UTILITIES ADVISORY COMMISSION
Regular Meeting
Wednesday, May 01, 2024
Council Chambers & Hybrid
6:00 PM

Utilities Advisory Commission meetings will be held as "hybrid" meetings with the option to attend by teleconference/video conference or in person. To maximize public safety while still maintaining transparency and public access, members of the public can choose to participate from home or attend in person. Information on how the public may observe and participate in the meeting is located at the end of the agenda. Masks are strongly encouraged if attending in person. The meeting will be broadcast on Cable TV Channel 26, live on YouTube https://www.youtube.com/c/cityofpaloalto, and streamed to Midpen Media Center https://midpenmedia.org.

VIRTUAL PARTICIPATION **CLICK HERE TO JOIN** (https://cityofpaloalto.zoom.us/j/96691297246)
Meeting ID: 966 9129 7246 Phone: 1(669)900-6833

PUBLIC COMMENTS
Public comments will be accepted both in person and via Zoom for up to three minutes or an amount of time determined by the Chair. All requests to speak will be taken until 5 minutes after the staff's presentation. Written public comments can be submitted in advance to UACPublicMeetings@CityofPaloAlto.org and will be provided to the Council and available for inspection on the City's website. Please clearly indicate which agenda item you are referencing in your subject line.

PowerPoints, videos, or other media to be presented during public comment are accepted only by email to UACPublicMeetings@CityofPaloAlto.org at least 24 hours prior to the meeting. Once received, the Clerk will have them shared at public comment for the specified item. To uphold strong cybersecurity management practices, USB's or other physical electronic storage devices are not accepted.

Signs and symbolic materials less than 2 feet by 3 feet are permitted provided that: (1) sticks, posts, poles or similar/other type of handle objects are strictly prohibited; (2) the items do not create a facility, fire, or safety hazard; and (3) persons with such items remain seated when displaying them and must not raise the items above shoulder level, obstruct the view or passage of other attendees, or otherwise disturb the business of the meeting.

TIME ESTIMATES
Listed times are estimates only and are subject to change at any time, including while the meeting is in progress. The Commission reserves the right to use more or less time on any item, to change the order of items and/or to continue items to another meeting. Particular items may be heard before or after the time estimated on the agenda. This may occur in order to best manage the time at a meeting to adapt to the participation of the public, or for any other reason intended to facilitate the meeting.

CALL TO ORDER 6:00pm – 6:05pm

AGENDA CHANGES, ADDITIONS AND DELETIONS 6:05pm – 6:10pm
The Chair or Board majority may modify the agenda order to improve meeting management.

PUBLIC COMMENT 6:10pm – 6:25pm
Members of the public may speak to any item NOT on the agenda.

APPROVAL OF MINUTES 6:25pm – 6:30pm

1. Approval of the Minutes of the Utilities Advisory Commission Meeting Held on April 3, 2024

UTILITIES DIRECTOR REPORT 6:30pm – 6:45pm

NEW BUSINESS *(a 10 minute break will be imposed during this section)*

2. Recommendation to Retain the Current WAPA Hydroelectricity Base Resource Contract Allocation From 2025-2030 *(**ACTION** 6:45 PM – 7:15 PM)* Staff: Lena Perkins, PhD

3. Discussion of the Northern California Power Agency Issuing Bonds to Prepay for the Energy Received Under the 2025-2037 Geysers Power Purchase Agreement *(**DISCUSSION** 7:15 PM – 7:45 PM)* Staff: Shiva Swaminathan

4. Utilities Advisory Commission Recommendation to Adopt a Resolution Amending the Gas Utility Long-term Plan (GULP) Objectives, Strategies and Implementation Plan, Amending the Gas Utility Reserves Management Practices, Amending the FY 2025 Gas Fund Budget, 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). *(**ACTION** 7:45 PM – 8:30 PM)* Staff: Jason Huang

5. Staff Recommends That the Utilities Advisory Commission Recommend the City Council Adopt the Proposed Operating and Capital Budgets for the Utilities Department for the Fiscal Year 2025 *(**ACTION** 8:30 PM – 9:30 PM)* Staff: Anna Vuong

COMMISSIONER COMMENTS AND REPORTS FROM MEETINGS/EVENTS

FUTURE TOPICS FOR UPCOMMING MEETING

ADJOURNMENT

SUPPLEMENTAL INFORMATION

The materials below are provided for informational purposes, not for action or discussion during UAC Meetings (Govt. Code Section 54954.2(a)(3)).

INFORMATIONAL REPORTS

12-Month Rolling Calendar

Public Letter(s) to the UAC

PUBLIC COMMENT INSTRUCTIONS

Members of the Public may provide public comments to teleconference meetings via email, teleconference, or by phone.

