Dashboard: Pennsylvania Gas System Overview

The six largest gas utilities (the "Big Six") in Pennsylvania comprise 97 percent of the Commonwealth's gas infrastructure. This dashboard tracks their gas infrastructure, spending, customer and demand growth, and energy affordability metrics.

The Big Six Gas Utilities

- Peoples Natural Gas Co. (IOU)
- Philadelphia Gas Works (Municipal utility)
- National Fuel Gas Distribution Corporation (IOU)
- UGI Utilities (IOU)
- Columbia Gas of Pennsylvania, Inc. (IOU)
- PECO Energy Company (IOU)

Figure D.1: Territories covered by the Big Six gas utilities in Pennsylvania Modified from: S&P Global

Sources: Esri, Tom Tom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community,

Peoples Natural Gas Co.
Philadelphia Gas Works
National Fuel Gas Distribution Corporation
UGI Utilities
Columbia Gas of Pennsylvania, Inc.
PECO Energy Company

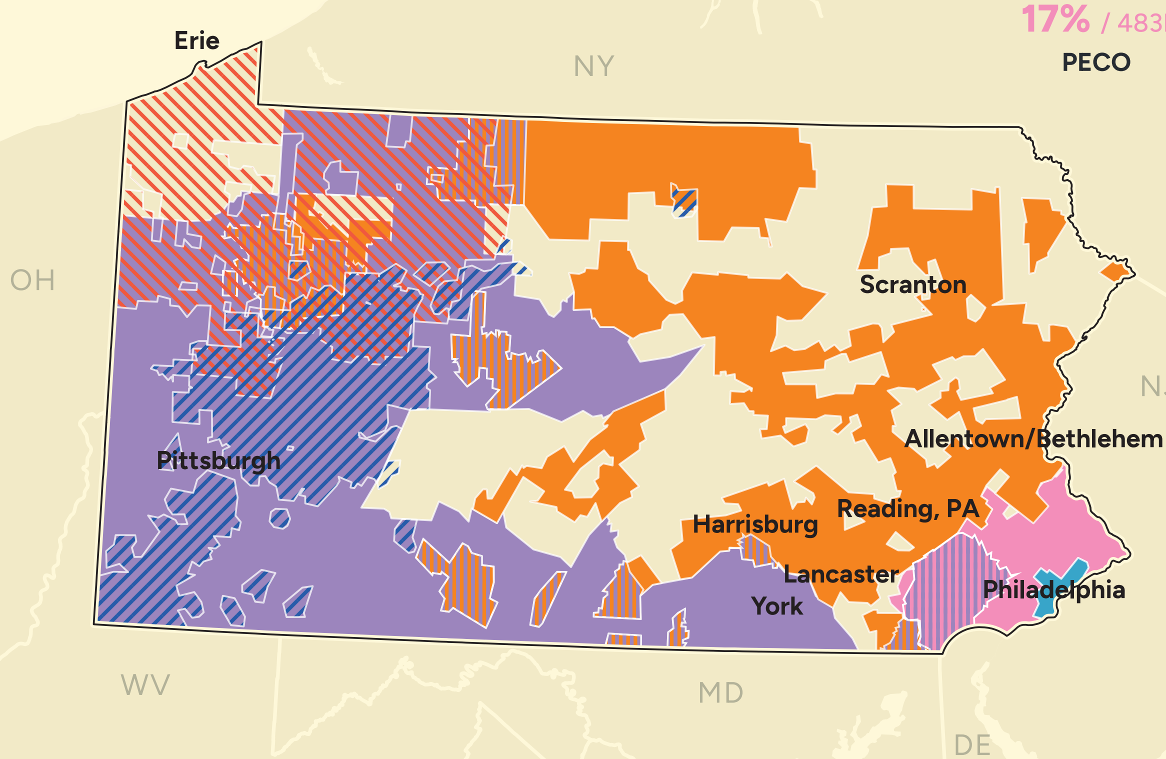
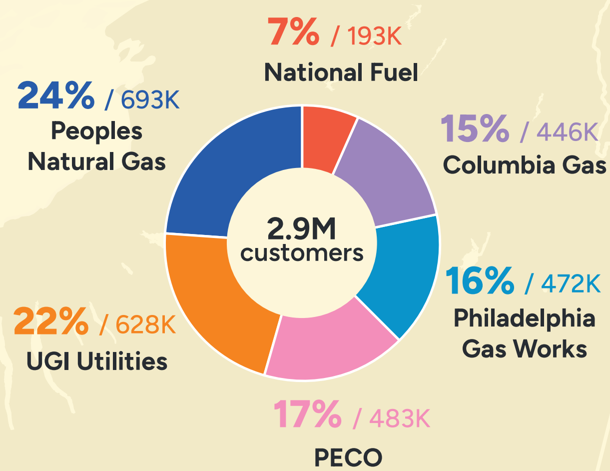


