. SRP with installed capacity of 56 kW and up to 1000 kW shall be get connected to HT service.

#### **Requirements:-**

- A Minimum vacant roof area of 10 Sq mtr or 100 Sq. ft is required for installation of 1 KWp system.
- The Consumer shall have 3 Phase/ 1 Phase supply, either LT/HT service connection.
- Mandatory safety precautions/features shall be installed as per the norms.
- 1No. bi-directional meter shall be installed for recording of export and import energy in the place of existing billing meter. For more than 56 KW capacity plant, 2Nos bi-directional meters shall be installed.
- The standard equipment as per the norms of MNRE/APTRANSCO/DISCOM shall only be installed.

### **II. General Information:**

- a) Eligible Developers are free to choose either Net or Gross metering option for sale of power to Discom. Applicable tariff shall be equal to the Average Pooled Power Purchase Cost as determined by APERC for the year during which the project is synchronized with the grid and the applicable tariff at the time of CoD will be paid for 25 years, for the projects executed under both Net metering and Gross metering basis.

The above tariffs shall be applicable for a period of 25 years for Eligible Developers who set up solar rooftop projects within the Operating Period of this policy.

- b) The Obligated Entities as per the RPPO Regulations of APERC, are eligible for adjusting the power generated from rooftop projects towards their obligation to meet RPPO, provided necessary metering is arranged for measuring the solar power as per the regulations of APERC.
- c) The metering facility will be extended for all Eligible Developers who intend to setup solar photovoltaic plants at their premises.
- d) Eligible Developers who wish to avail the metering facility will have to apply through online mode to the Discoms – either on their websites and/or through designated mee seva centers
- e) All approvals/clearances shall be disposed by the respective Discom within 14 days from the date of application
- f) The projects of capacity upto 1000 KWp at a single location will be permitted.
- g) The projects set up on the walls, roofs of the buildings and also in the open areas within the premises of the consumer are categorized as solar rooftop projects, as per the guidelines of MNRE.
- h) In case of different rooftops belong to single owner in a city or town, the combined solar power generation will be adjusted against the combined consumption recorded in various energy meters.
- i) Permission will be given to the group of persons/societies to set up Solar Power Projects and will be treated as collective generation for supply of power to the households of each society /group member. The DISCOMs will deduct the above energy from the consumed energy of individual service connections and balances (either excess or lower) can be billed on Net metering basis. No Distribution losses and charges will be collected from the Group/Society/ individuals by the DISCOMs.
- j) Eligible Developers are allowed to avail the relevant subsidies and incentives from MNRE under JNNSM scheme. The eligible subsidy for net metering systems may be processed through NREDCAP (Nodal agency) or Channel Partners of MNRE, GOI. The sanction and release of the subsidy will be as per the guidelines issued by MNRE from time to time.

- k) Eligible developer can install SPV plant under single-phase service is 3 kWp and maximum allowable SPV plant capacity under LT category is 56 kWp either at LT or HT potential. In respect of LT service, the SPV capacity is limited to the connected load of the service and in case of HT Service, the SPV plant capacity shall be limited to the CMD of that service.
- l) No prior approval of Chief Electrical Inspectorate General (CEIG) is required in case of an SRP connected at LT level of distribution network up to 10 kW capacity.
- m) All other charges shall be applicable as per the Tariff Order amended from time to time.
  - n) The applications as per the policy from Eligible Developers are to be registered in the prescribed format along with the Registration fees as shown below

Capacities upto 5Kwp is Rs 1000/-

Capacities above 5Kwp to 100 Kwp is Rs 5000/-

Capacities above 100Kwp to 1000Kwp is Rs 10000/-

- o) The insurance coverage can be optional for the LT Consumers opting Solar Net metering scheme. However, the consumers/ Solar Power developer may be advised to take insurance coverage to avoid risks at the time of accidents.
- p) The Solar rooftop developers/ MNRE channel partners may be allowed to attend the departmental procedures on behalf of applicant, except in case of signing the agreement.
- q) Pre existing rooftop Solar PV Projects with or without battery support can be allowed to avail net metering facility. They will not get any subsidy under solar net metering policy/ guidelines issued.

### **III. Application**

The Eligible Developer shall make an application to Discom for setting up a SRP along with the necessary information/ document on system size, inter-connection voltage, choice of either gross or net metering option, personal information etc., by paying requisite application fee either on AP Discoms websites and/or through designated mee seva centres or through USRTP web portal of Nodal Agency NREDCAP. From USRTP the Developer can monitor and track the application right from registration to extension of subsidy after completion of the project.

The Eligible Developer/ Societies/ Groups shall pay application fee through online or by cash. The Eligible Developer shall strictly adhere to the standards specified by CEA/MNRE.

#### **IV. Technical Feasibility:**

DISCOM personnel shall carry out the technical feasibility study based on the Application submitted by the Eligible Developer. An internal review to check if the proposed SRP satisfies the standards specified by the CEA, especially with respect to inverter specifications, penetration levels, safety aspects like anti-islanding and protection devices and etc shall be undertaken. Also, the area available to install the proposed SRP will be observed. This study shall be carried out within seven (7) working days from the date of submission of application. In absence of any intimation from the DISCOM within this time period, it shall be considered as deemed approval.