1. **Written public comments** may be submitted by email to UACPublicMeetings@cityofpaloalto.org.
2. **Spoken public comments using a computer** will be accepted through the teleconference meeting. To address the Council, click on the link below to access a Zoom-based meeting. Please read the following instructions carefully.
    - You may download the Zoom client or connect to the meeting in- browser. If using your browser, make sure you are using a current, up-to-date browser: Chrome 30 , Firefox 27 , Microsoft Edge 12 , Safari 7 . Certain functionality may be disabled in older browsers including Internet Explorer.
    - You may be asked to enter an email address and name. We request that you identify yourself by name as this will be visible online and will be used to notify you that it is your turn to speak.
    - When you wish to speak on an Agenda Item, click on "raise hand." The Clerk will activate and unmute speakers in turn. Speakers will be notified shortly before they are called to speak.
    - When called, please limit your remarks to the time limit allotted. A timer will be shown on the computer to help keep track of your comments.
3. **Spoken public comments using a smart phone** will be accepted through the teleconference meeting. To address the Council, download the Zoom application onto your phone from the Apple App Store or Google Play Store and enter the Meeting ID below. Please follow the instructions B-E above.
4. **Spoken public comments using a phone** use the telephone number listed below. When you wish to speak on an agenda item hit *9 on your phone so we know that you wish to speak. You will be asked to provide your first and last name before addressing the Council. You will be advised how long you have to speak. When called please limit your remarks to the agenda item and time limit allotted.

CLICK HERE TO JOIN **Meeting ID: 966 9129 7246 Phone:1-669-900-6833**

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Utilities Advisory Commission
Staff Report

From: Dean Batchelor, Director Utilities
Lead Department: Utilities

Meeting Date: May 1, 2024
Staff Report: 2404-2902

TITLE
Approval of the Minutes of the Utilities Advisory Commission Meeting Held on April 3, 2024

RECOMMENDATION
Recommended Motion
Staff recommends that the UAC consider the following motion:

Commissioner _____ moved to approve the draft minutes of the April 3, 2024 meeting as submitted/amended.

Commissioner _____ seconded the motion.

ATTACHMENTS
Attachment A: 04-03-2024 DRAFT UAC Minutes

AUTHOR/TITLE:
Jenelle Kamian, Program Assistant I

UTILITIES ADVISORY COMMISSION MEETING
MINUTES OF APRIL 3, 2024 REGULAR MEETING

CALL TO ORDER

Chair Segal called the meeting of the Utilities Advisory Commission (UAC) to order at 6:03 p.m.

Present: Chair Segal, Vice Chair Scharff, Commissioners Forssell, Mauter and Phillips

Absent: Commissioners Croft and Metz

AGENDA CHANGES, ADDITIONS AND DELETIONS

None

PUBLIC COMMENT

John Kelley encouraged the UAC to consider at a future meeting the topic of allowing ADUs to have separate electrical and water service.

Lisa Madden thought AB 1944 was great and could be a good example for other items in Section 54954.3.

APPROVAL OF MINUTES

ITEM 1: ACTION: Approval of the Minutes of the Utilities Advisory Commission Meeting Held on March 6, 2024

Chair Segal invited comments on the March 6, 2024 UAC draft meeting minutes.

ACTION: Commissioner Phillips moved to approve the draft minutes of the March 6, 2024 meeting as submitted.

Vice Chair Scharff seconded the motion.

The motion carried 5-0 with Chair Segal, Vice Chair Scharff, Commissioners Forssell, Mauter and Phillips voting yes.

Commissioners Croft and Metz absent.

ITEM 2: ACTION: Approval of the Minutes of the Special Utilities Advisory Commission Meeting Held on March 14, 2024

Chair Segal invited comments on the March 14, 2024 UAC draft meeting minutes.

ACTION: Chair Segal moved to approve the draft minutes of the March 14, 2024 meeting as submitted.

Commissioner Phillips seconded the motion.

The motion carried 4-0 with Chair Segal, Vice Chair Scharff, Commissioners Mauter and Phillips voting yes.

Commissioner Forssell abstained.

Commissioners Croft and Metz absent.

UTILITIES DIRECTOR REPORT

Utilities Director Dean Batchelor delivered the Director's Report.

April 1 through April 8, San Francisco Public Utilities will perform an inspection project of one of the drinking water transmission pipelines along El Camino at California Avenue. This work will result in closure of two lanes of traffic on El Camino from Cambridge Avenue to California Avenue. Vehicle and pedestrian crossings at the intersection of California Avenue and El Camino may be restricted.

On March 12, the City began posting refunds to utility customers who were members of the Green case. The City will disburse funds in three payments of approximately $156. Active gas utility customers who had service between September 23, 2015 and June 30, 2022 will receive credits on their next utility bill, in March 2025 and in March 2026. The City will reach out to non-active customers.

