

#PassOnGas, TVA.

A LIVABLE, AFFORDABLE FUTURE FOR VALLEY COMMUNITIES DEPENDS ON IT.

The Tennessee Valley Authority (TVA) - our country's largest federal utility - holds a deep legacy in the seven southeastern states it serves, as a New Deal-era job generator and energy powerhouse that brought a whole region out of the dark. Yet that reputation has taken a hit in recent years as the agency dwindles on clean, renewable energy investment, even to the direct contradiction of climate science and the Biden Administration's calls for carbon-free electricity.

TVA could be at the forefront of the transition off fossil fuels and pioneer the clean and just energy future we desperately need. But the agency is actively pursuing risky methane gas infrastructure that threatens to lock in its 10 million customers for decades more of price volatility, pollution, and energy insecurity.

Let's dive into some of TVA's arguments for expanding gas in the Valley.

Gas is NOT a "bridge fuel" to renewable energy - TVA President & CEO Jeff Lyash has repeatedly [referred](#) to methane gas as a "bridge fuel" - a necessary investment that will allow TVA to reliably interconnect renewable energy down the road. As TVA begins the retirement process for its remaining coal plants, the utility has firmly placed gas on the table as a replacement energy source. Recently, TVA proposed replacing its Cumberland coal plant (CUF) with a new gas plant and a pipeline. TVA asserts that "the proposed CC plant at CUF provides the flexibility to reliably integrate 10 GW of solar onto the system by 2035". However, if TVA builds a new gas plant, it is likely to become a stranded asset that ratepayers will be forced to pay for—well past 2035—given most plants have a 30-year lifecycle.

TVA is repeating a debunked talking point amplified by the fossil fuel industry. Replacing coal plants with new gas plants will not cut emissions by nearly enough, even if methane leakage is kept to a minimum. It is especially not a bridge to a stable or sustainable climate for communities. The reality is, this investment will *further delay TVA's progress* towards President Biden's mandate of 100% carbon-free electricity by 2035, and along the way, polluting communities who have long dealt with the risk - financial and health - of persistent fossil fuel reliance. Now, TVA could saddle *customers with billions in new gas infrastructure* that will soon become obsolete. All the while, TVA could be investing in clean, renewable, and affordable power like rooftop solar.

Gas is NOT reliable - TVA has long claimed that renewables intermittency must be paired with centralized fuel sources, like coal and gas. Just recently CEO Lyash argued for more gas by saying it was a necessary investment for dealing with intermittent solar and wind energy. One other alternative he mentioned was storage, but TVA has simply not given that solution the time of day.

Grid reliability is possible with renewables and storage. Battery storage is a competitive option to gas, and it will pave the way for a quicker and necessary transition to renewable, carbon-free energy sources. As studies have demonstrated, managing high capacities of wind and solar requires optimizing battery storage, demand response, and transmission. That's possible if TVA puts its ingenuity behind these solutions over polluting gas. Also, what TVA fails to recognize is that they have the country's largest hydro fleet and more than enough standing baseload generation to meet energy demand when the sun isn't shining, or the wind isn't blowing.

Gas is NOT cheap - One of the core tenets of TVA's mission is to provide "low cost" energy to Valley communities. TVA claims that part of the way they ensure this is through a diverse fleet and smart investments, like hedging fuel prices forward. At a recent board meeting, TVA acknowledged the year-to-year volatility of gas prices and that because of the utility's expert financial maneuvers, they "end up with an effective rate that is still in line with what it has been for the past decade." They claim that rising prices and likelihood of higher consumption during the hot summer months will bring higher power bills to most households, but these increases should not be alarming because they are less than in most of the country.

TVA isn't immune from gas price volatility and costs will continue to skyrocket. Just recently TVA increased its wholesale rates by 10% because fuel prices are so high. With more investment in gas its customers will be left to suffer the consequences of price volatility. Even more, these projects will soon become obsolete, leaving customers with billions in stranded assets. TVA has acknowledged that their region has the highest energy burden in the country. More fossil fuel investments will only aggravate that inequity. Even though TVA claims their prices are comparatively lower to utilities across the country, the burden of any further increase in energy bills is higher for TVA customers.