Figure D.2: The Big Six gas utilities serve from nearly 200,000 for National Fuel to nearly 700,000 for Peoples Natural gas, and together serve 98% of gas customers in Pennsylvania.



Gas Infrastructure

49k
Miles of distribution main pipeline (2024)

3.8%
Avg. annual growth, miles of distribution main pipeline (2017-2024)

40k
Miles of service pipeline (2024)

2.1%
Avg. annual growth, number of service pipelines (2017-2024)

1.2k
Miles of interstate transmission pipelines (2024)

71 years
Useful life of a gas main

15%
Gas mains 65+ years old in Big Six territory

50%
Gas mains in PGW territory 65+ years old

13.2%
Leak-prone pipe gas main mileage based on material alone in Pennsylvania

Figure D.3: **Since 2017, overall gas distribution infrastructure mileage has grown an average of 3% per year across the Big Six gas utilities.**

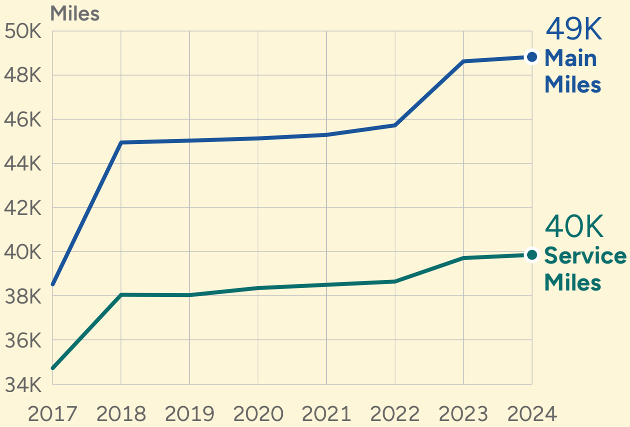


Figure D.4: **Main pipeline materials vary across iron, plastics, steel, and other materials. Across the Big Six, 13% of pipe mileage is made of known leak-prone materials, such as iron and unprotected bare steel, regardless of pipe age. Pennsylvania as a whole has about four times the national rate of leak-prone pipe.**

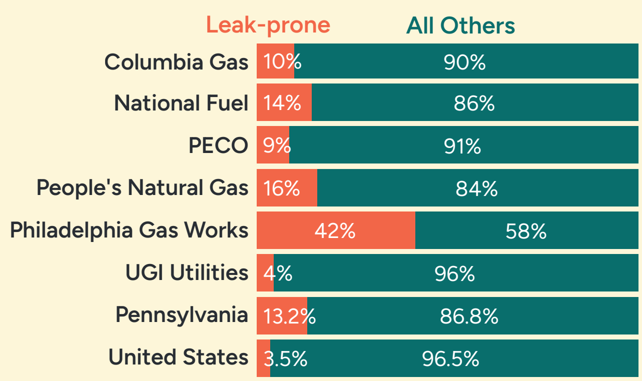
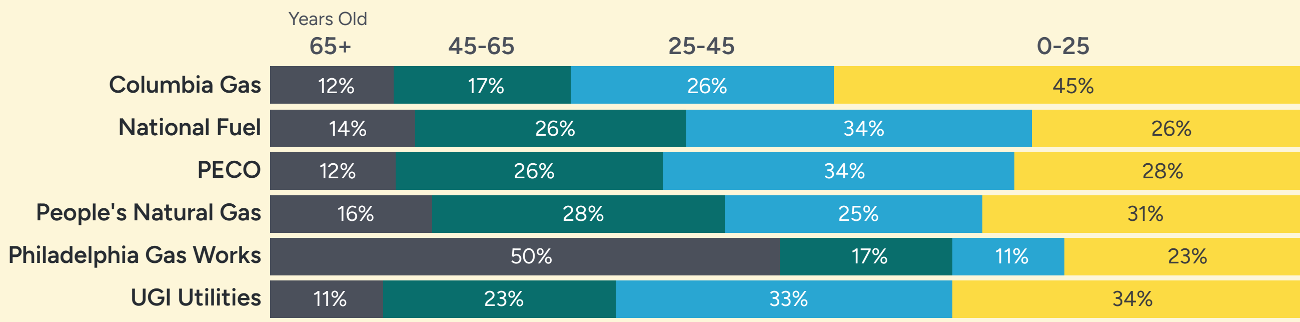