Hydro update: As of March 28, levels in Northern and Central California are above average. Snowpack levels are slightly above average. The City's hydro resources were projected to produce about 108% of the long-term average output for this fiscal year and 109% of the long-term average for 2025.

On February 26, 2024, Council suspended enforcement of the all-electric requirement for new buildings and substantial remodels. Staff was working on a new set of local energy Reach Codes to present to Council for consideration before their break.

As of the end of March, 29 sites have received rebates for EV chargers. Recent participants in the program include Stanford Healthcare, Children's Hospital, a school and three condominiums. The City in partnership with nonprofit Cool the Earth Ride and Drive extended the EV discount campaign through March to provide residents with savings up to $11,500 on EVs from Audi, Ford, Hyundai and Kia. In April or May, there will be a limited-time rebate campaign.

Upcoming events:

- April 4 WaterConservationShowcase.com
- April 13 Tips and Tricks for Successful Turf Conversions
- April 21 Earth Day Festival
- May 4 The UAC will have a couple tables at the May Fete parade. Commissioners were invited to host with staff and talk to community members who stop at the table.

In response to Chair Segal's request for further explanation, Mr. Batchelor stated the City suspended the Reach Code. Utilities, Public Works and the Development Center were working together on new standards for staff to present to Council before they go on break. Staff's report to Council will include models of higher efficiency standards in San Jose, San Luis Obispo and a couple other cities. Staff will provide more information by June 2024.

In reply to Commissioner Phillips's queries about the Green case refund, Mr. Batchelor responded it was coming out of the General Fund. Utilities Strategic Business Manager Dave Yuan replied the total was about $17M.

NEW BUSINESS

ITEM 3: ACTION: Approval of Chair and Vice Chair to Serve a Short Term of April 3, 2024 through April 2, 2025

ACTION: Commissioner Mauter moved to approve Vice Chair Scharff as Chair.

Commissioner Phillips seconded the motion.

The motion carried 5-0 with Chair Segal, Vice Chair Scharff, Commissioners Forssell, Mauter and Phillips voting yes.

Commissioners Croft and Metz absent.

Chair Scharff accepted the role of Chair.

ACTION: Commissioner Segal moved to approve Commissioner Mauter as Vice Chair.

Chair Scharff seconded the motion.

The motion carried 5-0 with Chair Scharff and Commissioners Forssell, Mauter, Phillips and Segal voting yes.

Commissioners Croft and Metz absent.

Vice Chair Mauter accepted the role of Vice Chair.

ITEM 4: ACTION: Continuation of Staff's Request for Utilities Advisory Commission's Recommendation for City Council to Approve the Phase IV Cross-Bore Verification Program

Principal Engineer Aaron Perkins delivered a slide presentation. A search on the federal government's website demonstrated seven reportable incidents of a natural gas cross-bore occurred in the past 20 years across the nation. Palo Alto's cross-bore inspection program discovered 23 gas cross-bores in sewer laterals, 0 reportable incidents.

Of the 966 laterals proposed for Phase IV cross-bore inspection, 670 have emergency excess flow valves (EFVs) on gas services, 296 do not. The cost estimate is $8950 to install an EFV for gas service including a four-person crew, materials, excavation and restoration of the street. The total to install 296 EFVs is $2.6M. EFV installation cost is about 190% more than the cost to perform Phase IV cross-bore

inspection. An EFV failed to prevent an incident in Chicago because EFVs require a certain amount of flow to trigger.

Mr. Perkins displayed a table. The criteria for priority factored the volumes of people impacted and the likelihood of finding cross-bores. Groups 1, 2 and 3 include schools, hospitals, churches and business districts. Group 1 does not have EFVs, Group 2 has manual valves and Group 3 has EFVs. The majority of cross-bores found during this project were within 15 feet to the sewer lateral. Staff will provide an update to the UAC after the first year of Phase IV. The estimated Cross-Bore Phase IV Project two-year budget was $1,352,400 ($676,200 for FY25 and $676,200 for FY26). Assistant Director WGW Engineering and Operations Matt Zucca stated there was a 1% or $0.70 impact on an average customer's gas utility bill for every $550,000 but this was not a recurring cost.

Mr. Perkins and Mr. Zucca addressed the Commission's questions. Phase IV is the final phase to inspect historic laterals. Staff reviewed the table of remaining laterals and all groups had a risk, so staff's proposal for next year is to prioritize inspections of laterals with higher risk (15 feet or less and Group 1).

Utilities Director Dean Batchelor remarked that staff's proposal was to do the first half of Phase IV in this budget period. Staff will review the results and return to the UAC next year for approval to continue Phase IV. The Water, Gas, Wastewater (WGW) group does not have the resources to perform 966 inspections internally. Staff believed inspections were important. If the UAC did not approve the proposal, staff would complete the project internally, which may take 8 or 10 years although staff had not calculated the actual timeline. Discussion ensued.

