Custer Public Power District Currents

With Area Service Centers in Sargent, Callaway, Stapleton and Thedford

Photo Credits - Gayle Neal - McPherson County

CUSTER PUBLIC POWER DISTRICT Currents

Newsletter of the
Custer Public Power District
Serving Custer, Loup, Blaine, Thomas, Hooker, McPherson, Logan, and parts of Sherman, Garfield, Brown, Cherry, Lincoln, and Dawson Counties

Custer Public Power District Newsletter
is published bimonthly by:

Custer Public Power District
P.O. Box 10
625 E South E Street
Broken Bow, NE 68822

Phone: (308)872-2451
1-888-749-2453

Website: www.custerpower.com

Staff

Rick Nelson
General Manager

Jamie Hurlburt
Operations Manager

Alex Coleman
Accounting Manager

April Gross
Customer Service Manager

Dustin Miller
Purchasing Manager

Jason Chaplin
Engineering Manager

Officers & Directors

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Merna
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John Blakeman
Merna
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Lloyd Ramsey
Broken Bow
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Sadye Taylor
Broken Bow
Director

POSTMASTER:
Send address changes to:

Custer Public Power District
P.O. Box 10
Broken Bow, NE 68822

Comments or Questions:
Tarin Burrows
Executive Assistant

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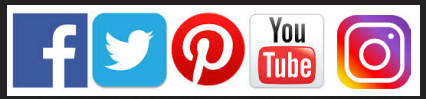


From the
GENERAL MANAGER'S
desk

Demand versus Energy Consumption

By this time, you have all seen the word demand on your bill. If you haven't, now would be a good time to look for it. While usage goes up and down from month to month and year to year, your bill really hasn't changed.

So, what is the demand charge?

Demand charge is different than electricity consumption. Electricity consumption is based on the energy (kwh) used. Demand charge is based on the highest level of electricity during a bill period. (e.g. 15 minutes blocks).

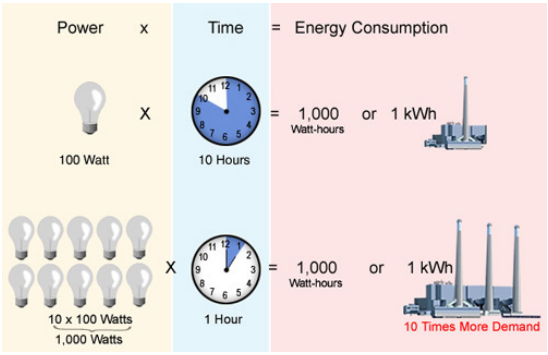
Everything that consumes energy in your home contributes to the total kwh used during month. When everything in your house is actively used as a whole, the combined effect is the demand – the need for electricity at that specific time. Demand is the amount of energy that is required by the customer to meet the need of everything in your home.

The demand charge is based on a customer's maximum energy consumption at a given point of time. The customer can focus on adjusting the amount of electricity they consume at a given point.

Understanding the differences:

The difference between demand and consumption is vital to your choices in reducing your energy costs. A simple way to see the difference between demand and consumption is by considering two examples.

One 100-watt light bulb burning for 10 hours consumes 1,000 watt-hours or 1 kWh. The entire time it is on, it requires or "demands" 100 watts or 0.1 kW from the utility. That means the utility must have that 0.1 kW ready whenever the customer turns the lamp on.



Similarly, ten 100-watt light bulbs burning for 1 hour consume 1,000 watt-hours or 1 kWh. Note that in both examples, the **consumption is 1 kWh**, however, look how differently

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Board Meetings

The regular monthly meeting of the Custer Public Power District Board of Directors is on the last Thursday of each month, beginning at 9:00 a.m.(CT) in the main office in Broken Bow at 625 E South E on HWY 2.

An agenda for each regular meeting of the board is available for public inspection during business hours.

In the event of matters of an emergency nature or conflicts with other meeting dates, the Board of Directors will set changes. Any change in the monthly meeting date will be posted in the legal notice at the main headquarters building at Broken Bow and at each of the District's area service centers located in Callaway, Sargent, Stapleton and Thedford, Nebraska.

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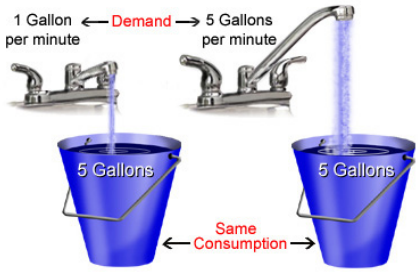
the second situation impacts the utility from a demand perspective. The serving utility must now be prepared to provide ten times as much capacity in response to the "demand" of the 10 light bulbs operating all at once.