Figure D.5: **Main pipeline age varies by gas utility, with PGW maintaining the oldest system. Across the Big Six, 15% of pipes are over 65 years old, and those pipes have higher leak potential.**



See Appendix for list of sources for Gas System Overview Section

Gas System Spending

$22.6B
Gross value of gas utility assets, Big Six (2024)

166%
Growth in value of gas utility assets, Big Six (2013–2024)

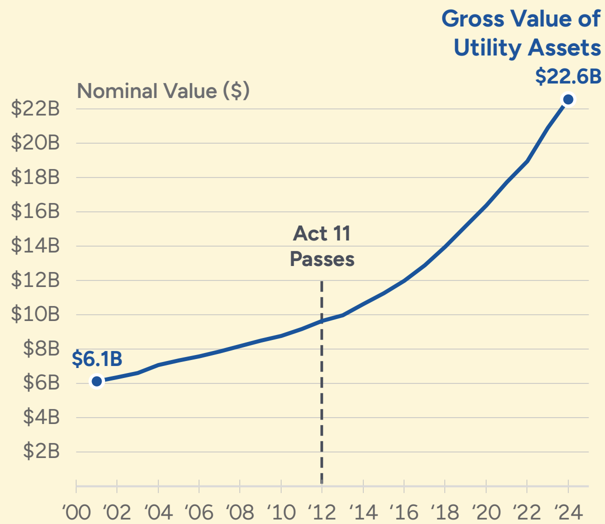
3.2x
Growth in value of gas utility assets per customer (2001-2024)

$7,150
Value of gas utility assets per customer (all classes) (2024)

$2.8M
Avg. spend per mile of main, Big Six

$40k
Average utility spending per connected customer per mile of main, 2025

Figure D.6: Since 2001, the gross value of gas infrastructure for the Big Six utilities has increased 4.5x (or 2x after inflation), increasing the asset base on which utilities earn a return and recover costs from customers.



Data Source: S&P Global and Utility Regulatory Filings, nominal dollars

Figure D.7: Since their inception in 2013, annual spending from LTIIPs, or accelerated pipeline replacement, across the Big Six has grown steadily every year, totaling $11B in direct costs through 2025.

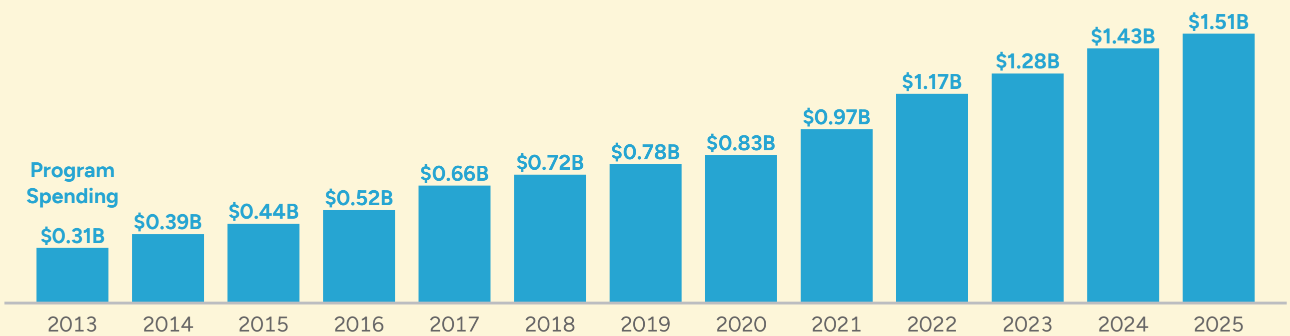


Table D.1: Gas main replacement economics by utility: spending per mile of main and per customer

