Alberta Government

Power Outages

Most power outages will be over almost as soon as they begin, but some can last much longer - up to days or even weeks. Power outages are often caused by freezing rain, sleet storms and/or high winds which damage power lines and equipment. Cold snaps or heat waves can also overload the electric power system.

During a power outage, you may be left without heating/air conditioning, lighting, hot water or even running water. If you only have a cell or cordless phone, you may be left without phone service if you do not have an alternate charging device. If you do not have a battery-powered or crank radio, you may have no way of monitoring news broadcasts. In other words, you could be facing major challenges.

You can greatly lessen the impact of a power outage by taking the time to prepare in advance. You and your family should be prepared to cope on your own during a power outage for a minimum of 72 hours.

Before a Power Outage

- Make a plan.
- Build a kit.
- You can install a non-electric standby stove or heater. Choose heating units that are not dependent on an electric motor, electric fan or some other electric device to function. It is important to adequately vent the stove or heater with the type of chimney flue specified for it. Never connect two heating units to the same chimney flue at the same time.
- If the standby heating unit will use the normal house oil or gas supply, have it connected with shut-off valves by a certified tradesperson.
- If you have a wood-burning fireplace, have the chimney cleaned every fall in preparation for use and to eliminate creosote build-up which could ignite and cause a chimney fire.
- Before considering the use of an emergency generator during a power outage, check with furnace, appliance and lighting fixture dealers or manufacturers regarding power requirements and proper operating procedures.

If you have functional needs (or know someone who does), consider the actions to be taken before and during a power outage:

- Establish an evacuation route without elevator service (if applicable).
- Keep a backup power supply for essential medical equipment.

- Keep a flashlight and a cell phone handy to signal for help. Consider your back-up plan if power is out for a long duration and you are unable to charge your phone.
- Establish a network to assist and check on you during an emergency.
- Enroll in a medical alert program that will signal for help if you are immobilized. Ensure the program has battery back-up and will continue to function, as required.
- Keep a list of facilities that provide life-sustaining equipment or treatment.
- Keep a list of medical conditions and treatment.
- If you live in an apartment, advise the property management that you may need assistance staying in your apartment or that you must be evacuated if there is a power outage. This will allow the property manager to plan and make the necessary arrangements on your behalf.

During a Power Outage

- First, check whether the power outage is limited to your home. If your neighbours' power is still on, check your own circuit breaker panel or fuse box. If the problem is not a breaker or a fuse, check the service wires leading to the house. If they are obviously damaged or on the ground, stay at least 10 meters back and notify your electric supply authority. Keep the number along with other emergency numbers near your telephone.
- If your neighbours' power is also out, notify your electric supply authority.
- Turn off all tools, appliances and electronic equipment, and turn the thermostat(s) for the home heating system down to minimum. This will prevent damage from a power surge when power is restored as well as reduce risk of fire (i.e. if your electric stove is on when the power goes out it will turn back on when power is restored). Also, power can be restored more easily when there is not a heavy load on the electrical system.
- Turn off all lights, except one inside and one outside, so that both you and utility crews outside know that power has been restored.
- Do not open your freezer or fridge unless it is absolutely necessary. A full freezer will keep food frozen for 24 to 36 hours if the door remains closed.
- **Never use charcoal or gas barbecues, camping heating equipment, or home generators indoors or in garages,** as they give off carbon monoxide. Because you cannot smell or see it, carbon monoxide can cause health problems and is life-threatening.
- Use proper candle holders. Never leave lit candles unattended and keep them out of reach of children. Always extinguish candles before going to bed.
- Listen to your battery-powered or crank radio for information about the outage and advice from authorities.
- Consider turning your cell phone to battery saving mode, and if there is service, only use it if necessary.

Tips:

- Make sure your home has a working carbon monoxide detector. If it is hard-wired to the house's electrical supply, ensure it has a battery-powered back-up.

