

# POWER QUALITY

## FREQUENTLY ASKED QUESTIONS

### Why does my neighbor have power and I don't during a power outage?

All customers receive electricity from a substation. Electricity is delivered to you from a circuit at one of the transformers in the substation. Although you and a neighbor may be located on the same street, both of you may be on a different circuit. If so, it is likely that during a power outage only one of the circuits was affected.

### Why do my lights sometimes turn off and then come back on within a few seconds?

Our electric system has many protection devices that operate automatically when an outage is detected. This helps ensure power to our customers is restored as quickly as possible. These systems can operate as much as three times when

attempting to restore electricity. If the power fails to come back on, a technician is sent out to investigate and determine the cause of the outage.

### How many customers can be served from a substation?

A substation may have up to four transformers. Each transformer can serve approximately 10-12,000 homes. Therefore, a substation can provide electric services to up to 48,000 homes.

### What should I do in the event of a storm to protect my equipment?

Surge protectors can help. However, for the best protection possible, turn off and unplug all electronic equipment. TV cable lines and phone lines should also be disconnected to protect those devices from power fluctuations.

**A ELECTRICITY** – generated at a power plant, solar or wind farm, delivers power to substations through high voltage transmission lines.

**B CIRCUIT BREAKERS** – automatic protection switches located at substations, are designed to protect circuits from damage when an excessive current is present or a disruption occurs. This causes the breaker to switch off and will reset once the problem is resolved.

**C RECLOSERS** – automated protection switches strategically placed on power poles, switch off when a circuit is overloaded. The recloser resets once the problem is resolved.

**D FUSES** – electrical protection devices on power poles, open when a problem is detected which stops the electricity from flowing through the line. The fuse is replaced once the problem is resolved.



### Should I unplug devices during a non-storm related power outage?

Yes. Disconnecting devices will help protect them against power fluctuations when the electricity is restored.

### Should I turn off the breaker to the AC unit?

Yes, if possible. When the power returns there can be fluctuations that can adversely affect the unit.

### What does my breaker box do?

A breaker box is designed for safety and protection inside the house. If an electrical problem is sensed, a breaker will open to cut the power to that plug or switch reducing the risk of a fire hazard related to overloaded circuits.

### What if I only have an outage in part of my house?

The issue may reside in the breaker box. You may want to reset the breaker but if it opens again (trips), we recommend you contact a licensed electrician.

### Do I need to call if I have a power outage or does CPS Energy already know?

Yes, always call to report an outage. Our system can detect outages on a large scale but depending on your particular situation, a phone call may be necessary.

### Why do my lights flicker when my AC comes on?

During start up, AC units draw a large amount of current that can result in momentary decreased voltage. This fluctuation is normal, depending on the size of your AC unit.

### Is underground service more reliable than overhead?

Underground lines are less susceptible to damage from lightning, winds and vehicles. However, locating issues that cause outages takes longer since they cannot be easily seen as with overhead equipment.

### Where does the power come from?

Electricity is made at a power plant. From there, the electricity travels through high-voltage transmission lines to a neighborhood substation. Voltage is reduced at the substation before being sent to homes through distribution lines. The power is reduced again at a transformer before entering your home or business at the required voltage.

### What is CPS Energy responsible for at my home or place of business?

Aside from ensuring the electric meter is working correctly, CPS Energy is responsible for delivering electric

services to a home or business up to the point before it enters a building. This can be either to the weatherhead or to the meter can.

### How does CPS Energy determine who gets reconnected first during outages?

The process is to reconnect hospitals or other critical care facilities first, as well as essential utilities such as water pumping stations, then circuits with the most customers affected before addressing isolated outages.

### What do I do if I see a downed power line?

**DO NOT** go near it. Treat all downed lines as if they are live. Contact **(210) 353-HELP (4357)** to report the location as soon as possible.



**TO REQUEST A POWER QUALITY INVESTIGATION  
CALL 210-353-2222**