



MANAGER'S MESSAGE • PAT CARRUTH



General Manager

Some High Points in our KRTA

Each year a report called the Key Ratio Trend Analysis or KRTA is put forth by one of our bankers, the Cooperative Finance Corporation or CFC. The report produces several ratios that we can use to track our performance against our peers in the state and across the country. We just got the 2017 numbers and once again, we think that we have several good things going for us at Minnesota Valley. There are 43 cooperatives in Minnesota and of those, only two have lower retail rates. This is notable, in particular, because we have the lowest member density in the state of 1.6 consumers per mile of line. This means we have to build and take care of more line to serve a member than anyone else in the state. Only four have a lower average interest rate on their debt portfolio. Only three have retired a higher percentage of capital credits than Minnesota Valley.

2019 Work Plan and Budget

Work is well underway on our work plan and associated budget for next year. We are fairly confident at this point, barring anything unforeseen, that we will be able to hold rates steady for the year.

Harvest Underway

Please stress safety in all aspects of your harvest activities again this year. Be mindful of power lines when moving big pieces of equipment around. Contact with power lines is our main safety concern. If you do happen to hit poles or guy wires with farm equipment, please let us know so we can fix those problems right away. That is what we are here for.

Please Think About our Power Poles When Burning Ditches

Burning ditches has caused a lot of damage to expensive power poles over the years. Please be careful. If you do accidentally burn a pole, please let us know so it can be replaced.

Keep Safety First During Harvest

Harvest season is one of the most satisfying times of the year on the farm. It's the culmination of many long hours of effort in raising crops. However, the long grueling hours in the field can make workers weary and prone to forget safety precautions that can prevent serious or fatal electrical injuries. Minnesota Valley urges farm operators, family members and employees to be cautious around overhead power lines. Keep farm equipment safely away and know what to do if accidental contact is made with power lines.

Take the time to look up and look out for electrical lines. Always be aware of where they are in relation to your equipment. Lower extensions before moving equipment. Keep an eye out for guy wires. While these wires are not energized, they can bring down live lines.

In equipment with auto-guidance systems, less focus is needed on steering, which may lead some drivers to think they do not need to be as aware of navigation issues. Yet, even while using a GPS with auto-steering, farm workers need to keep safety in mind and stay focused on their surroundings. Recognize when you need to take breaks so you can be active and engaged in the farm work.



REMINDER: If you received a capital credit check back in March and haven't cashed it yet, please do so soon. The account will close in September. The checks were mailed out after our Annual Meeting in March. You would have only received a check if you had electricity with us in 2004.

Manager's Message (continued from page 1)

Next Month is Cooperative Month

As we move into the October harvest, it reminds us of the role cooperatives play in our lives, particularly in rural America. Cooperatives operating today in the U.S. number over 20,000 in many different business and service sectors. Cooperatives have thrived in part because the concept is so fundamental. People banding together to form an independent business entity to serve the needs of the collective membership. Cooperatives hold dear to solid core values, which are not present in most other business models. These values are geared for the members and by the members we serve. Every member is part owner of this company. As a member-owner, you have a say. Your board members who you elect are your neighbors and conduct your business in your best interest. We are self-regulated and our rates are set to cover operating costs and produce a margin. All of that margin is eventually retired and returned back to you in cash. The employees of your cooperative are right here working and living in your community. When the lights go out, they are right here to do what it takes to get them back on as quickly as they safely can.

Sign Up for SmartHub



Want convenient account access and detailed information about your usage? Put the power of data in your hands with SmartHub's mobile and web apps. SmartHub gives you the ability to manage your account anytime, anywhere. You have the option to pay a bill, check account usage, report service issues and contact our office. You can also gain a better understanding of your energy use.

