

## **MEMBER OUTAGE QUESTIONS & ANSWERS**

### **Q: Why does my electricity go off and on?**

A: Most faults on the modern overhead electrical grid are temporary and can be cleared by briefly interrupting the power. The off, then back on cycle is an automatic response to a fault condition on the electrical system. The goal of this off/on cycle is to remove a temporary system fault.

### **Q: What is a fault?**

A: Faults are abnormal conditions on the grid. There are two types of faults: temporary and permanent. Temporary faults are momentary, normally caused by small animals or a tree branch falling across two conductors, then dropping clear. The grid remains in service. A permanent fault is characterized by damaged equipment. The grid is designed to isolate a permanent fault by removing power from the damaged area.

### **Q: The clock on my microwave keeps resetting. Why can't GCEA keep the power on?**

A: The momentary loss of power is the result of the grid functioning normally. The grid will automatically attempt to remove a temporary fault condition by momentarily dropping power.

### **Q: GCEA is causing my computer problems power going off and on. Why can't you fix it?**

A: GCEA will provide short circuit and over-voltage protection for its utility system in accordance with accepted industry standards. This protection will not prevent power interruptions on one or more phases and voltage surges and sags at the member's service point. GCEA's protective equipment is also not designed to prevent damage to specific member equipment. The member is responsible for assessing the risk and for providing suitable protection for utilization devices in accordance with applicable regulations and industry standards. Such protection may include voltage surge protection and power conditioning for sensitive mechanical, electronic, and data processing loads.

### **Q: My power is out. When will my power be restored?**

When your power goes out, our crews will be working 24/7 to get the power back on. Power is restored to the most critical areas first, like hospitals. Our crews then restore power in order of getting the most customers back on the fastest.

### **Q: What can I do when my power goes out?**

A: To report a power outage, call us: 970-641-3520 anytime, day or night; toll free 1-800-726-3523.

- The first step to take when the power goes out is to check your service panel or fuse box. If you have a service panel with circuit breakers, check each breaker to see if it has tripped. If all the breakers are in the “on” position (as opposed to “off” or “tripped”), turn off the main breaker, then switch it back “on”.
- If you have a fuse box, make sure the fuses are all intact. Turn off the main power switch, then turn it on again.
- If the power is still off, check the outside disconnect located beneath the electric meter. Not all meters have a breaker switch installed; if you do, flip it to “off,” then back to “on.”
- If your electricity is still off, check with neighbors to see if they are also without power. If they have power, there may be a downed line nearby. Do not try and locate the break yourself, but if you see a downed line, assume it is live and move away. Call the Co-op immediately at 970-641-3520 and let us know the location of the downed line.
- If the downed line is in contact with a fence or rail, keep away. The power line could energize the fence for several thousand yards, creating a hazard along the entire fence line.

**Q: Is there anything I can do to prepare for an outage?**

A: Most power outages will be over almost as soon as they begin, but some can last much longer – up to days or even weeks. Power outages are often caused by freezing rain, sleet storms and/or high winds which damage power lines and equipment. Cold snaps or heat waves can also overload the electric power system.

During a power outage, you may be left without heating/air conditioning, lighting, hot water, or even running water. If you only have a cordless phone, you will also be left without phone service. If you do not have a battery-powered or crank radio, you may have no way of monitoring news broadcasts. In other words, you could be facing major challenges.

You can greatly lessen the impact of a power outage by taking the time to prepare in advance. You and your family should be prepared to cope on your own during a power outage for at least 72 hours.

