



PENNSYLVANIA NATURAL GAS OUTLOOK REPORT

March 2025

Published by:
Pennsylvania Public Utility Commission
400 North Street
Harrisburg, PA 17120
www.puc.pa.gov

Technical Utility Services
Paul T. Diskin, Director

Prepared by:
Matthew P. Stewart, Gas Reliability Engineer



Contents:

Section 1 - Exposition

- | | | |
|-----|-------------------|---|
| I. | Introduction | 2 |
| II. | Executive Summary | 3 |

Section 2 - Charts and Analysis

- | | | |
|------|---|----|
| III. | Natural Gas Infrastructure | 6 |
| IV. | Natural Gas Generation and End Uses | 9 |
| V. | Natural Gas Production, Consumption, Reserves,
and Prices | 15 |
| VI. | Natural Gas Distribution Company Statistical Data | 24 |
| VII. | Natural Gas Distribution Company Gas Supply and
Demand Balance | 29 |

Section 3 – Financial Data

- | | | |
|-------|---|----|
| VIII. | Natural Gas Distribution Company Financial Statistics | 34 |
| IX. | Industry Trends | 40 |

Section 4 – Conclusion

- | | | |
|----|---------|----|
| X. | Summary | 44 |
|----|---------|----|

Section 1 - Exposition

I. Introduction

The Public Utility Code requires natural gas distribution companies (NGDCs) to file annual financial reports with the Pennsylvania Public Utility Commission (PUC).¹ These reports detail financial and accounting data, including revenues and expenses. NGDCs are also required to file annual resource planning reports (ARPR) with the PUC.² NGDCs with sales of eight billion cubic feet (Bcf) of gas per year or more must file these reports, which include the past year's historical data, program changes and the next three-year forecast of demand requirements.³

This report has been prepared using information filed by the NGDCs, including the information in the reports noted above, as well as the U.S. Energy Information Administration (EIA) and other sources. The most recent available data is reported, although much of the EIA production and reserves data has a one-year lag for reporting. With the uncertainty of unconventional gas supplies, EIA has not presented proven reserves information since 2009.

¹ 52 Pa. Code § 59.48.

² 52 Pa. Code § 59.81.

³ The NGDCs in PA with sales of 8 Bcf or more include Philadelphia Gas Works (PGW), PECO Energy Company (PECO), Columbia Gas of PA (Columbia), Peoples Natural Gas Company (Peoples), UGI Utilities Inc. (UGI), and National Fuel Gas Distribution Company (NFG).

II. Executive Summary

The PUC's Bureau of Technical Utility Services has prepared this report to summarize the 2023 financial and supply and demand data for the Pennsylvania NGDCs. This report also presents several topics of interest regarding the Pennsylvania natural gas industry. National trends in the natural gas industry are affected by trends and events in Pennsylvania. Therefore, macroeconomic and industry data for the entire U.S. are included in this report.

National Summary

The national natural gas storage inventory peak for the 12 months prior to this winter heating season⁴ was 3.97 trillion cubic feet (Tcf). This was 3.4% higher than the peak from the prior injection season of 3.84 Tcf. Domestic dry natural gas production in the U.S. averaged 103.6 billion cubic feet per day (Bcf/d) in 2023, which was an increase of 4% from 2022.⁵ Domestic consumption in 2023 was 89.4 Bcf/d, which was an increase of 0.9 Bcf/d from 2022. Henry Hub spot prices averaged \$2.53 per million British thermal units (MMBtus) in 2023, which was a dramatic decrease of 60.8% from the average of \$6.45 in 2022.⁶ The decrease in prices was likely driven by increased gas production, flat consumption, and rising natural gas inventories.⁷ However, an analysis of Henry Hub natural gas futures shows an expected reversal of pricing with a moderate increase in prices in 2025; producing a national average price of \$3.14/MMBtu for 2025.⁸

⁴ 2024-2025 heating season.

⁵ EIA, *EIA Natural Gas Gross Withdrawals and Production*, available at <http://www.eia.gov>.

⁶ Henry Hub is a distribution hub in Louisiana. The price at this delivery point is frequently used by industry and trading markets as a benchmark for natural gas prices.

⁷ [U.S. Henry Hub natural gas prices in 2023 were the lowest since mid-2020 - U.S. Energy Information Administration \(EIA\)](#)

⁸ CME Group, available at <http://www.cmegroup.com/trading/energy/natural-gas/natural-gas.html>.

Pennsylvania Summary

There are over 3.1 million natural gas customers in Pennsylvania, with nearly 2.9 million residential customers.⁹ There are 26 PUC-jurisdictional natural gas utility companies in Pennsylvania, and six of these are major distribution companies with gross revenues greater than \$40 million per year.¹⁰ Pennsylvania's natural gas infrastructure includes intrastate pipelines, interstate pipelines, landfill gas pipeline projects, propane facilities and liquefied natural gas (LNG) facilities. Infrastructure needs are being met by expansion and replacement of existing pipelines, with new pipelines and compressor stations being constructed.

As of Nov. 15, 2024, 31,677 unconventional drilling permit applications have been filed with the Pennsylvania Department of Environmental Protection (463 new applications Year to Date 2024).¹¹ Of those 31,677 applications, 13,311 unconventional well permits are currently active.¹² As of Nov. 22, 2024, there were 15 rotary rigs active in Pennsylvania, which is a 25% decrease in of the number of active rigs from a year prior. Rotary rigs are a piece or set of equipment, usually mobile, that is used to provide the rotational force needed to drill a borehole. The rotary rig count is an indicator of how many rigs are in service and the demand for drilling equipment.¹³ The EIA estimates that there were 68,929 producing shale and conventional gas wells in Pennsylvania in 2020, which was a 1.7% decrease from 2019.¹⁴

Financial statistics taken from the Gas Annual Reports of the NGDCs are presented in Section VII, in time series fashion from 2013 through 2023. Sections V through VII present broad category financial data for several categories, including revenue, expenses, plant in service, depreciation, maintenance, and gas costs. Data on the number of customers, reserves, wellhead prices, Pennsylvania production and average consumption are also provided.

⁹ EIA, *EIA Number of Natural Gas Consumers*, available at <http://www.eia.gov>.

¹⁰ \$40 million in gross revenue is the threshold over which an NGDC files under 66 Pa.C.S. § 1307(f) to recover natural gas costs.

¹¹ A conventional gas well is typically shallower than an unconventional well, and drills into a pocket or reservoir of gas. Such wells generally rely on the natural pressure to extract the gas once the well is drilled. An unconventional well uses more sophisticated means to extract gas from underground deposits, typically by hydraulic fracturing of shale structures (fracking). These unconventional wells also tend to require drilling to much greater depths than conventional wells.

¹² See, *PA DEP Well Permit Workload Report*, available at [Oil and Gas Reports | Department of Environmental Protection | Commonwealth of Pennsylvania](#)

¹³ Baker Hughes, rotary rig count, available at <http://www.bakerhughes.com/rig-count>.

¹⁴ EIA, *Number of Producing Gas Wells*, available at <http://www.eia.gov>. EIA's most current data on this subject is from 2020.

The following are a few of the notable statistics contained in this report:

- Total natural gas consumption in Pennsylvania has increased from 706.2 Bcf in 1997 to 1,873 Bcf in 2023.
- Pennsylvania gas production was 7.6 Tcf in 2023, up from only 121 Bcf (0.12 Tcf) in 1997, and up slightly by 1% from 2022.
- Gas deliveries for Pennsylvania electric generation have increased markedly from 3% of total deliveries in 1997, to 60.3% in 2023, or 20 Bcf in 1997 as compared to 947 Bcf in 2023.¹⁵

¹⁵ EIA, *Natural Gas Consumption by End Use*, available at <http://www.eia.gov>.

Section 2 - Charts and Analysis

III. Pennsylvania Natural Gas Infrastructure

Pipelines

Twenty interstate natural gas pipelines exist in the Northeast Region, which includes Connecticut, Delaware, Massachusetts, Maine, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Virginia and West Virginia. These interstate pipelines deliver to several intrastate pipelines and more than 50 local distribution companies (LDCs). They also deliver to natural gas-fired electric generating facilities and large industrial customers. The pipelines in Pennsylvania have access to natural gas production from the South and Midwest, from the Rocky Mountains via the Rockies Express Pipeline, from Canada, and from the Marcellus and Utica Shales that span large portions of Pennsylvania, Ohio and West Virginia.¹⁶

Marcellus shale production in the northeast U.S. has increased from 0.4 Bcfd in January 2010 to 26.0 Bcfd in October 2024, and was relatively steady over the previous 12 months. Despite this vast increase in production, many portions of eastern Pennsylvania and New England are still subject to higher priced gas, as well as dramatic spikes in price during cold snaps in the winter heating season. These price differences are mostly caused by a lack of pipeline capacity to transport supply to the markets with demand. There are 5.4 Bcfd of pipeline projects that have been, or were scheduled to be, placed in service in the Northeast region in 2024, and a further 260 MMcfd of projects are scheduled to be placed in service in 2025, as shown in Tables 1 and 2 below, respectively. The additional pipelines are intended to remove some of the above-mentioned constraints and may assist in stabilizing regional prices by moving the increased Marcellus Shale gas production to market or linking other sources of gas to the Northeast region.¹⁷

¹⁶ EIA, Natural Gas Pipelines in the Northeast Region, *About U.S. Natural Gas Pipelines*, available at <http://www.eia.gov>.

¹⁷ EIA, *EIA Marcellus Region Drilling Productivity Report*, available at <http://www.eia.gov>.

Table 1: Proposed Pipeline Infrastructure for 2024 In-Service in the Northeast Region^{18 19}

Project Name	Pipeline Operator Name	State(s)	Additional Capacity (MMcf/d)
Mountain Valley Pipeline	Mountain Valley Pipeline, LLC	WV,VA	2,000
Northeast Supply Enhancement Project	Williams Transco	PA,NJ,NY	400
Northern Loop Project	Columbia Gas	PA,WV,OH	0
Ohio Valley Connector Expansion Project	Equitrans Midstream Corporation	OH	350
Regional Energy Access Project (Phase I and II)	Transcontinental Gas Pipeline	PA,NJ	829
Supply Header Project	Eastern Gas Transmission and Storage	PA,WV	1,500
Virginia Electrification Project	Columbia Gas	VA	350

¹⁸ EIA, EIA Natural Gas Pipeline Projects, available at <http://www.eia.gov>.

¹⁹ Some projects providing 0 MMcf/d additional capacity are designed to meet new regulations, or to provide additional flexibility in deliverability to underserved or new areas of consumption.

Table 2: Proposed Pipeline Infrastructure for 2025 In-Service in the Northeast Region^{20 21}

Project Name	Pipeline Operator Name	State(s)	Additional Capacity (MMcf/d)
Appalachia to Market II & Armagh & Entriiken HP Replacement Project	Texas Eastern Transmission	PA,NJ	55
Commonwealth Energy Connector Project	Transcontinental Gas Pipeline	VA	105
Virginia Reliability Project	Columbia Gas Transmission	VA	100

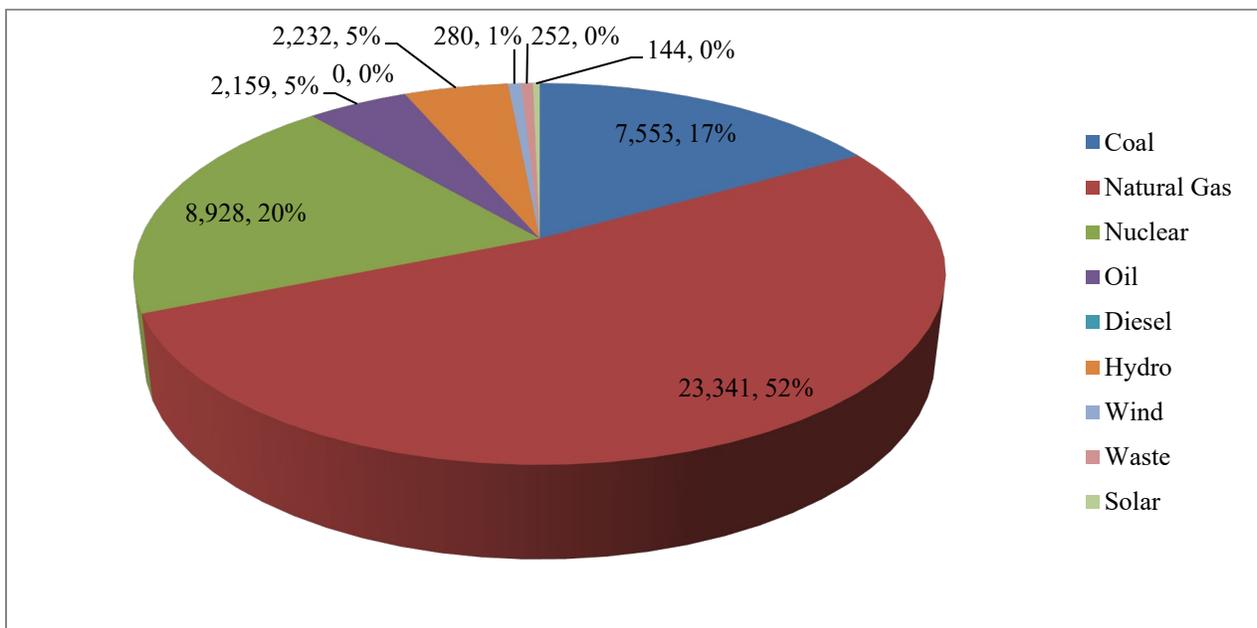
²⁰ EIA, EIA Natural Gas Pipeline Projects, available at <http://www.eia.gov>

²¹ Some projects providing 0 MMcf/d additional capacity are designed to meet new regulations, or to provide additional flexibility in deliverability to underserved or new areas of consumption.

