

From the desk of the Manager

Dissecting the Cost of a Kilowatt-hour

Occasionally a customer will ask why there are different rates for different customer classes. “Isn’t a kilowatt a kilowatt?” they ask. For the most part, allocating the cost of our electric service strictly on a per-kilowatt-hour basis can be a fair assessment, but certainly not in all cases. There are many parts to the electric utility structure and simply lumping all of the cost recovery into kilowatt-hour charges could cause some customer classes to pay more or less than their fair share of our costs. Our customers are the owners of our system and we are committed to managing the system to provide quality service for each customer, at the proportionate cost to serve each of you.

Cost to Serve Customers

As your distribution utility, Cedar-Knox must recover the cost to deliver electricity to your home, farm or business by charging rates that are fair and non-discriminatory. Periodic “cost of service studies” are performed by rate experts to ensure that each customer class is paying a fair share to cover the district’s costs to maintain and upgrade your electrical system, and to pay

proportionately for the wholesale electricity that we purchase for our customers. It would seem that we could simply charge every customer a certain, similar amount for each kilowatt-hour consumed and it would be the fairest way to allocate the costs. However, each customer class is unique and some customers need heavier service equipment but sometimes use little or no energy during a year. For this reason all customers pay a fixed customer charge that collects a percentage of our fixed cost to operate the system, regardless of the amount of electricity usage. Below are just a couple of glaring examples that might help explain why kilowatt-hour consumption alone is not always the most effective way to allocate the entire electric service cost to a particular group of customers.

Irrigation

Irrigation, obviously, is a seasonal load on our system and is charged much differently than most other of our customers. Whether it be a residential, farm, commercial, irrigation or industrial account, all of our customers pay a fixed customer charge in some form or another. Since irrigation customers are

not billed monthly and their kilowatt-hour usage can be very inconsistent, a fixed, “horsepower” charge is collected as a part of the lump payment just prior to the season. These fixed charges help pay for the equipment, materials, facilities and man-power that it takes to maintain and upgrade the electrical distribution system through normal wear, extreme storms and load-growth. As more load is added to our electrical system, new substations, lines and power quality equipment must constantly be built and upgraded to handle higher amperage that is carried through the lines. Another part of the horsepower payment goes to cover “peak production and transmission demand” charges to our power supplier that carry over from year to year. That’s why our irrigation customers that choose to utilize our load control program pay a lesser amount – since their systems are controlled off during peaking hours.

Consider this about irrigation load, just 15% of our total accounts (meters) are for irrigation pumping service, but these motors utilize more than half of the peaking capacity of our electricity system. Our system must be built to handle the maximum, extreme load at any time, whether that extreme load occurs just one day, or many days. Even though irrigation commands most of the capacity in our system when they run, there can be years where they consume very little energy - such as in 2014, when irrigation accounted for less than 4% of our total kilowatt-hour sales. Even though irrigation consumption can be low and occurs during the most expensive, “peaking” time of the year, the kilowatt-hour usage rate charges are moderate, since most of their fixed costs are collected up front in the horsepower charge.

Customer Generation

I’ve talked a lot about the fixed costs that are embedded in our system and why we need



Dan Leise

Field Trip

A very enthusiastic and curious 5th grade class from Holy Trinity Grade School visited Cedar-Knox PPD on April 19th, 2016. This field trip was led by their teacher Nancee Hochstein and was highly anticipated by all.

Eric Becker and Tom Potts, (pictured below)

demonstrated on a table top display the dangers and the way electricity is carried on the power lines. Many excellent questions were asked by the students and it was a great safety lesson for them. If you have a group that would like to visit us, we are always glad to share our expertise with you.



(continued...)



Recipe Corner

Fluffy Oven Scrambled Eggs for a Crowd

"We have all had a bunch of people for breakfast or brunch and this recipe is one I tried recently and it worked perfectly."

Ingredients:

- ½ cup butter melted
- 28 large eggs
- 1 ½ teaspoon of salt
- 1 teaspoon of ground black pepper
- 1 ¼ cup half and half cream
- 1 ¼ cup milk

Directions:

Set oven to 350 degrees (set oven rack to lowest position).
 Spray 9x13 inch glass baking pan with cooking spray then pour the melted

butter into the pan. In a bowl, whisk eggs and salt and pepper until smooth and well blended. Gradually whisk in the half and half and milk: pour into the baking pan. Bake uncovered for 10 minutes. Remove the pan from the oven and stir the eggs; return to oven and bake another 20 minutes or until the eggs are just set (do not over-bake). After removing from oven, top with shredded cheddar cheese and cover with foil till ready to serve.

Optional: add other ingredients, such as sautéed mushrooms, peppers and onions after you add the liquid ingredients, before you put in the oven.

From the desk of the Manager

Dissecting the cost... (Continued from front)

to collect them to keep our electrical system healthy. Historically, customer monthly base charges for farm, residential and general service were very low and utility operating costs have been recovered mostly in the kilowatt-hour charges. In this new day of customer generation and increased efficiency, utilities are starting to recover more of their operating costs in the monthly fixed customer charge instead of almost entirely in kilowatt-hour charges. This methodology tends to be a more fair allocation of costs to customers as system electricity demands continue to grow, but kilowatt-hour usage flattens or declines. Let's think about a customer that installs a small generator such as a wind turbine or a solar array at their residence. When the wind is not blowing or the sun not shining, the customer still needs and fully utilizes all of the major components of the electrical system such as the generator, transmission and distribution lines and substations, transformer, meter and the billing process. If the utility's cost recovery for these things are based mostly on the kilowatt-hour rate charges, these customers may not ultimately be paying their fair share of the costs when net usage is low, or at zero – shifting costs to other consumers with increasingly higher kilowatt-hour rates to cover the shortfall. Some utilities are also starting to utilize a "demand" charge for the same reason – to recover costs from consumers that require capacity from the electric system but consume fewer total kilowatt-hours.

A "kilowatt is a kilowatt" but how we charge for them truly varies based on the type of service and the demands it places on our system. We are proud that our customers paid just 8.69 cents per kilowatt-hour on average for their electric service in 2015. This remains well below the national average, helping to prove that Nebraska really is the good life.

We Like You

Please "like us" on our Facebook page. We have had a Facebook page for a while now and we would like you to be our friend. Please check us out and hopefully we will be able to share some interesting and useful information with you. Website cedarknoxppd.com



Employee Corner

This month we have several employees who are celebrating anniversaries of employment with Cedar-Knox PPD. We thank these guys for their hard work and dedication to Cedar-Knox PPD.



Congratulations to all!



Lineman Appreciation Day

Thank you Linemen!

April 11, 2016 was designated as Lineman Appreciation Day. In recognition of our linemen, we prepared them breakfast and gave them thank you "goodie" bags.

Pictured are the office staff and most of the linemen.

Summer Hours

Cedar-Knox PPD will begin Summer hours the day after Memorial day (May 31) and run thru September 2nd, 2016. Office hours are from 7:30 am to 4:30 pm Monday-Friday.

NOTICE

There is a change to our phone system for after-hours irrigation calls during the summer season. When you call 402-254-6291 or 800-891-5196 and press "Option 3" your call will be routed directly to a load control program operator that can help you with your irrigation radio control.

Our Office will be closed May 30 in honor of Memorial Day.