

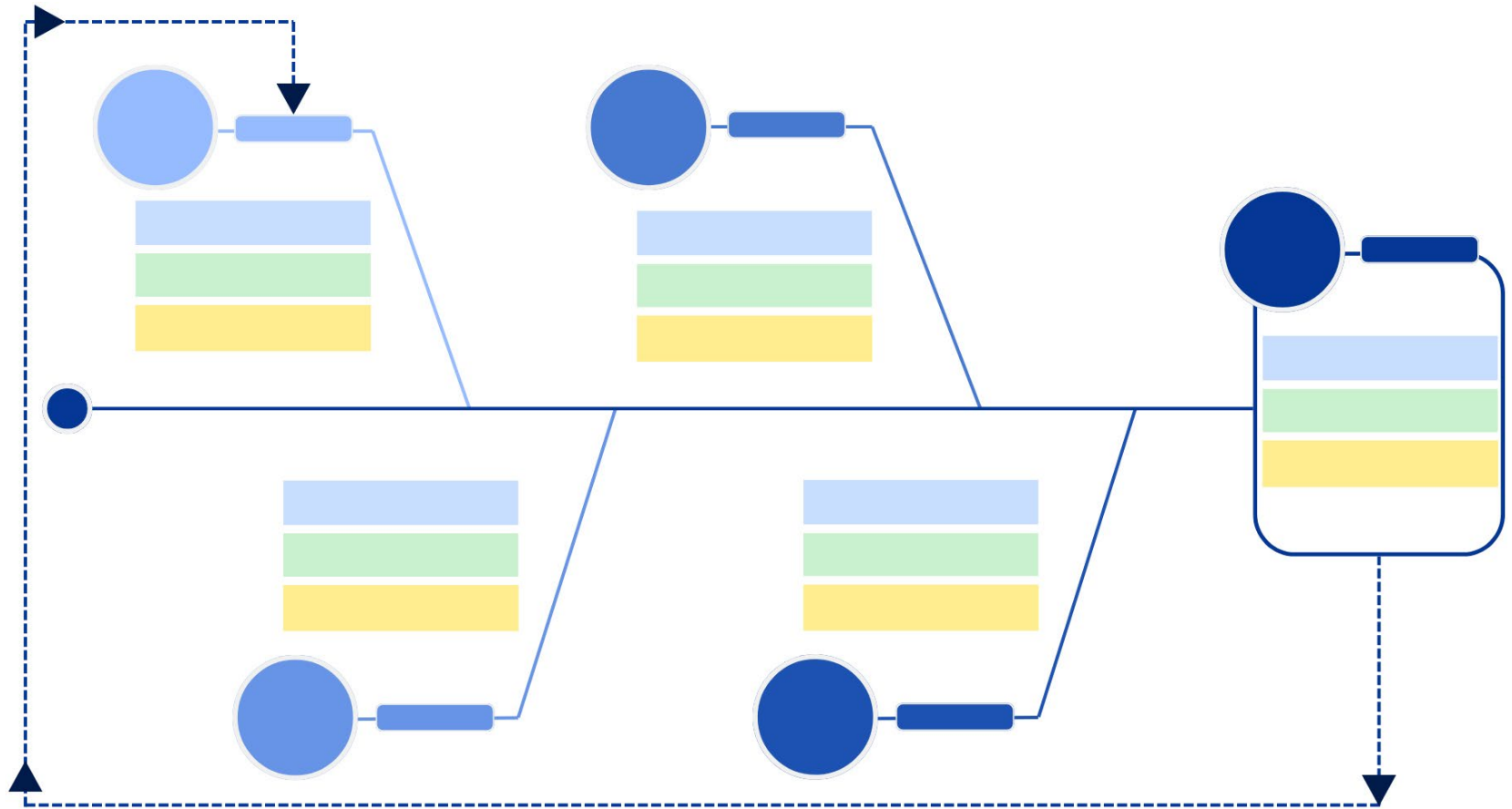


NARUC

National Association of Regulatory Utility Commissioners

Economic Development Cohort Roadmap

NARUC Task Force on Natural Gas Resource Planning



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Introduction

This roadmap describes a vision for an idealized planning process for a natural gas distribution utility (gas LDC), from a public utility commission perspective, designed to align with state policy goals for economic development. Developed by commissioners and commission staff members in the NARUC Task Force on Natural Gas Resource Planning Economic Development Cohort, with input from subject matter experts, the roadmap presents a planning process that a Commission could use as a model for advancing economic development goals into gas utility planning processes. Specifically, the roadmap identifies key planning elements that the Commission will evaluate to ensure that the gas LDC's long-term planning process supports the state's ambitious economic development goals.

The roadmap incorporates representative data types, alternatives, analyses, and planning steps that would enable the Commission to understand and properly evaluate the LDC's plans. The roadmap includes:

- A flowchart of the entire planning process
- Descriptions and explanations of each step of the planning process
- Guidance, resources, and examples that can augment understanding and offer starting points for action

Please note that this roadmap is not intended to endorse the pursuit or adoption of any particular state goal. Commissions are not policymaking bodies and economic development goals generally come from the executive or legislative branches. To that end, a fictional state persona was created to guide the development of this roadmap. Comparable roadmaps have been produced by other NARUC cohorts focused on the state policy goals of [affordability](#), [reliability](#), and [economic development](#).

These roadmaps do not focus on electricity system planning related to gas-fired power generation;¹ the focus is on in-state gas distribution utilities.

How to Read this Roadmap

This roadmap describes activities contained in an **idealized** planning process for a gas LDC located in a fictional state with ambitious clean energy goals. **Steps** are largely sequential; outputs from each step serve as inputs to subsequent steps (though iteration is expected). Many of the steps involve gathering information or data from the gas LDC or from customers, state agencies, or other stakeholders to provide evidence to support eventual regulatory decisions.