IV. Natural Gas Generation and End Uses in Pennsylvania

By the end of 2023, Pennsylvania had 23,341 megawatts (MWs) of natural gas fired electric generation installed capacity, as shown by comparison to other capacity fuel sources in Chart 1, below.²² These facilities constitute 52.0% of Pennsylvania’s electric generating capacity, up from 49.2% the prior year, making natural gas the largest portion of Pennsylvania’s electric generation mix for the sixth year in a row. The change in the share of natural gas fired electric generation capacity was caused by a combination of a small 205 MW increase in natural gas capacity, and a substantial decrease in coal capacity of 1,885 MW.²³ Chart 2, below, shows the percentage of electric generation capacity by fuel source over time, from 2014 through 2023. Chart 2 also shows that natural gas has been steadily increasing as a share of the total electric generation capacity in PA, firmly overtaking coal in 2018, and maintaining its dominance in Pennsylvania through 2023.

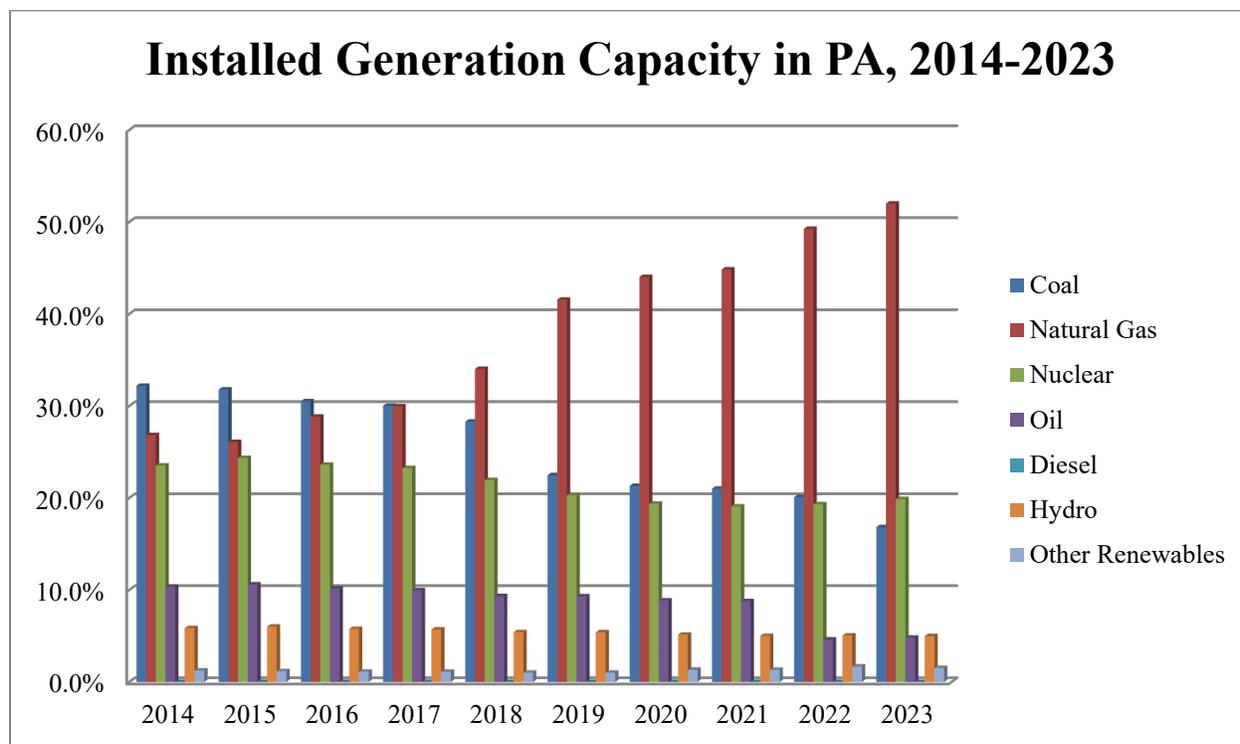
Chart 1: Electric Generation Capacity in Pennsylvania by Fuel Type at Year End 2023 (MW)



²² PJM, 2023 PJM Pennsylvania State Infrastructure Report, available at: <https://www.pjm.com/-/media/library/reports-notice/state-specific-reports/2023/pennsylvania.ashx>.

²³ While a relatively small portion of Pennsylvania’s total wholesale electric generation capacity, solar has seen noticeable increases over the past four years, with an increase of 137 MW, up from only 7 MW in 2019. In particular, wholesale solar resources more than doubled from 2022 to 2023, jumping from 70 MW to 144 MW.

Chart 2: Installed Electric Generation Capacity in PA, 2014-2023



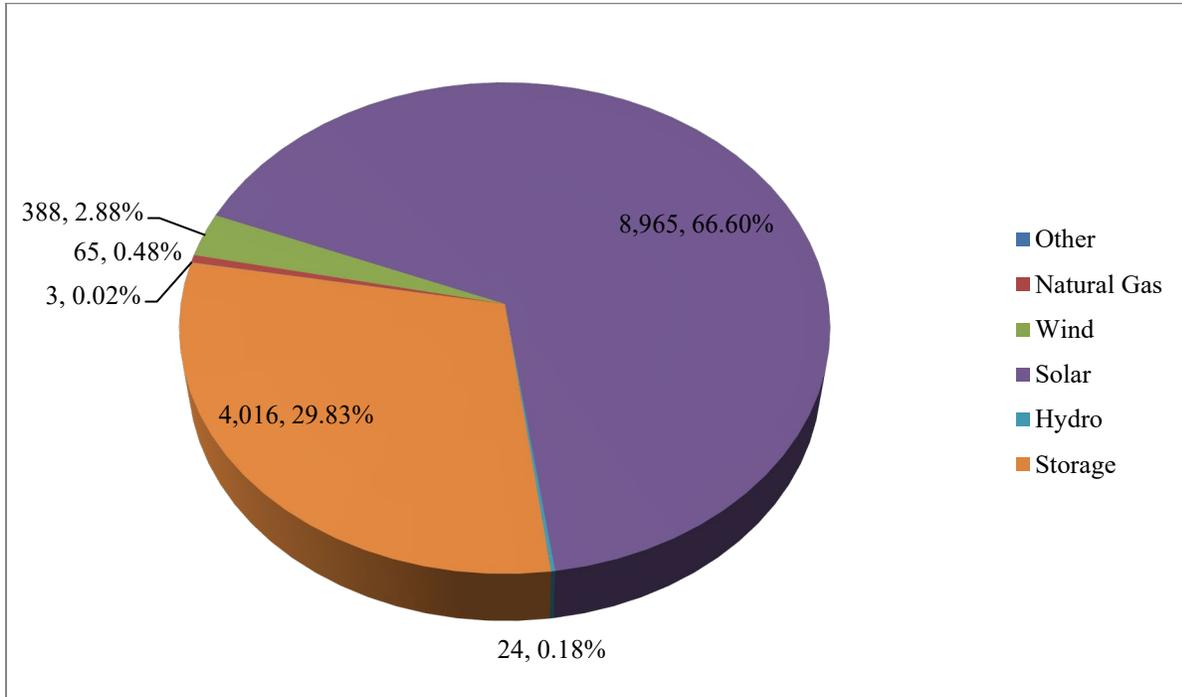
Charts 3 and 4, below, summarize the PJM queue for new electric generation capacity for Pennsylvania as of Aug. 1, 2024. The queue includes only 65 MW of proposed new natural gas fired capacity, making up 0.5% of the total PJM queue for Pennsylvania. This is primarily due to the continued high levels of solar and storage resources in the PJM queue.

PJM uses an Effective Load Carrying Capability (ELCC) method to calculate the capability of various resources, particularly intermittent, storage, renewables, and hybrid resources. These result in a lower value than the Installed Capacity (ICAP) or “nameplate” value of the resource. For example, PJM assigns an ELCC class rating of 35% to onshore wind resources, meaning an onshore wind facility with nameplate capacity of 100 MW would be given an ELCC value of 35 MW. With this in mind, Chart 4 shows the PJM queue with ELCC values for the appropriate resources in the queue.²⁴ This year solar and storage projects continue to be the vast majority of

²⁴ PJM, *Pennsylvania Resource Adequacy Analysis, Q3 2024*, available at: <http://www.pjm.com>.

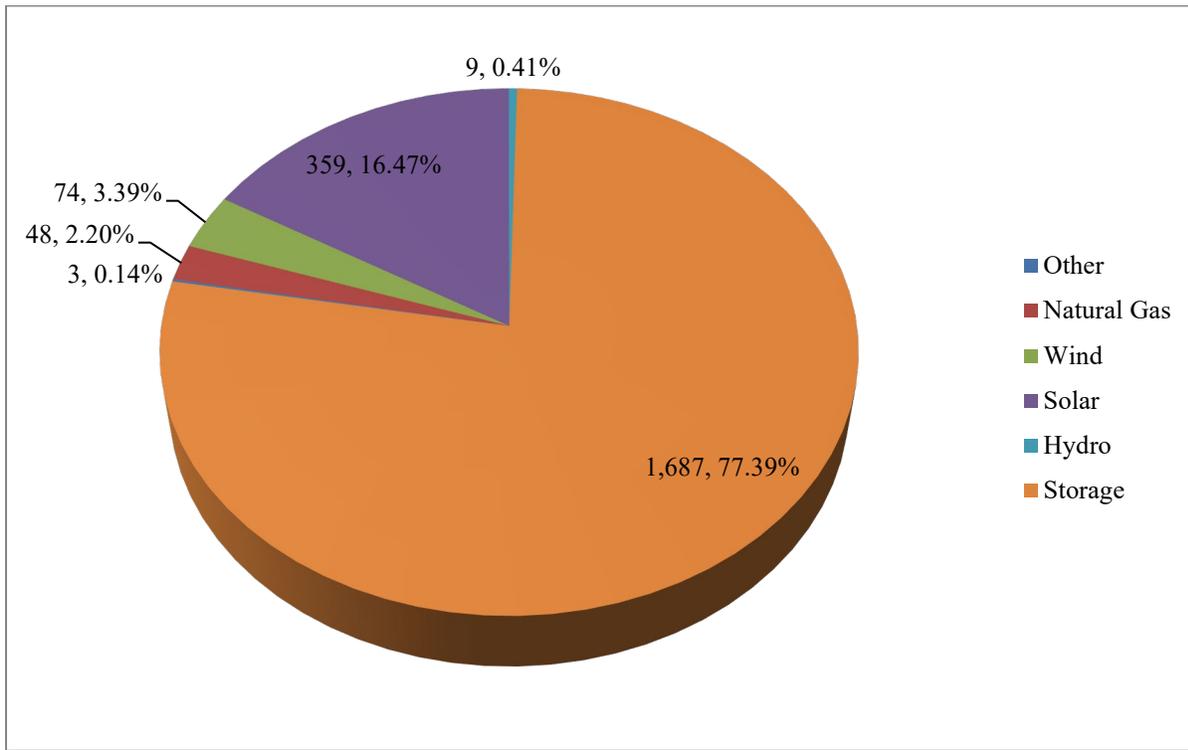
the queue, taking up 96.4% of the ICAP total combined, substantially higher than natural gas. Typically, PJM projects about 5% of the projects in the queue are actually put in service.²⁵

Chart 3: Queued Electric Generation Capacity (ICAP) in Pennsylvania by Fuel Type (MW)



²⁵ PJM, *Pennsylvania Resource Adequacy Analysis, Q3 2024*, available at: <http://www.pjm.com>.

Chart 4: Queued Electric Generation Capacity (ELCC Value) in Pennsylvania by Fuel Type (MW)



Charts 5 and 6, below, note the gas consumed in Pennsylvania for electric generation as compared to other end-uses in 1997 and 2023, respectively.²⁶ As depicted, the fraction of natural gas usage for electric generation has dramatically increased. Reasons for this increase include: greater supply of natural gas and the resultant lower cost for natural gas; the advancement of efficient natural gas fueled electric generation technology; and retirements of older coal-fired and nuclear power plants. As the composition of the generating fleet changes to more gas-fired units, pressure will continue to increase on the natural gas industry to augment production and transportation capacity.

²⁶ EIA, *Natural Gas Consumption by End Use*, available at <http://www.eia.gov>.

