

# EMPIRE ELECTRIC ASSOCIATION

*Echoes of the Empire*

SEPTEMBER 2021

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## TEAMWORK IS ESSENTIAL

BY ANDY CARTER  
MEMBER ENGAGEMENT MANAGER

I hope when you think of Empire Electric Association, you think of your electric cooperative as a partner. EEA is here to serve you by safely meeting your electric power needs in an affordable and reliable manner.

You may not think about it, but we depend on you to help us do our job. As technologically advanced as the world is today, we still need you to call and let us know when your power is out. As we have upgraded our metering system and transitioned to our new software suite, our capability to recognize and respond to outages is improving, but we still need you to let us know if your power is out. Calling us at 970-565-4444 or 800-709-3726 will ensure we know and will get your power restored as fast as safely possible.


A second area where we rely on you to help us perform our job well is when you are upgrading or adding a large electric appliance or device. Many members are taking advantage of the cold climate air source heat pumps that are now available to lower the cost to heat and cool their homes. The efficiency is undeniable and can generate the same amount of heat as electric resistance heaters with only 33% of the kilowatt-hour usage. Upgrading to a heat pump from electric resistance heating would most likely reduce your kilowatt demand on our distribution system, but if you are replacing a natural gas or propane forced air furnace, it's a different story.

A gas forced air furnace uses electricity to drive the fan used to move the heated air through the ductwork in your home. A furnace fan motor can be in the 0.5 kW to 1.0 kW range. A heat pump system that uses



ANDY CARTER



 Air source heat pumps are an efficient way to heat and cool your home but can affect your home's power needs.

## EEA RULES AND REGULATIONS

### Customer Responsibilities: Section G

As EEA's wires, poles, transformers, meters, and other facilities used in supplying electric service to the customer have a definite limited capacity, the customer shall give prior written notice to EEA and obtain its consent before making any material changes or increases in the customer's connected load or generation. EEA will, as promptly as possible, give its approval to the proposed change or advise the customer on the conditions service can be supplied for such change or alteration. Customer shall not make any change or alteration unless and until customer has met the conditions required by EEA.

ducts will require the same size fan and have the same fan kW load. Because the forced air is now being heated by the electric heat pump, the additional heat pump demand can be anywhere from 10 kW to 18 kW for a whole house system. That may be two to three times the existing demand for your home and could overwhelm the distribution equipment that serves your home. Overloading EEA's equipment reduces its serviceable life and may even cause equipment failure that

## YOUR CO-OP NEWS

may damage the appliances in your home or start a fire.

Besides affecting the life of the electrical equipment that serves your home, the power demands of some heating and cooling equipment can cause power quality issues for you and your neighbors who share the same transformer. Frequent, large surges in loads from motor starts or the operation of heat pumps can cause you and your neighbors to experience flicker and voltage sags if the transformer is not properly sized for these power demands.

The growing popularity of electric vehicles and home EV chargers is another example where it is important to contact EEA's engineering department before you install a charger. An EV will come with a Level 1 charger that has a demand of 1.5 kW and can add approximately 5 miles of range per hour of charge. Many EV owners opt to install a Level 2 EV charger at their home to increase the speed that range can be added



▲ **A Level 2 electric vehicle charger can overload EEA's equipment serving your home.**

to their EV. A level 2 charger can add up to 25 miles of range per hour at 8 kW of added demand. This is not as large a load addition as a heat pump, but it still may overload EEA equipment.

When devices are added to homes, the main electrical panel is checked to ensure there is enough capacity for the additional load, but many times the same consideration is not given to EEA's distribution system.

When a service is first installed, the owner tells EEA what power requirement they have and EEA sizes the service to meet that need. If your power requirements change, EEA needs to know. It is the responsibility of a consumer-member to notify EEA before adding additional electric load so that EEA can ensure it has the proper equipment in place to provide safe and reliable service. It is also the responsibility of the member to pay for upgrades to service.

If you are thinking of a home improvement project that will add additional electric load, please let your teammates at EEA know first. You can provide the engineering department the information they need by completing and returning a load data sheet available at [eea.coop](http://eea.coop). You may also call the engineering hotline at 970-546-4406 and leave a message with your contact information, and one of EEA's engineers will contact you as soon as possible to discuss your power needs.



