HED: Some Kentucky Power ratepayers struggle with electric bills. Could energy efficient homes help?

DECK: Advocates and utility met over past summer to work on energy efficiency. Advocates say more could be done

AUTHOR: Liam Niemeyer

Investor-owned Kentucky Power faced strong criticism last year when it asked to increase its electricity rates in response to "historic" economic decline among the 20 Eastern Kentucky counties it serves.

The Kentucky Public Service Commission (PSC) ultimately slashed the proposed rate hike by over two-thirds, approving a 5.66% increase in residential bills. But as part of that decision, the utility regulator agreed to a collaboration between Kentucky Power and a coalition of consumer and renewable energy advocacy groups to work on helping ratepayers reduce their electricity bills by making their homes more energy efficient.

Kentucky Power ratepayers already paid the state's <u>highest average residential electricity bill</u> at \$187 a month before last year's rate increase, and the area the utility serves includes some of the poorest communities in the state and entire country.

Advocates and the utility met over recent months, but the coalition of groups is disappointed in what Kentucky Power has proposed and plans to urge the PSC to push the utility to be more ambitious with its energy efficiency offerings. These groups say energy efficiency programs could offer home upgrades that households could repay through monthly utility bills while they save electricity and money.

Byron Gary, a Kentucky Resources Council attorney representing the groups, said much more could be done "to cut down on the suffering of folks in Eastern Kentucky as well as the continued reliance on fossil fuels."

He said the groups hope robust energy efficiency offerings could also reduce the utility's power demand and, the groups hope, dissuade the utility from building a new natural gas-fired power plant that ratepayers would bear the costs of.

"The cheapest kilowatt hour is the one you don't have to produce in the first place," Gary said.

Kentucky Power spokesperson Sarah Nusbaum in a statement said the utility is surprised and disappointed by the criticism "especially from groups we would have expected to support energy efficiency programs." Nusbaum said the utility's goal is to gauge interest from ratepayers in the new program offerings that could then lead to those programs being ramped up and expanded.

The ratepayers who pay the highest bills

During a hearing over Kentucky Power's rate case last year, then-PSC Chairman Kent Chandler honed in on data provided by the utility that showed Kentucky Power's poorest ratepayers had, on average, the highest electricity usage compared to the utility's average residential customer. That high usage leads to high bills.

"Those customers that are likely least able to afford their bill, relative to the average residential customer, have the highest bill, is that right?" Chandler asked Kentucky Power President Cynthia Wiseman during the hearing.

"I would presume that's true," Wiseman replied.

Bills are significantly higher for those whose incomes are low enough to qualify for federal assistance through the <u>Low Income Home Energy Program (LIHEAP)</u>, a federally funded program that helps low-income people afford utility bills.

The average monthly electricity consumption for all Kentucky residential ratepayers in 2022 was 1,094 kilowatt-hours, according to the Energy Information Administration. But the data presented by Chandler showed electricity consumption for Kentucky Power ratepayers was higher than that average — significantly higher for those receiving LIHEAP assistance.

During the winter months when electricity consumption peaks for Kentucky Power, the Eastern Kentucky utility's ratepayers who take part in LIHEAP on average use more than 2,500 kilowatt-hours per month. Multiply that consumption by Kentucky Power's average residential rate — approximately 16 cents per kilowatt in 2022, among the highest in the state — and you get monthly electricity costs north of \$400. During some months the past three winters, roughly 20% of Kentucky Power ratepayers who take part in LIHEAP have used more than 4,000 kilowatt-hours of electricity, according to a Kentucky Power data provided to the PSC. Wiseman during a November 2023 PSC hearing mentioned some ratepayers' monthly electricity usage has gone as high as 6,000 kilowatt-hours.

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A major reason cited by Kentucky Power leadership for such high electricity consumption: Many homes need better insulation and better, more efficient heating sources.

Disagreement after a collaboration

That's where energy efficiency programs and <u>"weatherizing"</u> a home can play a role in reducing electricity usage and electricity bills. Chris Woolery, a residential energy coordinator for the nonprofit Mountain Association supporting economic development in Eastern Kentucky, said that kind of work can include better insulation, air sealing a home and installing energy-efficient heat pumps to warm a household.

Many Kentuckians, Woolery said, have types of resistance heat such as electric furnaces and baseboard heaters, or they use space heaters.

"That is some of the most expensive and inefficient heat that you can buy," Woolery said, saying switching people to use heat pumps is key. "When a utility can invest in getting people off of resistance heat, they can often save so much money in peak demand, generation or power purchase costs that it offsets the investment."

A focus on improving Kentucky Power's energy efficiency programs is something that state government officials, nonprofit housing builders, consumer advocacy and renewable energy groups and Kentucky Power all collaborated on in a series of stakeholder meetings.

The meetings were characterized as "mutually beneficial" by Barry Nolen, a customer and distribution services manager with Kentucky Power, in testimony filed before the PSC.

