

K.C. ELECTRIC ASSOCIATION

APRIL 2019

K.C. ELECTRIC STAFF

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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.

WINDS OF CHANGE

BY DAVID CHURCHWELL GENERAL MANAGER

Last March I wrote an article about the changing landscape in eastern Colorado, namely the Rush Creek 2 wind farm located in K.C. Electric Association's service territory. Well, the winds of change are coming again. There are three proposed wind farms being developed in our service territory as I speak.

TradeWind Energy is developing a 500-megawatt wind farm approximately 15 miles north of Cheyenne Wells called Cheyenne Ridge. This project will be located in both Cheyenne and Kit Carson counties, and Xcel Energy is expected to purchase the output of this wind farm.

NextEra Energy is developing a 300-MW wind farm South of Flagler called Bronco Plains. This project will be located in Kit Carson County, and Xcel Energy is expected to purchase the output of this wind farm. A 345,000-volt transmission line will be built tying the Cheyenne Ridge and Bronco Plains wind farms into the transmission line that delivers the output of the Rush Creek 2 wind farm located in Lincoln County. This transmission line originates at an Xcel substation near Deer Trail and then is distributed throughout Xcel's system.

EDP Renewables is developing a 104-MW wind farm 20 miles south of Seibert, which will be called Crossing Trails, and this project will be located in both Kit Carson and Cheyenne counties. Tri-State Generation and Transmission has signed a power purchase agreement with EDP and will be purchasing the output of this wind farm. As part of this wind farm project, a new 230,000-volt transmission line will be built from the wind farm to an existing transmission line north of Seibert.



DAVID CHURCHWELL, GM

K.C. Electric will not receive any energy from the Cheyenne Ridge or Bronco Plains wind farms but will sell power to both of these projects when the wind turbines are not producing power. Since Tri-State Generation and Transmission is K.C. Electric's electric provider, not only will we sell power to the Crossing Trails wind farm when the turbines are not producing, some of the output of the Crossing Trails wind farm will also be distributed onto our system.

Wind farms receive a production tax credit (PTC). A PTC is a per-kilowatt tax credit for electricity generated from qualified energy resources. These tax credits are phasing out, so I expect these three wind farms to be in service by the end of 2020.

ANNUAL MEETING

On another note, K.C. Electric's 73rd annual meeting is quickly approaching. Our annual meeting will be held in Hugo on June 6. Three directors will be elected to K.C. Electric's board of directors this year: one from Cheyenne County, one from Kit Carson County and one from Lincoln County. Nominating petitions were available at our Hugo or Stratton office beginning on March 8 and are due back by April 22. If you would like more information regarding the annual meeting or would like more information on becoming a candidate, please contact the Hugo office at 719-743-2431.

Farm Shop Energy Efficiency

Checklist & Tips

➤ Farm shops are often the second most used building during the winter. They can be made more efficient to keep energy use at a minimum.



Farm shop energy is part of a series of efficiency checklists and topics that can help you to assess all areas of your farming operation for energy efficiency and find ideas to save energy and reduce costs.

The farm shop is often the second most used building during the winter next to the home. It needs to be well-insulated and sealed to keep energy use to a minimum.

QUESTIONS TO ASK

- Is insulation adequate in the walls, ceiling and doors of the shop?
- Do the doors fit tightly to limit air infiltration?
- Do you have insulation around the shop floor and foundation that extends at least two feet below ground?
- Do you use your waste engine oil for heating the shop?
- Do you have good economical lighting in the shop?
- Do you have a minimal amount of windows in the shop?
- Are windows double-glazed?
- Do large shop doors face south or east?
- Do you have a dense shelterbelt on the west and north sides of your farmstead?

FACTS AND ACTIONS: FARM SHOP

Tip 1: Install insulation with an R-30 to R-40 value in the ceiling and R-18 value in the walls. Doors should have an R-value of 10 to 12 (two inches of foam insulation).

Tip 2: Install weather stripping if doors do not fit tightly and allow significant amounts of cold air in. Air infiltration is one of the largest heat wasters in many buildings.

Tip 3: Install 1 or 2 inches of extruded polystyrene (enclosed cell insulation) at least 2 feet below ground level around the shop foundation. Any concrete exposed above ground level needs insulation and the insulation above ground needs to be covered to prevent physical damage from birds, rodents and sunlight. Be sure to extend the insulation cover well below ground level for at least 6 inches or more. The foundation insulation should lap the wall insulation to provide continuous insulation.

