

Fact Sheet



Using Your Generator Safely

If you own a generator, or are planning on getting one, here are some facts to protect you, our lineperson's safety and your property.

Even though Nova Scotia Power's power system is reliable, the option of owning a generator may still be attractive to some consumers.

Typically, generators are used during power outages to supply emergency energy to essential equipment such as refrigerators and freezers. While the market includes many models of generators, most fit into one of two categories - portable generators and back up generators that are permanently connected to the electrical system.

Portable Generators

Portable generators are very convenient as they are used to plug appliances directly into an outlet on the generator. This type of generator is popular at locations such as cottages and construction sites. However, portable generators are limited to the number of appliances that can be connected.

Back Up Generators

In other situations, users may consider connecting a generator to their building's electrical system. The installation of generators that are connected to the electrical system are subject to the Electrical Installation and Inspection Act. The Act requires that a qualified electrician install the wiring associated with the generator installation and that it conforms to applicable Canada Safety Standards. The electrician must, by law, apply for a wiring permit and have the new installation inspected by a Nova Scotia Power Wiring Inspector. This ensures the installation conforms to applicable codes and standards for safety requirements.

Operation and Safety

The safe and proper operation of any type of power equipment should always be a priority.

- Before you begin operation, read the owner/operator safety manual. Become familiar with all aspects and features of the generator including start and shut-off switches, fuel shut-off valves, and exposed moving parts or danger points. Be sure to observe warning signs mounted on the generator such as danger/hot signs around the exhaust area.

- With backup generators, back feed is a major concern. Back feed occurs when a generator is connected to a building's electrical system while that system is still connected to the utility. Here, the generator re-energizes circuits thought dead due to the outage, creating a safety hazard for customers, utility linepersons, and equipment.
- When generators are connected to the building electrical system the installation requires a transfer switch to be installed to prevent power to back feed on the utility system. This transfer switch isolates the building's connection with the utility, and then makes a connection between the generator and the building's electrical system. This allows the generator to operate safely, avoiding potential fire or shock hazard.
- Because internal-combustion engines provide the power to portable generators, it is important to operate these units in an open, well-ventilated area. Never operate the generator in a closed, confined area such as a vehicle or building. If you must work in close quarters, direct the generator's exhaust port away from the work area. Doing so helps operators and others avoid inhaling dangerous fumes.
- Never place the generator on an unstable surface to operate it. Make sure the unit sits on a firm, level surface. Operating on an incline or unstable surface can cause premature wear or damage to the engine.
- Always operate your generator under dry conditions. Operation in wet weather or under potentially wet conditions may cause potential electrical shock or electrocution. Avoid contact with the generator if you are wet or standing in water.
- Finally, manufacturers of today's generation of generators have designed the units for maximum power and efficiency. Don't try to tamper with or modify your generating unit to produce more power. Doing so only damages the generator and creates a potentially dangerous situation. If the unit isn't operating properly, consult your operator's manual or take the unit to an approved service technician for inspection. And, of course, remember to read the operator's manual before use!

Questions?

As a homeowner or small business owner, you may need help selecting a generator that will supply enough power to meet your emergency needs. To identify which loads you may wish to keep energized, determining these load's power requirements, and ensuring that your generator produces the correct voltage, contact your electrician or your local generator vendors.

For more information about electrical safety, call us at 1-800-428-6230 (428-6230 in Metro Halifax) or visit <https://www.nspower.ca/cgibin/TalkToUs/Public/talkToUs.cgi> over the Internet to talk to us.

At Nova Scotia Power, Safety is Our Number One Priority!

