

PPL, affiliate partners selected for \$72 million research grant from the U.S. Department of Energy's Office of Clean Energy Demonstrations

ALLENTOWN, Pa., Feb. 2, 2024 /PRNewswire/ -- PPL Corporation (NYSE: PPL) announced today the company and its research partners have been selected for a \$72 million award negotiation by the U.S. Department of Energy (DOE) Office of Clean Energy Demonstrations (OCED) to help fund a ground-breaking carbon dioxide (CO₂) capture research and development project expected to cost in excess of \$100 million.

The research project and new carbon capture system – developed in partnership with the University of Kentucky and others – will be hosted at PPL subsidiaries Louisville Gas and Electric Company's (LG&E) and Kentucky Utilities Company's (KU) Cane Run 7 natural gas combined-cycle generating station in Louisville, Ky.

"Across PPL, we continue to pursue a comprehensive clean energy strategy to achieve net-zero carbon emissions by 2050," said PPL President and Chief Executive Officer Vincent Sorgi. "As part of our strategy, we're focused on driving innovation and advancing technologies that can be scaled safely, reliably and affordably to meet our customers' energy needs, including carbon capture and sequestration technologies."

About the project

The new 20-megawatt research system planned for Cane Run is designed to capture a portion of the CO₂ from the natural gas plant's flue gas using an advanced heat-integrated CO₂ capture technology.

The goal is to capture up to 240 tons of CO₂ per day and up to 90,000 metric tons of CO₂ per year – an amount equivalent to the annual CO₂ emissions of 20,000 gasoline-powered cars, according to OCED. This is an important step in assessing the future viability of utility-scale carbon capture technology on natural gas units.

Current plans include the captured CO₂ being beneficially reused and purified in its entirety by a nearby manufacturer.

In addition, this project is designed to expand existing training and internship programs to create a workforce development plan that involves collaborating with local community leaders and organizations and partnering with local colleges and universities, including a Historically Black College and University, for implementation.

In addition to the University of Kentucky, collaborators on the project include EPRI; Kentucky State University; Visage Energy; and American Welding & Gas. Vogt Power International Inc., a Babcock Power Inc. subsidiary, and Siemens Energy, manufacturers of the Cane Run 7 Generating Station, are contributing technical support as part of the project team on integrating the new CO₂ capture system. Koch Modular Process Systems and others will support the design, fabrication and construction of the carbon capture unit.

The power of collaboration

PPL subsidiaries LG&E and KU have partnered with the University of Kentucky for nearly two decades on various carbon capture research projects and were founders of the university's carbon capture research program in 2006. Together with EPRI, the company and university deployed a pilot-scale carbon capture facility in 2014 at the KU E.W. Brown Generating Station.

"For almost two decades, the University of Kentucky has partnered with PPL on carbon capture projects that laid the foundation for industry-leading research. By scaling up UK's carbon capture technology and utilizing technology transfer, Kentucky can not only put carbon dioxide to industrial use, it can enhance the state's position in energy-intensive manufacturing sectors," said Dr. Eli Capilouto, President of the University of Kentucky.

The latest research initiative at Cane Run is one of more than 150 research and development projects that PPL

is currently collaborating on with over 30 industry and academic partners. Projects range from accelerating low-carbon energy technologies to strengthening network resiliency and building the grid of the future.

"There is tremendous value in collaboration when it comes to unlocking and accelerating clean energy innovation," said Sorgi. "And in this endeavor, we're thankful for the Department of Energy's support and eager to get to work with our research partners in driving innovation that can ultimately benefit our customers and the planet."

About PPL

PPL Corporation (NYSE: PPL), headquartered in Allentown, Pennsylvania, is a leading U.S. energy company focused on providing electricity and natural gas safely, reliably and affordably to more than 3.5 million customers in the U.S. PPL's high-performing, award-winning utilities are addressing energy challenges head-on by building smarter, more resilient and more dynamic power grids and advancing sustainable energy solutions. For more information, visit www.pplweb.com.

About the Office of Clean Energy Demonstrations

The U.S. Department of Energy's Office of Clean Energy Demonstrations (OCED) was established to accelerate clean energy technologies and fill a critical innovation gap on the path to achieving our nation's climate goals of net zero emissions by 2050. OCED's mission is to deliver clean energy demonstration projects at scale in partnership with the private sector to accelerate deployment, market adoption, and the equitable transition to a decarbonized energy system. Visit energy.gov/oced to learn more.

Note to Editors: Visit our media website at www.pplnewsroom.com for additional news about PPL Corporation.

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