



PORTABLE GENERATOR SAFETY & INSTALLATION

REVISED AUGUST 2024

HOW CAN ELECTROCUTION OCCUR?

If a portable electric generator is connected to your home's wiring, the energy it generates can flow back into FPU's power lines and electrocute line workers or others who come in contact with the lines. Even a line that has been knocked down and is verified to be "dead," or not live, by FPU could become energized without warning.

HOW CAN IT BE PREVENTED?

You must have a qualified, licensed electrician install a double-pole, double-throw transfer switch (see illustration) between the generator and utility power in compliance with state and local electrical codes. Also, let FPU know if you have a generator, as this information can be used for line worker safety.

WHY DOES IT HAVE TO BE INSPECTED?

It's the law. Tennessee law requires a state wiring inspector to approve any additions or changes to the wiring in your home. Installing a home transfer switch falls into that category.

WHAT ABOUT CARBON MONOXIDE?

Never use a generator indoors. This includes: your home, basement, garage, crawl space and other enclosed or partially enclosed spaces, even with ventilation. Opening doors and windows or using fans will not prevent carbon monoxide build-up in the home.

WHAT ABOUT ELECTRICAL HAZARDS?

Follow the manufacturer's instructions for safe operation and maintenance. Keep the generator dry and do not use in rain or wet conditions. Make sure your hands are dry before touching the generator. Plug appliances directly into the generator, and make sure it is properly grounded.

Never try to power the house wiring by plugging the generator into a wall outlet. This is an extremely dangerous practice that presents an electrocution risk to utility workers and neighbors served by the same utility transformer. It also bypasses some of the built-in household circuit protection devices.

Do not overload the generator. A portable generator should only be used when necessary and only to power essential equipment or appliances.

ARE THERE ANY FIRE HAZARDS?

Never store generator fuel in the home. Gasoline and other flammable liquids should be stored outside of living areas in properly labeled, non-glass safety containers. Before fueling the generator, turn it off and let it cool down. Gasoline spilled on hot engine parts could ignite.

TYPICAL INSTALLATION FOR SERVICE ENTRANCE RATED AT 200 AMPERES OR LESS

- Conductor sizes from generator to transfer switch will be determined by generator capacity.
- Over-current protection for the generator will be determined by generator capacity.
- Transfer switch shall be a double-throw type that breaks contact of ungrounded conductors. The neutral will not be broken by the switch.
- Transfer switch will be bonded to the service entrance ground with #4 solid copper conductor.
- If the transfer switch is suitable for service equipment, the overcurrent protection between the meter base and the transfer switch is not required.