Chart 5: Natural Gas Consumption in Pennsylvania by End Use 1997²⁷

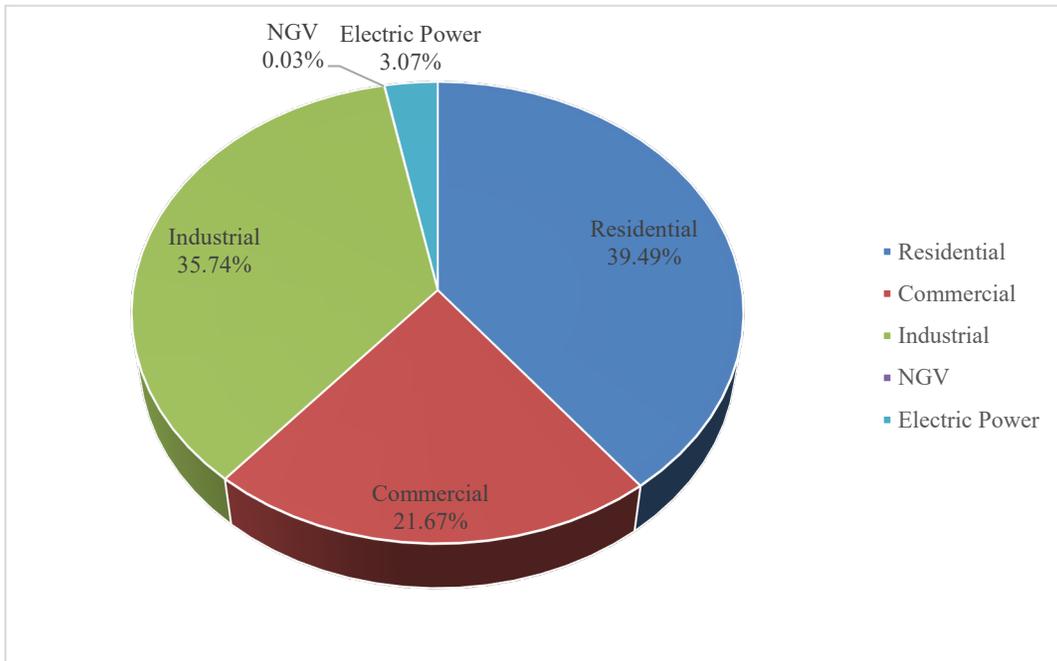
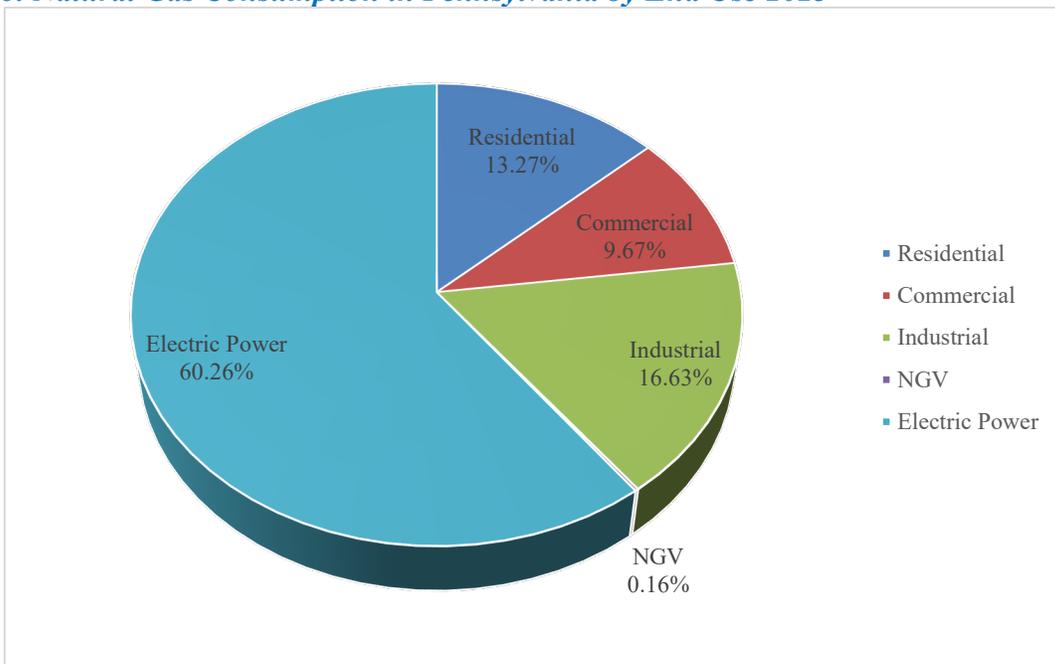


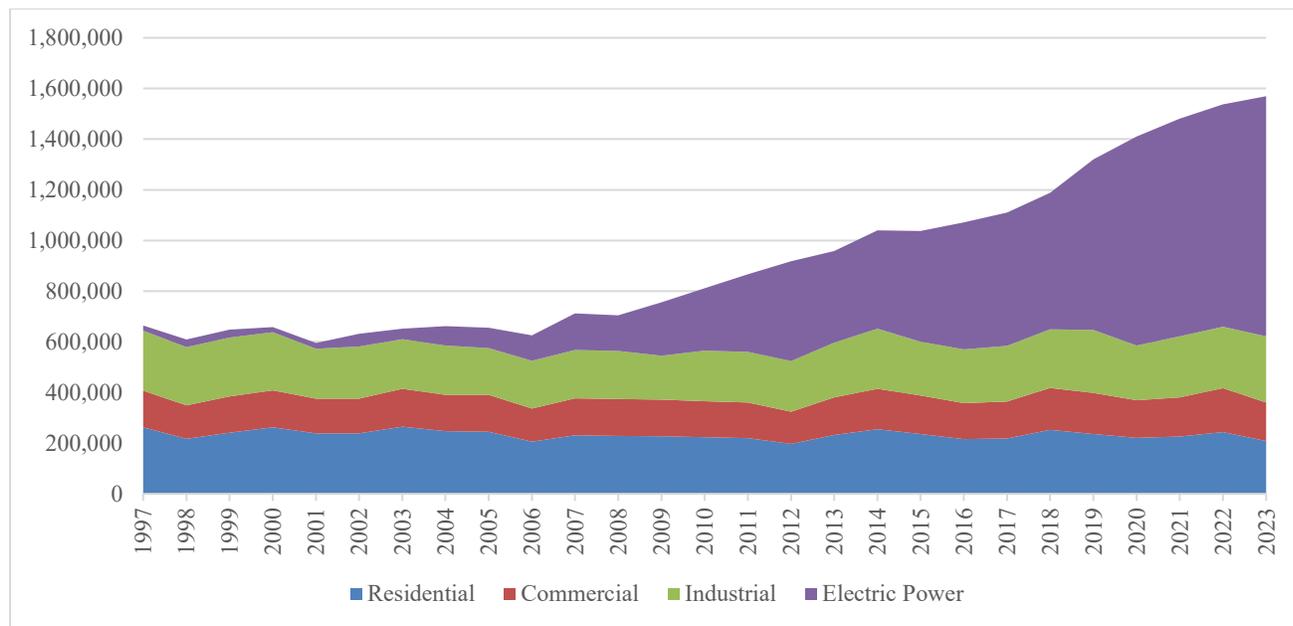
Chart 6: Natural Gas Consumption in Pennsylvania by End Use 2023



²⁷ NGV = Natural Gas Vehicles.

The dramatic shift in the use of natural gas from primarily residential, commercial, and industrial uses to electric power generation has been occurring steadily over the period from 1997 through 2023, with a marked acceleration beginning in 2008 as Marcellus Shale production ramped up, as seen in Figure 1, below.²⁸ Notably, natural gas usage for electric generation increased over 150% from 2013 to 2023, rising 585 Bcf, while total usage increased 613 Bcf over the same period.²⁹ Gas usage for all other end uses varied over this period, with residential use being relatively flat over most of the period, but with a sharp decrease of 12.1% in 2023 as compared to 2022. Usage in the commercial sector remained relatively flat over the period, while industrial usage increased by a total of 21.4%.³⁰ Electricity demand decreased in 2023 as compared to 2022, with a year-over-year decrease of -3.44%.³¹

Figure 1: Natural Gas Deliveries in Pennsylvania by End Use 1997-2023



²⁸ EIA, *Natural Gas Consumption by End Use*, available at <http://www.eia.gov>.

²⁹ Usage for NGVs actually increased over this time period, but since the amount going to this sector is so small, it is negligible for the purposes of the analysis in this section. NGV usage went from 312 MMcf to 2,527 MMcf, an increase of 710% from 2013-2023.

³⁰ While average usage declined in the Industrial customer class, the large increase in the number of industrial customers caused overall usage within the class to increase.

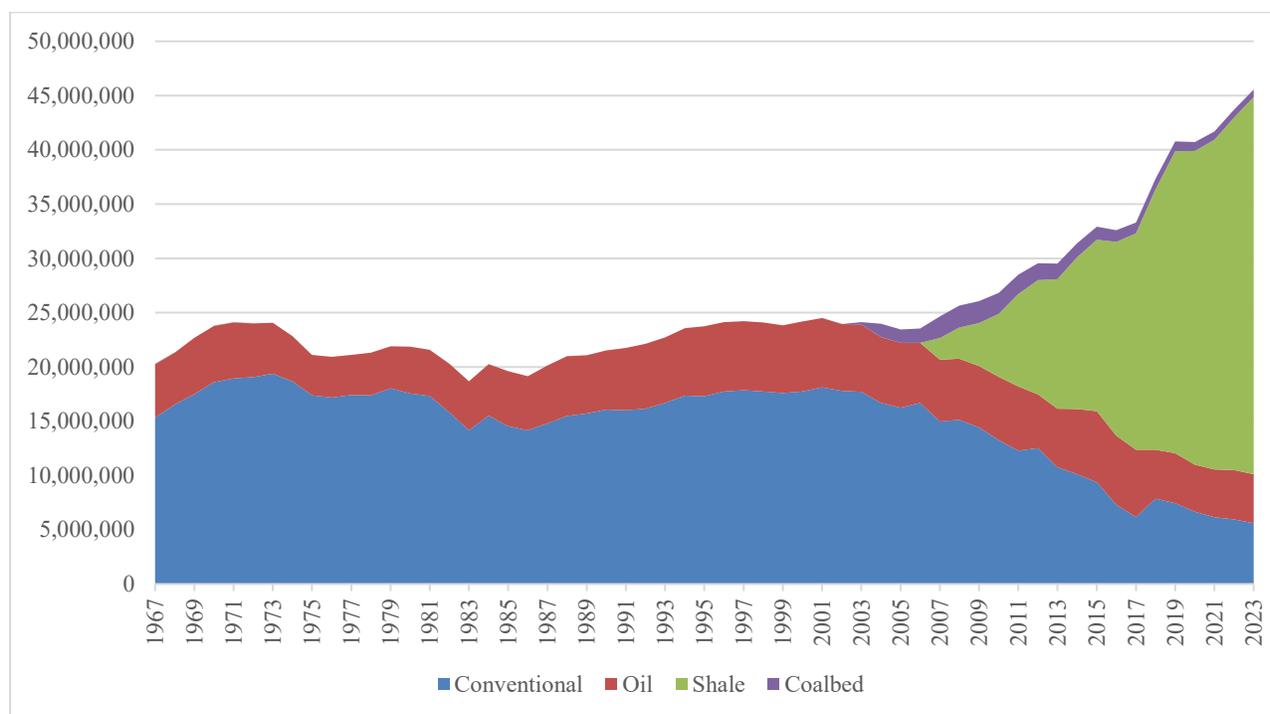
³¹ PUC, *Electric Power Outlook Report for Pennsylvania 2023-2028*, available here: https://www.puc.pa.gov/media/3124/2024-epo-2023-2028-7-2024_final.pdf

V. Natural Gas Production, Consumption, Reserves, and Prices

United States

Total U.S. withdrawals of natural gas were 45.6 Tcf in 2023, of which, gross withdrawals of unconventional shale gas were 34.7 Tcf.³² As shown in Figure 2 below, 2023 was the eleventh consecutive year in which unconventional shale gas withdrawals outpaced conventional gas wells in the U.S. This trend is accelerating, with the spread between shale and conventional gas production increasing from 1.2 Tcf in 2013 to 29.1 Tcf in 2023. Total US withdrawals of natural gas increased by 1.8 Tcf in 2023, which was a 4.2% increase from 2022.

Figure 2: US Gross Natural Gas Withdrawals by Well Type (MMcf), 1967-2023



The national natural gas storage inventory peak for the 12 months prior to this winter heating season³³ was 3.97 trillion cubic feet (Tcf). This was 3.4% higher than the peak from the prior injection season of 3.84 Tcf. Domestic dry natural gas production in the U.S. averaged 103.6 billion cubic feet per day (Bcfd) in 2023, which was an increase of 4% from 2022.³⁴ Domestic

³² EIA, *EIA Natural Gas Summary*, available at <http://www.eia.gov>.

³³ 2024-2025 heating season.

³⁴ EIA, *EIA Natural Gas Gross Withdrawals and Production*, available at <http://www.eia.gov>.

consumption in 2023 was 89.4 Bcfd, which is an increase of 0.9 Bcfd from 2022. Henry Hub spot prices averaged \$2.53 per million British thermal units (MMBtus) in 2023, which was a dramatic decrease of 60.8% from \$6.45 in 2022.³⁵ The decrease in prices was likely driven by increased gas production, flat consumption, and rising natural gas inventories.³⁶

An analysis of Henry Hub natural gas futures contracts in comparison to Henry Hub spot prices³⁷ shows an expected decrease in price over the coming year. Henry Hub spot prices have averaged \$2.10/MMBtu in 2024, while the average projected price is \$3.14/MMBtu for 2025.³⁸ Figure 3, below, shows the futures prices for Henry Hub through June 2026 delivery dates. Although the Henry Hub price is frequently used as a benchmark for the “price” of natural gas, there are significant differences in price at delivery points based on geography. For example, the Dominion South Hub is located in southwestern Pennsylvania, which is in the middle of the Marcellus and Utica Shale plays. Based on past spot prices, Henry Hub prices are generally higher, with an average basis spread of \$0.30/MMBtu to \$0.80/MMBtu.³⁹ Although it is purely speculative, if this pricing trend were to continue going forward, we could expect lower pricing in 2025 at the Dominion South Hub compared to Henry Hub.

³⁵ Henry Hub is a distribution hub in Louisiana. The price at this delivery point is frequently used by industry and trading markets as a benchmark for natural gas prices.

