

Customer Rate Impacts of Utility Reliance on Natural Gas

2026 NASUCA Mid-Year Meeting

July 21, 2026

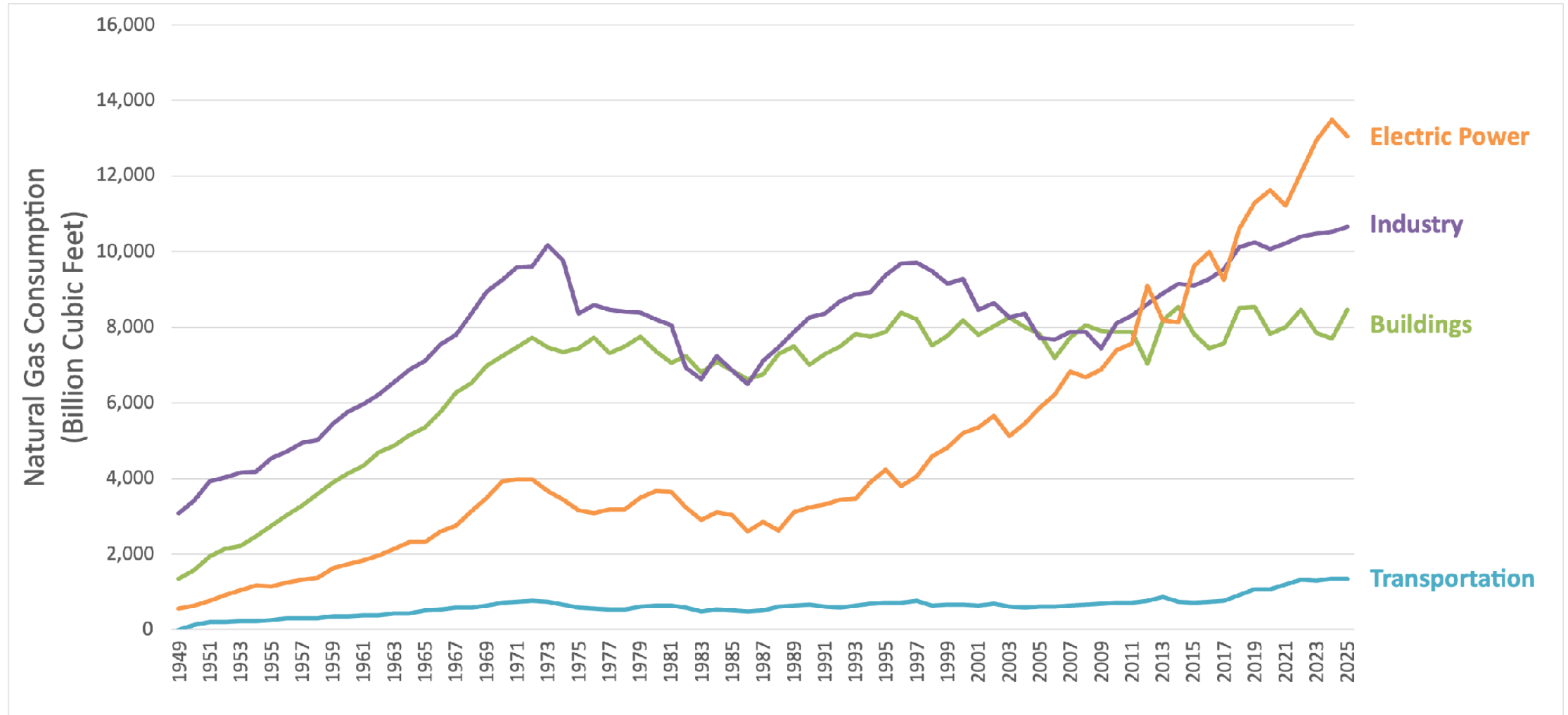
Asa Hopkins

Senior Vice President

Synapse Energy Economics

- We were founded in 1996 by Bruce Biewald and Jean Ann Ramey.
- Synapse is a leader for public interest and government clients in providing rigorous analysis of the electric power and natural gas sectors.
- Our staff of 50+ includes experts in energy, economic, and environmental topics.
- Synapse studies issues such as gas infrastructure planning, financial strength, and ratepayer implications.
- We are particularly attuned to the potential for inequitable outcomes for communities already facing high energy burdens and the need for proactive programs and planning to mitigate risk for these customers.

