The Steps to Restoring Power

AFTER A MAJOR POWER OUTAGE

Hurricanes, ice storms, tornadoes and blizzards, electric cooperative members have seen them all. And with such severe weather comes power outages. 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.

Electricity is used to provide many critical services including communications, emergency response, healthcare, water and sanitation. Without electricity, other service providers often cannot provide their services. We have an obligation to our communities to do our part in helping restore critical services such as water service as soon as possible. This is why restoring power to critical infrastructures is the first goal after a major storm or other catastrophe. It just so happens that residential customers who live along the power lines serving critical infrastructure are also often restored at the same time.

After critical infrastructure is restored, the main goal is to restore power safely to the greatest number of members in the shortest time possible. How we go about this is outlined in the steps below.

Step 1

Transmission towers and lines supply power to transmission substations. These lines seldom fail, but they can be damaged by severe weather. 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

Your electric power association has several local distribution substations, each serving thousands of consumers. When a major outage occurs, the local distribution substations are checked first. If the problem can be corrected at the substation level, power may be quickly restored to a large number of people.

Step 3

Main distribution lines are checked next. These lines deliver power from the substation to large groups of customers such as towns or communities. These lines also service other critical infrastructure such as hospitals, communication systems, water tanks and sewer treatment plants. When power is restored at this stage, all consumers served by this line could see lights come on. In large storms with widespread damage, these main lines may be segmented, so that service is restored one section at a time, from the substation outward.

Step 4

Smaller branches from the main line, often called taps, serve at a street or neighborhood level. These tap lines may serve a small subdivision or they may stretch over several miles in rural areas. After the main lines have been restored, line crews begin repairing these tap lines based on restoring service to the greatest number of customers in the least amount of time.

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. Contact your electric power association anytime you are without power.