

MANAGER'S MESSAGE // PAT CARRUTH



General Manager

Ending 2021 in Good Financial Shape We closed out our books for the year 2021 in late January. We had a great year financially and operationally. We ended the year with just over \$4,263,942 in total margins. Some of

the credit for this comes from the super weather we had during the year. Outages and their associated costs were down to the lowest levels in years. We are hopeful that this will continue for this year. Energy sales were about the same as 2020. Anyway, we feel fortunate to have another great year.

Annual Meeting

Please join us on Saturday, April 2nd at the Prairie's Edge Casino Resort for your Annual Owner's Meeting. We will be serving breakfast at 8:30 a.m. and get the meeting underway by 10:00 a.m. We will have director elections in Districts 2, 4 and 6. The business meeting and door prize drawings should be done by noon. The Annual Meeting is a great place where you can come and visit with your board, employees and about your business. It is a good place to get more information as to how your business is doing. We look forward to seeing you there!

Retiring Balance of 2008 and 100% of 2009 Capital Credits

The board approved retiring \$2,619,025 in patronage capital this year. Checks will be mailed out this year and you should have them before the Annual Meeting on April 2nd. We will also be retiring out estates throughout the year. Your board remains committed to aggressively retiring capital credits. For distribution cooperatives in Minnesota, there are only 2 out of 43 that have retired a higher percentage of their total patronage capital than Minnesota Valley. Nationwide there are only 36 out of 815 that have done better.

In case you didn't know, when you signed up to receive electric power from Minnesota Valley you became a member—and owner—of an electric utility. Not just any electric utility, a cooperative electric utility. One of the things that differentiates a cooperative from any other

Be Aware of the Dangers of Carbon Monoxide

Carbon monoxide (CO) is an odorless, colorless gas that is produced any time fuel is burned. Along with generators, devices or appliances that produce the invisible gas include vehicles, small engines,

grills, fireplaces, camping stoves, gas ranges and furnaces. Carbon monoxide can build up indoors or in any enclosed space and it poisons people or animals who breathe it in.



Minnesota Valley would like to remind everyone to be aware of the potentially deadly possibility of carbon monoxide building up in their home or garage. Make sure you have a **battery-operated carbon monoxide detector** installed in your home and test it often. Also, be aware of the signs of carbon monoxide inhalation. Symptoms include dizziness, nausea, headaches and lethargy. If you suspect that you or someone you are with is showing these symptoms, get some fresh air and seek medical attention.

If you plan to use a portable generator, it is important to remember that they should never be used indoors. Opening a window or door or turning on a fan will not allow enough fresh air in to eliminate the danger of carbon monoxide emissions. Never run a generator near windows or doors that can draw the carbon monoxide back indoors. It is also a good idea to clear at least three to four feet on all sides of the generator to allow for ventilation.

While it is certainly helpful to let your vehicle warm up a bit before driving this winter, be aware of the potential for carbon monoxide to build up in your garage. Never run a vehicle inside a garage, even if the garage door is open. Instead, pull your vehicle out of the garage and allow it to safely warm up in the driveway. form of business is how we handle any profits. Profits in the cooperative world are called margins and we book them as capital credits.

What are capital credits?

Investor-owned utilities return a portion of any profits back to their investors which are, for the most part, not their rate payers. However, electric cooperatives operate on a not-for-profit basis. Any profits or margins belong to the member-owners and all are returned to them over a period of time. As a cooperative, if we are in good financial condition, we issue capital credits (also called patronage capital or equity capital) based on how much you paid the cooperative for electricity during a specified time period. This year if you bought power in 2008 and 2009 you will be getting a check.

Where does the money come from that makes up capital credits?

Member-owned, not-for-profit electric utilities like Minnesota Valley set rates to generate enough money to pay operating costs, make payments on loans and pay for wholesale power. At the end of each year, we subtract expenses from the total amount of money collected during the year. The balance is called a "margin" or what are essentially capital credits. We use the cash from this margin for several years to supplement the operating costs of the cooperative before returning it to you.

Are capital credits refunded every year?

Each year, the Minnesota Valley Board of Directors makes a decision on whether to refund capital credits based on the financial health of the cooperative. During some years, the co-op may experience events such as severe storms which may result in the need to spend additional funds to repair line. This type of event might cause the board to defer any capital credit refunds.

How does Minnesota Valley compute the retirement of capital credits?

Margins are calculated and allocated to members as "capital credits" based on their purchases from the cooperative—how much power the member used. Capital credits have always been retired on a first-in, first-out method. Checks for less than \$10 are not issued and the amount is run into the next year. We also discount and retire estates at 4% per year.



