

LG&E and KU forecast load growth due to data centers and economic development

Utilities' IRP filing models scenarios and addresses increase in load

LOUISVILLE, Ky., Oct. 18, 2024 /PRNewswire/ -- Kentucky has seen unprecedented economic growth in recent years that, fortunately, thanks to an interest in data centers and other economic development activity, doesn't appear to be slowing down.

As a result, Louisville Gas and Electric Company and Kentucky Utilities Company are forecasting in their Integrated Resource Plan (IRP) filed with the Kentucky Public Service Commission (KPSC) today the need for additional generation due to the expected influx of data centers and economic development across the utilities' service territories.

While the utilities' resource planning is an ongoing process, the IRP is a snapshot in time of the companies' planning and required by the KPSC to be filed every three years. It provides an updated view of load and resources needed to serve customers safely, reliably and at the lowest reasonable cost in the years to come.

Despite significant amounts of energy efficiency, customer-installed solar, and other energy-saving activities that are forecasted to reduce load by over 3.5 percent by 2032, LG&E and KU expect economic development to increase system load by 30 percent to 45 percent by 2032 compared to 2024. This unprecedented load growth will require additional generation to continue to provide the reliable electric service that customers expect.

The IRP also addresses the uncertainties around the latest environmental regulations, including the Good Neighbor Plan as it relates to ozone, the 2024 Effluent Limitation Guidelines, and the Clean Air Act Section 111(b) and (d) Greenhouse Gas Rules, all currently in litigation.

"There are always uncertainties when you are planning 15 years out. The idea behind the IRP is to pick a point in time and forecast the best path forward based on the current information that can be modelled," said David Sinclair, vice president—Energy Supply and Analysis. "We know there likely will be market and regulatory changes that could impact our actual plans, but we are confident that, given what we know today, the IRP modelling and our recommendation provide us with a solid direction forward."

In the base case, the utilities recommend that the least-cost path forward to support existing customers, new load and compliance with environmental regulations, would be to build two new natural gas combined-cycle generation units (one in 2030 and another in 2031); install 400 megawatts of battery storage in 2028, another 500 megawatts of battery storage and 500 megawatts of solar in 2035; and add selective catalytic reduction to the Ghent Generating Station Unit 2 in 2028 and environmental compliance technology at Ghent and Trimble County Generating Station by 2030. Mill Creek Generating Station Units 3 and 4 and E. W. Brown Generating Station Unit 3 would retire in 2035 near the end of the IRP planning period. In addition, since the growth of data centers load is driven by customers with aggressive carbon goals, the IRP presents an enhanced solar plan, if requested by customers or solar prices become more economically competitive with other generation. In that scenario the first 200 megawatts are forecasted to be installed in 2028, followed by 200 megawatts in 2030 and 600 megawatts in 2032.

While the IRP is part of the planning process, any new generation requires a filing with and approval from the KPSC.

About LG&E and KU

Louisville Gas and Electric Company and Kentucky Utilities Company, part of the PPL Corporation (NYSE: PPL) family of companies, are regulated utilities that serve more than 1.3 million customers and have consistently ranked among the best companies for customer service in the United States. LG&E serves 335,000 natural gas and 436,000 electric customers in Louisville and 16 surrounding counties. KU serves 545,000 customers in 77 Kentucky counties and 28,000 in five counties in Virginia. More information is available at www.lge-ku.com and www.pplweb.com.

For inquiries: contact the LG&E and KU media hotline at 502-627-4999

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