Comprehensive stakeholder engagement throughout the planning process is key to an informed, robust process that ultimately arrives at decisions that further state policy goals and the public interest. To that end, where appropriate, the descriptions of each step note when and how stakeholders can provide input or otherwise engage in the planning process.

This roadmap describes an **idealized planning process, not an actual one**. While this exact process might not be implemented in any instance and any actual process must, of course, be adapted to the particular situation at hand, some Commissions have implemented portions of this process for gas or other regulated utilities. The Cohort expects that the roadmap could offer a starting point for considering state-specific implementation, so where possible, the roadmap notes relevant resources and examples from across the U.S. that can be referenced and adapted as helpful.

Finally, the roadmap does not contain a timeline for the planning process, as timing could vary widely across states based on the particular situation.

1 Natural gas infrastructure, particularly the underground gas distribution pipeline network, provides a high degree of reliability for heating and industrial customers, ensuring uninterrupted service even during normal and extreme or peak conditions. NARUC's Task Force on Gas-Electric Alignment for Reliability (GEAR) found that additional gas pipeline and storage infrastructure is key to ensuring long-term reliability of the natural gas and electric sectors as demand for both commodities grows. GEAR's Final Report and Recommendations states: "[There is] widespread recognition that the United States needs additional natural gas pipeline infrastructure to reliably meet the United States' growing and changing demand for energy... GEAR recognizes the critical role of storage in supporting energy system reliability." Please see the NARUC Gas-Electric Alignment for Reliability (GEAR) Task Force [report](#) (November 2025) for recommendations from a diverse group of commissioners and industry stakeholders about how to improve electric and gas coordination at the wholesale level.

About the Economic Development Cohort's State

The fictional, representative state that the Economic Development Cohort is supporting has some key characteristics that provide context for the cohort's vision of an ideal planning process. As with all aspects

of the idealized planning process, the divergence between this fictional state and a real state could result in deviations from the gas planning process offered as a potential starting point.

Geography and Economy

- The state is geographically large with population distributed across rural and other urban areas.
- Natural gas is easily accessible in urban areas; however, some rural parts of the state do not have access to natural gas.
- The state has aggressive economic growth goals with a state economic development agency that has expressed interest increasing engagement with the PUC.
- Industries that are considering locating within the state want reliable, affordable energy quickly.
- The state offers incentives to attract new industrial customers.
- The state is a net importer of energy with significant in-state natural gas production.

Infrastructure

- The PUC issues certificates of public convenience and necessity for pipeline infrastructure.
- Upstream infrastructure is robust, but some midstream and downstream infrastructure is experiencing constraints or in need of modernization / expansion.
- Some downstream infrastructure has been abandoned and decommissioned but could see reinvestment to become used and useful again.
- State is exploring possible tax incentives for pipeline development.

Utility Demographics

- Gas-electric and gas-only utilities operate in the state and are rate-regulated by the PUC.
- Utilities file rate cases nearly every year.
- Approximately half of the state's electric generation comes from natural gas.
- State law permits use of natural gas as a fuel source for behind-the-meter generation.

Customer Characteristics

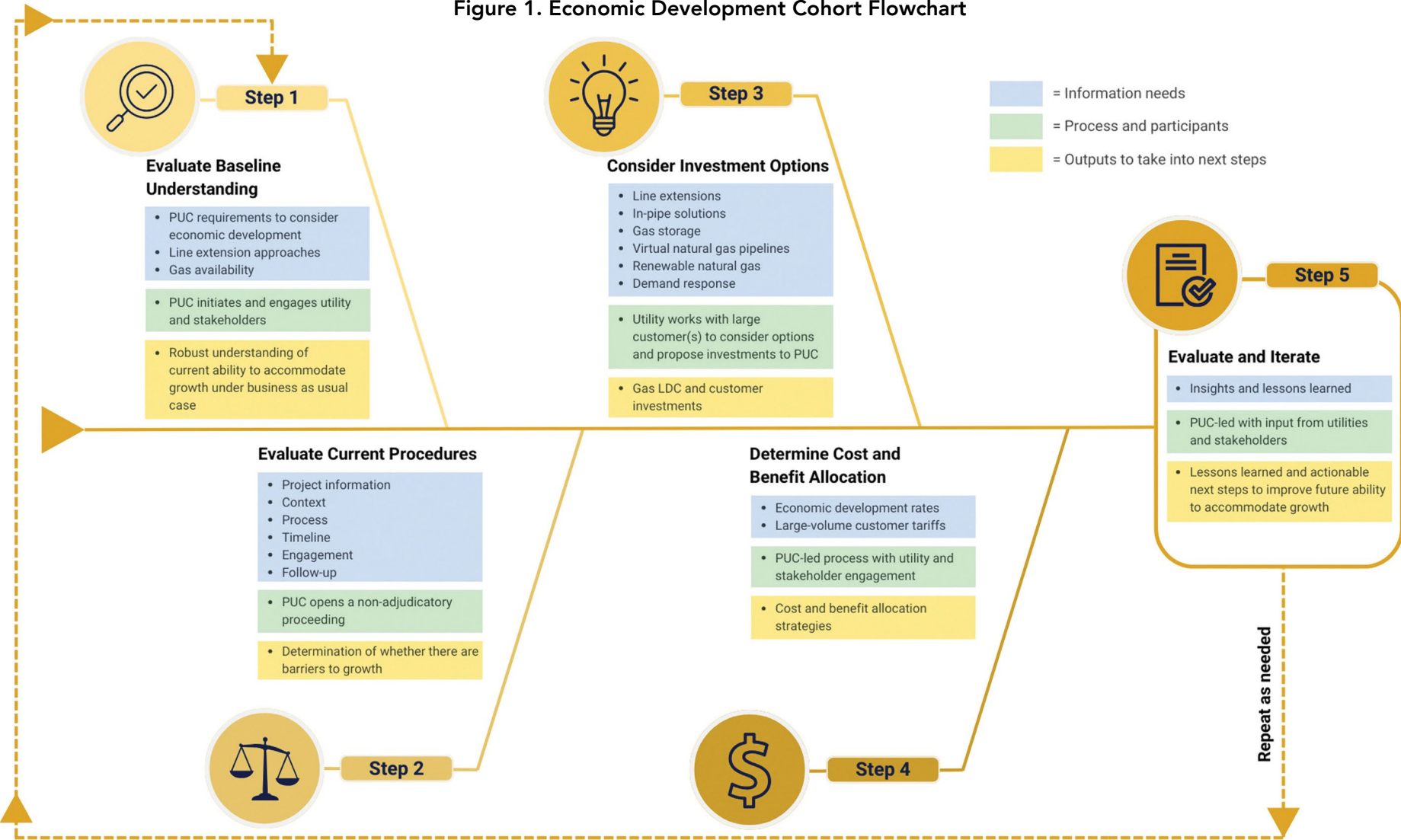
- Customers appreciate the reliability and affordability of natural gas.
- Some advocacy organizations have expressed concern that increased demand for natural gas from industrial customers will threaten reliability and affordability for existing residential and small commercial customers.