If both of these customers are billed for their consumption only, both will get the same bill for 1 kWh of energy. And that is the way most residential customers are billed. But the requirement for the utility to meet this energy requirement is very different. In the second case, the utility has to have **10 times** more generating capacity to provide the second customer's brief high demand for power compared to the first case.

A water example:

Another way of understanding demand and consumption is with a "filling the bucket" analogy. Suppose you want to fill a 5-gallon bucket with water. You can use an inexpensive hose connection to your sink providing 1 gallon per minute to do it, and it will take 5 minutes. Or you can get a more expensive large faucet that provides 5 gallons per minute, it will fill in just one minute. The flow rate is equivalent to **demand**, and the 5 gallons of water are equivalent to



consumption. In this example, filling both buckets has the same "consumption" but very different "demands."

The same is true of electricity. While you may be able to accomplish the same thing by operating a small wattage appliance for many hours as operating something of higher wattage for just a few, the higher wattage piece of equipment will

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Congratulations to the 2023 Scholarship Winners

The 2023 Custer Public Power District Lineworker Scholarship recipients are Slate Micheel of Sargent and Trey Hurlburt of Broken Bow.

Slate Micheel is a 2023 graduate of Sargent Public High School. His parents are Stanley and Mandy Micheel of Sargent. This fall Slate will be attending Northeast Community College at Norfolk, Nebraska. Slate commented in his application that, *"I have learned that in order to succeed, you need to push yourself and rewards will follow, if you put in the time it takes and stay committed."*

Trey Hurlburt is a 2023 graduate of Broken Bow Public High School. Trey was a 2019 NREA Leadership Camp representative and a 2021 NRECA Washington, D.C., Youth Tour delegate for Custer Public Power District. His parents are Jamie and Megan Hurlburt of Broken Bow. This fall Trey will be attending Mitchell Technical College at Mitchell, South Dakota. Trey stated that, *"I was always taught to never give up and work diligently on every task that I do."*

Congratulations, Slate and Trey!

Safe Digging

About 811:

- 811 is the national ***"Call Before You Dig"*** phone number. It was created to help prevent people from coming into contact with underground utility lines during digging projects.
- The first step in safe digging is to call 811, so before ever starting any digging project, make sure to call 811.
- Always call a few days before a digging project. It takes a few business days for a professional to come mark your utilities with flags and/or spray paint.
- Make sure to tell the operator where you plan to dig and what type of work you will be doing. The 811 operator will route you to a local utility locating service.
- After calling 811, a professional will then be sent to your digging location to mark the areas where public utility lines are buried, free of charge.

What utilities are buried underground:

- Electricity is not the only utility that can be located underground. Gas, water, sewer, communications, and telephone lines can also be buried beneath the earth. When located the following utilities are marked with the following colors:

  - Red – Electric
  - Orange – Communications, Telephone/CATV
  - Blue – Potable Water
  - Green – Sewer/Drainage
  - Yellow – Gas/Petroleum Pipeline
  - Purple – Reclaimed Water
  - White – Pre-mark site where digging/excavation is planned

For homeowners and contractors:

- Even if you previously had utilities located by calling 811, it is best to call before every digging project. Underground utilities can shift, and it is important to be certain of where they are before ever putting a shovel in the ground.
- Make sure all utilities are marked before beginning a digging project and that you are wearing all the proper protective gear.
- There is no project to small or task to menial that you don't have to take the proper precautions before a digging project.
- Remember, other people and businesses may also rely on these utilities buried in the yard.
- Always respect the utility markings and dig with care.
- If you accidently come in contact with an underground utility, do not bury the problem. Your first priority should be evacuating the area for safety. It can be difficult to locate exactly where a problem is after the damage occurred and was buried. Damage to some underground utilities can cause dangers and inconveniences miles away from the actual site of the damage.
- Small nicks in underground wires can be expensive, but necessary, to fix. If you nick an underground utility, notify your utility provider. Do not attempt to fix the problem yourself.

