

After a Major Power Outage

# Steps to Restoring Power

**Step 1.** Transmission towers and lines supply power to one or more transmission substations. These lines seldom fail, but they can be damaged by strong winds. Tens of thousands of people could be served by one high-voltage transmission line, so if there is damage here, it gets attention first.

**Step 2.** A utility may have several local distribution substations, each serving thousands of consumers. When a major outage occurs, the local distribution substations are checked first. A problem here could be caused by a failure in the transmission system supplying the substation. If the problem can be corrected at the substation level, power may be restored to a large number of people.

**Step 3.** Main distribution supply lines, called feeders, are checked next if the problem cannot be isolated at the substation. These supply lines carry electricity away from the substation to a group of consumers, such as a town or housing development. When power is restored at this stage, all consumers served by this supply line could see the lights come on, as long as there is no problem farther down the line.

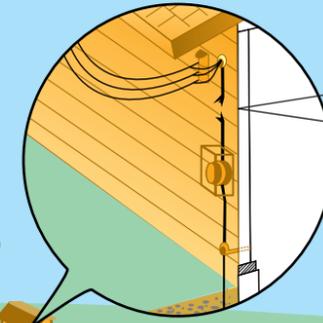
**Heavy snowfall, ice storms and strong winds are a few of the forces residents of Interior Alaska face in the winter. With such severe weather comes power outages. This illustration explains the restoration priorities.**

Restoring power after a major outage is a big job that involves much more than simply throwing a switch or removing a tree from a line. The main goal is to restore power safely to the greatest number of members in the shortest time possible.

The major cause of outages is damage caused by fallen trees. That's why Golden Valley has an ongoing right-of-way maintenance program.

While restoration priorities differ by utility, repairs generally follow a plan similar to this one.

**Step 5.** Sometimes, damage will occur on the service line between your house and the transformer on the nearby pole. This can explain why you have no power when your neighbor does. Your utility needs to know you have an outage.



**Area enlarged:** The consumer—not the utility—is responsible for having damage to the service installation on the building or the meter pole repaired. Your utility cannot fix this. Call a licensed electrician.

During a major outage, neighboring utilities help one another by providing line crews, equipment and supplies to assist with restoring power.

Report your outage to the utility office. GVEA uses every available phone line to receive outage reports. However, when there is a problem with the transmission system, thousands of members might be without power at one time. This could overload our phone system and you might not be able to get through right away. Please be patient and try again later.

GVEA posts large outage updates on its website ([www.gvea.com/outages](http://www.gvea.com/outages)) and Facebook ([facebook.com/GoldenValleyElectric](https://www.facebook.com/GoldenValleyElectric)).

**Step 4.** The final supply lines, called tap lines, carry power to the utility poles or underground transformers outside houses or other buildings. Line crews fix the remaining outages based on restoring service to the greatest number of members.

**DANGER!**  
Stay clear of fallen lines.

Illustration by Katherine Fowler, Carolina Country (North Carolina Association of Electric Cooperatives)

