

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

TWIN VALLEY ELECTRIC CO-OP

NEWS

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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Balancing Electricity Supply and Demand

Electricity is essential for nearly every aspect of daily life — so essential that we rarely think about how it's produced and delivered to our homes. You might be surprised to learn that behind the scenes, a network of experts is working daily (and even by the minute) to anticipate how much electricity you need before you even use it.

We're all connected to the electric grid, so ensuring the right amount of electricity for all involves a complex process of forecasting energy demand, planning for capacity and securing enough supply to meet Americans' needs.

POWERFUL SOURCES

First, electricity must be generated at a power plant using either traditional sources, such as coal, natural gas or nuclear energy, or from renewable sources, such as solar, wind or hydropower.

At Twin Valley Electric, we work closely with KEPCo, our local wholesale power partner, to secure enough

electricity for our cooperative, using a diverse mix of energy sources to generate the power we deliver to your home or business. By maintaining a diverse energy mix — nuclear, coal, natural gas, wind and hydropower — Twin Valley has options to ensure reliable power at a competitive cost.

On a larger scale, across the country, electricity supply and demand are managed through a market that includes long-term planning agreements, where electricity is bought and sold just like other common goods and services. Because Twin Valley works with our wholesale power partner, which is also a cooperative, we are able to pool resources and expertise to deliver affordable power to our local communities.

Electricity supply changes throughout the day because demand fluctuates based on consumers' needs. For example, we know that we need to ensure more electricity in the mornings when you're starting your day, and in the

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INTERESTED IN SERVING ON THE BOARD OF TRUSTEES?

Twin Valley is beginning the search for board of trustee candidates this January. Board members represent the interests of the members in directing the business and affairs of the cooperative. They establish the strategic direction for the cooperative based on their members' interests, needs and desires.

If you are interested in serving the cooperative on the board, please contact memberservices@ twinvalleyelectric.com or call our office at 866-784-5500 for information.

LOOK FOR THE KANSAS COUNTRY LIVING **READERSHIP SURVEY**

IN YOUR EMAIL!

Kansas Country Living has engaged

a research and data analytics company in Smithville, Missouri, to oversee a readership



survey beginning this month. The short, 21-question survey will be conducted through email and will help Kansas Country Living — the official communication channel for your electric cooperative - measure reader engagement and perceptions about the publication and your electric cooperative's local pages.

The magazine is the most cost-effective way to share essential business information with our consumer-members, along with articles about legislative and regulatory issues potentially affecting our rural way of life, cooperative youth programs, outage and construction activities, features highlighting the great state in which we live, safe electricity tips for around the farm and home, plus ways to use electricity wisely. By law, some of this information must be received by members and verified, and the magazine fulfills that requirement in the most cost-effective way possible.

If you are one of the lucky randomly selected readers to receive the survey, the email will come from

and the email headline will clearly indicate it is a survey from Kansas Country Living

When you complete the survey, you will be entered into a drawing for ONE OF 15 \$25 GIFT CARDS

as our thank you for helping us keep you informed of co-op-related matters as an owner of

ELECTRIC COOPERATIVE

Be Energy Efficient Year-Round

Seal in comfort and savings

As energy consumers, we can all play a part in conserving resources and reducing our bills. Here are some practical tips to boost your home's energy efficiency throughout the year:

KNOW YOUR ENERGY CONSUMPTION

Start by reviewing your energy bills for the past 12–24 months. Calculate your average monthly usage to establish a baseline for measuring your energysaving efforts.

ADOPT NO-COST WAYS TO **SAVE ENERGY**

Small changes can lead to significant savings:

- Turn off lights and unplug electronics such as chargers when not in use.
- ► Close or lower window coverings to regulate the temperature indoors.
- Change your air filters regularly as recommended.
- Use ceiling fans strategically: counterclockwise in summer and clockwise in winter to force warm air down.
- ▶ Grill outdoors in summer to keep the heat out of the kitchen.
- Insulate your home.
- Weatherproofing is key to maintaining comfort and reducing energy use.
- ► Check for air leaks around windows and doors using the wet finger or tissue test. To check for air leaks follow the following steps from the U.S. Department of Energy:
- 1. Turn off all combustion appliances such as gas burning furnaces and water heaters.
- 2. Ensure all external openings are closed such as windows, external doors and fireplace flues.
- 3. Turn on all exhaust fans that blow air outside, such as your clothes dryer, bathroom fans, or stove vents.
- 4. Using a wet finger or tissue, carefully run your hand around your door and window frames. If you feel a breeze on your finger or see the tissue blowing,

- you know you have air leaks or cracks around those windows and doors.
- Apply caulk or weather stripping to prevent drafts.
- ▶ Remember to keep doors closed to maintain indoor temperature.

GET SMART WITH YOUR THERMOSTAT

Optimize your heating and cooling by using your programmable thermostat's features — many homeowners never use them — and allow it to adjust the temperature when you're asleep or away.

- Consider upgrading to a smart thermostat for automatic adjustments.
- In general, adjust the thermostat a few degrees up or down for energy savings.