We Are 40 Years into an Electric-Sector Gas Boom



Source: U.S. Energy Information Administration, Total Energy Data Browser

Reliance on Gas Brings the Risk of Price Volatility and Uncertainty

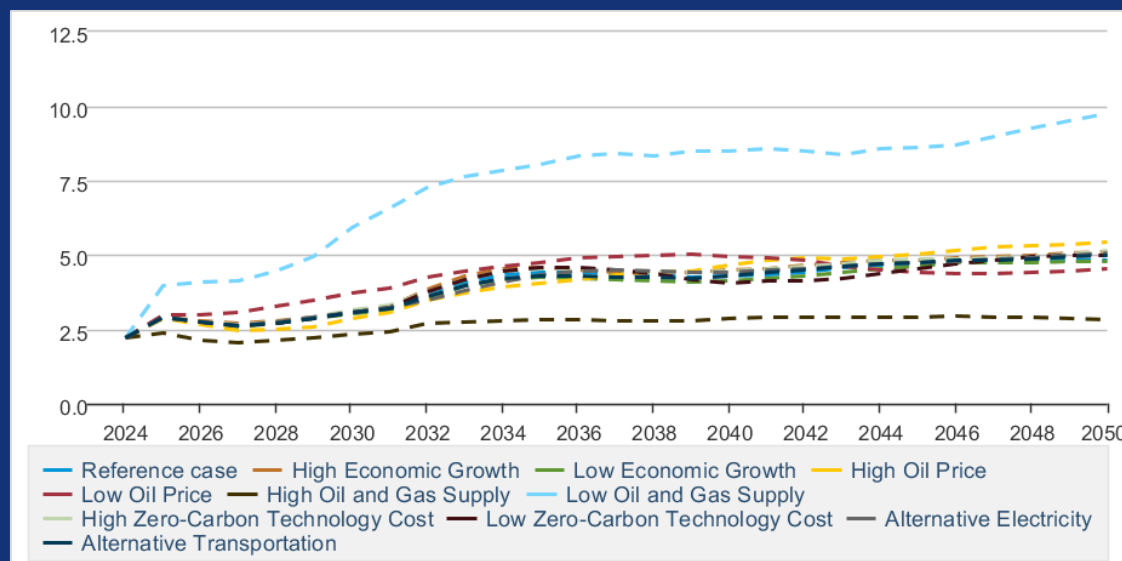
- Synapse analyzed three utilities that pass fuel cost risk directly onto consumers: Dominion Energy in Virginia, Georgia Power Company, and Arizona Public Service.
- **About 10-17% of the average residential customer's electric rate is from natural gas purchased for these utilities.**
- Gas prices can be volatile in the short term (Figure 1), and gas price forecasts that utilities use to set rates are uncertain (Figure 2).
- When gas prices are high, utilities pay more for gas and pass these costs directly onto their customers.

Figure 1. Historical Henry Hub natural gas spot price



Source: U.S. Energy Information Administration. Henry Hub Natural Gas Spot Price. Accessed March 15, 2026. Available at: <https://www.eia.gov/dnav/ng/hist/rngwhhdm.htm>.

Figure 2. Projected Henry Hub natural gas spot price (2024\$/MMBtu)

