



# SECTION 4: THE NATURAL GAS SECTOR

## 600K CUSTOMERS

PURA is responsible for the regulation and oversight of all in-state natural gas pipelines, both as they relate to the operation and management by the owners and operators of such pipelines and regarding public safety.[1] These owners and operators of in-state natural gas pipelines are commonly referred to as the local distribution companies (LDCs). The LDCs receive gas from interstate transmission pipelines and distribute the gas to retail customers. Pipelines, called mains, run down streets to distribute the gas throughout the area. Smaller service lines run from the mains to the individual customers.

LDCs are required to meet both Minimum Federal Safety Standards and the laws and regulations of Connecticut, which together address most areas of gas operator activities. Detailed requirements apply to the materials that may be used for constructing new gas pipelines. The requirements also address permitted pressure levels for the systems, design standards for the facilities, construction requirements, and initial testing of the facilities to ensure safety. There are extensive requirements for welding steel and other forms of joining materials. Corrosion control, operation and maintenance, emergency response, and qualification of employees to perform safety-related activities are also covered.

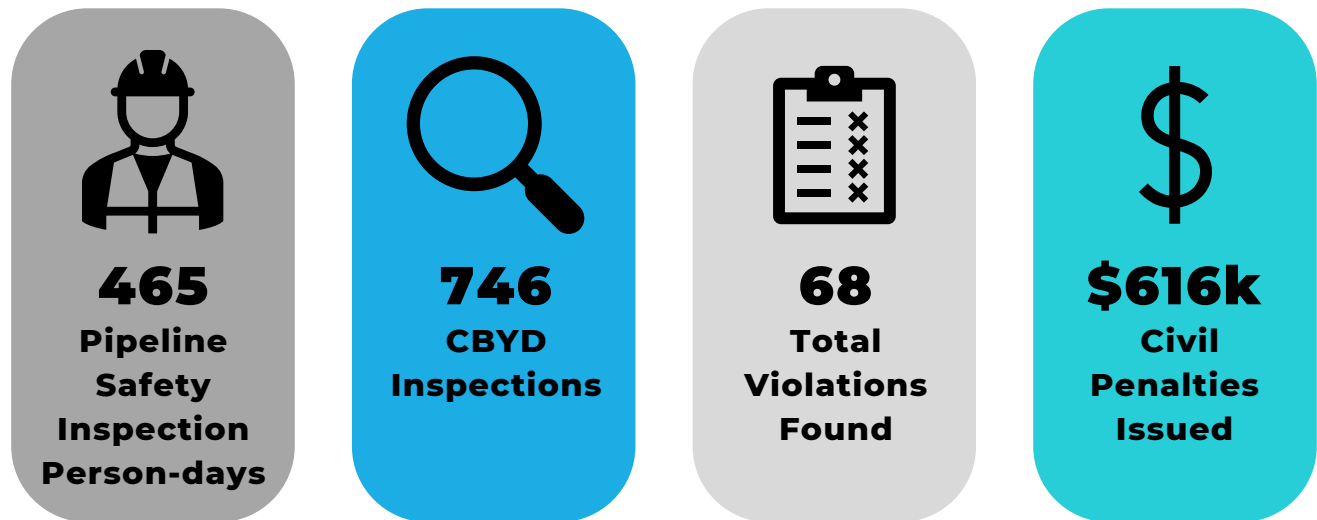
PURA's gas pipeline inspection program uses a combination of field inspections and reviews of company plans, procedures, and records to ensure compliance with applicable safety requirements. When a safety incident occurs, PURA staff will perform an investigation of the cause, and may levy fines or penalties depending on who or what was responsible for the incident. Any member of the public may file a complaint reporting defects or state or federal safety violations of any part of the natural gas pipeline infrastructure in the state to the Authority.

