



# What You Need to Know About Backup Generation

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## Power outages can happen at any time

**Backup electric generators can be a part of any preparedness plan.** Backup electric generators operate as a stand-alone power source and are not connected to PG&E’s power grid. Generators are typically powered by solar with backup storage, battery, natural gas, gasoline, propane or diesel fuel.

## Determining if a generator is right for you

Electric backup generators can keep the lights on, help appliances stay running, save perishable food, and power essential equipment and electronics during a power outage. Generators can also be expensive, noisy, and pose safety hazards. It’s important to understand how to safely operate your generator before an emergency occurs. This means doing regular safety checks and being sure you have enough fuel to last a few days.

### Consider these factors when deciding whether you need a generator:



**ENERGY NEEDS |** Do you own certain devices or equipment that need to keep functioning in the event of a loss of power? How crucial is it for you to have power during an extended outage? This is especially important for customers who are dependent on life-support equipment or require special heating or cooling needs for a medical condition.



**NOISE |** Are there community ordinances where you live or work that restrict or limit the decibel level allowance for outdoor equipment?



**COST |** Generators can cost thousands of dollars. Take any immediate needs into consideration as you examine which generator option may be the best choice for you.

## Choosing the right generator

If you decide to purchase a generator, explore what kind of generator will work for you.

### Factors to consider include:



#### YOUR ENERGY NEEDS

Generators can produce enough electricity to power your phone and laptop or your whole home. Consider what critical items, appliances and equipment you would need during an outage.



#### FUEL PREFERENCES

Your preference may be determined by environmental concerns, accessibility, affordability, and available space for secure generator storage. Some fuel types are: gasoline, propane, natural gas, diesel and renewable energy.



#### INSTALLATION REQUIREMENTS

No matter what type of generator you have, whether small-battery operated, portable or permanent standby, always consult the owner’s manual for detailed instructions and safety guidelines prior to operation.

Visit [pge.com/backupgeneration](http://pge.com/backupgeneration) for more information

## Using your generator correctly and safely

If you don't understand how to use your generator, you risk damaging your property, endangering your life and endangering the lives of PG&E crews who may be working on power lines in your community.



**FOR YOUR SAFETY:** Understand and follow all safety instructions provided by the manufacturer. Never connect any generator to another power source, including PG&E power lines.

### Portable generator safety

- Be sure that the power needs of the device (electric load) is supported by your generator and does not exceed the manufacturer's specifications.
- Position your generator where its exhaust can vent safely to prevent carbon monoxide poisoning, which can be fatal.
- Only use extension cords that are properly sized for an individual generator's electric to prevent overheating. The American Wire Gauge (AWG) chart can be utilized to determine which extension cord is right for you.
- Keep cords out of high-traffic areas so they don't present a tripping hazard.
- Never run cords under rugs or carpets where heat can be generated or where damage to a cord may go unnoticed.



#### Do

- Purchase the right generator
- Plan and test generator before use
- Put safety first!



#### Don't

- Run a portable generator in the garage or the rain
- Ignore instructions
- Store fuel inside the house

### Permanent-standby generator safety

- Installation requires a licensed electric contractor or other qualified professional.
- Ensure electricity from your generator does not flow or "backfeed" into PG&E's power lines. The most common way to prevent backfeeding is to install a "double-pole, double-throw transfer switch" along with your permanent standby generator.
- Any additions or adjustments to your house wiring should be inspected by your city or county building department.
- Once installation is complete, call PG&E at **1-800-743-5000** to let us know about your back-up system. PG&E line workers will then be aware of your generator when working on an outage in your area.

## Always be prepared.

Power outages can occur because of extreme weather and high fire danger conditions, natural disasters, storms, earthquakes or other unforeseen events. Backup generation can be a helpful tool in any emergency preparedness kit. For solar customers, please note that during an electric power outage, your solar system will not function unless designed to work with a battery or standby generator. For more information, call your solar or battery provider. Additional tips on how to prepare for an emergency or extended outage can also be found at [pge.com/beprepared](http://pge.com/beprepared).