Roadmap Features

The flowchart shown in **Figure 1** outlines a series of steps designed to gather and process relevant information that would aid in developing a comprehensive economic development plan for a gas LDC.

The seven steps in the Economic Development Cohort’s roadmap are: (1) Establish Baseline, (2) Evaluate Current Procedures, (3) Consider Investment Options, (4) Determine Cost Allocation, and (5) Evaluate and Iterate

Figure 1. Economic Development Cohort Flowchart



Iterate. Each step is described in more detail in the following sections, which highlight information needs [in blue], processes and participants [in green], and outputs to take into the next step [in yellow] along with relevant resources and examples. See the [NARUC Task Force on Natural Gas Resource Planning website](#) for supplementary materials such as expert presentations, data sources, and regulatory tools.

The planning process is intended to be iterative, with periodic reassessments during which utility regulators, utilities, and stakeholders identify opportunities for refinement and improvement. The plan, once completed, will be reviewed and approved or acknowledged by the utility regulator and will serve as a resource going forward for all stakeholders.

Regulatory decisions are based on state law and evidence submitted by utilities and stakeholders. During the planning cycle, the Commission may need to evaluate new tools or services to customers even in cases where available evidence is limited. Evidence will change over time as technologies and customer preferences evolve, so the completed plan and its future iterations will likely be dynamic.



Step 1. Establish Baseline Understanding

Many states are navigating the benefits and challenges of economic development, specifically examining the ability of energy infrastructure to support new customers and proper cost allocation and risk mitigation strategies to ensure fairness to existing customers. Public Utility Commissions (Commissions) ensure the safety, reliability, and affordability of utility services. As data centers, manufacturers, and other large energy users seek to build new facilities across the U.S., the availability of affordable, reliable energy, particularly natural gas,² is a major consideration for siting. Assessing the impacts of the costs of energy infrastructure and supply to serve new customers on existing customers falls to Commissions.

Today, Commissions are facing additional scrutiny regarding the affordability and reliability implications of adding large new natural gas customers to the distribution system. While natural gas utilities operate within a robust regulatory framework, challenges may arise when responding to requests from high-volume customers that may require extraordinary infrastructure investments. Without a credible picture of demand growth and the ability of current infrastructure to meet anticipated needs, Commissions risk utility overinvestment in natural gas infrastructure and potential risks to service reliability for existing customers.³ Given the difficulty of siting and permitting all types of energy infrastructure – particularly gas pipelines⁴

- PUC requirements to consider economic development
- Line extension approaches
- Gas availability

- PUC initiates and engages utility and stakeholders

- Robust understanding of current ability to accommodate growth under business as usual case

2 Commissions play an important but limited role in economic development. U.S. LDCs have effectively expanded infrastructure to add new customers to the gas system, building 24,800 miles of new distribution pipelines to serve 660,000 new customers last year. Natural gas remains an affordable option for residential, commercial, and industrial customers to meet their energy needs. In 2024, residential natural gas prices in the U.S. averaged approximately 28 percent lower (applying DOE's conversion rates) than the price per million Btu of electricity. Energy expenditures for heating and other end uses during the 2025 – 2026 winter season were projected to be significantly less for residential natural gas users than electricity, propane, or heating oil customers—between \$110 – 150 per month for natural gas compared to \$200 – 250 for electricity, \$180 – 300 for propane, and \$220 – 340 for heating oil. See U.S. Energy Information Administration, “Short-Term Energy Outlook: Winter Fuels Outlook 2025 – 26,” October 15, 2025. <https://www.eia.gov/outlooks/steo/report/perspectives/2025/10-winterfuels/article.php#naturalgas>.

3 As an example, see Lydersen, K., Canary Media, “Wisconsin Utility’s Data Center-Driven Gas Expansion Meets Skepticism,” April 14, 2025. <https://www.canarymedia.com/articles/utilities/wepco-gas-data-centers>.

4 Mountain Valley Pipeline (MVP) provides an example of the difficulty of building pipelines. Initially filed at the FERC in 2015, the project received a CPCN from FERC two years later and secured necessary state and federal permits within the next year. Construction began in 2018 but was halted in 2023 at 94 percent complete due to litigation of previously granted permits. It was not until an act of Congress in June 2023 that the pipeline was completed and entered service one year later. See <https://mountainvalleypipeline.info/overview/>.

