

The Life of a Power Pole

From Forest to Farm



Wood poles have been an essential part of America's communication and electrical infrastructure for more than a century. The first documented use of wood poles was in 1844 with the development of the telegraph and the success of supporting telegraph wires led to the use of wood poles to distribute electricity.

In 1908, standards for round timbers, and specifically for wood utility poles, were developed; defining the sizes and characteristics allowed. Over the same time, standards for pressure treating wood with preservatives to extend their service life were also established.

With an estimated 130 plus million poles in place in North America, wood poles have achieved a long record of in-place performance where the service life has been extended to 70 years or more. Through research, testing and development of new technologies, we've learned more about the structural capabilities of poles and that is reflected in today's standards. In Canada, wood pole standards are administered by the CSA.

As longevity and durability are essential requirements for utility poles, they are infused with preservatives; not just on the surface, rather they are infused deep into the wood to provide long-lasting protection. Preservative treating creates a chemical barrier that protects wood poles from many external threats, allowing them to remain in service for decades. The WW REA poles are treated with one of two approved products: Pentachlorophenol or chromated copper arsenate.

The life of a power pole starts deep in the forest where trees are judged for length, straightness, taper and other characteristics that may impact the load-carrying abilities. Interestingly, in a typical stand of timber, only 7

percent of the trees have the qualities needed to make a utility pole. The WW REA poles are Lodge Pole Pine, so the next time you see a Lodge Pole Pine stand, remember only a few of them will ever graduate to be a power pole!

Trees are harvested and transported to a manufacturing facility, where the bark is removed and the pole is shaped to make it as straight as possible. Each pole is reviewed, graded and assigned a class as defined by utility industry standards. The characteristics reviewed include grain orientation, presence of decay, knots and splits.

To ready wood poles for treatment, that is the infusion of preservatives, they are seasoned, or conditioned, in a way that maintains strength characteristics. Once treated, core samples are taken from the poles and analyzed to ensure that quality and durability standards are met before being placed into service.

Once in service for WW REA members, the poles are tested at 15 years after installation. Subsequently, as a proactive measure, poles are tested every 7 years. If test results show some compromise, additional treatment of the pole on site can continue to prolong its life. Regular pole testing and review of results allows the REA to strategically budget for pole replacements. WW REA's next pole testing cycle is 2021. While pole testing is the primary reason to replace a pole, storm or equipment damage can also necessitate a change out.

So remember, that utility pole in your yard took a long journey to be chosen to perform its vital task of electricity distribution, and while it may not look as smooth as when it was young, it still does the job!

For power troubles or service requests,
contact: FortisAlberta (the distribution
system operator for West Wetaskiwin
REA): Toll-free: 1-855-333-9473
or 780-310-9473

For REA inquiries contact:
West Wetaskiwin REA
R.R. #1 Station Main,
Wetaskiwin, Alberta T9A 1W8
Phone: 780-335-9378 (WEST)
E-mail: westwet@telus.net
www.westwetaskiwinrea.com

For billing or account inquiries contact:
Battle River Power Coop
Box 1420
Camrose, Alberta T4V 1X3
Toll-free: 1-877-428-3972
E-mail: brpc@brpower.coop
www.brpower.coop

Keeping Your House Energy Efficiently Cool

The key to keeping your house cool in summer is to reduce indoor heat sources and make sure that outside heat stays outside. The following tips and tricks are a winning combination of cooling ideas that also generate energy efficiency.



1

During the day, create indoor shade by making use of curtains, blinds, shutters and/or awnings to keep sunlight from turning into indoor heat. Conversely when the outside temperature begins to drop at night, open windows and allow cool air into the home. This will save on your air conditioning bill.

2

Ceiling and room fans are great for keeping you cool as you move around your home. However, to conserve energy don't leave fans running in a room that is empty. Fans do not actually cool air; unlike an air conditioner; they simply move it around making you feel cooler. Also remember the direction of your ceiling fan blades in summer should be counter clockwise.

3

When washing clothes or dishes, consider these tips. Wash clothes in cold water and if possible hang to dry. If you must use a dryer, use it at night when temperatures are cooler. Dishwashers, on the other hand, must use hot water, so make sure you only run full loads and don't run the sanitizer or sterilizer settings. After the rinse cycle, consider allowing the dishes to air dry rather than running a heating element. Once again, run your dishwasher in the evening or overnight.

4

Use your air conditioning more efficiently. Sources indicate the ideal temperature for thermal comfort is between 23.5°C (74.3° F) and 25.5° C (78°F). Use a programmable thermostat and set it higher when you are away from the home or at night when you sleep. Your body can tolerate higher temperatures when you are sleeping – so you can raise the temperature and toss off the covers. Remember for every degree Celsius you raise your thermostat, you can save as much as 10% in air conditioning energy cost.

5

In the kitchen, stay cool by using your oven sparingly as oven heat can make the whole house hotter. Try recipes that use a microwave, slow cooker, toaster oven or move outside to a barbeque. Cool meals like salads, etc. are another option. Maximize your refrigerator efficiency and follow recommended manufacturer settings. If your fridge is too cold, it could be costing you money. Additionally, keep your refrigerator reasonably full as solids and liquids are easier to cool than air, but keep in mind not to overfill shelves so you leave enough room for circulation.

Regulated
Rate
Option



The Regulated Rate Option (RRO) may increase or decrease from month to month as it is priced on the open market and subject to many factors relating to supply and demand. It is not a 'regulated' rate, rather is a default rate. If you do not have a contract with an electricity retailer, then you are on the RRO. For May 2019, RRO is priced at \$0.05955 per kWh, reflected on your enclosed orange bill. For June 2019, the Battle River Power Coop monthly rate as calculated under the RRO regulation is \$0.06205; the billing rate charged to WW REA members is \$0.06205.

It is very important to note that your electrical distribution system provider will always be the West Wetaskiwin REA, regardless of who supplies your electricity. Members will not be disadvantaged in any way based on their retailer choice.

For a list of energy retailers, contact the Utilities Consumer Advocate: 310-4-UCA (310-4822) or www.ucahelps.alberta.ca. If you do not have a contract with an electricity retailer, then you are on the default Regulated Rate Option (RRO). The RRO rate is listed on www.westwetaskiwinrea.com

Information on West Wetaskiwin's Code of Conduct Regulation Compliance Plan can be found on our website: www.westwetaskiwinrea.com