FY 2025 GAS UTILITY FINANCIAL PLAN

FY 2025 TO FY 2029

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SECTION 1: DEFINITIONS AND ABBREVIATIONS

ABS: Acrylonitirile butydene styrene, a plastic gas main material

AMI: Advanced Metering Infrastructure

CARB: California Air Resources Board

CIP: Capital Improvement Program

CNG: Compressed Natural Gas

CPAU: City of Palo Alto Utilities Department

CPUC: California Public Utilities Commission

Cross-bore: A cross-bore exists when one utility line has been drilled or "bored" through a portion of another line. Gas cross-bores can occur in sewer lines as a result of "horizontal boring" construction practices.

Distribution: transportation of gas to customers.

GMR Program: Gas Main Replacement Program

Local Transportation: transportation of gas to Palo Alto across PG&E's distribution system from PG&E City Gate.

Malin: a delivery hub referred to in gas purchase contracts and located in Malin, Oregon, where the northern end of PG&E's Redwood Transmission Pipeline is located.

MMBtu: Millions of British thermal units, a unit of gas measurement equal to ten therms. Commonly used for high volume gas measurement. Wholesale purchases of gas from suppliers are typically measured in MMBtu.

O&M: Operations and Maintenance

PE or **HDPE:** Polyethylene, a gas main material (more specifically, High-Density Polyethylene)

PG&E: Pacific Gas and Electric

PG&E Citygate, or **Citygate:** a delivery hub referred to in gas purchase contracts. Any gas delivered to PG&E's distribution system (such as gas delivered at the southern end of PG&E's Redwood Transmission Pipeline) is said to have been delivered at PG&E Citygate.

PVC: Polyvinyl chloride, a plastic gas main material

Summer: April 1 to October 31

Therms: The standard unit of measurement for natural gas sales to customers, equal to 100,000 British thermal units. Therms measure the heating value of the gas, rather than its volume.

Transmission: transportation of gas between major gas delivery hubs via a gas transmission pipeline, such as PG&E's Redwood pipeline.

UAC: Utilities Advisory Commission, an appointed body that advises the City Council on CPAU issues.

Winter: November 1 to March 31

SECTION 2: EXECUTIVE SUMMARY AND RECOMMENDATIONS

This document presents a Financial Plan for the City's Gas Utility for the next five years. This Financial Plan provides revenues to cover the costs of operating the utility safely over that time while adequately investing for the future. It also addresses the financial risks facing the utility over the short term and long term and includes measures to mitigate and manage those risks.

SECTION 2A: OVERVIEW OF FINANCIAL POSITION

In FY 2021 and FY 2022, the Gas Utility maintained minimal rate increases, leading to revenues struggling to match the rising expenses, resulting in a significant depletion of reserves. Although revenues exceeded costs in FY 2023, some costs associated with FY 2023 were paid in FY 2024. Specifically, carbon offset purchases from FY 2023 were made in FY 2024, and the transfer of prior years' Cap and Trade auction sales revenue from the Operations Reserve to the Cap and Trade reserve, which was a cost item, also occurred in FY 2024. Additionally, FY 2024 costs reflect the Council's adopted revised natural gas purchasing strategy for the 2023 – 2024 winter months to include insurance against very high prices. A longer-term strategy for mitigating against potential future gas price spikes will be presented to Council for consideration prior to next winter. Consequently, staff projects the Operations Reserve will drop below the risk assessment level by the end of FY 2024. To address this, staff is proposing a 15% increase in the distribution component of gas rates for FY 2025 in order to cover the utility's costs and gradually replenish reserves back to within guideline ranges. The projected distribution rate increase is expected to raise overall customer bills by about 9% in FY 2025, assuming gas supply-related costs remain unchanged.

Gas commodity prices have substantially decreased from the unprecedented high levels in FY 2023 and have stabilized to normal levels in FY 2024. While gas commodity prices are projected to decline approximately 2% on average from FY 2024 to FY 2025, mild weather so far in FY 2024 has reduced gas usage, which staff expects will return to a higher level consistent with the long-term trend in FY 2025. From FY 2025 to FY 2029, staff forecasts gas usage to gradually decline by 0.5% annually on average. The uncertain nature of gas market prices and gas sales means these forecasts could change. Gas commodity costs are passed directly to customers through a rate adjuster, currently capped at $4/therm.

Gas total supply costs are projected to increase on average about 2% per year (though this forecast is uncertain)[1] over the forecasting period from FY 2025 to FY 2029, while distribution operational costs are expected to increase on average about 5% per year, primarily due to salary and benefit increases, and CIP costs are projected to increase on average about 9% per year, due to increasing construction costs, gas decommissioning expenses. This leads to an average increase of about 5% per year in the overall costs for the Gas Utility through the forecasting

[1] This results from a projected gradual decline in the main component of gas supply costs, the cost of gas purchased in the market (the "commodity" charge), combined with significant increases in smaller components of commodity costs: gas transportation and environmental charges. The net result is a gradual increase in costs. However, forecasting commodity costs is very uncertain. For more detail gas supply rate design and the sources for these forecasts, see Section 4G: Gas Supply Pass-Through Rates and Section 6A: Gas Purchase Costs.

period. However, total gas bills, including both commodity and distribution components, are forecasted to rise at a slightly higher average rate of 7% per year. This is because distribution rates are currently below costs, necessitating higher rate increases than distribution cost increases for full cost recovery and reserve replenishment.

Table 1 provides an overview of Gas Utility expenses over the period covered by this Financial Plan.

Table 1: Gas Utility Expenses for FY 2023 to FY 2029 ($,000)

Expenses ($000)	Actual	Projected					
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Supply Costs	**45,926**	**27,395**	**26,265**	**26,896**	**27,445**	**27,911**	**28,547**
Commodity	38,713	16,449	15,557	15,309	14,891	14,407	13,934
Transportation	4,144	4,483	4,112	4,331	4,514	4,632	4,741
Carbon Offset	871	2,705	2,175	2,270	2,481	2,723	3,133
Cap-and-Trade	2,198	3,759	4,422	4,985	5,559	6,148	6,740
Distribution Costs	**28,008**	**39,864**	**40,238**	**39,433**	**47,125**	**50,684**	**51,184**
Operations	25,176	31,967	30,867	32,598	34,816	36,331	38,083
Capital	2,832	7,897	9,371	6,836	12,310	14,353	13,100
TOTAL	**73,934**	**67,259**	**66,503**	**66,329**	**74,571**	**78,595**	**79,731**

CIP costs fluctuate from year to year, while staff has historically planned for a new gas main replacement project every year, higher-than-expected bid proposals have necessitated resizing and redesign of some projects. Since FY 2020, staff has budgeted for a new, larger main replacement project every other year, allowing CPAU to effectively address construction market challenges and optimize staffing resources. However, replacement costs continue to rise, and maintaining the gas main replacement program budget at the same level results in a reduction in the rate of main replacement over time. This Financial Plan addresses these challenges by increasing the main replacement budget starting in FY 2025 and including a 5.4% annual construction inflationary increase thereafter. Staff is also controlling costs by applying for grant funding for the upcoming main replacement Project 25 through the Natural Gas Distribution Infrastructure Safety and Modernization grant opportunity. Staff plan to apply each year for the grant. In addition, the attached Financial Plan includes transfers of between $4 million to $7 million each year from FY 2026 to FY 2029 in order to bring the currently empty CIP Reserve to within the guideline range gradually by the end of the forecast period. Decommissioning and electrification costs, if needed, are included in CIP budgets. The CIP budgets include $4 million in gas decommissioning costs and an additional $3 million annually from FY 2027 through FY 2029 for electrification-related costs.

In order to move towards full cost recovery while minimizing rate impacts, the Financial Plan includes the rate trajectory shown in Table 2, which shows the overall annual rate increases, excluding supply-related cost changes.

Table 2: Projected Gas Rate Trajectory for FY 2025 to FY 2029

Projection	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
FY 2025 Financial Plan (Current)	9%	7%	7%	6%	6%
FY 2024 Financial Plan	7%	5%	5%	5%	N/A
FY 2023 Financial Plan	4%	4%	3%	N/A	N/A

The unprecedented and extreme gas prices experienced in FY 2023 had a significant impact on the Gas Utility's reserves. To bring the reserves back within guideline levels, double-digit increases in distribution rates would be necessary. In last year's financial plan, Staff anticipated that the Gas Operations Reserve would fall below the risk assessment levels in FY 2024 and FY 2025 and remain below the minimum guideline in FY 2026. However, the current projection suggests that the Operations Reserve will return above the minimum guideline by FY 2026, one year earlier than last year's forecast. For more detailed information, please refer to Section 5E: Risk Assessment and Reserves Adequacy.

The Gas Utility's transfer to the City's General Fund is another component of the City's gas rates. City voters first authorized the transfer in 1950, and in November 2022 voters approved Measure L, affirming the continuation of this practice by amending the Municipal Code. According to Measure L, the City Council has the authority to transfer an amount of up to 18% of the Gas Utility gross revenues to the general fund each year[2], although City Council may opt to transfer a lesser amount.

This Financial Plan proposes to transfer 11.9% of the Gas Utility's gross revenues from FY 2023, $8,959,629, to the general fund for FY 2025, which aligns with the voter-approved changes codified in PAMC 2.28.185. Additionally, staff anticipates recommending the continuation of a gradual annual transfer increase to up to 18% of gross revenues by FY 2027. Alternatively, the "Transfer 18%" alternative proposes transferring 18% of the Gas Utility's gross revenue each year starting from FY 2025, in line with the voters' approval in Measure L. However, this increase in the transfer amount would significantly impact the gas reserves and require a larger rate increase. Additional details are shown in Section 5G: Alternative Gas Increase Plans.

Table 3 shows the projected reserve balances and transfers over the forecast period. As noted above, staff is seeking approval for the Gas Operations Reserve to be at the risk assessment levels for FY 2024 and FY 2025. The Gas Utility Reserves Management Practices (Attachment B, Section 8) require returning Operations reserves to within minimum guidelines (60 days of O&M and commodity expense) within one year unless an alternative plan is approved by Council.

Each year, the Cap and Trade allowance sales revenues are recorded in revenue accounts in the Gas Supply Fund and staff then transfers the revenues to the Cap and Trade Reserve. The transfer of $6.696 million in FY 2024 from the Operations Reserve to the Cap and Trade Reserve shown in Table 3 is the sum of the $3.622 million of transfer of Cap and Trade auction revenue true-up from FY 2015, FY 2021, FY 2022, and FY 2023, and the forecasted Cap and Trade auction revenue

[2] 18% of the gross revenues of the Gas Utility received "during the fiscal year two fiscal years before the fiscal year of the transfer." (Section 2.28.185, Palo Alto Municipal Code).

for FY 2024 of $3.074 million. The $3.662 million true-up resulted from an administrative change in the City's accounting practices, which provide for an annual transfer of Cap and Trade allowance sales revenues to the Cap and Trade reserve, in order to easily track these revenues. Staff completed this transfer to the Cap and Trade Reserve in mid-year of FY 2024.

Table 3: Operations, Rate Stabilization and CIP Reserve Starting and Ending Balances, Revenues, Transfers To/(From) Reserves, Capital Program (CIP) Contribution To/(From) Reserves, and Reserve Guideline Levels for FY 2024 to FY 2029 ($,000)

	Fiscal Year	2024	2025	2026	2027	2028	2029
	Starting Reserve Balances						
1	Operations Reserve*	11,360	5,133	9,045	13,217	12,920	13,470
2	CIP Reserve	-	-	-	4,000	10,000	16,000
3	Cap and Trade	6,731	13,427	16,754	20,366	24,232	28,341
4	Debt Service Reserve	378	378	378	378	-	-
	Revenues						
5	Total Revenues	57,958	67,087	70,889	76,030	81,035	86,055
6	Cap and Trade	3,074	3,327	3,612	3,866	4,109	4,340
	Expenses						
7	Non-CIP Expenses	(52,665)	(53,806)	(55,881)	(58,396)	(60,133)	(62,290)
8	Planned CIP	(7,897)	(9,371)	(6,836)	(12,310)	(14,353)	(13,100)
	Transfers						
9	Operations Reserve*	(6,696)	(3,327)	(7,612)	(9,487)	(10,109)	(11,340)
10	CIP Reserve	-	-	4,000	6,000	6,000	7,000
11	Cap and Trade	6,696	3,327	3,612	3,866	4,109	4,340
12	Debt Service Reserve	-	-	-	(378)	-	-
	Ending Reserve Balances						
1+5+6+7+8+9	Operations Reserve*	5,133	9,045	13,217	12,920	13,470	17,135
2+10	CIP Reserve	-	-	4,000	10,000	16,000	23,000
3+11	Cap and Trade	13,427	16,754	20,366	24,232	28,341	32,681
4+12	Debt Service Reserve	378	378	378	-	-	-
	Operations Reserve Guidelines						
13	Minimum	9,758	9,392	9,780	10,235	10,560	10,953
14	Maximum	19,516	18,783	19,559	20,469	21,121	21,906
	CIP Reserve Guidelines						
15	Minimum	6,365	8,634	8,103	9,573	13,331	13,727
16	Maximum	12,729	17,268	16,206	19,145	26,663	27,453

**Operations Reserve represents the Gas Supply Fund Rate Stabilization Reserve and the Gas Distribution Fund Operations Reserve combined.*

SECTION 2B: SUMMARY OF PROPOSED ACTIONS

Staff proposes the following actions for the Gas Utility:

1. Approve the FY 2025 Gas Utility Financial Plan, which includes amending the Gas Utility Reserve Management Practices, reflected in Appendix C: Gas Utility Reserves Management Practices, sections 3, 10, and 11; and
2. Increase distribution rates by 15% (for an estimated 9% increase to total rates) for FY 2025; and
3. Transfer up to 11.9% of gas utility gross revenues received during FY 2023 to the general fund in FY 2025.

SECTION 3: DETAIL OF FY 2025 RATE AND RESERVE PROPOSALS

SECTION 3A: RATE DESIGN

The Gas Utility's rates are evaluated and implemented in compliance with cost of service requirements set forth in the California Constitution and applicable statutory law. The Gas Utility's proposed rates are based on the methodology from the March *2019 Natural Gas Cost of Service and Rates Study*.

The City's natural gas rates are based on the 2019 Natural Gas Cost of Service and Rates Study, updated with current and proposed operating costs. As mentioned in last year's financial plan, there has been a notable decrease in gas consumption among various customer classes due to the shift towards remote work and businesses operating with reduced staff during the COVID-19 pandemic. Concurrently, there has been an increase in expenses related to salaries and benefits, and administrative functions provided by the City's General Fund staff, as well as rising supply costs. These factors have contributed to expenses surpassing revenues for several years, leading to a depletion of the gas reserves. In order to move towards full cost recovery and replenish gas reserves, while minimizing rate impacts, Staff recommends increasing the distribution component of the rates by 15%, which equates to around a 9% increase to total rates, if commodity rates remained unchanged from FY 2024. Rate impacts of these changes are outlined in Section 3B: Current and Proposed Rates.

Distribution rates typically comprise approximately 70% of the overall rate, which consists of both gas supply and distribution components (though in FY 2023 it accounted for about 40% due to unprecedented supply cost increases). Supply-related costs include the cost of the natural gas itself (the "commodity" rate), gas transmission, and gas environmental charges, and these are a fluctuating component of the Gas Utility's expenses. Commodity rates, which typically make up approximately 30% of overall retail gas rates, vary significantly due to changes in market conditions. Staff monitors market prices monthly and automatically incorporates market prices into monthly supply rate adjustments, which are passed directly to customers as a line item on their utility bills.

The overall rate changes (commodity plus distribution) referenced in this report are based on current gas market forecasts that indicate that the commodity portion of the overall rate will decline from the level observed in FY 2023 to a more normal range. Current gas market forward prices indicate that average annual commodity prices are projected to decline about 2% in FY 2025 from FY 2024. This is consistent with current gas market forecasts from various sources, including forward gas contracts on exchanges and forecasts from suppliers, but staff cautions that these forecasts can change rapidly due to changing weather, economic factors, or gas supply constraints.

SECTION 3B: CURRENT AND PROPOSED RATES

Gas rates have two drivers: 1) Supply costs – these are costs related to the purchase of gas supply, transmission costs to bring the gas to Palo Alto's meters, and environmental costs, such as the purchase of cap and trade allowances for gas burned and carbon neutral offsets; and 2) Distribution costs.

Supply costs are charged to customers via four pass-through rate components related to supplying gas to customers:

1. Gas commodity: This represents the cost of buying gas in the markets.
2. Gas transportation: This reflects the cost of transporting purchased gas to Palo Alto. This charge continues to increase as PG&E collects costs related to improving storage facilities, decommissioning older facilities, increased costs resulting from wildfire mitigation, accounting for and greenhouse gas mitigation costs. Based on PG&E's estimates, prices are going to continue to escalate about 4% annually between FY 2026 to FY 2029.
3. Cap and Trade compliance: This covers the cost of mandated participation in the State's cap and trade program and changes depending on the cost of allowances and gas demand.
4. Carbon offset charge: This accounts for the cost of buying offsets for the City's Carbon Neutral Gas Portfolio. The costs associated with the carbon neutral gas plan are passed directly to customers, with the maximum rate impact is $0.10 per therm.