– many stakeholders are concerned about how demand from large new customers will affect reliability and affordability for existing customers, particularly residential and small commercial customers on the front lines of natural gas price swings and rising utility rates.⁵ This is a concern not just for gas distribution but also electricity, water, and other regulated utility services.⁶

Information needs

Commissions' ability to directly consider economic development impacts (e.g., direct / indirect / induced employment growth, tax revenue) of utility investments varies significantly across states.⁷ All Commissions, however, have the authority to set fair, just, and reasonable rates for investor-owned gas local distribution companies (LDCs). Through the rate case process, Commissions exercise oversight of the revenue requirement (including the total prudent costs incurred by a regulated utility to serve customers and a fair rate of return on capital expenditures), cost allocation (assigning prudent costs to various customer classes), and rate design (creating fixed and usage-based rates to recover costs from customers). In exchange for operating as a regulated monopoly, utilities have an obligation to serve new customers without undue discrimination.

The treatment of costs to connect new customers is one important factor for natural gas-based economic development. Through Commission-regulated line extension policies, the cost to connect new customers to the gas system may be subsidized across other customers and / or spread across a longer payback period. Alternatively, larger customers may be asked to pay for all or a portion of new infrastructure required to connect them to the gas system, consistent with cost-causation principles.

5 Natural gas prices are a major, but not dominant, factor in LDC bills, accounting for a fluctuating proportion of retail price that generally falls well under 50 percent. See U.S. Energy Information Administration, "Short-Term Energy Outlook: Winter Fuels Outlook 2024 – 25," October 8, 2024. <https://www.eia.gov/outlooks/steo/report/perspectives/2024/10-winterfuels/article.php>. See also U.S. Energy Information Administration, "Today in Energy: Changes in U.S. Residential Natural Gas Prices Lag Spot Prices," September 19, 2023: <https://www.eia.gov/todayinenergy/detail.php?id=60421>; U.S. Energy Information Administration, "Electricity Monthly Update," updated October 24, 2025: <https://www.eia.gov/electricity/monthly/update/>; and U.S. Energy Information Administration, "State Profiles and Energy Estimates: Consumption and Expenditures," updated October 16, 2025: <https://www.eia.gov/state/data.php#ConsumptionExpenditures>.

6 Plautz, J., E&E News, "Rulemakers Play Catch-Up as Data Centers Multiply," July 18, 2025. <https://subscriber.politicopro.com/article/eenews/2025/07/18/rulemakers-play-catch-up-as-data-centers-multiply-00458731>. See also Olson, E., Grau, A., and Tipton, T., University of Tulsa, "Data Centers Draining Resources in Water-Stressed Communities," July 19, 2024. <https://utulsa.edu/news/data-centers-draining-resources-in-water-stressed-communities/>.

7 NARUC, "The Role of State Utility Regulators in a Just and Reasonable Energy Transition," September 2021. <https://pubs.naruc.org/pub/952CF0F2-1866-DAAC-99FB-0C6352BF7CB0>.

Energy availability is another factor affecting the location and speed of economic development activity. Commissions retain the responsibility to analyze the affordability, reliability, and safety impacts of connecting new customers to the gas distribution system. When these customers are particularly large or in areas where growth in usage may stress existing infrastructure or present cost or reliability risks to existing customers, Commissions may need greater insights and analytical tools to satisfy their functions as economic regulators.

Process and participants

This resource aims to support Commissions in determining whether they might need to adjust their regulatory processes to provide regulatory certainty for both new and existing natural gas customers as economic development opportunities proliferate in their state (and elsewhere). By moving with appropriate speed and improving the availability of information to Commissions, LDCs, and stakeholders, regulators can harness the benefits of economies of scale for LDC customers while mitigating the probability of unnecessary investments or disproportional risks on existing customers.

Outputs

This information-gathering phase results in a robust understanding of the current gas distribution system and connections to economic development outcomes.



Step 2. Evaluate Current Procedures

Before considering any changes to regulatory processes, Commissions can benefit from a high-level assessment of existing procedures for natural gas-based economic development.

The obligation to serve inherent in the regulatory compact for public utilities requires utilities to connect new customers without undue discrimination. Many commissions have approved programs to prevent those new customers from having to pay the full costs of the infrastructure necessary to serve them.

- Project information
 - Context
 - Process
 - Timeline
 - Engagement
 - Follow-up
- PUC opens a non-adjudicatory proceeding
- Determination of whether there are barriers to growth

A general principle of utility regulation, reaffirmed in recent NARUC policy resolutions,⁸ is cost causation: infrastructure costs should be allocated to the customer(s) driving those investments to the greatest extent possible. Allocating costs in this way protects existing ratepayers from undue burden. When adding new residential customers, the regulatory burden of cost causation may be impractical (e.g., there is insufficient information about expected consumption or imprecise cost estimates of necessary infrastructure investments at such a granular level) or the Commissions may find that there is an inherent societal benefit of connecting customers to the gas system. In certain instances, with large customers where more precise information about consumption and infrastructure expansion is available, large customers could receive incentives to offset their connection or usage costs if it is in the public interest, for example by providing economic or employment benefits to the city or state.

DEEP DIVE: Line Extension Approaches

In 2017, NARUC commissioned a Task Force on Natural Gas Access and Expansion to propose logistical and financial solutions to expand natural gas distribution lines to underserved and unserved areas.⁹ Finding that cost was the biggest barrier to expanding natural gas infrastructure, the report cited installation costs of approximately \$1 million per mile to reach new customers. Customers, particularly residential users, would be unable to bear these costs; therefore, without an alternative cost recovery mechanism, utilities would find it uneconomic to serve these customers. Several states (e.g., Arkansas, Delaware, Pennsylvania) offer no-cost extensions for customers located within a short distance (e.g., 100 or 150 feet) of an existing gas main. Other states (e.g., Maine, Minnesota, New Mexico, Texas) offer customers the ability to finance extensions through on-bill surcharges or other payment plans, spreading costs over a longer time period

instead of requiring payment upfront. Other states (e.g., Washington, Wisconsin) offer financial assistance to customers to convert appliances to natural gas or use state tax revenues to reimburse utilities or customers for connection costs. And other states simply socialize the costs for new customers and infrastructure across utility rate bases, finding that it is in the public interest for new customers to connect to natural gas service regardless of the costs. Georgia's Public Service Commission, for example, approved the Strategic Infrastructure Development and Enhancement (STRIDE) program to create a rider on customer bills to recover costs of both traditional infrastructure replacement (i.e., replacement of aging bare steel and cast iron pipelines with modern, plastic materials less prone to leakage) and new infrastructure for customer growth and economic development.