Kentucky Power is proposing to add additional funding for an <u>existing program</u> that helps ratepayers get energy efficiency upgrades through home air sealing, new insulation, new doors, new windows and new lighting. The federal <u>Weatherization Assistance Program</u> is what facilitates those upgrades, but oftentimes homeowners who need that help <u>are deferred or denied it</u> because of damage or structural issues to a home.

If there's a roof leak, for example, newly installed insulation could be destroyed by water damage. That's where the federal <u>Weatherization Readiness Fund</u> comes in to support ratepayers making home repairs necessary before making energy efficiency improvements. Kentucky is also offering <u>additional funding for a federal fund</u>, up to \$1,000 for 60 homes over three years.

But advocates that collaborated with Kentucky Power say while the new investments are appreciated, they still don't meet the scale of the need among Kentucky Power's ratepayers.

"It must be in the thousands, if not the tens of thousands of homes that need improvements in Kentucky Power's territory," said Andy McDonald, vice-chair of the solar energy advocacy group Kentucky Solar Energy Society. "We appreciate that Kentucky Power is aware of this issue and concerned about it" but that the program "is not in proportion to the need."

The groups also see potential for going further with new programs the utility could offer. The groups point to a type of program called <u>Inclusive Utility Investment</u> (IUI) where individual households could receive energy efficiency upgrades to their home in exchange for a charge on their bill, potentially saving money on their bill while the utility still recoups their investment. They also point to the <u>potential of replicating a program home battery storage systems offered by a Vermont utility</u>.

McDonald shared with the Lantern a consultant report from the Vermont-based consulting firm Energy Futures Group that showed the amount of investment in energy efficiency programs Kentucky Power would be proposing is much lower than what other utilities offer and lower than what Kentucky Power itself has invested in the past. The PSC in 2018 <u>scrapped almost all of Kentucky Power's energy efficiency programs</u> stating the "high levels of spending" on the programs couldn't be justified.

Nusbaum, the Kentucky Power spokesperson, said in her statement the utility was focused on programs that were "proven and cost-effective to customers" and that the utility didn't believe an IUI program "would provide benefits that would outweigh the cost to our customers."

Nusbaum also said they determined the amount of funding for the Weatherization Readiness Fund through consultation with community action agencies in the state that administer such help, an investment level the utility believes is "impactful for customers" while also being mindful of what ratepayers will have to pay on their bills to implement such programs.

"We worked hard to develop this proposal to help our customers." Nusbaum said. "Some of the good work we felt was accomplished to make this happen, we did with some of the groups criticizing the current proposal. It's disappointing to hear negative feedback and opposition from these stakeholders, especially since this opposition can delay or even prevent the important [demand side management] benefits these programs will provide for our most vulnerable customers."

Worries over fossil fuels

These disagreements over energy efficiency come as Kentucky Power is seeking more power generation, some of it potentially through additional fossil fuels. The prospect concerns advocacy groups that the cost of building, for example, a new natural gas-fired power plant would fall on ratepayers.

"We're really excited that they're starting new programs, but we're just disappointed that the scale is not enough to affect that [natural gas] peaker plant that's proposed," Woolery said. "Every one of those investments is so meaningful to the families that received them, but in the grand scheme it's going to take a whole lot more to offset the need, right?"

Kentucky Power currently only has one natural gas-fired power plant and it's <u>unclear if the utility</u> <u>will have access to electricity generation</u> from a West Virginia co al-fired power plant beyond 2028.

As of now, that leaves the utility having to purchase the rest of their power from the regional electricity grid operator PJM, which can expose the utility to paying higher prices for power compared to producing it on their own. The PSC <u>scolded Kentucky Power last year</u> for having insufficient in-house power generation available during a December 2022 winter storm, forcing the utility to pay exorbitantly high electricity prices from PJM as much of the South and Midwest faced a power demand crunch.

Kentucky Power leadership in an <u>energy planning document filed to the PSC last year</u> wrote its "preferred plan" for the future was to add to its energy portfolio a 480 megawatt natural gas-fired power plant along with 700 megawatts of new wind power, 800 megawatts of new solar power and 50 megawatts of electricity battery storage. The utility also <u>put out requests to purchase</u> up to 1,800 megawatts of fossil fuel-fired and renewable energy last year.

Nusbaum, the utility spokesperson, in her statement said while energy efficiency programs are an important part of addressing future energy needs, it can not "alone cannot fully address all of them."

Woolery framed the energy efficiency programs as a choice Kentucky Power has to make: invest in a "really risky path" of adding a natural gas-fired power plant amid uncertainty over how greenhouse gas emissions will be regulated, or invest in a "virtual power plant." He said that means investing in energy efficiency in homes, rooftop solar, household battery storage that can reduce the future energy demand — and the potential for a new natural gas fuel-fired power plant — the utility is considering

"It just seems like the smart play, the play that's going to make more jobs, going to save more money, going to create less risk and uncertainty is to invest in ourselves, to invest in our communities," Woolery said.