All gas supply, transportation, and environmental costs are passed through to customers as monthly prices change. Two years' worth of history of these supply rate components can be found on Palo Alto's website.[3]

CPAU has four rate schedules: one for separately metered residential customers (G-1), one for small commercial and master-metered multi-family residential customers (G-2), one for customers using over 250,000 therms per year (G-3), and a specific schedule for the City's Compressed Natural Gas (CNG) station (G-10). To recover distribution costs, all customers pay a monthly service charge, which funds meter reading, billing, and other customer service costs, as well as a portion of Operations and Maintenance (O&M) costs. All customers are also assessed a distribution charge based on each therm of gas used. Separately metered residential customers are charged on a tiered basis, differentiated by season. During the winter months, the first 2 therms per day (60 therms for a 30 day billing period) are charged a base price per therm, and all additional units charged a higher price per therm. During the summer months, the first tier level is 0.667 therms per day, or 20 therms for a 30 day billing period. Commercial customers pay a uniform price for each therm used.

Table 4 shows the current monthly service charges for all rate schedules. Table 5 shows the consumption charges related to distribution. As mentioned earlier, commodity charges change monthly, and transportation charges are tied to the PG&E G-WSL rate schedule. Some recent commodity price history is discussed in *Section 6A: Gas Purchase Costs.*

[3] Monthly Gas Commodity & Volumetric Rates https://www.cityofpaloalto.org/files/assets/public/utilities/rates-schedules-for-utilities/residential-utility-rates/monthly-gas-volumetric-and-service-charges-residential.pdf

Table 4: Current and Proposed Monthly Service Charges

Rate Schedule	**Current Rates (as of 7/1/23)**	**Proposed Rates (effective 7/1/24)**	**Change ($)**	**Change (%)**
G-1 *(Residential)*	$ 14.01	$ 16.11	$ 2.10	15%
G-2 *(Small Commercial)*	129.78	149.24	19.46	15%
G-3 *(Large Commercial)*	593.79	682.85	89.06	15%
G-10 *(CNG)*	87.77	100.93	13.16	15%

Table 5: Current and Proposed Gas Distribution Charges

	Current Rates (as of 7/1/23)	**Proposed Rates (effective 7/1/24)**	**Change ($)**	**Change (%)**
G-1 *(Residential)*				
Tier 1 Rates	$ 0.6807	$ 0.7828	$ 0.1021	15%
Tier 2 Rates	1.7406	2.0016	0.2610	15%
G-2 *(Residential Master-Metered and Small Commercial)*				
Uniform Rate	0.8941	1.0282	0.1341	15%
G-3 *(Large Commercial)*				
Uniform Rate	0.8852	1.0179	0.1327	15%
G-10 *(CNG)*				
Uniform Rate	0.0145	0.0166	0.0021	14%*

*Adjusted downward due to rounding

SECTION 3C: BILL IMPACT OF PROPOSED RATE CHANGES

Table 6 shows the impact of the proposed July 1, 2024 rate changes on the median monthly residential bill for representative average winter and summer bills. The average annual gas bill for the median residential customer is projected to be 9% higher in FY 2025 than FY 2024, excluding supply-related cost changes. However, since customer gas usage varies and the price of commodities changes monthly, the actual change may vary. Table 6 shows a representative winter period (November thru March) and summer period (April through October) bill comparison.

Table 6: Monthly Impact of Proposed Gas Rate Changes on Residential Bills[4]

Usage (Therms/month)	Bill Amount (Current Rates)	Bill Amount (Proposed Rates)	Change	
			$/mo.	%
Summer				
10	$ 29.30	$ 32.42	$ 3.12	11%
18 (median)	41.54	45.47	3.94	9%
30	68.80	75.45	6.65	10%
45	105.65	116.14	10.49	10%
Winter				
30	$ 64.65	$ 69.81	$ 5.16	8%
54 (median)	105.15	112.77	7.62	7%
80	169.71	184.03	14.33	8%
150	362.05	395.88	33.82	9%

Table 7 shows the impact of the proposed July 1, 2024 rate changes on various representative commercial customer bills. The overall increases for the G-2 and G-3 classes are projected to be about 7-13% on an annual basis, excluding supply-related cost changes.

Table 7: Monthly Impact of Proposed Gas Rate Changes on Commercial Bills[8]

Usage (Therms/month)	Bill under (Current Rates)	Bill under (Proposed Rates)	Change	
			$/mo	%
250	$ 167.60	$ 189.86	$ 22.26	13%
1,000	281.32	311.96	30.65	11%
3,200	613.69	668.91	55.22	9%
35,000	5,428.68	5,839.31	410.63	8%
250,000	38,145.93	41,001.25	2,855.32	7%

SECTION 3D: PROPOSED AMENDED RESERVES MANAGEMENT PRACTICES

Staff requests Council authorization to amend the Gas Utility Reserves Management Practices. The Gas Utility Reserve Management Practices, Section 10, currently authorize staff to transfer the difference between Gas Supply Fund costs and revenues from the Gas Distribution Fund to the Gas Supply Fund, or vice versa. This amendment, if approved by Council, would modify Section 10 to authorize staff to transfer funds between the Gas Supply Fund and the Gas Distribution Fund if consistent with the purposes of the two reserves involved in the transfer and in order to balance gas utility reserves to avoid negative balances.

This amendment is needed to provide a mechanism to transfer distribution revenues from the Gas Distribution Fund to the Gas Supply Fund to cover expenses that are funded by distribution

[4] Current rates are derived from actual commodity prices up to January 2024 and forecasted prices until June 2024. Proposed rates, while based on the same commodity prices as current rates, incorporate adjustments solely in the increase of distribution rates.

revenues, such as administration of the Gas Supply Fund. Additionally, the amendment would help avoid negative balances, such as the FY 2023 year-end balance of -$3.077 million in the Supply Rate Stabilization Reserve, when funds are otherwise available in the Gas Utility. This was the case at year-end FY 2023. The proposed change would allow staff to complete the transfer once actual costs and revenues are known (rather than estimated) at year end.

In FY 2026, the final debt service payment is expected on the 2011 Utility Revenue Refunding Bonds, Series A. At that time, the $0.378 million in the debt service reserve will partially offset the final year's debt service payment.

Table 3 and *Appendix A: Gas Utility Financial Forecast Detail* show the impact of transfers on reserve levels.

SECTION 4: UTILITY OVERVIEW

This section provides an overview of the utility and its operations. It is intended as general background information and to help readers better understand the forecasts in *Section 5: Utility Financial Projections* and *Section 6: Details and Assumptions*.

SECTION 4A: GAS UTILITY HISTORY

On September 22, 1917, the City of Palo Alto issued a bond to purchase the property of Palo Alto Gas Company and continue it as a municipal enterprise. At the time, the system was comprised of 21 miles of mains, 1,900 meters, and was valued at $65,500. PG&E supplied the gas, which was synthesized from coal at its Potrero gasification facility. Almost immediately the City faced challenges. Losses were at nearly 25% according to PG&E's master meter, and PG&E had filed with the Railroad Commission (the forerunner to today's CPUC) to increase rates by nearly 72.5%. Despite these initial hurdles, Palo Alto's system grew tremendously, and by 1924 revenues had exceeded those of the electric utility. Sales were such that the annual reports of the time noted gas usage "appears to be greater than that of any other city in the state, showing that gas is a very popular form of fuel in Palo Alto." Just prior to the acquisition of the neighboring town of Mayfield's gas system (centered around today's California Avenue) in 1929, the miles of main in service and customer connections had doubled.

Notable changes to the gas supply itself came in 1930, when PG&E ceased supplying purely manufactured (or coal) gas from its Potrero Hill facility in San Francisco and instead switched to natural gas. In 1935, a supplementary butane injection system (later retired) was purchased from Standard Oil to mitigate large wintertime peaks. Gas sales were at 248,658 million cubic feet (MCF) with 4,849 active services.

Early gas mains in Palo Alto were made of steel, but in the 1950s, like many other utilities, CPAU switched to ABS plastic. CPAU switched to PVC plastic in the early 1970s, but around 100 miles of ABS mains had already been installed. A 1990 evaluation of the system found a steadily increasing rate of gas leaks associated with those mains, something that other gas utilities had also been experiencing. To reduce leaks, CPAU accelerated its main replacement program from 7,000 feet (1.3 miles) of replacements per year to 20,000 feet (3.8 miles) per year. This would enable the utility to replace all of its ABS and its most vulnerable steel and PVC mains with polyethylene (PE) mains over the course of the following 36 years.[5] The Gas Utility has replaced all but .11 miles of ABS gas mains, which consists of mainly short sections of pipelines in various locations throughout the City. These sections will be replaced as the distribution mains around them are replaced. The majority of ABS, Taenite, and K40 gas services were replaced in 2020. The only ABS, Tenite and K40 gas services remaining are on moratorium streets; these services will be replaced as the street moratorium expires. The Gas Utility completed the replacement of approximately 22,000 linear feet of PVC gas main and over 250 natural gas services in FY22 under the Gas Main Replacement Project 23. This is an example of how local control of its Gas Utility has provided Palo Alto residents with substantial benefits. During the 1990s and 2000s, while CPAU was increasing its main replacement rate to ensure a robust gas distribution system, PG&E was underspending on safety-related infrastructure, according to a past audit.[6]

In the 1990s, while grappling with the issues surrounding its distribution system, CPAU was also participating in major changes to the structure of the gas industry in California. Until 1988 CPAU had a formal policy of setting its rates equal to PG&E's rates and successfully did so with the exception of one year in the mid-1970s. At times this led to inadequate revenue (1974 to 1981) as PG&E, the City's only gas supplier, regularly filed requests with the CPUC to increase the wholesale gas supply rates charged to the Gas Utility. In the 1990s, as the CPUC began deregulating the natural gas industry in California, the Gas Utility began purchasing gas from suppliers other than PG&E. In 1997 the CPUC adopted the "Gas Accord,"[7] which enabled the Gas Utility (along with other local transportation-only customers) to obtain transmission rights on PG&E's Redwood transmission pipeline running from Malin, Oregon into California.

In 2000/2001 the California energy crisis occurred, causing major disruptions to the Gas Utility's supply costs. Wholesale gas prices rose over 500% between January 2000 and January 2001. The Council approved drawing down reserves to provide ratepayer relief and, for two years following the crisis, CPAU rates were above PG&E's as reserves were replenished. In April 2001 the Council approved a hedging practice of buying fixed price gas one to three years into the future. After reaching a low point in October 2001, prices continued to rise, and the CPAU hedging strategy frequently resulted in a wholesale supply cost advantage compared to PG&E until prices began to decline steeply in mid-2008. At that point the Gas Utility's wholesale supply costs became higher than market gas prices due to fixed price contracts entered into prior to 2008. As a result the Gas Utility's wholesale supply costs were higher than PG&E's for several years. In 2012 Council approved a plan to formally cease the hedging strategy and purchase all gas on the short-term ("spot") markets. As of July 1, 2012, the commodity portion of the gas rates changes every month based on the spot market gas price. In January 2015, the Council adopted a new rate component to collect the costs of purchasing allowances for the purpose of compliance with the State's cap-and-trade program.[8] As of November 1, 2016, the Council adopted a resolution changing the Local Transportation rate (which had been collapsed into the Distribution rate in

[5] Staff Report CMR:183:90. *Infrastructure Review and Update,* March 1, 1990

[6] *Focused Financial Audit of The Pacific Gas & Electric Company's Gas Distribution Operations*, Overland Consulting, made available through a CPUC Administrative Law Judge's ruling on A12-11-009/I13-03-007 on 5/31/2013

[7] CPUC decision 97-08-055. Since then, the Gas Accord has been amended four times, with the most recent being Gas Accord V, application A.09-09-013

[8] Staff Report 5397, 1/26/2015: https://www.cityofpaloalto.org/civicax/filebank/documents/45537

2015 to streamline bill presentation), to be a pass-through of PG&E's Gas Transportation Rate to Wholesale/Resale Customers (G-WSL) charge to Palo Alto.[9] In December 2016, Council approved a carbon neutral gas plan, with a goal of achieving a carbon neutral gas portfolio by FY 2018.[10] The City's gas utility has been carbon neutral since FY 2018 through the purchase of offsets.

SECTION 4B: CUSTOMER BASE

CPAU's Gas Utility provides natural gas service to the residents, businesses, and other gas customers in Palo Alto. Close to 23,800 customers are connected to the natural gas system, approximately 21,500 (90%) of which are residential and 2,300 (10%) of which are non-residential. In a normal year, residential customers consume about 10 to 11 million therms of gas per year, roughly 40% of the gas sold, while non-residential customers consume 60% (about 15 to 18 million therms). Residential customers use gas primarily for space heating (46% of gas consumed) and water heating (42%), with the remainder consumed for other purposes such as cooking, clothes drying, and heating pools and spas. Non-residential customers use gas for space and water heating (73% of gas consumed), cooking (20%), and industrial processes (6%).[11]

The Gas Utility receives gas at the four receiving stations within Palo Alto where CPAU's distribution system connects with Pacific Gas and Electric's (PG&E's) system. These receiving stations are jointly operated by CPAU and PG&E. CPAU purchases gas from various natural gas marketers, with PG&E providing only local transportation service (transportation from the PG&E City Gate gas delivery hub to Palo Alto). CPAU also has transmission rights on PG&E's transmission pipeline from Malin, Oregon to PG&E City Gate, allowing it to purchase lower priced gas at that location. CPAU does not produce or store any natural gas, and purchases gas in the monthly and daily spot markets. The cost of the purchased gas is passed through directly to customers through a rate adjuster that varies monthly with market (Bidweek) prices. In a similar fashion, the costs for local transportation is tied to PG&E's G-WSL rate schedule, and it varies when and if PG&E changes its rate schedule. The cost of purchased gas and PG&E local transportation service usually account for roughly one third of the utility's expenditures.

SECTION 4C: DISTRIBUTION SYSTEM

To deliver gas from the receiving stations to its customers, the utility owns 210 miles of gas mains (which transport the gas to various parts of the city) and close to 23,800 gas services (which connect the gas mains to the customers' gas lines). These mains and services, along with their associated valves, regulators, and meters, represent the vast majority of the infrastructure used to deliver gas in Palo Alto. CPAU has an ongoing CIP to repair and replace its infrastructure over time, the expense of which normally accounts for around 15 to 20% on average of the utility's expenditures. Costs for main replacements have been going up in recent years.

In addition to the CIP, the Gas Utility performs a variety of maintenance activities related to the system, such as monitoring the system for leaks, testing and replacing meters, monitoring the

[9] Staff Report 7260 10/17/2016 http://www.cityofpaloalto.org/civicax/filebank/documents/54165

[10] Staff Report 7533 12/05/2016 http://www.cityofpaloalto.org/civicax/filebank/documents/54882

[11] Source: Statewide Commercial End Use Study, California Energy Commission report, 2006. Statistics shown are for end users in PG&E Climate Zone 4 (the Peninsula) where Palo Alto is located.

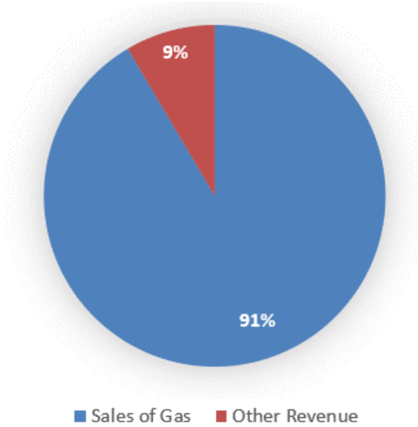
condition of steel pipe, and building and replacing gas services for buildings being built or redeveloped throughout the city. The utility also shares the costs of other system-wide operational activities (such as customer service, billing, meter reading, supply planning, energy efficiency, equipment maintenance, and street restoration) with the City's other utilities. These maintenance and operations expenses, as well as associated administration, debt service, rent, and other costs, make up roughly half of the utility's expenses.

In addition to these ongoing activities, CPAU launched a cross-bore safety inspection program to identify and replace cross-bores over the last several years. The estimated expense will be around $0.9 million in FY 2025 and $0.4 million in FY 2026 for the cross-bore program. Operations cost projections assume staff's proposal for the cross-bore funding program is approved. However, if the Council approves a lower level of funding for the program, staff would recommend the same rate trajectory and the operations reserve would recover more quickly to within the minimum guideline range.

SECTION 4D: COST STRUCTURE AND REVENUE SOURCES

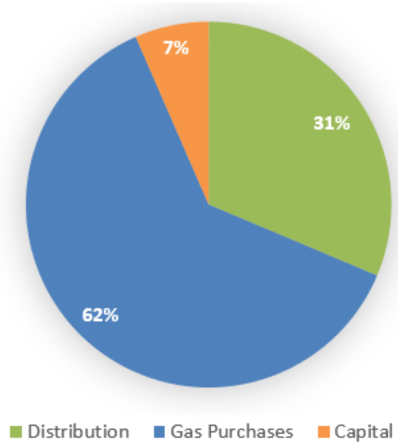
As shown in Figure 1, the Gas Utility receives about 91% of its revenue from sales of gas and the remainder from capacity and connection fees, interest on reserves, and other sources. *Appendix A: Gas Utility Financial Forecast Detail* shows more detail on the utility's cost and revenue structures.