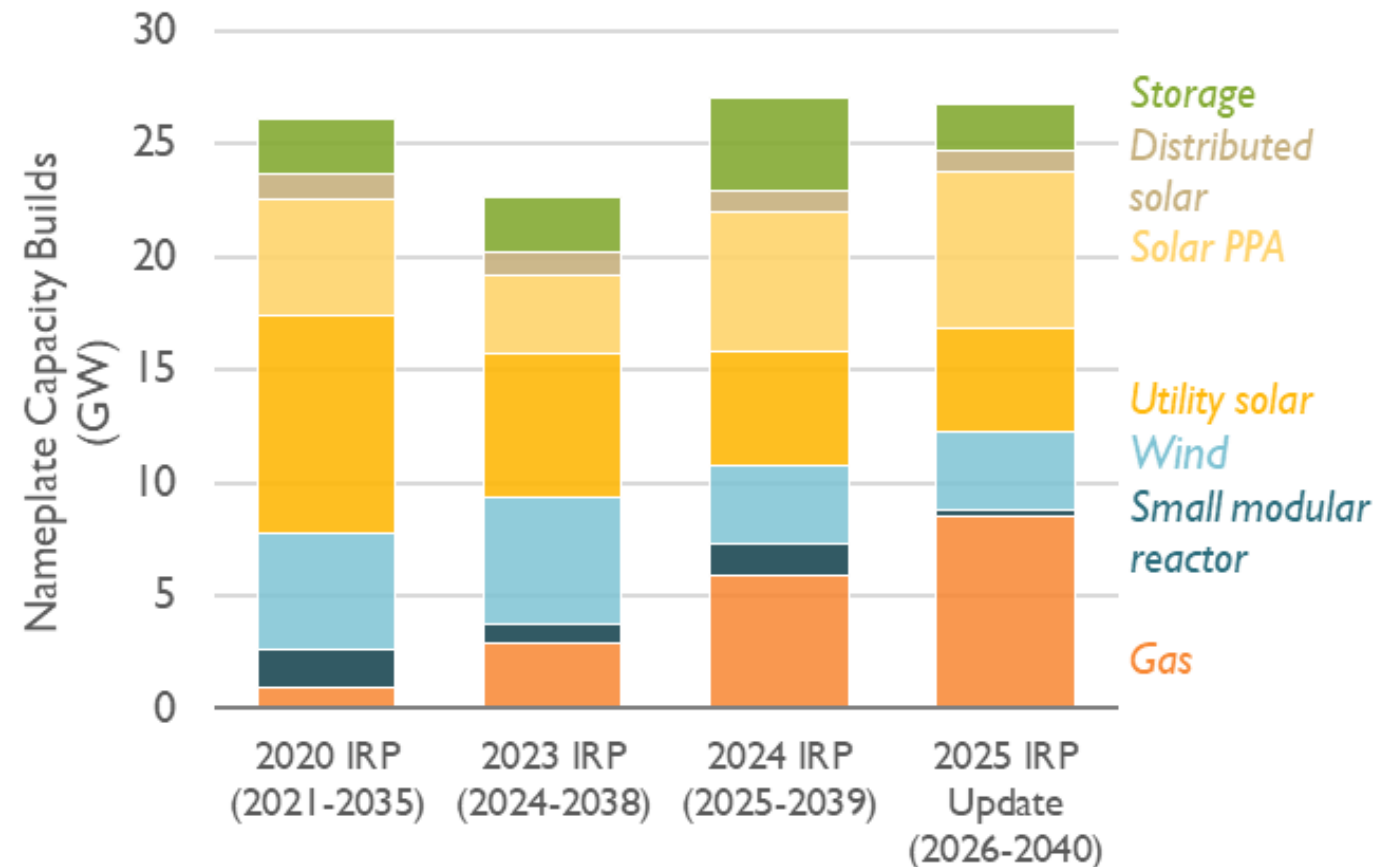


Source: U.S. Energy Information Administration. Annual Energy Outlook 2025. Accessed March 25, 2026. Available at: <https://www.eia.gov/outlooks/aeo/>.

Utilities Are Responding to Rapid Demand Growth by Increasing their Reliance on Natural Gas

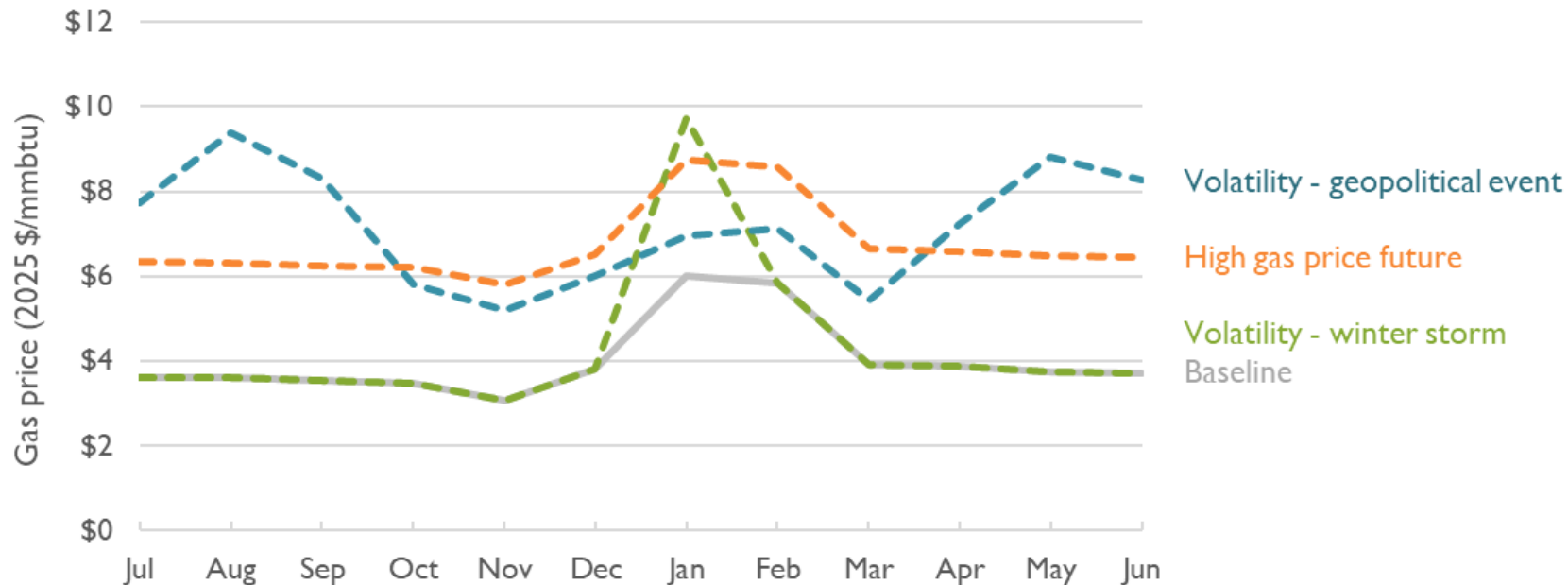
- With the rise of data center load growth, these utilities now plan to construct many new gas power plants to serve new large-load customers, which impose costs on all customers.
- Dominion Energy in Virginia plans to add **4.7 GW** of new gas capacity by 2035 (Figure 3).
- Georgia Power plans to add **16.9 GW** of gas resources over the next 20 years.
- Arizona Public Service plans to add **1.7 GW** of gas resource by 2030.