DISCOM shall accord feasibility approval to consumers on a first come first serve basis. The maximum penetration limits at the LT level of distribution network is 80% (*Ratio of aggregate installed SRP capacity under the DTR to the DTR capacity* )

Feasibility study and inspection shall be the responsibility of DISCOM/ ADE in case of LT services and DE (M & P) & DE (Operations) in case of HT services. Feasibility and Synchronization approvals for LT services to be given by ADE/Operation, Feasibility and synchronization approvals for HT services to be given by Superintending Engineer/Operation.

#### **V. Agreement and SRP Installation**

The Eligible Developer and the Discom shall enter into an agreement that specifies the technical information, commercial arrangement and the clear roles and responsibilities of all concerned stakeholders as specified in **Annexure-C**. within 14 days of issuing Technical feasibility if Agreement is not entered by the Developer, application is deemed to be cancelled.

The SRP shall be installed within three (3) months from the date of Agreement. In case of any delay beyond three months, one time extension of 14 days shall be provided after which the agreement shall be deemed to be terminated without any reason.

#### **VI. Pre-commissioning check and commissioning of the PV system**

Post installation of the SRP, the Eligible Developer shall make an online request for inspection. The DISCOM personnel shall inspect the system within 10 working days and provide approval based on checklist mentioned in **Annexure- A**. In absence of the response within the stipulated time, it shall be considered as deemed inspection approval.

#### **VII. Metering and Synchronization:**

**1 No. bi-directional meter shall be installed for export and import. For more than 56 KW capacity plant, 2Nos bi-directional meters shall be installed.**

All meters must be Smart Meters as per the standards specified by the CEA regulations as amended from time to time. AP Discoms shall provide net metering (net meter along with its connected CT's, PT's wherever applicable) on cost basis. Eligible Developers shall be free to procure Meters, Current Transformers (CT), and Power Transformer (PT) either from open market or from DISCOM. If the metering equipment is purchased by the Developer, the same is to be tested at standard laboratory at the cost of Consumer only.

Eligible Developer shall raise a request for metering infrastructure through online mode/ Mee seva by paying the requisite amount. DISCOM personnel shall deliver the metering infrastructure within **15 working days** and the Eligible Developer shall be responsible for its safe-keeping during the interim period until grid synchronization.

The SRP shall be synchronized within seven (7) working days of inspection approval. Upon synchronization of the SRP with the grid, the DISCOM personnel shall inspect, calibrate and seal the meter(s) and ensure installation of safety features/precautions. A commissioning certificate would be issued by the DISCOM/CEIG subject to the test results which should confirm to the CEA requirements.

Meter reading shall be done as per the prevailing Discom procedure. The applicable customer charges shall be payable to Discom.

Eligible Developer shall be assigned a unique service number for metering and billing purposes. All eligible developers have to submit their bank details where payments shall be made through electronic transfer by APDISCOMs. The Eligible Developer shall submit a cancelled cheque with bank a/c No. & IFSC Code along with Application form.

The DISCOM official (ADE/AE) shall send test reports of the SRP along with the agreement to the concerned ERO. Billing process shall start within one month/ next Billing cycle of synchronizing the SRP. In case of HT services ADE/DE operation will submit the Test Report to Senior Accounts Officer of the concerned circle.

#### **VIII. Energy Settlement and Billing/Invoicing:**

Energy settlement shall be done on a monthly basis. Group of persons/societies setting up SRP's will be treated as collective generation for supply of power to the households of each society /group member. In case of Apartments/Group Houses, common service meter may be used for net metering.

**Net Metering:** The energy generated from SRP shall be adjusted against the consumption of energy from the DISCOM by the Eligible Developer/ consumer every month. In case of Groups/Societies, the energy generated shall be prorated as per the installed capacity share indicated in the Agreement between the group/society and DISCOM. This computed energy share shall be adjusted against the consumption of energy for each consumer every month.

- In case of excess generation (after energy adjustment) in any month, payment shall be made by the Discom quarterly for the net energy computed at the average Pooled Power Purchase cost as determined by APERC for the year during which the project is synchronized with the grid and the applicable tariff at the time of COD will be paid for a period of 25years.
- In case of excess consumption in any month, payment shall be made by the Eligible Developer /Group /Society for the net energy at the applicable tariff as determined by APERC every year.
- **Gross Metering:** The payment for energy generated from SRP will be computed at the average Pooled Power Purchase cost as determined by APERC for the year during which the project is synchronized with the grid and the applicable tariff at the time of COD will be paid for a period of 25years.

This shall be adjusted against the total billing demand for consumption of energy for the Eligible Developer/ consumer from the DISCOM every month. The balance amount after adjustment for the month shall be made by the Discom.

A limit shall be defined for all Eligible Developers in terms of energy, beyond which no payment shall be made by APDISCOM. Please refer example in **Annexure-E**.

#### **IX. Inspection:**

- a) DISCOM personnel reserve the right to inspect the SRP routinely at any time during the term of the Agreement. As part of the inspection, DISCOM officials have to ensure to check the following aspects
  - All protective equipment of the SPV system are functioning as per specifications.
  - The SPV system including the panels, inverters, etc continue to meet the requirements of Indian & IEC standards post installation till contract completion.
- b) An Eligible Developer, found indulging in theft of electricity or unauthorized use of electricity, shall pay the additional charges as may be levied by the DISCOM as per provisions of Electricity Act 2003. DISCOM may levy additional charge besides disconnection of electricity supply.