8 NARUC, "EL-1: Resolution Urging the Federal Energy Regulatory Commission to Preserve and Affirm State Retail Regulatory Jurisdiction in its Large Load Interconnection Proceeding," November 14, 2025. <https://pubs.naruc.org/pub/2C687846-9DB8-596F-228F-FF8D4E7291D4>.

9 NARUC, "Report of the NARUC Task Force on Natural Gas Access and Expansion," November 2017. <https://pubs.naruc.org/pub/8F38EF6F-D44F-80A0-578C-CF1610C47520>.

Building new gas distribution pipelines to serve new customers can be costly, particularly if customers are located in rural areas far away from existing gas pipelines. The Pennsylvania Public Utilities Commission approved several of these mechanisms in the 2010s following the availability of low-cost Marcellus Shale gas. The Growth Extension Tariff (GET Gas) program was a settlement reached by UGI Utilities, the Office of Consumer Advocate, Office of Small Business Advocate, and the PUC's Bureau of Investigation and Enforcement to allow eligible customers to pay line extension costs over 10 years as an on-bill monthly charge. Customers are deemed eligible if their extension required a total capital main cost of \$15,000 or more, a per customer maximum project cost of \$10,000, and where at least 50 percent of the prospective customers along the path of the project can reasonably be expected to convert their heating source to natural gas within 12 years. See Pennsylvania Public Utility Commission, ["PUC Approves UGI GET Gas Program to Increase Affordability, Access to Natural Gas Service,"](#) February 20, 2014.

Information needs

As part of the process of evaluating current procedures, the Commission may elect to seek utility and stakeholder input regarding improvements to facilitate public participation and regulatory certainty. Undertaking an assessment of existing barriers can inform the Commission when identifying when and where changes such as increased staff capacity, adjusted timelines, or new information or modeling may be beneficial to the public interest. Proposed questions are below to aid Commissions in beginning an assessment of barriers. Further questions specific to jurisdictionally unique issues or priorities are encouraged.

- **Project Information:** Does the Commission receive adequate information from the LDC about the prospective customer's demand and infrastructure requirements?
 - In what form does this information come to the Commission (e.g., integrated resource plan, approval of investments required

to serve a customer, rate case, Certificate of Public Convenience and Necessity [CPCN])?

- How credible is this information? Have financial commitments already been made?
- What is a reasonable range of uncertainty around the new demand and infrastructure requirements?

DEEP DIVE: Streamlined CPCN Processes

CPCNs are required for certain infrastructure projects that impact the public. States define the conditions that require a CPCN. In general, CPCN processes allow for public engagement and comment, giving potentially affected residents the opportunity to express their support or opposition for the project to state regulators.

Virginia code exempts "ordinary extensions or improvements in the usual course of business" from the requirement to obtain a CPCN. Commissions might consider providing specific language to define what constitutes an ordinary extension or improvement to provide increased regulatory certainty to utilities and stakeholders.

As an alternative approach that provides more scrutiny to gas infrastructure, in December 2022, the California Public Utilities Commission (CPUC) adopted new rules for CPCN requirements for natural gas infrastructure in the state. The rules state that a full CPCN application is required for projects whose cost exceed \$75 million or are located within 1,000 feet of a sensitive receipt and increase criteria air pollutants within the area. Proposed projects that do not meet these criteria can undergo a streamlined review process. Gas utilities are required to file a Report of Planned Gas Investments for any project expected to exceed \$50 million within a 10-year forecast horizon on or before March 1 of each year. Commissions could consider periodic adjustments to these criteria to account for inflation and changing conditions.

- **Context:** Does the Commission have access to the required contextual information from the LDC, interstate pipelines, or other stakeholders to fully evaluate the new customer request (e.g., availability of supply from upstream pipelines)?
 - Can the Commission adequately compare the efficacy of upstream / midstream vs. downstream investments in serving the new customer at least cost to ratepayers?
 - Is the Commission or LDC making assumptions about the availability of upstream or midstream infrastructure that is currently in the permitting or construction process?
- **Process:** Does the existing regulatory process allow the Commission to adequately address all important factors of an interconnection request?
- **Timeline:** Is the Commission or the LDC facing challenges to meet procedural deadlines to connect new natural gas customers?
 - Is the deadline appropriate given the scope / scale of the matter?
 - How quickly does new infrastructure need to be in place to serve a new customer offering economic development benefits to the state?

