



Polk County Rural Public Power District

*"Committed to enhancing the lives of our
customers by providing safe, reliable,
economical energy now and into the future."*

Your Touchstone Energy® Partner 

August 2015

Volume 15 Number 8

PO Box 465

115 W 3rd St., Stromsburg NE 68666

(402) 764-4381

From Tree to Utility *by Erin Dickey*

"Mom, how do they get poles," looking out the window of the car he questions on, "do they have to wait for a tree to get big enough and then they can hang the wires on it?" Still looking out the window, he continues to watch as we pass by the power poles.

Good question. Although most of us understand they do come from trees we don't know exactly how the process works and how long it takes.

Where do power poles come from and how do they get there? Finding the right tree: Trees that fit the size, strength and reputation for a potential utility pole is usually left to the widely used Southern Yellow Pine species. Whether they are harvested from a forest or a pine stand, the amount of time it takes for a tree to be 'pole ready' is anywhere from 30 to 70 years from germination. Too early, the diameter and height will be insufficient and if left too long the more potential for rot, fungus and decay.

Harvesting: Equipment has advanced since the two-man saw, making harvesting quick and efficient. Felling starts the harvesting process by cutting the tree at the stump. Processing (a.k.a. bucking) the tree removes the limbs and top portion of the tree. Most harvesting systems

today combine this all into one step with one machine. Check out 'Tree Felling Machines' on YouTube. In a matter of 20 seconds, a tree is cut, bucked, debarked and cut to size. Loaded onto flat beds, trains and occasionally helicopters, these logs are then transported to a plant.

Processing: After arriving at the plant, logs are inspected, peeled, sized, graded and sorted. A pole becomes ready for framing with a flat cut made at the top and holes pre-drilled for framing once it is needed on site. Cross arms and hardware will be attached once it is needed by the utility.

Conditioning and Treatment: All poles must be conditioned and treated to prevent potential problems from decay, fungi, splitting and insects. Loaded into a cylinder, the logs are put into a vacuum tight chamber that pushes all the moisture out of the logs. Heating of the pith center of the pole at a high temperature sterilizes the pole and makes it ready for treatment. A preservative is then pushed back into the logs



through the pressure treatment chamber. Preservatives from pentachlorophenol (penta), a naturally biodegradable oil-based preservative, CCA (chromate copper arsenate), a water based preservative and creosote are used to treat the poles.

Continued on page 2

From Tree to Utility

Continued from page 1

Inspection: Strict regulations and standards are checked and maintained by outside organizations such as ANSI, AWPA and the RUS to make sure treatment facilities are maintaining expectations for preservation retention. Boring holes into the pole, a sample of the core is checked for treatment retention percentage. If needed, a pole may be retreated, but only once and must go out of service if unable to reach standards.

Distribution: Once the pole has been inspected and cleared for distribution, companies, contractors and power districts place their order for poles needed. Most facilities maintain a warehouse or stockyard of poles but these can be quickly cleared-out after natural disasters like hurricanes, tornadoes and floods that wipe out stretches of poles. From the facility, most poles are transported by flat-bed to the desired location, most going to the facility's pole yard.

Framing and Setting: A pole is framed with cross-arms and hardware such as conductors, insulators, braces and jumpers making it ready for power lines. Poles are framed on a need or specific function. Maintaining a proper clearance between varying lines, trees, weight and resistance of conductor have to be considered when framing a pole for it's intended use. Determining the distance a pole must be set in the ground depends on the class (height/weight) of said pole. A general formula of 10% of the poles height plus 2 feet leaves most of the poles in Polk County Power District's service area at about 6 feet in



the ground. A guy line may be used to offset the strain of the pole. These guy lines are seen going from a pole in a diagonal line to the ground.

Stringing: The power line is strung onto the poles with equipment such as pullers, tension pullers and reel trailers. Varying ranges of operating voltages are strung on poles from the low voltage that carries power from the utility to the customer to the high voltage that comes from the substations. Power line carrying ultra-high voltage are seen on large steel utility poles that criss cross across the county to substations.

Within the Polk County Rural Public Power District, an average amount of 400 poles will be added or replaced within a years time. Severe storms, other acts of nature, and irrigation needs highly influence the amount of poles the district adds or replaces in a year. The oldest poles on the rural lines would have been starting to grow in the Civil War era before being harvested and hauled to our small country roads years later. Pretty amazing to think they are still serving us today.

Area Chemical Applicators and Farmers Asked to Use Caution

In recent years, throughout Nebraska, there have been several occasions where utility personnel have been exposed to toxic field chemicals, or due to those chemicals, could not get access to the power line to restore power to their customers.

In an effort to keep our employees safe, Polk County RPPD is asking that if you are spraying or applying chemicals that are toxic or may be hazardous to our employees, that you please notify us prior to the application. Please mark fields appropriately when chemical applications are used. This will allow us the opportunity to reassign our employees to a different work location and therefore prevent putting them in an unnecessarily dangerous situation.

Your cooperation with this issue would be greatly appreciated. Please feel free to call our office at 402/764-4381 to report applications or if you have any questions regarding this information. Thank you.

YOU'RE IN CONTROL.



Installing a programmable thermostat is one way you can control the amount of electricity you use. The advantages are cost savings for you and less energy your utility has to generate and deliver.

Stay Safe From Lightning - When Thunder Roars, Go Indoors!



