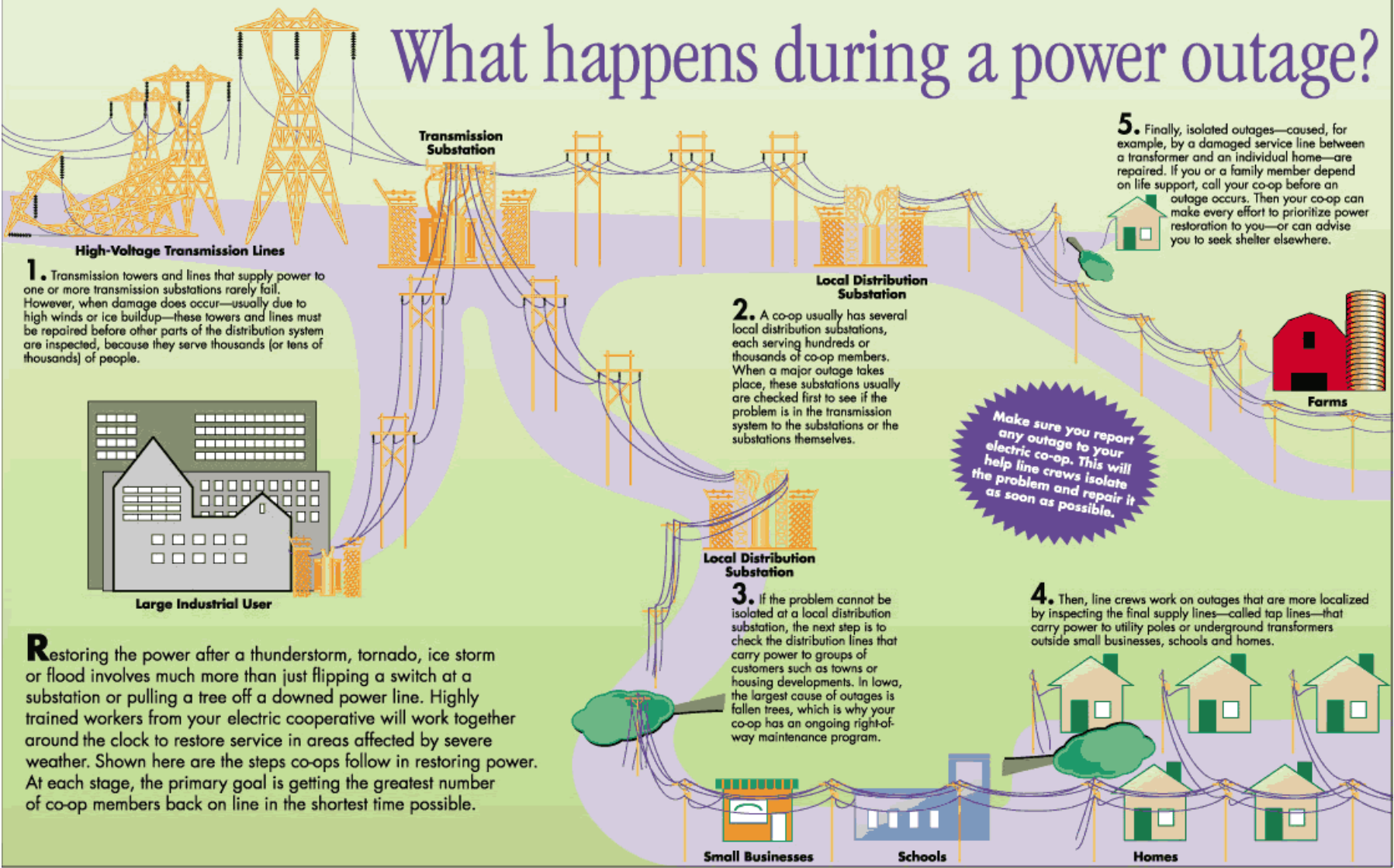
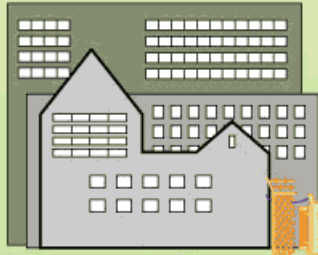


# What happens during a power outage?



## High-Voltage Transmission Lines

**1.** Transmission towers and lines that supply power to one or more transmission substations rarely fail. However, when damage does occur—usually due to high winds or ice buildup—these towers and lines must be repaired before other parts of the distribution system are inspected, because they serve thousands (or tens of thousands) of people.



Large Industrial User

## Transmission Substation

## Local Distribution Substation

## Local Distribution Substation

**2.** A co-op usually has several local distribution substations, each serving hundreds or thousands of co-op members. When a major outage takes place, these substations usually are checked first to see if the problem is in the transmission system to the substations or the substations themselves.

**3.** If the problem cannot be isolated at a local distribution substation, the next step is to check the distribution lines that carry power to groups of customers such as towns or housing developments. In Iowa, the largest cause of outages is fallen trees, which is why your co-op has an ongoing right-of-way maintenance program.

**5.** Finally, isolated outages—caused, for example, by a damaged service line between a transformer and an individual home—are repaired. If you or a family member depend on life support, call your co-op before an outage occurs. Then your co-op can make every effort to prioritize power restoration to you—or can advise you to seek shelter elsewhere.

*Make sure you report any outage to your electric co-op. This will help line crews isolate the problem and repair it as soon as possible.*

**R**estoring the power after a thunderstorm, tornado, ice storm or flood involves much more than just flipping a switch at a substation or pulling a tree off a downed power line. Highly trained workers from your electric cooperative will work together around the clock to restore service in areas affected by severe weather. Shown here are the steps co-ops follow in restoring power. At each stage, the primary goal is getting the greatest number of co-op members back on line in the shortest time possible.

**4.** Then, line crews work on outages that are more localized by inspecting the final supply lines—called tap lines—that carry power to utility poles or underground transformers outside small businesses, schools and homes.