Figure 3. Dominion Virginia nameplate capacity additions over 15-year study period (GW)



Utilities' Plans for More Gas Resources Increase Customer Bill Risk

Figure 4. Gas price projections used in volatility analysis



- We found that the high gas price future and the geopolitical events similar to those of 2022 resulted in the largest customer bill increases.
- Average residential Dominion Virginia customers would see **monthly bill increases of up to around \$15**, and Georgia Power and Arizona Public Service customers would see **monthly bill increases of around \$10**.

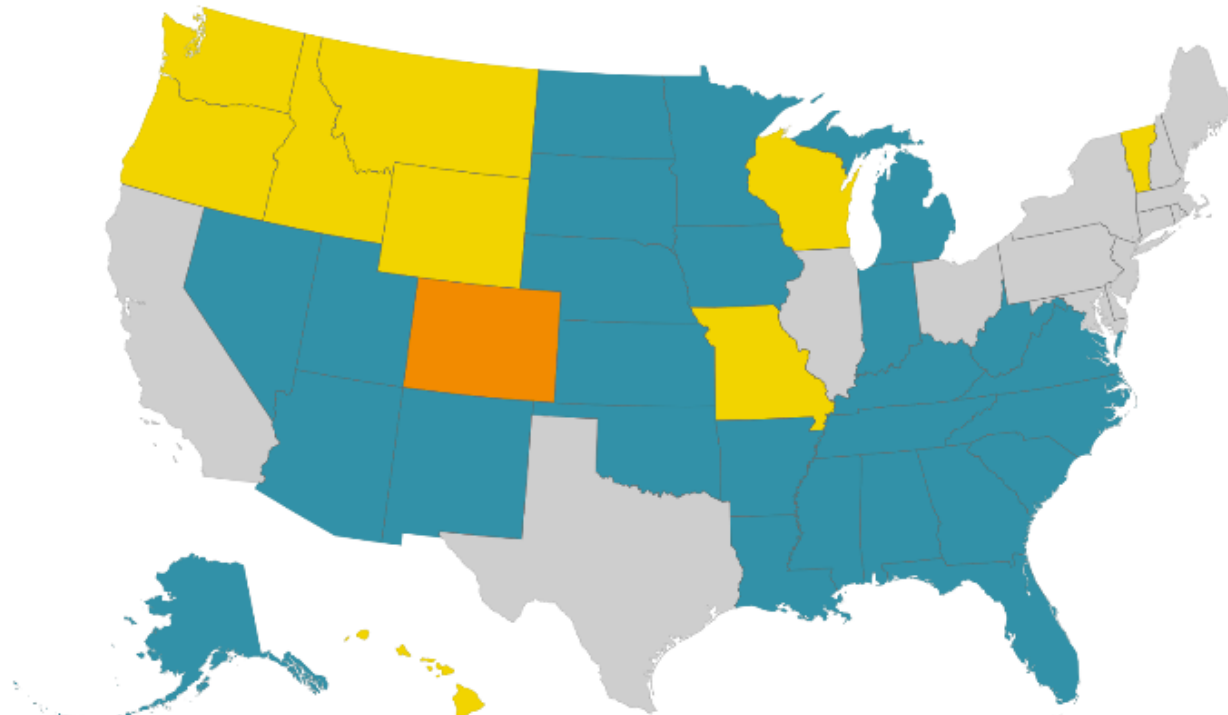
- As utilities add gas resources to their systems in the future, their exposure to gas prices will increase.
- Synapse analyzed the magnitude of average residential bill increases incurred by the utility's planned level of gas, under three gas price scenarios (Figure 4):
 1. A brief price spike caused by a winter storm in January
 2. A year-long price increase caused by a geopolitical event, similar to that of 2022
 3. Sustained high gas prices

Fuel Cost-Sharing Mechanisms Align Incentives for Price Stability and Fuel Efficiency

Fuel cost-sharing Implementation

March 2026

■ Fuel Cost-Sharing In Place ■ Fuel Price Volatility PIM ■ No Fuel Cost-Sharing ■ Restructured state; regulated utilities not responsible for fuel procurement



Note: Generation in Tennessee and Nebraska is publicly owned and operated, so there is no option for fuel cost-sharing.

