

COMMUNITY RELATIONS THOMPSON OKANAGAN COLUMBIA REGION

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WINTER POWER OUTAGES— ARE YOU PREPARED?

Power outages in winter are a common occurrence in many parts of Canada. Winter power outages are often more significant due to cold weather and freezing temperatures. This could be life threatening in certain circumstances—are you prepared at home and work?

Even though BC Hydro is an industry leader when it comes to electrical reliability, power outages will still occur. Compared to other Canadian Electrical Association members, BC Hydro customers have fewer and shorter outages than most Canadian utility customers. However, we understand that even one power outage is an inconvenience.

Bringing power over long distances from our generation sources to our customers in the varied terrain of British Columbia has its challenges. We have 75,000 kilometres of power lines, and utilize almost 900,000 poles and 300,000 transformers to serve our customers.

Sufficient vegetation management in advance of fire and storm season is an ongoing challenge for BC Hydro throughout British Columbia. We have a comprehensive multi-million dollar program to remove trees and vegetation causing potential safety and security threats near our power lines and facilities. Resources have however been challenged as a result of the Mountain pine-beetle epidemic.

The annual pruning and hazard removal program addresses approximately 12,000 km of line each year. The Mountain Pine Beetle program has impacted approximately 25,000 km of BC Hydro's system. This requires the removal of many more trees per kilometres than the pruning program.

2009 saw the removal of over 450,000 Mountain Pine Beetle affected trees that posed a threat to the system.

While BC Hydro does its best to protect and maintain the electrical system, outages caused by adverse weather, trees, motor vehicle accidents and equipment failure can still occur. Are you ready?

BC Hydro customers are now able to view outage information from their web-enabled wireless mobile device. Visit bchydro.com/outages for details of this.

MAIN CAUSES OF OUTAGES DURING THE WINTER PERIOD



Trees blown down over wires due to storms.



Avalanches taking powerlines down.



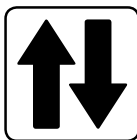
Trees with heavy snow drooping onto powerlines.

PLEASE CALL 1 888 POWERON (1 888 769 3766)
IF YOU SEE ANY OF THESE CONDITIONS

SAFETY FIRST

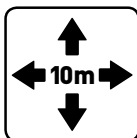
- Never approach a fallen power line. Always consider a fallen power line energized and extremely dangerous.
- Stay at least 10 meters (33 feet) away from downed lines or anything that is in contact with them and keep others away until BC Hydro is on the scene.
- If your vehicle makes contact with an energized line, stay inside until help arrives. If you must get out, due to fire, jump out with your feet together and shuffle away, never allowing the heel of one foot to move beyond the toe of the other. If you cannot shuffle the 10 meters (33 feet) away from the energized area, put your feet together and hop—but never walk or make contact with the ground and your vehicle at the same time.
- Report the location immediately to BC Hydro at 1 888 POWERON (1 888 769 3766).

3 KEYS OF ELECTRICAL SAFETY



1. LOOK UP & DOWN

- Plan your work to prevent electrical contact—call for assistance.
- Identify overhead and underground power lines.



2. KEEP BACK—KNOW YOUR LIMITS

- On foot, stay at least 10 metres (33 feet) away from equipment operating around power lines.
- Use a spotter to make sure you keep equipment back at least 6 metres (20 feet) from power lines.



3. STAY BACK & CALL FOR HELP

- Stay back at least 10 metres (33 feet) from a fallen power line, exposed underground power line, or any object in contact with the line.
- Stay put until help arrives if your equipment contacts a line.
- If it's a life threatening situation, jump clear of your vehicle, feet together, and shuffle away keeping both feet close together. Never contact the ground and your vehicle at the same time.
- Call for help. Do not attempt a rescue until directed by BC Hydro personnel.



OUTAGE PREPAREDNESS— AT WORK AND AT HOME

- Develop an Outage Plan—share it with your co-workers and family.
- Make a list of emergency contact numbers including 1 888 POWERON (1 888 769 3766) to report outages or get outage updates.
- Prepare an emergency kit and store in an easy to find location.
- Use surge protectors to protect sensitive electrical devices and equipment.
- Use portable generators safely and correctly.

Visit our website at bchydro.com/outages for information on all aspects of outage preparedness.



