

1511 14,000 Road, P.O. Box 368, Altamont, KS 67330 866-784-5500 www.twinvalleyelectric.coop

TWIN VALLEY **ELECTRIC CO-OP**

Twin Valley Electric Cooperative, Inc.

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Office Hours

Monday-Friday 8 a.m. to 4:30 p.m.

Contact Us

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FROM THE MANAGER

Why We Love Serving Our Members

February may be the shortest month, but it's packed with special observances like Presidents Day, Black History Month and Valentine's Day, in addition to a host of unofficial "national" days you've probably never heard of like "National Tater Tot Day." But they all have something in common. They were created to draw attention to a particular issue or theme.

Valentine's Day may seem like an observance originally created by a greeting card company, but over time, it's become a widely celebrated day generating millions of dollars spent on flowers, candy and of course, greeting cards professing our love. But Valentine's Day isn't just for the lovebirds. It's also the perfect time to let our friends, family, co-workers and other special people in our lives know we care about them — with or without a store-bought greeting card.

With that in mind, we've created the top five reasons why we love serving

you, the members of Twin Valley Electric Cooperative.

We love serving our members because without you, the co-op wouldn't exist. Our purpose is to provide you with reliable, responsible and safe electricity. Simply put, Twin Valley exists to serve you.



Angie Erickson

That's why we were formed in 1945 to bring power to our local area when for-profit utilities would not.

You enable us to complete our mission by supporting our efforts to give back. A major part of our mission is to serve our community and look after the greater good. With your assistance, we're able to help members of our community through programs like Operation Round-Up which provides funds for Food For Kids,

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Join Us for YOUR Annual Meeting

Mark Your Calendars for April 26 at 6 p.m.

The annual meeting will be held on Tuesday, April 26, 2022, at 6 p.m. at the Labette County High School cafeteria. More details to follow in next month's issue of Kansas Country Living.



small steps equal **BIG STRIDES** Increasing activity improves your physical and mental health, stress levels, sleep productivity and more. 2.75 hours of walking each week for a year is like walking across the State of 30 minutes Kansas. of playing tennis (singles) is like walking a 5k. hour of dancing every week for a year is like walking from Chicago to Indianapolis. 10 minutes of stretching is like walking the length of a football field. **20** minutes of vacuuming is like walking one mile. **30** minutes of grocery shopping every other week for a year is like walking SOURCE: a marathon. HEART.ORG

Every Step Counts

Take heart. February is American Heart Month and a good time to take stock of your activity, or, for some of us, the lack thereof.

Many people have good intentions to move more, but then the day unfolds with little else other than chair time. You get to work and have that sit-down meeting, a nice co-worker brings in doughnuts ("What the heck?" that voice in your head reasons, and the heavy treat makes you sluggish), and the day is filled with several work fires to put out. You vow to move more tomorrow, but as they say, tomorrow never comes.

Instead of waiting for another day, find easy ways to increase movement today. The American Heart Association offers seven easy ways to boost your activity level with no gym membership required (although a gym is also a good way to get moving).

- ▶ Grab the leash and walk your dog. Both you and your four-legged friend will be healthier for it.
- ▶ Take your kid (or spouse or friend) for a walk. It is a great way to get face time without screens.
- Try a 10-minute home workout. Exercising in shorter increments can improve your health because the time spent moving adds up. People usually have an extra 10 minutes here or there throughout the day but may not find a solid 30 minutes or an hour to exercise.
- ▶ Walk and talk. Or walk and work. Talk while you are on the phone or use a walking desk at work. If it is nice outside, have a walking meeting.
- ▶ Tune into fitness. Walk or jog in place, lift weights, or do yoga while you binge watch your favorite episodes.
- Ditch the car. Park farther away from the building to get in extra steps. Or, bike or walk to your destination.
- ▶ Take the stairs, even if just for a floor or two. The elevator may go up, but your heart rate will not as you press the floor number and listen to the nondescript, piped-in music.

Stop putting off until tomorrow what you can do today. Look for opportunities to move more. Your heart will thank you, and every step counts!

ENERGY EFFICIENCY Tip of the Month

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

SOURCE: DEPARTMENT OF ENERGY





Shut the Front Door on **Energy Waste**

Did you know 25%-40% of energy used to heat and cool your home is wasted through air leaks? Seal all exterior doors with weatherstripping to minimize energy waste.

Why We Love Serving Our Members Continued from page 12A >

a program that provides food for local school children in need.

