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SWRE POWER SOURCE
A Supplement to Oklahoma Living

BEGINNER'S GUIDE TO THE ELECTRIC GRID

Electricity plays an essential role in everyday life. It powers our homes, offices, hospitals and schools. We depend on it to keep us warm in the winter (and cool in the summer), charge our phones and binge our favorite TV shows. If the power goes out, even briefly, our lives can be disrupted.

The system that delivers your electricity is often described as the most complex machine in the world, and it's known as the electric grid.

What makes it so complex? We all use different amounts of electricity throughout the day, so the supply and demand for electricity is constantly changing. For example, we typically use more electricity in the mornings when we're starting our day, and in the evenings when we're cooking dinner and using appliances. Severe weather and other factors also impact how much electricity we need.

The challenge for electric providers is to plan for, produce and purchase enough electricity so it's available exactly when we need it. Too much or too little electricity in one place can cause problems. So, to make sure the whole system stays balanced, the electric grid must adjust in real time to changes and unforeseen events.

At its core, the electric grid is a network of power lines, transformers, substations and other infrastructure that span the entire country. But it's not just a singular system. It's divided into three major interconnected grids: the Eastern Interconnection, the Western Interconnection and the Electric Reliability Council of Texas. These grids operate independently but are linked to allow electricity to be transferred between regions when backup support is required.

Within the three regions, seven balancing authorities known as independent system operators (ISOs) or regional transmission organizations (RTOs) monitor the grid, signaling to power plants when more electricity is needed to maintain a balanced electrical flow. ISOs and RTOs are like traffic controllers for electricity.

Jeff Simpson, CEO

STAY IN THE KNOW: UPDATE YOUR INFO

"At Southwest Rural Electric, we're constantly striving to improve our operational efficiency so we can provide the most reliable electric service possible for our consumer-members.

We rely on data for nearly every aspect of our operations, which is why we could use your help.

By making sure we have your most accurate and complete contact information, we can continue to provide the high level of service that you expect and deserve. Up-to-date information enables us to improve customer service and enhance communications for reporting and repairing outages. It also allows co-op members to receive information about other important programs, events and activities.

Current contact information allows for a more efficient power restoration process during an outage.Your phone number is linked to your service address in our outage management system. This means that when you call to report an outage, our system recognizes your phone number and matches it with your meter location. That helps us predict the location and possible cause of an outage, making it easier for our crews to correct the problem.

While we always do our best to maintain continuous service, we occasionally plan outages to update, repair or replace equipment. In these instances, we can provide advance notification to affected members through automated phone messages or email if we have your updated contact information and communication preferences.

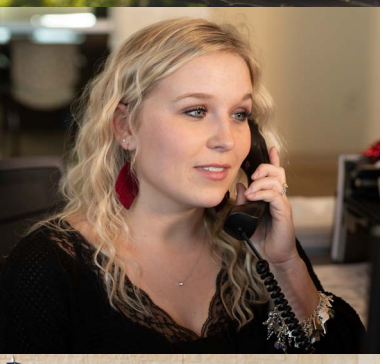
Keeping the co-op updated with your information also helps us when there's a question about energy use or billing. Discrepancies on your account can be taken care of promptly if SWRE can easily get in touch with you.

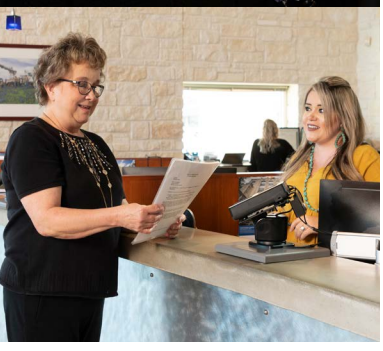
Emails and automated phone messages are also used to notify registered members of any changes in co-op events.

Many of you have been members of the co-op for years, and it's likely that your account information hasn't been updated for some time. We recognize that many members now use a cellphone as their primary phone service, and we might not have that number in our system.

I want to emphasize that when you provide your contact information to the co-op, we will never share this information with any third parties. It's only used by SWRE to send important information to you.

Please take a moment to confirm or update your contact information by contacting us at 1-800-256-7973. By doing so, you'll help us improve service and efficiency so we can better serve you and all members of the co-op."





BEGINNER'S GUIDE TO THE ELECTRIC GRID CONTINUED...

The journey of electricity begins at power plants. Power plants can be thought of as factories that make electricity using various energy sources, like natural gas, solar, wind and nuclear energy. Across the U.S., more than 11,000 power plants deliver electricity to the grid.

Southwest Rural Electric receives power from our generation and transmission (G&T) co-op, Western Farmers Electric Cooperative (WFEC). We work closely with WFEC to provide electricity at the lowest cost possible. Being part of a G&T benefits members like you by placing ownership and control in the hands of your co-op, prioritizing affordability and reliability, supporting local economic development and fostering a sense of community.

To get the electricity from power plants to you, we need a transportation system. High-voltage transmission lines act as the highways for electricity, transporting power over long distances. These lines are supported by massive towers and travel through vast landscapes, connecting power plants to electric substations.

