



SECTION 5: 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. 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 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 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, significant disruptions to public utility service, and even injuries and death. To prevent this, PURA administers the Call Before You Dig (CBYD) program. The CBYD Program was established to protect the public safety regarding 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 2025, 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

To submit a Safety Complaint or Contact CBYD, call 811 or 1-800-922-4455.



498
Pipeline
Safety
Inspection
Person-days



473
CBYD
Inspections



1,165
Total
Violations
Found



\$2.5M
Civil
Penalties
Issued

KEY NATURAL GAS TOPICS

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

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 2025, PURA completed an update of its gas 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.

Updated State Gas Pipeline Safety Regulations

The Legislative Regulation Review Committee approved the Authority's Gas Pipeline Safety Regulations at its May 27, 2025 meeting, completing a nearly two-year process to update the regulations. The Secretary of the State subsequently posted the Gas Pipeline Safety Regulations to the eRegulations System on June 11, 2025. The revised State Regulations go into effect on January 1, 2027 and the LDCs have begun preparing to comply.

The purpose of the updated Gas Pipeline Safety Regulations is to revise PURA's existing regulations that implement General Statutes §§ 16-280b(b) and 16-280c. The updated regulations repeal and replace outdated requirements and provide clarification and updates to reflect current practices related to PURA's oversight and the safety of the gas distribution systems throughout Connecticut using an approach consistent with federal regulations.

The Connecticut Gas Pipeline Safety Regulations had previously not been revised since circa 1964. 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, the Proposed Regulations focus on enhancing public safety and reducing the environmental impact of gas distribution systems.

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 2025, PURA opened Docket No. 25-03-02, 2024 PURA Report to the General Assembly Concerning Lost and Unaccounted for Gas, to review the 2024 LAUF reports submitted by

CNG, SCG, and Yankee Gas. 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 5 displays the historical summer-to-summer LAUF Gas over the past five years.

Table 5: LAUF Gas for Summer-to-Summer Period

| Year | CNG | SCG | Yankee |
|------|-------|-------|--------|
| 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% |
| 2024 | 2.85% | 1.99% | 2.81% |

Based on the data in Tables 5 and 6, the Authority found that the LAUF gas percentages for CNG and SCG in 2024 are below the 3% threshold and therefore do not require further investigation. For calendar year 2024, CNG, SCG, and Yankee each reported a LAUF gas percentage below the statutory maximum of 3% for the summer-to-summer reports. The Authority investigated the causes of CNG exceeding the 3% LAUF gas maximum for the calendar year reporting period. Through this investigation, the Authority found that the LAUF data provided by CNG indicates that the primary cause of LAUF gas in 2024 is due to the estimated value for unaccounted gas due to meter bias. Meters that are biased slow reduce the net unaccounted for gas, while meters biased fast have the opposite effect. In the sample population of meters tested in 2024, more meters registered “fast”, meaning that they registered more gas than passed through 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 meter bias.

Table 6: Historical LAUF Gas during a Calendar Year Period

| Year | CNG | SCG | Yankee |
|------|-------|-------|--------|
| 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% |
| 2024 | 3.20% | 2.82% | 2.60% |

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. 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. 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 7 shows the number of Grade 1 Leaks eliminated or repaired by the cause of the leak, over the past five years.

Table 7: Number of Grade 1 Leaks Eliminated or Repaired; by Cause

| Cause | 2020 | | | 2021 | | | 2022 | | | 2023 | | | 2019 | | |
|-----------------------------------|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|
| | YGS | CNG | SCG | YGS | CNG | SCG | YGS | CNG | SCG | YGS | CNG | SCG | YGS | CNG | SCG |
| Corrosion | 97 | 56 | 108 | 84 | 57 | 147 | 85 | 50 | 207 | 78 | 39 | 150 | 73 | 74 | 188 |
| Natural Forces | 41 | 12 | 45 | 77 | 13 | 71 | 53 | 21 | 53 | 18 | 17 | 27 | 22 | 24 | 41 |
| Excavation Damage | 98 | 83 | 110 | 96 | 77 | 109 | 89 | 82 | 107 | 90 | 82 | 84 | 88 | 69 | 100 |
| Other Outside Force Damage | 3 | 0 | 2 | 7 | 0 | 2 | 24 | 0 | 5 | 25 | 8 | 2 | 26 | 0 | 10 |
| Material or Welds | 49 | 0 | 0 | 52 | 1 | 20 | 16 | 1 | 23 | 27 | 3 | 25 | 22 | 6 | 23 |
| Equipment | 27 | 60 | 21 | 37 | 80 | 46 | 86 | 49 | 51 | 45 | 23 | 37 | 61 | 36 | 44 |
| Incorrect Operation | 8 | 0 | 0 | 14 | 0 | 0 | 26 | 0 | 0 | 4 | 2 | 0 | 4 | 0 | 0 |
| Other | 52 | 16 | 0 | 25 | 7 | 2 | 5 | 11 | 1 | 14 | 8 | 6 | 20 | 12 | 2 |
| Total | 375 | 227 | 286 | 392 | 235 | 397 | 384 | 214 | 447 | 301 | 182 | 331 | 316 | 221 | 408 |

[Read the LAUF Gas Report.](#)