Figure 1: Revenue Structure (FY 2023)



As shown in Figure 2, in FY 2023, gas purchase costs accounted for about 62% of the Gas Utility's costs, about 15% higher than a typical year due to the winter price spike during the 2022/23 winter. This percentage can vary widely from year to year, as this cost is based upon market purchases, and includes costs related to cap and trade. Distribution costs in FY 2023 represented 31% of expenses and capital costs were responsible for the remaining 7%. CIP is on average about 10 to 15% of expenses, but as main replacement projects occur every other year, the percentage swings more.

Figure 2: Cost Structure (FY 2023)



SECTION 4E: RESERVES STRUCTURE

CPAU maintains six reserves for its Gas Utility to manage various types of contingencies and track program spending. The summary below describes each of these briefly. See *Appendix C: Gas Utility Reserves Management Practices* for more detailed definitions and guidelines for reserve management:

- **Reserve for Commitments:** A reserve equal to the utility's outstanding contract liabilities for the current fiscal year. Most City funds, including the General Fund, have a Commitments Reserve.
- **Reserve for Re-appropriations:** A reserve for funds dedicated to projects re-appropriated by the City Council, nearly all of which are capital projects. Most City funds, including the General Fund, have a Re-appropriations Reserve.
- **Capital Improvement Program (CIP) Reserve:** The CIP reserve can be used to accumulate funds for future expenditure on CIP projects. This CIP can also act as a contingency reserve for the CIP. This type of reserve is used in other utility funds (Electric, Water, and Wastewater Collection) as well.
- **Rate Stabilization Reserve:** This reserve is intended to be empty unless one or more large rate increases are anticipated in the forecast period. In that case, funds can be accumulated to spread the impact of those future rate increases across multiple years. This type of reserve is used in other utility funds (Electric, Water, and Wastewater Collection) as well.
- **Operations Reserve:** This is the primary contingency reserve for the Gas Utility and is used to manage yearly variances from budget for operational gas costs. This type of reserve is used in other utility funds (Electric, Water, and Wastewater Collection) as well.
- **Unassigned Reserve:** This reserve is for any funds not assigned to the other reserves and is normally empty.
- **Cap and Trade Reserve:** This reserve tracks unspent or unallocated revenues from the sale of carbon allowances freely allocated by the California Air Resources Board to the gas utility, under the State's Cap and Trade Program.

SECTION 4F: COMPETITIVENESS

Table 8 presents the median residential bills for Palo Alto and PG&E customers from FY 2022 to FY 2024. In FY 2023, the annual gas bill for the median Palo Alto residential customer was $940, about 4% higher compared to a PG&E customer with equivalent consumption. This is attributed to the gas price spike during the winter of 2022/2023, affecting all California utilities except PG&E, which managed to evade the exceptionally high gas prices.

Looking ahead to FY 2024, the anticipated annual gas bill for the median Palo Alto residential customer is expected to be about 11% lower than that of a PG&E customer with equivalent consumption. PG&E's gas transportation rates continue to rise to fund system improvements for pipeline safety and maintenance.

The bill calculations below for PG&E customers are based on PG&E Climate Zone X, an area which includes the surrounding communities.

Table 8: Residential Natural Gas Bill Comparison ($/month or year)

Time Period	Median Usage (therms)	Palo Alto	PG&E Zone X	% Difference
FY 2022	Annual (400 Thms)	$ 688.84	$ 776.36	(13%)
FY 2023		940.33	903.73	4%
FY 2024*		752.90	836.26	(11%)
FY 2024 Summer*	Monthly (18 Thms)	41.54	38.70	7%
FY 2024 Winter*	Monthly (54 Thms)	105.15	131.67	(25%)

**Calculated based on actual and projected supply-related costs*

Staff is actively conducting a comprehensive review of commercial customer competitiveness and will provide updates in the future.

SECTION 4G: GAS SUPPLY PASS-THROUGH RATES

The City has four pass-through rates related to supplying gas to customers: 1) gas commodity, which represents the cost of buying gas in the markets, 2) gas transportation, which represents the cost of transporting purchased gas to Palo Alto, 3) Cap and Trade compliance, which represents the cost of mandated participation in the State's cap and trade program, and 4) carbon offset charge, which represents the cost of buying offsets for the City's Carbon Neutral Gas Portfolio. Gas commodity rates are forecasted to decline slightly over the forecast period, but increases in other rate components are forecasted to lead to a net gradual increase in total gas supply costs over the forecast period.

For the gas commodity charge, starting in July 2012, CPAU replaced a "laddering" hedging strategy for purchasing gas supplies with a strategy to buy gas on the short-term, or "spot" markets and pass the commodity cost to customers on a monthly basis. Prior to December 2018, commodity prices had generally fluctuated in a fairly narrow band, averaging around $0.32/therm. Over the last few years, a variety of factors combined that led to more variability in prices: Regional temperatures were cooler than normal, but in addition, gas supplies stored in underground facilities have been lower than normal, as well as constrained due to problems with the Aliso Canyon facility in southern California. There have been periodic pipeline constraints at both the northern and southern California borders. While there was not an actual constriction on supply, the confluence of all these factors drove up the bidweek prices for all California delivery points during FY 2023.

Gas Capped-Price Winter 2023-2024 Gas Purchasing Strategy

On September 18, 2023, Palo Alto City Council adopted a resolution which modified the City's gas purchasing strategy for the winter of FY 2024 in response to the high energy prices that occurred in the winter of FY 2023 which resulted in dramatically high bills for Palo Alto customers. This purchasing strategy is an insurance policy to mitigate the potential for a repeat of high winter gas prices to a maximum $0.15 per therm. It involves purchasing price caps, limiting the price of gas cost $2 per therm for a portion of City's anticipated gas needs.

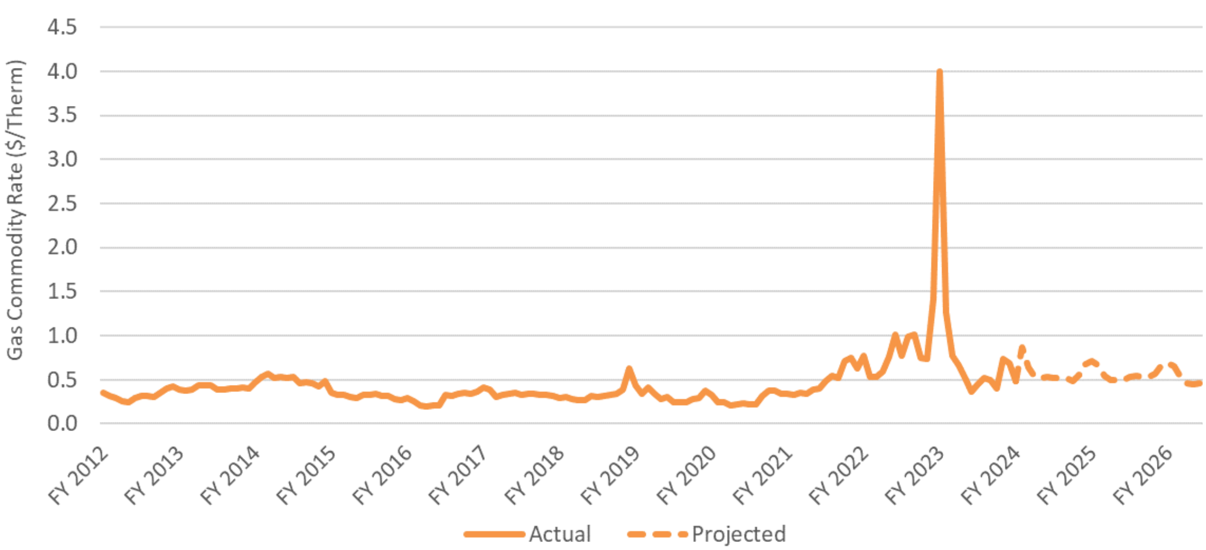
Per Council's decision, staff implemented the capped-price winter natural gas purchasing strategy in October 2023 for the gas year November 2023-October 2024. Within the constraints set by Council, staff was able to purchase $2 per therm price caps for about half of Palo Alto's expected load for the months of December 2023, January 2024 and February 2024. The cost of the price caps was $0.275 per therm and a total cost of $1.5 million. Spread out over the entire year, an adder of $0.055 per therm is applied to the gas commodity charge passed through to customers. This represents approximately $1.81 on a typical residential customer's monthly bill or an approximate 2.8% increase, not taking into account changes in the underlying commodity price which is still based on a market index. The amended rate schedules associated with this implementation were effective November 1, 2023. The City's website and rate schedules were updated to reflect the change in purchasing strategy.

Current Gas Price Projection

After experiencing a notable price spike last winter, natural gas prices have seen a significant decline, returning to more typical ranges. This shift can be attributed to several factors, including milder temperatures nationwide that diminished demand for heating and an above-average level of gas storage. The combination of these factors has put downward pressure on natural gas prices. Looking ahead, it is anticipated that gas prices will maintain a stable level in the long term. This is attributed to diminished demand resulting from electrification efforts and a consistent gas production that exerts a downward pressure on prices. Conversely, the increase in liquefied natural gas (LNG) exports is expected to contribute to pushing prices higher.

Figure 3 shows the City's actual commodity rates through January 2024, and projected rates through FY 2026. Note that while gas commodity costs might be forecasted to decline slightly, increases in other gas supply components (transportation, environmental charges) are expected to offset that, leading to a gradual increase in overall gas supply costs.

Figure 3: Palo Alto Gas Commodity Rates, Actual and Projected, FY 2012 - FY 2026



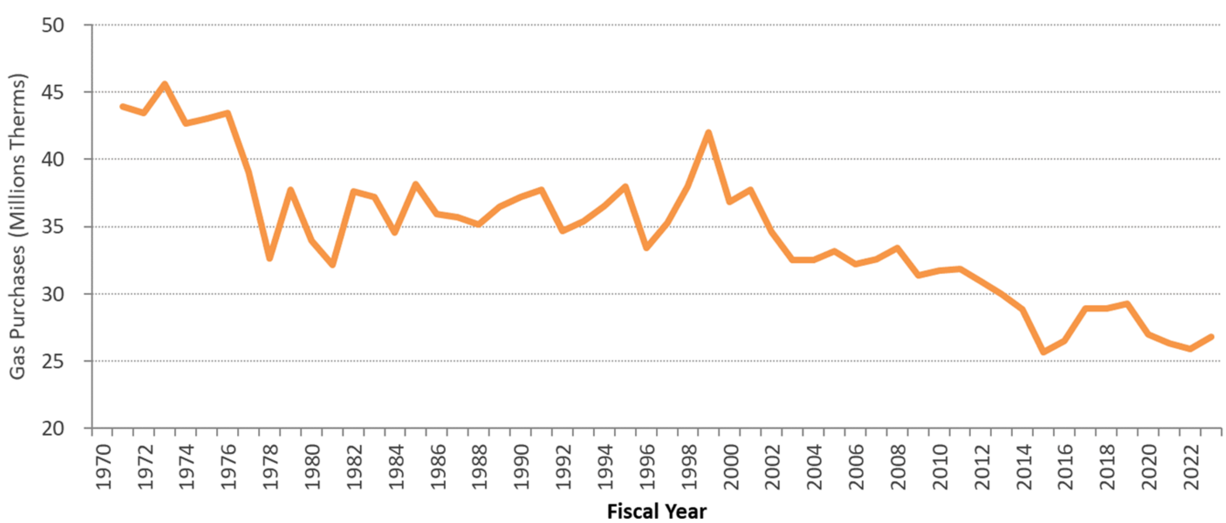
SECTION 5: UTILITY FINANCIAL PROJECTIONS

SECTION 5A: LOAD FORECAST

Gas usage in Palo Alto is volatile, varying with both economic and weather conditions. As shown in Figure 4, in the early 1970s, gas purchases reached over 45 million therms per year. Usage dropped dramatically in the 1976/1977 drought when customers saved significant amounts of (hot) water by upgrading to efficient showerheads. During the 1980s and 1990s average gas usage was around 36 million therms per year. Usage dropped again in the early 2000s. In FY 2001, gas prices escalated during the California energy crisis and Palo Alto's rates increased by nearly 200%. From 2003 to 2011, usage decreased by 2.3% mainly as a result of continued customer investments in energy efficiency.

In 2014 and 2015, unusually warm winters, as well as ongoing drought, caused gas usage to tumble to historic lows. In 2017 and 2018, as the drought eased, gas usage increased again, but appeared to have stabilized. The Covid pandemic resulted in gas usage decreasing again, mainly in the commercial sectors as a result of many businesses operating staff remotely. Gas usage decreased by about 12% in 2020 and 2021, compared with 2019.

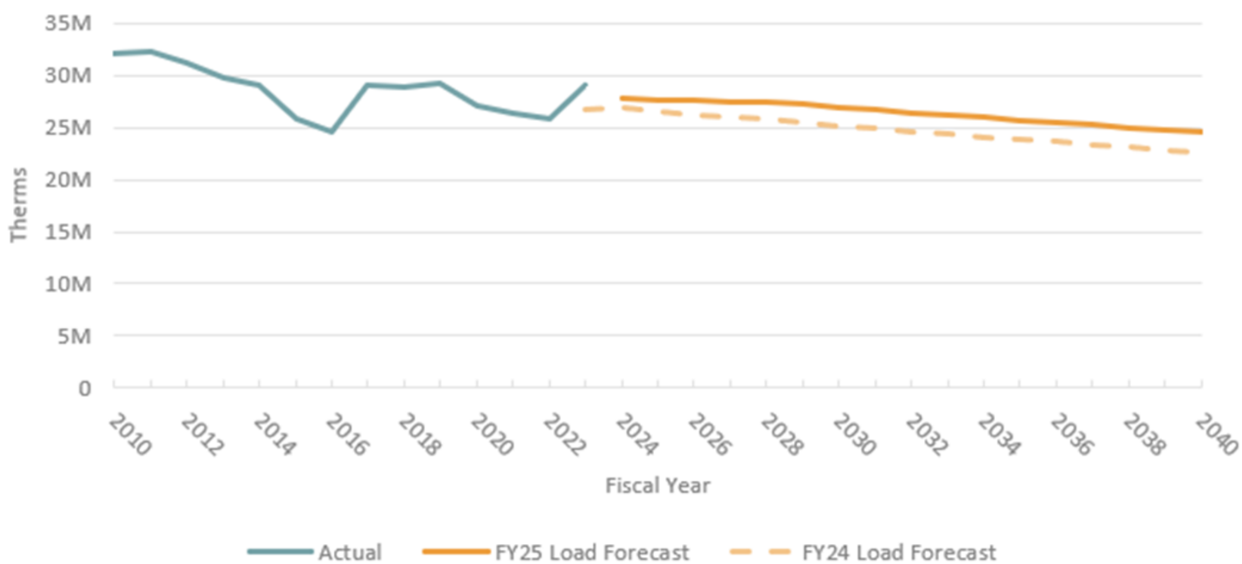
Figure 4: Historical Gas Supply Purchases



Gas usage in Palo Alto declined from FY 2020 to FY 2022, mainly due to the Covid pandemic and drought in California. The increase in gas usage in FY 2023 was likely due to modest usage recovery from Covid and lower than normal average temperature during the winter. However, as seen with prior economic and drought-related gas usage declines in the past, it is likely that consumption will not come back to pre-conservation/pandemic levels but will likely return to a long-run usage decline. Further changes, such as the voluntary replacement of gas appliances with electric appliances, increased building electrification in new construction, and customer behavior are also expected to lower long run usage. In addition, separate strategic planning and financial analysis will be performed separate from this Financial Plan to address a financial and infrastructure strategy for the gas utility during a transition to an electrified community. Any insights from separate analyses will be integrated into future Financial plans.

The latest forecast anticipates gas supply purchases for FY 2025 at 27,711,370 therms, about 4% higher than forecasted in the FY 2024 Financial Plan. This upward projection may have been influenced by increased consumption in FY 2023, which has slightly altered the long-term trend. Long term declining gas consumption will put upward pressure on rates, as a generally increasing cost to operate and distribute gas will be spread across fewer units of sale.

Figure 5: Gas Supply Purchases Forecast



SECTION 5A: FY 2019 TO FY 2023 COST AND REVENUE TRENDS

Figure 6 and *Appendix A: Gas Utility Financial Forecast Detail* show how costs have changed during the last five years as well as how staff project costs to change over the next five years.