Tip 4: Waste engine oil is an excellent source of heat. Used engine oil tends to accumulate extremely fast during times when farm engines are operating. Store this oil in a large barrel to use for heating during the winter. Several manufacturers make waste oil heaters, and many can use fuel oil if the waste oil runs out. Service and inspect heaters annually to ensure proper operation.

Tip 5: Keep the number and size of windows to a minimum. They increase heat loss and limit useable wall space for

tools. Also, they usually provide little light in the shop as the days are short in winter and the light they provide is usually near the wall where they are installed.

Tip 6: Install double- or triple-glazed windows to help reduce heat loss and reduce moisture condensation. A window with single glazing will have an R-value of about 0.9, whereas a double-glazed window with an inert gas between panes will have an R-value of 3.0 to 4.0, reducing heat loss by 60 to 75 percent.

Tip 7: Good overhead lighting is a necessity in a shop. Use LEDs for economical lighting that will keep electricity use to a minimum. Good lighting to work on equipment is vital. LED's are recommended because they will use about 50 percent less electricity for the same amount of light as pulse-start metal halide, provide light instantly and will not flicker in cooler temperatures like the common T-12 fluorescent lamps do. Metal halides can take two to three minutes to emit light; therefore, if they are used it would be helpful to have LEDs to provide light when you enter the shop or run in to grab a tool or part.

Tip 8: Install large doors for bringing machinery in and out of the shop so they face away from prevailing winter winds. Prevailing winter winds are usually from the northwest. Installing the large doors facing south or east will prevent a considerable amount of heat loss when doors are opened. Bring large, cold equipment inside the shop to warm up the night before working on it.



▶ Dan Mills (left) receives recognition for his years of service from Kent Singer, executive director of the Colorado Rural Electric Association.

Recognizing Dan Mills

Dan Mills was recently recognized for being on the Colorado Rural Electric Association and Western United Electric Supply Corporation boards of directors for 10 years. Dan currently serves as the vice president of our board and has been a K.C. Electric director for 26 years. CREA is the trade group for Colorado's electric cooperatives, providing education, safety information and training, legislative assistance and communication services. WUE is a member-owned, not-for-profit electric utility supplier and provides the majority of the material we use to build and maintain our distribution and transmission system.

Tip 9: Use zone heating. Heat only the areas that need to be heated with directional or radiant heaters — over work benches, for example. They heat the objects but not the air directly. Separating the shop from the storage area, even with a plastic curtain, can save a significant amount of heat. Turn off or turn down the heat when it is not needed. If using unit heaters, use the power-vented or condensing type and avoid gravity-vented unit heaters. A power-vented unit heater and a condensing-type unit heater are 13 percent and 28 percent more efficient, respectively, than a gravity-vented unit heater.

Tip 10: Dense shelterbelts reduce the wind velocity and the energy needed to heat the shop. Short, dense trees should be located on the edge of the shelterbelt and taller trees in the middle. Shelterbelts should be a minimum of 200 feet from the shop or other buildings to reduce the problem of snow buildup.

Claim Your Savings

Each month, members have a chance to claim a \$10 credit on their next electric bill. All you must do is find your account number, 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).

Robert Mayhan, Wild Horse — 111200001

J.D. Coles, Stratton — 1113040002

Cassandra Walsworth, Hugo — 641150024

Earl Helm, Cheyenne Wells — 1115890000

In February 2019, all four consumer-members called to claim their savings: Gary Kindred, Stratton; Terry Graham, Hugo; Frank Crites, Bethune; and Laurel Nieman, Flagler.

**Committed to the job.
Committed to safety.
Committed to you,
our members.**

Lineworker Appreciation Day
April 8, 2019



CAPITAL CREDITS: WE NEED YOUR HELP

One of the many things that sets K.C. Electric apart from an investor-owned utility is the fact that consumer-members are owners and therefore are entitled to a capital credit refund if financial conditions are favorable.

K.C. Electric is currently trying to locate members who have unclaimed capital credits. In many cases, refunds were returned because of insufficient or incorrect addresses.

Please look through the following list of members with unclaimed capital credits. If there is anyone on this list you can help us locate, please contact Kristie Constance at the Hugo office during regular business hours, Monday through Thursday, from 7 a.m. to 5:30 p.m. at 719-743-2431 or 800-700-3123.

