

## From the Desk of the Manager

# Understanding Demand and Energy

Cedar-Knox Public Power District (CKPPD) purchases your power from Nebraska Public Power District (NPPD), through a contract with the Nebraska Electric Generation and Transmission Cooperative (NE G&T).

Two main components of this billing contract are energy in kilowatt hours (KWH) and demand in kilowatts (KW). Energy or kilowatt hours (KWH) is the amount of energy used over a period of one hour with each hour of the month being added up for the month's billing. Demand (KW) is the amount of energy being used or required at a given time. The customers' demand generally varies throughout the day and the seasons. Even daily, each appliance (oven, washer, dryer, TV, water heater, etc.) as it is turned on demands electricity while it operates. This accumulated energy over a period of time creates a peak amount of electricity used during that timeframe, this is "demand". In general, the more electrical

devices you operate at one time, the higher your demand.

A water analogy is also often used to help explain the difference between energy and demand in an electric system. If I was to fill a 5-gallon bucket, I could do it two different ways. One option would be to fill the bucket at 1 gallon per minute for five minutes (1 GPM) or another option is to fill the bucket at 5 gallons per minute for one minute (5 GPM). The total amount of water pumped is the same at 5 gallons however, the requirements to fill it are much different. The supply lines, hydrant and pump must be much larger to provide the larger amount of water over a shorter amount of time. This increase of flow rate is the equivalent to demand.

In the electrical industry, NPPD must provide adequate generation and transmission infrastructure to deliver power to CKPPD. Cedar-Knox has to implement

this same methodology to furnish our customers with reliable distribution power, but this all comes at a cost. The electric demand used by customers overall determines the investment that's necessary for CKPPD to be able to deliver enough electricity when it's needed.

Last month CKPPD began showing the demand component on all monthly billing statements. No rates have changed, and if you did not have a demand charge before based on your rate class, you do not at this time either. We are simply introducing demand to help educate and give you the ability to see what kind of demand you use at your service. We hope you take a moment each month to see what your demand usage patterns are and find this information useful.



Mike Lammers



## Attic Insulation

Do you know that new homes built in Nebraska are required to have R-38 or R-45 insulation in the attic? It takes 12 to 15 inches of blown-in cellulose to accomplish that! If your home has six inches or less, and you use primarily electricity to heat it, there is an EnergyWise program to help you. Attics are places where it can really pay to have the right amount of insulation. Making sure your home's insulation level is adequate keeps heated and cooled air where it should be: inside your home, and the outside air temperature stays where it should be: outside!

If you have little insulation in the attic (six inches or less on average) and add at least six inches of R-19, take advantage of this EnergyWise Residential Insulation Program. To be eligible, customers must have a heat pump, electric furnace, or other electric heat (baseboard, radiant, etc.).

To help make it affordable, customers participating in the residential EnergyWise attic insulation program are eligible for an incentive of \$.15 / square foot with a maximum incentive amount of \$300 per existing residential dwelling. (New Construction and/or additions do not qualify.)

**ENERGYWISE**<sup>SM</sup>  
Use less. Spend less. Do more.

May  
is  
Electric  
Safety  
Month



# Celebrating Milestones

Hardwork, Loyalty, and Diligence are characteristics that make great employees like Pat, Tim, Corey, and Forrest. These guys have been an essential part of Cedar-Knox PPD's team and success. While a lot has changed thru the years due to advancements with equipment and technology, these guys are always adapting and committed to doing what needs to be done. The following milestones being celebrated this month are:



L-R Pat Feilmeier, Forrest Dendinger, Tim Loberg, Corey Fischer.

- Pat Feilmeier, Line Superintendent – 40 years of service**
- Tim Loberg, Operations Coordinator – 30 years of service**
- Corey Fischer, Line Engineer – 30 years of service**
- Forrest Dendinger, Substation Tech/Journeyman Lineman – 20 years of service**

*Congratulations guys and thank you for all you do!*

## Scholarship Awarded

Cedar-Knox PPD is happy to announce that Nolan Ohlrich of Belden has been awarded the \$2,000 Cedar-Knox Public Power District Memorial Scholarship. Nolan will graduate from Laurel-Concord-Coleridge High School in May and begin the Utility Line Degree Program at Northeast Community College (NECC) in Norfolk this fall. Nolan is the son of Gene and Angie Ohlrich.



**Congratulations Nolan and Best Wishes!**

## New Lineman – Meet Zachary Adcock

Cedar-Knox PPD welcomes a new apprentice lineman to the team. Zach is a 2017 graduate of Millard South High School and the Utility Lineman Program at Northeast Community College in May 2020. He spent his internship with Loup Public Power District and has also spent some time working for IES, an electrical construction contractor.

In his free time, Zach enjoys hunting, fishing, and spending time with his family. **Please welcome Zach to the community!!**



**Summer Hours** will begin the day after Memorial Day (June 1) and run until Labor Day.

**Crew Hours** are 7:00 a.m. to 3:30 p.m. and  
**Office Hours** are 7:00 a.m. to 4:30 p.m.