While the gas utility strives to maintain a steady rate of funding for main replacement over time, this funding pattern was disrupted from FY 2015 to FY 2020. In FY 2015, no funding for gas main replacement was budgeted due to the fact that staff was completing a prior major gas main replacement project, the largest in utility history, which completed replacement of most of the ABS gas mains in Palo Alto. The next main replacement to be budgeted involved replacements of gas mains on University Avenue, a project that evolved into the Upgrade Downtown project involving a coordinated replacement of several different types of infrastructure to avoid multiple disruptions to the business district. This multi-year planning effort did not allow for design of other new projects, and the hiatus in starting a new main replacement project allowed the Gas Utility to temporarily keep rates lower. In FY 2021 the gas utility returned to routine funding for main replacement for the gas utility, though gas main replacement investment is likely to become more complex as the City plans for a transition to an electrified community.

Revenues have fluctuated but generally matched expenses in the years between FY 2019 and FY 2023. The absence of new budget for main replacement projects for several years, as well as the availability of relatively large reserves, reduced the need for rate increases until FY 2019.

The last adjustment to gas distribution rates was a 8% increase to the total system average gas rate (supply rates plus distribution rates) in July 2023. The commodity cost and revenue increases in FY 2023 were the result of higher market commodity prices, as shown in Figure 3**Error! Reference source not found.** in Section 4G. Gas supply costs are passed through to customers, and change month to month with a cap of $4/therm.

Figure 6 shows the actual overall system average rate change from FY 2019 through FY 2024 (shown in grey) and the projected overall system average rate change for FY 2025 through FY 2029 (shown in red) both excluding supply-related rate changes. The rate increases only include the needed increase for the distribution rate as a percentage of the base gas utility sales revenue.

Figure 6: Gas Utility Expenses, Revenues, Rate Changes Excluding Supply-Related Changes
Actual Costs through FY 2023 and Projections through FY 2029

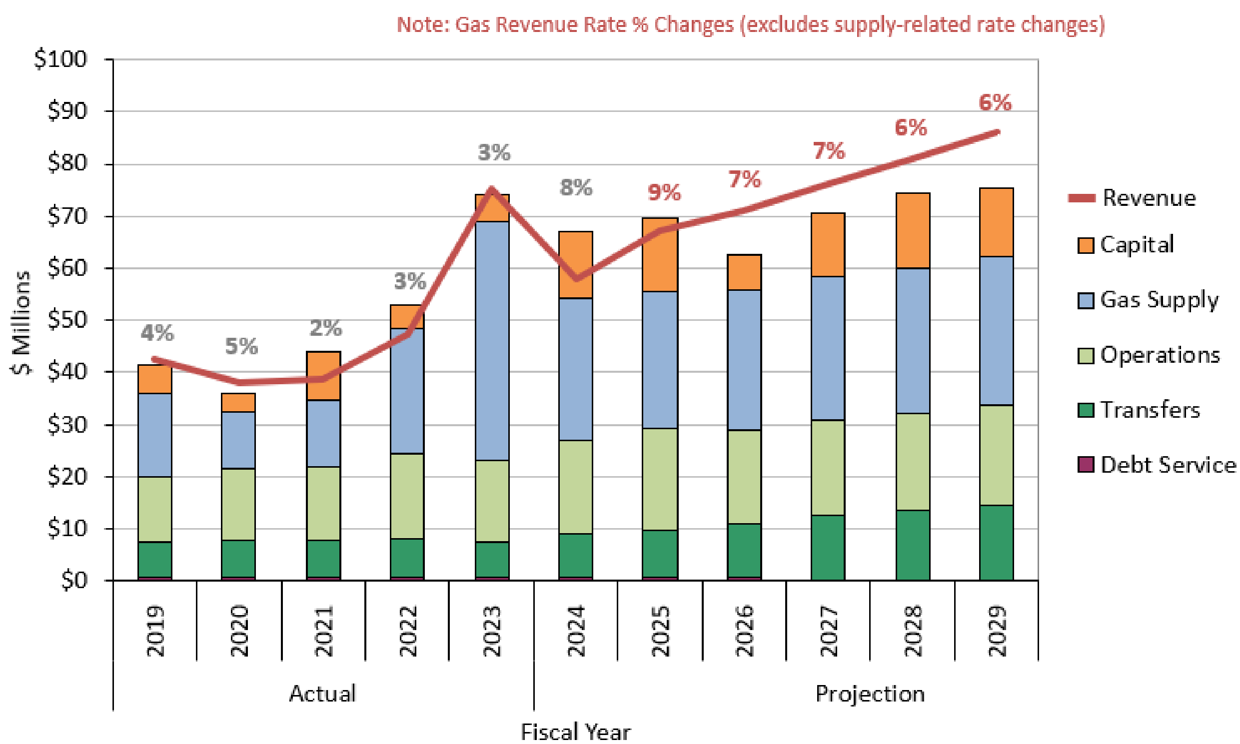
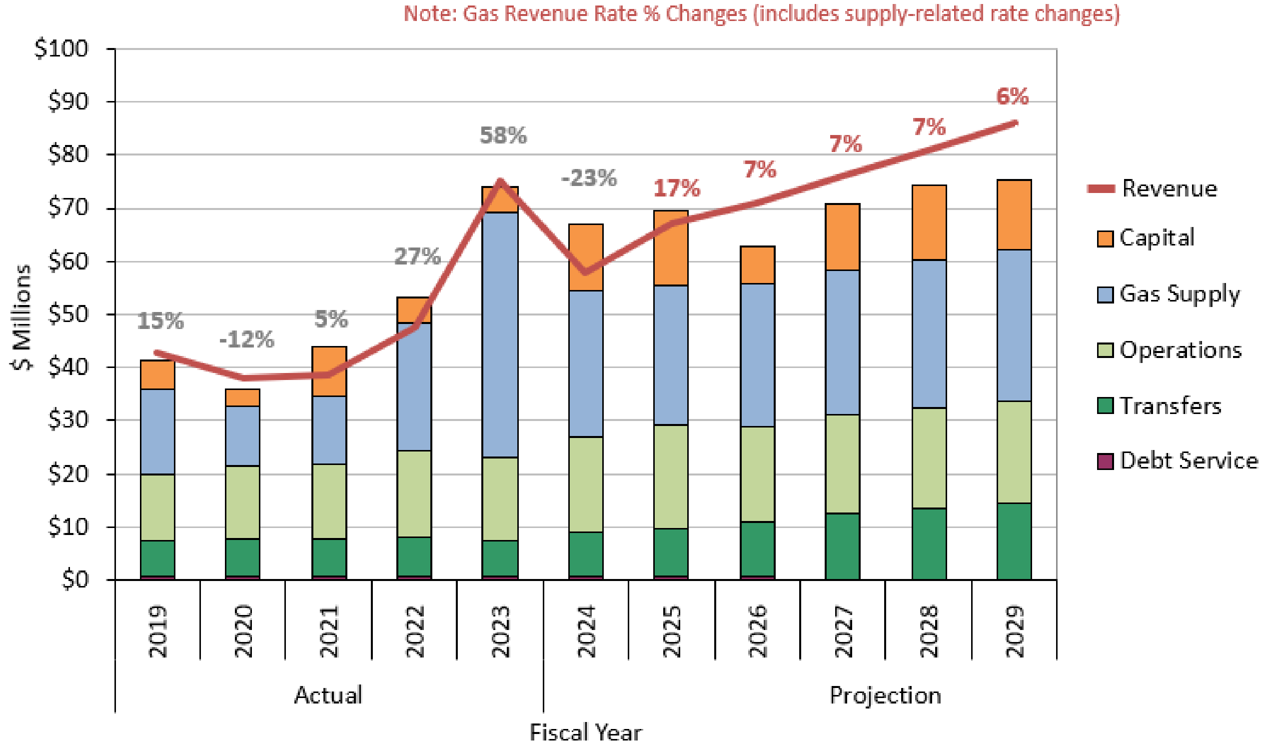


Figure 7 shows the actual overall system average rate change from FY 2019 through FY 2024 (shown in grey) and the projected overall system average rate increase for FY 2025 through FY 2029 (shown in red) including supply-related rate changes. The rate changes include the overall change in the rate as a percentage of the prior year's base sales revenue for the gas utility. These rate changes are sensitive to supply price spikes and as the commodity prices increased in FY 2022 and FY 2023, rate changes including supply related changes increased greatly. As commodity prices declined in FY 2024, this measure of rate changes dropped and then in FY 2025 is readjusting to more normal commodity prices and increasing distribution rates to cover costs.

Attachment A: Exhibit 1

Figure 7: Gas Utility Expenses, Revenues, Rate Changes Including Supply-Related Changes
Actual Costs through FY 2023 and Projections through FY 2029



SECTION 5B: FY 2023 RESULTS

Sales revenues were higher than projected in the FY 2023 Financial Plan by about $5.6 million, due to higher revenue from high gas commodity rates and higher gas usage, but other sources of funds were lower by $0.7 million due to lower service connection and capacity fees revenue. On the expense side, supply costs were about $2.1 million lower than projected due to lower market commodity costs and deferring of carbon offset purchases to FY24. Operational expenses were about $1.4 million lower than projected, due to lower operating administrative charges and lower cross-bore costs. Total FY 2023 expenses were $74 million compared to $83 million projected in the FY 2024 Financial Plan. Table 9 summarizes the variances from forecast.

Table 9: FY 2023 Actual Results vs. FY 2024 Financial Plan Forecast ($000)

	Net Cost/ (Benefit)	Type of Change
Sales increased due to higher usage and higher commodity prices	(5,647)	Revenue Increase
Lower interest income and non-sales revenues	741	Revenue Decrease
Lower gas purchase costs, offset deferred to FY24	(2,130)	Cost Decrease
Lower administration costs	(1,410)	Cost Decrease
Net Cost / (Benefit) of Variances	**(8,447)**	

SECTION 5C: FY 2024 PROJECTIONS

Overall costs for the Gas Utility are expected to be 11% lower in FY 2024 compared with FY 2023, due to the reduction in supply costs from the unprecedented winter price spike in FY 2023. Current projections indicate that sales revenues will be lower than last year's forecast by about $5.9 million, due to lower consumption and commodity costs. Other revenues and transfers are projected to be higher by about $0.7 million. Gas purchase costs are projected to be $2.6 million lower due to lower than expected market commodity prices. Table 10 summarizes the projected variances from the FY 2024 Financial Plan.

Table 10: FY 2024 Projected Results vs. FY 2024 Financial Plan Forecast ($000)

	Net Cost/ (Benefit)	Type of Change
Sales decrease due to lower usage and lower commodity prices	5,937	Revenue Decrease
Lower connection & capacity fees but higher transfers in	(700)	Revenue Increase
Lower gas purchase costs but higher transportation costs	(2,553)	Cost Decrease
Collection and CIP costs projected to be about the same	30	Cost Increase
Net Cost / (Benefit) of Variances	**2,714**	

SECTION 5D: FY 2025-FY 2029 PROJECTIONS

Figure 6 above shows overall costs for the Gas Utility is expected to be slightly lower in FY 2025 compared with FY 2024, due to the reduction in supply costs but higher CIP costs. However, overall costs are expected to increase by 5% annually on average throughout the rest of the forecast period.

Gas commodity costs are the most variable component and represented the largest in costs in FY 2023. But commodity costs have stabilized in FY 2024 and are expected to gradually decline throughout the forecasting period. However, significant increases in transportation and environmental costs will offset the decrease in commodity costs. Staff projects Cap-and-Trade allowance costs will increase by 11% annually[12], transmission costs to increase steadily by about

[12] Based on allowance broker quotes.

4% annually[13], and Carbon offset costs are projected to increase by 10% annually throughout the forecasting period.

Staff anticipates annual capital expenditures will fluctuate during the forecast period due to planning for larger main replacement construction projects every other year instead of smaller projects annually. This main replacement schedule allows CPAU to meet its main replacement needs while addressing challenges in the current construction market and optimizing current staffing resources. Staff also anticipates additional costs from gas decommissioning projects and will set aside appreciate budget in the forecasting period. Overall CIP costs are expected to increase by around 9% on average annually from FY 2025 through FY 2029.

General inflationary increases for operating expenses are around 3-5% annually. Salaries and benefits expenses are projected to rise at 3-4% annually, per similar assumptions used in the City's Long-Range Financial Forecast.

As shown in Figure 8, the FY 2024 and FY 2025 reserve levels will be recovering from the sharp rise in commodity costs in FY 2023 and increasing CIP costs. By FY 2025, staff expects gas fund costs to align more closely with revenues and this will allow the Operations Reserve to begin to replenish.

At the end of FY 2024 there were balances in the Operations and CIP Reappropriations and Commitments Reserves, which is common because capital projects often cover multiple years. Figure 9 shows an assumption that the level of funding in the Operations and CIP Reappropriations and Commitments Reserves will be spent, split between FY 2024 and FY 2025.

Figure **9** shows the CIP Reserve has reduced to zero by the end of FY 2023. Once the Operations Reserve is replenished above minimum levels, staff will plan transfers to replenish the CIP Reserve, which is expected will begin in FY 2026 and should able the reserve to recover above minimum guideline level by FY 2027. Per the Reserves Management Practices (Appendix C), Section 6, any rate plan that does not return CIP reserves above minimum levels within one year requires Council approval.

Staff is planning to replenish the Supply Rate Stabilization and CIP Reserves from the Operations Reserve to stabilize rates and fund capital improvements. This approach will provide stability to the Operations Reserve by providing for a steady funding stream for CIP work and by reflecting fluctuations due to CIP such as project delays or accelerations in the CIP Reserve; ultimately, this should result in more stable customer rates. Conversely, other trends or factors affecting the Operations Reserve will be easier to identify and communicate. Without this change, both CIP costs and revenues flow solely through the Operations Reserve.

[13] The transportation rates for calendar years 2023-2026 reflect the rates in the December 15, 2021 prepared testimony (A.21-09-018) regarding PG&E's 2023 Gas Transmission & Storage (GT&S) Cost Allocation and Rate Design (CARD), afterward a 3% escalation rate is applied.

Figure 8: Gas Utility Reserves
Actual Reserve Levels for FY 2023 and Projections through FY 2029

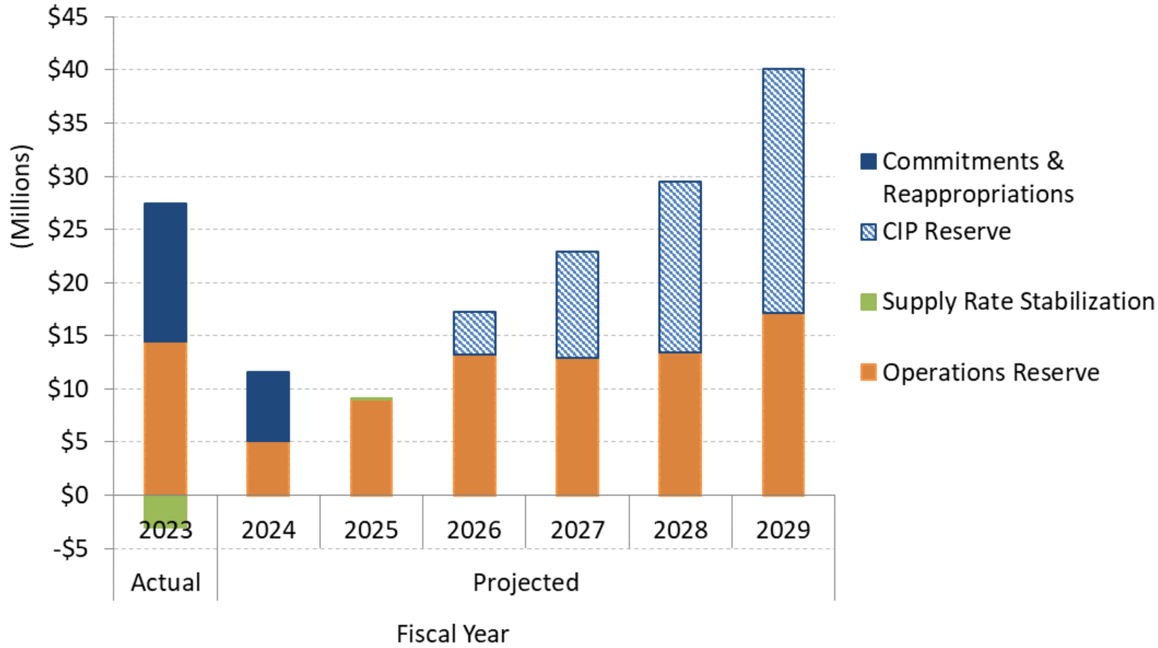
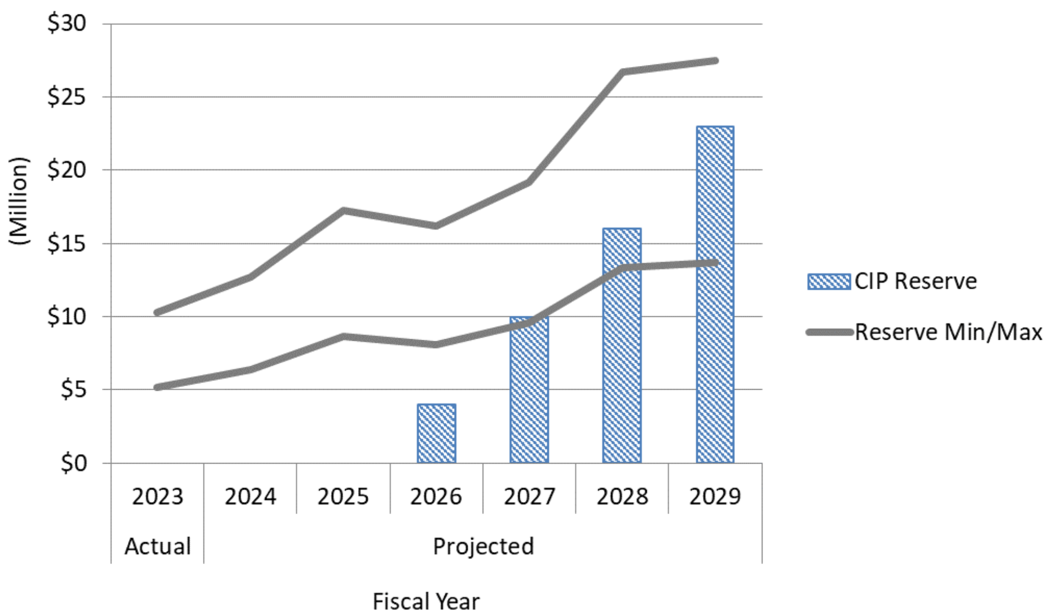


Figure 9: Gas CIP Reserve Levels for FY 2023 through FY 2029



SECTION 5E: RISK ASSESSMENT AND RESERVES ADEQUACY

As noted earlier, unprecedented high gas prices in FY 2023 and higher than expected CIP costs has significantly impacted the gas utility's reserves, and multi-year double-digit distribution rate increases would be required to return reserves to within guidelines. Staff predicted in the FY 2024 Financial Plan that the Gas Operations Reserve will be below the risk assessment levels in FY 2024 and FY 2025 and below the minimum guideline in FY 2026. Staff currently projects the same trajectory, except the Operations Reserve is expected to be above minimum guideline by the end of FY 2026, then return to reserve range by the end of FY 2029. Per the Reserves Management Practices (Appendix C) any rate plan that involves returning the Operations Reserve to within guideline levels in more than one year requires Council approval. Figure 10 shows the Operations Reserve alongside the guideline levels.