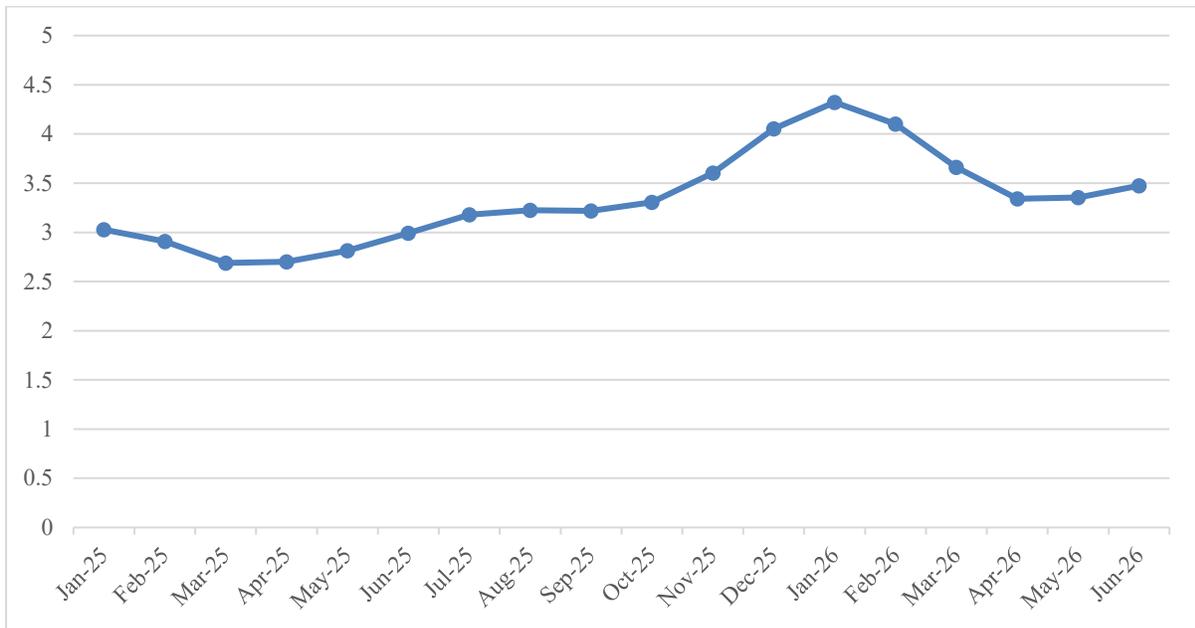
³⁶ [U.S. Henry Hub natural gas prices in 2023 were the lowest since mid-2020 - U.S. Energy Information Administration \(EIA\)](#)

³⁷ CME Group, available at <http://www.cmegroup.com/trading/energy/natural-gas/natural-gas.html>.

³⁸ EIA, *EIA Short Term Energy Outlook*, available at <http://www.eia.gov>.

³⁹ CME Group, available at <http://www.cmegroup.com/trading/energy/natural-gas/natural-gas.html>.

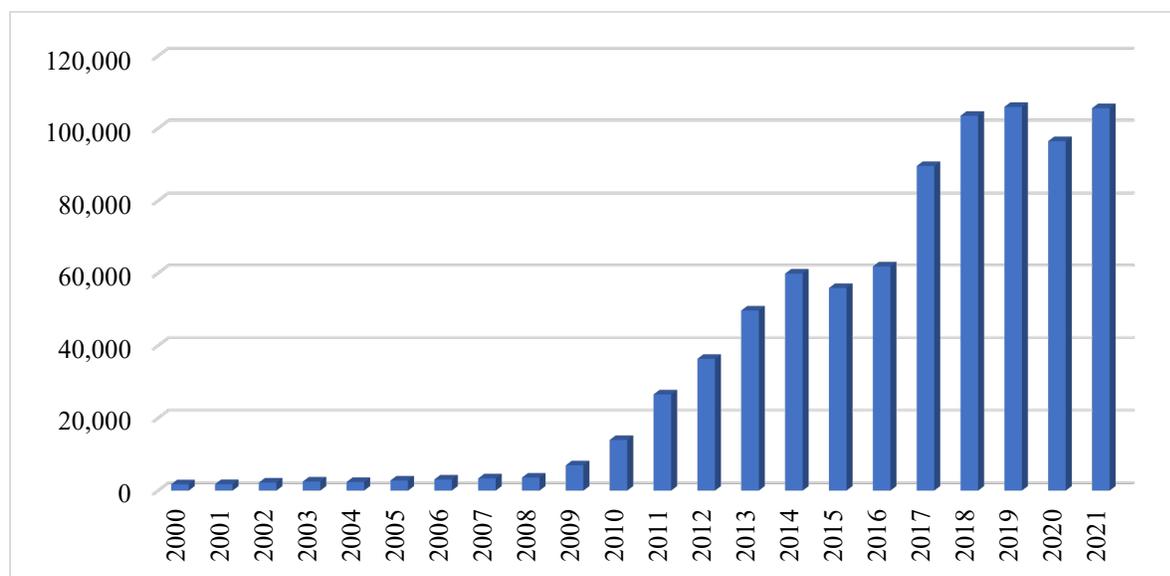
Figure 3: Henry Hub Futures Prices (\$/MMBtu)



Pennsylvania

This section presents Pennsylvania specific data. The data includes sales by NGDCs, deliveries by NGDCs for competitive suppliers and production of natural gas in Pennsylvania. Dry proved reserves for Pennsylvania as of Dec. 31, 2021, were 105.6 Tcf, an increase of 9.4% from 2020. Pennsylvania’s dry proved reserves since 2000 can be seen in Figure 4, below.

Figure 4: Pennsylvania’s Dry Proved Reserves (Bcf), 2000-2021⁴⁰



As of Nov. 15, 2024, 31,677 unconventional drilling permit applications have been filed with the Pennsylvania Department of Environmental Protection (463 new applications Year to Date 2024).⁴¹ Of those 31,677 applications, 13,311 unconventional well permits are currently active.⁴² As of Nov. 22, 2024, there were 15 rotary rigs active in Pennsylvania, which is a 25% decrease in of the number of active rigs from a year prior. Rotary rigs are a piece or set of equipment, usually mobile, that is used to provide the rotational force needed to drill a borehole.

⁴⁰ Data beyond 2021 was not available.

⁴¹ A conventional gas well is typically shallower than an unconventional well, and drills into a pocket or reservoir of gas. Such wells generally rely on the natural pressure to extract the gas once the well is drilled. An unconventional well uses more sophisticated means to extract gas from underground deposits, typically by hydraulic fracturing of shale structures (fracking). These unconventional wells also tend to require drilling to much greater depths than conventional wells.

⁴² See, *PA DEP Well Permit Workload Report*, available at [Oil and Gas Reports | Department of Environmental Protection | Commonwealth of Pennsylvania](#)

The rotary rig count is an indicator of how many rigs are in service and the demand for drilling equipment.⁴³ Table 3, below, illustrates that Pennsylvania’s production in 2023 greatly exceeded its deliveries to consumers in the state by nearly a factor of five.

Table 3: Historical Pennsylvania Deliveries, Transportation and Production (Bcf)⁴⁴

Year	Gas Delivered to Consumers	Delivered for the Account of Others (Transport)	PA Gross Gas Production
1997	664.8	261.2	80.0
1998	609.8	273.4	130.3
1999	648.2	293.5	174.7
2000	659.0	292.0	150.0
2001	596.0	254.2	130.9
2002	632.0	270.6	157.8
2003	651.9	264.3	159.8
2004	662.5	258.2	197.2
2005	656.1	246.8	168.5
2006	625.9	247.3	176.0
2007	711.9	259.1	182.3
2008	705.3	260.6	198.3
2009	755.9	253.3	273.9
2010	811.2	283.2	572.9
2011	866.8	287.6	1,310.6
2012	918.5	293.5	2,256.7
2013	959.0	331.4	3,259.0
2014	1,039.9	362.7	4,257.7
2015	1,038.3	332.5	4,813.0
2016	1,072.1	326.3	5,210.2
2017	1,111.7	335.2	5,453.6
2018	1,189.9	365.8	6,264.8
2019	1,321.5	382.1	6,896.8
2020	1,415.8	341.9	7,168.9
2021	1,475.7	366.4	7,647.1
2022	1,544.6	383.1	7,513.6
2023	1,552.1	358.2	7,592.3

⁴³ Baker Hughes, rotary rig count, available at <http://www.bakerhughes.com/rig-count>.

⁴⁴ EIA, *Natural Gas Delivered for the Account of Others*, available at: <http://www.eia.gov>.

Natural Gas Liquids (NGLs) and the Natural Gas Market

At this time, a significant amount of NGLs is simply sold directly into the natural gas system, owing to a lack of supply transportation to other markets, *e.g.*, manufacturing, retail sales, etc. With natural gas prices still relatively low, this adds to the downward pressure on NGL prices. However, over the past several years, the pricing for NGLs has begun to increase, as Mariner East Pipelines have come online for ethane service and some energy companies have begun transporting additional quantities of NGLs through other means, such as rail and road transportation.⁴⁵ These transportation options have allowed more NGLs to be sold to higher priced markets, such as manufacturing. As more NGLs are sold into these alternate markets, this creates additional incentive for producers to remove these NGLs from the natural gas supply, rather than selling them into the natural gas pipelines.

As new pipelines are placed in service, it is possible that a substantial shift in the relationship between NGL supplies and the natural gas market could develop. Currently, there is a substantial, though unmeasured, volume of NGLs within the natural gas system, both in Pennsylvania and throughout the U.S. This causes variation in the heat content of natural gas being delivered to consumers. Heat content is a measure of the amount of energy derived from a given quantity of gas when it is combusted, usually measured in Btu. For example, pure methane, the primary component of natural gas, has a heat content of 1,010 Btu/ft³.⁴⁶ Ethane, the most common NGL to be produced from natural gas wells by volume, has a much higher heat content of 1,783 Btu/ft³. Other potential impurities in natural gas, such as carbon monoxide, have much lower heat content.⁴⁷

It is possible for the heat content of the mixture that is delivered to a customer to have a heat content either higher or lower than that of pure methane, depending on the amounts of these various impurities within a given sample of natural gas. If it is higher, an estimate can be made of the amount of NGLs present in the gas. To prepare estimates of the amount of NGLs in gas produced in Pennsylvania, two assumptions have been made:

⁴⁵ See the Reuters' article available here: <https://www.reuters.com/article/us-range-resources-npls-mariner-east/range-finds-alternatives-to-ship-npls-due-penn-mariner-east-shutdown-idUSKCN1J42EK>.

⁴⁶ In the natural gas industry, the heat content of natural gas is often approximated to be 1,000 Btu/ft³.

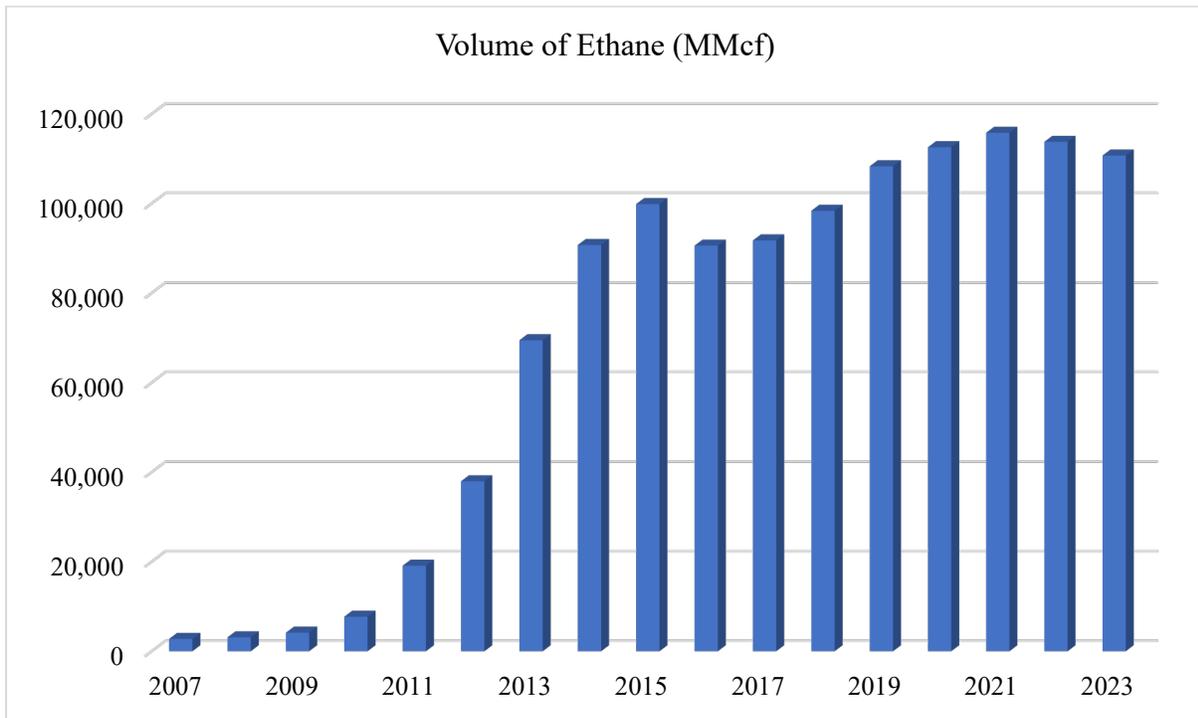
⁴⁷ Carbon monoxide has a heat content of 323 Btu/ft³.

1. The heat content of gas consumed in Pennsylvania is the same as the heat content of the gas being produced in Pennsylvania. This assumption is necessary since EIA only provides data on the heat content of gas consumed.
2. The only NGL in the gas is ethane, and there are no other low-heat content impurities in the gas. This is done for simplicity. While there may be other impurities, including a small quantity of larger hydrocarbons, e.g., propane, butane, etc., ethane is used to try to derive an estimate of the overall amount of NGLs in the natural gas.

Using these assumptions, Figure 5, below, shows the theoretical quantity of ethane produced and fed into the natural gas system by Pennsylvania producers. These estimates were determined using the average heat content of natural gas delivered in Pennsylvania, combined with the gross production of natural gas in Pennsylvania.⁴⁸ Using the assumptions, above, it then follows that any additional heat content above 1,010 Btu/ft³ of methane is derived purely from ethane, and the exact quantity of ethane injected into the natural gas system can be determined.

⁴⁸ EIA, *Heat Content of Natural Gas Delivered to Consumers*, and *Natural Gas Gross Withdrawals*, both available at <http://www.eia.gov>.