Sometimes, damage to a gas pipeline is caused by improper or unauthorized digging during construction projects. Excavation damage to underground utility facilities can cause fires and explosions, injuries, deaths, and significant disruptions to public utility service. To prevent this, PURA administers the [Call Before You Dig](#) (CBYD) program. The CBYD Program was established to protect the public safety with regard to excavations near underground facilities by

providing a communications link between excavators, public agencies, and public utilities. Excavators must call CBYD prior to digging, and then CBYD will notify all utilities that might be in the area. Utilities will then locate their pipes and cables using paint and stakes so excavators can conduct their work without causing damage to existing underground utilities. Due to the potential safety issues at risk, the Authority assesses significant civil penalties to any party who violates the applicable statutes and regulations, which are not recoverable in rates.

In 2024, PURA conducted robust inspection processes, and found and corrected multiple violations. Additionally, PURA issued multiple civil penalties designed to deter further noncompliance.

**Submit a Safety Complaint**  
or  
**Contact CBYD:**  
Call 811 or 1-800-922-4455



## KEY NATURAL GAS TOPICS IN 2024

The Authority's foremost responsibility related to natural gas is ensuring the safe and affordable delivery of service throughout the state. In addition to inspections, documentation review, and civil penalties, the Authority can monitor and enforce safety compliance through the adoption of regulations and measurement of leak metrics. In 2024, PURA continued updating its regulations for the first time since the 1960's, and also

completed its annual Lost and Unaccounted for Gas Report, both supporting continued high standards of safety and affordable service in Connecticut.

## Updates to Connecticut's Gas Pipeline Safety Regulations

On July 25, 2023, the Authority initiated Docket No. 23-07-21, Regulations for Gas Pipeline Safety, to repeal, amend, and adopt new gas pipeline safety regulations for Connecticut. Before this date, the existing regulations had not been revised since the 1960's.[2] Since that time there have been significant changes in the gas industry, including the materials and equipment used and the processes for installing and maintaining gas distribution systems. Additionally, there is now increased prioritization on the enhanced public safety and reduced environmental impact of gas distribution systems.

The Authority issued draft proposed regulations on August 21, 2023, and held a public hearing on October 11, 2023, accompanied by an opportunity to submit written comments through October 20, 2023. The Authority received comments from CNG and SCG, Yankee Gas, and Norwich Public Utilities. Importantly, though PURA does not regulate the rates of municipal utilities such as Norwich Public Utilities, all state gas safety regulations apply to all gas companies in Connecticut, regardless of their ownership structure. The Authority reviewed all comments and issued final proposed regulations with appropriate revisions on January 3, 2024. Key amendments in the final proposed regulations include, for example, strengthening the qualification and training requirements for pipeline operators and codifying enhanced leakage reduction procedures, as well as leak severity level criteria as set by the October 7, 2020 Decision in PURA Docket No. 20-02-19, PURA Investigation into a Uniform Natural Gas Leak Classification.

Following a review and approval by the Attorney General's Office in April 2024, the Authority submitted the proposed regulations to the Legislative Regulation Review Committee for approval. In accordance with the legislative procedures, the Legislative Commissioners' Office issued a report on the proposed regulations which detailed substantive and technical corrections and recommendations. The Legislative Regulation Review Committee rejected the proposed regulations without prejudice. Following a thorough review of the report and after internal consideration and revision, the Authority submitted revised regulations to the Attorney General's Office on January 15, 2025.

These regulations will be considered final after review and approval by the Attorney General and the Legislative Regulation Review Committee. Upon approval by the

### Additional Gas Pipeline Safety Regulation Resources

- [PURA Updated Proposed Regulation Amendments](#)
- [eRegulations System Tracking Number: PR2023-019](#)

Attorney General and the Legislative Regulation Review Committee, these modern regulations that benefit public safety, employee safety, and the environment will take effect.