Utility	Customers	Services per mile of main (2024)	Main mile replacement spending ($M), 2025 Actual	Main replacement spending per customer	Per-mile spending increase since 2014
UGI	700,000	50.3	$4.62	$91,768	209%
Philadelphia Gas Works*	500,000	154.8	$2.71	$17,493	23%
Peoples Natural Gas	700,000	52.5	$2.52	$47,970	289%
Columbia	446,000	57.4	$2.94	$51,298	132%
National Fuel**	215,000	39.9	$0.70	$17,426	70%
PECO	495,000	65.9	$3.02	$45,795	112%

*Earliest available data from 2015 **Earliest available data from 2017

Figure D.8: **The amount that a utility spends to replace a mile of gas main pipeline has more than doubled in the decade since the introduction of Act 11.**

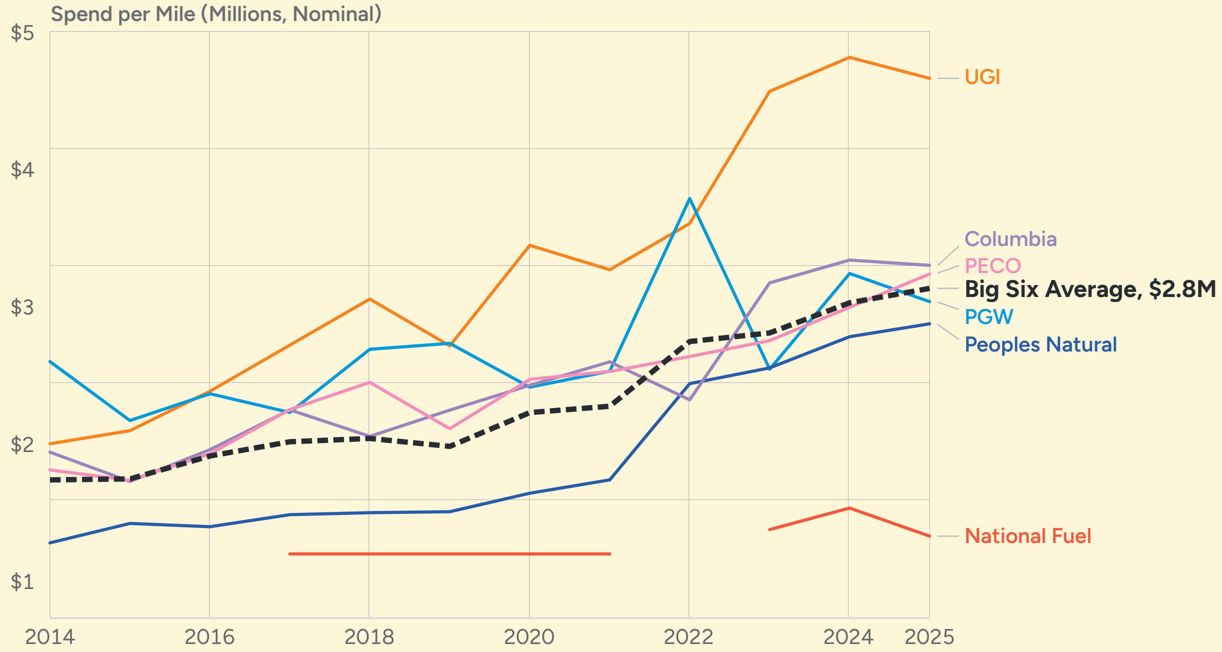
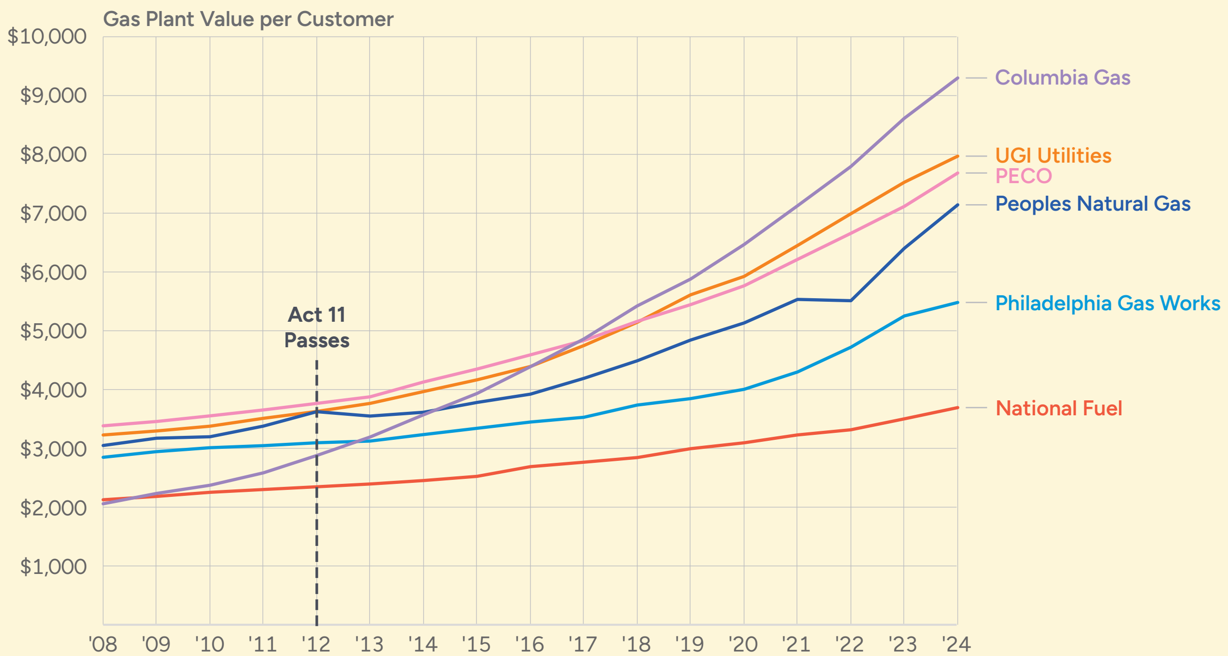