Figure 5: Hypothetical Volume of Ethane Injected into the Natural Gas System by Pennsylvania Producers (MMcf)



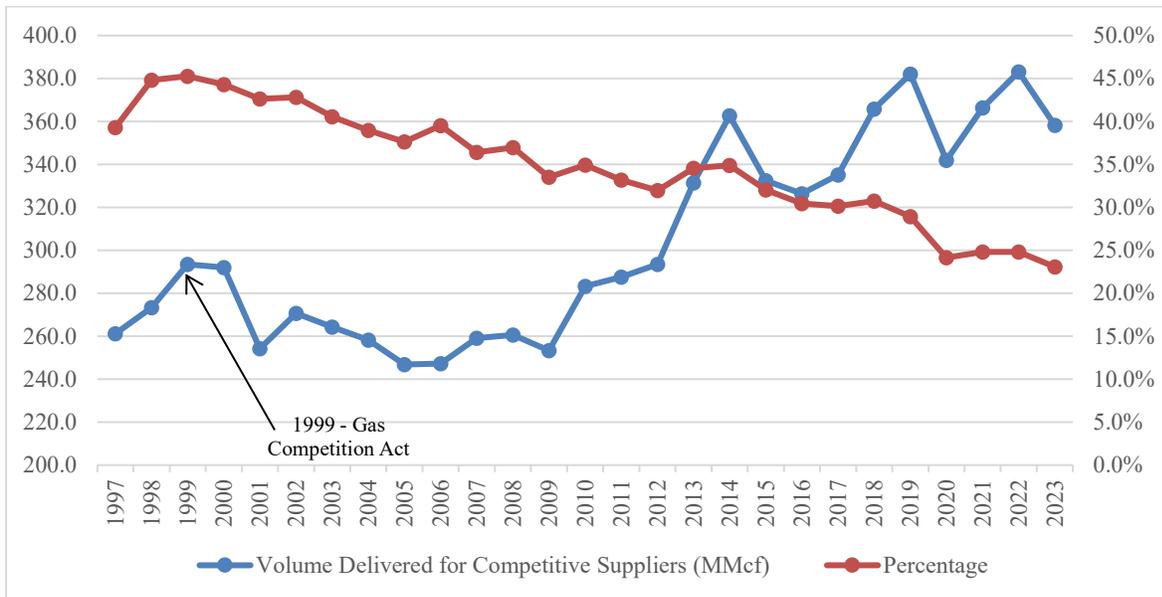
In 2023, this could have meant that an estimated 110,712 million cubic feet (MMcf) of NGLs currently being fed into the natural gas system could have been redirected, possibly causing the prices of both NGLs and natural gas to rise, creating incentive for additional production in Pennsylvania.

Figure 6, below, shows Pennsylvania deliveries of natural gas for competitive suppliers, often called transportation gas, as a percentage of total gas delivered. In 2023, 23.1% of the total natural gas delivered was for competitive suppliers in Pennsylvania. In 2023, the percentages of gas delivered for competitive suppliers by customer class were as follows:⁴⁹

- Residential: 11.8%
- Commercial: 62.0%
- Industrial: 99.0%

⁴⁹ EIA, Natural Gas Delivered for the Account of Others, available at: <http://www.eia.gov>.

Figure 6: Natural Gas Delivered for Competitive Suppliers by Pennsylvania NGDCs ⁵⁰



Since 2009, total transportation gas amounts have been generally increasing, despite the slight decline in 2023. While the total amount of transportation gas has been increasing, the percentage of transportation gas has been declining, as overall usage in other delivery sectors has increased dramatically.

⁵⁰ The Natural Gas Choice and Competition Act was signed into law on June 22, 1999.

VI. Natural Gas Distribution Company (NGDC) Statistical Data

Customer Data

The information in Tables 4 and 5, below, is derived from data contained in the Gas Annual Reports and the ARPRs submitted to the Commission by those Pennsylvania NGDCs with greater than 8 Bcf of annual sales. The charts and data analysis in this section are derived from the raw data in these two tables.

Table 4: 2023 Customer Statistical Data

<i>Company</i>	<i>Number of Residential Customers</i>	<i>Average per customer usage (MCF)</i>	<i>Number of Commercial Customers</i>	<i>Average per customer usage (MCF)</i>	<i>Number of Industrial Customers</i>	<i>Average per customer usage (MCF)</i>	<i>Number of Transportation Customers</i>	<i>Average per customer usage (MCF)</i>
Columbia	360,490	69	26,110	298	82	3,756	59,919	649
Peoples	568,043	78	40,700	258	80	3,150	94,430	747
NFG	179,612	87	11,603	250	174	1,523	21,933	1,097
PECO	507,197	68	45,001	465	8	3,125	627	36,463
PGW	458,311	61	22,514	335	401	1,000	33,413	938
UGI	537,990	72	47,723	315	658	1,248	109,231	2,503

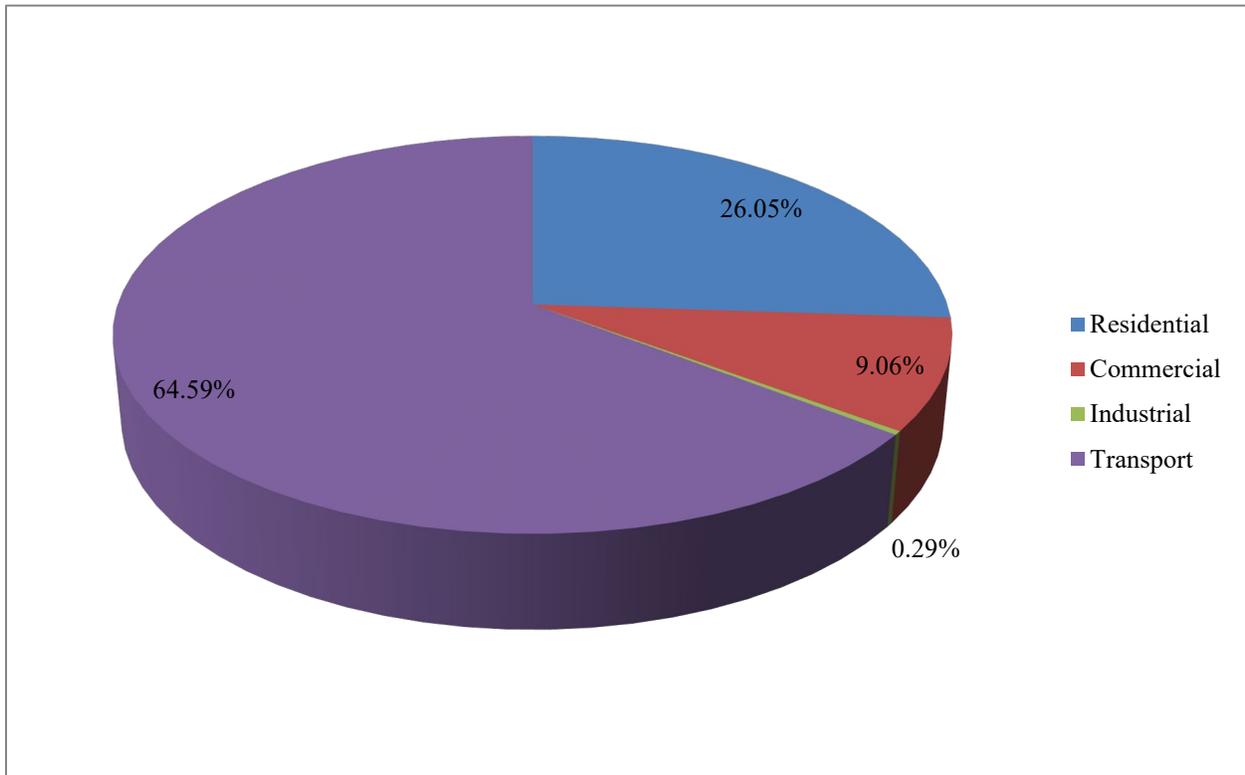
*Table 5: 2022 Customer Statistical Data*⁵¹

<i>Company</i>	<i>Number of Residential Customers</i>	<i>Average per customer usage (MCF)</i>	<i>Number of Commercial Customers</i>	<i>Average per customer usage (MCF)</i>	<i>Number of Industrial Customers</i>	<i>Average per customer usage (MCF)</i>	<i>Number of Transportation Customers</i>	<i>Average per customer usage (MCF)</i>
Columbia	360,154	81	26,571	346	84	3,000	58,340	705
Peoples	563,309	86	41,449	261	95	4,768	98,010	755
NFG	179,151	101	11,655	289	178	1,949	22,551	1,131
PECO	502,944	84	44,957	522	8	1,750	655	38,188
PGW	467,914	67	22,748	359	454	1,022	25,896	1,209
UGI	542,927	82	49,545	356	716	1,271	96,447	2,666

Chart 7, below, provides a breakdown of gas usage by customer class among Pennsylvania’s major NGDCs (those with more than 8 Bcf in sales per year). 64.6% of all sales volume was from transportation customers, up from 61.1% the previous year. These are typically larger customers that procure their own natural gas supply, and the utility delivers the natural gas to them. Transportation also includes residential and commercial customers that utilize an alternate natural gas supplier (NGS).

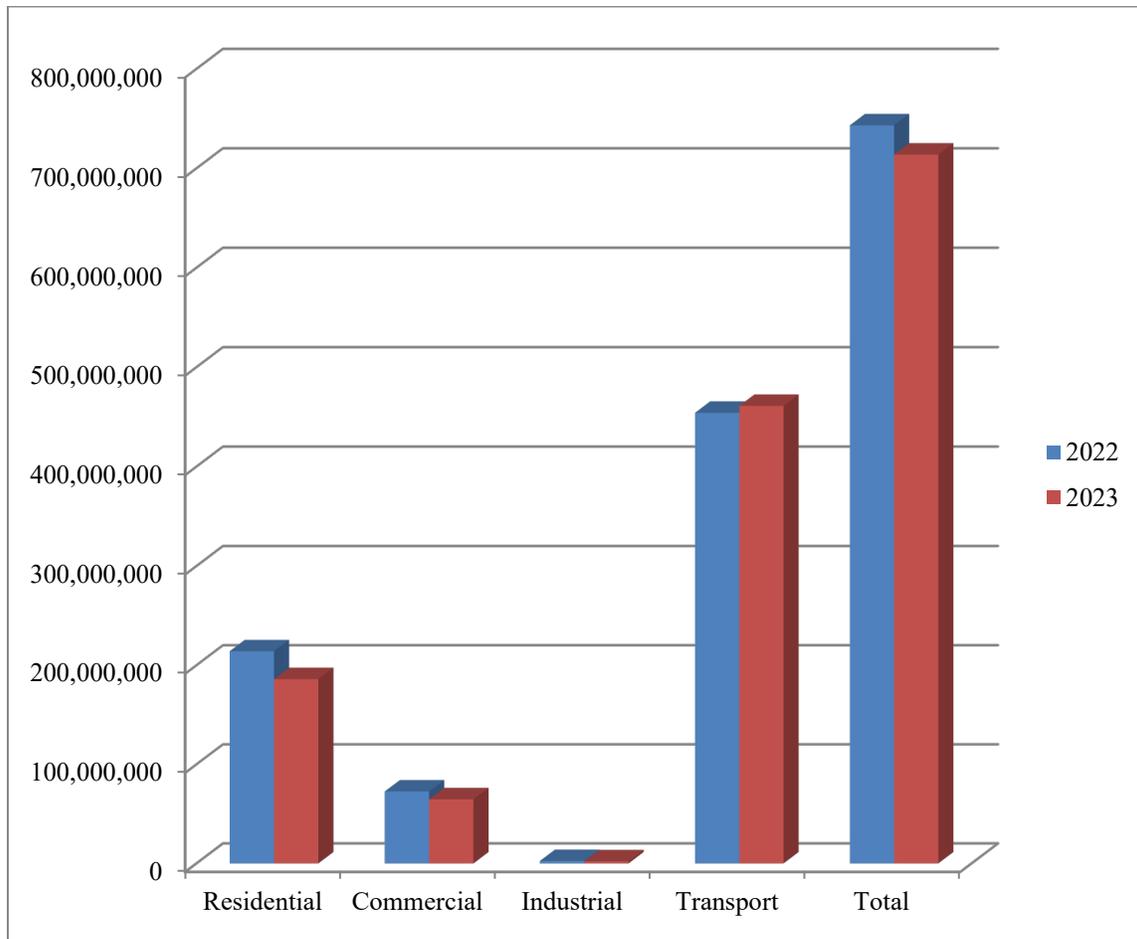
⁵¹ The tracking of customer classes and natural gas usage are not necessarily done within one tracking system. Some customers may be classed in a certain category, but depending on their usage for the year, may end up assigned to a different rate class. This can create the appearance of a customer class with 0 Mcf of usage, when in actuality they had simply been shifted to a different rate class that year and are accounted for under a different category.

Chart 7: 2023 Pennsylvania Gas Usage by Customer Class within Major NGDCs



As seen in Figure 7, below, natural gas usage in 2023 decreased for all customer classes except transportation in Pennsylvania when compared to 2022.