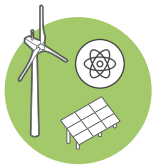
Substations are like pit stops along the highway, where the voltage of electricity is adjusted. They play a crucial role in managing power flow and ensuring that electricity is safe for use in homes and businesses.

Once the electricity is reduced to the proper voltage, it travels through distribution power lines, like the ones you typically see on the side of the road. Distribution lines carry electricity from substations to homes, schools and businesses. Distribution transformers, which look like metal buckets on the tops of power poles or large green boxes on the ground, further reduce the voltage to levels suitable for household appliances and electronic devices.

After traveling through transformers, electricity reaches you—to power everyday life.

We're proud to be your local, trusted energy provider. From the time it's created to the time it's used, electricity travels great distances to be available at the flip of a switch. That's what makes the electric grid our nation's most complex machine—and one of our nation's greatest achievements.

HOW ELECTRICITY GETS TO YOU

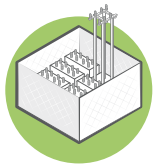


step 1
Generation
Electricity is generated from various sources.

step 2
Step-Up Transformer
Voltage is increased to push the electricity over long distances.

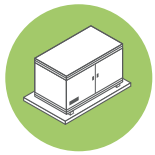
step 3
Transmission Power Lines
Lines carry electricity over long distances.

step 4
Transmission Substation
Voltage is lowered so electricity can travel across the local system.

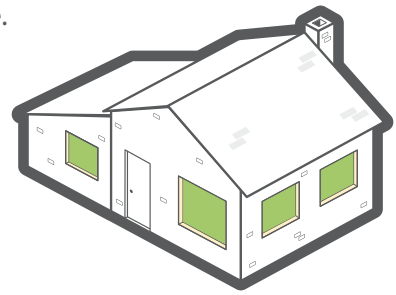


step 5
Distribution Substation
Voltage is lowered further for safe distribution.

step 6
Distribution Power Lines
Electricity travels across these lines in your community.

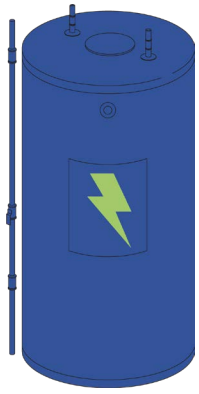


step 7
Final Stop
A transformer reduces voltage a final time, and electricity is sent to your home.



REBATES FOR CO-OP MEMBERS

SWRE members can receive a rebate for installing energy efficient fixtures and appliances on cooperative lines. SEER rating is required on all new installs to qualify. All SWRE rebate programs have limited availability.

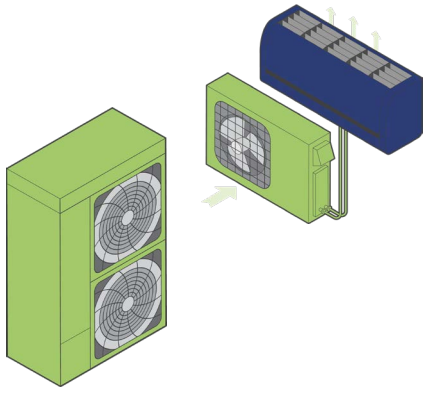


WATER HEATER REBATES

Rebate on electric water heater in new homes:
$200.00 per water heater

Conversion of existing gas water heater to electric water heater:
$200.00 per water heater

Replacing existing electric unit with electric water heater:
$25.00 per water heater

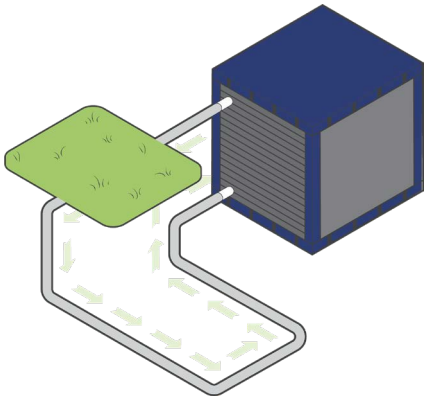


HEAT PUMP & MINI SPLIT REBATES

Installation of electric heat pump in a new home:
$200.00 per heat pump

Conversion of existing gas heat to electric heat pump:
$200.00 per heat pump

Replacing existing electric unit with electric heat pump:
$100.00 per heat pump



GEOTHERMAL HEAT PUMP REBATES

Contact member services for the most current offer!

Barry Holt
Manager of Member Services
1-800-256-7973

Southwest Rural Electric
P.O. Box 310 • 700 N. Broadway
Tipton, OK 73570-0310
Headquarters: 1-800-256-7973

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Bill Pay Options:

24/7 Bill Pay: 1-833-890-9510
SmartHub App or SWRE.com

Outage Reports:

24/7 Hotline: 1-833-590-0353
SmartHub App

SWRE is an equal opportunity provider and employer. SWRE *Power Source* is published monthly for distribution to members of SWRE and is produced by Rebecca Chambless.

WE'RE PROUD TO POWER YOU.