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Prevent Power Outages with Solar Energy & Storage, a Gas Generator, or the Combination of Both!

Power Outages Can Strike Anytime and Anywhere

In recent years, South Carolina, North Carolina, and Georgia homeowners have become concerned about the high number of grid power outages lasting from a few hours to several days.

Traditionally, homeowners looked to portable or whole-home standby generators to keep their essential appliances running during a power outage. Recently a second option has come to the market with great success, using a solar energy and battery storage system.

For the first time, homeowners have options to eliminate power outages and to keep the essential appliances operating – powered by either a solar system with battery or a gas generator.

This review will help you determine which one of these backup energy systems is best for you.

If providing protection to your home and family from power outages is your primary goal, ***a solar energy and battery storage system ...***

- allows you to take advantage of currently available federal and state tax credits which can offset up to 50% of your purchase cost, making this choice less costly long-term
- can be financed over a longer period of time for a lower monthly payment, plus you can use your tax credits and energy bill savings to offset most if not all of your monthly payment amount
- carries up to a 25-year warranty, which is significantly longer than other back-up power production alternatives (with typical warranties available up to 10 years)
- offers a long lifespan that can be up to double that of other alternatives
- is odorless and quiet
- dramatically lowers or can even eliminate your annual power costs
- eliminates the need to worry about refueling and/or the availability of fuel if something happens to supply lines or retail availability

- protects you from the rising costs of electricity to power your home as well as the rising costs of fossil fuels to power a back-up generator
- requires very little maintenance or repair and is unlikely to break down during emergencies
- has zero operating cost as it is fueled/replenished by the sun
- provides immediate back-up power when the grid goes down compared to other alternatives, which may take up to a minute to start up and activate back-up power
- can be roof mounted or ground mounted
- is non-polluting/reduces your carbon footprint
- typically provides a greater increase in your home's value and marketability as compared to other alternatives

If providing protection to your home and family from **power outages** is your primary goal and your property is mostly shaded and/or typical weather patterns at your location provide limited access to the sun for lengthy periods of time, **a gas generator home standby power system ...**

- provides a constant source of back-up power for extended periods of time regardless of weather conditions, limited only by the availability of fuel (which is not likely to be a consideration when connected to a natural gas supply)
- is often a better option for households that want to use a lot of power during extended periods of power loss – for example, several weeks off grid during a time when there is not much sunlight (as a solar system with battery storage would require multiple battery systems to ensure enough standby power is available in that situation)
- may have a lower initial purchase cost than a solar system with battery storage

Some consumers, typically those in more rural settings where grid power can be down for weeks, choose *both* by buying a combination system. They use their solar system with battery storage to continuously lower their monthly power bills and provide back-up power during grid outages. They use their gas generator when necessary, which would generally be during lengthy severe storm periods when the sky may be dark for extended periods of time, limiting solar energy production and the recharging of their solar energy storage battery.

Whether you select a solar energy system with battery back-up, a gas generator, or both for your emergency back-up power needs, choosing to back up your home's *entire* electrical needs will affect the size/capacity of the equipment required and therefore the overall initial cost. Additionally, in the case of a gas generator, the cost to maintain and operate a larger system during emergencies and over its lifetime will be greater as well.

That's why many consumers choose to have back-up power provided to only what they deem are essential appliances. This reduces the size and cost of the back-up power equipment needed.

To facilitate this, both solar battery and generator back-up systems make the following equipment options available to you:

- Automatic Transfer Switch
 - Using smart management modules, today's automatic transfer switches allow you to designate/prioritize critical appliances to power during outages.
- Essential Loads Sub Panel
 - With this device installed, the home's essential appliance circuits (i.e., for refrigerators, freezers, lights, electronics, etc.) are moved to a new sub panel, which is the only part of your electrical system that is powered by your battery back-up system or generator during a grid power outage.

U.S Energy Solutions is in a unique position to assist you with your back-up power decision as we offer solar energy systems with battery storage and gas generators for home standby power. We'll work with you to provide the system that is most cost effective and best matched to your needs and goals. Contact us today for a free, no-obligation, expert evaluation and quotation!

Best regards,



Don Redman
President, U.S. Energy Solutions