Figure 10: Operations Reserve Adequacy

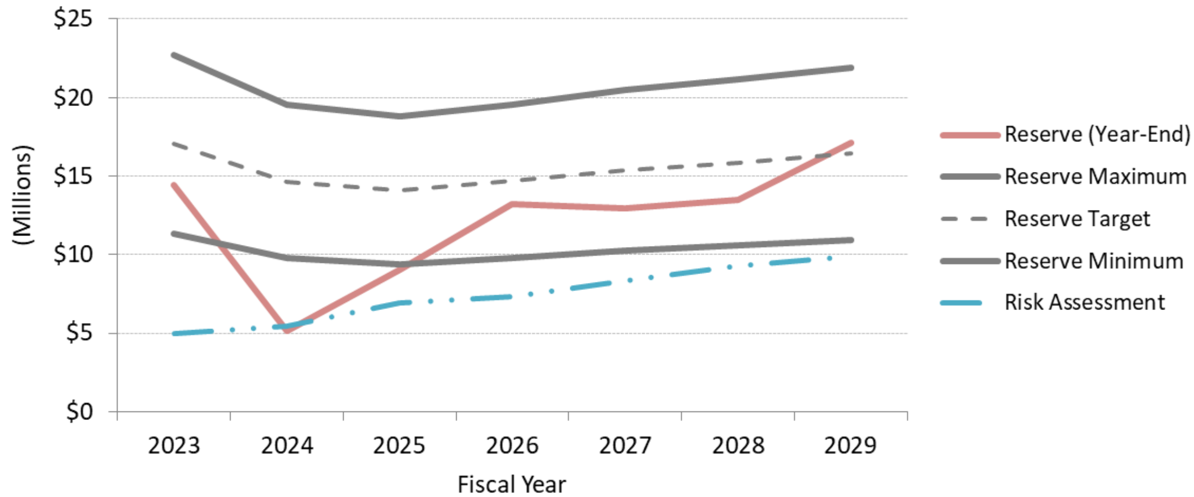


Table 11 summarizes the risk assessment calculation for the Gas Utility through FY 2029. The risk assessment includes the revenue shortfall that could accrue due to:

1. Lower than forecasted distribution sales revenue; and
2. An increase of 10% of planned system improvement CIP expenditures for the budget year.

Table 11: Gas Risk Assessment ($000)

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Total non-commodity revenue	30,227	38,237	42,670	47,298	51,897	56,305
Max. revenue variance (last 10 yrs)	16%	16%	16%	16%	16%	16%
Risk of revenue loss	4,836	6,118	6,827	7,568	8,304	9,009
CIP Budget	6,252	7,875	5,316	7,765	9,784	8,505
CIP Contingency @10%	625	788	532	777	978	850
Total Risk Assessment value	5,462	6,905	7,359	8,344	9,282	9,859

SECTION 5F: LONG-TERM OUTLOOK

It is difficult to predict commodity costs in the long-term as a variety of trends can impact them positively or negatively. For example, advancements in gas extraction technology like fracking has led to increased supplies of gas, but also face increased scrutiny for their environmental effects. Additionally, factors such as pipeline capacity for transporting natural gas, storage levels impacted by weather and changes in demand, and injection or withdrawal activity also play a role in determining commodity costs. On the demand side, a continued shift from coal to natural gas for electricity generation, an expansion of liquified natural gas export capabilities, or an increase in manufacturing in the U.S. might drive up natural gas prices, but other factors, such as an increased drive towards electrification, might drive gas demand lower. The State's cap-and-trade program also introduces additional uncertainties in predicting the long-term cost impacts on natural gas. The California Air Resource Board (CARB) is currently modeling alternatives to the range of potential emissions outcomes, which might affect future allowance allocations and price projections, therefore, assessing the magnitude of these cost impacts is challenging and requires ongoing monitoring of regulatory developments. In the face of this uncertainty, CPAU is able to protect the financial position of the Gas Utility by continuing its current strategy of passing these costs directly to its customers via month-varying rate adjustment mechanisms. The City introduced a price cap insurance product in the winter of FY 2024 and will also plans to evaluate future winter hedging program as needed. The City also pursues a policy of purchasing offsets to make gas usage in Palo Alto carbon neutral. The cost is not to exceed $0.10/therm.

Future CIP investment needs for the Gas Utility may be lower than in the past, although costs per foot for main replacement have increased substantially. CPAU is continuing to study and develop its future main replacements priorities and strategy. If customers transition away from natural gas, it will become necessary to scale back the rate of replacement of the existing gas system, but this will also require increased investment in electrification and gas decommissioning. However, staff believes it is necessary to continue the current efforts to replace older and higher-risk materials within the gas system to maintain safety and system integrity. This investment is recommended until a more defined plan on electrification and the transition away from natural gas is completed. The priority for the gas utility fund is continued safe operation to manage the overall risk and continue the reliable and safety delivery of natural gas throughout the City.

Long-term state or local climate goals will also have a major impact on the Gas Utility. The Global Warming Solutions Act, Assembly Bill 32, set a goal of reducing greenhouse gas (GHG) emissions to 1990 levels by 2020. In its December 2007 Climate Protection Plan, the City set a goal of lowering emissions to 15% below 2005 levels by 2020. As a community Palo Alto achieved these goals in 2012 even with continued use of natural gas for heating, cooking, and industrial processes. However, to achieve the recently adopted Sustainability and Climate Action Plan (S/CAP) goal of an 80% reduction in carbon emissions by 2030, or the State's adopted goal of an 80% reduction in emissions by 2050, extensive electrification of gas-using appliances is necessary. Extensive electrification could result in stranded investment and higher rates as the costs of the distribution system are recovered over a lower sales base. It is instructional that, in the recent discussion draft of its scoping plan update, CARB says, to meet those goals, natural gas use would have to be "mostly phased out."[14] Staff has begun to evaluate how to manage potential impacts of these trends. Staff expects gas utility costs associated with electrification including safely decommissioning gas pipes. This Financial Plan includes $4 million for gas decommissioning in the CIP budget for FY 2028 and additionally includes annual placeholders of $3 million for electrification and related costs each year from FY 2027 through FY 2029, although detailed cost estimates are not yet available. These costs will be refined as staff studies them in more detail,

[14] *Climate Change Scoping Plan, First Update, Discussion Draft for Public Review and Comment*, California Air Resources Board, October 2013, pg. 88.

and alternative funding sources may be required. The S/CAP Goals and Key Actions and Work Plan will include strategic planning for the gas utility for managing the transition to an electrified community, and this is also a strategic planning priority for the Utilities Department.

SECTION 5G: ALTERNATIVE GAS INCREASE PLANS

The gas utility's transfer to the City's General Fund is a component of the City's gas rates. City voters first authorized the transfer in 1950, and in November 2022 voters approved Measure L, affirming the continuation of this practice by amending the Municipal Code. Specifically, section 2.28.185, "Natural Gas Utility Transfer" states:

> Each fiscal year the City Council may transfer from the natural gas utility to the general fund an amount equal to 18% of the gross revenues of the gas utility received during the fiscal year two fiscal years before the fiscal year of the transfer. At its discretion, the City Council may decide to transfer a lesser amount. The projected cost of the transfer shall be included in the City's retail natural gas rates as part of the cost of providing gas service.

This Financial Plan proposes an 11.9% or $8,959,629 million transfer for FY 2025, which follows from Council's direction in FY 2024 to transfer a lesser amount and gradually increase the transfer up to 18%.

Staff proposes to transfer 11.9% of gross revenue in FY 2025 due to the substantial commodity revenues generated in FY 2023. FY 2023 was the year most affected by the high commodity prices, which led to high commodity revenues that year. Therefore staff proposes transferring less than 18% of FY 2023 gas utility gross revenues, which is the basis for the FY 2025 transfer amount. Staff anticipates requesting Council approval to transfer 16.5% of FY 2024 gas utility gross revenue in FY 2026 and 18% of FY 2025 gas utility gross revenue in FY 2027. This allows a steady rise to 18% in FY 2027. Alternatively, the Council may choose to transfer 18% of gas utility gross revenue each year starting in FY 2025. Both alternatives align with the voter-approved changes codified in PAMC 2.28.185.

Table 13 below shows the amount of the transfer both in dollars and as a percentage of utility revenue for each fiscal year, as well as the projected rate of annual growth in the transfer. Table 14 below shows the distribution rate increases (as a percentage of the total bill, excluding supply cost changes) associated with each alternative.

Table 12: Proposed / Projected and Alternate Transfers as % of Gross Revenues Two FY Prior[15]

	Approved (Council Resolution 10101)	Proposed / Alternate	Projected	
	FY 2024	FY 2025	FY 2026	FY 2027
Gas Utility Gross Revenue Two Fiscal Years Prior ($000)				
	$49,721	$75,291[16]	$61,032	$70,414[17]
				$73,618
Percent of gas utility gross revenue to transfer				
	15.5%	**11.9%**	16.5%	18%
		18%	18%	
Transfer amount ($000)				
Transfer 11.9%	$7,707	$8,960	$10,070	$12,674
Transfer 18%		$13,552	$10,986	$13,251
Change in Transfer Amount from Prior Fiscal Year (%)				
	7%	16%	12%	26%
		76%	-19%	21%

Table 13: Summary of Rate Changes for Alternatives (Excludes Supply Rate Changes)

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Transfer 11.9%	9%	7%	7%	6%	6%
Transfer 18%	15%	5%	5%	5%	6%

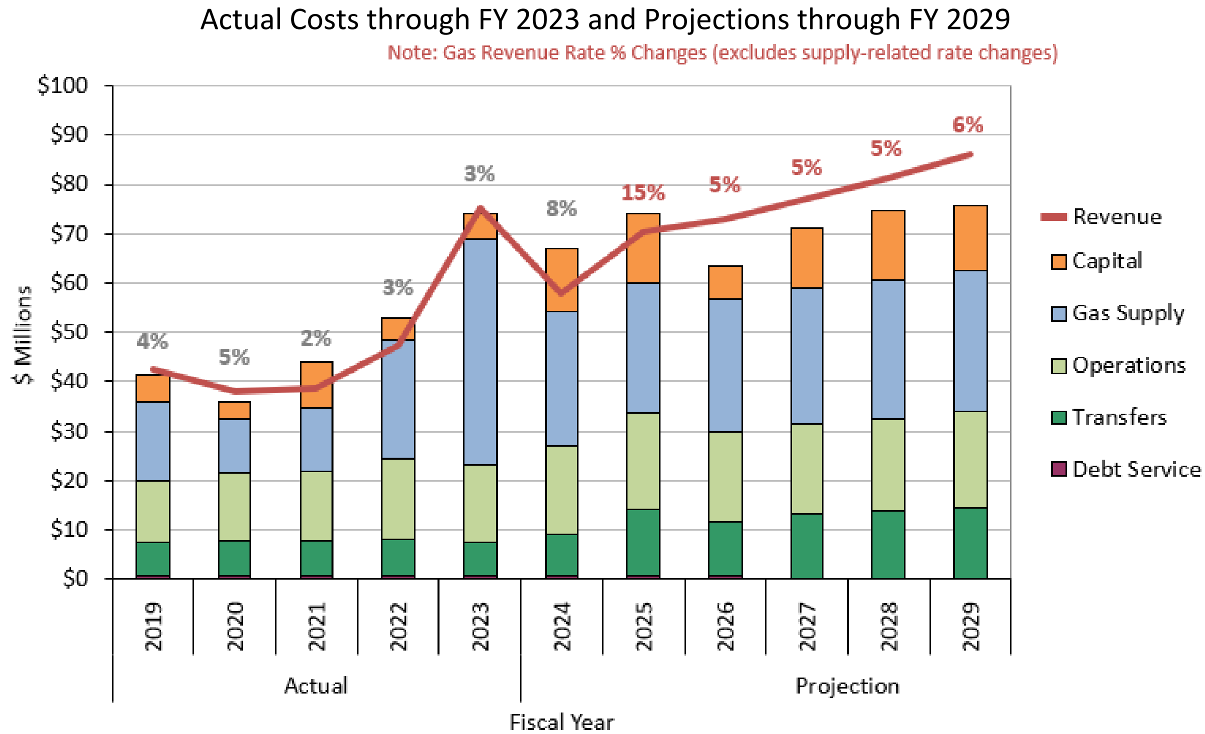
Figure 12 shows the Gas Utility's Expenses, Revenues and Rate Changes excluding the supply related rate changes at the General Fund 18% Transfer alternative.

15 Measure L authorizes a transfer based on 18% (or a lesser percentage if approved by Council) of the revenue for two fiscal years prior, so the FY 2024 transfer is based on FY 2022 revenue.

16 Represents actual gas utility gross revenues for FY 2023.

17 There are two values for gross revenue in FY 2027 because there are two possible rate trajectories shown in Table 3 that would impact the forecasted revenue for FY 2025 (two fiscal years prior to FY 2027); the first would increase rates by 9% in FY 2025 leading to forecasted revenues of $70.414 million and the second would increase rates by 15% in FY 2025 leading to forecasted revenues of $73.618 million.

Figure 11: Gas Utility Expenses, Revenues, and Rate Changes Excluding Supply-Related Rate Changes (Transfer 18%)

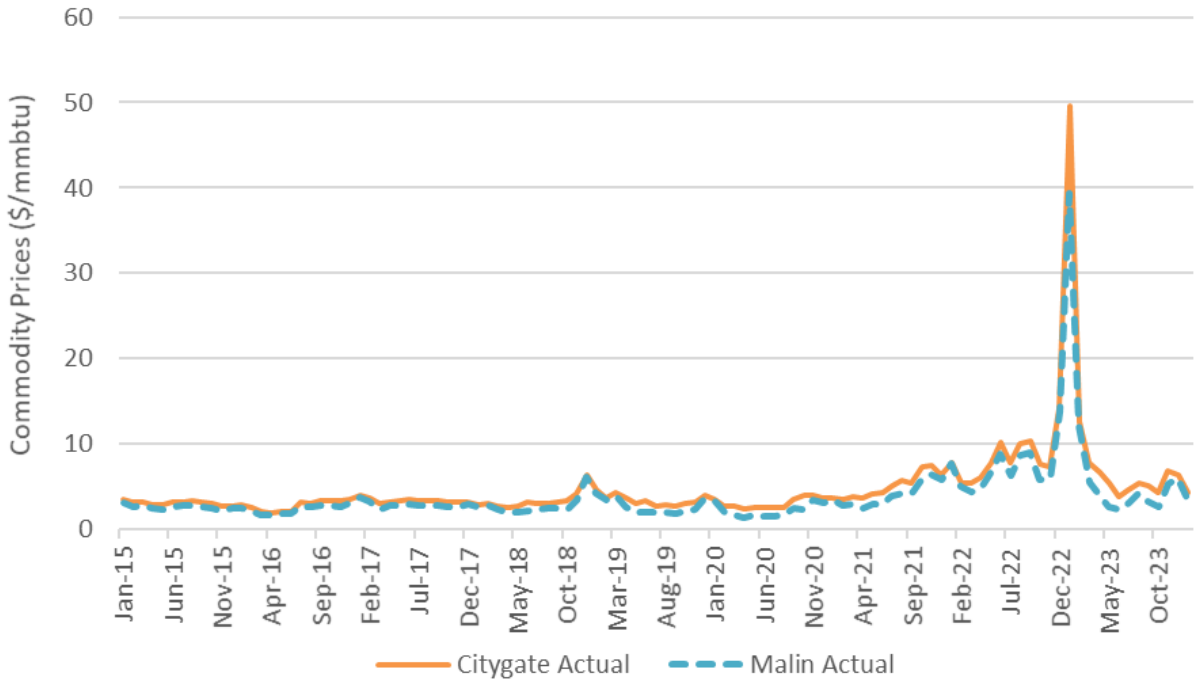


SECTION 6: DETAILS AND ASSUMPTIONS

SECTION 6A: GAS PURCHASE COSTS

The Gas Utility purchases much of its gas for delivery at Malin, Oregon which is almost always less expensive than delivery at PG&E Citygate, even including the costs of transmission from Malin to Citygate. The Gas Utility purchases gas on a month-ahead and day-ahead basis in the spot market. The years from FY 2009 through FY 2022 have seen gas prices in a relatively narrow but low band. Starting in late 2021, and becoming more acute starting in the summer of 2022, lower levels of natural gas in storage, along with colder than normal weather and transmission pipeline constraints on both the northern and southern borders of California has created short-term price spikes and increased volatility, as shown in Figure 12. These market conditions exacerbated and caused unprecedented price spikes during the winter of FY 2023 when Citygate prices reached as high as $49.52 on the monthly index and up to $57.07 on the daily index. Since the price spike, gas prices have stabilized, however, high amounts of volatility and uncertainty still remain in the market.

