Net Metering is one of the initiatives taken by the govt in order to encourage people to opt more for solar energy. But in current solar scenario indian DIACOMS offer two of metering for solar rooftop plants - Net and Gross. Both type of metering affects the economies of a solar rooftop plant in different ways. The main difference between the two relates to accounting for energy consumed and billing involved.

**What is Net Metering?**

Net Metering is a system of electricity billing mechanism that gives credits to residential and commercial solar power systems for making excess electricity with their solar panel systems. When solar panels produce excess power, that power is sent to the grid.

The net metering system only works with grid-tied solar power systems. If the energy generated is more than the amount of energy consumed, the owner gets compensated for the excess amount. And, if the amount of energy consumed is more than the amount of energy generated, the owner only pays for the net amount. Net metering was introduced as an initiative to make renewable energy more economical and popular among the countrymen.

**How does Net Metering Work?**

A grid-tied solar system generates more electricity than you consume during the daytime. So, with net metering, the homeowner is only billed for the difference of the energy produced by the system and the energy consumed by the house over the monthly billing period. Hence excess energy is credited while the shortage of energy is covered by the grid.

For instance, you have a grid-tied solar rooftop system that produces 500 units of electricity every month, and you use 600 units from the grid. So, with the net metering system,distribution companies will charge you for (600 – 500) 100 units with rates set by regulatory bodies. The average rate around the country is Rs10/unit. So, your monthly bill would be 10 X 100 =Rs1000.

And if you produce 500 units of electricity every month, and use only 400 units, you will be billed for 0 units and paid for excess 100 units of energy produced by your system.

**What is Gross Metering?**

Now, as the net metering system is just a promotional initiative for solar energy, it is not going to stay in commission for long. In fact, there is another system that is in discussion for utility billing called ‘gross metering’.

With gross metering, all the electricity generated by the solar power system is sent to the grid and all the electricity required for consumption by the consumer is imported from the grid. The consumers are paid a feed-in tariff for the electricity exported to the grid.

# How Does Gross Metering Work

If the consumer with a solar panel system has a monthly consumption of 500 units of energy and also installed a solar rooftop plant having the capability to generate 400 units of electricity. At the end of every month, he will be charged for total consumed energy which is 500 units at a normal tariff. The energy generated from the solar rooftop plant will be recorded by a separate gross meter and distribution companies will pay for those many units, at the predetermined rate, called the feed-in-tariff rate.