DEEP DIVE: Coordination with State and Local Economic Development Organizations and Energy Offices

Commissions could consider participating in initiatives led by state and local government entities affecting energy availability for economic development, as has been done in multiple states. Local governments could be encouraged to submit comments to Commissions as they consider agreements for new service or other decisions around large customers. Louisiana's Public Service Commission (PSC) works in tandem with the Louisiana Department of Economic Development. In December 2024, Meta announced plans to build a \$10 billion artificial intelligence data center in Richland Parish, a rural area in the northeastern part of the state. The PSC voted to approve an agreement to enable infrastructure investments to serve the new data center, finding these investments in the public interest, in an August 2025 order following substantial public participation.¹⁰

In a proceeding before the Mississippi Public Service Commission (PSC), the president of the Rankin County Board of Supervisors, a

central Mississippi county east of Jackson, submitted a letter to the Mississippi PSC in October 2025 encouraging the approval of an agreement for electric service between Entergy Mississippi and ADP Rankin Data Hub, LLC, a data center project in the county.¹¹

In October 2025, the Virginia Department of Energy (VDOE) announced plans to complete a study with Red Post Energy, an independent power producer, and Williams and Enbridge, both natural gas infrastructure operators, to identify locations in the state for new natural gas pipeline infrastructure. Citing "unprecedented energy demand driven by Virginia's historic economic growth, including the expansion of advanced manufacturing facilities and diverse economic development opportunities," the VDOE claimed that failing to take this statewide approach would risk increased energy costs, limited economic growth, and decreased grid reliability.¹²

10 Louisiana Public Service Commission, "Order Number U-37425, Docket No. U-37245, In re: Application for approval of generation and transmission resources in connection with service to a single customer for a project in North Louisiana," August 20, 2025. <https://lpscpubvalence.lpsc.louisiana.gov/portal/PSC/ViewFile?fileId=nDWN%2fjuc2%2bA%3d>.

11 Scarborough, Sid, "Reference: Support Letter: 25-UA-85; Entergy Mississippi, LLC; Application of Entergy Mississippi, LLC for Approval of Agreement for Electric Service with ADP Rankin Data Hub, LLC," October 13, 2025: <https://ctsportal.psc.ms.gov/portal/ViewFile?fileId=a%2BbpHtN5zl4%3D>.

12 Virginia Department of Energy, "Virginia Announces Industry Partnership to Increase Natural Gas Power Generation to Meet Unprecedented Growth," October 9, 2025. <https://www.energy.virginia.gov/public/documents/newsroom/2025/Press%20Release%20-%20Gas%20Partnership.pdf>.

- **Engagement:** Are the appropriate stakeholders involved in the Commission decision process?
 - Which customers are represented by the consumer advocate?
 - If commercial and / or industrial customers are not represented by the consumer advocate, as is the case in most states, how
- **Follow-Up:** Are there processes in place for the Commission to receive or request information about the project after the customer is connected?
 - How can the Commission improve confidence in demand forecasts in the future?
 - Can any rate or bill changes be attributed to the customer's needs?

Process and participants

Many state regulators and the Federal Energy Regulatory Commission (FERC) have held technical conferences to explore the impacts of large electric customers on regulated utilities, customers, and grid reliability. These inquiries have generally been confined to electricity use; however, there is growing evidence that data center growth may impact other types of utility services such as natural gas and water.¹³ Commissions could consider opening non-adjudicatory investigative proceedings to gather more information about the above criteria or the broader effects of large load growth on natural gas service.

Outputs

A deliberate examination of the above questions will reveal if there are gaps in the Commission's existing processes--where the Commission might need additional information, resources, or agility to facilitate growth on the natural gas distribution system.



Step 3. Consider Investment Options

Well managed economic development can facilitate benefits for customers broadly. In accordance with Bonbright's principles of utility regulation, the costs of infrastructure maintenance and expansion to serve new customers should ideally be allocated to those specific customers driving demand,¹⁴ protecting existing ratepayers from disproportionate burdens. When it is feasible to expand infrastructure quickly while maintaining adequate supply, safety, and affordability, extensions of gas to new customers in a business as usual manner is likely the first preference of the customer, utility, and perhaps the Commission. In cases where traditional line extensions are costly, challenging, or infeasible, large new customers with unique consumption characteristics may be prime candidates for alternatives to conventional pipeline infrastructure expansion, including emerging technologies and programs to align their demand with system needs. These investment options have the potential to avoid costly infrastructure buildout in favor of localized, customer-driven solutions.

- Line extensions
- In-pipe solutions
- Gas storage
- Virtual natural gas pipelines
- Renewable natural gas
- Demand response

- Utility works with large customer(s) to consider options and propose investments to PUC

- Gas LDC and customer investments

Information needs

The LDC and Commission will scrutinize any investments to ensure that they meet customer needs and enhance system reliability, safety, and affordability. These alternatives include:

- **In-pipe solutions:** using emerging technologies to detect, quantify, and repair leaks in natural gas distribution pipelines and enhance infrastructure integrity, decreasing lost and unaccounted for (LAUF) gas and increasing availability of delivered gas to customers¹⁵

13 Tan, E., New York Times, "Their Water Taps Ran Dry When Meta Built Next Door," July 14, 2025. <https://www.nytimes.com/2025/07/14/technology/meta-data-center-water.html>.

14 Bonbright, J., "Principles of Public Utility Rates," 1961. <https://www.raonline.org/wp-content/uploads/2023/09/powellgoldstein-bonbright-principlesofpublicutilityrates-1960-10-10.pdf>.

15 See Lewnard, J., "Alternative to Gas Pipeline Replacement," February 24, 2025 and Carbone, M., "Innovations in Pipeline Safety: Cured-in-Place Lining (CIPL) Trenchless Renewal of Natural Gas & Pipelines," February 24, 2025. Presentations for Future of Heat Initiative, "Innovations in Pipeline Safety," February 24, 2025, Washington, DC.