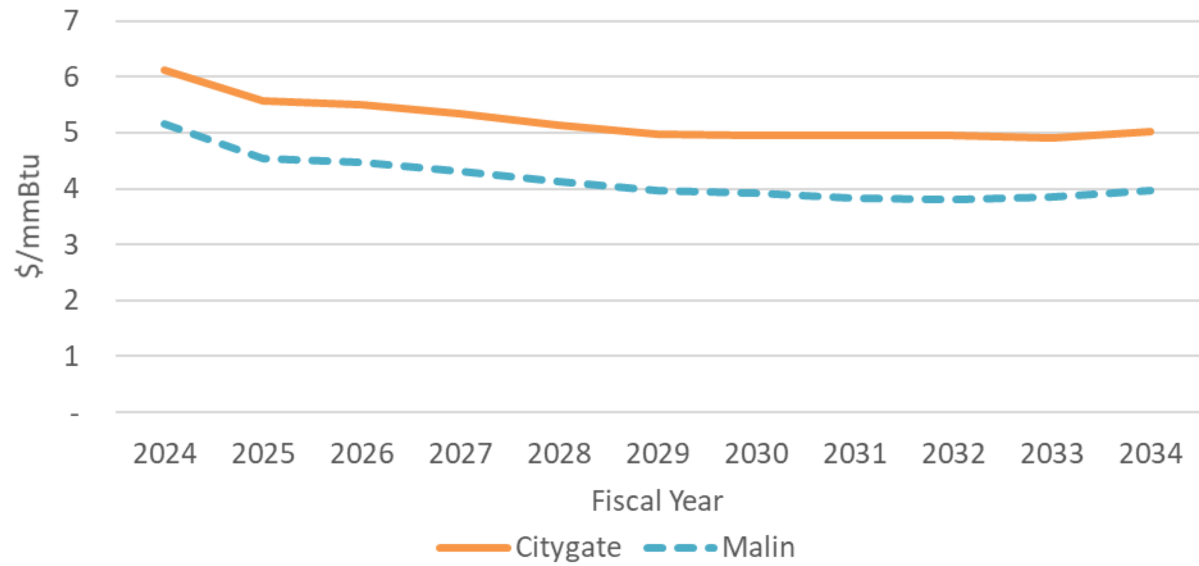
Figure 12: Gas Commodity Monthly Market Prices at Malin and PG&E Citygate



On September 15, 2014, Council adopted a resolution (Reso. #9451) authorizing the City's participation in a natural gas purchase from Municipal Gas Acquisition and Supply Corporation (MuniGas) for the City's entire retail gas load for a period of at least 10 years. The MuniGas transaction includes a mechanism for municipal utilities to utilize their tax-exempt status to achieve a discount on the market price of gas. As of November 1, 2018, gas began flowing under this program, reducing the City's gas commodity cost by about $1 million per year and saving gas customers approximately $0.03 per therm on the commodity portion of their bills.

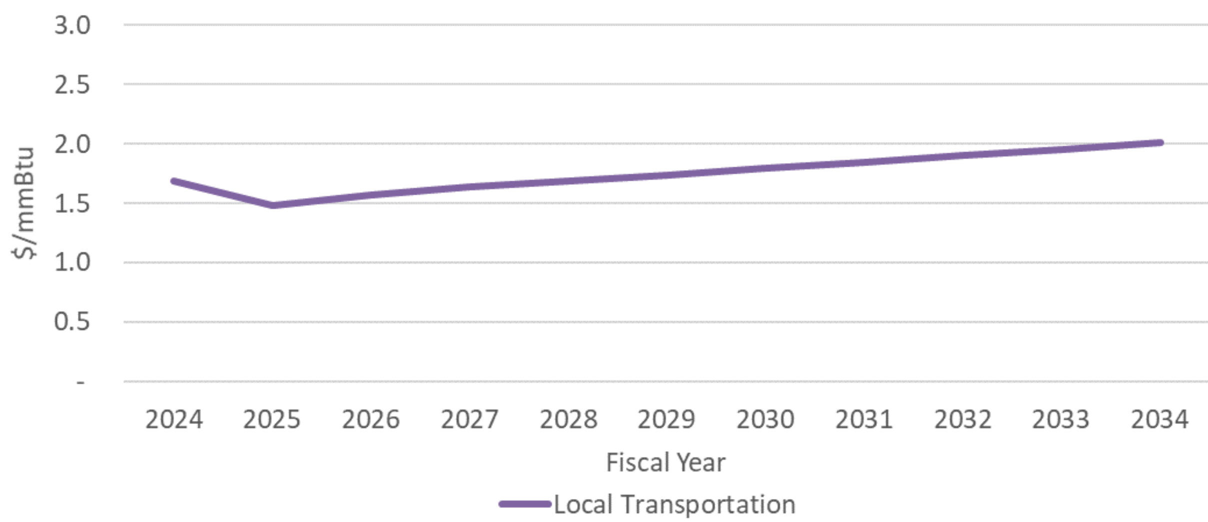
Gas commodity costs are forecasted to stay fairly steady over the next several years, but forecasts of commodity costs are very uncertain. Figure 13 shows the projected gas prices used to generate this forecast. Projections for transmission costs associated with transporting gas over PG&E's Redwood transmission pipeline (from Malin, Oregon to the PG&E Citygate) are based on rates adopted in the most recent update to the Gas Accord.

Figure 13: Annual Average Wholesale Gas Market Price Projections



PG&E's Local transportation rates have increased over the past few years and are projected to slowly increase annually in future years. Figure 14 shows the average annual PG&E gas transportation rates with the Cap-and-Trade exemption rates, projected up to FY 2034.

Figure 14: PG&E Gas Local Transportation Rates, Actual and Projected



For Cap and Trade compliance costs, the gas utility has been regulated under California's greenhouse house (GHG) regulations since January 2015 with a GHG emissions cap that declines over time. The gas utility receives carbon allowances equal to the emissions allowed under the cap and is required to auction off a portion (65% in 2023, increasing by 5% annually) of the allowances through the state Cap and Trade Program. To meet its annual GHG compliance obligation, the gas utility must purchase allowances based on actual gas load. Proceeds of allowance sales must be used within 10 years of their receipt. Palo Alto has started allocating funds from the Cap and Trade reserves to fund Heat Pump Water Heater related programs in FY 2024.

The auction price to either purchase or sell allowances also increases annually by 5% plus inflation. Given the rate of increased allowance purchases and the increasing market prices, these costs are anticipated to increase from $2.2 million in FY 2023 to $7.3 million in FY 2030, about an 19% increase per year on average.

The City also has a Carbon Neutral Natural Gas plan (Staff Report 7441[18]) whereby carbon offsets are purchased in an amount equal to the emissions generated by the communities' natural gas use. These high-quality carbon offsets support projects that reduce the amount of GHGs in the atmosphere, such as forest maintenance or capturing methane from dairy farms. Purchasing carbon offsets is a good first step towards reducing carbon in the atmosphere, but the longer-term goal is to reduce the community's use of natural gas by maximizing efficiency and switching to high-efficiency electric appliances where possible. Due to staff constraints, FY 2023 offset purchases were deferred to be purchased in FY 2024. The costs for these offsets are projected to increase from $1.2 million in FY 2024 to $3.1 million in FY 2029.

SECTION 6B: OPERATIONS

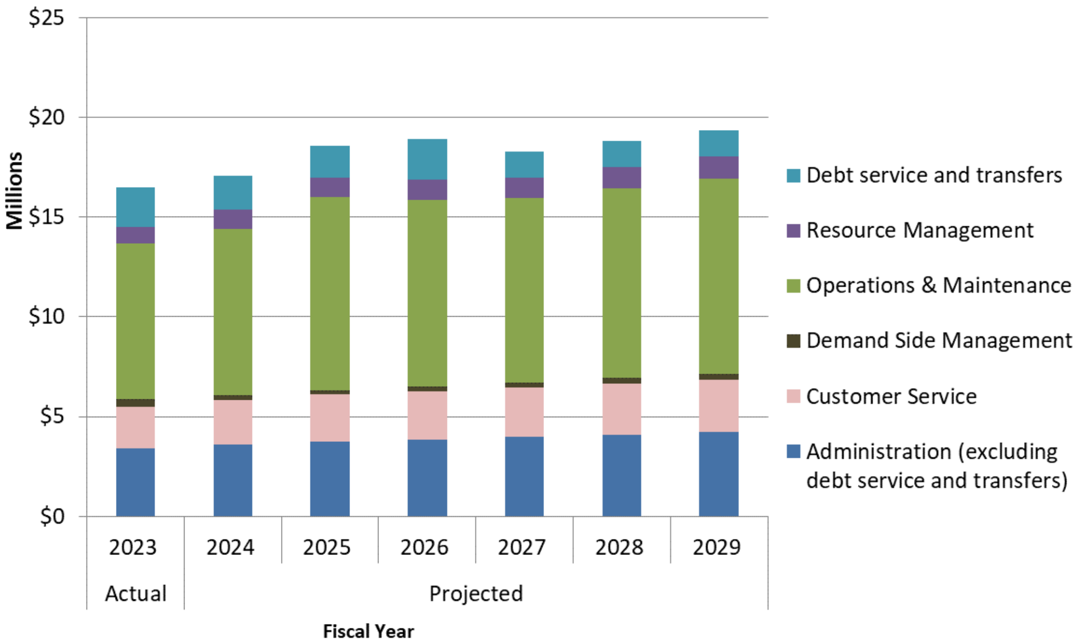
Operations costs include the Customer Service, Demand Side Management, Operations and Maintenance (including Engineering), Resource Management, and Administration categories in Figure 15, below. Debt service, rent, and transfers are also included in Operations costs (excluding the General Fund equity transfer). *Appendix D: Description of Gas Utility Cost Categories* includes detailed descriptions of the activities associated with these cost categories. Operations costs are generally projected to increase by 3 to 5% per year on average. Salary and benefits, inflation, and other assumptions match those used in the City's long-range financial forecast as closely as possible.

Operations costs include funding for the cross-bore program. In the 1970s CPAU, like many other utilities, adopted horizontal drilling as an alternative to trenching when installing new gas services. This created the possibility of cross-bores, which can happen when a gas service is bored through a sewer lateral. Though cross-bores are very rare, they can create a dangerous situation when a contractor attempts to clear a blocked sewer line, because if the cross-bored gas service is damaged during the line, clearing it can result in a gas leak. CPAU has been inspecting new gas services since 2001, and in 2011 began video inspections of the sewer laterals at the location of horizontally-drilled gas services installed before 2001. This inspection program cost roughly $1 million per year since FY 2012 and decreased in FY 2023 with the completion of Phase III of the cross-bore inspection project. While a majority of sewer laterals have been inspected, staff has come across several services which are not able to be scoped, either due to infiltration by roots or broken/collapsed pipe segments. CPAU planned to find and replace cross-bores over the last several years. This Financial Plan includes the estimated expense of $0.9 million in FY 2025 and $0.4 million in FY 2026 for the cross-bore program. However, if the Council approves a lower level

[18] https://www.cityofpaloalto.org/civicax/filebank/documents/54588

of funding for the program, staff would recommend the same rate trajectory and the operations reserve would recover more quickly to within the minimum guideline range.

Figure 15: Actual and Projected Operational Costs



SECTION 6C: CAPITAL IMPROVEMENT PROGRAM (CIP)

The Gas Utility's CIP consists of the following programs and budgets:

- The Gas Main Replacement Program, under which the Gas Utility replaces aging gas mains and mains ranked to have the greatest risk scores within the system in accordance with the City's Distribution Integrity Management Plan (DIMP).
- Customer Connections, which cover the cost when the Gas Utility installs new services or upgrades existing services at a customer's request. The Gas Utility charges a fee to these customers to cover the cost of these projects.
- Ongoing Projects, which cover the cost of routine meter, regulator, and service replacement, minor projects to improve reliability or increase capacity, and other general improvements.
- Tools and Equipment, which cover the cost of capitalized equipment, such as directional boring, gas pipeline maintenance and emergency equipment.
- One-time Projects, which represent occasional large projects that do not fall into any other category.

Error! Reference source not found. shows the current status of these project categories and future projected spending.

Table 14: Budgeted Gas CIP Spending ($000)

Project Category	2024 Budget*	2025	2026	2027	2028	2029
Gas Main Replacement	13,295,809	6,775,000	4,216,000	6,665,496	4,683,622	7,404,806
Gas Tools and Equipment	100,000	100,000	100,000	100,000	100,000	100,000
Ongoing Projects	1,784,075	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Customer Connections	887,698	700,000	700,000	700,000	700,000	700,000
Electrification Transition	-	-	-	-	4,000,000	-
TOTAL	16,067,583	8,575,000	6,016,000	8,465,496	10,483,622	9,204,806

*Includes unspect funds from previous years carried forward or reappropriated into thte current fiscal year

Gas Main Replacements

The Gas Main Replacement (GMR) Program is the largest budgeted category in the gas fund and is used to replace ageing natural gas infrastructure throughout the City. This program improves safety and reliability of the natural gas system by replacing pipe material and components, prior to failure, with reliable polyethylene pipe and fittings.

The GMR Program completed a major milestone in 2013 with the replacement of gas mains made from Acrylonitrile-Butadiene-Styrene (ABS) plastic with Polyethylene (PE) pipe. The City's 2015 DIMP identified ABS pipe and components as suitable for replacement due to the pipe's brittleness and difficulty of repair. There are 0.1 miles of remaining ABS in the system, which is scattered throughout the City in very small sections.

After the replacement of ABS pipe, CPAU's 2015 Risk Assessment identified PVC pipe material as the next pipe material to be reviewed for replacement. In general, CPAU replaces about 4 miles (1.9% of the system) of pipe on each GMR project, accounting for approximately 75% of PVC and 25% of steel. The pipelines are replaced with PE pipe.

If customers transition away from natural gas, it may necessary to scale back the rate of replacement of the existing gas system. Staff is working to develop an efficient phasing plan for electrification and the scaling back of the gas infrastructure. However, staff believes it is necessary to continue the current efforts to replace older and higher-risk materials within the gas system to maintain safety and system integrity. This investment is recommended until a more defined plan on electrification and the transition away from natural gas is completed. That transition plan may involve aggressive electrification in areas with PVC pipe to avoid future investments in PVC pipe replacement. The priority for the gas utility fund is continued safe operation to manage the overall risk and continue the reliable and safety delivery of natural gas throughout the City. In the short term that requires investing in replacement of highest risk PVC pipe, prioritizing areas of the gas system that will be needed the longest during the transition to an electrified community, and gradually that will be integrated with a strategy to aggressively electrify neighborhoods and abandon PVC pipe rather than replace it.

Several factors are contributing to an increase in construction costs in the Bay Area, such as a greater focus on infrastructure improvement by many municipal agencies and the higher demand for utility contractors within these fields. The current budget for the GMR program has held steady over the last few years, which results in a reduction of replacement due to the steady increase in the replacement cost. CPAU recently posted the Gas Main Replacement 24A Project for competitive bidding and resulted in one contractor submitting a bid for almost two times the engineering estimate, even after it was bid a second time. Future GMR projects will require a budget increase to maintain a similar rate of PVC and steel main replacement. Currently, CPAU plans to replace as many aging mains as possible within its current budget. However, if this trend of higher construction cost continues, the Gas Utility may require larger CIP budgets and as a result, an increase in rates to maintain an adequate rate of replacement to relieve the risks of PVC and steel pipe in the system. Staff will continue to apply for federal grant opportunities to assist in offsetting the cost of replacement.