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| Alcorn, Jeremy | D L Diesel Inc. - Boswell, Daniel |
| Allen, Alisha | Dalgetty, Marvin |
| Anderson, Shirley | Danley, Timothy |
| Ardery, Mary | Dean, Linda |
| Atwood, Mike | Dickey, Mary |
| Bagley, Donna | Dominguez, Jesus |
| Baker, Michele | Dorsch, Neal |
| Ballard, Kelly | Downey, Ronald |
| Benge, Regina | Durr, Dennis |
| Bennett, Chuck | Dye, Christy |
| Benson, Stephen | Elliston Co. |
| Bertsen, Robert and Bertsen
Renee | Escudero, Laura |
| Bledsoe, Angela | Estus, Ron |
| Bruzichesi, Anna | Fancher, Anson |
| Buczek, Russ | Fesler, Sharon |
| Budrow, Margo | Fifer, Larry and Fifer, Janette |
| Burke, E. M. | Figenser, Todd and Figenser,
Jennifer |
| Burl, Shirley | Flagler Auto Parts |
| Burnett, Douglas | Fuentez, Joseph |
| Burton, Timothy | Gafkjen, Allen |
| Businger, Paula | Garcia, Eddie or Garcia, Dora |
| Byall, Blake | Gilley, Billy |
| Callies, Ronald | Goodwin, James |
| Carnegie, Debora | Graber, Judith |
| Case, Nicholas | Guinard, Robert |
| Cline, Andrew | Hampton, Kevin or Hampton, Kim |
| Coate, Corie | Harris, Debra |
| Coleman, Joe or Coleman, Susan | Hase, Ronnie |
| Contracting Service Inc. | Hatfield, Thelma |
| Cooper, Lois | Hauxwell, Troy |
| Copley, Theresa | Heard, Richard or Heard, Shari |
| Cott, Maudie | Hemphill, Summer |
| Cox, Nelda | Hilgemann, Billy |

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| Imes, Gretah | Pearson, Roger |
| Jarrett, Vicki | Pelser, Shane |
| Johnson, Anton | Pelton, Christopher |
| Johnston, Larry | Perez, Joe and Perez, Margaret |
| Joy, Bryan | Petersen, Michael or Petersen,
Kerrie |
| Kern, John | Pharo, Shirley |
| Kerns, Patty | Phillips, Tracie |
| King, Heather | Pickard, Wade |
| Kit Carson Housing Mountain
Management | Potenza, Brian |
| Kizer, Janice | R M Ventures |
| Knutson, Boyd | Red Dog Bar & Grill (Miller, Earlene) |
| Koepke, Sharon | Reese, Carl |
| Konecny, Jerry or Konecny,
Michele | Reeves, Frank and Reeves,
Tammera |
| Kramer, Theresia | Rehfeld, Ron |
| Kurz, Shiree | Richards, Larry |
| Kyles, Elaine | Richmond, Billy |
| Langton, Neil | Richmond, Donald |
| Leach, Kelly | Rivas, Jose G. |
| Lindholm, Chris | Rizo, Mario & Rizo, Elaine |
| Long, Jesse | Rogers, Harry |
| Loutzenhiser, Doyle and
Loutzenhiser, Sue | S O Ranch (Baker, Gary or Carla) |
| Maggard, Jerimy | Sage, David |
| Mapstone, Dorian | Schulte, Anthony |
| Martinez, Manuel | Schurman, Myra Kay |
| Maskus, Doris | Sellers, Kenneth |
| McKampson, Mike and
McKampson, Sheila | Siekman, Meredith |
| Medrano, Jose Luis | Simpson, Kevin |
| Mejia, Maria | Starks, Ramon A. |
| Melia, Royce | Steinke, Janet |
| Menard, Tori | Stites, Lodaiska Kay |
| Miller, Carl B. | Stitzel, Richard or Stitzel, Heather |
| Miller, Patrick | Stokes, Kathy |
| Moczygemba, Monika | Stratton Livestock Auction
Marketing |
| Moody, Sharon | Strong, Tamela |
| Mountain, Sandee | Stuber, Joan |
| Mousel, Mark | Swanson, Sandra |
| Nall, Jennifer | Tedeschi, Becky |
| National Oilwell | Thiede, Brooke |
| Nejdl, Clarence or Nejdl, Patricia | Thompson-Sharp, Christine |
| Neve, Kirk or Neve, Mindy | Tibbets, Sarah |
| Oldfield, Nancy | Tyson, Patrick |
| Ollis, Michael | Vlasin, Mark |
| Otto, Jacob | Wiley, Jack |
| | Williams, Kenneth |