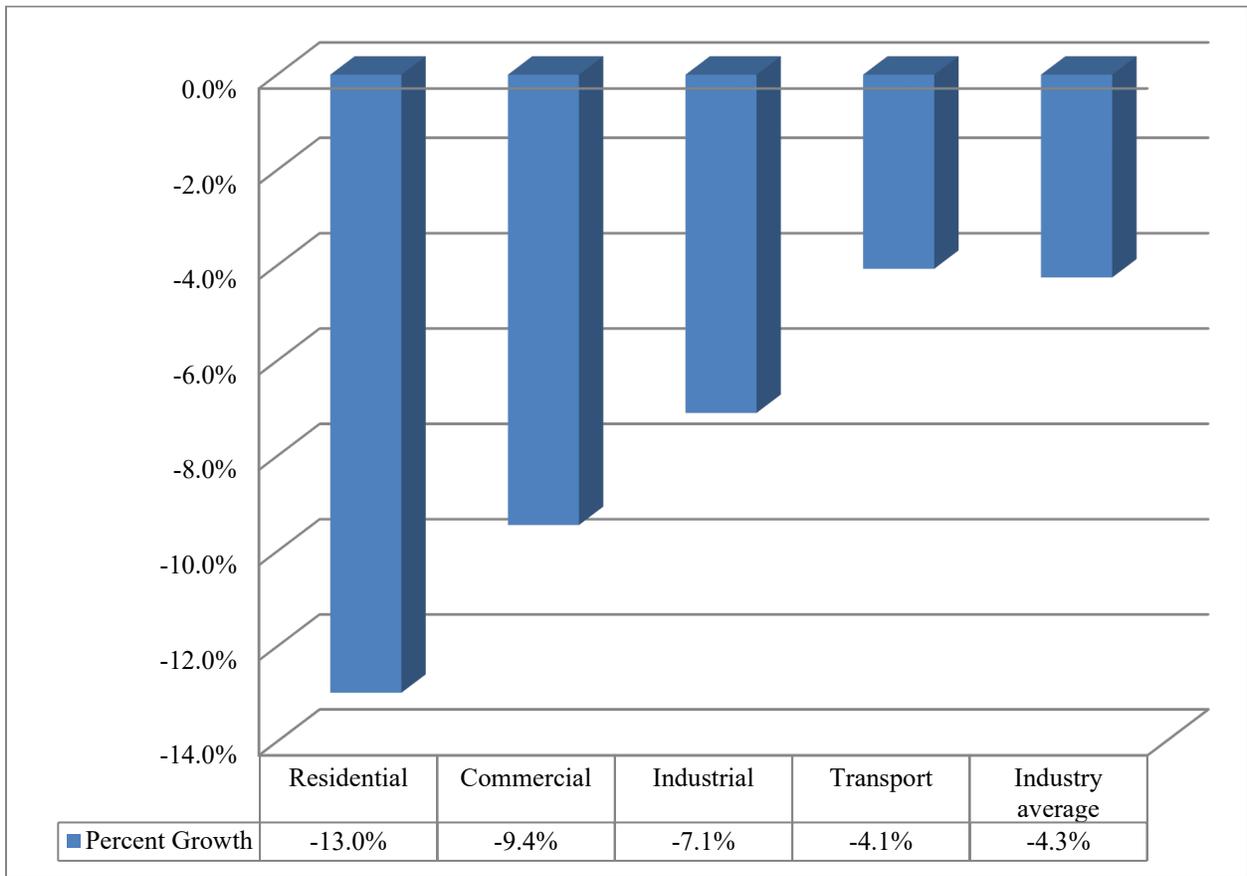
Figure 7: Pennsylvania Gas Usage by Customer Class within Major NGDCs: 2022-2023



In total, gas usage decreased by 4.0% between 2022 and 2023, while the number of customers increased by 0.3%. This decrease in usage was across residential, commercial, and industrial customers, with the largest decreases coming from residential and commercial customers. This was partially offset by an increase in usage among transportation customers. The number of customers served followed a similar pattern, with decreases in customers among all three retail classes, accompanied by an increase in the number of transportation customers.

Figure 8, below, shows the change in average customer usage by class. As illustrated, average customer usage decreased for all customer classes from 2022 through 2023.

Figure 8: Change in Average Customer Usage for Major NGDCs by Customer Class: 2022-2023



VII. Pennsylvania Natural Gas Distribution Company Gas Supply and Demand Balance

The following tables and charts provide natural gas supply and demand data for Pennsylvania's NGDCs. The NGDCs provided the supply and demand data for the 2023 delivery year. The data is presented for 2023 on an annual basis as well as for peak day. Peak day is non-coincident data such that demand for a specific customer class is not necessarily at the same time as the system peak. Data is derived from the ARPRs.⁵²

⁵² Some large users bypass the local distribution companies, buy gas at the wellhead or from suppliers, and receive the gas directly from the interstate pipelines. Gas-fired electric generation stations are usually bypass customers, and most of their gas consumption is not included in the PUC reports.

Table 6: 2023 Annual Gas Supply and Demand for Major Gas Utilities (MMcf)

	UGI	PGW	Columbia	NFG	PECO	Peoples
Gas Supply:						
Supply Contracts	73,416	37,886	22,120	11,297	51,671	26,707
Spot Purchases	20,345	0	9,595	7,121	4,192	27,920
Storage Withdrawal	0	8,692	0	0	0	0
LNG	0	1,610	0	0	0	0
Subtotal Gas Supply	93,761	48,188	31,715	18,418	55,863	54,627
Transportation	273,380	31,331	38,858	24,052	22,046	74,020
TOTAL GAS SUPPLY	367,141	79,519	70,573	42,470	77,909	128,647
Requirements:						
Firm Requirements	56,205	36,483	31,714	18,418	55,836	61,685
Liquefaction	0	1,989	0	0	0	0
Interruptible Requirements	0	954	0	0	26	0
Storage Injections	0	8,763	0	0	0	0
Subtotal Firm & Interruptible	56,205	48,189	31,714	18,418	55,862	61,685
Transportation	273,380	31,331	38,858	24,052	22,046	70,583
Load Deductions	(37,556)	0	0	0	0	0
TOTAL GAS REQUIREMENTS	367,141	79,520	70,572	42,470	77,908	132,268
Surplus (Deficiency)	0	(1)	1	0	1	(3,621)

Chart 8: Pennsylvania Gas Utility Annual Supply 2023

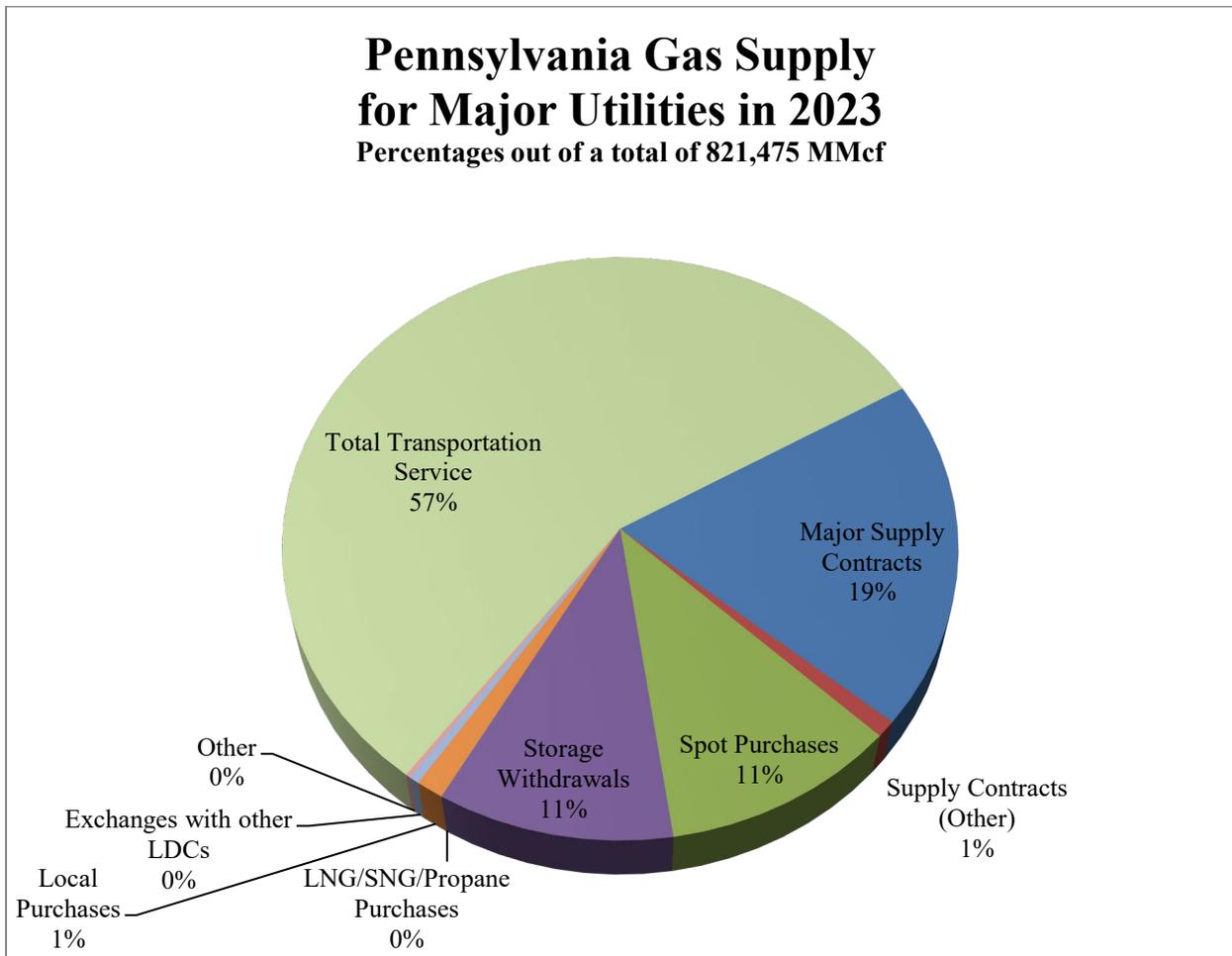
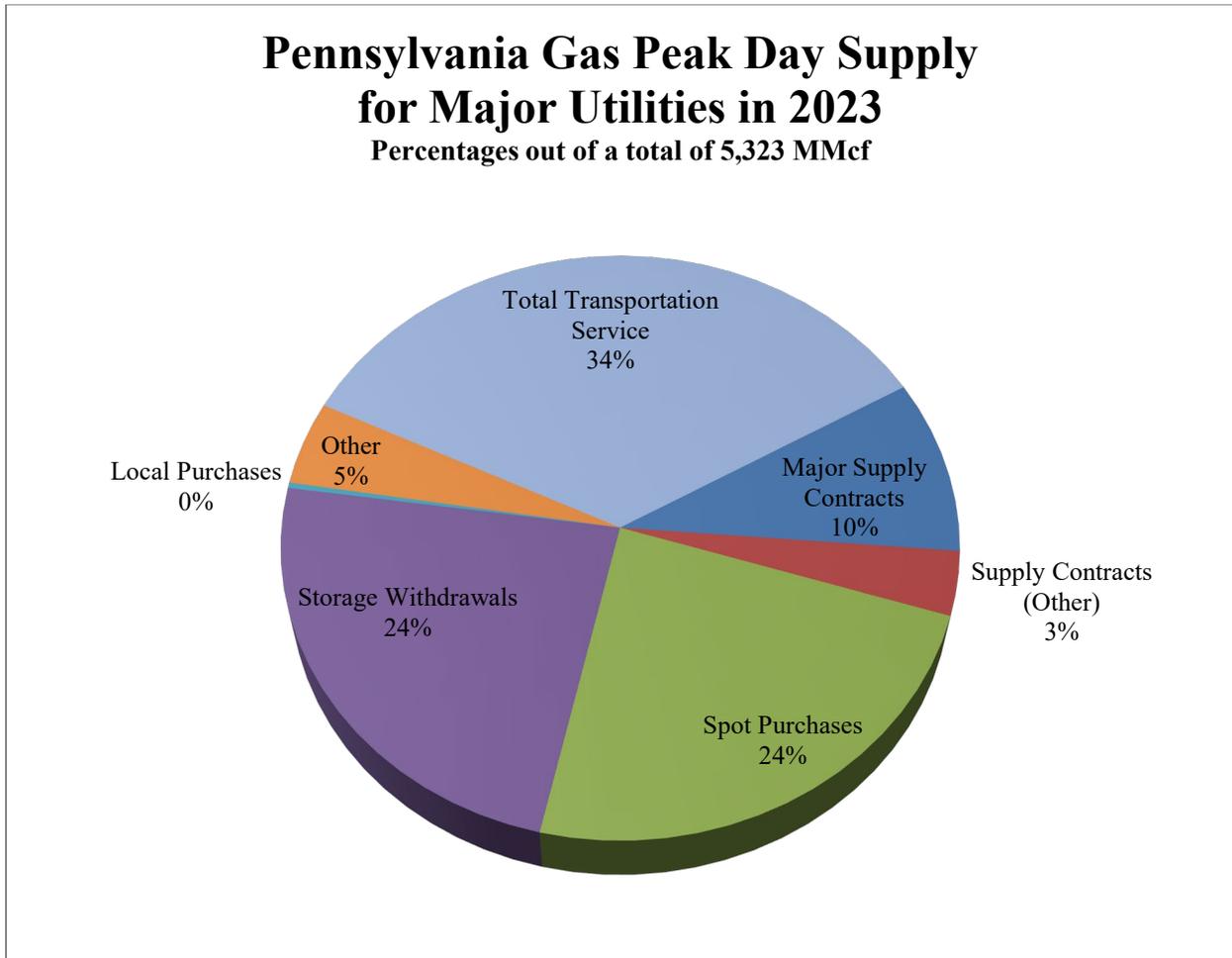


Table 7: 2023 Peak Day Gas Supply and Demand Balance for Major Gas Utilities (MMcf)

	UGI	PGW	Columbia	NFG	PECO	Peoples
Gas Supply:						
Supply Contracts	305	65	404	214	369	390
Spot Purchases	722	0	0		203	434
Storage Withdrawal	0	158	0	0	0	0
LNG	0	221	0	0	0	0
Subtotal Gas Supply	1,027	444	404	214	572	824
<hr/>						
Transportation	724	148	278	145	159	385
<hr/>						
TOTAL GAS SUPPLY	1,751	592	682	359	731	1,209
<hr/>						
Requirements:						
Firm Requirements	696	442	404	214	572	683
Liquefaction	0	0	0	0	0	0
Interruptible Requirements	0	2	0	0	0	0
Storage Injections	0	0	0	0	0	0
Subtotal Firm & Interruptible	696	444	404	214	572	683
<hr/>						
Transportation	886	148	278	145	159	527
<hr/>						
Load Deductions	(169)	0	0	0	0	0
<hr/>						
TOTAL GAS REQUIREMENTS	1,751	592	682	359	731	1,210
<hr/>						
Surplus (Deficiency)	0	0	0	0	0	(1)

Chart 9: Pennsylvania Peak Day Supply 2023



Section 3 – Financial Data

VIII. Natural Gas Distribution Company Financial Statistics

Data Set

This section presents selected NGDC financial data taken from the Gas Annual Reports of the major NGDCs for an 11-year period from 2013 through 2023.⁵³

The data in Tables 8 through 12 below includes operating revenues and expenses, net operating income, gross plant in service, administrative and general expense, maintenance expense, depreciation expense and total gas cost, and average cost of gas purchased by the NGDC.

