



HILL COUNTY ELECTRIC NEWS & VIEWS

September 2024



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hillcountyelectric.coop

CEO MESSAGE



Craig Gates
General Manager/CEO

At Hill County Electric, I take immense pride in our history and the vital role we have played in the electrification of rural Montana. Our journey began with the support of the Rural Electrification Administration (REA), which provided loans to HCE to bring electricity to members in our service area. As I reflect on our roots and the strides we've made, I am excited to share insights from a great article written by Tim Busby who is curator of the Upper Musselshell Museum. The article

dives deeper into the history of the electrical industry and the significant impact of REA.

As we flick on the lights in our homes, let us remember the dedication and collaboration that paved the way for the progress we enjoy today. At HCE, we are proud of our history and are excited for the future as we continue to power lives and communities. If you are in Harlowton, I encourage you to stop by the Upper Musselshell Museum for a tour and if you are lucky, a chat with Tim.

Rural Electrification

It is hard to envision modern life without electricity. From toasters to cars, from locomotives (the Milwaukee Road) to that annoying little fish on the wall that sings "Take me to the River" whenever someone walks past, some days it seems everything runs on electricity.

And why not?

Electricity is clean and efficient, it's not hard to produce, just spinning a coil of copper wire in a magnetic field using water or wind can produce usable amounts, and it makes everything from running a business computer to lighting a home easy at the flip of a switch.

Imagine shooting a rocket to the moon without the huge amount of electricity needed to run the computers and generate the data needed, the machines to make the rocket, or the onboard systems to navigate, operate, and land without the electrical engineering and energy needed and provided for by electricity.

Without electricity, would we be watching a steam-powered television with a coal-fired boiler?

While electricity in theory has been known for millennia, there are even ancient batteries found in the Middle East, called the "Baghdad Battery." It was comprised of a clay pottery jar with acid in it, a tube of iron, and another of copper to create a spark dating back to 150 BC.

Every child has heard the story of Ben Franklin and his kite proving lightning was electricity.

By the late 1800s, Thomas Edison had started a revolution with Direct Current, (DC) electricity powering electric lights, but in 1887, Nicola Tesla filed a patent for his Induction Motor, and the battle between Edison's Direct Current and Tesla's Alternating Current had begun.

The two inventors had a long, ongoing feud. Tesla had worked for Edison, but Edison had dismissed Tesla's "impractical" idea for alternating current, (AC), especially since Edison's DC power was already in place and implementing AC would cause a huge rework of power lines, power generation stations, and to top it off, there weren't any appliances that used AC.

However, Tesla proved that AC could be transmitted for vast distances with little loss of power, while DC had to have generating stations close together as the power could only be transmitted at very high voltages for short distances.

Efficiency won out and today, nearly all of our power and communication systems are thanks to Tesla.

Now, with the advent of electric lights, neon signs, and electric streetcars as well as new equipment being designed to utilize electricity instead of steam power, Electricity made an impact on the Industrial Revolution that created a whole new economy of factories and mass production of goods.



25th Anniversary

As this technology was just starting, for those who remember the start of cell phones, the issue was similar, the only places that had electricity or cell towers were population centers where there were more paying customers, and if a person didn't live in those areas, they were just "out of service area".

In one of the most amazing coincidences of history, as the electrical revolution was starting, and the need for copper to make wiring was rising, the Berkeley Pit in Butte, Montana, one of the richest copper deposits in the world, was hitting its peak of production making the Butte Copper Kings some of the wealthiest men in America at that time, and enabling them to indelibly impact the history of Montana in law and history. Montana's first state Constitution is proof of that.

In 1929, what would be known as the Great Depression would hit America. Millions of people lost everything, their homes, their jobs, then the Dust Bowl hit and a locust swarm destroyed millions of acres of farmland and made hundreds of thousands homeless as they couldn't make a living so they hit the road looking for a way to survive.

So many homesteaders left Oklahoma moving to California looking for a way to make a living that the term "Okies" is still pejorative and widespread.

In 1932, newly elected Franklin Delano Roosevelt started his "New Deal" funneling hundreds of millions of dollars into federal programs designed to create jobs for unemployed Americans. One such program was the Rural Electrification Program, which started in 1932.

By the 1930s, more than 90% of rural homes still depended on Kerosene lamps for light, had no refrigeration, and there was no running water (except a hand pump), or indoor toilets because they required electric pumps to provide the volume and pressure of water to work.