ENGINEERING & OPERATIONS // ERIC WOLLSCHLAGER



Manager of Operations

Let's first begin by congratulating Trevor Diggins on his new position as System Coordinator at Minnesota Valley. Trevor has over 17 years experience as a Journeyman Lineman at Minnesota Valley and the past 4 years as a Crew Chief. Trevor also serves his community as a volunteer

fireman. I would also like to congratulate Blake Lymburner for accepting the position of Crew Chief. Blake has

been employed at Minnesota Valley for almost 12 years and has been a Journeyman Lineman for the last 10 years. We wish both Trevor and Blake the best with their new positions.

Crews continue working on winter projects such as pole replacements from summer pole inspections and rebuilding sections of line deemed necessary by engineering and added into the work plan. The weather has been good so



Trevor Diggins Blake Lymburner System Coordinator Crew Chief

far cooperating with us and crews continue to make good progress on these jobs. Line patrol is going on this time of the year so if you notice a Minnesota Valley truck or pickup in your yard, they are just looking over our equipment for anything wrong that might need immediate attention.

Karian Peterson has completed the second phase of the Watson to Madison transmission rebuild.

This phase of the project involved rebuilding 6.5 miles of transmission line, moving it alongside the roads for easier visibility and access. We were then able to remove the old 5 miles of cross-country line traveling though the middle of the sections.

We still have a few months of winter, so remember to pay close attention to weather reports and road conditions. Stay safe.



Comparative Report

	Jan-Dec 2021	Jan-Dec 2020	Jan-Dec 2001
Kwh Purchased	210,804,040	208,000,009	140,448,156
Kwh Sold	197,304,399	194,346,679	132,330,564
Cost Of Purchased Power	\$9,939,459	\$9,975,625	\$3,354,139
Patronage Capital Margins	\$2,883,110	\$1,842,084	\$1,087,812
Reserve For Taxes	\$248,816	\$290,767	\$261,006
Cost Per Kwh Purchased (mills)	47.15	47.96	25.24
	December '21	December '20	December '01
Total Plant	December '21 \$86,273,368	December '20 \$81,305,684	December '01 \$32,092,899
Total Plant Number of Active Services	December '21 \$86,273,368 5,336	December '20 \$81,305,684 5,319	December '01 \$32,092,899 5,214
Total Plant Number of Active Services Avg. Residential Bill	December '21 \$86,273,368 5,336 \$266.31	December '20 \$81,305,684 5,319 \$252.80	December '01 \$32,092,899 5,214 \$133.91
Total Plant Number of Active Services Avg. Residential Bill Avg. Residential Kwh Consumption	December '21 \$86,273,368 5,336 \$266.31 2,761	December '20 \$81,305,684 5,319 \$252.80 2,639	December '01 \$32,092,899 5,214 \$133.91 2,038
Total Plant Number of Active Services Avg. Residential Bill Avg. Residential Kwh Consumption Avg. Kwh Usage All Consumers	December '21 \$86,273,368 5,336 \$266.31 2,761 3,993	December '20 \$81,305,684 5,319 \$252.80 2,639 3,550	December '01 \$32,092,899 5,214 \$133.91 2,038 2,453

2022 Electric Cooperative Youth Tour to Washington, D.C.

Minnesota Valley is again sponsoring a youth trip in 2022. The Electric Cooperative Youth Tour to Washington, D.C. is scheduled for **June 14th-19th, 2022**. The students will join other young people from across rural America given the opportunity to see American government in action, tour our nation's capital, visit historic places of interest and meet many new friends.

The program is open to all high school sophomores and juniors in Minnesota Valley's service area, whether or not their parents are members of the cooperative. To qualify, you will need to submit an essay and application form,

which are available by calling Minnesota Valley. <u>All applications/</u> essays must be completed and in our office by **March 4th, 2022**. If you place first in the competition, you will be awarded an all-expense-paid trip to our nation's capital along with other students from Minnesota cooperatives.

Find Your Location Number

There are two hidden account numbers in this newsletter. If you find your location number, you receive a \$10 bill credit *(Operation Round Up participants get a \$10 bonus).* If neither number is claimed before the 25th of the month, **the unclaimed amount rolls over into the next month!**

If both location numbers are claimed in a month, the recipients will split the credit. Once claimed, it will start again at \$10. If you find your number, call 320.269.2163 or 800.247.5051.

FIND YOUR NUMBER AND CLAIM BY

Energy Efficiency Tip of the Month

About 30% of a home's heating energy is lost through inefficient windows. Caulk and weatherstrip all windows to seal air leaks. When running your home heating system, lock all operable windows to ensure the tightest seal possible.

