

# K.C. ELECTRIC ASSOCIATION

JULY 2019

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**Our mission** is to provide our members with safe, reliable service at the lowest cost, while maintaining an environmentally responsible, accountable and sustainable operation now and in the future.

# K.C ELECTRIC ASSOCIATION AND TRI-STATE

BY DAVID CHURCHWELL GENERAL MANAGER



DAVID CHURCHWELL

**K**.C. Electric Association is a not-for-profit electric cooperative owned and controlled by the consumer-members we serve. K.C. Electric is governed by a board of nine democratically-elected directors, one from Lincoln County, three from Cheyenne County and five from Kit Carson County.

Our power supplier, Tri-State Generation and Transmission Association, is also a cooperative. K.C. Electric was one of 24 founding members of Tri-State in the 1950s. Tri-State is a not-for-profit wholesale power supply association made up of 43 member electric cooperatives and public power districts located in four states: Colorado, Nebraska, New Mexico and Wyoming. Tri-State is governed by 43 directors, one from each member system. K.C. Director Bob Bledsoe represents K.C. Electric and our consumer-members on the Tri-State board of directors.

Recent opinion articles (one even showed up in a local newspaper) suggest that Tri-State is not subject to any sort of oversight to ensure that rural cooperative members are getting a fair deal for the electricity they buy. This could not be further from the truth. Tri-State is regulated by its 43 owners through its directors.

These Tri-State directors not only represent their local cooperatives and public power districts, they also represent each and every member of those organizations.

Tri-State has also been on the receiving end of articles accusing it of being too dependent on coal and not investing in renewable projects. This is also a false statement. A growing part of Tri-State's energy portfolio comes directly from water, sun and wind. In fact, nearly a third of the electricity used by Tri-State member co-ops comes from renewable resources. Tri-State has been purchasing energy from wind and solar renewable projects since 2010 and currently purchases renewable energy from four wind projects and three solar projects. Tri-State is the nation's leading generation and transmission cooperative for solar energy and recently announced it will be purchasing the output of a 100-megawatt solar project located near Trinidad, and a 104-megawatt wind project located south of Seibert.

New state and federal legislation will affect Tri-State's business model, but be assured all Tri-State governing decisions are based on sound financial principles, utility industry best practices and, most importantly, the needs of their members.



## Electrical Fire Alert

If an electrical fire starts in your home, do not use water to extinguish it. Water conducts electricity and you could get an electric shock. Use an extinguisher that is approved for use on electric fires. For more fire safety tips, visit [SafeElectricity.org](http://SafeElectricity.org).

# Irrigation Energy Efficiency Checklist and Tips

**The following irrigation energy efficiency information can help you assess all areas of your farming operation for ways to save energy and reduce costs.**

**A**gricultural irrigation is an energy intensive operation. Pressurized irrigation systems, especially center pivot sprinkler installations, use a high flow rate pump and require a large electric motor or engine. The major causes of increased energy use are associated with pipeline leaks, engine and pump efficiency, and well maintenance.

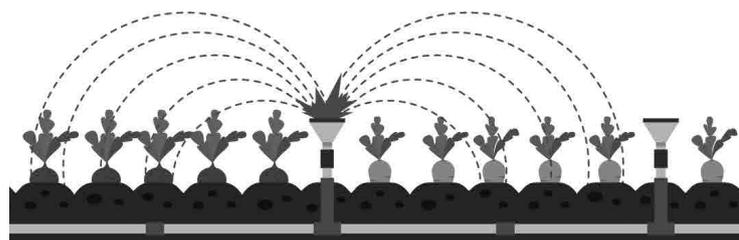
Poor uniformity of water application can also affect energy use by increasing pumping time. On center pivot systems, the major causes of poor water application uniformity are sprinkler nozzles that are worn or sized wrong, missing sprinkler heads and leaking boots. Using a consistent method of irrigation scheduling during the growing season can optimize water application.