The stated purpose of this program, aside from the jobs, was to bring electricity to rural areas so they could participate in the economic opportunities and also increase productivity because electrical appliances didn't require the wood or coal a steam engine did to do much of the work such as running a sawmill or clean grain. Less labor and equipment were needed, so more efficient.

Roosevelt used rural electrification as a campaign issue touting it as a way to modernize the whole country.

Running the lines necessary was problematic due to cost. Depression-ravaged farmers and rural communities just didn't have the needed money.

Not only did they need to run power lines, but to create hydroelectric dams to generate the power. The Department of Reclamation at the start of the New Deal had 26 different projects underway to the tune of \$335 million, or roughly \$7.6 Billion in 2024 dollars.

The New Deal Electrification projects were a massive undertaking, and many of the projects weren't completed until the 1940s, although the Rural Electrification program was funded through 1993, and continues to 2024, just under different names including modern projects bringing broadband internet to the rural areas.

At the time, it cost roughly \$2000 per mile of line to run power, that's roughly \$46,000 in 2024 dollars, and most rural communities didn't have that much money, they had a problem with the \$5.00 fee to join into the project which was considered too pricey.

However, there was a workaround. Farmers and Ranchers had for years created cooperatives to maximize their buying power and get better bulk prices on feed, fuel, and any number of other commodities, so it wasn't a stretch to set up an Electric Cooperative.

The Co-ops could receive low-interest federal loans, (2-3% interest), to create the company, run the lines, and buy power from the federal hydroelectric dam suppliers.

Pretty soon, everyone knew the REA, (Rural Electrification Administration), and the Co-ops were such a success that with the REA hiring engineers, and negotiating bulk rates, the cost per mile of transmission lines dropped from \$2000/mile to \$875 per mile.

By 1953 electricity was available to pretty much anyone who wanted it no matter where they lived. From 1932 when 90% had no electricity, by 1953, just 21 years later, 90% now had power.

Nearly all of the 900 of the rural Co-ops created back then still operate in 2024.

The program was such a success that it was expanded to Telecommunications and telephones, and later Internet Access, although the name of the REA has now changed to RUS or Rural Utilities Service and is part of the Department of Agriculture.

Now, when you flip that switch or grab that snack from the fridge and that little light comes on, you'll know all the work that went into bringing electricity to your home in Central Montana.

Written By: Tim Busby, Curator of the Upper Musselshell Museum

Early Annual Meeting



1948 HCE Foreman Truck



HCE Rate Increase

Increased costs for everyday items is a hot topic in today's world, and for good reason. With the rising cost of living and inflation, it's no surprise that Hill County Electric has been affected by these increases as well. HCE has managed to avoid a rate increase over the last 8 years, a feat that is almost unheard of in the current economic climate.

However, HCE has not been immune to the cost increases, and we must make a change to remain financially solid for our members today and our future members. The driving force behind the increase in electric rates is inflation and increased power costs. Inflation is the general increase in prices and fall in the purchasing value of money. This means that as inflation rises the cost of producing and delivering electricity also increases. This is because the price of materials, labor, and other resources needed to generate and distribute electricity also rises. As a result, electric companies, like ours, are forced to increase rates in order to cover these rising costs.

Inflation has been a major concern for many years and has only been exacerbated by the recent economic downturn caused by the COVID-19 pandemic.

The electric rate increase is a result of inflation, increased energy costs and the rising cost of living. However, our cooperative business model, focus on energy efficiency, and strong relationship with our members has allowed us to postpone the rate increase until now. It is a reminder that, at the heart of it all, the cooperative business model is about serving the community and putting the needs of its members first.

HCE members can learn more about this change effective September 1st, 2024 by going to www.hcelectric.com

