

SMART ENERGY PLAN

2023 Progress Report



We know you need reliable power now more than ever. At Ameren Missouri, we are investing in **new and upgraded substations, smart technology, stronger poles and upgraded power lines** to reduce outages and respond faster when they do occur. We are working diligently to create a more **resilient, reliable and sustainable** energy grid, **empowering** you and your community every step of the way.



ENERGY TO STAY CONNECTED

The Smart Energy Plan continues Ameren Missouri’s investment in communities across the state through smarter, more reliable energy delivery. Created by forward-thinking legislation passed by the Missouri General Assembly, the Smart Energy Plan has spurred thousands of grid modernization projects – supporting greater reliability from Kirksville to Cape Girardeau and St. Louis to Lake of the Ozarks.

These critical improvements provide families and businesses with the energy they need while keeping costs well below the Midwest and national averages.* Those lower rates, coupled with economic development, have helped Missouri attract new business and investment, and create or retain thousands of jobs in the state. And with more than one million smart meters now installed, Ameren Missouri is giving residential customers more choice, convenience and control over their energy options. As we move forward with the Smart Energy Plan, Ameren Missouri remains committed to powering the quality of life for all customers – meeting the energy needs of today and the future.

STRENGTHENING THE SYSTEM

The Smart Energy Plan benefits customers through upgrades to aging foundational grid infrastructure, including substations, meters, poles, wires and cables. These investments in smart technology support increased reliability, resiliency and flexibility.



Substations are the heart of the system. They change voltage to safely and efficiently deliver energy to homes and businesses. The Smart Energy Plan is upgrading the oldest substations – many are more than 50 years old – to support reliability and operational flexibility, including new smart technology to detect outages, rerouting and restoring power even faster.

Smart switches, strategically placed along power poles, can reduce outages from hours to minutes and even seconds by rerouting power while Ameren Missouri crews safely repair damaged lines. These devices, in conjunction with correlated grid upgrades, can improve reliability up to 40%.

We are upgrading **power lines and poles** to better withstand storms, high winds and other extreme weather events. These upgrades include stronger poles made of composite material. Increasing power line capacity provides flexibility to reroute power during an outage while crews safely make repairs.

We are upgrading **aging underground cable**, much of which is at least 40 years old. Due to degradation from direct contact with the soil, we are upgrading the cable and adding protective conduit, which will prevent outages and support the reliability of the energy delivery system.

New **smart meters** for Ameren Missouri customers mean convenience, choice and control, including new rate options that are tailored for customers. We have installed more than one million smart meters so far, and all electric customers will have a new meter by early 2025.

*According to the EEI “Typical Bills and Average Rates Report” for the 12 months ended June 30, 2023.

GROWING MISSOURI'S ECONOMY

The Smart Energy Plan supports local communities by promoting economic development to grow jobs and investment throughout Missouri. In 2023, 15 businesses announced plans to move to or expand in our service territory, resulting in more than \$360 million in capital investment and creating nearly 700 new Missouri jobs.

St. Louis-based Volpi Foods is upgrading and expanding its food processing plant in Union. The charcuterie company aims to reduce energy costs and invest in more sustainable, energy-efficient technologies.



* Since the beginning of the Smart Energy Plan



50% of the suppliers we worked with are Missouri-based



\$100M spent with Missouri-based diverse suppliers



\$467M spent with Missouri vendors and contractors

"Beyond the cost savings we can invest back into the business, we're particularly grateful to be partnering with Ameren Missouri in this important stage of our expansion."

— Dylan Puricelli
Engineering Manager for Volpi Foods

In Central Missouri, EquipmentShare celebrated the grand opening of a new industrial and upfitting facility in Moberly. The investment is expected to create 150 jobs over the next four years. The company, which offers nationwide equipment rentals and service distribution, worked closely with Ameren Missouri throughout its expansion.

Washington, Missouri-based WEG Transformers USA completed a \$10 million expansion at its facility in Franklin County last August. "We supply transformers to investor-owned utilities throughout the country, but Ameren is our largest customer at this facility," said Phillip James, general manager of WEG Transformers USA. Company leaders credit the Smart Energy Plan as one of the drivers behind its decision to expand.

KEEPING RATES AFFORDABLE

We continue working to keep customer rates as low as possible while making the necessary investments to build the stronger, smarter and cleaner energy system our customers expect. That's why our residential rates remain 27% below the Midwest average compared to other electric utilities.

*According to the EEI "Typical Bills and Average Rates Report" for the 12 months ended June 30, 2023.



Unless otherwise noted, all numbers based on 2023 data.

PROJECT STORIES

Historic Storms Showcase Smart Energy Benefits

An unprecedented string of storms impacted communities throughout the state during the summer of 2023. Between June 30 and Aug. 2, waves of severe weather, with winds reaching 70 mph, downed trees and disrupted service. While Ameren, local contractors, and out-of-state crews mobilized to make repairs and restore power, Smart Energy Plan upgrades helped to keep the lights on for more than 55,000 customers. Investments in automated switches and storm-hardened lines helped to avoid more than 27 million minutes of outages during this time.

“To know that Smart Energy Plan upgrades helped keep the power on for so many during this challenging stretch really shows we’re making the right investments.”

— Lucas Klein

Director of Distribution Operations for Ameren Missouri



Supporting Growth at Lake of the Ozarks

A new substation is supporting rapid growth of year-round residents using electric heat at Lake of the Ozarks. The substation will relieve existing load at two nearby substations. This \$14 million Smart Energy Plan investment also includes new wood and composite poles, automated sensors, and two-way communication devices. These upgrades will support reliability for thousands of customers in the Four Seasons area at the lake.