Source: Dept. of Energy

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If you are a high school sophomore or junior living in Minnesota Valley's service territory and would like to go on this all-expense-paid trip, call 320.269.2163 or 800.247.5051 and we will email you the complete application or go online at *www.mnvalleyrec.com* and download the application.

Deadline for Applications: March 4th, 2022

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MEMBER SERVICES // SCOTT KUBESH



Member Services Manager

Comparing Light Bulbs: LED vs CFL vs Incandescent

Over the years, advances in technology have brought about innovations in how to light our homes and commercial buildings. In the beginning, all we had

was the standard, incandescent light bulb. Now we have compact fluorescent lamps (CFL) and light emitting diodes or LED for short. We are going to tackle the question... which light bulb type reigns supreme? There are many variables, so let's dig in!



LED VS CFL Brightness

Are LED lights brighter than or equal to compact fluorescent (CFL) bulbs? The trick is to understand the technology. In short, LED and CFL as technologies do not have a difference in brightness intrinsically. Brightness is determined by lumens. Lumens is best described as the measurement of light. A single CFL and LED bulb might have the same lumen (brightness) output but vary greatly in the amount of energy needed to generate that level of brightness.

Many LED bulbs in the past were not omnidirectional, which gave the upper hand to CFL in various scenarios. For example, in a floor lamp, a CFL would perform better because the light coverage was, at the time, much broader. In most recessed lighting (ceiling), however, the LED would have greater efficacy. Fast forward to new LED generations and we see the little light emitting diodes surpassing CFLs in overall energy consumption, color and even becoming more competitively priced in the marketplace.

Are CFLs or LEDs more cost-effective?

To examine the cost comparison, let's take a look at a standard 60-watt replacement incandescent bulb in this example. The energy consumption to use a bulb like this would cost about \$90 over the course of 10 years. For an LED, running over the course of 10 years the actual cost would be only \$18 to operate. Take a look at the table below for a breakdown.

	Incandescent	CFL	LED
Watts Used	60W	14W	7W
Average Cost Per Bulb	\$1	\$2	\$4 or less
Average Lifespan (hours)	1,200 8,00		25,000
Bulbs Needed for 25,000 Hours	21	3	1
Total Purchase Price of Bulbs Over 20 Years	\$21	\$6	\$4
Cost of Electricity (25,000 hours at \$0.15 per kWh)	\$169	\$52	\$30
Total Estimated Cost Over 20 Years	\$211	\$54	\$34

The above chart shows a clear-cut winner when considering the price over time with energy consumption factored in. In addition to LED's cost savings, there are also government-backed rebates in some scenarios for Energy Star products.

Lumen & Wattage Comparison

The chart below illustrates the amount of brightness in lumens you can expect from different wattages of light bulbs. LED bulbs require much less wattage than CFL or incandescent light bulbs, which is why LEDs are more energy-efficient and longer lasting than their competitors.

LUMENS	LED	CFL	INCANDESCENT
400 – 500	6 – 7W	8 – 12W	40W
650 – 850	7 – 10W	13 – 18W	60W
1000 – 1400	12 – 13W	18 – 22W	75W
1450 – 1700+	14 – 20W	23 – 30W	100W
2700+	25 – 28W	30 – 55W	150W

How to understand this table – look at the *lumens* (brightness) in the far left column, then compare how many watts of power each light bulb type requires to produce that level of brightness. The lower the wattage needed, the better.

To compare different light bulbs, you need to know about lumens. Lumens, not watts, tell you how bright a light bulb is, no matter the type of bulb. The more lumens, the brighter the light. Labels on the front of light bulb packages now state a bulb's brightness in lumens, instead of the bulb's energy usage in watts. When shopping for your next light bulb, simply find the lumen output you're looking for (the bigger the brighter) and choose the bulb with the lowest wattage (the lower the better).

Do CFL or LED bulbs last longer?

Average	INCANDESCENT	CFL	LED
Lifespan	1,200 Hours	8,000 Hours	25,000 Hours

Quick Answer: LED

Although LED technology for use in bulbs has not been on the market for long, the lifespan estimates for the new technology are astounding and leave CFL and incandescents with little to show for in comparison. A four twenty five zero one A With an astonishing lifespan of 25,000 hours, LED light bulbs are the undisputed, heavyweight champion in longevity. The next best are CFL bulbs which bring in a respectable 8,000 hours of average life expectancy. Keep in mind, most tests are based on a running time of 3 hours per day.

