Generators in disaster situations

Purchasing a Generator

If you buy a generator, make sure you get one that's rated for the amount of power that you think your home will need. Look at the labels on lighting, appliances and equipment in your home that you plan to connect to the generator. This will help you know how much power it will take for the generator.

If your generator does not produce enough power for all your needs, you will need to stagger the operating times for household electrical items. If you can't determine the amount of power that will be needed, ask an electrician to help you. If your equipment uses more power than the generator can produce, then you may blow a fuse on the generator or damage the connected equipment.

Using a Generator Safely

Follow the directions supplied with your generator. Keep in mind that the primary hazards to avoid when using a generator are:

- Carbon monoxide poisoning from the toxic engine exhaust;
- Electric shock or electrocution; and
- Fire

Every year, people die in incidents related to portable generator use. Never, ever use a generator indoors, including inside a garage, carport, porch or other enclosed or partially-enclosed area – even with ventilation. Opening doors and windows or using fans will not prevent carbon monoxide build-up in your home.

■ Carbon monoxide from generators can quickly lead to death, because you cannot see or smell carbon monoxide. Even if you don't smell fumes, carbon monoxide may still be present. If you start to feel sick, dizzy or weak while using a generator, get to fresh air right away. Don't delay.

You should also install battery-operated carbon monoxide alarms or plug-in carbon monoxide alarms with battery back-up in your home, according to the manufacturer's installation instructions. If dangerous carbon monoxide gas from the generator enters your home, the alarm will sound to warn you. Test the battery frequently and replace when needed.

Because you may have opened windows to get fresh air while your power is out, be sure to place the generator away from windows, doors and vents that could allow carbon monoxide to come indoors.

- To avoid electrocution, keep the generator dry and don't use it in the rain or in or wet conditions. To protect the generator from moisture, use it on a dry surface under an open canopy-like structure, such as under a tarp held up on poles. If your hands get wet, be sure to dry them before touching the generator.
- To prevent fire, be sure to turn the generator off and let it cool down before refueling it. Gasoline spilled on hot engine parts could catch fire. Keep fuel for the generator in an approved safety can. Keep the fuel outside of living areas in a locked shed or other protected area. Don't store fuel near a fuel-burning appliance, such as a natural gas water heater. If fuel is spilled or the container isn't sealed properly, invisible vapors from the fuel can travel along the ground and can be ignited by the appliance's pilot light or by arcs from electric switches in the appliance.

Plug appliances directly into the generator. Or use a heavy duty, outdoor-rated extension cord that is rated (in watts or amps) at least equal to the connected loads. Check that the cord is free of cuts or tears and that it plug has all three prongs, especially a grounding pin.

Do not plug your generator into a wall outlet, a practice known as back-feeding. This is an extremely dangerous practice that presents an electrocution risk to utility workers and neighbors served by the same utility transformer.

For more information, contact your local fire department or local county health department.