### Lost and Unaccounted for Gas Report (LAUF Gas)

The Authority is required to submit a report to the General Assembly each year reporting on LAUF gas in Connecticut. LAUF gas is an accounting concept and ratemaking tool developed to balance the receipts and deliveries of natural gas. During a 12-month period, a difference may arise between the amount of gas injected into a distribution system and the gas measured at customers' meters; this difference is accounted for using the concept of LAUF gas. The LAUF gas metric is comprised of various sources, such as measurement and accounting errors, and estimates for unbilled gas, stolen gas, and pipe leaks. Thus, LAUF gas encompasses both a physical (e.g., from leaky pipes) and a nominal component. LAUF gas must be kept to a reasonable and prudent level because uncontrolled LAUF gas can indicate that there are excessive leaks, or utility mismanagement in repairing leaks, resulting in customers paying too much for gas.

In 2024, PURA opened Docket No. 24-03-02, 2024 PURA Report to the General Assembly Concerning Lost and Unaccounted for Gas, to review the 2023 LAUF reports submitted by CNG, SCG, and Yankee Gas. If an LDC's reported LAUF gas for the previous year exceeds 3%, PURA must initiate a docket to investigate further. The Authority requires the LDCs to submit LAUF data on both a calendar year and a summer-to-summer basis because Connecticut's LDCs experience peak sales and delivery of natural gas during the winter months. Therefore, a 12-month period from summer-to-summer provides a more accurate LAUF calculation because it encompasses a full winter heating season. The associated loss of revenue attributable to LAUF gas calculated from summer-to-summer is then recovered by the LDCs through the purchased gas adjustment (PGA) mechanism. Table 7 displays the historical summer-to-summer LAUF Gas over the past five years.

**Table 7: Historical LAUF Gas During Summer-to-Summer Period**

| Year | CNG   | SCG   | Yankee |
|------|-------|-------|--------|
| 2019 | 1.10% | 1.84% | 1.43%  |
| 2020 | 1.41% | 1.50% | 1.54%  |
| 2021 | 2.10% | 2.85% | 1.55%  |
| 2022 | 2.11% | 2.56% | 2.25%  |
| 2023 | 1.93% | 2.13% | 1.80%  |

Based on the data in Tables 7 and 8, the Authority found that the LAUF gas percentages for CNG and SCG in 2023 are below the 3% threshold and therefore do not require further investigation. However, while Yankee’s summer-to-summer LAUF gas fell below the 3% statutory limit, its calendar year LAUF gas did not, prompting the Authority to investigate potential causes. Through this investigation, PURA found that the primary cause of LAUF gas in 2023 was due to a misalignment of two gas flow measurements: (1) the amount of gas as it enters the distribution system; and (2) the amount measured at customer meters during monthly customer billing. These measurements are taken on different cadences causing discrepancies between the measured amount of gas passing through the distribution system, and the gas measured at the meter. As such, the Authority did not find evidence suggesting the LAUF gas exceedance of the statutory limit was caused by aging infrastructure or leaks but rather was attributable to measurement timing.

**Table 8: Historical LAUF Gas during a Calendar Year Period**

| Year | CNG   | SCG   | Yankee |
|------|-------|-------|--------|
| 2019 | 1.10% | 1.84% | 1.05%  |
| 2020 | 2.59% | 2.77% | 1.31%  |
| 2021 | 2.02% | 1.36% | 1.88%  |
| 2022 | 2.59% | 2.84% | 2.42%  |
| 2023 | 2.06% | 2.29% | 3.13%  |

Nonetheless, gas leak reduction continues to be a major priority for both the Authority and the LDCs. Two major threats to an LDC’s system integrity are aging infrastructure and third-party damage during excavation work. At the direction of the Authority, the LDCs have implemented a variety of methods to address these threats and to reduce gas leaks. These methods include but are not limited to: replacing older leak-prone infrastructure; implementing distribution integrity management programs; and executing aggressive damage prevention programs and enforcement such as CBYD. The Authority recommends that the LDCs continue their efforts to implement the programs listed above to further reduce gas leaks.