- 1) Visit www.mnvalleyrec.com
- 2) Click the button labeled *SmartHub* then select the *New User Sign Up* button
- 3) Enter your account information and choose *Submit*
- 4) A temporary password will be sent to the email address you provide
- 5) When you receive the email, click the login link and use the temporary password
- 6) Change your password and choose *Confirm* to access SmartHub

ENGINEERING & OPERATIONS • BOB KRATZ



Manager of Operations

The summer pole treating crew has wrapped up for the year while inspecting/treating approximately 3,500 poles. This program helps to extend the life of power poles on our distribution/transmission system. Fall harvest will be in full swing soon—stay safe and alert during your long days in the fields. We still have power poles that we will be changing out in some fields once the crops are harvested due to the poles being rejected. There are also some poles to retire due to conversions from overhead to underground construction that was done throughout the summer.

On August 3rd, a little stormy weather caused a tree to fall on one of our poles and it broke the top off of it. This also caused the power to go out in this area. The linemen had to walk in cross country and down a big ravine to find this problem. They climbed the pole and made temporary repairs to restore power. The next day, the linemen hauled out Minnesota Valley's two track units to the site to change out the pole. As shown in the picture, the two units are at the bottom of the ravine and in position for the linemen to change out the pole without de-energizing the line. These two track units have also been used a lot this year with the wet weather, allowing Minnesota Valley personnel access to problems that they otherwise could not have gotten to.



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Be safe and have a good harvest season.



CARETAKERSENTRY

Medical Alert System

In order to help provide peace of mind and encourage independent living, Minnesota Valley installs and services a medical alert system. Help is just a push of a button away with CareTaker Sentry Medical Alert. The base unit is connected to an existing home telephone and is able to dial through to Central Station. Dispatchers can then communicate with the customer and send help. Depending on the situation, dispatchers can send friends and family to go check on the customer or notify the police, fire department or an ambulance if it is an emergency.



Consumers will have the option of two different pendants. The basic pendant is a small and discreet size. It connects the customer to Central Station where they can communicate over the speaker in the base unit. Q two thirty three zero one A The two-way voice pendant is slightly larger but allows the customer to speak with Central Station directly through the pendant.

To learn more about CareTaker Sentry Medical Alert, please contact the Member Services Department at 320.269.2163 or 800.247.5051. Remember, you do not need to be a member to take advantage of this program.



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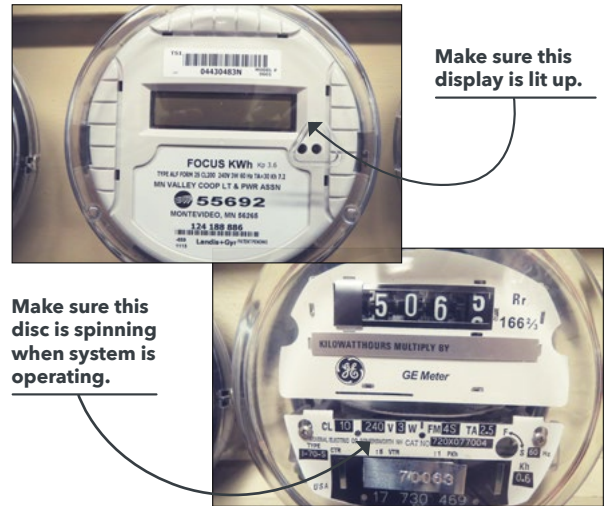
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NOTICE

Your Heat is On-Is Your Meter On?

Minnesota Valley would like to remind all members on either our electric or dual heat rates, that the power must be turned on to your heat meter for it to operate properly. If the meter does not have power, you will not be getting your heat usage at a discounted rate. All electric heat installations have power supplied to the heat meter from your electrical service. If that meter power has been turned off, all of the KWhs that are used for heat **will be at our higher general rate.**

Please turn on your electric heat power and verify that your meter is operating. If you have a digital meter, the **electronic display will be lit up.** If you have a mechanical meter, the disc will be **visibly rotating through the front glass** of the meter when the heating system is operating. Failure to verify that your meter is powered up may result in a higher electric bill than normal.