This Financial Plan addresses these challenges in a way that will allow CPAU to meet its main replacement needs. This plan includes approximately $8 million starting in FY 2025 and includes about a 5.4% annual construction cost inflationary increase. This will assist in keeping up with the increasing cost of replacement of PVC mains and steel mains as needed. Additionally, the GMR project schedule for gas will be staggered with water and wastewater (water and wastewater construction every even year and gas construction every odd year), which will ease scheduling difficulties for inspection coverage due to shared inspection staff across water, wastewater, gas, and large development services projects.

Construction of the GMR 24A project was completed in March 2023 (FY 2023). Construction of the GMR 24B project will commence at the end of January 2024 and is anticipated to be completed in May 2025. The GMR 24B project was not selected for a Natural Gas Distribution Infrastructure Safety and Modernization (NGDISM) grant opportunity. For the GMR 25 project, CPAU applied for a NGDISM grant opportunity in August 2023. A final determination for the grant opportunity is expected in February 2024. CPAU intends to apply each year for the grant funding opportunity, which would assist with the replacement of PVC and steel distribution mains in the gas system. If CPAU determines that grant funding is not likely to be awarded, CPAU will evaluate the merit of continuing to apply for the grant.

<u>Tools and Equipment, Ongoing Projects, and Customer Connections</u>

Staff estimates ongoing projects, tools and equipment, and customer connections to cost approximately $2.2 million through the end of the forecast period. In practice, these projects can fluctuate dramatically depending on prices of material, system conditions and the pace of development and redevelopment in the city. It is worth noting that fee revenue pays for the Customer Connections program, so when costs go up fees will be adjusted as well.

Aside from customer connections and transfers from other funds, the CIP plan for FY 2025 to FY 2029 is funded by utility rates. Appendix B: Gas Utility Capital Improvement Program (CIP) Detail shows the details of the plan.

SECTION 6D: DEBT SERVICE

The Gas Utility currently makes debt service payments on one bond issuance, the 2011 Series A Utility Revenue Refunding Bonds. This bond issuance was to refinance the $18 million principal remaining on the Utility Revenue Bonds, 2002 Series A issued for the Gas and Water Utilities to finance various improvements to the distribution systems. $9.4 million of this issuance was secured by the net revenues of the Gas Utility. Table 15 shows debt service for this bond for the financial forecast period. Debt service on this bond will continue through 2026.

Table 15: Gas Utility Debt Service ($000)

	FY 2025	FY 2026
2011 Utility Revenue Refunding Bonds, Series A	799	802

The 2011 bonds include two covenants stating that 1) the Gas Utility will maintain a debt coverage ratio of 125% of debt service, and 2) that the City will maintain "Available Reserves"[19] equal to five times the annual debt service. This Financial Plan complies with these covenants throughout the forecast period, as shown in Table 19 and Table 20.

Table 16: Debt Service Coverage Ratio ($000)

	FY 2025	FY 2026
Revenues	70,414	74,501
Expenses (Excluding CIP and Debt Service)	(47,080)	(47,910)
Net Revenues	23,334	26,592
Debt Service	799	802
Coverage Ratio	2919%	3317%

Table 17: Debt Service Minimum Reserves ($000)

	FY 2024	FY 2025	FY 2026
Gas and Water Utilities [a]	24,767	28,473	32,578
Debt Service [b]	1,459	1,454	1,457
Reserves Ratio [c]	17x	20x	22x
a) CIP, Rate Stabilization, Operations, and Unassigned Reserves b) Gas and Water Utility's share of the debt service on the 2011 bonds. c) Calculated using combined Gas and Water Utility reserves. The actual reserves ratio for the 2011 bonds is calculated based on the combined Electric, Gas, and Water Utility reserves and total debt service and is higher than shown here.			

The Gas Utility's reserves and net revenue are also pledged as security for the bond issuances listed in Table 18, even though the Gas Utility is not responsible for the debt service payments. The Gas Utility's reserves or net revenues would only be called upon if the responsible utilities are unable to make their debt service payments. Staff does not currently foresee this occurring.

Table 18: Other Issuances Secured by Gas Utility's Revenues or Reserves

Bond Issuance	Responsible Utilities	Annual Debt Service ($000)	Secured by Gas Utility's Net Revenues	Secured by Gas Utility's Reserves
1999 Utility Revenue Bonds, Series A	Wastewater Collection Wastewater Treatment Storm Drain	$1,207	No	Yes
2009 Water Revenue Bonds (Build America Bonds)	Water	$1,977*	No	Yes
**Net of Federal interest subsidy*				

[19] Available Reserves as defined in the 2011 bonds include the reserves for the Water, Electric, and Gas Utilities

SECTION 6F: REVENUES

The Gas Fund receives most of its revenues from sales of gas, but about 8% comes from other sources including interest income, service connection and capacity fees, and sales of allowances related to California's cap-and-trade program. The Cap and Trade compliance charge is another revenue item related to the cap-and-trade program that is collected in customers' bills. While the State provides CPAU with a certain number of free allowances each year, the Gas Utility is required to sell a portion of those in accordance with the regulations. In order to have enough allowances to cover customers' natural gas emissions, CPAU must buy allowances at market, and subsequently passes through the cost of those allowances to customers. The regulations do not allow the revenue derived from the sale of the free allowances to offset allowance purchases, thus the pass-through rate component. These funds are recorded in the Carbon allowance revenue accounts in the Gas Supply Fund and the funds are then transferred to the Cap and Trade Reserve (see Section 3D: Proposed AmendED Reserves Management practices for more details).

This Financial Plan bases sales revenue projections on the load forecast in *Section 5A: Load Forecast.* Except where stated otherwise, these load forecasts are based on normal weather. Weather can vary substantially, however, and this can affect revenues substantially. Also, changes in customer behavior, as well as changes to more efficient gas appliances, or switching to electric appliances, will modify these forecasts. Staff continually evaluates forecasts to see when new trends emerge.

SECTION 6G: COMMUNICATIONS PLAN

The FY 2025 gas utility communications strategy covers these primary areas: natural gas market supply costs, revisions to the natural gas purchasing strategy, operations, infrastructure, safety, efficiency, carbon neutrality, and cost containment measures. The City of Palo Alto Utilities (CPAU) communication methods include the Utilities webpages, utility bill inserts, messaging on bills and envelopes, informational fliers and brochures, email newsletters, social media, print and digital ads in local publications, and participation in community outreach events.

CPAU purchases gas as a commodity on the market, therefore monthly gas rates can fluctuate for customers due to factors affecting the market. Staff post the monthly rates online at www.cityofpaloalto.org/RatesOverview and provide updates on the rate setting process for members of the public can be informed. During the FY 2023 winter, utilities across the region saw extremely high gas market prices projected for January and February; much higher than previous year winter prices, and the highest since the 2001 energy crisis. In September 2023, the Palo Alto City Council adopted a revised natural gas purchasing strategy for the 2023-2024 winter months to include the addition of insurance against very high prices. A longer-term strategy for mitigating against potential future gas price spikes may be considered by Council in 2024.

CPAU promotes gas use efficiency incentives year-round, but most heavily during winter months to impact heating activities. Messaging emphasizes the importance of saving energy to keep utility costs low even if gas prices are high or utility rates are increasing. Programs such as the Home Efficiency Genie and commercial energy efficiency programs help residents and businesses better understand energy usage, and activities or upgrades they can implement to improve efficiency and keep utility costs low. The MyCPAU online account management portal provides customers with direct access and more information about utility account and consumption data.

Consistent with the Utilities Strategic Plan, CPAU is instituting cost containment as an ongoing priority that is part of our annual cycle. Examples include implementing a mobile workforce application to reduce administrative data entry time, advanced metering infrastructure to improve efficiency, and establishing a cross-functional field crew to install water, gas, and sewer services simultaneously at new construction sites, reducing hours spent in the field and freeing up staff time to be reallocated for other projects. CPAU schedules larger capital improvement projects every other year to achieve efficiencies in project management and also better project proposals which lowers construction costs.

CPAU communicates about safety for all utility services year-round including the need to call USA (811) before digging to check for underground utility lines. Staff also emphasize the importance of contacting CPAU to check for potential sewer and gas line cross-bores prior to clearing a sewer line. Every year, CPAU publishes an updated gas safety awareness brochure and mails it to all customers in Palo Alto as well as other stakeholders. Staff talk with business customers at special facilities meetings and attend neighborhood safety and emergency preparedness fairs. While print materials and webpages still feature prominently, CPAU is increasing use of other outreach channels such as email newsletters, social media and online videos. The Gas Safety Public Awareness Plan contains saved copies of all outreach materials and activity logs.

APPENDICES

Appendix A: Gas Financial Forecast Detail

Appendix B: Gas Utility Capital Improvement Program (CIP) Detail

Appendix C: Gas Utility Reserves Management Practices

Appendix D: Description of Gas Utility Cost Categories

Appendix E: Gas Utility Communications Samples

APPENDIX A: GAS FINANCIAL FOREST DETAIL

CITY OF PALO ALTO

Gas Financial Details

($'000)

		Actual			Projected					
	Fiscal Year	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
1	**Distribution Rate Change %**	**4%**	**5%**	**6%**	**21%**	**15%**	**12%**	**11%**	**10%**	**9%**
2	**Rate Change % (excludes Commodity)**	**2%**	**3%**	**3%**	**7%**	**9%**	**7%**	**7%**	**6%**	**6%**
3	Total System Average Rate ($/Therm)	$1.417	$1.802	$2.538	$2.304	$2.383	$2.561	$2.756	$2.950	$3.156
4	Supply Average Rate ($/Therm)	$0.501	$0.948	$1.607	$1.131	$0.960	$0.989	$1.018	$1.036	$1.065
5	Retail Sales (Thousand Therms)	25,451	25,426	28,582	24,230	27,351	27,189	27,129	27,030	26,857
6	Retail Sales Revenue	36,071	45,816	72,528	55,835	65,189	69,640	74,764	79,752	84,753
7	Connection & Capacity Fees	840	475	414	888	700	700	700	700	700
8	Other Revenues & Transfers In	2,559	2,915	4,032	3,840	4,032	3,653	3,908	4,154	4,387
9	Interest	479	427	502	470	493	508	523	539	555
10	**REVENUES**	**39,950**	**49,634**	**77,476**	**61,032**	**70,414**	**74,501**	**79,895**	**85,144**	**90,395**
11	Commodity & Cap and Trade	9,891	20,591	41,782	22,912	22,154	22,565	22,932	23,278	23,807
12	Transportation	2,859	3,513	4,144	4,483	4,112	4,331	4,514	4,632	4,741
13	Total Supply Purchases	12,750	24,103	45,926	27,395	26,265	26,896	27,445	27,911	28,547
14	Administration (CIP & Operating)	3,248	4,403	3,395	3,576	3,749	3,862	3,978	4,097	4,220
15	Customer Service	1,904	2,035	2,109	2,257	2,349	2,420	2,492	2,567	2,644
16	Demand Side Management	417	306	354	225	235	242	249	257	264
17	Engineering (Operating)	571	659	515	550	573	591	608	626	645
18	Operations & Maintenance	6,600	7,422	7,314	7,822	9,082	8,744	8,640	8,899	9,166
19	Resource Management	551	668	824	934	971	1,000	1,030	1,061	1,093
20	Total Supply & Distribution Operations	13,291	15,493	14,511	15,364	16,960	16,859	16,997	17,507	18,032
21	Debt Service	801	803	803	802	799	802	-	-	-
22	Rent	471	481	501	515	528	543	557	572	588
23	General Fund Transfers	6,847	7,240	6,683	8,215	8,960	10,070	12,674	13,410	14,381
24	Cap-and-Trade Reserve Transfers	1,363	2,189	0	6,696	3,327	3,612	3,866	4,109	4,340
25	Other Transfers Out	512	277	679	375	293	712	721	732	742
26	CIP*	9,283	4,674	4,832	7,897	9,371	6,836	12,310	14,353	13,100
27	**EXPENSES**	**45,318**	**55,260**	**73,934**	**67,259**	**66,503**	**66,329**	**74,571**	**78,595**	**79,731**
28	**INTO / (OUT OF) RESERVES**	(3,339)	(2,368)	3,542	(6,227)	3,911	8,172	5,325	6,549	10,664
29	Reappropriations + Commitments	9,086	5,541	12,959	12,959	12,959	12,959	12,959	12,959	12,959
30	Plant Replacement	0	0	0	0	0	0	0	0	0
31	Debt Service Reserve	434	434	378	378	378	378	0	0	0
32	CIP Reserve	3,820	3,820	0	0	0	4,000	10,000	16,000	23,000
33	Rate Stabilization	2,766	(872)	(3,077)	0	0	0	0	0	0
34	Operations Reserve	11,981	11,300	14,437	5,134	9,045	13,217	12,920	13,470	17,135
35	Cap-and-Trade Reserve	4,542	6,731	6,731	13,427	16,754	20,366	24,232	28,341	32,681
36	Unassigned	0	0	0	0	0	0	0	0	0
37	Total Reserves (excludes Cap-and-Trade)	28,087	20,223	24,697	18,471	22,382	30,554	35,879	42,429	53,094
38	**Operations Reserve Guidelines**									
39	Max (120 Days Commodity + O&M)	12,102	15,560	22,719	19,516	18,783	19,559	20,469	21,121	21,906
40	Target (90 Days Commodity + O&M)	9,076	11,670	17,039	14,637	14,087	14,670	15,352	15,840	16,429
41	Min (60 Days Commodity + O&M)	6,051	7,780	11,359	9,758	9,392	9,780	10,235	10,560	10,953
42	Short Term Risk Assessment Value	4,625	4,291	4,987	5,462	6,905	7,359	8,344	9,282	9,859

*includes connection and capacity related costs

APPENDIX B: GAS UTILITY CAPITAL IMPROVEMENT PROGRAM (CIP) DETAIL

Fiscal Year	2024			2025	2026	2027	2028	2029
Projects	Carryover From FY23	CIP Funding	Adjusted Budget*	Projected				
GS-13001 - Gas Main Replacement - Project 23	-	63,266	63,266	-	-	-	-	-
GS-14003 - Gas Main Replacement - Project 24	8,422,203	85,341	8,507,544	-	-	-	-	-
GS-15000 - Gas Main Replacement - Project 25	-	4,725,000	4,725,000	5,775,000	-	-	-	-
GS-16000 - Gas Main Replacement - Project 26	-	-	-	-	4,216,000	6,665,496	-	-
GS-20000 - Gas Main Replacement - Project 27	-	-	-	-	-	-	4,683,622	7,404,806
GS-28X00 - Gas Decommissioning Project	-	-	-	-	-	-	4,000,000	-
GS-25001 - Design and Repair at Arastradero Creek	-	-	-	1,000,000	-	-	-	-
Subtotal - Gas Main Replacement Programs	**8,422,203**	**4,873,607**	**13,295,809**	**6,775,000**	**4,216,000**	**6,665,496**	**8,683,622**	**7,404,806**
GS-13002 - Gas Equipment and Tools	-	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Subtotal - Tools and Equipment	**-**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**	**100,000**
GS-03009 - System Extensions - Unreimbursed	-	-	-	-	-	-	-	-
GS-11002 - Gas Distribution System Improvements	505,796	745,796	1,251,592	500,000	500,000	500,000	500,000	500,000
GS-80019 - Gas Meters and Regulators	-	532,483	532,483	500,000	500,000	500,000	500,000	500,000
Subtotal - Ongoing Projects	**505,796**	**1,278,279**	**1,784,075**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**	**1,000,000**
GS-80017 - Gas System, Customer Connections	-	887,698	887,698	700,000	700,000	700,000	700,000	700,000
Subtotal - Customer Connections	**-**	**887,698**	**887,698**	**700,000**	**700,000**	**700,000**	**700,000**	**700,000**
Total CIP Expenses	**8,927,999**	**7,139,584**	**16,067,583**	**8,575,000**	**6,016,000**	**8,465,496**	**10,483,622**	**9,204,806**

* Includes unspent funds from previous years carried forward or reappropriated into the current fiscal year

APPENDIX C: GAS UTILITY RESERVES MANAGEMENT PRACTICES

The following reserves management practices shall be used when developing the Gas Utility Financial Plan:

Section 1. Definitions

a) "Financial Planning Period" – The Financial Planning Period is the range of future fiscal years covered by the Financial Plan. For example, if the Financial Plan delivered in conjunction with the FY 2015 budget includes projections for FY 2015 to FY 2019, FY 2015 to FY 2019 would be the Financial Planning Period.
b) "Fund Balance" – As used in these Reserves Management Practices, Fund Balance refers to the Utility's Unrestricted Net Assets.
c) "Net Assets" - The Government Accounting Standards Board defines a Utility's Net Assets as the difference between its assets and liabilities.
d) "Unrestricted Net Assets" - The portion of the Utility's Net Assets not invested in capital assets (net of related debt) or restricted for debt service or other restricted purposes.

