



City Council Staff Report

From: City Manager
Report Type: ACTION ITEMS
Lead Department: Utilities

Meeting Date: September 18, 2023

Report Staff:2306-1660

TITLE

Public Hearing: Adoption of a Resolution Approving Capped-Price Winter Natural Gas Purchases for Winter 2023-24 and Amending the FY 2024 Gas Fund Budget to Fund These Purchases; Amending the Gas Utility Long-term Plan Objectives, Strategies and Implementation Plan; and Amending Rate Schedules G-1 (Residential Gas Service), G-2 (Residential Master-Metered and Commercial Gas Service), G-3 (Large Commercial Gas Service), and G-10 (Compressed Natural Gas Service); CEQA status: not a project under Public Resources Code 15378(b)(5) and exempt under Public Resources Code 15273(a)

RECOMMENDATION

The Finance Committee recommends that City Council (Council) adopt a resolution (Attachment A):

1. Implementing capped-price winter natural gas purchases for winter 2023-24 with a maximum commodity rate impact of 15 cents per therm;
2. Amending the FY 2024 Budget Appropriation in the Gas Fund (requires 2/3 approval) by:
 - a. Increasing the Gas Operating Budget for Commodity Purchases by \$2,000,000; and
 - b. Increasing the Gas Operating Retail revenue estimate by \$2,000,000
3. Amending the Gas Utility Long-term Plan (GULP) Objectives, Strategies and Implementation Plan (Attachment B) to implement the capped-price winter gas purchases intended to manage potential winter 2023 gas price spikes; and
4. Amending Rate Schedules G-1 (Residential Gas Service), G-2 (Residential Master-Metered and Commercial Gas Service), G-3 (Large Commercial Gas Service), and G-10 (Compressed Natural Gas Service) (Attachment C), effective November 1, 2023.

EXECUTIVE SUMMARY

Based on the Finance Committee's recommendation on August 15, 2023 ([Finance Committee Aug 15, 2023¹](#)), staff is seeking Council approval to implement capped-price winter natural gas purchasing for winter 2023-24.

Capped-price winter gas purchasing involves continuing to purchase monthly gas at prices tied to a published market monthly index, but purchasing the gas with a price cap in place. Purchasing capped price gas functions as an insurance policy, in which the City will pay an additional charge to a gas supplier, in order to limit the price the City pays for gas to a maximum of \$2 per therm, and thus avoiding exposure to extremely high market prices like those seen during winter 2022-23.

The City's current monthly market-price-based gas purchasing and pass-through commodity rate strategy has been in place since 2012 when the strategy was approved by Council ([Council Approval of Pass-through Rates](#))². Under this strategy, the City purchases baseload gas at prices tied to a published gas market monthly index, adjusted to account for delivery losses to the customer's meter and a municipal purchase discount.

This past winter (2022-23), natural gas prices rose dramatically across the western United States, resulting in high customer bills and numerous customer inquiries. In response, staff explored alternatives for mitigating the impact of similar market events in the future. Staff identified a gas procurement strategy – capped-price winter gas purchasing – that could limit the impact of another unexpected surge in prices and be implemented in time for this upcoming winter (2023-24).

The actual cost of this product cannot be precisely determined until staff receives proposals from eligible counterparties; staff estimates that implementing capped-price winter gas purchasing for winter 2023-24 could result in an additional cost of \$1.93 million-\$3.03 million and an increase of 4-6% in the median monthly residential customer gas bill over the year, assuming the product is available. Staff recommends Council approve a maximum customer commodity rate impact of 15 cents per therm on gas sales over a 12-month period. Staff recommends Council approve a maximum customer commodity rate impact of 15 cents per therm on gas sales over a 12-month period. Resulting in a percentage breakdown of an 8% increase on an annual bill. The City will purchase as much capped-price winter gas as is available and projected to be necessary to serve load while staying within the 15 cents per therm impact limit. The Council-approved \$4 per therm maximum commodity charge will not change.