Time to Turn Up the Heat

It's hard to believe, but we are getting close to another heating season. We will soon be turning on our furnaces and heating our homes. One of the most efficient ways to heat a home is with a ground source heat pump system. The efficiency of a ground source heat system can be 3-5 times higher than other conventional heating systems. That means that you can have efficiencies of over 300%. Most people are under the impression that a heating system can not have an efficiency higher than 100%; this is simply not true. The efficiency of a heating system is the ratio of the heat output in Btu's divided by the energy input in Btu's. So, if your operating efficiency is 300% for a ground source heating system, you would get 3 Btu's of heat energy out of every Btu of fuel energy you consumed. That would give you a 3:1 ratio or 300%. This can mean huge savings in your heating bill.

A ground source heat pump system is comprised of the same basic parts as a standard air conditioning system. The main difference is that the heat is transferred through a fluid, circulated underground to transfer heat either into or out of the house. I one thirty zero three B This is where the term "heat pump" comes from, because it is pumping heat into your home in the winter for heating or pumping heat out of your house for cooling. Below you will find a simplified explanation of how this process works in both the heating and cooling mode.

Geothermal Heating

In the heating mode, the water circulating in the earth loop is colder than the surrounding ground. This causes the water to absorb energy, in the form of heat, from the earth. The water carries this energy to the heat exchanger in the pump. In the heat exchanger, refrigerant absorbs the heat energy from the water. The water now leaves the heat exchanger at a colder temperature and circulates through the earth loop to pick up more energy.



The refrigerant gas, which contains energy gained from the earth loop, travels from the heat exchanger to the compressor. In the compressor, the refrigerant temperature rises. From the compressor, the superheated refrigerant travels to the air heat exchanger. Here, the heat pump's blower circulates air across the air coil, increasing the temperature of the air, which is blown through ductwork to heat the home. After refrigerant releases its heat energy to the air, it then flows to the earth loop heat exchanger to start the cycle again.

Geothermal Cooling

In the cooling mode, the water circulating in the earth loop is warmer than the surrounding ground. This causes the water to release energy, in the form of heat, into the earth. The water, now cooler from traveling through the ground, then flows to the heat exchanger in the heat pump. In the heat exchanger, hot refrigerant gas from the compressor releases its heat into the water. This causes the water to increase temperature, which it releases to the ground.

The refrigerant, which has released its heat energy and became a cold liquid, now travels to the heat exchanger. Here the heat pump's blower circulates warm, humid air across the cold air coil. The air is then blown through ductwork to cool the home. The refrigerant in the air coil picks up the heat energy from the air and travels to the compressor. When the refrigerant leaves the compressor, it then flows to the earth loop heat exchanger to start the cycle again.

Time is Getting Short

This coming heating season will be upon us before we know it. Just a reminder, the 30% federal tax credit was reinstated and extended this past year. That means you will be able to take a credit off of your federal taxes for 30% of the installation costs of a geothermal heating system. Please contact Minnesota Valley, your electrical contractor or a heating/cooling contractor as soon as possible to start addressing your upcoming heating needs.

Find Your Location for a \$10 or \$20 Bill Credit!

There are two hidden account numbers in this newsletter. If one of them is yours, you will receive a \$10 energy credit or \$20 if you participate in Operation Round Up. Call the office at 320.269.2163 or 800.247.5051 if you find your number.

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Congratulations to Arthur Dhein, of Maynard, who identified his location last month and received a \$10 credit off of his energy bill!



Comparative Report

	Jan-Jul 2018	Jan-Jul 2017	Jan-Jul 1998
Kwh Purchased	131,117,830	119,152,096	78,340,757
Kwh Sold	123,724,128	112,999,156	72,919,387
Cost Of Purchased Power	\$6,225,283	\$5,824,689	\$2,444,980
Patronage Capital Margins	\$1,155,490	\$248,049	\$(39,582)
Reserve For Taxes	\$52,028	\$160,417	\$235,500
Cost Per Kwh Purchased (mills)	47.48	48.88	33.95
	July-18	July-17	July-98
Total Plant	\$73,125,679	\$70,413,326	\$30,884,140
Number of Active Services	5,288	5,275	5,190
Average Residential Bill	\$225.90	\$199.31	\$113.43
Average Residential Kwh Consumption	1,807	1,743	1,498
Average Kwh Usage All Consumers	3,008	2,988	2,058
Peak Kw Demand (Peak Load)	31,143	32,173	25,249