



A Touchstone Energy® Cooperative 

1511 14,000 Road, P.O. Box 368, Altamont, KS 67330

866-784-5500

[www.twinvalleyelectric.coop](http://www.twinvalleyelectric.coop)

**TWIN VALLEY  
ELECTRIC CO-OP**

# NEWS

## Twin Valley Electric Cooperative, Inc.

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### Staff

**Angie Erickson**  
CEO

### Office Hours

Monday-Friday  
8 a.m. to 4:30 p.m.

### Contact Us

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## Help Us by Keeping Your Meter Neat(er)

Winter weather is here and that means a chance of heavy snow or ice. Please help us by keeping your electric meter easily accessible and free from snow, ice or debris. We need to access your meter from time to time to service or inspect it, and in some cases, to read it, depending on the type of meter.

Accumulated ice and snow not only make it difficult for utility crews to access meters, but the added weight can also strain them. Snow and ice buildup can also be dangerous since it could cause a gas leak.

### Clearing Meters

Heavy snow and icicles are not a meter's friend.

After you have finished shoveling or snow-blowing your driveway and sidewalk, take a broom or use your hands to gently brush the snow from your electric and gas meters. If there is thick ice on your meter that will not easily come off with a brush or your hands, call Twin Valley Electric at 866-784-5500. Please do not try to kick off the ice or chisel it with a snow shovel or sharp object since this could damage the meter.

### Meter Safety/Utility Equipment Tips Include:

- ▶ Do not cover meters or pipes with shoveled or blown snow.
- ▶ Carefully remove overhead icicles from eaves and gutters so that

dripping water does not freeze, fall on or damage meters or pipes.

- ▶ Do not use a shovel or a sharp object to remove snow and ice from meters.
- ▶ Do not kick your gas meter, as this can cause damage that could cause a gas leak.
- ▶ Do not kick your electric meter, as this could cause damage.
- ▶ Keeping gas meters and vents clear allows for proper ventilation and can prevent deadly carbon monoxide buildup in your home.
- ▶ Never try to remove ice from an overhead power line.
- ▶ If there is a downed power line, do not approach it or try to move it; instead, stay away and call 911 or Twin Valley Electric to report it.
- ▶ Be aware that snow, ice and standing water can cover downed power lines.

### Pave the Way

It is always a good idea to clear a path to your meter. Thank you in advance for keeping your meters clear and accessible.

## Happy Thanksgiving

Our offices will be closed  
Thursday, Nov. 23, and Friday, Nov. 24,  
in observance of the holiday.  
Happy Thanksgiving!



# A Lineman's Timeline: Restoring a Power Outage

BY ADAM MYERS, TWIN VALLEY LINE SUPERINTENDENT

"How long is it going to take?" Those are familiar words to all who work in the electric industry. It's a phrase I've been asked thousands of times in my career. It's the first thing people think when the lights go out. It doesn't take long sitting in the dark to realize how dependent we are on electricity and how much it makes our lives better and easier.

As a lineworker, it's always a good feeling to help people get their lights back on. I can remember times when I've been on storm or extended outages re-energizing neighborhoods and heard people in their homes cheering as their lights came on for the first time in days. No matter how tired I am or how long I've been working, that feeling will always make it worthwhile.

But what does it take to get those lights back on? Why does it sometimes take so long? We want to provide you with a better understanding of the process and the work Twin Valley Electric line crews are doing to restore your power.

The electricity you use travels a great distance and goes through several steps to get to your home. It starts with a power plant that typically produces voltages of less than 30,000 volts. That voltage needs to be "stepped up" so it can travel long distances. That process starts in the power plant's

substation and switchyard where a transformer will step up the voltage to 345,000 volts, or sometimes higher, and send it out on transmission lines to another substation.

At the next substation, a transformer steps down the voltage to 69,000 volts and sends it out to smaller, local substations.

Local substations are the final destination before the electricity reaches your home. Here electricity is stepped down to 7,200 or 14,400 volts that can then be delivered to the poles outside your home. Once it arrives outside your home, it is stepped down a final time to 120/240 volts that operate all the devices that power your life.