GULP is the vehicle by which the gas supply portfolio is managed consistently, transparently, and with input from Council. Council amended the- GULP Objectives, Strategies, and Implementation

¹ <https://cityofpaloalto.primegov.com/Portal/Meeting?meetingTemplateId=12741>

² https://www.cityofpaloalto.org/files/assets/public/from-archive/agendas-minutes-reports/reports/city-manager-reports-cmrs/2012/final-staff-report-id-2552_gas-utility-long-term-plan-revisions.pdf

Plan most recently in 2017 ([Staff Report #7967](#))³. Council adoption of staff's proposed capped price winter natural gas purchases to manage potential winter 2023 natural gas price spikes requires conforming changes to GULP which are reflected in Attachment B. Since 2017, there have been a number of other Council-approved changes to policies and operations that require conforming changes to GULP. For simplicity, those changes will be addressed in a separate future staff report.

BACKGROUND

Prior to the 2001 energy crisis, Palo Alto engaged in minimal short-term natural gas commodity hedging. Hedging is a risk management strategy used to achieve some level of cost stability despite fluctuations in commodity prices. The energy crisis sent market prices soaring, and the City's largely unhedged gas portfolio experienced gas supply cost shocks that required four major retail gas rate increases in FY 2001 (15%, 25%, 35% and 67%). In addition, \$9 million was withdrawn from the Gas Supply Rate Stabilization Reserve (G-SRSR) leaving a near-zero balance.

In 2001, in direct response to the financial pain caused by gas rate increases experienced during the energy crisis, staff developed and Council approved a gas laddering strategy, whereby a portion of the City's gas needs would be purchased at fixed-prices and capped-prices over a 36-month time horizon. The goal of this purchasing strategy was to smooth or stabilize gas supply costs relative to the extremely volatile market. The gas laddering strategy was only applicable to residential and small commercial customers. Palo Alto's eight largest customers managed their own gas portfolio costs by electing either a monthly market-based commodity rate, a fixed rate for 12 or 24 months, or a custom rate.

In the summer of 2008, the credit crisis combined with increased gas supply from new shale developments sent market prices plummeting. As anticipated in a falling market, Palo Alto's average gas supply cost became higher than wholesale market prices, and commodity rates were therefore higher since some fixed-price gas was purchased prior to the price decline. This prompted a review of the laddering strategy.

In 2012, Council approved a new monthly market-price-based purchasing and pass-through commodity rate strategy. The City began purchasing gas at prices tied to a published gas market monthly index, adjusted to account for delivery losses to the customer's meter and a municipal purchase discount. That purchase price, which made up the commodity charge, was passed through in customer's retail gas rates. This monthly market-price-based purchasing and pass-through commodity rate strategy has remained in place since.

DISCUSSION

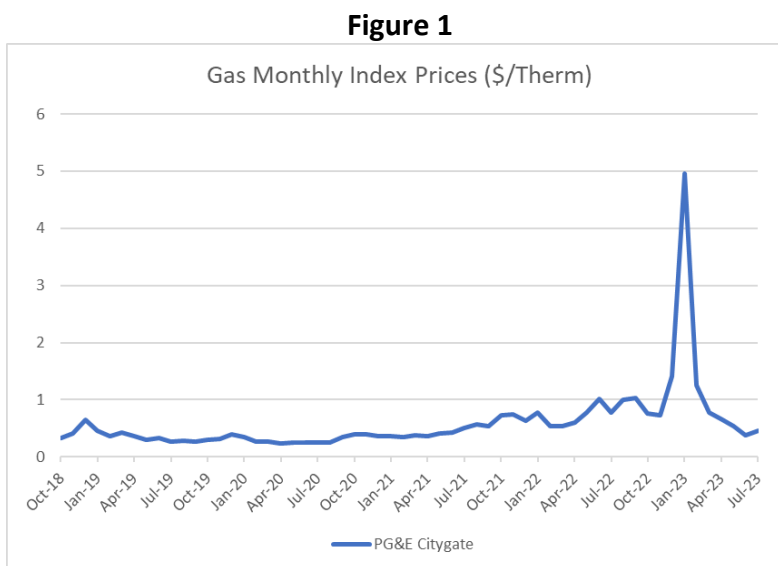
Winter 2022-23 Gas Prices

This past winter (2022-23), natural gas prices rose dramatically across the western United States due to a confluence of factors, including: (a) historically cold December temperatures, (b)

