FAQs on Grid Connected Solar Rooftop System:

1. What is Grid Connected Solar Rooftop System?

Ans: Unused open space on the roof (shadow free) can be utilised to install solar panel for generation of DC electric energy. This DC energy is converted into AC energy using inverter and the AC power output is connected/integrated to the grid (distribution power lines). This system is called Grid connected solar rooftop system. The programme encourages installation of rooftop solar photovoltaic power generation plant for self-consumption as well as sale of electricity generated from the solar to the grid.

2. What are the facilities/incentives provided by Govt. of India (MNRE) and State Government?

Ans: Ministry has got representation for providing higher CFA through National Portal in line with higher benchmark cost prescribed for North Eastern States and hilly States/UT. The request has been considered by Ministry and it has been decided to provide higher CFA for residential consumers of North Eastern States including Sikkim, Uttarakhand, Himachal Pradesh, UT of Jammu & Kashmir, Ladakh, Lakshadweep, and Andaman & Nicobar Islands. All residential consumers of these states/UTs applying for installation of rooftop solar on the National Portal for Rooftop Solar on or after date of issuance of this OM will be eligible to get higher CFA as mentioned below.:

- i. Individual Household For first 3 kW: **Rs. 17662/ kW** and for RTS capacity beyond 3 kW and upto 10 kW: **Rs. 8831/kW**.
- ii. Resident Welfare Associations/Group Housing Societies (RWA/GHS) Rs.8831/kW for common facilities up to 500 kWp @ 10 kWp per house
- 3. What are the benefits of Grid connected solar rooftop system?

Ans: Benefits of Grid connected solar rooftop system to the beneficiary consumers:

- a) Revenue earn by selling power to the distribution licensee (MSPDCL)
- b) Reduce expenditure on purchase of power from distribution licensee (MSPDCL)
- 4. How solar rooftop system can be connected to the grid (distribution power lines)?

Ans: The connection of rooftop system to the grid can be carried out through two mechanisms, viz. **Net Metering** and **Gross Metering**.

Net metering: In Net metering, the power output from solar panel supplies electric energy to consumer premises and the surplus energy, if any, is fed to the grid. In times of deficit of electricity from solar generation, electric energy will be drawn from the grid.

Gross Metering: In case of Gross metering, all the electric energy generated from solar panel is fed to the grid while energy requirement of the consumer is drawn from the grid lines

The type of metering to be incorporated with the Solar Rooftop system will be left to the consumer's discretion.

5. Who are eligible to apply?

Ans: For Individuals:

- a) Should be a bona-fide consumer of MSPDCL
- b) Should have a valid Aadhar card, PAN Card & Voter ID Card
- c) Should have internet banking enabled Bank Account

For institution and social sectors:

- a) Should be a bona-fide consumer of MSPDCL
- 6. How to apply?

Ans: Log on to http://manireda.mn.gov.in and click on "CLICK HERE TO APPLY ONLINE FOR RTS (ROOFTOP SOLAR).

Documents required for submission of online application (scanned copies) are as follows:

- a) Aadhar Card / Registration certificate (in case of social sectors or institution)
- a) Latest passport photo / photograph of the site (in case of social sectors or institution)
- b) Bank Passbook showing Account Number, Account Holder Name, Bank Name and Branch, IFSC code and MICR code details (The account should be active and internet enabled.)
- c) Electricity Bill obtained from authorised MSPDCL counter showing Meter Number, Consumer Number, Connection Number, **Sanctioned load** and Tariff Category details.
- 7. What are the procedures for installation of Solar Rooftop System?

Ans: The procedure are as follows:

- a) Once online application data is verified, consumers will be contacted over the phone by MANIREDA for site visit time scheduling.
- b) Information of those sites which are found feasible by MANIREDA field-visit team will be forwarded to MSPDCL for further verification.
- c) Meantime, download the list of empanelled firms to install Rooftop System which is available in <u>Solar Rooftop-Grid connected link</u>. The list contains their contact numbers, email ids and rate quotations for different KW ranges.
- d) Consumers should contact the firm of their choice. The price of installation can be negotiated base on the level of understanding between the firm and the consumer.

- e) Those consumers, whose proposed sites are given clearance by MSPDCL, will be required to enter into a power purchase agreement (PPA) with the MSPDCL and MANIREDA.
- f) Once the power purchase agreement is confirmed, Rooftop solar system will be installed at the proposed site by the firm of one's choice.
- g) Either consumer or firm should inform MANIREDA upon completion of Rooftop installation.
- h) MANIREDA will verify installed equipment and other details.
- i) Information of those sites where Rooftop solar system are successfully installed will be uploaded to Ministry of Renewable Energy (MNRE) website for their approval.
- j) Applicable CFA (subsidy) shall be released through online to the bank account of approved/accepted installing empanelled firm subject to release of fund by MNRE.
- 7. What is the rate for purchase of solar power by MSPDCL?

Ans: The finalized tariff for both **Net Meter** and **Gross meter** approved by Joint Electricity Regulatory Commission (Manipur & Mizoram), Aizawl, for entities availing subsidy and not availing subsidy is given below:

Sl. No.	Category	Unit	1-10 kW	Above 10-100 kW	Above 100 kW to 500 kW
1	Without Subsidy	Rs./kWh	7.89	7.33	7.10
2	With Subsidy	Rs./kWh	3.16	2.99	2.92

8. Will Roof-top system work in the event of grid power failure?

Ans: In the event of grid power failure the Roof-top system will <u>automatically shut</u> <u>down</u> and stop feeding power to the grid so as to prevent any person/technician from getting shock (electrocuted) while working on the grid for maintenance.

Note: Kindly refer to Solar Rooftop policies available at http://manireda.mn.gov.in before applying online.

For further details please contact:

Manipur Renewable Energy Development Agency (MANIREDA) 2nd Foor, South Block, Secured Office Complex, Near 2nd M.R. Gate, Imphal-Dimapur Road, Imphal-795001 Mobile No. 6009182027 (During Office Hour)