⁵³ Note: UGI Central Penn Gas was purchased from PPL Gas Utilities in 2007. UGI Penn Natural Gas was purchased from PG Energy in 2006. Equitable Gas Company merged with Peoples Natural Gas in 2013-2014, becoming Peoples Natural Gas Company, which has since merged with Peoples Gas Company. For ease of comparison in the tables, the data for Peoples includes combined data for Peoples, Equitable, and Peoples Gas during the years when they were still separate companies. UGI now reports as a combined company, so totals across the three companies in prior years have also been combined.

Table 8: Operating Revenue and Operating Expense

OPERATING REVENUE (\$ Million)							
	Columbia	NFG	PECO	Peoples	UGI	PGW	Total
2013	512.3	235.5	600.8	827.7	855.8	276.9	3,309.0
2014	563.3	248.3	646.8	946.1	973.9	746.6	4,125.0
2015	536.2	196.9	546.5	802.0	853.7	621.5	3,556.7
2016	493.9	175.0	463.4	667.1	739.7	629.0	3,168.1
2017	552.6	204.6	495.3	766.7	868.1	635.0	3,522.3
2018	590.2	215.3	569.8	820.0	1,002.0	697.2	3,894.4
2019	602.4	206.9	611.4	818.0	965.5	703.4	3,907.5
2020	555.3	189.2	515.1	722.6	908.1	608.1	3,498.4
2021	666.6	206.2	538.9	789.7	1,016.0	692.1	3,909.5
2022	867.6	274.8	738.2	1,050.1	1,365.1	850.7	5,146.5
2023	821.1	243.3	691.9	779.9	1,308.2	688.0	4,532.4

OPERATING EXPENSE (\$ Million)							
	Columbia	NFG	PECO	Peoples	UGI	PGW	Total
2013	416.1	187.9	484.8	571.0	592.5	204.1	2,456.5
2014	478.5	209.0	525.7	797.0	841.8	627.3	3,479.3
2015	445.2	165.0	430.5	660.0	731.2	564.9	2,996.8
2016	400.2	143.3	340.1	538.6	609.5	520.7	2,552.3
2017	467.1	177.0	367.7	643.2	713.5	540.0	2,908.4
2018	450.2	187.1	421.8	667.2	837.9	563.3	3,127.5
2019	466.8	175.1	457.7	645.4	780.2	552.5	3,077.7
2020	427.2	163.9	379.0	535.3	741.7	468.9	2,716.0
2021	510.5	165.2	392.0	570.4	824.9	480.7	2,943.6
2022	654.5	245.5	561.4	796.8	1,117.5	613.6	3,989.2
2023	617.2	211.6	504.3	496.1	1,043.8	557.1	3,430.1

Table 9: Net Operating Income and Administration & General Expense

NET OPERATING INCOME (\$ Million)							
	Columbia	NFG	PECO	Peoples	UGI	PGW	Total
2013	37.6	116.1	90.2	164.5	41.8	56.5	506.7
2014	97.0	45.8	121.0	165.3	182.9	67.7	679.8
2015	100.4	35.8	115.9	140.3	161.2	5.8	559.5
2016	66.8	24.0	123.2	84.2	109.7	63.3	471.3
2017	85.8	20.2	127.6	86.1	136.0	56.1	511.8
2018	105.8	21.8	148.0	104.5	127.2	97.7	605.0
2019	97.0	27.4	153.7	115.7	135.9	124.1	653.8
2020	86.6	20.9	136.2	137.3	119.5	105.0	605.4
2021	110.5	34.7	146.9	181.4	148.5	174.0	795.9
2022	162.7	20.6	176.8	216.4	203.3	198.2	978.1
2023	144.9	23.1	187.5	240.5	207.0	107.9	911.1

ADMINISTRATION & GENERAL EXPENSE (\$ Million)							
	Columbia	NFG	PECO	Peoples	UGI	PGW	Total
2013	53.0	31.2	28.0	93.7	75.7	21.8	303.4
2014	58.9	27.7	27.4	75.3	79.8	110.9	380.0
2015	62.3	27.9	30.2	79.6	85.8	152.9	438.8
2016	70.5	24.5	31.3	63.2	72.8	168.3	430.7
2017	91.5	28.2	33.2	59.9	85.4	148.5	446.7
2018	64.8	30.3	33.8	60.6	91.0	133.0	413.4
2019	74.2	26.0	31.1	59.3	96.8	120.8	408.2
2020	84.6	30.7	31.2	56.1	110.4	89.5	402.3
2021	86.7	8.5	33.6	55.8	112.5	50.7	347.7
2022	85.4	21.9	33.6	50.4	101.0	71.0	363.2
2023	89.0	25.8	33.7	45.5	98.6	109.5	402.2

Table 10: Maintenance Expense and Depreciation Expense

MAINTENANCE EXPENSE (\$ Million)								
	Columbia	NFG	PECO	Peoples	UGI	PGW		Total
2013	15.5	5.6	27.0	45.2	28.0	9.1		130.4
2014	18.3	6.1	26.8	47.6	31.9	40.5		171.2
2015	22.0	6.4	32.4	47.6	34.3	38.5		181.1
2016	23.6	5.9	29.5	42.5	30.8	41.0		173.4
2017	25.8	6.1	29.9	42.7	33.2	42.5		180.3
2018	22.3	6.4	28.7	48.7	38.4	45.8		190.3
2019	23.8	6.8	30.2	51.7	41.7	46.5		200.8
2020	25.7	6.8	33.6	53.8	23.7	45.7		189.2
2021	28.5	7.6	34.2	53.6	23.0	47.9		194.8
2022	27.6	9.1	35.1	57.0	21.3	47.1		197.4
2023	30.1	10.4	34.2	59.8	34.5	49.9		219.0

DEPRECIATION EXPENSE (\$ Million)								
	Columbia	NFG	PECO	Peoples	UGI	PGW		Total
2013	33.4	11.4	36.7	55.1	49.2	14.6		200.3
2014	37.7	11.5	39.2	53.6	52.5	41.7		236.1
2015	42.1	12.0	42.0	53.3	56.8	44.6		250.8
2016	47.5	12.9	43.1	56.0	60.7	46.7		267.0
2017	52.0	14.2	47.2	59.9	66.9	48.6		288.9
2018	55.6	14.4	51.8	64.5	74.6	60.5		321.4
2019	65.7	14.4	56.4	69.6	86.7	68.2		361.0
2020	72.3	15.0	59.7	76.4	100.9	65.0		389.2
2021	79.0	16.3	63.2	83.9	111.4	70.2		424.1
2022	86.8	16.1	69.3	106.5	117.8	70.5		467.1
2023	94.9	16.7	74.9	113.5	125.4	85.0		510.4

Table 11: Total Gas Costs and Average Cost of Gas Purchased

TOTAL GAS COSTS (\$ Million)							
	Columbia	NFG	PECO	Peoples	UGI	PGW	Total
2013	265.3	79.3	275.5	342.5	467.0	164.6	1,594.2
2014	259.1	91.3	320.3	397.6	545.6	295.1	1,909.0
2015	182.6	44.5	189.2	311.8	361.1	196.8	1,286.0
2016	114.7	22.5	174.1	213.7	307.1	149.8	981.8
2017	176.4	54.3	190.9	307.3	401.7	187.9	1,318.5
2018	184.2	62.5	297.1	350.8	507.8	203.5	1,605.9
2019	157.4	57.9	209.6	322.8	451.8	191.7	1,391.2
2020	120.9	37.1	163.3	236.7	484.8	144.3	1,187.1
2021	207.5	56.2	222.2	331.4	443.7	216.0	1,477.0
2022	359.8	120.2	423.0	603.5	695.1	329.6	2,531.1
2023	166.7	87.0	174.5	241.1	403.1	159.7	1,232.0

AVERAGE COST OF GAS PURCHASED (\$/MCF)							
	Columbia	NFG	PECO	Peoples	UGI	PGW	Ave.
2013	5.75	3.81	5.51	7.30	4.74	5.29	5.40
2014	6.25	4.07	6.15	5.29	5.29	5.78	5.47
2015	4.90	2.10	4.09	5.25	6.29	4.17	4.47
2016	3.56	1.21	3.97	4.20	4.34	3.33	3.44
2017	5.22	2.85	4.39	4.60	4.02	4.28	4.23
2018	4.43	2.93	6.11	5.44	4.55	4.31	4.63
2019	4.30	2.82	4.53	4.78	5.64	4.17	4.37
2020	3.60	1.90	4.11	3.93	5.79	3.44	3.80
2021	5.20	2.84	5.17	5.42	5.66	5.18	4.91
2022	9.14	5.59	8.61	8.14	8.08	7.66	7.87
2023	4.59	4.67	4.41	3.94	5.37	4.22	4.53

Table 12: Gross Utility Plant in Service

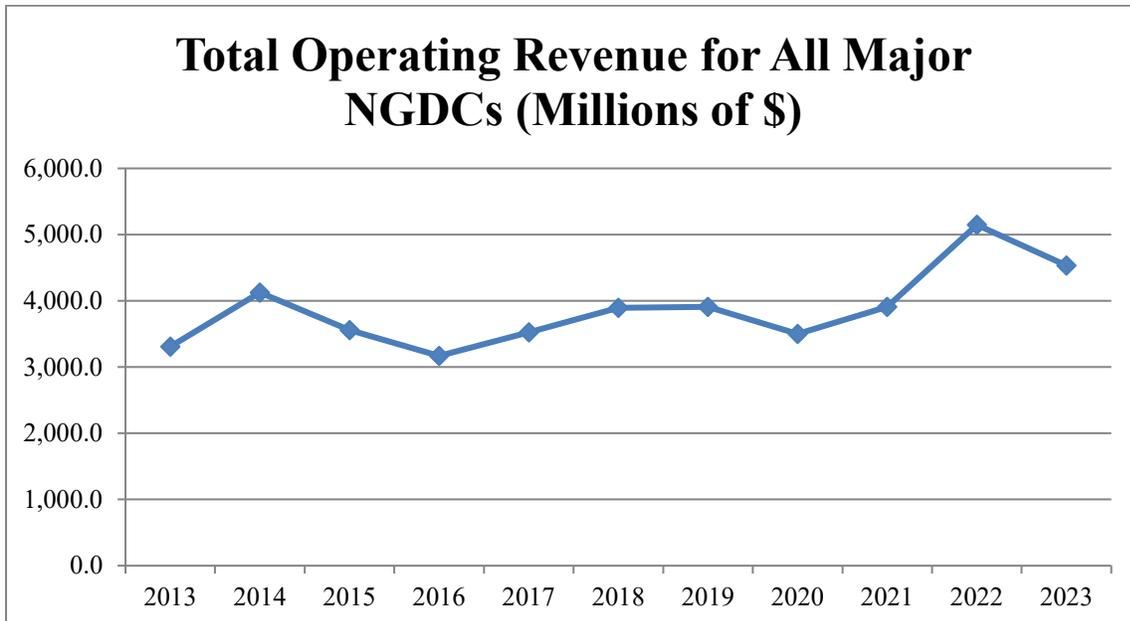
GROSS UTILITY PLANT IN SERVICE (\$ Million)							
	Columbia	NFG	PECO	Peoples	UGI	PGW	Total
2013	1,335.7	511.7	1,932.4	2,350.6	2,262.9	650.2	9,043.4
2014	1,500.5	527.2	2,071.4	2,469.8	2,418.9	1,646.7	10,634.5
2015	1,660.1	542.5	2,205.4	2,589.7	2,581.9	1,685.2	11,264.7
2016	1,860.1	577.8	2,260.4	2,697.5	2,945.3	1,741.5	12,082.6
2017	2,074.1	594.5	2,503.6	2,892.3	3,035.8	1,793.6	12,893.9
2018	2,330.6	611.8	2,694.0	3,110.5	3,329.1	1,905.1	13,981.0
2019	2,568.9	637.9	2,899.1	3,357.7	3,681.6	2,038.5	15,183.7
2020	2,851.1	662.2	3,098.4	3,592.3	4,004.8	2,172.1	16,380.9
2021	3,141.1	690.8	3,339.3	3,872.3	4,359.7	2,331.7	17,735.1
2022	3,449.5	710.2	3,619.8	3,862.9	4,767.9	2,544.7	18,955.0
2023	3,837.0	749.9	3,905.3	4,504.1	5,195.3	2,709.9	20,901.4

IX. Industry Trends

Many indicators of the financial status of the gas utilities in Pennsylvania are very closely correlated with current prices of natural gas. The single largest expense for NGDCs is the procurement of natural gas and the largest source of revenue is the sale of natural gas.⁵⁴

Therefore, as gas prices have remained low in recent years, so too have the sales revenues of the NGDCs. The uptick in 2022 for revenues and expenses is largely attributable to an increase in commodity prices, which decreased sharply the next year in 2023. Figures 9 through 11, below, illustrate this correlation with very similar patterns for Operating Revenues, Operating Expenses, and the Average Cost of Gas Purchased for the major NGDCs since 2013.

Figure 9: Total Operating Revenue for All Major NGDCs (Millions of \$)



⁵⁴ Pennsylvania natural gas utilities do not derive any net earnings or profits from natural gas commodity prices. The cost of procuring natural gas for customers is purely a pass-through cost. NGDCs only earn a profit on the delivery of the commodity to customers.