³ <https://www.cityofpaloalto.org/files/assets/public/agendas-minutes-reports/reports/city-manager-reports-cmrs/year-archive/2017/id-7967-6-5-17-ccm.pdf>

unusually low regional gas storage levels, (c) constraints on the availability of natural gas supplies flowing into California, and (d) an increased reliance on natural gas in the electric power sector as a result of the ongoing drought's impact on hydroelectric supplies. Though fundamental conditions were influencing the increase in prices, those factors alone do not explain the unprecedented price spike. January natural gas prices were five times greater than November prices. In December 2022, Council increased the maximum allowed commodity rate passed through to customers from \$2 per therm to \$4 per therm, but the City's price to purchase January gas was \$5 per therm, resulting in a \$1.8M shortfall discussed in more detail below. The sudden and extreme increase in natural gas prices is under investigation by Federal Energy Regulatory Commission (FERC) and California Public Utilities Commission (CPUC). The preliminary timeline for these investigations to yield findings is in the spring of 2026, subject to change.

Figure 1 shows the published gas market monthly indexes from October 2018 through July 2023, including the winter 2022-23 price surge. The PG&E Citygate hub in Northern California is a delivery point for Palo Alto's gas purchases and the index on which the city gas commodity rates are based.



When staff began to see signs of higher gas prices in late November and early December 2022, attempts were made to inform customers in advance through utility bill messaging, website notices, social media, email newsletters, and other community forums. Customers were encouraged to take action and save energy to try to avoid surprisingly high utility bills. The gas market monthly index for January 2023 settled at just below \$5 per therm, above the Council-approved maximum commodity rate for the first time in history.

Because the gas market monthly index exceeded the maximum Council-approved commodity rate, the full cost of January gas was not passed through to customers; instead about \$1.84 million in reserves was withdrawn to cover the difference between the maximum commodity

rate and market purchase price. Even so, the impact on customer bills was significant, and the City received a large number of customer inquiries. The City responded by offering resources to help customers with higher than anticipated utility bill costs, including access to free home efficiency assessments through the Home Efficiency Genie and payment arrangements. In April 2023 Council approved gas and electric ([Staff Report 2303-1209](#))⁴ rebates of \$2.4 million, funded by the City's General Fund, to compensate residential customers for the high energy bills they experienced.

Gas prices dropped and began to stabilize to levels under \$1 per therm in March 2023, and monthly indexes as well as price forecasts for the upcoming winter 2023-24 have remained below the \$1 per therm level to present. However, due to the dramatic rise in gas prices and resulting high customer bills, staff explored alternative gas procurement strategies that would limit the risk and impact of another unexpected surge in prices and could be implemented in time for this upcoming winter 2023-24.

Recommended Capped-Price Winter Gas Purchase

The capped-price winter gas purchasing alternative involves continuing to purchase monthly gas at prices tied to a published market monthly index, but also purchasing the gas needed for the coldest winter months with a price cap in place. The estimated cost of purchasing the price cap is \$2.0 million-\$3.0 million for December 2023-February 2024. This functions as an insurance policy and limits the price paid to a maximum of \$2 per therm, a price consistent with the pre-winter 2022-23 Council-approved maximum commodity rate. For example, if the monthly index settles below \$2 per therm, the City's purchase price would be the monthly index; on the other hand, if the monthly index settles at or above \$2 per therm, the City's purchase price would be \$2 per therm.

In order to minimize customer bill impacts, staff proposes spreading the cost of the price cap over the calendar year. Commodity charges are one part of the City's [monthly gas volumetric and service charges](#)⁵, which are listed in the City's gas rate schedules and shown by month.

December, January, and February are typically the coldest and most expensive months for gas in California and the most at risk for dramatic rises in gas prices due to winter supply and demand and market fundamentals. These were the three months during this past winter 2022-23 when the market monthly indexes settled at the highest levels, from above \$1.25 per therm to just shy of \$5/therm. Given the cost of a \$2 per therm price cap, staff only recommends purchasing gas with the price cap in place for the December, January, and February months and recommends continuing to purchase gas without the price cap for the other months of the year.

⁴ <https://cityofpaloalto.primegov.com/Portal/viewer?id=1954&type=0>

⁵ <https://www.cityofpaloalto.org/files/assets/public/utilities/rates-schedules-for-utilites/residential-utility-rates/monthly-gas-volumetric-and-service-charges-residential.pdf>

If approved by Council, the capped-price winter purchasing strategy will be implemented in accordance with the Energy Risk Management [Policy](#)⁶, Guidelines, and Procedures. The City solicit bids from a list of pre-approved counterparties ([Staff Report 14551](#))⁷ for all natural gas purchases to ensure competitive pricing and consistent, robust contract terms. The amended rate schedules associated with this change will be effective November 1, 2023.