- Protect sensitive electrical appliances such as televisions, computers and DVD players with a surge-protecting powerbar.

Use of home generators

Home generators are handy for backup electricity in case of an outage, but must only be used in accordance with the manufacturer's guidelines. A back-up generator may only be connected to your home's electrical system through an approved transfer panel and switch that has been installed by a qualified electrician. Never plug a generator into a wall outlet as serious injury can result when the current produced by the home generator is fed back into the electrical lines, and transformed to a higher voltage. This can endanger the lives of utility employees working to restore the power.

To operate a generator safely:

- Follow the manufacturer's instructions.
- Ensure that the generator operates outdoors in well-ventilated conditions, well away from doors or windows, and never in your garage, to prevent exhaust gases from entering the house.
- Connect lights and appliances directly to the generator. If extension cords must be used, ensure they are properly rated, CSA-approved cords.

If You Have to Evacuate

Evacuation during a power outage is more likely during winter months, when plummeting temperatures can make a house uninhabitable. Although a house can be damaged by low temperatures, the major threat is to the plumbing system. If a standby heating system is used, check to see that no part of the plumbing system can freeze.

If the house must be evacuated, protect it during the winter months by taking the following precautions:

- Turn off the main breaker or switch of the circuit-breaker panel or power-supply box.
- Turn off the water main where it enters the house. Protect the valve, inlet pipe and meter or pump with blankets or insulation material.
- Drain the water from your plumbing system. Starting at the top of the house, open all taps, and flush toilets several times. Go to the basement and open the drain valve. Drain your hot water tank by attaching a hose to the tank drain valve and running it to the basement floor drain.
    - If you drain a gas-fired water tank, the pilot light should be turned out. Call the local gas supplier to re-light it.
- Unhook washing machine hoses and drain.

- Do not worry about small amounts of water trapped in horizontal pipes. Add a small amount of glycol or antifreeze to water left in the toilet bowl, and the sink and bathtub traps.
- If your house is protected from groundwater by a sump pump, clear valuables from the basement floor in case of flooding.

After a Long Power Outage

- If there is flooding, do not enter a flooded basement unless you are sure the power is disconnected.
- Do not use flooded appliances, electrical outlets, switch boxes or fuse-breaker panels until they have been checked and cleaned by a qualified electrician.
- Replace the furnace flue (if removed) and turn off the fuel to the standby heating unit.
- Before switching on the main electric switch, check to ensure appliances, electric heaters, televisions, microwaves computers, etc. were unplugged to prevent damage from a power surge.
- Give the electrical system a chance to stabilize before reconnecting tools and appliances. Turn the heating-system thermostats up first, followed in a couple of minutes by reconnection of the fridge and freezer. Wait 10 to 15 minutes before reconnecting all other tools and appliances.
- Close the drain valve in the basement.
- Turn on the water supply. Close lowest valves/taps first and allow air to escape from upper taps.
- Make sure that the hot water heater is filled before turning on the power to it.
- Check food supplies in refrigerators, freezers and cupboards for signs of spoilage. If a freezer door has been kept closed, food should stay frozen 24 to 36 hours, depending on the temperature. When food begins to defrost (usually after two days), it should be cooked; otherwise it should be thrown out.
- As a general precaution, keep a bag of ice cubes in the freezer. If you return home after a period of absence and the ice has melted and refrozen, there is a good chance that the food is spoiled. When in doubt, throw it out!
- Reset your clocks, automatic timers, and alarms.
- Restock your emergency kit so the supplies will be there when needed again.

Be Informed

- Download the Alberta Emergency Alert app to receive current information about disasters or emergencies impacting your community.
- Preparing for a power outage – ATCO.
- Preparing for power outages – EPCOR.

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For more information on hazards in Alberta, contact your municipality or community's Director of Emergency Management or the Alberta Emergency Management Agency at 780-422-9000 (Dial 310-0000 for toll-free access outside Edmonton). You can also visit www.aema.alberta.ca.