The following are useful items to have in an outage. Remember to replace items you've used up, such as batteries, food, and water after each outage

Outage Kit Checklist

- ✓ Battery-powered radio or television
- ✓ Flashlights
- ✓ Batteries
- ✓ Portable charger
- ✓ A phone that does not require electricity
- ✓ Non-electric alarm clock
- ✓ Bottled water and non-perishable food
- ✓ Manual can opener
- ✓ First aid kit
- ✓ Manufacturer's instructions on how to manually open power-operated doors

**Q: What about people with disabilities or others that require assistance during a power outage?**

Consider how you may be affected in a power outage, including:

- Your evacuation route – without elevator service (if applicable).
- Planning for a backup power supply for essential medical equipment.
- Keeping a flashlight and a cell phone handy to signal for help.
- Establishing a self-help network to assist and check on you during an emergency.
- Enrolling in a medical alert program that will signal for help if you are immobilized.
- Keeping a list of facilities that provide life-sustaining equipment or treatment.
- Keeping a list of medical conditions and treatment.
- If you live in an apartment, advise the property management that you may need assistance staying in your apartment or that you must be evacuated if there is a power outage. This will allow the property manager to plan and make the necessary arrangements on your behalf.

**Q: Should I get a backup generator for my home?**

A: Emergency standby generators can supply electricity to your home or business during a power outage. Operating a standby generator can be a lifesaver during a power outage, but only if it is properly installed and maintained. Understand the hazards and familiarize yourself with these important safety precautions before you purchase or begin to use one.

Portable Gasoline-Powered Generators

You can purchase a small, portable, gasoline-powered outdoor unit and run extension cords from the generator directly to appliances such as lamps, refrigerators, or electric space heaters. Always run such generators outside where there is adequate ventilation — never inside the house.

Generators Permanently Connected to Main Electrical Supply

A licensed electrician can connect a larger backup generator to a building's main wiring panel. These generators can be used during electric outages to power essential medical devices, furnaces, air conditioners, or well pumps for those not connected to a municipal water supply. Your electrician will see that the setup meets national, state, and local electrical codes and ensure compatibility with our power system.

### Generator Hazards

Improper installation and use of standby generators may violate state or local electrical codes and can severely endanger those working to restore your power. During power outages, our crews work from maps to locate disconnects. Improperly connected generators may re-energize lines that otherwise would be off, creating "back feed." Back feed occurs when electric power is introduced to the utility's power lines from generators with faulty connections. In the case of back feed, lines expected to be de-energized are in fact live, and could potentially electrocute crew members attempting to make repairs.

### **Q: Why doesn't GCEA just bury all of the overhead electrical lines?**

A: There are generally two primary reasons for maintaining overhead electrical lines: economics and repair time. First, the cost for underground line construction is generally three to four times that of overhead. Secondly, overhead lines are much easier to locate damaged equipment and effect repair compared to underground. Additionally, the GCEA service territory contains mountainous terrain that makes certain areas impractical for underground construction.

### **Q: How long will I be out of power each year?**

A: On average, for the last 10 years, GCEA's system interruption duration index, also called SAIDI, was 158 minutes. The national average in 2016 for SAIDI was 127 minutes.

### **Q: How long will it take to restore power?**

A: On average, for the last 10 years, GCEA's customer average interruption duration index, also called CAIDI, was 100 minutes. The national average in 2016 for CAIDI was 99 minutes.

### **Q: How many times will I be out of power each year?**

A: On average, for the last 10 years, GCEA's system average interruption frequency index, also called SAIFI, was 1.62. The national average in 2016 for SAIFI was 1.32 interruptions per year.

**Q: Where does my electricity come from?**

GCEA purchases the electricity Tri-State Generation and Transmission Association, based in Westminster, Colorado.

**Q: Why does GCEA buy power from a Tri-State, a coal burning company?**

A: GCEA and Tri-State have a mutually beneficial, long term contract to supply power. Tri-State, like GCEA, is incorporated as a member owned, not for profit, cooperative. Tri-State is actively moving away from coal electrical generation. Tri-State recently closed the Nucla coal-fired power plant in Western Colorado and is moving forward with large renewable energy projects.

**Q: Will solar panels provide electricity for my house in the event of an outage?**

A: No, without a battery and smart inverter, most solar arrays do not provide power during outages. A grid tied solar system is required to shut down if power from the grid is lost.