Figure 10: Total Operating Expenses for All Major NGDCs (Millions of \$)

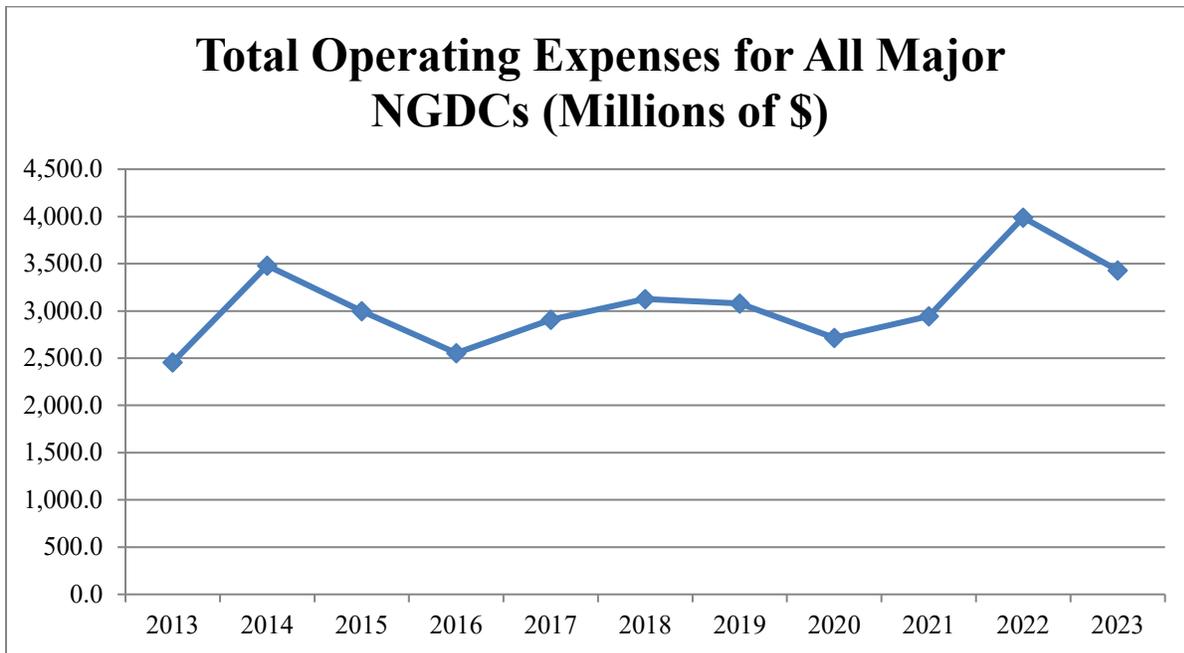
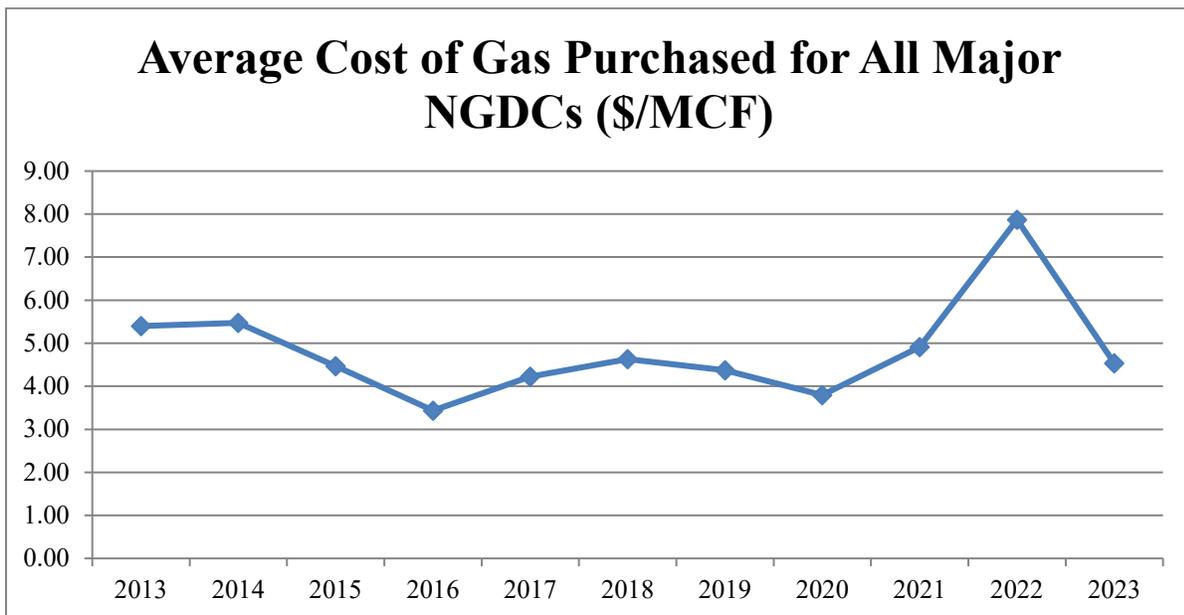


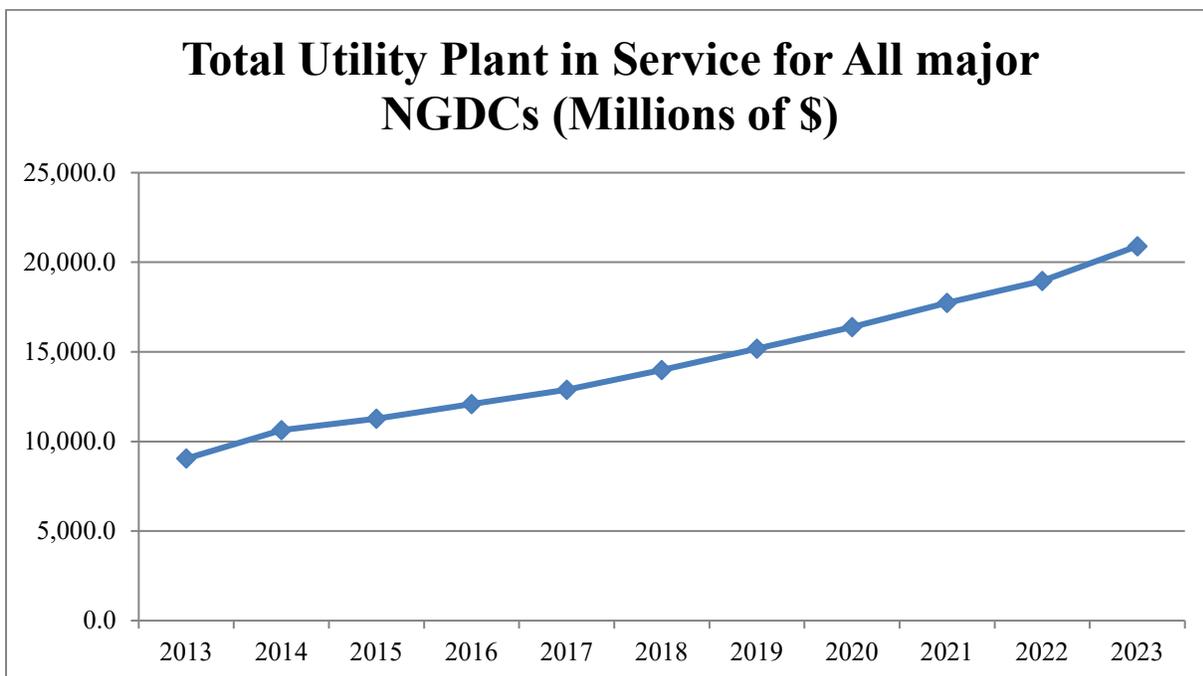
Figure 11: Average Cost of Gas Purchased for All Major NGDCs (\$/Mcf)



Over the past decade, NGDCs have been steadily investing in their infrastructure. Much of the increase in infrastructure spending was spurred by the implementation of Commission-approved Long-Term Infrastructure Improvement Plans (LTIIPs) and their corresponding Distribution

System Improvement Charge (DSIC) mechanisms for most of the major NGDCs.⁵⁵ Figure 12, below, shows that the major NGDCs have added approximately \$1.08 billion per year to their total utility plant in service. This equates to a cumulative increase of 131.1% in plant in service for the total industry since 2013. Figure 13, below, shows that while all NGDCs have increased plant in service since 2013, PGW and Columbia have the highest rates of increase. PGW has more than quadrupled its total plant in service since 2013, while Columbia has nearly tripled its plant in service over the same period. NFG has the lowest rate of increase at 46.5% since 2013.⁵⁶

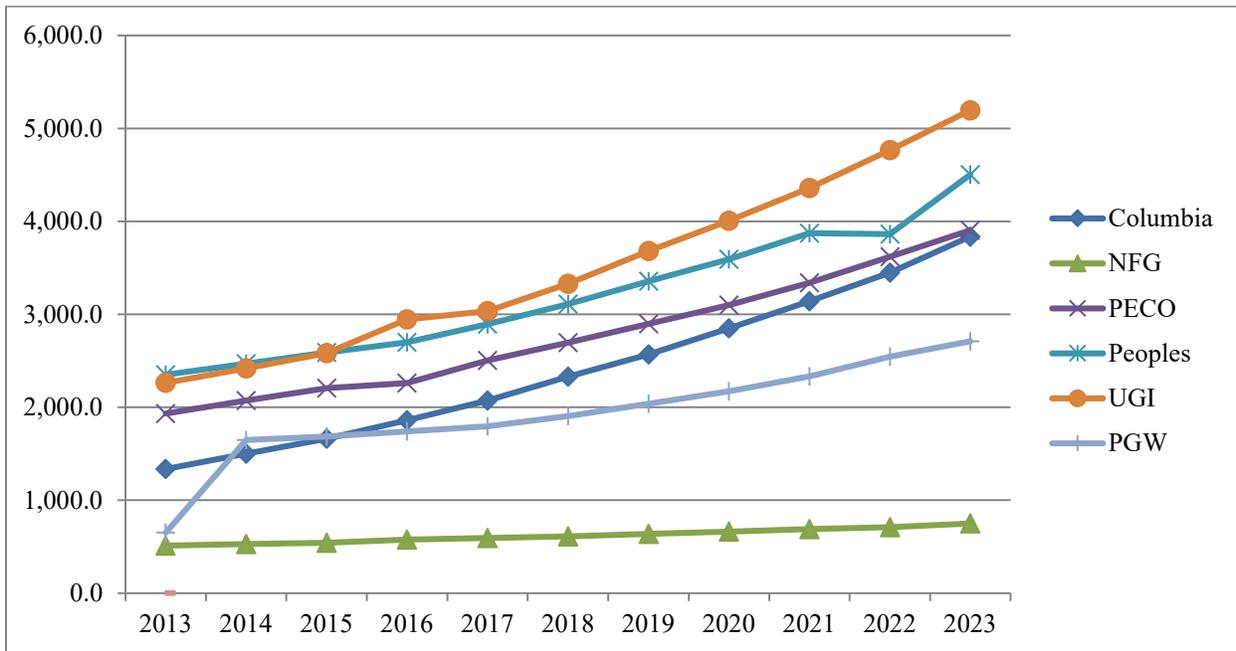
Figure 12: Total Utility Plant in Service for All Major NGDCs (Millions of \$)



⁵⁵ See *Final Implementation Order*, order entered May 23, 2014, at Docket No. L-2012-2317274.

⁵⁶ All of the other major NGDCs besides PGW and Columbia have had an increase in total plant in service of approximately 90-130% since 2013. The only other notable exception is NFG, with an increase of only 46.5%. NFG is also the only major NGDC in Pennsylvania that did not have a Commission-approved LTIP for most of the prior decade. However, NFG filed a Petition for approval of an LTIP on September 2, 2022, at Docket No. P-2022-3034957, which was approved by Commission Order entered December 22, 2022.

Figure 13: Cumulative Increase in Utility Plant in Service for Each Major NGDC (Millions of \$, base year 2013)



Section 4 - Conclusion

X. Summary

Natural gas production increased slightly in Pennsylvania in 2023, in comparison to the more substantial national increase in production in 2023. Despite the modest rise in production, natural gas deliveries to consumers in Pennsylvania increased in 2023. Natural gas prices decreased significantly in 2023 and, although it appears that prices will rise slightly through 2025, prices appear to be relatively stable in the short term. Price fluctuations are significant, as natural gas has become the largest portion of Pennsylvania's electric power generation, and it seems likely that it will continue to be the largest share of the electric generation portfolio going forward. Thus, higher natural gas prices will likely increase the price of electricity for retail customers.

A notable shift in the industry is that natural gas usage in the electric power generation sector has been increasing over the past decade, as the share of natural gas being allocated to electric power generation has continued to grow. In Pennsylvania, electric power generation currently accounts for more than 60% of all natural gas deliveries to consumers. Despite the other sectors of usage seeming to level off or slightly decrease, the continuing growth of electric power generation in Pennsylvania continues to drive overall increases in natural gas consumption in the Commonwealth.

In general, it appears that the natural gas industry in Pennsylvania is robust, and drilling for new natural gas wells is still continuing. Natural gas utilities in Pennsylvania are making significant investments in their infrastructure, to ensure that they will be prepared to meet any increased demand in the future, providing the residents and businesses of the Commonwealth with safe and reliable natural gas service.

Acronyms

ARPR	= Annual Resource Planning Report
Bcf	= Billion cubic feet
Bcfd	= Billion cubic feet per day
EIA	= Energy Information Administration
GSC	= Gas Supply Cost
LDC	= Local Distribution Company
LNG	= Liquefied Natural Gas
Mcf	= Thousand cubic feet
MMBtu	= Million British Thermal Units
MMcf	= Million cubic feet
MMcfd	= Million cubic feet per day
MW	= Megawatt
NGDC	= Natural Gas Distribution Company
NGL	= Natural Gas Liquids
NGS	= Natural Gas Supplier
NYMEX	= New York Mercantile Exchange
PUC	= Public Utility Commission
Tcf	= Trillion cubic feet



Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120
www.puc.pa.gov
1-800-692-7380