What I just described is hundreds of miles of line and thousands of poles. That's a lot of exposure for something to happen and cause an outage. Just like your home, our system has breakers. Our breakers help us reduce the exposure of the line and allow us to split our system into sections. Doing so helps limit the size of the outages and allows us to keep as many people on as possible. Breakers also help protect equipment on the line. Ever wonder why your lights blink a few times before going off? That's the breaker trying to give the fault a chance to clear the line before they stay open and the power is off — that's when your local electric lineworker gets to work.

## OUTAGE TIMELINE

 <p><b>LINEMAN IS NOTIFIED</b> They ask questions to determine if it's an individual or section outage and its location.</p>	 <p><b>CAUSE LOCATED — SAFETY FIRST</b> Once the cause is located, a safety briefing takes place, identifying hazards and locations of lineworkers and equipment. Lineworkers then isolate and ground the line to prevent backfeed.</p>	 <p><b>REPAIRS COMPLETE</b> The lineworkers contact dispatch to get clearance to re-energize the line. Once dispatch confirms no one else is working on the line, the breaker is closed restoring power.</p>
 <p><b>THE DRIVE</b> A crew is dispatched to the outage site. If after hours, lineworkers must travel from their homes, which often adds additional travel time.</p>	 <p><b>WORK BEGINS</b> Lineworkers take special care and awareness to remove objects causing the outage. While crews work to clear the line, materials required for repairs are located and in transit.</p>	 <p><b>POWER RESTORED — OUTAGE OVER</b> Restoration time varies by outage depending on the cause, location and materials needed for repair.</p>
 <p><b>ARRIVAL AND INSPECTION</b> Crews visually inspect the line for open breakers and cause of outage. Evaluating the outage is time consuming but one of the most important steps of restoration.</p>	 <p><b>MATERIALS ARRIVE</b> Materials and equipment arrive onsite to make the repair. Broken material is removed, inspections performed and repairs made.</p>	 <p><b>CREWS RETURN SAFELY HOME</b> Our goal is to restore power safely and efficiently and ensure co-op employees go home safe after work is complete.</p>



NOTE: OUTAGE AND RESTORATION TIMELINES VARY BY OUTAGE TYPE AND SEVERITY OF LINE DAMAGE.

# Beware of Damaged Power Equipment

## Energy can spread like ripples on a pond

The transmission and distribution of power is safe and reliable much of the time.

However, storms, critters and car accidents can damage energized utility equipment such as power lines, poles and pad-mounted transformers (green boxes). Not only can this cause minor inconveniences, like service interruptions and road closures, it can also create life-threatening situations when energy invisibly spreads like ripples on a pond.

Here is what can occur when utility equipment is damaged:

- ▶ **STEP POTENTIAL** happens when a person walks from one voltage “ripple” to another, and their feet experience a difference in voltage.
  - ▶ **TOUCH POTENTIAL** happens when someone touches something at one voltage and steps on or contacts something else at a different voltage.
- Both types of potential can cause serious internal and external injuries and death since electric current enters the body at one point and exits at another.

### How to Stay Safe

Take precautions near downed power lines, poles or other damaged power equipment. Always assume damaged power equipment is energized; it

can look lifeless and harmless and still be live.

Besides accidents, storms and animal interferences, another hazardous situation may occur when equipment or extensions get too close to or contact power equipment. **TO STAY SAFE AROUND DAMAGED UTILITY EQUIPMENT:**

- ▶ Stay inside your vehicle or cab.
- ▶ Call 911.
- ▶ Report damaged power equipment to a dispatcher.
- ▶ Only exit if you see smoke or there is a fire.

**IF YOU MUST EXIT DUE TO A FIRE, CAREFULLY DO THE FOLLOWING:**

- ▶ Cross your arms and make a clean jump out.
- ▶ Do not touch the vehicle and the ground at the same time.
- ▶ Make solid hops with your feet together and hop as far away as you can.
- ▶ If you are unable to hop, shuffle away without lifting your feet.
- ▶ Do not return to the vehicle.