Figure D.9: **Since Act 11 passed in 2012, gross value of gas infrastructure per customer has increased by 5% (National Fuel) to 18% (Columbia Gas) per year**



Gas Customers and Demand

3.15M

Customers, all classes

91.9% **8.0%** **0.1%**

Residential, commercial, industrial customer share, respectively

0.59%

Annual average growth for all customer classes since 2000

0.62% **0.4%** **-1.7%**

Average annual growth for residential, commercial, and industrial customers, respectively, since 2000

-18%

Overall change in residential gas use (2000-2024)

-28%

Change in residential gas use per customer (2000-2024)

+61%

Change in residential gas price (2000-2024)

Figure D.10: The majority of gas customers in Pennsylvania are residential. Across all sectors, annual average customer growth since 2000 was 0.59%.

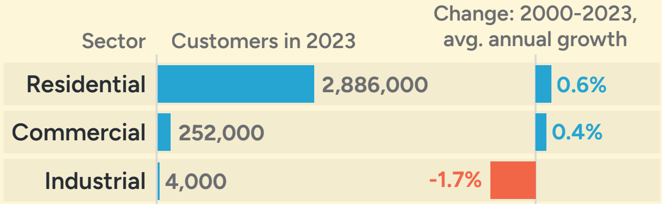


Figure D.11: Gas consumption in buildings in Pennsylvania is stagnant, with nearly all growth going to electric power generation.

