



Town of Gila Bend COMMUNITY DEVELOPMENT

GENERATOR USE & SAFETY

1. When would I need a generator?

Generators are very handy to have in the event the power goes out because of a storm or other natural event. They are a good backup system for heaters, freezers, well pumps and lights. There are two different types of generators available. The first are the Portable models. These are very popular for those who need to run equipment away from electricity. Many are available for light duty residential use, while others are rated for heavier commercial and industrial use. The second type is a fully automatic permanently installed unit attached to a home or business. Some have dual-fuel capability.

2. What is a permanent unit?

Permanent units are fully automatic generators that can be installed at a home or business in a fixed location. These units typically can perform such functions as monthly self-tests and systems checks. They generally are directly wired into the main breaker panel and can operate the entire facility or a part of it in the event of an outage. In addition, they automatically turn themselves on when they sense a power failure. While these units are the most expensive to purchase, they are also the most convenient to operate.

3. How do I connect my portable generator safely?

Generators should always be installed or used outdoors and should be located away from doors or windows. Carbon-monoxide poisoning is serious and often fatal, **NEVER USE A GENERATOR INDOORS.** There are two ways to connect a generator.

First, you can plug your appliances directly into the generator and run them as needed. Second, you can have the generator connected to your breaker panel, by a licensed electrician, through a transfer switch. This enables you to throw the switch and have the items that you have designated as important continue to operate from the generator.

VERY IMPORTANT NOTICE: The main breaker on your panel does not qualify as a transfer switch under the National Safety Code. Using it in such a manner is illegal!

4. Do I need any permits?

Yes. If you choose to have the transfer switch installed the electrician will get the necessary permits for the job. 2 sets of drawings consisting of a one line electrical diagram with load calculations and a site plan showing generator location, fuel type & capacity, property lines and building locations with dimensions is required. If a generator requires fuel gas piping a plumbing isometric drawing and calculations will also be required.

If you choose to operate a portable generator with items plugged into it, you do not need a permit. Remember that you must also observe city noise and pollution codes. HOA requirements may apply as well.



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5. Can someone or something be hurt by a generator?

Yes. Emergency generators pose safety hazards you may not be aware of.

Transfer switches are required because electricity from the generator can be sent through the meter base and into the distribution lines. This could be life-threatening to workers, neighbors, children or animals in the vicinity of a downed power line.

In addition, when power is restored it will flow back to your home, and can seriously damage or destroy a generator that does not have approved safety switching.

6. Who can help me do this?

The Town of Gila Bend Community Development and your local utility can provide you with information and assistance on generator installation and safety.