In addition to reporting LAUF gas, the LDCs provide the number of leaks that they repaired, broken down by the cause of leak, as well as the remaining leaks on a calendar year basis. Leaks are categorized on a series of grades that reflect the hazard level. A Grade 1 Leak represents an existing or probable hazard to persons or property.[3] A Grade 2 Leak is a leak that is recognized as nonhazardous to persons or property at the time of detection, but justifies a scheduled repair based on probable future hazard.[4] A Grade 3 Leak is a leak that is recognized as nonhazardous to persons or property at the time of

detection and can be reasonably expected to remain nonhazardous. All Grade 1 leaks must be repaired immediately; however, Grade 2 leaks are not always repaired immediately, but are still considered important. The Authority limits the number of Grade 2 leak backlogs at the end of each calendar year. Grade 3 leak have traditionally been eliminated through the replacement of older, leak-prone pipe.

**Table 9: Number of Grade 1 Leaks Eliminated or Repaired; by Cause**

| Cause                             | 2019 |     |     | 2020 |     |     | 2021 |     |     | 2022 |     |     | 2023 |     |     |
|-----------------------------------|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|
|                                   | YGS  | CNG | SCG | YGS  | CNG | SCG | YGS  | CNG | SCG | YGS  | CNG | SCG | YGS  | CNG | SCG |
| <b>Corrosion</b>                  | 108  | 71  | 234 | 97   | 56  | 108 | 84   | 57  | 147 | 85   | 50  | 207 | 78   | 39  | 150 |
| <b>Natural Forces</b>             | 29   | 12  | 47  | 41   | 12  | 45  | 77   | 13  | 71  | 53   | 21  | 53  | 18   | 17  | 27  |
| <b>Excavation Damage</b>          | 73   | 69  | 101 | 98   | 83  | 110 | 96   | 77  | 109 | 89   | 82  | 107 | 90   | 82  | 84  |
| <b>Other Outside Force Damage</b> | 0    | 0   | 4   | 3    | 0   | 2   | 7    | 0   | 2   | 24   | 0   | 5   | 25   | 8   | 2   |
| <b>Material or Welds</b>          | 25   | 0   | 1   | 49   | 0   | 0   | 52   | 1   | 20  | 16   | 1   | 23  | 27   | 3   | 25  |
| <b>Equipment</b>                  | 41   | 82  | 138 | 27   | 60  | 21  | 37   | 80  | 46  | 86   | 49  | 51  | 45   | 23  | 37  |
| <b>Incorrect Operation</b>        | 2    | 0   | 0   | 8    | 0   | 0   | 14   | 0   | 0   | 26   | 0   | 0   | 4    | 2   | 0   |
| <b>Other</b>                      | 49   | 17  | 0   | 52   | 16  | 0   | 25   | 7   | 2   | 5    | 11  | 1   | 14   | 8   | 6   |

[Read the 2024 LAUF Gas Report.](#)

---

[1] See Conn. Gen. Stat. § 16-272.

[2] See Conn. Agencies Regs. §§ 16-11-22, 16-11-31, 16-11-41, and 16-16-2.

[3] A Grade 1 Leak is present if any of the eight conditions listed in Appendix A of the Leak Classification Decision occurs.

[4] A Grade 2 Leak is present if any of the six conditions listed in Appendix A of the Leak Classification Decision occurs.

## 2024 NATURAL GAS SECTOR DECISIONS

| Docket Number  | Title  | Decision Date |
|--|--|---------------|
| <a href="#">23-10-01</a>   | PURA Annual Review of the Purchased Gas Adjustment Clause Charges or Credits Filed by Connecticut Local Distribution Companies | 5/15/2024     |
| <a href="#">23-11-02 (SCG)</a><br><a href="#">23-11-02 (CNG)</a> | Application of Connecticut Natural Gas Corporation and The Southern Connecticut Gas Company to Amend Their Rate Schedules      | 11/18/2024    |
| <a href="#">24-03-01</a>   | Annual Review Of The System Expansion Reconciliation Mechanisms  | 12/18/2024    |
| <a href="#">24-09-01</a>   | Call Before You Dig, Inc. - Proposed Budget for 2025   | 12/18/2024    |

A comprehensive list of PURA 2024 decisions is available in Appendix 2, attached to this Report.