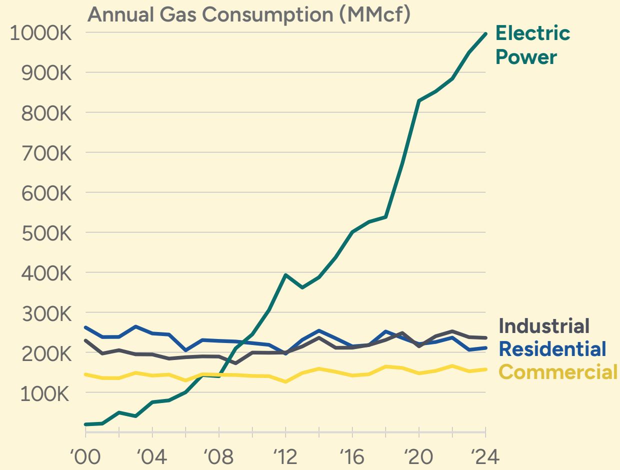
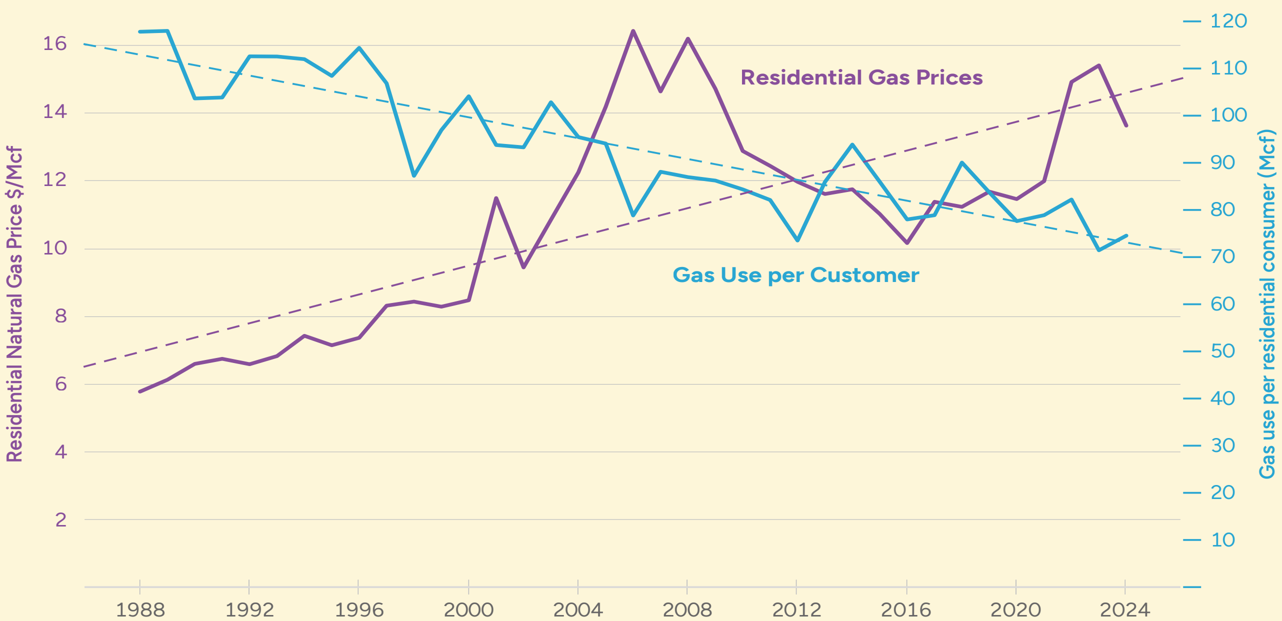


Figure D.12: Recent trends in delivered cost of gas to the residential sector and average gas use per residential customer show residential customers paying more even while consuming less gas.



Energy Affordability

Gas Bills

66%

Portion of gas bill that pays for infrastructure

34%

Portion of gas bill that pays for gas itself

$111

Average monthly residential gas bill, year-round (2025)

$234

Average monthly residential gas bill, heating season (2025)

67%

Increase in average monthly residential gas bill, year-round, since 2015.

Table D.2: Average monthly residential bill by utility

Utility	Avg. Monthly Res. Usage, Year Round (Mcf)	Avg. Monthly Res. Bill, Year Round ($)	Avg. Monthly Res. Bill, Heating Season (15 Mcf)
Columbia	7	$155	$309
National Fuel	8	$86	$148
PECO	7	$108	$203
Peoples Natural	7.1	$105	$203
PGW	5.5	$118	$290
UGI	7.3	$118	$229

Table D.3: Energy Insecurity Metrics for Residential Gas Customers*

Category	2024
Low-Income Customers, Confirmed	456,514 (16.2%)
Low-Income Customers, Estimated	705,234 (25%)
Customers with Payment Arrangements	159,093 (5.6%)
Payment-Troubled Customers	104,998 (3.7%)
Number of Customers in Debt	245,355 (8.7%)
Average Arrearage Amount ($)	$571.67
Service Terminations	99,684 (3.5%)

*See Methodology in Appendix B for definitions and further analysis

Figure D.13: Overall residential gas costs have increased steadily over time, with the majority of the growth coming from delivery charges, which now make up two-thirds of gas bills.