**IF YOU ARE NEAR THE SCENE:**

- ▶ Do not approach the scene to help.
- ▶ Stay at least 50 feet away.
- ▶ Do not lean on or touch anything.

Never approach a downed power line or pole or a damaged pad-mounted transformer.



## DON'T LET POWER LINES Fade into the Landscape

### 3 Types of Overhead Lines



TRANSMISSION



DISTRIBUTION



SERVICE DROP

Regardless of the type or voltage, any power line can kill if the path of the electrical current is disrupted.



Always look up and look out for power lines when working outdoors.

Be careful any time you go up, whether it be on a ladder, scissor lift or in a cherry picker.



### Look for Power Lines When:



Operating a crane, concrete or pump truck.



Raising a truck bed.



Using any long tool or equipment that extends.

SOURCE: WWW.SAFEELECTRICITY.COM

## ENERGY EFFICIENCY Tip of the Month

The holiday season is upon us, and that means we'll be using more energy in the kitchen. When possible, cook with smaller countertop appliances instead of the stovetop or oven. Smaller appliances like slow cookers, air fryers and pressure cookers consume less energy. When using the oven or stovetop, match the size of the pot to the heating element and place a lid over the pot while cooking. The food will cook faster, and you'll use less energy. **SOURCE: WWW.ENERGY.GOV**



# 5 Ways to Safeguard Your Home This Winter

As the temperatures drop and the days grow shorter, there's a natural inclination to create a warm and cozy haven at home. Unfortunately, as we see increased use of heating equipment, candles and electrical items, the number of home fires tends to increase during winter months.

Here are five ways you can safeguard your home for the winter season.

**1 ENSURE CARBON MONOXIDE AND SMOKE DETECTORS ARE WORKING PROPERLY.** If your detectors are battery-operated, replace the batteries annually. Test the detectors once a month and give them a good dusting to ensure the sensors are clear of dirt and debris.

**2 INSPECT ELECTRICAL CORDS.** We depend on more cords during winter, whether for holiday lighting, extension cords or portable heaters. Before using any corded items, double-check to make sure cords aren't frayed or cracked. If you use portable space heaters, remember to keep them at least 3 feet away from flammable items. Use models that include an auto shut-off feature and overheat protection. Space heaters can take a toll on your energy bills. Use them efficiently (to heat smaller spaces) and safely. Never plug a space heater into a power strip.

**3 AVOID OVERLOADING ELECTRICAL OUTLETS AND POWER STRIPS.** When overloaded with electrical items, outlets and power strips can overheat and catch fire. If you use power strips for

multiple devices, make sure the strip can handle the electrical load. For a safer bet, look for power strips that include surge protection.

## 4 CLEAN THE FIREPLACE TO IMPROVE SAFETY

**AND EFFICIENCY.** There's nothing better than a warm fire on a chilly night, but it's important to maintain your fireplace for safety. As wood burns, a sticky substance known as creosote builds up in the chimney. When creosote buildup becomes too thick, a chimney fire can ignite. The chimney should be cleaned at least once a year to reduce fire risks. Regular cleaning also improves air flow and limits the amount of carbon monoxide that seeps indoors.

**5 PRACTICE SAFETY IN THE KITCHEN.** As we spend more time in the kitchen during the holiday season, be mindful of potential fire hazards. Never leave food that's cooking on the stovetop unattended. Clean and remove spilled foods from cooking surfaces and be mindful of where you place flammable items like dish towels.

Twin Valley wants you and your family to stay safe during the winter season.



Test smoke and carbon monoxide detectors once a month and clean them to ensure the sensors are clear of dirt and debris.



There's nothing better than a warm fire on a chilly night, but it's important to maintain your fireplace for safety.



Avoid overloading electrical outlets and power strips. When overloaded with electrical items, outlets and power strips can overheat and catch fire.