Non-Traditional Scholarship Winner

Lindsay Roudebush



Teacher Appreciation Program Winner

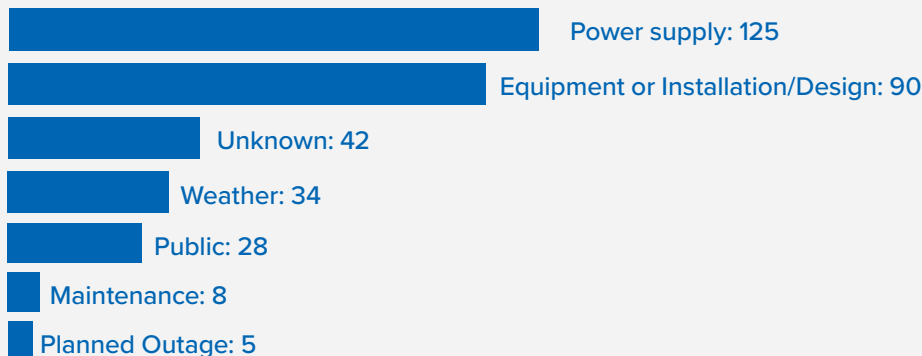
Sophia Reichelt



To learn more about our youth and community opportunities, visit hcelectric.com/community

HCE Happenings

Last month, Hill County Electric (HCE) had approximately 332 account hours affected by outages. Of these hours:



Swap and Shop

Welcome to our Swap and Shop! Feel free to post and find classifieds from other members! Ads submitted online are usually added within 2 to 3 business days.

Due to print deadlines and space available, some ads may appear in the next month's magazine.

**Denotes photo available on website*

2015 GMC Sierra 3500HD Crew Cab

Engine will need to be replaced, has 230,705 miles. Asking \$5,000. Call 406.394.2879. Ask for Brian.

2016 Ford F350 Super Duty Crew Cab

Has 161,136 miles. Asking \$20,000. Call Brian at 406.394.2879 for more information.

Case 446 tractor and more

1980 collectible Case 446 tractor with hydro and 46" mower. Good tires, nice paint, stored inside, 16hp, asking \$1,400. 1950's 7up pop refrigerator cooler out of old grocery store, all original. Asking \$550. Firebird snowflake wheels, \$400. Antique 1930's 3 divided gas truck bulk tank. Has rear compartment for barrels and grease buckets. Call 406.374.2458 ask for Mike.

1985 MacGreror Jetboat*

1985 MacGreror Jetboat, call 406.326.2211.

2005 Cadillac Deville For Sale

2005 Cadillac Deville for sale, call 406.301.4035 for price.

Sanger Speed Boat w/trailer and more

Sanger Speed Boat with a 440 Chrysler engine, includes trailer, water skis, life jackets, innertube, and almost new paddle board. Asking \$4,000 for everything, call 406.378.2572. (leave message).

John Deere 54-inch Mower

54-inch John Deere Mower, asking \$500. Call 406.378.3233.

2002 Hallmark 8ft overhead Popup Pickup Camper

2002 Hallmark 8ft overhead popup pickup camper. Electric jacks. Solar nice condition. Asking \$6,000. Call 406.759.5894 (leave a message).

Misc Toys

15 ft. boat, motor & trailer; 2004 Harley Davidson Fat Boy; 2013 Harley Davidson v-Rod; 2012 Suzuki V-Strom. Call 406.399.4949

Brake light for a 2010 Ford Super Duty F350

For sale brake lights for a 2010 Ford Super Duty F350. 4 5-hole inch aluminum rims for older Ford truck, 3 seats for custom Harley Softtail motorcycles 1989, 2007 and 2008. Call 406.654.1475 and please leave a message.

51-Foot Flex Coil Drill

51-foot Flex Coil Drill, no cart. Asking \$2,500. Call 406.376.3215.

Wanted To Buy

Wanted to buy 1979 thru 1981 Chevy pickup truck. Running or not, but in repairable condition. Half or 3/4 ton. Manual tranny preferred. Call 406.932.5758.

Swap & Shop is a classified advertising section of the Triangle Communications and Hill County Electric websites and newsletters. It is maintained as a service to customers and communities wanting to buy, sell and announce non-commercial items. To have an ad included, simply enter all the pertinent information on the online form. An administrator will review the information within two business days and if approved, the ad will then appear. It will stay online for 60 days unless you notify us to remove or change it. It will also appear in any of the newsletters printed during that 60 day window. Triangle reserves the right to abbreviate ads and if the section is full, we will display ads on a first come, first-served basis. If you're unable to enter your ad online you may mail or e-mail it to us using the contact info inside the front cover of this magazine. Happy swapping and shopping.

Your Electric Cooperative needs YOUR HELP

ATTENTION MEMBERS!

You may receive a short End-Use survey from Basin Electric Power Cooperative. HCE is a member of Basin Electric Power Cooperative. Thank you for your participation in this survey!