Source: RMI analysis



Source: RMI
<https://rmi.org/how-fuel-cost-sharing-can-deliver-savings-for-utility-customers/>

Alternatives to fuel cost-sharing include elimination of the recovery clause, fuel efficiency performance incentive mechanisms, and **fuel cost-sharing** mechanisms.

Requiring utilities to share a portion of fuel costs provides incentive to:

- Reduce reliance on fuel-dependent power plants.
- Improve operating efficiencies of fuel-dependent power plants.
- Manage fuel procurements, e.g., using fixed-price contracts, hedging options.

Nine states have adopted some form of fuel cost-sharing: HI, ID, MO, MT, OR, UT, VT, WA, WI

Related Work for Restructured States: Overcharged in New England

Over the last 10 years, residential basic service customers in New England paid an average of **\$66 million per month** in retail premiums, totaling **\$8.6 billion**.

Table 1. Summary of residential basic service premiums, 2016-2025

State	Weighted Average Monthly Per-Customer Premium, 2016-2025 (2025 \$)	Total Premiums, 2016-2025 (2025 \$ billion)
CT	\$11	\$1.8
ME	\$12	\$1.0
MA	\$18	\$2.7
NH	\$20	\$2.5
RI	\$14	\$0.7
Total	—	\$8.6

Results include the following investor-owned utilities: Central Maine Power, Eversource (MA, NH, CT), Liberty Utilities, National Grid, Rhode Island Energy, United Illuminating, Unitil (MA, NH), and Versant Power. Impacts related to other customer types (e.g., commercial, industrial), other states (e.g., Vermont), and other utility types (e.g., municipal utilities, municipal aggregation, retail choice) are excluded due to data limitations.

What are basic service premiums?

- When consumers get electricity supply through an electric distribution company (EDC), it is called **basic service**.
 - Other terms used in different states include default service, standard service, standard offer service, and last resort service.
 - In all five states, customers may use a third-party competitive retail supplier (Retail Choice). Some customers in MA, RI, and NH may enroll in local Community Choice Aggregation (CCA) programs. In some states, customers who live in certain towns and cities are limited to obtaining electricity through a municipal utility.
 - This analysis covers residential customers on the basic service offering.**
- The difference between the basic service rate charged to customers and the actual market cost of buying energy, capacity, RECs, and other supply costs is the “**premium**.”

<https://www.synapse-energy.com/overcharged-new-england>

Asa Hopkins, Senior Vice President
ahopkins@synapse-energy.com
617-453-7060

Long slides

Reliance on Gas Brings the Risk of Price Volatility and Uncertainty

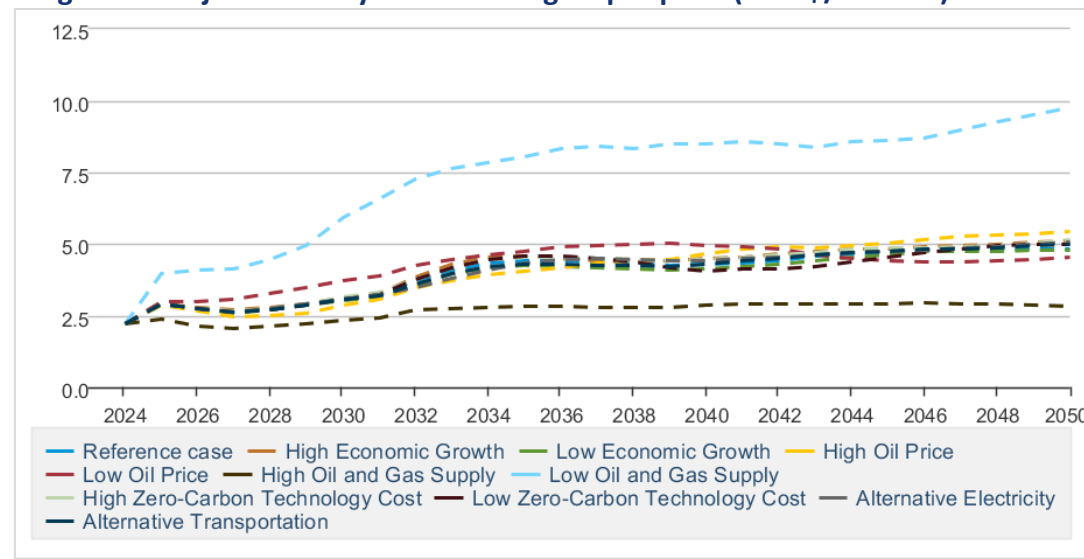
- Gas prices can be volatile, with short-term price spikes caused by winter storms, and longer periods of elevated prices caused by geopolitical conflicts and other events (Figure 2).
- Gas price forecasts that utilities use to set rates vary based on assumptions about future economic and technical conditions (Figure 3).
- When gas prices are high, utilities pay more for gas and pass these costs directly onto their customers.