Section 2. Supply Fund Reserves

The Gas Utility's Supply Fund Balance is reserved for the following purposes:

~~a)~~ For existing contracts, as described in Section 4 (Reserve for Commitments)
a)
b) For operating and capital budgets re-appropriated from previous years, as described in Section 5 (Reserve for Re-appropriations)

Section 3. Distribution Fund Reserves

a) For existing contracts, as described in Section 4 (Reserve for Commitments)
b) For operating and capital budgets re-appropriated from previous years, as described in Section 5 (Reserve for Re-appropriations)
c) For cash flow management and contingencies related to the Gas Utility's Capital Improvement Program (CIP), as described in Section 6 (CIP Reserve)
d) For rate stabilization, as described in Section 7 (Rate Stabilization Reserve)
e) For operating contingencies, as described in Section 8 (Operations Reserve)
~~e)~~f) For tracking unspent or unallocated revenues from the sale of carbon allowances freely allocated by the California Air Resources Board to the gas utility under the State's Cap and Trade Program, as described in Section 11 (Cap and Trade Program Reserve)
~~f)~~g) Any funds not included in the other reserves will be considered Unassigned Reserves and shall be returned to ratepayers or assigned a specific purpose as described in Section 9 (Unassigned Reserves)

Section 4. Reserve for Commitments

At the end of each fiscal year the Gas Supply Fund and Gas Distribution Fund Reserve for Commitments will be set to an amount equal to the total remaining spending authority for all contracts in force for the Wastewater Collection Utility at that time.

Section 5. Reserve for Reappropriations

At the end of each fiscal year the Gas Supply Fund and Gas Distribution Fund Reserve for Reappropriations will be set to an amount equal to the amount of all remaining capital and non-capital budgets, if any, that will be re-appropriated to the following fiscal year for each fund in accordance with Palo Alto Municipal Code Section 2.28.090.

Section 6. CIP Reserve

The CIP Reserve is used to manage cash flow for capital projects and acts as a reserve for capital contingencies. Staff will manage the CIP Reserve according to the following practices:

The following guideline levels are set forth for the CIP Reserve. These guideline levels are calculated for each fiscal year of the Financial Planning Period based on the levels of CIP expense budgeted for that year.

Minimum Level	12 months of budgeted CIP expense
Maximum Level	24 months of budgeted CIP expense

a) Changes in Reserves: Staff is authorized to transfer funds between the CIP Reserve and the Reserve for Commitments when funds are added to or removed from the Reserve for Commitments as a result of a change in contractual commitments related to CIP projects. Any other additions to or withdrawals from the CIP reserve require Council action.

b) Minimum Level:
   i) Funds held in the Reserve for Commitments may be counted as part of the CIP Reserve for the purpose of determining compliance with the CIP Reserve minimum guideline level.
   ii) If, at the end of any fiscal year, the minimum guideline is not met, staff shall present a plan to the City Council to replenish the reserve. The plan shall be delivered by the end of the following fiscal year, and shall, at a minimum, result in the reserve reaching its minimum level by the end of the next fiscal year. For example, if the CIP Reserve is below its minimum level at the end of FY 2017, staff must present a plan by June 30, 2018 to return the reserve to its minimum level by June 30, 2019. In addition, staff may present, and the Council may adopt, an alternative plan that takes longer than one year to replenish the reserve, or that does so in a shorter period of time.

c) Maximum Level: If, at any time, the CIP Reserve reaches its maximum level, no funds may be added to this reserve. If there are funds in this reserve in excess of the maximum level staff must propose to transfer these funds to another reserve or return them to ratepayers in the next Financial Plan. Staff may also seek Council approval to hold funds in this reserve in excess of the maximum level, if they are held for a specific future purpose related to the CIP.

Section 7. Rate Stabilization Reserve

Funds may be added to the Rate Stabilization Reserve by action of the City Council and held to manage the trajectory of future year rate increases. Withdrawal of funds from the Rate Stabilization Reserve requires Council action. If there are funds in the Rate Stabilization Reserve at the end of any fiscal year, any subsequent Gas Utility Financial Plan must result in the withdrawal of all funds from this Reserve by the end of the Financial Planning Period.

Section 8. Operations Reserve

The Operations Reserve is used to manage normal variations in costs and as a reserve for contingencies. Any portion of the Gas Utility's Fund Balance not included in the reserves described in Section 4-Section 7 above will be included in the Operations Reserve unless this reserve has reached its maximum level as set forth in Section 8 d) below. Staff will manage the Operations Reserve according to the following practices:

a) The following guideline levels are set forth for the Operations Reserve. These guideline levels are calculated for each fiscal year of the Financial Planning Period based on the levels of Operations and Maintenance (O&M) and commodity expense forecasted for that year in the Financial Plan.

Minimum Level	60 days of O&M and commodity expense
Target Level	90 days of O&M and commodity expense
Maximum Level	120 days of O&M and commodity expense

b) Minimum Level: If, at the end of any fiscal year, the funds remaining in the Operations Reserve are lower than the minimum level set forth above, staff shall present a plan to the City Council to replenish the reserve. The plan shall be delivered within six months of the end of the fiscal year, and shall, at a minimum, result in the reserve reaching its minimum level by the end of the following fiscal year. For example, if the Operations Reserve is below its minimum level at the end of FY 2014, staff must present a plan by December 31, 2014 to return the reserve to its minimum level by June 30, 2015. In addition, staff may present, and the Council may adopt, an alternative plan that takes longer than one year to replenish the reserve.
c) Target Level: If, at the end of any fiscal year, the Operations Reserve is higher or lower than the target level, any Financial Plan created for the Gas Utility shall be designed to return the Operations Reserve to its target level by the end of the forecast period.
d) Maximum Level: If, at any time, the Operations Reserve reaches its maximum level, no funds may be added to this reserve. Any further increase in the Gas Utility's Fund Balance shall be automatically included in the Unassigned Reserve described in Section 9, below.

Section 9. Unassigned Reserve

If the Operations Reserve reaches its maximum level, any further additions to the Gas Utility's Fund Balance will be held in the Unassigned Reserve. If there are any funds in the Unassigned Reserve at the end of any fiscal year, the next Financial Plan presented to the City Council must include a plan to assign them to a specific purpose or return them to the Gas Utility ratepayers by the end of the first fiscal year of the next Financial Planning Period. For example, if there were funds in the Unassigned Reserves at the end of FY 2015, and the next Financial Planning Period is FY 2016 through FY 2020, the Financial Plan shall include a plan to return or assign any funds in the Unassigned Reserve by the end of FY 2016. Staff may present an alternative plan that retains these funds or returns them over a longer period of time.

Section 10. Intra-Utility Transfers Between Supply and Distribution Funds

The Gas Utility records costs in two separate funds: the Gas Supply Fund and the Gas Distribution Fund. At the end of each fiscal year staff is authorized to transfer funds between the Gas Supply Fund and Gas Distribution Fund if consistent with the purposes of the two reserves involved in the transfer and in order to balance gas utility reserves to avoid negative balances. For example, Gas Distribution revenues are needed to pay for certain supply-related costs such as administration of the Gas Supply Fund.~~an amount equal to the difference between Gas Supply Fund costs and Gas Supply Fund Revenues, from the Gas Distribution Fund Operations Reserve to the Gas Supply Fund, or vice versa.~~ Such transfers shall be included in the ordinance closing the budget for the fiscal year.

Section 11. Cap and Trade Program Reserve

This reserve ~~tracks~~ holds revenues from the sale of carbon allowances freely allocated by the California Air Resources Board to the gas utility, under the State's Cap and Trade Program. Funds in this Reserve are managed in accordance with the City's Policy on the Use of Freely Allocated Allowances under the State's Cap and Trade Program (the Policy), adopted by Council Resolution 9487 in January 2015. At the end of each fiscal year, the Cap and Trade Program Reserve will be adjusted by the net of revenues and expenses associated with the Cap and Trade program.~~At the end of each fiscal year staff is authorized to transfer all revenues from the sale of allocated carbon allowances to this reserve.~~

APPENDIX D: DESCRIPTION OF GAS UTILITY COST CATEGORIES

This appendix describes the activities associated with the various cost categories referred to in this Financial Plan.

Customer Service: This category includes the Gas Utility's share of the call center, meter reading, collections, and billing support functions. Billing support encompasses staff time associated with bill investigations and quality control on certain aspects of the billing process. It does not include maintenance of the billing system itself, which is included in Administration. This category also includes CPAU's key account representatives, who work with large commercial customers who have more complex requirements for their gas services.

Resource Management: This category includes gas procurement, contract management, rate setting, and tracking of legislation and regulation related to the gas industry.

Operations and Maintenance: This category includes the costs of a variety of distribution system maintenance activities, including:

- surveying the gas system (50% of the system each year) and repairing any leaks found;
- investigating reports of damaged mains or services and perform emergency repairs;
- building and replacing gas services for new or redeveloped buildings; and
- testing and replacing meters to ensure accurate sales metering.

This category also includes a variety of functions the utility shares with other City utilities, including:

- the Field Services team (which does field research of various customer service issues);
- the Cathodic Protection team (which monitors and maintains the systems that prevent corrosion in metal pipes and reservoirs); and
- the General Services team (which manages and maintains equipment, paves and restores streets after gas, water, or sewer main replacements, and provides welding services, including certified gas line welding services)

Administration: Accounting, purchasing, legal, and other administrative functions provided by the City's General Fund staff, as well as shared communications services and Utilities Department administrative overhead and billing system maintenance costs.

Demand Side Management: Includes the cost of administering gas efficiency programs and the direct cost of rebates paid.

Engineering (Operating): The Gas Utility's engineers focus primarily on the CIP, but a small portion of their time is spent assisting with distribution system maintenance.

APPENDIX E: GAS UTILITY COMMUNICATIONS SAMPLES

CALL BEFORE YOU DIG!

THERE'S MORE THAN JUST DIRT BELOW YOUR YARD.

Underground utility pipelines can be located anywhere, including under streets, sidewalks and private property—sometimes just inches below the surface. Hitting one of these pipelines while digging, planting or other excavating can cause serious injury, property damage and loss of utility service.

NUMBERS YOU SHOULD KNOW BEFORE YOU DIG:

811 — Call Underground Service Alert (USA) at 811. To submit a single ticket for an individual address, visit 811express.com.

48 — You must call at least 48 hours before you start your project.

0($) — This is a free service. It is your responsibility to contact USA before digging begins. Failure to contact USA can result in liability for any damage or loss of property.

Dig with care! In the event that a utility service, may it be the following—a GAS LINE, a WATER LINE, or an ELECTRIC LINE, —is disturbed or damaged, call the City of Palo Alto Utilities 24/7 Dispatch at (650) 329-2579, or 911 if there is an immediate threat to life or safety.

Tools to Prepare for an Emergency

BE PREPARED
- Make a Plan
- Identify an Evacuation Route
- Build an Emergency Kit
- Document and Insure Property
- Learn more at www.cityofpaloalto.org/BePrepared

HELP YOUR NEIGHBORS & VOLUNTEER IN AN EMERGENCY

Please be a good neighbor and offer assistance to your neighbors if you're able. If you're interested in volunteering to provide support during emergencies, consider becoming an Emergency Services Volunteer. Visit www.cityofpaloalto.org/EmergencyVolunteers.

STAY INFORMED
- Receive Emergency Alerts, Sign Up at AlertSCC.org
- Sign Up for Police Department Alerts by Texting Your Zip Code to 888777
- Follow the City on Nextdoor, Twitter, and Other Social Media Channels: www.cityofpaloalto.org/Connect
- Should evacuations due to storm emergencies/ flooding become necessary, the City offers evacuation resources online www.cityofpaloalto.org/FloodAlert

BE STORM READY
- www.cityofpaloalto.org/Storms
- www.cityofpaloalto.org/StormFAQs
- www.cityofpaloalto.org/CreekMonitor
- www.cityofpaloalto.org/OutageMap

IMPORTANT PHONE NUMBERS & WEBSITE RESOURCES
- Do not call 9-1-1 unless it's an emergency
- **Power Outage & Electrical Problems:** Palo Alto Electric Operations (650) 496-6914
- **Gas/Water Leaks and Sewer Spills:** Palo Alto Utilities Dispatch (650) 329-2579
- **Blocked Storm Drains and Mudslides:** Palo Alto Public Works (650) 496-6974 (weekdays 7am to 4pm) & (650) 329-2413 (after hours)
- **Report Road and Other Conditions to PaloAlto311 at www.cityofpaloalto.org/311**
- **Fallen Trees:** Palo Alto Public Works (650) 496-5953 (weekdays 7am to 4pm) & (650) 329-2413 (after hours)

WWW

www.CityofPaloAlto.org/StayInformed

The City of Palo Alto Utilities (CPAU) is rolling out Advanced Metering Infrastructure! Metering Infrastructure (AMI) is a relatively new technology for utilities metering proce a utility to digitally read energy and water usage at a home or business. It will allow us t our customer with more real-time consumption data and enhance our billing efficiency. partnered with Utility Partners of America (UPA) to exchange your electric meter with a electric meter and retrofit existing gas and water meters with AMI radios. Learn more a at cityofpaloalto.org/AMI.

A weakened or damaged pipeline | IMPORTANT CONTACT NUMBERS Emergencies: 911 | GEN QUE PIPE

Holiday cooking can leave you with a greasy cleanup, but don't pour cooking oil or gr kitchen sink! Grease solidifies and clogs pipes and causes sewer back-ups. Collect food amounts of cooking grease and oil into the green compost bin. Large amounts of cooki can be collected in a container and brought to the Household Hazardous Waste Station Household Hazardous Waste Station is open every Saturday from 9am – 11am or the fi month from 3pm – 5pm. Call (650) 496-5910 or visit cityofpaloalto.org/hazwaste for m

CITY OF PALO ALTO UTILITIES

GAS

Call 911 in an emergency

24-Hour Call Line (650) 329-2579

KNOW WHAT TO DO IF YOU DETECT A GAS LEAK OR HI WI

Do not strike a match.

Do not look for a gas leak.

STAYING SAFE

The City of Palo Alto Utilities is committed to safely operating its underground natural gas distribution system comprised of

OUR RESPONSIBILITY

The City owns, and is responsible for, the gas line on to your home gas meter. We maintain the natural gas prescribed federal safety standards.

The prices that the City of Palo Alto Utilities (CPAU) and other utilities in the region pay and electricity delivered to customers have risen significantly this year. Most residents effects of these prices on their February bills. The City is offering several ways to help res cityofpaloalto.org/efficiencytips for ways to save immediately and other steps you can ta energy bill costs. Take advantage of free home assessments at cityofpaloalto.org/efficien visit cityofpaloalto.org/financialassistance to find alternative payment arrangements and for help with your utility bill.

CALL BEFORE YOU DIG.

Avoid costly accidents and dangerous conditions! Call Underground Service Alert (USA), a free service, at 811 a minimum of 48 hours prior to any excavation.

It is your responsibility to call USA before digging begins. Failure to call this number can result in liability for any damage or loss of property.

STEPS TO TAKE

1. Property mark your excavation area.
2. Call USA and provide a detailed description of where and when you plan to dig.
3. USA will then locate and mark all underground natural gas pipelines and other utilities prior to your excavation work.

RECOGNIZING A PIPELINE LEAK

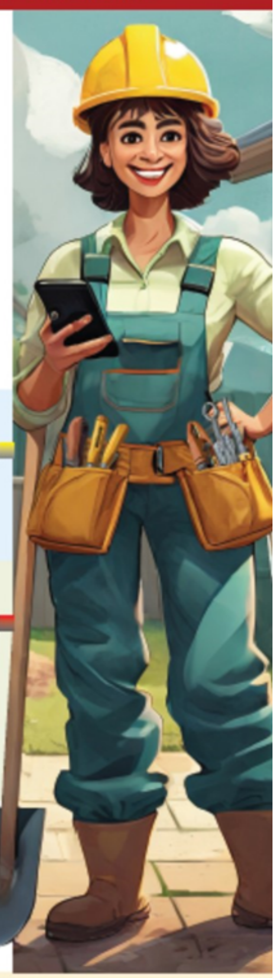
SMELL — Mercaptan, a sulfur chemical, is added to natural gas to make it smell similar to rotten eggs. The smell of mercaptan helps you detect even the smallest amount of natural gas in the air.

SIGHT — Fire near pipeline; unusual dirt or dust blowing; pool of liquid on the ground, possibly bubbling; persistent bubbles in standing water; discolored vegetation

SOUND — Explosion near pipeline; hissing or roaring sound

If you detect a gas leak or hit a pipeline while digging, leave the area immediately and call from elsewhere. Call 911 or the City of Palo Alto 24-hour emergency number at **(650) 329-2579**. Do not strike a match or look for a gas leak!

For More Information, go to: **cityofpaloalto.org/safeutility**



CITY OF PALO ALTO UTILITIES

Persons with disabilities who require materials in an appropriate alternative format, auxiliary aids, or modifications to policies or procedures to access City meetings, programs, or services should contact the City's ADA Coordinator George Hoyt at (650) 329-2550 or by emailing ADA@cityofpaloalto.org.

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