- Use of a consistent method of irrigation scheduling can often reduce energy use by 7 to 30%. Using an ET-based irrigation scheduling system can ensure you are not under- or over-watering the crop.
- The average life expectancy of a sprinkler head is about seven to 10 years. The diameter of the sprinkler head nozzle is extremely important for uniform water application; and the nozzle diameter can grow with use, especially if there is sand or grit in the water. Poor application uniformity increases water pumping time and therefore energy use. Replace broken sprinkler heads as soon as possible. Do a “can test” to check the uniformity of the application pattern. Repair all leaks on the center pivot as soon as you notice them.
- Buried pipelines rarely leak, unless they were not pumped out before winter. However, above ground pipelines frequently have worn gaskets and up to 30% of the water can be lost before it gets to the discharge point. Replace leaking gaskets and plug any holes in the pipeline.
- The drawdown in a well increases if the screen becomes plugged. Increased drawdown greatly increases pumping costs. Screens become plugged due to mineral incrustation or from iron bacteria. Mineral incrustation occurs over time. By measuring the static and pumping water levels each year, the increase in drawdown can be measured and corrective action taken. Iron in the water usually means iron bacteria are present in the well. Annual chlorination will control the iron bacteria.
- Maintain pumps regularly, including proper greasing and filling oil reservoirs every year. Adjust packing glands and adjusting impellers on deep well turbines regularly for efficient pump operation. Replace diesel engines with electric motors, which can have significant cost savings, depending on the price difference.

## QUESTIONS TO ASK

1. Do you have a good procedure to determine when to irrigate and how much water to apply? Do you use ET, or evapotranspiration-based, irrigation scheduling? Do you know how to estimate soil moisture by feel and appearance?
2. Do the sprinkler nozzles on your center pivot provide a uniform application pattern along the full length? Have the sprinkler heads and nozzles been on the pivot more than seven years? Have you checked nozzle sizes on the center pivot to make sure they match the nozzle sizes listed in the sprinkler package printout from your dealer?
3. Do you annually check for pipeline leaks, missing nozzles and nozzles that are not rotating properly?
4. If you have an engine powering the pump, do you change the oil and filter according to manufacturer recommendations? Do the pump and motor or engine receive regular annual maintenance?
5. Do you record the static and pumping water levels in the well every year?
6. If you have iron in the irrigation water, do you chlorinate the well each year?

## FACTS AND ACTIONS: Irrigation



# Converting a “Dumb” Home to a Smart One: Is it Worth it?

Depending on your age, your “techie” factor or perhaps your interests, you may or may not be excited at the prospect of installing smart devices in your home. Becoming more and more a part of our vocabulary, having a “smart home” or even a semi smart one can help make the many tasks we do each day less time consuming and more fun.

So what exactly are smart homes? They are houses that boast a number of interconnected devices and home appliances that perform certain actions or functions. Smart home performance is often more efficient than the owner-operated kind, which could save money. Other high-tech, smarty-pants devices won't save much on your utility bills but can increase your home's cool factor.

Smart home automation allows you to program a variety of items, including a smart thermostat, lights, window blinds and even an automatic pet-feeding bowl.

If all your devices are interconnected, you can orchestrate them from one place on your tablet or cell phone. And if you have voice-assisted technology, you can just use your words

and the coffeemaker starts or your lights turn on or off.

In many upper-end markets, buyers can consider a new home that is already smart. For the rest of us, it can cost thousands to upgrade our entire home with multiple smart devices. If your house has not yet arrived on the smart scene, there are ways to increase your home's “smartness.”

Examples include smart thermostats; gizmos that track energy use, such as individual smart plugs; whole-house monitoring trackers; and smart lighting that includes motion sensors and phone app controls.

Smart appliances and devices can save money because, in many cases, they allow you to use less energy. They're also convenient, fun to use and can give you peace of mind. In short, some may be worth it in the long run.

Contact K.C. Electric at 719-743-2431 for more information about smart devices that could help you save some green on your energy bill. For more information about electrical safety, visit [SafeElectricity.org](http://SafeElectricity.org).



July 2019

## Energy Efficiency

Tip of the Month

When it's warm out, avoid using the oven. Try cooking on the stove, using the microwave oven or grilling outside instead.

Source: [energy.gov](http://energy.gov)



- ★ Make sure fireworks are legal in your community before using them.
- ★ Never buy professional-grade fireworks. They are not designed for safe consumer use.
- ★ Keep small children a safe distance from all fireworks including sparklers which can burn at temperatures in excess of 2,000 degrees.
- ★ Never reignite or handle malfunctioning fireworks. Keep a bucket of water or garden hose nearby to thoroughly soak duds before throwing them away.
- ★ Keep pets indoors and away from fireworks to avoid contact injuries or noise reactions.