▲ **Photo Contest Winner September 2021** *Farming in the Dust at Sunset* by Charlotte Daves

## Monthly Calendar

### September 1

Youth Trip applications available

### September 6

Labor Day (EEA office closed)

### September 10

EEA's board meeting begins at 8:30 a.m. at its headquarters in Cortez. The agenda is posted 10 days in advance of the meeting at [eea.coop](http://eea.coop). Consumer-members are reminded that public comment is heard at the beginning of the meeting. Meeting restrictions due to health concerns may require the meeting to be held remotely.

### September 22

First day of fall



# ALL IN A DAY'S WORK

BY ANDY CARTER  
MEMBER ENGAGEMENT MANAGER

Modern equipment makes many jobs easier, and electric distribution system maintenance and repair is certainly included. However, there are times when the situation calls for old-school muscle and teamwork to keep EEA's distribution system reliable and delivering power to consumer-members. EEA performs power pole inspections on a regular schedule to identify poles that have reached the end of their service life. Several poles in the distribution line that provides power to the Morefield area of Mesa Verde National Park were identified as needing replacement.

*[continued on page 10]*



Chase Suckla attaches conductors to a new pole prior to re-energizing the line. *Photo courtesy of Ace Astor.*



EEA's Brad Dennison (right) assists the helicopter ground crew prepare the harness used to transport poles to the job site. *Photo courtesy of Orly Lucero.*



A new power pole is airlifted to the job site. *Photo courtesy of Orly Lucero.*



Nick Podrazik and Justin Purkat secure insulators on de-energized line with assistance from Jake Thurman and Tyler Berry. *Photo courtesy of Ace Astor.*



Matt Ruggles, Shad Bellmire, Brett Crouse and Chase Suckla position a new pole. *Photo courtesy of Ace Astor.*

# All in a Day's Work

[continued from page 9]

The line runs through rough terrain in an environmentally sensitive part of the park that was not accessible by vehicle without causing damage. EEA worked with the National Park Service on a plan to replace the aging poles using a helicopter to deliver the new poles that EEA linemen then installed by hand. The crews spent two days of preparation work framing and hiking into each pole location with the necessary tools and equipment. Power poles

must be buried 10% of the pole's height plus 2 feet, or roughly 6 feet deep. The linemen used "banjos," or long-handled shovels, designed specifically to dig the deep, narrow holes required, and "spoons" for scooping out the dirt. A total of three poles were flown in by helicopter and set by hand, taking roughly 4 hours to complete the job.

We are proud of our linemen and their willingness to do what it takes to keep your power flowing.

**Expand Your Horizons, apply for an Empire Electric week-long *all-expense-paid* Youth Trip for High School Juniors!**

**Washington DC Youth Tour - June 12-19, 2022**  
The Washington DC Youth Tour will start in Denver where you will spend a day learning about Colorado state government and our electric system. From Denver you will fly to DC, meet new friends from across the country, while enjoying days of planned activities and tours. Participating in this unforgettable experience is sure to change your life!

**Steamboat Leadership Camp - July 16-21, 2022**  
The Youth Leadership Camp is held at the Glen Eden Resort in Clark Colorado, near Steamboat Springs. Swimming, dancing, shopping, rafting and volleyball - all in one trip. You will learn about yourself and build new leadership skills that you will use the rest of your life!

**Complete your application on our website, [www.eea.coop](http://www.eea.coop), between September 1 and December 13.**

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Dolores County Development Corp.

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Contact Solarize

(970) 677-2283

[solarizedoloresmontezuma.com](http://solarizedoloresmontezuma.com)

**SOLARIZE combines pricing incentives with resources that help community members like you through each step of working with a solar installer to get solar for your home or business.**

September 2021  
**Energy Efficiency**  
Tip of the Month

Energy used for cooling and heating your home makes up the largest portion of your monthly energy bills. By combining regular equipment maintenance and upgrades with recommended insulation, air sealing and thermostat settings, you can save about 30% on your energy bills while helping our environment.

*Source: energy.gov*