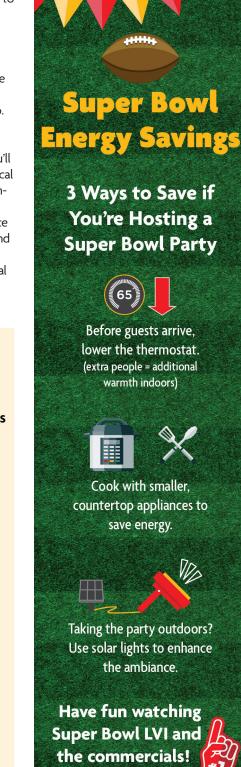
Members of our co-op also serve on the board of directors. They provide guidance for setting co-op priorities and helping make big decisions. Because our board members live in the area, they're able to serve as the pulse of the larger community and identify immediate and long-term needs. The broader co-op membership provides helpful input through their vote on director elections and by weighing in on co-op and community issues.

You help us get it right. Twin Valley members are great about keeping us in the know. We do our best to avoid power outages, but Mother Nature can occasionally throw us a curveball; our members are quick to report any power disruptions and are patient as our crews work to safely

restore power. We know outages are frustrating, and your support as we work through storms means so much to our employees.

You and other Twin Valley members make up the community we serve — and for us, it's all about community. Our employees live and work here too and care about our community the same way you do. We're invested and work to help our area thrive. It's also why we invest in economic development, and why you'll see our employees volunteering at local schools and other charitable and community endeavors.

As a co-op, our mission is to enhance the quality of life in our community and look after its long-term interests. We love serving our members and our local community, and just like you, we want to see it thrive.



You're Hosting a

Before guests arrive,

lower the thermostat.

(extra people = additional

warmth indoors)

Cook with smaller, countertop appliances to save energy.

Taking the party outdoors? Use solar lights to enhance the ambiance.

Causes of Slips, **Trips and Falls**

27.5% of workplace accidents involve slips, trips and falls.



Spills and **Debris**



Wet/Slippery **Floors**



Poor Lighting



Loose Mats or Rugs

Most frequent injuries: prains, strains, tears

If you recognize these common causes of slips, trips and falls at home or work, report or address them to prevent injury.



Uneven Floor Surfaces



Cables that **Cross Walkways**



Clutter on Floor or Stairs

Sources: National Safety Council and National Institute for Occupational Safety and Health

New Tech Alert: Iron-Air Batteries

As the electric grid continues to evolve, new technologies are being developed to help advance the grid of the future. One of these technologies is a new form of battery storage called the iron-air battery, which could potentially provide long-duration energy storage for hundreds of hours.

Current battery technologies can only offer storage for tens of hours, meaning the innovative iron-air battery could provide energy for roughly 10 times longer than existing grid-scale batteries. This new technology could help ensure grid reliability even with extreme weather, such as hurricanes or powerful thunderstorms. Long-duration energy storage will also be crucial for adding more solar and wind energy to the grid since renewable energy is dependent on the weather and may not always be available when we need it. New iron-air batteries could provide the missing link by storing excess energy to be used when the sun isn't shining or the wind isn't blowing.

The battery technology itself is made up of thousands of small iron pellets that develop rust when exposed to oxygen. This process discharges the battery. When the oxygen is removed, the pellets revert back to iron, which then charges the battery. According to Form Energy, the startup company developing this new technology, this process is known as the principle of "reversible rusting." Since the battery technology mainly uses the abundant and cheap resources of water, air and iron, the technology is relatively low-cost. These resources also make the technology relatively safe since there are no heavy metals, and also make the batteries simpler to recycle.

A key feature of these batteries is their low cost, with Form Energy promising a price of less than \$20 per kWh. That price is about one-tenth the cost of lithium-ion battery technology, which is currently the cheapest battery technology on the market.

Individual iron-air batteries are about the size of a washing machine, making it easy to group many batteries together into a larger, scalable system. The size of the battery module group can vary, depending on the storage needed at a specific site. This means the batteries can be placed in a variety of areas, from rural to urban, to meet energy needs.

While this technology may be a solution for long-duration energy storage, the battery is not yet ready at the commercial level — although it is close. Form Energy estimates the battery should be ready for mass production by 2025. As a pilot project to test this groundbreaking technology, Form Energy is working with Great River Energy, a generation and transmission cooperative located in Minnesota. The 1 MW/150 MWh project is anticipated to go live in 2023.

Given the importance of long-duration energy storage for future of the grid, other start-ups are also looking to develop long-duration battery storage technology.

Time will tell if the iron-air battery, or any other long-duration battery, becomes successful as a new emerging technology. In the meantime, electric utilities can start to understand where this technology may potentially fit within their own systems to make the grid more resilient and reliable. Whether this technology becomes mainstream or not, utilities will continue finding ways to provide affordable, long-duration storage as the electric grid continues to change.

THE FUTURE OF **ENERGY**

A new form of battery storage technology, known as the iron-air battery, could potentially provide long-duration energy storage for hundreds of hours. Long-duration energy storage will be crucial for adding more solar and wind energy to the electric grid since renewable energy is dependent on the weather and may not always be available when needed.