- **Gas storage:** constructing LNG, CNG, or underground natural gas storage facilities to serve large customers during peak times or seasons or address short-term local capacity needs
- **Virtual natural gas pipelines:** transporting natural gas via vehicles to serve customers lacking adequate pipeline infrastructure
 - National Grid’s New York and Massachusetts natural gas utilities rely on trucked compressed natural gas (CNG) to serve demand in light of regional pipeline constraints in the Northeast. CNG transfer sites enable National Grid to maintain system integrity during severe cold weather when pipeline capacity is scarce.¹⁶
 - Proposed pipeline projects to serve National Grid’s New York City and Long Island service territories are expected to alleviate pipeline constraints and reduce the need for CNG to serve customers. CNG will provide an interim solution to serve growing customer demand until longer-term pipeline capacity solutions can be built.¹⁷
- **Renewable natural gas:** working with LDCs, current and potential RNG producers (e.g., landfills, agricultural operations, wastewater treatment plants) to bring new RNG supply online in areas with near-term capacity constraints¹⁸
- **Demand response:** incentivizing customers to reduce or stop using natural gas during peak periods to alleviate pipeline capacity or supply constraints
 - The Colorado Public Utilities Commission (PUC) approved a natural gas demand response pilot program for Public Service Company of Colorado, the state’s largest gas LDC, in April 2024 with two goals: to avoid costly investments in new gas infrastructure and to shift gas consumption to off-peak times.¹⁹ The program targeted capacity-constrained areas on the gas distribution system. In its order, the PUC emphasized that the company should collect robust data during the pilot across varying climate areas to answer the study question: “What is the potential reduction of peak natural gas demand usage through demand response program designs and technologies, including but not limited to, different temperature setbacks, elevations, and different weather conditions?”²⁰

Process and participants

These options will likely be developed and analyzed by the LDC, though informed by input from the Commission and key stakeholders, including intervenors, local governments, customers, and others.

Outputs

This step provides a set of investment options to facilitate growth and offers a justification for the selection of particular options based on economic analysis.

16 National Grid, “National Grid is Prepared to Serve Customers for the Winter Heating Season,” November 9, 2020. <https://www.nationalgridus.com/News/2020/11/National-Grid-is-Prepared-to-Serve-Customers-for-the-Winter-Heating-Season/>.

17 National Grid, “Case 24G-0248: National Grid NY Final Gas System Long-Term Plan Update Technical Conference,” July 22, 2025. <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKewiGp8-9fGQAxWSETQIHx7gMO4QFnoECBgQAQ&url=https%3A%2F%2Fdocuments.dps.ny.gov%2Fpublic%2FCommon%2FViewDoc.aspx%3FDocRefId%3D%257BC05F5298-0000-C72A-90A5-5B829ED7145D%257D&usq=AOvVaw0qq2x6d74cMDMI2R4yzoQg&opi=89978449>.

18 See NARUC, “Potential State Regulatory Pathways to Facilitate Low-Carbon Fuels,” March 2024. <https://pubs.naruc.org/pub/D42D84E6-FC2A-CA17-6E4D-A82BD8EB2BB8>.

19 Colorado Public Utilities Commission, “Decision No. C-24-0211: Commission Decision Granting, In Part, and Denying, In Part, Exceptions to Recommended Decision No. R24-0009 and Closing Proceeding” April 5, 2024. https://www.dora.state.co.us/pls/efi/EFI.Show_Docket?p_session_id=&p_docket_id=23M-0466EG.

20 Id, p. 19.



Step 4. Determine Cost and Benefit Allocation

Once investments are selected, the Commission will oversee the appropriate allocation of costs---and benefits---to customers based on their contribution to the need for the investments. Potential pathways include proactive tariff design and infrastructure improvements funded by growth.

- Economic development rates
- Large-volume customer tariffs

- PUC-led process with utility and stakeholder engagement

- Cost and benefit allocation strategies

Information needs

A growing number of state regulators have approved tariffs specific to large customers.²¹ Many gas LDCs already offer large commercial or industrial natural gas tariffs with lower volumetric rates for customers exceeding certain thresholds of consumption. When authorized by statute, some Commissions have the authority to deviate from approved tariffs to offer special economic development rates designed to attract major employers or industries deemed to be within the interest of the state. In the spirit of attracting AI investments, electric distribution utilities are spearheading new large load tariff designs to accommodate growing large load demand from data centers. The objectives of these tariffs include additional protections for existing customers and financial certainty for the utility on cost recovery. State utility regulators might consider applying effective approaches to address electric demand from large loads to large load requests on the natural gas distribution system.

While approaches from gas LDCs are sparse, electric utility approaches can offer some instructive examples. In June 2025, electric distribution utility Commonwealth Edison (ComEd) proposed four changes to

its General Terms and Conditions (GT&C) to the Illinois Commerce Commission for approval. The proposed changes included project prioritization in coordination with the Illinois Department of Commerce and Economic Opportunity, higher large load deposits, transmission security agreement / minimum transmission payments, and new distribution system extension costs. ComEd requested the proposals to be approved and effective on August 7, 2025.²²

- **Authorization for ComEd to prioritize projects identified by the state:** Revisions would allow ComEd to prioritize projects that have been “formally designated by the Illinois Department of Commerce and Economic Opportunity (DCEO), or other [authorized] unit of government of the State of Illinois [as] economic development priorities,” so long as it does not “affect the results of prior Cluster Studies or costs associated with projects in such prior Clusters.”
- Commissions could be brought in as parties to coordinate with LDCs state economic development agencies to identify economic development priority projects expecting to use large quantities of natural gas. This would provide early notice to the Commission that an LDC filing to recover infrastructure costs to serve a large new customer might be materializing. The Commission could allocate appropriate resources to review the application.
- **Larger deposits:** ComEd is proposing a new deposit requirement for new large load (greater than or equal to 50 MW) applications: \$1 million refundable deposit for the first 50 MW, followed by \$500,000 for each additional 100 MW above 200 MW. Any deposit beyond \$2 million requires an additional letter of credit. The deposit provides “a security for the Company’s analysis and engineering costs,” and

21 Smart Electric Power Alliance and North Carolina Clean Energy Technology Center, “Database of Emerging Large-Load Tariffs (DELTA).” <https://sepapower.org/large-load-tariffs-database/>