EXPLORE RENEWABLE ENERGY

Consider harnessing the power of natural energy sources.

- ► Research local community solar programs that may be available. Contact your local electric co-op to learn if they have a community solar program.
- Research whether installing solar panels on your home would be cost effective. Call your local electric coop before contacting a solar installation company to gather information about connecting to the electric grid and to understand requirements for doing so.

Consult your electricity provider early in the process. They can provide valuable information about:

- Grid connection requirements.
- Cost considerations.
- ▶ Potential rebates available for renewable energy installations.

By implementing these tips, you'll not only save on energy costs but also contribute to a more sustainable community. For more tips on building a resilient and efficient home, visit www.SafeElectricity.org.



Download the SmartHub App and Register Account (Mobile)

STEP 1



On your mobile device open your app store application.

STEP 2



Search for SmartHub and look for the SmartHub icon. Follow the instructions to install the app on your device.

STEP 3



Once the app installs, tap the SmartHub icon on your device to open the app.

STEP 4



After SmartHub opens to the initial launch screen, tap the appropriate button to search by Name.

STEP 5



Search for the name Twin Valley Electric Cooperative and tap on our name in the search results list.

STEP 6



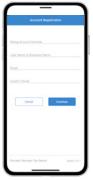
Tap the **Confirm** button to confirm your choice.

STEP 7



From the SmartHub login screen, look for the link that says Don't have an account? Register now.

STEP 8



Fill out the registration form completely and tap the Continue button.

STEP 9



On the security check screen, answer all of the security questions and tap the Register button.

STEP 10



After you tap the Registration button, you will receive an email that will ask you to Verify Account.

STEP 11



Open the email and tap on the Verify Account button.

STEP 12



The next step will ask you to set your new password on your account. Type your new password in twice and tap Save.

STEP 13



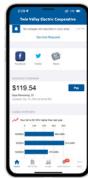
During your first log in, you may be asked to accept our terms and conditions. Tap the **Accept** button to do so.

STEP 14



If you would like to activate Paperless Billing move the Activate Paperless Billing slider to the right and tap Save.

STEP 15



Congratulations! You have successfully installed the app and registered your SmartHub account!

A Balancing Act:

ELECTRICITY SUPPLY AND DEMAND

Behind the scenes, a network of people and facilities work together to ensure you have electricity when you flip the switch.







Electricity is generated at a power plant, then sent across the grid to homes, schools and businesses.

REGIONAL GRID OPERATORS







Regional Transmission Organizations (RTOs)

Independent System Operators (ISOs)

Flectric Utilities

The amount of electricity generated and how much is sent to where it's needed are typically coordinated and monitored by regional grid operators.



As electricity demand varies throughout the day, grid operators, power plant operators and electric utilities work to forecast, plan and purchase enough electricity for everyone.



Ensuring communities have the exact amount of electricity they need is a challenging task, but a network of industry experts make it happen every day.

FACTORS THAT IMPACT ELECTRICITY SUPPLY AND DEMAND

- Demand Surges
- Extreme Temperatures
- Infrastructure Costs and Availability
- Supply Chain Challenges
- ▶ Fuel Costs
- Federal and State Regulations

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evenings when you're cooking dinner, running appliances and watching TV. Demand also increases when weather patterns change, such as extremely warm or cold temperatures.

MANAGING SUPPLY AND DEMAND ACROSS THE GRID

Across the country, other electric utilities are managing the same task of balancing supply and demand, which is why we have a larger network of key players in place to ensure enough power is delivered across the grid.

In most cases, the amount of electricity generated and how much is sent to specific areas are coordinated and monitored by regional transmission organizations (RTOs) and independent system operators (ISOs). In Kansas, our RTO is the Southwest Power Pool, the monitor for our 14-state region. In other areas, individual electric utilities perform these tasks.

RTOs, ISOs and electric utilities act as air traffic controllers for the electric grid. They forecast when you, your neighbors and communities across a large region will need more power. These organizations take measured

steps to ensure there's enough supply to meet demand.

LOOKING AHEAD

As the energy sector undergoes rapid change, it's important for all consumers to understand the basics of electricity supply and demand.

Electricity use in the U.S. is expected to rise to record highs this year and next, with the demand for electricity expected to at least double by 2050. At the same time, energy policies have been pushing the early retirement of always-available generation sources, which will undoubtedly compromise reliable electricity.

Twin Valley remains committed to providing affordable, reliable energy to the members we serve. That's why we are preparing now for increased demand and other challenges that could compromise our local electric supply.

Managing the balancing act of electricity supply and demand is a complex job, which is why we have a network of utilities, power plant operators and energy traffic managers in place to direct the electricity we need and keep the electric grid balanced.



OUR OFFICE WILL BE CLOSED ON JAN. 1.

TIPS TO AVOID **ERGY SCA**



Never make a utility bill payment to anyone calling you on the phone, texting you or emailing you. Always call your utility company at the number provided on your bill or on the utility's website if you have a question about payment or billing information. Know your utility bill payment options online, by phone, automatic bank draft, mail or in person.

SOURCE: UTILITIES UNITED AGAINST SCAMS