

# Focused on serving the community

Utility companies work to reduce carbon energy, provide renewable energy



**◀ENVIRONMENTALLY FRIENDLY**

LG&E and KU has committed to electrifying 10% of its corporate fleet by 2030. It has also installed nearly two dozen charging stations across its service territories.

monthly bills based on their subscription level. By participating in the program, customers get the benefits from solar energy without having to pay the added up-front and long-term expenses that come when installing and maintaining a private solar system. Since July 2019, the facility has produced more than 2 million kilowatt-hours of renewable energy for participating customers.

A total of eight 500-kilowatt Solar Share sections are planned for the Simpsonville facility, for a total of 4 megawatts.

Construction of each section is completed as it becomes fully subscribed. The utility is currently accepting enrollments for the fifth section, which is now nearly 80% subscribed.

In conjunction with parent company, PPL Corp., LG&E and KU are committed to achieving net-zero carbon emissions by 2050 as part of efforts toward a sustainable energy future. It is targeting an 80% reduction from 2010 levels by 2040 and a 70% reduction by 2035.

**LG&E-KU joins UK in research project**

LG&E-KU, in partnership with the University of Kentucky Center for Applied Energy Research (CAER), has launched an innovative program to study

BY RUSS BROWN

**P**ROGRESS in renewable energy and reducing emissions of carbon dioxide in the coming decades is a priority with the U.S. government, and Kentucky utilities are continuing to do their part in that area, as evidenced by recent initiatives and projects.

Construction is complete and two new sections of LG&E and KU's Solar Share facility in Simpsonville are now fully operational and producing energy for subscribing customers. Thanks to subscribers of sections three and four—which include more than 1,300 LG&E and KU residential customers and several business customers—development of the Solar Share site is now 50% complete. Both sections consist of 1,150 solar panels.

The subscription-based Solar Share program is a cost-effective option available to the utilities' residential, business and industrial customers who want to support solar energy for as little as 20 cents per day.

“Watching the site develop and knowing it is a direct result of our customers’ interest and participation has been both exciting and rewarding,” said Eileen Saunders, LG&E and KU vice president—customer services. “We developed this program in response to their desire to support local solar generation and we’re pleased to continue helping all of our customer categories advance their personal and professional sustainability goals.”

When energy is produced by the facility, customers earn credits on their



**▶SOLAR POWERED** LG&E and KU's Solar Share facility expanded in the spring of 2021, thanks to increased participation of its business and residential customers. Two more sections of the facility are now fully subscribed, making the Solar Share site in Simpsonville 50% complete.

LG&E and KU photo

capture of carbon dioxide emissions at natural gas combined cycle power plants.

The goal is to develop a flexible, net negative CO<sub>2</sub> emissions technology that will be directly applicable to natural gas combined-cycle power generation while minimizing the associated capital costs of installing the technology. In addition to capturing CO<sub>2</sub>, the system will produce two value-added streams—hydrogen (H<sub>2</sub>) and oxygen (O<sub>2</sub>)—which can be sold to offset the cost of CO<sub>2</sub> capture.

“Being able to improve the lifespan and efficiency of natural gas combined-cycle power plants while simultaneously achieving negative carbon dioxide emissions will have a profound impact on Kentucky’s energy industry,” said Kunlei Liu, associate director for research at CAER and an associate professor of mechanical engineering in UK’s College of Engineering.

### EKPC launches sustainability plan

East Kentucky Power Cooperative (EKPC), whose owners consist of 16 electric cooperatives as well as 1.1 million customers in the central and eastern parts of the state, has instituted a sustainability plan with goals of reducing carbon dioxide emissions 70% by 2050 based on 2010 emissions.

Among other things, the plan establishes a framework to develop strategies to increase

Photo courtesy of Kentucky American Water



fuel diversity and promote environmental stewardship; ensure EKPC is working closely with its 16 owner-member electric cooperatives to meet their changing needs; and attract and retain employees with the knowledge and skills to meet Kentucky’s energy needs.