Investing in the Future of Jefferson County

Much of the grid infrastructure being upgraded through the Smart Energy Plan is reaching the end of its useful life. In Horine, crews replaced a 60-year-old substation with a new, larger-capacity substation better equipped to support the growing community. The substation includes two new transformers and four switchgears equipped with smart technology that can respond quickly to outages and reroute power. This investment will support reliability for 4,500 customers and support new residential and commercial developments in neighboring Herculaneum.



Unless otherwise noted, all numbers based on 2023 data.



Made in Missouri for Missourians

A new substation in St. Charles County highlights Ameren Missouri's commitment to support local suppliers through the Smart Energy Plan. The substation in Foristell features two transformers made by WEG Transformers of Washington, Missouri, and four switchgears manufactured in Fulton, Missouri, by Avail Switchgear Systems. Every Smart Energy Plan upgrade using in-state suppliers is a reinvestment in the local economy. The Foristell project, which also includes 10 miles of new lines between Wentzville and Wright City, is a more than \$23 million dollar investment supporting reliability and future load growth in the area.

Going Underground in the Bootheel

In 2023, Ameren Missouri completed pole and wire upgrades along a 5-mile stretch serving Hayti and Caruthersville. These upgrades include stronger composite poles and smart switches above ground, and undergrounding wires previously crossing above Interstates 55 and 155. The new underground portions not only support greater reliability but also increase safety by eliminating the risk of power lines falling across the interstate due to storm damage.



Grid Flexibility Boosts Reliability in St. Louis County

Thanks to the Smart Energy Plan, Ameren Missouri upgraded several substations in St. Louis County in 2023. For example, a new, higher-capacity transformer in Florissant will support greater reliability for nearly 24,000 customers in this community. Coupled with other recent Smart Energy Plan investments in the area, Ameren Missouri now has greater flexibility to handle growing electricity demands during times of high usage and the ability to reroute power when and where it's needed most.

CUSTOMER BENEFITS OF SMART METERS

Ameren Missouri is nearing completion of smart electric meter installations across its service territory. The project, which began in July 2020, is a full year ahead of schedule and nearly 90% complete.* Ameren crews installed the one millionth smart meter at a home in Kirksville last August.

“The new meters unlock multiple benefits for customers. The meters provide customers with more precise usage data so they can easily manage usage and tailor their rate plan to fit their lifestyle and potentially save money.”

— John Luth

Director of the smart meter program

Thanks to the two-way communication capabilities of the new meters, customers have a smoother, faster experience when starting and stopping service.

Smart meters offer additional customer convenience by automatically detecting and reporting outages. “Real-time feedback during an outage is a crucial tool for managing restoration efforts,” says Luth. “Automated reporting allows us to identify a problem and deploy resources when and where they’re needed most.”



COMMITTED TO CLEAN

A new neighborhood solar installation located at Delmar DivINe in St. Louis’ West End neighborhood is expected to provide enough energy to power about 35 homes while offering shade and weather protection for almost 200 employees and visitors to the nonprofit’s campus. Delmar DivINe provides shared space and capacity-building programs for nonprofit and retail tenants that deliver a variety of social services as well as financial and career assistance to the community. The Energy Center went into service in August 2023.

*As of December 31, 2023.



YOUR ENERGY, YOUR WAY

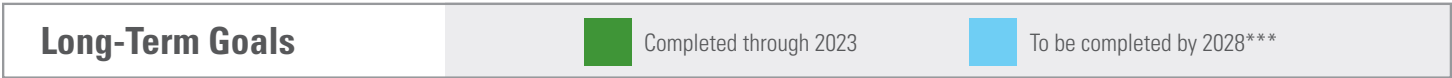
Customers with the new smart meters can take advantage of Ameren Missouri’s My Energy Manager. The system is accessible from the customer’s online account. The interactive dashboard shows the specific estimated energy usage of each appliance and allows Ameren to offer personalized savings recommendations based on individual usage data and surveys.



BY THE NUMBERS

What's Ahead?

Every investment through the Smart Energy Plan – from smart meters to substations – makes the grid more resilient and reliable. As we move forward in 2024 and beyond, each new upgrade builds on the ones before it. Ameren Missouri is ready to continue this work through the next five years of the Smart Energy Plan, to power the quality of life for years to come.



Upgraded Power Line Miles*

Among 4,200 miles of line, we're addressing those with the lowest performance.



Smart Switches

Installation of smart switches has improved reliability up to 40%.



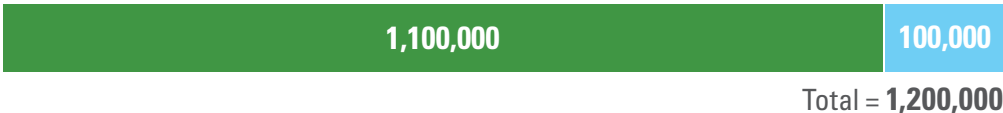
Substations

We are addressing capacity limitations and replacing the oldest substations in the system.



Smart Meters**

Upgraded smart meters enable convenience, choice and control for customers.



"The Smart Energy Plan is working as designed to create a more resilient and reliable grid. Our investments in a smarter, stronger system prevented tens of thousands of customer outages in 2023. The expansion and extension of the Smart Energy Plan will allow us to deliver additional modernization projects benefiting our customers for years to come."

— Mark Birk
Chairman and president of Ameren Missouri

All numbers accurate as of December 2023.
 *This refers to Ameren Missouri's subtransmission circuits.
 **Does not include gas modules. All installations by 2024.
 ***Long-term targets are estimates and contingent on funding levels.

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