WHAT TO DO DURING AN OUTAGE

1. Check whether the power failure is limited to your home or business. If your neighbour's power is still on, check your circuit breaker panel or fuse box.
2. Call BC Hydro at 1 888 POWERON (1 888 769 3766), *HYDRO (*49376) on your cell phone. Tell us about the outage so we can send the right crews and equipment to the right location. Please have your account number ready.
3. Tune into your local radio station for storm and power outage updates.
4. If possible, visit the BC Hydro website on bchydro.com/outages for details on your outage.
5. Implement your Outage Plan
6. Turn off all appliances, including computers and peripherals, especially those that generate heat. This helps prevent hazards or damage when service is restored.
7. Turn off all lights except one inside your home/business and one outside. The inside light lets you know and the outside light lets BC Hydro crews know when the power is back on.

For further information on safety and preparation in the case of power outages, see our **Home Outages**, **Business Outages** and **Power Outage Safety** sections at bchydro.com/outages

PRIORITIES OF POWER RESTORATION

BC Hydro attempts to restore outages in the order they are reported. In storm or multiple outage situations BC Hydro must act to first ensure public safety.

Our power outage restoration priorities are:

- Power plants, transmission lines and substations
- Main power circuits and feeders
- Critical services such as hospitals, police, fire, water and communication systems.
- Repairs that will return the largest number of customers in the least amount of time.
- Repairs to smaller neighbourhoods, individual streets and homes.

IDENTIFYING AND REPAIRING AN OUTAGE

1. Knowing that there is a problem.

In many cases, BC Hydro is not aware of an outage until a customer calls. We do not yet have the technology to monitor the entire electrical system. So if your power goes out, contact BC Hydro at 1 888 POWERON (1 888 769 3766)

2. Identifying the cause and location of the outage.

When customers call 1 888 POWERON (1 888 769 3766) the system records the outage location and combined with other calls can predict the probable location of the problem. As more calls come in, this additional information aids us in dispatching crews to the probable location of the problem, allowing for quicker restoration times.

3. Dispatching a crew.

The time of day, location of the problem and the number of other outages all affect how quickly a crew is dispatched on can be on scene to assess the situation and make repairs. Often, until a crew is actually on scene, it is very difficult to provide an accurate restoration time.

4. Investigating and repairing the problem.

Locating the problem can take some time if the area is remote or served underground. Winter conditions or storm situations can also considerably add to the repair time due to travel considerations. Once the damage has been assessed, the crew may begin repairs or may need to call in additional resources and equipment. At this time a more accurate restoration time can be provided.

5. Testing and re-energizing the system.

Once repairs are made the system is re-energized and the customer's power is restored. On occasion, the power goes out again. This could be caused by another problem previously undetected or by a condition referred to as 'cold load pickup'.

To assist in shortening outage times, customers are encouraged to turn off their lights and appliances, **especially any electrical heating devices**, and protect sensitive electronic equipment during an outage.



Leave one light and a radio on so you know when the power is restored. Then wait ten minutes after the power is restored for the system to stabilize before using any electrical heaters or appliances. Should customers not take these steps, the crews may have to sectionalize the load and restore customers individually. This additional work will add considerable time to the length of the outage.

WHY ARE ESTIMATED TIMES OF RESTORATION SHORTER OR LONGER THAN ORIGINALLY PREDICTED, OR NOT AVAILABLE AT ALL?

Shorter. In some situations, when the BC Hydro crew arrives at the site, they learn that the problem is in an area that can be bypassed. In these cases, power can be restored to some customers on the line right away while the crew fixes the problem. This can significantly shorten the predicted outage time.

Longer. In other situations, the BC Hydro crew learns that the cause of the outage is difficult to locate or is particularly complicated. If the outage has multiple causes—which may become apparent only after the first problem has been fixed—the repair may take longer than originally predicted.

Not available. During storms, our customers are communicating a huge volume of information and the situation can change from moment to moment. In these conditions, providing estimated restoration times is not always possible early on.



BC HYDRO HAS A GREAT WEBSITE

Should you ever need more information on outage preparedness or outages, please visit our website at bchydro.com/outages or contact us directly.

WE WOULD LIKE TO HEAR FROM YOU

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