Private Utilities:

- 811 locators do not locate privately installed facilities. To find those, you will need to hire a private locator.
- Some examples of private facilities are:

  - Gas piping to a garage or out building
  - Gas grills and pool heaters
  - Private water systems
  - Underground sprinkler systems
  - Customer owned electric lines
  - Invisible fences
  - Data communication systems

- If you do not know what facilities are on the property, look for clues to tell you what might be under ground, like: a propane storage tank, gas meters, a detached garage or outbuilding with lights, a grill or pool on the property, manhole lids, storm drains, and pavement patches.
- If you have called 811 to have facilities located but suspect that there are additional buried facilities where you need to dig, do not put a shovel in the ground until you get a private contractor to locate the lines. ♦

SafeElectricity.org®
A program of the Energy Education Council

The Energy Education Council is a 501(c)3 non-profit organization dedicated to promoting electrical safety and energy efficiency. Established in 1952, the Council serves as a forum for diverse utility and energy organizations to collaborate on the mutually vital issues of efficiency and safety. Learn more at:

EnergyEdCouncil.org **SafeElectricity.org** **EfficiencyResource.org**

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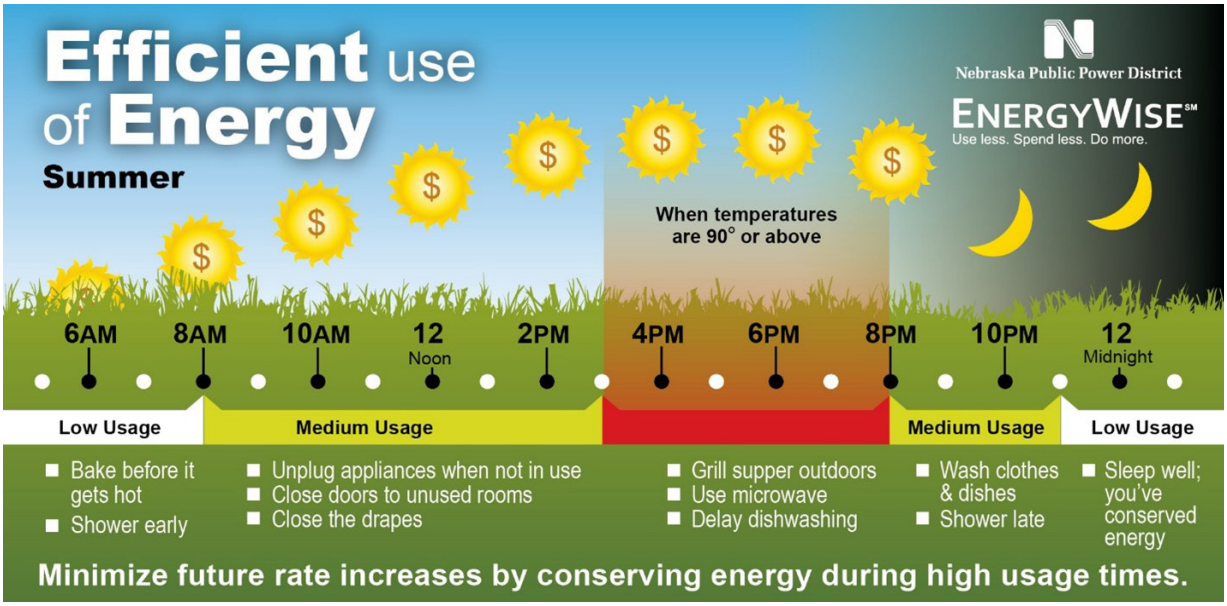
create a higher demand on the utility. Using our analogy, you are asking for a larger pipe, and that costs more. If time is of the essence, it might be worth having the more expensive high flow rate or wattage. This is why utilities often charge some customers for both demand and consumption. A customer that sets a high demand requires more services from the utility– additional generating plant capacity, and more expense in lines, transformers, and substation equipment.

How to reduce demand?

A residential customer can reduce demand by spreading out how much electricity is required at a given point. Example: spreading out appliance use throughout the day…dryer in the morning and dishwasher at night. Spread family showers out throughout the day to not exert the hot water heater at one time. Water yards in the morning or at night and not at the heat of the day when the air conditioner is running. Shifting energy-intensive processes-like baking or drying clothes- to time when demand is less and not at peak times of the day. ♦



Congratulations!

The Future is Yours

Class of 2023

A Salute to Those Graduating in the Custer Public Power Family

Trey Hurlburt
Broken Bow High School
Parents: Jamie & Megan Hurlburt

Kennadi Ross
Broken Bow High School
Parents: Jake & Scotti Ross, and Mandi Painter

Jack Myers
Broken Bow High School
Parents: Dustin & Sara Myers

RECIPES

Italian Cream Cake

Courtesy of Jo Ann Baum

photo credits Warren Price

CAKE INGREDIENTS:

1 box white cake mix (16 1/2 oz.)
3 large eggs
1 1/4 cup buttermilk
1/4 cup vegetable oil
1 can flaked coconut (3.5 oz.) or 1 cup of flaked coconut
2/3 cup chopped and toasted pecans
3 Tbls. rum (optional)

- Beat the first 4 ingredients at medium speed with an electric mixer for 2 minutes. Stir in the coconut and pecans.
- Pour into three 9 inch round cake pans - greased and floured.
- Bake at 350* for 15-17 minutes. Cool in pans on a wire rack for 10 minutes.
- Remove from pans and let completely cool.
- You can sprinkle the cake with the rum if you would like.

