Frequently Asked Questions for Net metering Rooftop Solar PV System

1. What is a Solar Rooftop System?

As the name suggests, a solar rooftop system is where the solar panels are installed on the roof of any Residential, Commercial, Institutional or Industrial building.

This can be of two types:

(i) Grid Connected Rooftop Solar System with storage facility
(ii) Grid Connected Rooftop Solar System without storage facility

2. What is a Solar Rooftop System with Storage facility?

Some Solar rooftop systems that have a battery as storage facility. Such solar systems can ''store'' electricity in the battery and hence are named so.

3. What is a Grid Connected Solar Rooftop System?

In grid connected rooftop or small Solar Photo Voltaic (SPV) system, the DC power generated from SPV panel is converted to AC power using power conditioning unit (eg. Inverter) and is fed to the grid either of 440/220 Volt three/single phase line or 33 kV/11kV three phase lines depending on the capacity of the system installed at Residential, Commercial, Institutional or Industrial building and the regulatory framework specified by respective authorities. These systems, generate power during the day time which is utilized fully by powering captive loads and feed excess power to the grid as long as grid is available. In case, where solar power is not sufficient due to cloud cover etc., the captive loads are served by drawing power from the grid.

4. Where can such plants be installed?

As per the policy, such rooftop systems can be installed at rooftops or/and Open areas on the land, building or infrastructure or part or combination thereof .

5. What is GUJARAT SOLAR POWER POLICY 2015?

Government of Gujarat has announced Gujarat Solar Power Policy on 13-Aug-2015 to facilitate and promote solar power generation. To download the policy, click here:

http://guj-epd.gov.in/pdf/gujarat_solar_power_policy_2015_n.pdf

6. What is operating period of Gujarat Solar power policy - 2015?

13-Aug-2015 to 31-Mar-2020

7. What is the size of grid connected rooftop solar system?

The rooftop solar systems from minimum 1 kWp up to 1000 kWp or in combination can be set up on the roofs as per GoG-Solar Power Policy -2015.

8. Who all are eligible for this policy?

Eligible Consumer" means a consumer of electricity in the area of supply of the distribution licensee, who intends to use a Rooftop Solar PV System, given that such system is self owned, to offset part or all of the consumer's own electrical requirements.

9. What are the different categories covered in this policy?

- Rooftop PV (Photo Voltaic) System with net metering
    - Residential Or Government Consumers
    - Industrial, Commercial and other consumers
- Solar Project for captive consumption
- Solar Project with sale of power to DISOMs
- Solar Project Under REC mechanism with sale of power to discom at APPC (Avg. Power Purchase cost)
- Solar Project with sale of power under NSM.
- Solar Project with sale of power to third party under open access.
- Agriculture Solar Pump
- Standalone PV system and home lighting system
- Canal top and canal bank solar PV project
- Technology Demonstration Project.
- Other Scheme.

10. What safety to be ensured /precaution to be adopted by the customer who install grid connected SPG.

It is extremely important that the user organization follows strict safety practices as per the guidelines mentioned in the policy. Failure to do so may result in severe damage to life as property. One key safety practice that has to be followed is in case the grid fails, the solar power has to be stopped immediately feeding to the grid so as to safe-guard any technician while working on the grid for maintenance etc. This feature is termed as **'Islanding Protection'**.

More safety directions are available here:

http://www.cea.nic.in/reports/regulation/distributed_gen.pdf

11. Where does one need to submit the fresh Application to install Solar Power Grid?

Applicant has to submit a proposal to the State Nodal Agency i.e. –

The Deputy Director,
Gujarat Energy Development Agency,
4th Floor, Block No.11-12, Udhyogbhavan
Sector-11, Gandhinagar: 382 017

12. What are the documents to submit with proposal of SPG?

The following documents are mandatorily to be submitted with the application –

a) Ownership documents of the rooftop solar PV system.
b) Ownership or legal possession of the premises including the rooftop or terrace on which SPV systems needs to be installed.
c) Proof of being a consumer of the local DISCOM and premise connected to the DISCOM's Grid
d) Declaration of request for 1-phase or 3-phase Solar system & declaration of Section under which of the Solar Policy benefit to be availed?
e)

13. How much Solar PV KWp can be installed by the applicant?

Applicant can install a maximum of 50 % of the existing DISCOM's Sanctioned Load / Contract Demand

14. What is Net metering?

Conventionally energy meter installed at customer premises register energy consumption in one direction which is energy injected in to the customer system. However, in this case energy also needs to measure which has been generated from the solar system. Hence, bidirectional meter need to be installed.