As the air is heated by the sun, energy is created with air movement, and lightning typically comes from towering storm clouds. Fortunately, accidents involving lightning are very avoidable. *Safe Electricity* has the following suggestions to stay safe from the dangers of lightning:

- There is no safe place from lightning when you are outside. It is important to be aware of weather forecasts and watch for developing thunderstorms, which occur more often in spring and summer.
- Lightning can strike many miles ahead of a storm front. If you hear thunder, seek shelter immediately, because that indicates lightning is within 10 miles of you. Safe shelters include inside a building or in an enclosed metal topped vehicle.
- If you are inside a building, the National Weather Service advises you to stay off corded telephones, or away from any electrical device that could carry an electrical surge if lightning were carried into your home through wiring. Turn off or unplug such appliances, stay away from television sets, and do not depend on surge protectors to absorb a lightning strike. Conductors can also include the plumbing in your house.
- Authorities warn against outdoor activity until 30 minutes after the last clasp of thunder is heard.
- If a person is struck by lightning, call 911 and care for the victim immediately. You are not in danger of being electrocuted by the victim.

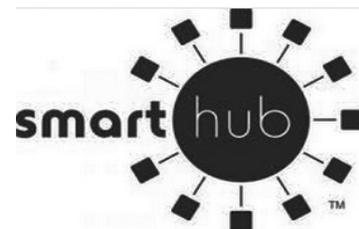
When Was The Last Time You Had Your Home's Cooling System Tuned Up?

If it has been a few years, now is the time to have your heating and cooling contractor - inspect, service, and clean it. Typically tune-ups on cooling systems that have been neglected for a few years can provide 5-15% energy savings, or more. Not to mention the unit can better perform from a comfort and equipment longevity standpoint.

Fortunately there is a \$30 Energy-Wise™ incentive available to homeowners that have their cooling system tuned-up, regardless of what type or age of cooling system it is (air conditioner, air or water source heat pump).

The application includes a checklist of key components your contractor should inspect as well as items for discussion, such as; filter replacements schedule, proper temperature set-back practices and an understanding of the general condition of the system.

introducing...



Coming soon to your mobile device. An application you can download to view your bill, pay your bill, manage your accounts, view usage graphs and much more. Watch your mailbox for future information.

Quick Reference Guide for Call Capture Secure Pay
For customers who pay by check, credit or debit over the phone:
Call 1-844-859-5977

Main Menu

Please create a 4 digit PIN-personal identification number that is easy to remember and enter a phone number the first time you call.

1. To inquire on our account or make payment press 1
2. To update your phone number press 2
3. To create or update your PIN number press 3
4. To enter a meter reading press 4 (please enter preceding zeros)
5. To repeat this menu press 9

How To Make a Payment

1. To look up your information using your phone number press 1
2. Using your account number press 2
3. Please enter your account number followed by the # sign (repeats back) if this is correct Press 1, if not Press 2
4. If you are calling in regards to your service at (gives address) press 1, otherwise press 2
5. Please enter you four digit PIN, (please hold while I check that account for your electric service, listen for information)
6. To pay the total amount due press 1
7. To enter a specific payment amount press 2
8. To continue without making a payment press 3
9. To hear this information again press 9
10. Please enter the amount you wish to pay followed by the #sign (enter amount and listen), if this is correct press 1, if not press 2
11. If you wish to add another account to your total, please press 1
12. To process your payments press 2

Select a Payment Method

1. Pay by American Express, Discover, Master Card or Visa press 1 (follow all prompts through zip code entry)
2. If you wish to pay by check press 2
3. Exit this menu without making a payment (will take you back to payment options menu)
4. To repeat these options press 9

Check as Your Payment Method

1. Please enter your banks 9 digit routing number
2. If this is correct press 1, if not press 2
3. Please enter your checking account number followed by the # sign
4. If this is correct press 1, if not press 2
5. If this is a personal account press 1, if this is a business account press 2
6. If this is your checking account press 1, if this is your savings account press 2
7. If you wish to save your payment information press 1, if not press 2
8. If you wish to have your bill automatically withdrawn from your account each month press 1, if not press 2
9. The total amount you have elected to pay is \$...., if this is correct press 1, to review your payments press 2, to repeat these options press 9. Your payment's verification code is..... for \$....., to hear this information again press 1, to continue press 2
10. If you are finished making payments you may hang up at any time. Thank you for using our automated payment system.

Reminder: Summer rates are in effect for monthly billed accounts and apply to bills rendered in June, July, August and September. The summer energy charge is higher during peak billing months when there is more of a demand for electricity. If you have any questions, please call our office at 402/764-4381.

Don't forget: All rural customers are reminded to read their monthly meter(s) and submit it to the office by the 10th of each month. After two, consecutive estimated readings a lineman will read the meter and a \$20.00 fee will be added to the account. Please, please do not staple or tape checks to payment stubs or issue checks in red ink. Thank you.

Paying by Check?



Please do not staple your payment stub to the check. When a staple is removed, a slight tear may result and the check or stub may jam our processor. Also, please do not write checks in red ink. Most scanners do not read red ink. We thank you in advance for your cooperation which helps us promptly post payments to your account(s).

Words to Live By

Employees of the Dwyer Group, a service based franchiser, are expected to "Live RICH." The acronym describes the company's code of values and stands for:

- Respect
- Integrity
- Customer focus
- Having fun in the process!