Finance Committee Review

Staff presented the two alternatives to the Finance Committee on August 15, 2023, seeking their recommendation on whether to maintain the current market-price-based gas purchasing and pass-through commodity rate strategy or implement the capped-price winter gas purchasing alternative for winter 2023-24. Their recommendation (by a vote of 3-0) for Council approval was to implement capped-price winter gas purchasing for winter 2023-24.

Alternative Strategies Not Recommended

The default alternative is to maintain the current market-price-based gas purchasing and pass-through commodity rate strategy for this upcoming winter 2023-24 with no price spike mitigation measures. Considerations for maintaining the current policy include: 1) energy market prices are inherently unpredictable and volatile, but gas prices (including for the upcoming winter) have come down significantly and stabilized since March 2023; 2) Palo Alto's commodity rates are generally less than PG&E's; and 3) this policy yields the lowest average supply cost over many years of implementation.

Considerations for revising the current strategy and implementing capped-price winter gas purchasing include: 1) reserve levels will be protected, protecting against the need for future rate increases; 2) customer costs will be higher if implemented over many years; 3) this acts as an insurance policy that adds cost but may not be used; 4) this is an uncommon strategy in gas markets, and thus the capped-price product may not be readily available from suppliers; and 5) this may result in an additional cost that is even greater than staff's estimate, if the market is very volatile, or lower than staff's estimate if the market is relatively stable.

Staff is presenting the capped-price winter gas purchasing alternative because it could be implemented in time for this upcoming winter. There are also other alternatives that could potentially be considered for the future. These alternatives, which would take additional resources and time to evaluate, plan, and implement, include: 1) establishing an additional special reserve to manage gas price spikes; 2) making a limited volume of fixed-price gas purchases; 3) reverting to a full laddering strategy; 4) investing in gas production assets; and 5) investing in gas storage.

⁶ <https://www.cityofpaloalto.org/files/assets/public/sustainability/policies-and-plans/attachment-c-energy-risk-management-policy-2018.pdf>

⁷ <https://portal.laserfiche.com/Portal/DocView.aspx?id=59239&repo=r-704298fc&searchid=6445f704-ce44-46fc-adc1-0d9e3606c5af>

Changes to GULP Needed if Council Adopts Capped Price Winter Gas Purchase Strategy

The 2017 GULP update included the change from a hedged portfolio to market-based retail gas rates. Those commodity rates have been in effect since 2013. Cost containment applied to winter 2023 gas purchases, if adopted, requires changes to GULP as shown in Table 1 below. The GULP Objectives, Strategies and Implementation Plans are attached. While some other items also need updates, staff is not proposing changes other than those associated with the gas purchasing strategy at this time for the sake of simplicity. Administrative updates will be brought to Council in a separate staff report.

Table 1: Market Price Transparency in GULP

GULP	Current	Proposed
Objective 1	Pass a market cost signal through to customers.	Pass a market supply cost signal through to customers with measures to protect against price spikes applied during winter months.
Strategy 1	<ul style="list-style-type: none">a. Purchase natural gas at monthly and daily market index prices.b. Change gas supply rate monthly to reflect market prices.	<ul style="list-style-type: none">a. Purchasing natural gas at monthly and daily market index prices;b. Changing gas supply rates monthly to reflect market prices; andc. Purchasing physical capped-price gas for some or all forecasted natural gas volumes for December through February, provided that the cost of the price caps results in no more than a 15 cents per therm impact on retail commodity gas rates.
Implementation Plan Item 1	<ul style="list-style-type: none">a. Continue to implement market-based supply purchases and commodity rates.	<p>Implement market-based supply purchases and commodity rates with measures to protect against price spikes applied during winter months by:</p> <ul style="list-style-type: none">a. Developing a new purchasing plan to be approved by the Director of Utilities; andc. Conducting customer communication and outreach.

FISCAL/RESOURCE IMPACT

There are no additional fiscal or resource impacts of maintaining the current market-price-based natural gas purchasing and pass-through commodity rate strategy.