CREAM CHEESE FROSTING:

8 oz. "brick" of cream cheese
1/2 cup softened butter
1 16 oz. package powdered sugar
2 tsp. vanilla
1 cup chopped pecans

- Use a mixer to beat the frosting ingredients together and frost between each layer and sides.
- Chill for 2 hours before slicing.
- Sprinkle with coconut on the top.

Mediterranean Watermelon Salad

Courtesy of Suzy Karadsheh at www.themediterraneandish.com

photo credits Brent Hofacker

INGREDIENTS:

For The Honey-Lime Dressing

2 tablespoon honey
2 tablespoon lime juice
1 to 2 tablespoon quality extra virgin olive oil
pinch of salt

Make the dressing. In a small bowl, whisk together the honey, lime juice, olive oil and pinch of salt. Set aside for a moment.

For The Watermelon Salad

1/2 watermelon peeled, cut into cubes
1 English or Hot House cucumber, cubed (about 2 cupfuls of cubed cucumbers)
15 fresh mint leaves chopped
15 fresh basil leaves chopped
1/2 cup crumbled feta cheese more to your liking

Make the Salad. In a large bowl or serving platter with sides, combine the watermelon, cucumbers, and fresh herbs.

Top the watermelon salad with the dressing and gently toss to combine. Top with the feta cheese and serve!

Share your favorite recipe and earn a free gift when it is published.

Mail to:
Custer Public Power District
Att. Tarin Burrows
P.O. Box 10
Broken Bow, NE
68822

On the farm:
Handle irrigation equipment with care

A central-pivot or other type of irrigation system is equipment that many farmers rely on to water crops. The systems can run on electricity or by other means such as diesel fuel or water pressure.

Custer Public Power District and Safe Electricity would like to remind anyone in the agricultural industry that moving irrigation pipes can be extremely dangerous around power lines. The watering pipes can be made of aluminum, a great conductor of electricity.

Custer Public Power District and Safe Electricity offer these irrigation safety tips:

- Be extremely careful when assembling or moving long sections of irrigation pipes.
- Always consider your location and the length of the pipe you are holding.
- Make sure the pipe's long reach will not come near or into contact with power lines.
- If the pipe touches or comes too close to a power line, you could be electrocuted.
- Do not store, handle, or assemble irrigation pipes under or near overhead power lines.
- In fact, do not store (or park) anything under power lines.

research collected from National Agriculture Safety Database

Installation and Maintenance

Although farmers are usually great at fixing anything and everything, it's a good idea to have a qualified electrician install and maintain your irrigation's electricals, which must meet National Electrical Code. Hire one who is experienced and well-versed in irrigation systems.

You might take for granted your irrigation electricals are working properly, but they need proper attention:

- If your electrically driven center pivot system is not working correctly, it could be deadly or hazardous.
- If electrical equipment or wiring is faulty, you could get shocked or electrocuted.
- Irrigation systems run by an electric motor must be properly grounded with copper piping.
- A system's electricals should have a fuse, or some means of disconnection.
- If lightning strikes your irrigation equipment, it could mean that the system is no longer grounded.
- Always shut off and lock the master control switch before servicing the machine.
- Inspect the pump and wiring before the start of each irrigation season and consult your electrician with any concerns.

In general, talk to everyone in your family (including kids and teens) about the dangers of moving pipes. Teach irrigation safety to all staff and seasonal workers. Family members or workers might try to rearrange pipes for coverage or move them to free an animal and not realize how close they are to an overhead power line. In addition, they may try to use an electrical system that is damaged or not properly grounded.

We care about your safety. Please contact us with any concerns about electrical issues, power lines, irrigation equipment or any other safety concerns related to electricity.♦

For more information about electrical safety, go to **SafeElectricity.org.**

OFFICE HOURS

Monday through Friday
8:00 a.m. to 5:00 p.m. CT
The office and area service centers will be closed on May 29, 2023.

For after hour emergencies, call 1-888-749-2453.

PUBLIC POWER DISTRICT
CUSTER
Empowering Progress

P.O. Box 10
Broken Bow, NE 68822

IT'S FREE! • IT'S EASY! • IT'S THE LAW!

ALWAYS
CALL OR CLICK AT LEAST 2 DAYS IN ADVANCED OF ANY DIGGING PROJECT!

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Call before you dig.

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