“We must focus on a shifting energy landscape, now and in the future, and this plan will be vital to helping our organization do that,” said EKPC President and CEO Anthony “Tony” Campbell. “This sustainability plan is a living, breathing document. As circumstances change, the plan will continue to evolve . . . .”

“We must recognize that we face shifting expectations from a growing number of stakeholders, including cooperative members, policymakers, lenders and others,” said Don Mosier, executive vice president and chief operating officer.”

Throughout the past year, EKPC has kept important work and projects on track despite challenges posed by the pandemic. Work has continued on \$262 million in projects to ensure EKPC’s largest power plant, Spurlock Station, remains in compliance with tightening federal environmental rules. Improvements were completed at its Bluegrass and Cooper Stations.

EKPC marked its 80th anniversary in 2021.

### American Water completing upgrades

The Kentucky Energy and Environment Cabinet has consistently reported that the state’s 434 public water systems produce excellent quality water and have a high rate of compliance with the Safe Drinking Water Act (SDWA) requirements.

One of the main providers is Kentucky American Water (KAW), which continues to invest in infrastructure projects such

▲ **ON TAP** Kentucky American Water, a subsidiary of American Water, is the largest investor-owned water utility in the state, providing services to approximately half a million people.

as \$35 million worth of upgrades to its two water treatment plants in Lexington, and one at Jacobson Reservoir that was announced last summer.

This year, KAW undertook \$8 million in water main replacements the Kentucky Public Service Commission authorized in 2020 for KAW’s new Qualified Infrastructure Program (QIP). The QIP enables the company to replace aging water system infrastructure at a quicker pace before it becomes potentially more problematic and more costly to replace. In addition to QIP projects, the company invests approximately \$25 million annually in capital improvements.

Among the water main improvements were projects near the UK campus, where approximately 3,500 linear feet of water main and valves that were installed in the 1920s were replaced to improve both the flow and water quality. In another Lexington neighborhood, approximately 4,500 linear feet of water mains and valves that were installed in the 1930s were replaced, as well as seven fire hydrants. A third project involved upgrading approximately 3,000 linear feet of water main with new, ductile iron pipe.

Kentucky American Water has been awarded a 2021 Diversity and Inclusion Award from the Kentucky/Tennessee Section of the American Water Works Association for its outstanding commitment to an inclusive and diverse workplace. The company received the award at a ceremony in August during the Kentucky/Tennessee Water Professionals Conference, attended by nearly 1,500 water industry professionals. ●

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President  
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Consistently ranked among the best companies for customer service in the U.S. and recognized nine times as one of the top utilities for economic development by *Site Selection* magazine, Louisville Gas and Electric and Kentucky Utilities are committed to attracting and keeping businesses in the Bluegrass and making the commonwealth a better place to live.

As the energy landscape continues to evolve, LG&E and KU are evolving with it. The utilities continue to create programs and offerings to help meet the goals of business and residential customers – including empowering customers with energy data to help better manage energy usage, providing opportunities to support and grow renewable energy and installing publicly accessible charging stations to support electric vehicle adoption. Comprised of coal, natural gas, hydroelectric and solar, LG&E and KU maintains a diverse generation mix and rates among the lowest in the nation.

An aerial photograph of a vast solar farm at sunset. The rows of solar panels stretch across the landscape, reflecting the golden light of the setting sun. In the lower right foreground, a worker wearing a hard hat and a dark jacket is looking at a tablet. The sky is a mix of orange, yellow, and blue, with the sun low on the horizon.

empowering sustainability  
in Kentucky.

*Aron, Manager,  
Technology Research  
and Analysis,  
at Kentucky's largest  
universal solar facility.*

At KU, we're helping build stronger and more sustainable communities by promoting business incentives to help grow jobs and offering more renewable energy options, including new ways to support local solar, to our more than 1.3 million customers. All while keeping energy costs well below the national average. Now more than ever, our energies go to serving you. [lge-ku.com/sustainability](https://www.ku.com/sustainability)

