FREQUENTLY ASKED QUESTIONS (FAQs)

Q. Whether all power consumers are eligible to install solar rooftop systems to avail net metering facity?

No, only those consumers who are having the three phase supply connection are eligible.

Q. How much space on my roof do I need for a solar PV installation?

The grid connected systemof1KW peak power capacity occupies about 10 square metres on the rooftop .

Q. How much electricity does a PV system output?

For every kW peak power installed on a South facing roof, the system will generate around 1000 to 1200 units in a year. This reduces by around 20% for an East or West facing roof.

Q. How much does a Solar PV system cost?

The cost of the system varies with the capacity of the system, which ranges approximately between Rs.80, 000 to Rs.1, 10,000 per KWp.

Q. Do I need plan permission from the Municipal Authorities?

The roof mounted systems do not need any permission.

Q. Will my roof be strong enough?

Most roofs are strong enough to take a solar installation without any reinforcement. However, in case of larger systems, it is suggested to obtain the opinion of a qualified Structural Engineer.

Q. Do I need to inform Power Utility (DISCOM)?

Prior permission is to be taken from DISCOM to install the SPV system based on net metering.

Q. Is there ANY application?

The application shall be made in prescribed format to the Divisional Engineer/ Operation/DISCOM along with a fee of Rs.1,000/-. The consumer can download Solar net metering rooftop application from official websites of APDISCOMs.

Q. How much time will it take to give permission?

Permission will be issued normally within 15 days from the date of submission of completed application, provided there is feasibility for connectivity.

Q. Who is the Nodal Point of Contact?

The nodal point of contact for solar net metering programme shall be the Divisional Engineer (Operations), APDISCOMs.

Q. Are there any grants / subsidy available?

Yes. Central Financial Assistance upto 30% of the system cost may be provided by MNRE as per the prescribed eligibility criteria. 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 the eligible Central Financial Assistance.

Q. Where shall I contact for subsidies?

The Central Financial Assistance (CFA) may be provided by the approved Channel Partners of MNRE, who are installing the system or the consumer shall make application in the prescribed format to NREDCAP requesting for grant of CFA, before installation of the system. In respect of CFA from MNRE, the proposals will be recommended to MNRE by NREDCAP, for release of eligible amount. The State Government subsidy will be released by NREDCAP.

Q. What is the difference between monocrystalline and polycrystalline PV panels?

Monocrystalline solar electricity panels tend to be slightly more expensive than polycrystalline panels, however monocrystalline panels are regarded as having a higher output per kW peak power installed. Polycrystalline wafer has a dark blue colour, monocrystalline wafer is black.

Q. How much do the solar PV panels weigh?

Normally about 13kg per m2.

Q. Are the solar PV panels fragile?

Solar PV panels are very robust and can withstand the normal stresses subjected by nature.

Q. What is a PV system?

PV technology produces electricity directly from electrons freed by the interaction of sunlight with a solar panel made of semiconductor material. The power provided is direct current (DC) electricity. The basic building block is known as a cell. Many cells put together are known as a module, and many modules assembled together form an array. A PV system will consist of an array of modules generating DC electricity, an inverter, and sometimes battery storage back up with charge controller.

Q. What is an inverter?

There are two kinds of electricity, DC and AC. Homes that are connected to utility power use AC electricity. Flashlights, small radios and automobiles use DC electricity. In to use solar power to operate the appliances in your home, an inverter will convert PV power from DC to AC. Inverters can be further classified as units that use batteries (UPS) and those that use the utility grid as power storage (Grid-tied). Inverters are now required to possess meters that will indicate their performance and some manufacturer’s supply remote display units that can be

mounted inside the home. It is important to check on your inverter regularly to become acquainted with its operation and performance.

Q. What is a "grid-tie" PV system?

You may connect your solar system directly into the wires of your utility. Since the "Net Metering" allows you to do this you will actually be spinning your meter backwards when your system is generating more power than you are consuming. When you generate excess electricity (more power than you are using) it will enter the grid. Your meter will tally the excess and credit to your account.

Q. Who are the Vendors for installation of the system?

Approved Channel Partners of MNRE or Manufacturer/Supplier/System Integrator empanelled with NREDCAP.

Q. Are there any technical standards for various components of the system?

Yes. The various components of SPV system shall have IEC/ISI/BIS Certification and confirm to technical standards specified by MNRE/APTRANSCO/DISCOMs.

Q. What guarantees will I receive?

As per the MNRE guidelines, the SPV system shall be guaranteed for a period of 5 years and Solar Panel shall be guaranteed for a period of 25 Years.

Q. How the billing and payments are made?

(i) The consumer shall receive a net import/export bill indicating either net export to the grid or net import from the grid.

(ii) In case of net import bill, consumer shall settle the same as per existing norms. If it is a net export bill, then credit amount shall be carry forward to next month for adjustment against next month import bill. No interest will be payable on this credit forward amount. Net credit available in his account will be refunded twice in a year based on June and December Month bills of each year. Net Credit amount payable will be deposited by DISCOM in consumer's bank account bearing a/c number provided by consumer at the stage of application, by June and December month end as the case may be. The amount payable for net export of energy will be based on pooled cost decided by APERC for that year.

(iii) 2 months net bill should be submitted by vendors to NREDCAP to claim subsidy.