

PORTABLE GENERATORS

New York's winter weather and storms can sometimes lead to electrical power-outages. When this happens, some individuals rely on a portable generator. However, there are many things to consider both pro and con, when considering the purchase and/or use of a portable generator.

First, homeowners should be realistic in how much they will actually use a portable generator. The US Consumer Products Safety Commission reports that in preparation for Y2K, 400,000 portable generators were purchased. They also estimate that there are probably 1 million portable generators nationwide. While it is a useful tool when the power goes out, generators will sit in the corner of the garage most of the year. Whether the generator is run for just a few hours or a few days, after each use, it is important to drain or run the gas out of the lines so that it won't turn to varnish and clog the fuel line. Fuel stabilizer can help maintain the fuel during periods between uses.

The second important consideration when deciding whether to buy a portable generator is to be realistic on what appliances it can really power. Most portable generators for the home range from 2,500 to 12,000 watts of power output and are intended to power appliances, not the entire home. For example, a refrigerator/freezer will use 600-3000 watts, a water pump 1000-3500 watts, one lamp 60-100 watts, and a sump pump 800-3500 watts. If your generator is a 4500 watt unit, you'll be able to run the refrigerator and a few lamps, but then have to unplug those in order to run the sump pump, or another heavy-wattage appliance. This technique of load shifting is a way to make the best use of a portable generator.

To power the furnace or water heater, a portable generator must be professionally connected by a licensed electrician. It is possible for the electrician to install a transfer switch and proper wiring connections. Never attempt to feed power from the portable generator into the home's main power supply via an extension cord with a home-made, double-male plug. This can cause backflow of power into the line feeding electricity to the home. Linemen have been electrocuted when trying to work on a line, not realizing that power is running backward from a near-by home.

Other issues to consider are the noise that the generator will make, the amount of fuel it will consume, and the carbon monoxide it will produce. A generator must never be run inside the home, garage or barn due to the carbon monoxide it will produce. According to the US Consumer Product Safety Commission, between 2000 and 2003, 114 people died from carbon monoxide poisoning associated with portable generators.

Since the generator must be used outside, noise is something to consider. For home owners in the country, this may not be an issue, but in a subdivision with homes nearby, a generator running all night long could spawn complaints from neighbors. Extension cords will be needed and must be properly sized for the load they are expected to carry. Overloaded cords can overheat and cause a fire.

Portable generators also use a considerable amount of gasoline, and the tank will need to be refilled several times per day. Make sure to store any extra fuel supplies in a storage building not connected to, or near the home in case of fire or explosion.

By: Mark Hansen, PhD (Emergency Management Coordinator at Michigan State Univ.).