22 Commonwealth Edison Company, “Supplemental Statement: Revised General Terms and Conditions,” June 23, 2025. https://www.comed.com/cdn/assets/v3/assets/blt3ebb3fed6084be2a/bltba111a4e95c5ea00/68596f1662bf7985046bf9ff/SS_-1_Large_Load_Deposits_and_TSA_Suppl_Stmnt_20250622_-_Unsigned.pdf?branch=prod_alias. See also Commonwealth Edison, “Electricity: General Terms and Conditions, Organization of General Terms and Conditions,” June 23, 2025. https://www.comed.com/cdn/assets/v3/assets/blt3ebb3fed6084be2a/blt4eb49693923d71e/68596f9762bf792d7c6bfa87/Shts_125_127-127.1_129_149.2-151_and_151.3_1_GTC_-_Deposits_and_TSA_Lg_Load_062025_515pm_-_ADVANCED_COPY.pdf?branch=prod_alias.

the deposit eventually is to be refunded, minus the company's share of the cluster study and any other "attributable" costs.

- Commissions could consider LDC requests to require escalating refundable or nonrefundable (i.e., held by the utility in escrow and used to pay down initial customer bills) deposits at gas usage threshold levels to ensure that the costs of speculative work done on a potential new customer's behalf are not passed onto other ratepayers should the new demand not appear for any reason.

TIP: Commissions may consider the new customer's ability to pay deposits or penalties, particularly if a limited liability subsidiary of a larger customer is the party agreeing to these rules.

- **Greater share of distribution extension costs:** The revisions to the Distribution System Extensions rider will now require a large load customer (greater than or equal to 50 MW) to provide deposits for the Company's standard facilities on the customer premises, as well as the standard facilities extended to the premises.
- The costs of pipeline extensions, compressor stations, and other equipment needed to serve new natural gas users may be substantial and should be borne by those customers. The Commission may require new analytical tools to accurately allocate new infrastructure costs when a large economic development customer chooses to locate in an already developed / dense area of the state where infrastructure improvements could benefit a large number of existing customers in addition to the new user. When economic development occurs on greenfield sites or sparsely populated areas, it will be easier to isolate and allocate the new infrastructure costs.

Many gas utilities also offer separate tariffs for large-volume customers. Such tariffs allow the utilities to allocate costs to large end-users, consistent with cost-causation principles and provide rate protections for

Consumers Energy in Michigan offers a "Large Business" tariff for natural gas customers that use more than 10,001 Mcf/year as well as a Transportation Rate for large customers who secure their own natural gas supplies. Similar, PECO has a separate rate rider for Large High Load Factor Service for commercial and industrial customers. See Consumers Energy, "[Business Natural Gas Options](#)"; PECO Energy Company, "[Supplement No. 20 to Gas-Pa. P.U.C. No. 5: Gas Service Tariff](#)," November 26, 2024.

other, smaller customers. Lessons learned from new large load electric tariffs, such as the ComEd Example above, can be applied to existing gas tariffs to serve growing demand.

By facilitating economic development with natural gas expansion, Commissions can also work with utilities to ensure that appropriate revenues from growth are put to productive use for customers balanced with utility shareholder returns. NARUC's GEAR Task Force recognized the potential of delivering the benefits of system expansion to existing customers in its final report: "Any economic optimization benefits realized by utilities can be shared with consumers, such as rate reductions or accelerated LDC system improvements."

An example can also be found in electric utility regulation. In September 2025, Entergy Mississippi announced plans to seek regulatory approval from the Mississippi PSC for a plan to spend an additional \$300 million (representing a 50 percent increase in capital spending) in grid reliability over five years. This spending includes investments in stronger distribution poles better equipped to resist severe storms, smart devices and monitoring systems, and enhanced vegetation management to reduce the frequency and duration of outages for Mississippi customers by 50 percent, excluding major weather events.²³ Critically, this incremental spending will not impact bills for existing Entergy Mississippi customers but will come entirely from large industrial customers such as Amazon.

23 Entergy Mississippi, "Entergy Mississippi Launches Largest, Most Comprehensive Grid Upgrade in Company History: Superpower Mississippi," September 24, 2025. <https://www.entropy.com/news/entergy-mississippi-launches-largest-most-comprehensive-grid-upgrade-in-company-history-superpower-mississippi>.

Lessons learned and successes from Entergy Mississippi's program could be applied to natural gas utilities with reliability improvement needs.

Process and participants

This step envisions a Commission-led process with robust engagement from utilities and stakeholders.

Outputs

This step will produce cost and benefit allocation strategies that can align with cost causation principles amid system growth.



Step 5. Evaluate and Iterate

After working through the planning cycle, the Commission will reflect on what worked well, what did not go well, and lessons learned. These lessons learned will inform improvements to the inclusion of economic development within commission processes.

- Insights and lessons learned

- PUC-led with input from utilities and stakeholders

- Lessons learned and actionable next steps to improve future ability to accommodate growth

Information needs

In the final step, the Commission will initiate a process to collect takeaways and potential improvements from the planning process. These reflections will come from the Commission, staff, LDC, and key stakeholders involved in the process.

A suggested approach for this step is for the Commission to ask questions of itself and invite input from stakeholders. Potential questions include:

- What changes, if any, were made to Commission processes?
- Did these changes provide benefit to the Commission and / or stakeholders?
- Should these changes be further revised or rejected in future processes?

Using insights from reflecting on these questions, the Commission will review the planning process and make changes. Alterations could also be driven by how the context surrounding economic development may have changed since the start of the planning process (e.g., changes in policies, regulations, system baseline, customer needs, or economic conditions).

After taking account of and potentially implementing these changes, the Commission will re-initiate the planning process again from the beginning.

Process and participants

The Commission will lead the collection of lessons learned and actionable takeaways. The Commission will solicit and review feedback from stakeholders.

Outputs

This final step results in lessons learned and actionable next steps to improve processes to better align with state economic development goals.

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