With this bidirectional meter, energy will be measured in both the direction (a) Energy injected in to customer system and (b) Excess energy (after captive consumption) exported to the TPL grid. Accordingly, net units (a-b) only would be billed to the consumer. Such metering is called NET metering.

15. What is banking of units generated from Solar system?

Units generated from Solar system, if not utilized then will be exported to TPL grid and recorded in bidirectional meter. Customer can utilize those units any point of time during same billing month. This mechanism is called ''banking'' of the excess units generated.

16. What Rate TPL will purchase excess unit generated from solar system?

In the event the electricity injected exceeds the electricity consumed during the billing period, such excess injected electricity after adjustment of consumption shall be purchased by the concerned Distribution Licensee at the APPC rate determined by the Commission for the year in which the Rooftop Solar PV System is commissioned for whole life of the Rooftop Solar PV System; e.g. for the Rooftop Solar PV System commissioned during 2016-17, the APPC rate determined by the Commission for FY 2015-16 shall be applicable.

18. What is APPC rate

"Average Power Purchase Cost" (APPC) means the Weighted Average Pooled Price at which the distribution licensee has purchased the electricity including cost of self generation, if any, in the previous year from all the energy suppliers on long-term, medium-term and short-term basis, but excluding energy purchased from renewable energy sources,

19. What is procedure to follow by the customers to complete the net connectivity?

- Interested customer has register the application with prescribe format with GEDA (Gujarat Energy Development Agency)
- GEDA register an application with unique no and date.
- GEDA forward application to concern Distribution Licensee as well as to Chief Electrical Inspector (CEI) –Gandhinagar.
- On the receipt of the approval from Approval of Chief Electrical Inspector (CEI) for Single Line Diagram, Earthing Diagram and Wiring Diagram, Customer need to fill up separate application form at Distribution Licensee.
- Customer also need to submit Documents related to legal possession of roof-top /NOC of co-owners, in case of joint ownership.
- Torrent Power Ltd (TPL) will register application and acknowledge the receipt to the applicant.
- TPL will carry out the site inspection and will conduct technical feasibility study.
- We will provide In-principle consent for the grid connectivity, quotation towards applicable connectivity charges, network enhancement cost and meters cost along with draft connectivity agreement.
- Customer sign and submit connectivity agreement on Rs. 100/- stamp paper along with payment towards quotation provided.
- Connectivity agreement will be executed with Torrent Power Ltd.
- Customer shall install Solar PV system within 60 days from the connectivity agreement date.
- After completion of installation work of RTSPV system, the customer needs to submit installation charging approval issued by Chief Electrical Inspector (CEI) to TPL.
- Testing and synchronization of the RTSPV system will be carry out and TPL will replace the main meter by Import /port meter to give the benefit of Net metering. TPL will provide separate (Solar) meter to measure total generation of RTSPV system.
- TPL will intimate GEDA for issuing commissioning certificate.
- GEDA shall Visit the site in consultation with TPL and applicant and issue commissioning certificate

20. Who will provide Bidirectional meter/Net meter and Solar meter?

TPL will provide Net meter, solar meter and Solar check meter (applicable to above 20 KWp solar systems) and the cost of the same will be borne by the customer.

21. Can customer purchase his own Net meter, Solar meter and Solar check meter (applicable to above 20 KWp solar system)?

Yes, Customer has option of purchasing his own meter as per specification provided by us. Please visit our customer portal https://connect.torrentpower.com and visit solar section to get specification. Also, customers own meters require to be tested at our meter laboratory for the accuracy and other parameter testing.