

Under Pressure: Gas Utility Regulation for a Time of Transition

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Executive Summary

The way we use fossil gas as a fuel for heating buildings and other end uses is rapidly changing. Efficiency gains and improved electric end-use technologies are constraining demand for gas. The urgency to address climate change is increasing, with the new U.S. national target to cut greenhouse gas emissions by more than half by 2030 adding to existing state-level decarbonization policies. Increased awareness of the health and safety risks of fossil gas is also accelerating the transition to other sources of energy. These shifts are happening as gas utility distribution systems in many places are aging — meaning that utilities may be seeking approval for major investments while the size of their customer base is poised to shrink. Regulators and utilities that do not get ahead of these trends may face the need to impose unsustainable rate increases on customers, meaning high costs for those who can least afford it.

These changes mean that the current paradigm for gas utility regulation is coming under pressure. The good news is that preparing for the gas transition does not require inventing new regulatory mechanisms. Regulators can start with existing tools to anticipate changing circumstances and create paths to meet customer needs. Planning processes, efficiency and electrification programs, and rate-making reforms can all be deployed to manage the risks to consumers, utilities and the economy at large.

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Building Blocks for a Changing Regulatory Framework

Our recommendations, summarized on the next page, offer a range of practical options for utility regulators to consider as they confront changing circumstances in gas regulation and risks to gas customers. Utility regulators may choose to use one or many of these strategies to build on their understanding of gas systems in their state, unlock cost savings and other benefits, and increase awareness of changes or evolving demands on the system. These recommendations can serve as building blocks to create a regulatory framework to facilitate the gas transition in a manner that is efficient and equitable.

The Road Ahead

Beyond reforms that are within the current powers of utility regulators, policymakers should start to consider whether broader structural changes will be necessary. These policies may require statutory changes to implement, such as new sources of funding for transition assistance and more fundamental changes to the structure of investor-owned gas utilities.

Strategies for Regulators Addressing the Gas Transition



Revitalize Gas Utility Planning

- Set a solid foundation with a **robust and inclusive stakeholder process**, an outline of relevant goals and policies, and coordination with other planning efforts.
- Have the gas utility create a layered **system map** that illustrates and describes the current system, including existing infrastructure and its condition, customer base, and demand and supply.
- Require the development of **alternative scenarios** for meeting demand; analyze the scenarios for reliability, safety, cost, carbon impact, risk and resiliency; and consider other key transition issues.
- Create a short-term action plan and a **long-term transition plan**.



Enhance Energy Efficiency and Electrification Programs

- **Remove barriers to electrification** within energy efficiency program rules, such as prohibitions on fuel switching.
- **Expand and coordinate** energy efficiency and electrification programs to reduce costs and improve equity.
- Develop an approach for evaluating and implementing **non-pipeline alternatives**.
- Implement **geographic targeting of full-building electrification** as part of a gas distribution network transition strategy.



Reform Gas Rate-Making

- **Pay down rate base** and **lower the risk** of rate impacts.
 - Require **additional investment from new customers** for any gas system expansions.
 - **Accelerate depreciation timelines** for long-lived gas system assets.
- Update cost allocation and rate design to ensure **equitable and efficient outcomes**.
 - Abandon archaic minimum system analyses and adopt **flexible time-based allocation methods** for shared gas system costs.
 - Implement **rate designs that improve efficiency, while prioritizing affordable bills** for low-income customers.
- Better **align utility incentives** with customer objectives and public policy goals.
 - Adopt **decoupling methods that use overall revenue targets**, not revenue-per-customer targets.
 - Explore **performance-based rate-making** improvements to deemphasize capital investments and incentivize customer objectives and public policy outcomes.

Making equity integral to addressing a changing gas system

Regulators will need to take deliberate steps to ensure that changes to the gas system will not disproportionately affect low- and moderate-income (LMI) communities and customers. Throughout this paper, we recommend ways in which regulators might integrate these considerations into planning, programs and rate design. Here, we highlight several recommendations.

Planning

- Create robust and inclusive stakeholder processes to ensure that the voices of disadvantaged communities are being heard and their long-term needs are being met.
- Consider how targeted electrification may allow LMI customers to benefit from a lower energy burden.

Programs

- Expand weatherization and other energy efficiency

programs and orient programs toward low-income and disadvantaged communities to decrease energy burden and improve home resiliency.

- Develop incentives and dedicated programs for LMI electrification and ensure that those programs are known and accessible to LMI customers.

Rate-making

- Consider methods to lower rate base to avoid increases in rates that may affect customers remaining on a shrinking gas system.
- Look at customer class distinctions and analytical methods to ensure that costs are allocated efficiently and fairly.
- Design rates to ensure that low-income gas heating customers are not unfairly penalized throughout the transition.

Conclusion

Regulators are at the forefront of ensuring that utilities meet consumers' needs efficiently, equitably and fairly. This mission is made more complex by large shifts in the energy system driven by state and local greenhouse gas reduction targets and increasingly competitive technology innovations. Regulators can use familiar building blocks of solid utility regulation in new ways to prepare for and respond to changing circumstances and public expectations. In this report, we provided options and recommendations to create this consumer-oriented foundation, including outlining

a revitalized gas utility planning process, enhancements for energy efficiency and electrification programs, and means to reform rate-making to enable and promote equitable and efficient outcomes. By using these tools, regulators can augment regulation of gas utilities in general and specifically create an environment in which transition can occur. We offer this report as the initial framework for this new challenge. We will dive into more specific means of addressing this changing area in future reports on this topic.