Figure 2. Historical Henry Hub natural gas spot price



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Figure 3. Projected Henry Hub natural gas spot price (2024\$/MMBtu)

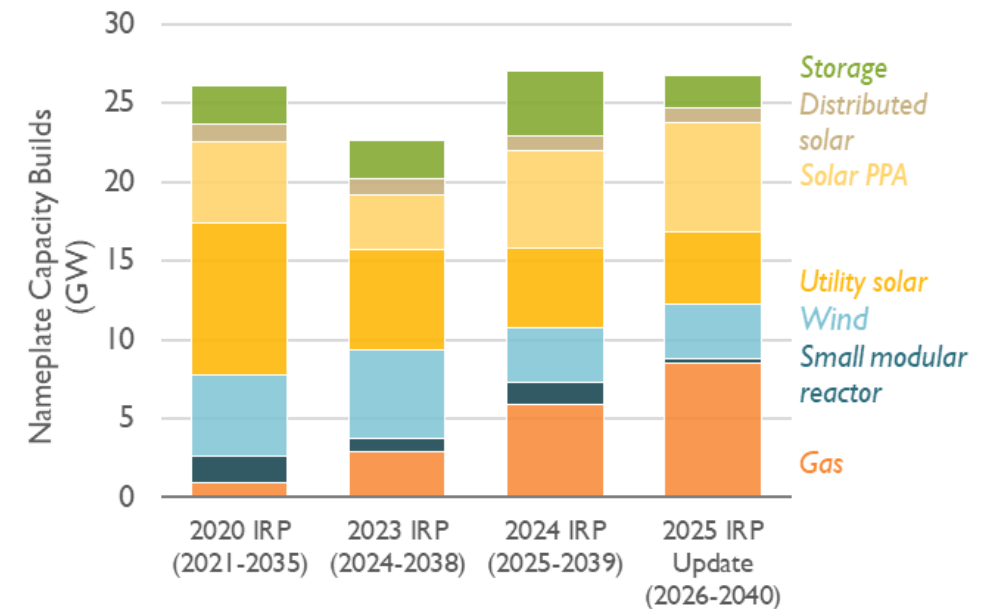


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Utilities are Responding to Rapid Demand Growth by Increasing their Reliance on Natural Gas

- With the rise of data center load growth, these utilities are now planning to construct many new gas power plants. Although the gas plants are being built to serve new large-load customers, they also offset the renewable transition and can impose costs on all customers.
- Dominion Energy in Virginia plans to add **4.7 GW** of new gas capacity by 2035 (Figure 4).
 - Dominion's most recent plans would increase their estimated share of gas generation by 10%, to 51%.
- Georgia Power plans to add **16.9 GW** of gas resources over the next 20 years.
 - This is an increase from 10.5 GW in their last IRP update in 2023.
- Arizona Public Service plans to add **1.7 GW** of gas resource by 2030.
 - This is three times the gas capacity it projected it would need in 2023.

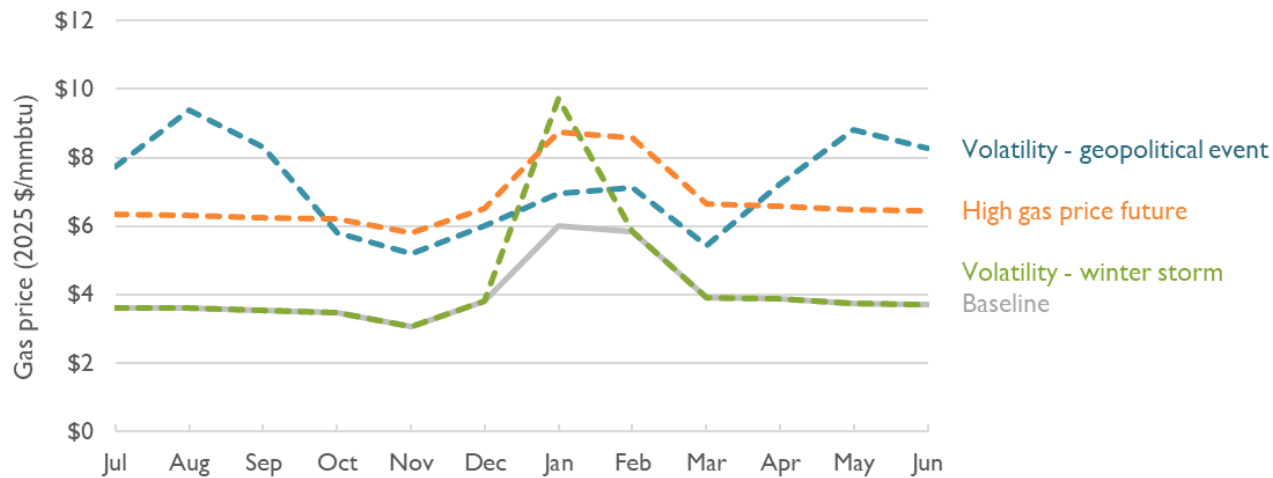
Figure 4. Dominion Virginia nameplate capacity additions over 15-year study period (GW)



