

FACT SHEET Your Solar

Solar Systems and Power Outages

Do Solar Systems Work During Power Outages?

It may seem surprising, but solar systems (without batteries) will **NOT** normally work in the rare event that there is power outage on the grid. This fact sheet explains why this is the case, and discusses some of the alternative ways you can ensure you have power whenever you need it*.

There are two reasons why:

- 1 If there is a power outage on the grid, your solar system inverter will shut off power sources including solar, **to protect your electrical equipment & appliances.**

The reason is that the electrical equipment & appliances in your home/business need a steady power supply otherwise they may be damaged or not work properly.

If you have solar panels, the power flowing to your home or business changes with the amount of sunlight that day. Your appliances cannot run with power stopping and starting, so your solar panels join with the power flow from the grid to provide a stable flow of power. If that stability is not there, i.e. during a grid power outage, **then your solar system shuts down.**

- 2 When there is a power outage, AusNet Services sends people to find and fix the faults. If a solar system is still generating power, **this can put their safety at risk.**

By law, solar systems have inverters that sense if you are connected to the network, and whenever grid power is down, they automatically shut down too, to protect people and property.

So what can I do to keep my power on?

Every situation is different, and this depends partly on your power requirements. Below are some options which could maintain your power supply:

1. A small fuel generator (for example, to run a water pump in a rural situation).
2. A UPS device (Uninterrupted Power Supply – essentially a battery with smart controls) might be suitable for a small device such as a computer or a light.
3. Batteries (see below for more detail).

Battery storage systems can provide the necessary backup power supply to run some or all of your household appliances.

There are three types of battery storage systems:

1. **No backup power:** the battery only works when the grid is available, similar to solar systems
2. **Limited backup power:** the battery is usually wired up to power a single circuit supplying specific loads (eg fridge, lights, water pump)
3. **Full backup power:** the battery can power the whole house (for the time of its storage capacity)

Technology and prices are constantly changing (usually for the better), and will continue to do so, so research into your needs and the best way to meet them is the key.

You will need **advice from your licensed electrician** to tailor these options for your particular circumstances.

*Life support customers please visit the safety page on www.ausnetservices.com.au for more information.