## Vandalism Alert

Did you know that K.C. Electric offers a reward of up to \$1,000 for information leading to the arrest and conviction of any person or persons causing significant damage or committing acts of vandalism to K.C. Electric's property and/or to electrical transmission facilities owned by others but used to serve K.C. Electric? If you observe any acts of vandalism to K.C. facilities, please call 719-743-2431.



# Purchase Energy Before You Use It

A K.C. Electric prepay account allows residential consumer-members to purchase energy before they use it. When making a payment, consumer-members put a positive balance on their account and as they use electricity the balance goes down. Prepay participants receive alerts when they have less than five days' worth of electricity remaining. Consumer-members can choose to add money to their prepay balance anytime through a variety of payment methods.

A prepay account allows consumer-members to customize their payments to their lifestyle and budget. Some choose to make smaller more frequent payments, while others choose to put a large balance on their account. Either way, it allows consumer-members to be in control of how much energy they use and their costs.

If the account balance goes below zero, power is automatically disconnected. However, a consumer-member can have his or her power turned back on in minutes by making a payment anytime of the day. Payments can be made 24/7 online via a computer or a smart-phone. Payments can also be made during normal business hours via phone or in person at either the Hugo or Stratton office. Consumer-members on prepay are not subject to disconnect fees, reconnect fees, late fees or collection fees. There are also no payment due dates or minimum payments associated with the program.

	TRADITIONAL	PREPAY
<b>Connect Fee:</b>	\$20	\$20
<b>Deposit:</b>	\$100 minimum	\$0
<b>Billing:</b>	Due by the 20th of each month	Pay as you go - no monthly bill
<b>Late Fee:</b>	\$5 plus 1.5% of balance	\$0
<b>Disconnect Nonpaying Fees:</b>	\$95- Disconnect \$95 - Reconnect	\$0 - Disconnect \$0 - Reconnect
<b>Monthly Maintenance Fee:</b>	\$0	\$5 (daily = 17 cents)

If you would like to know more, please contact the Hugo office at 719-743-2431.

## Always Assume a Downed Power Line Is Deadly

Overhead power lines carry thousands of volts of electricity. If a line is down, always assume it is energized and dangerous, even if the power is out in your area. Touching or getting near a live power line injures and kills.

Never approach an accident scene where a line is down or damaged. If you run toward the accident to help, you, too, could become a victim by entering the energized area.

Power lines can come down or sag close to the ground for a few reasons: severe weather or damage due to a car accident, for instance. And a downed line isn't always visible. After severe weather, lines can lurk underneath water or debris.

Stay clear of all types of utility lines. Even if you think lines might be designated for telephone or cable service, they may have contact with damaged and energized power lines nearby.

### K.C. Electric Association offers these additional safety reminders:

- Call 911 to report fallen or damaged power lines.
- Power lines do not have to be arcing or sparking or making a humming noise to be live.

## Claim Your Savings

Each month, consumer-members have a chance to claim a \$10 credit on their next electric bill.

All you must do is find your account number and call the Hugo office at 719-743-2431 and ask for your credit. The account numbers are listed below. How simple is that?

You must claim your credit during the month in which your name appears in the magazine (check the date on the front cover).

- Chandler Kent, Kit Carson - 1110810001**
- Robert Grosso, Stratton - 933200009**
- Blas Torrez, Hugo - 641887001**
- Jennifer Robinson, Cheyenne Wells - 436800007**

In May 2019, three consumers called to claim their savings: Richard May, Stratton; Clarence Pedersen, Cheyenne Wells; Roger Evans, Kit Carson.

- Do not attempt to move a downed line or anything it is touching with another object, such as a stick or pole. Even materials that don't normally conduct electricity can do so if they are slightly wet.
- Do not step in water or walk in debris near a downed power line.
- Stay at least 10 feet away from the downed power line.
- Do not attempt to drive over a downed power line.
- If a power line falls on your vehicle while driving, do not attempt to drive away or get out. Call for help and stay inside the vehicle until utility crews say it is safe to get out. If there is a fire or you smell gasoline, hop out without touching the vehicle at the same time and do not walk. Instead, hop away to safety.
- Line properties can change: Any power line that is dead could become energized at any moment due to power restoration or back feed from backup generators.

Always consider all lines to be energized at deadly voltages, regardless of the type. For more information about electrical safety, visit [SafeElectricity.org](http://SafeElectricity.org).