Utilities' Plans for more Gas Resources Increase Customer Bill Risk

- As utilities add gas resources to their systems in the future, their exposure to gas prices will increase.
- Synapse analyzed the magnitude of average residential bill increases incurred by the utility's planned level of gas, under three gas price scenarios (Figure 7):
 1. A brief price spike caused by a winter storm in January.
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 3. Sustained high gas prices.

Figure 10. Gas price projections used in volatility analysis

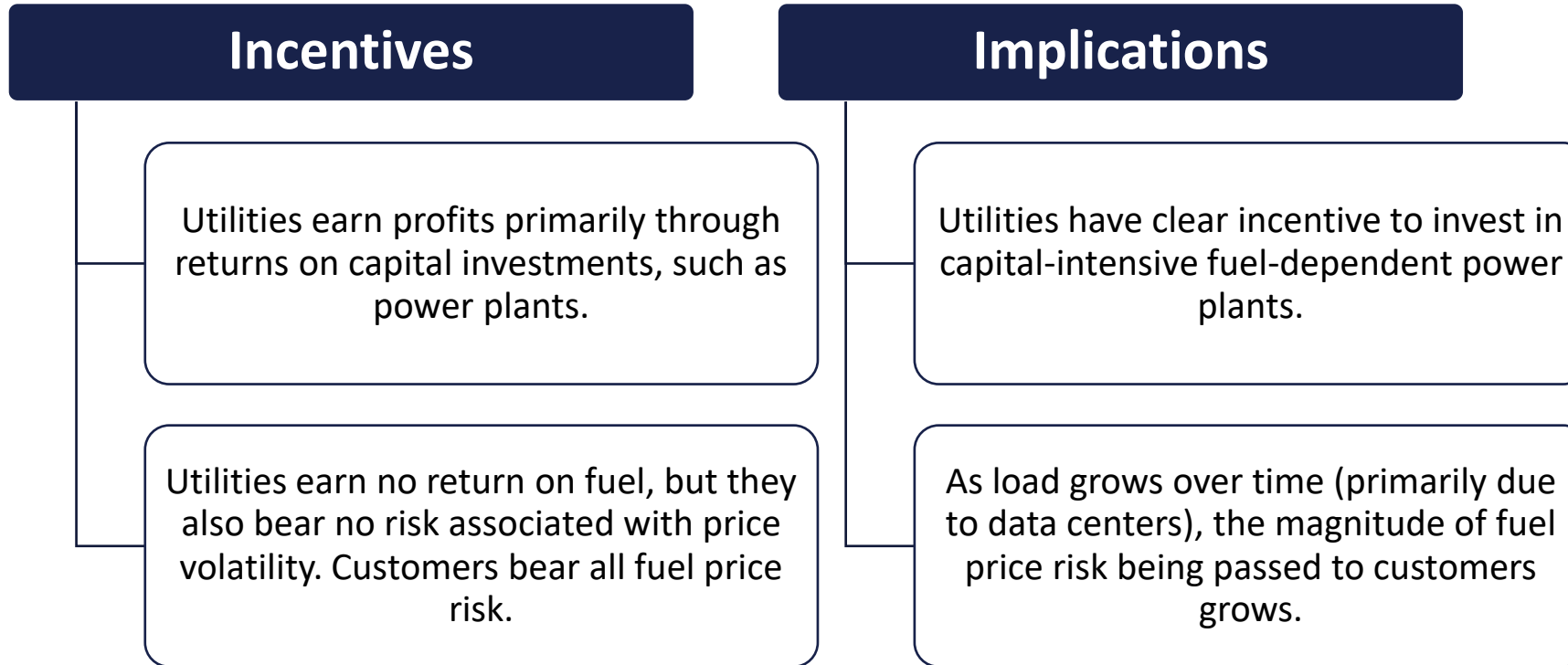


- We found that the high gas price future and the geopolitical events similar to those of 2022 resulted in the largest customer bill increases.
- Average residential Dominion Virginia customers would see monthly bill increases of up to around \$15, and Georgia Power and Arizona Public Service customers would see monthly bill increases of around \$10.