There is a fiscal impact associated with implementing the capped-price winter natural gas purchasing alternative for winter 2023-24; no additional staff resources are needed. The cost of the price cap for December 2023-February 2024 is estimated at \$0.175-\$0.275 per therm, based on recent supplier quotes, resulting in an additional estimated gas supply cost of \$2.0 million-\$3.0 million to the City, assuming the capped price product is available on the market. Staff recommends an appropriation of \$2.0 million in the FY 2024 Gas Operating budget in the Commodity Purchase category to increase the budget from \$20.8 million to \$22.8 million, which will be offset by increased retail gas prices and corresponding revenues from customers.

The commodity charge for customer gas rates would continue to be based on the monthly market price, which will include the cost of the December 2023-February 2024 purchase price cap, applied over 12 months. The estimated cost impact is \$0.07-\$0.11 per therm, which would result in an increase of 4-6% in the median monthly residential customer bill over the year if capped price purchases prove necessary and available. The increase would be 4-6% for the winter bill months (November 2023-March 2024) and 3-5% for the summer bill months (April 2024-October 2024).

Table 2 shows the median monthly residential customer bill and the projected impact based on the estimated cost of \$0.07 per therm or \$0.11 per therm for the price cap.

Table 2

Median Monthly Residential Bill - Projected Impact						
Season	Therms	Bill Estimate	Commodity Cost Increase		Commodity Cost Increase/Bill Estimate	
			\$0.07	\$0.11	\$0.07	\$0.11
Winter (Nov-Mar)	54	\$ 99.80	\$ 3.78	\$ 5.94	4%	6%
Summer (Apr-Oct)	18	\$ 40.52	\$ 1.26	\$ 1.98	3%	5%
Annual	33	\$ 65.22	\$ 2.31	\$ 3.63	4%	6%

STAKEHOLDER ENGAGEMENT

The Finance Committee reviewed the alternatives presented by staff at its August 15, 2023 ([Finance Committee Aug 15, 2023](https://cityofpaloalto.primegov.com/Portal/Meeting?meetingTemplateId=12741))⁸ meeting and voted unanimously to recommend the capped price gas purchasing strategy to Council. If adopted by Council, the website will be updated to reflect the change in the commodity rate calculation in the [Monthly Gas Volumetric and Service Charges](https://www.cityofpaloalto.org/files/assets/public/utilities/rates-schedules-for-utilites/residential-utility-rates/monthly-gas-volumetric-and-service-charges-residential.pdf)⁹ document. In addition, customers will be notified via bill inserts and social media.

⁸ Finance Committee Staff Report

<https://cityofpaloalto.primegov.com/Portal/Meeting?meetingTemplateId=12741>

⁹ Monthly Gas Volumetric and Service Charges <https://www.cityofpaloalto.org/files/assets/public/utilities/rates-schedules-for-utilites/residential-utility-rates/monthly-gas-volumetric-and-service-charges-residential.pdf>

ENVIRONMENTAL REVIEW

Council's approval of capped-price winter natural gas purchasing for winter 2023-24, amendments to the FY 2024 Gas Fund budget appropriation and amendments to the Gas Utility Long-term Plan (GULP) Objectives, Strategies and Implementation Plan does not require California Environmental Quality Act review, since these actions do not meet the definition of a project under Public Resources Code Section 21065 and CEQA Guidelines Section 15378(b)(5), because these are administrative governmental activities which will not cause a direct or indirect physical change in the environment, and therefore, no environmental assessment is required. The Council finds that changing the Commodity Charge Cost Component of gas rates schedules to meet operating expenses, purchase supplies and materials, meet financial reserve needs and obtain funds for capital improvements necessary to maintain service is not subject to the California Environmental Quality Act (CEQA), pursuant to California Public Resources Code Sec. 21080(b)(8) and Title 14 of the California Code of Regulations Sec.15273(a). After reviewing the staff report and all attachments presented to Council, the Council incorporates these documents herein and finds that sufficient evidence has been presented setting forth with specificity the basis for this claim of CEQA exemption.

ATTACHMENTS

Attachment A: Resolution Approving Capped-Price Winter Natural Gas Purchase for Winter 2023-24 and Amending the FY24 Gas Fund Budget

Attachment B: GULP Revisions 2023 Winter Hedging

APPROVED BY:

Dean Batchelor, Director of Utilities

Staff: Karla Dailey, Acting Assistant Director

Jason Huang, Resource Planner