What is affordable, effective, and affordable is renewable energy. A [recent study debunks](#)ⁱⁱ TVA's argument that transitioning from coal to gas will keep electricity costs low. In fact, the cost of switching from coal to renewables has plunged by 99% since 2010. And solar and wind remain [cheaper to build and operate](#)ⁱⁱⁱ compared to fossil fuels.

Gas is NOT clean and safe. CEO Lyash said that TVA's objective is not 'renewables', adding that "in addition to being clean, which is critically important, the system must be affordable, reliable and resilient. If you sacrifice any one of those, it is not a sustainable solution." TVA touts "[clean natural gas](#)"^{iv} as checking all those boxes, and has recently discussed anticipated agreements with other energy companies to buy 'safer' gas.

An energy source that produces emissions and waste is simply not clean. TVA's energy mix is currently 45% fossil-fueled, and rather than bring that number down, they've opted to exchange one polluting fuel for another. With its plans for 4 GW of new gas by 2030, TVA is set to have the second highest planned gas capacity within

the decade. Even more, TVA is a massive polluter - ranking in the top 10 among the 100 largest energy producers - and averages 50 million tons of CO₂ emissions. While TVA likes to focus on the decreased carbon emissions they'd achieve by shifting from coal to gas, they gloss over the fact that methane gas has a significantly higher warming potential than carbon dioxide - about 30 times more. To mitigate climate catastrophe, decarbonization TVA must work to [eliminate non-CO₂](#)^v emissions like methane, in addition to just carbon emissions.

Solar is NOT destructive and land intensive - In its recent draft environmental impact statement on the Cumberland plant retirement, one of the reasons TVA did not pursue a solar alternative - and specifically large-scale solar and storage - is because it would have immense land use implications. TVA estimates that each megawatt of solar energy deployed requires at least 10 acres of land—a gross overestimate.

Distributed energy resources (DER)--like rooftop solar--have many benefits. TVA must significantly ramp up its renewable energy generation in the next few years to curb emissions and ensure a reliable, resilient grid. A combination of DER, energy efficiency, storage and demand response will not only help to reduce energy usage, but it will also diminish demand and need for large-scale projects like gas. TVA could also look at developing solar on brownfields or other already disturbed land.

ⁱ Southern Alliance for Clean Energy, "TVA Board gives away power plant decision-making authority to CEO Jeff Lyash, while also giving him a raise", November 11, 2021, <https://cleanenergy.org/blog/tva-board-gives-away-power-plant-decision-making-authority-to-ceo-jeff-lyash-while-also-giving-him-a-raise/>.

ⁱⁱ Matthew Gray, Transition Zero, "Fuel Switching 2.0: Carbon Price Index for Coal-to-Clean Electricity", May 10, 2022, <https://www.transitionzero.org/blog/fuel-switching-coal-to-clean>.

ⁱⁱⁱ Oil Change International, "Burning the Gas 'Bridge Fuel' Myth: Why Gas Is Not Clean, Cheap, or Necessary", May 2019, <https://priceofoil.org/content/uploads/2019/05/gas-myth-2-pager-final-web-r2.pdf>.

^{iv} Tennessee Valley Authority, "Clean Natural Gas Comes to Memphis", <https://www.tva.com/energy/our-power-system/natural-gas/clean-natural-gas-comes-to-memphis>.

^v Gabrielle B. Dreyfus, Yangyang Xu, Drew T. Shindell, and Veerabhadran Ramanathan, "Mitigating climate disruption in time: A self-consistent approach for avoiding both near-term and long-term global warming", *Proceedings of the National Academy of Sciences (PNAS)*, May 23, 2022, <https://www.pnas.org/doi/full/10.1073/pnas.2123536119>.