Fuel Cost Recovery Mechanisms Place Fuel Cost Risk onto Customers

- These utilities have a **fuel cost recovery clause** that places all fuel cost risk on customers:
 - Risk of volatility: storms, geopolitical events, etc.
 - Risk of rising market costs over time.
- Fuel cost recovery clauses are based on the logic that utilities have little control over fuel **prices**.
 - Because coal, gas, and oil prices are determined by larger market forces, including global markets and geopolitical events.
- However, utilities do have control of fuel **costs**.
 - Choosing fixed cost resources, e.g., wind, solar, batteries, energy efficiency.
 - Purchasing fuel and/or generation using fixed-price contracts.
 - Purchasing hedging instruments.

Additional Incentives Discouraging Fuel Efficiency



Alternatives to Fuel-Cost Recovery Clauses

Eliminate the recovery clauses

- Instead, recover all costs through base rates.
- When actual fuel prices are higher or lower than those assumed in rates, the difference would be recovered by the utility instead of ratepayers.
- This would provide the utility with the greatest incentive to minimize fuel costs.

Fuel efficiency performance incentive mechanism (PIM)

- The utility is given a target level of power plant efficiency, such as \$/MWh or \$/MMBtu, based on improvements over historical levels.
- The utility has an incentive to reduce fuel costs.
- PIMs can work so that upside potential savings in fuel costs are rewarded to customers, and the utility pays for downside fuel cost losses.
- PIMs can be combined with a fuel cost-sharing mechanism to bolster the incentive.

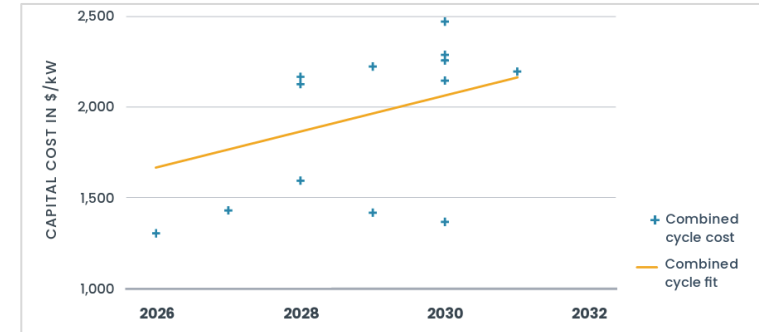
Fuel cost-sharing mechanism

- The recovery clause can be modified so customers pay only a portion of the change in fuel price, while the utility pays for the remainder.

High Gas Capital Costs Lock in Ratepayers for Decades

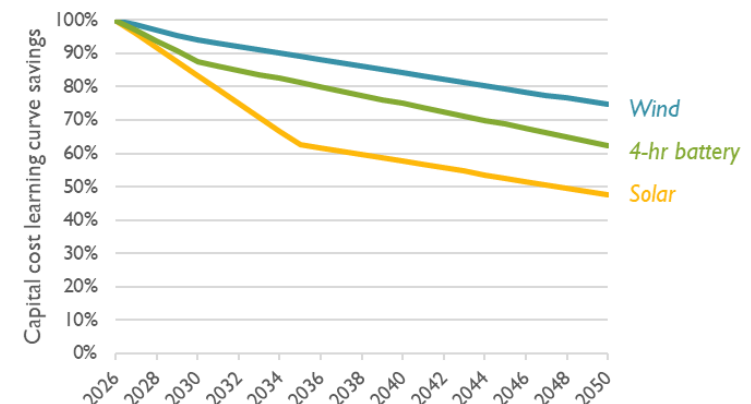
- In the near term, capital costs for new gas resources are likely to continue increasing. Utility planned gas buildout risks locking ratepayers into these high capital costs for decades.
 - A CC unit added in the early 2030s will have a capital costs over \$2,000 per kW (Figure 9).
 - If the cost of the new gas plants that utilities construct to serve data centers is higher than alternative resources such as wind and solar, this will increase costs for existing ratepayers.
 - Ratepayers will pay for the capital costs of new gas resources over the lifetime of the plants. A gas plant lifetime is generally 40 to 45 years: much longer than the typical term of a data center contract.
- Capital costs for renewables and battery storage have declined substantially over the past decade (Figure 10).
 - Solar, wind, and battery storage costs are expected to continue to decline in the future as the technology continues to mature and supply chains are expanded (Figure 11).
- In contrast, gas generation technology is relatively mature. While current price spikes are driven by a supply and demand mismatch, overall, costs are not expected to decline in the future due to technological advancements.

Figure 9. CC cost as a function of operating year



Source: GridLab, Energy Futures Group, and Halcyon. 2025. *The New Reality of Power Generation: An Analysis of Increasing Gas Turbine Costs in the U.S.* Available at: <https://gridlab.org/gas-turbine-cost-report/>.

Figure 11. Projected decreases in renewable capital costs



Source: National Laboratory of the Rockies 2024 Annual Technology Baseline. Available at: <https://atb.nrel.gov/electricity/2024/data>.