SOLAR ROOF TOP PHOTOVOLTAIC POWER SYSTEMS – NET METERING

There is a large potential available for generating solar power using unutilized space on rooftops and wastelands around buildings. Small quantities of power generated by each individual household, industrial building, commercial buildings or any other type of building can be used to partly fulfill the requirement of the building occupants and surplus, if any, can be fed into the grid. The distribution companies will allow power to feed into the grid and extending net metering facility to the consumers.

In grid interactive rooftop or small SPV systems, the DC power generated from SPV panel is converted to AC power using power conditioning unit and is fed to the grid. The generated power during the day time can be utilized fully by powering captive loads and excess power can be fed to the grid as long as grid is available. In case, where Solar Power is not sufficient due to cloud cover or during the night hours, the captive loads are served by drawing power from the grid. The grid interactive roof top solar system can work on net metering basis wherein the beneficiary pays to the utility on net meter reading basis only.

ADVANTAGES

- Utilization of vacant rooftop for power generation.
- Can generate power for self consumption and feed excess power to the Grid.
- Provision for settlement of registered surplus energy fed to the grid on a half yearly basis.
- Surplus energy injected shall be considered for payment by the DISCOM at pooled cost decided by the APERC.
- Generation of environmental friendly green energy.
- Reduction in diesel consumption where DG back-up is provided.
- 80% accelerated depreciation benefit during first year of operation.
- Capital subsidies from Govt. of India and Govt. of A.P.

REQIREMENTS

1. A minimum vacant roof area of 10 Sq. mtr or 100 Sq. ft is required for installation of 1 KWp system
2. The consumer shall have 3 phase supply service connection.
3. Mandatory safety precautions / features shall be installed as per the norms
4. A single bi-directional meters shall be installed for export and import

5. The standard equipment as per the norms of MNRE/APTRANSCO/DISCOM shall only be installed
6. The vendor executing the turn key solution should be a channel partner of MNRE or manufacture / supplier / system integrator approved by NREDCAP.

INCENTIVES

1. Central Financial Assistance upto 30% of the system cost may be provided by MNRE as per the prescribed eligibility criteria.
2. The State Govt. will provide 20% subsidy for installation of roof top system upto 3 KW capacity in domestic sector only. This will be in addition to that eligible Central Financial Assistance.
3. Surplus energy injected by Solar Roof Top/Small Solar PV generator shall be considered for payment by concerned APDISCOMs at pooled cost as may be decided by APERC for that year.
4. The payment of pooled cost will be made effective for a period of 7 years from the date of establishment of such SPV plant.
5. The settlement of registered surplus energy will be carried out on a half yearly basis.

PROCEDURE FOR GETTING CLEARANCE

1. The interested consumer can download Solar Net metering Roof Top Application from Official Web Site of APDISCOMs and submit filled in application to the concerned Divisional Engineer / Operation / AP DISOM along with fee of Rs.1,000/-
2. The DISCOM personnel will conduct feasibility analysis within 15 days from date of completed application and give its approval based on feasibility. The consumer shall enter into agreement with DISCOM in the prescribed format.
3. The approval shall contain maximum permissible capacity of the SPV system and shall be valid for a period of 6 months from the date of approval..
4. The consumers shall install the SPV system and request DISCOM authorities for inspection within 6 months of receiving approval.
5. On inspection of the equipment SPV system shall be synocornized within 10 working days, provided the systems are installed as per the norms and standards.
6. During the period of synornization of SPV plant to the grid, the DISCOM personnel shall inspect, calibrate and seal the bi-directional meter.
7. NREDCAP shall be the Nodal Agency for processing and / or release of MNRE and Govt. of A.P. subsidy as per the existing norms and eligibility criteria.