Mr. Perkins and Mr. Zucca explained PG&E's process. PG&E has a historic cross-bore program. PG&E changed the method for installing services. PG&E digs opens a path from the curb to the house and drops it in as opposed to running the risk of a cross-bore and the errors introduced with video.

Since approximately 2011, the City of Palo Alto uses in-house staff to video inspect the sewer when installing a gas line and previously used contractors since 2001. If Council did not approve spending additional money for Phase IV cross-bore inspections, Mr. Zucca guessed it would take 5 or 10 years to complete the project in-house. Mr. Perkins did not expect to complete the project in less than 10 years when taking into consideration approximately 100 inspections per year and some may include excavations and additional work.

Mr. Perkins addressed Vice Chair Mauter's questions. Potholing, cleanout installation and section replacement would have bid item pricing fixed for that year. Funds expended on private property benefit the homeowner to clear the cross-bore. If a failed private sewer line is found, it will be replaced to complete the inspection, resulting in a benefit to the homeowner.

The Commission reached a consensus to include Group 1 in its entirety and sewer laterals within 15-feet proximity to the gas service in Groups 2 through 6.

Mr. Perkins remarked that staff would return to the UAC in the fall or before the next round of work for approval. Chair Scharff encouraged staff to complete the remainder of the inspections using staff's resources instead of returning to the UAC to seek further approval.

ACTION: Chair Scharff moved the Utilities Advisory Commission recommend the City Council approve FY25 funding in the amount of $676,200 to complete the Cross Bore Phase IV inspections of Group 1 and

inspections of the sewer laterals within proximity of 15ft or less to the gas service in Groups 2 through 6, for a total of 495 inspections.

Commissioner Segal seconded the motion.

The motion carried 5-0 with Chair Scharff, Vice Chair Mauter, Commissioners Forssell, Phillips and Segal voting yes.

Commissioners Croft and Metz absent.

ITEM 5: ACTION: Recommendation to Adopt a Resolution Authorizing the City Manager or Their Designee to Execute an Amendment to the Power Purchase Agreement with Ameresco Half Moon Bay LLC for the Purchase of up to 60,000 Megawatt-Hours per Year of Biogas Energy over a Term of up to 20 Years for a Total Not to Exceed Amount of $147.2 Million; CEQA Status: Not a Project under CEQA Guidelines Section 15378

Sr. Resource Planner Jim Stack, PhD, delivered a slide presentation. Palo Alto and Alameda Municipal Power each receive 50% of the Ox Mountain Landfill-Gas-to-Energy (LFGTE) Plant's output. The plant delivers about 44,000 MWh/year to Palo Alto, which is approximately 5.5% of the City's overall electricity consumption. It has been a very reliable, valuable plant. In addition to electricity, the plant provides Local Resource Adequacy (RA) capacity and Bucket 1 Renewable Energy Credits (RECs). Palo Alto has a requirement to purchase RA capacity every year and there is a shortage of local RA in our portfolio.

The current contract price escalates at 1.5%/year. In 2026, the contract price will be $67/MWh, which is a very competitive price in the current market. The contract ends in 2029. Proposed Amendment No. 1 increases the plant's capacity, extends the contract 20 years from the expansion capacity online date, increases the price to $74/MWh when the expansion capacity comes online and the annual escalation factor drops to 1% except in years with high inflation when it will be 2%. The contract price will be $0.93/MWh lower if the expansion capacity does not qualify as RA. Ameresco will have the right to terminate the amendment if it cannot obtain the CEQA permit and/or air permit needed for expansion capacity or if the required permitting improvements result in the project becoming uneconomic for them.

Amendment No. 1 would result in an annual cost to Palo Alto between $4.4M to $5.8M. Including the benefits of Bucket 1 REC prices and Local RA value, the net value is between -$4 to $21/MWh (expected value $11/MWh). The total cost of the original 20-year contract is $61.8M. With Amendment No. 1, the total cost of the approximately 37-year contract will be $147.2M. For the 20-year extension term, the maximum spending authority is $101M (approximately $5M/year).

Dr. Stack addressed the Commission's questions. The triggering of the termination rights clause does not have specific objective criteria, as there is no objective and non-proprietary information available to make this determination. Ameresco did not want to have discussions to pre-negotiate a pure contract extension in the event that this amendment termination provision is exercised, due to their focus being on the capacity expansion at this time.

The City of Palo Alto negotiated as a team with the City of Alameda and were offered the same terms.

Commissioner Phillips commented he was very strongly in support. Landfills were not going away anytime soon. It was great economically and for the environment.

Commissioner Forssell loves landfill gas as a resource. Dr. Stack addressed Commissioner Forssell's questions. In comparison to some of our other contracts, $74/MWh is an attractive price. The City executed this agreement in 2005. Today, a baseload contract for a new resource is probably $95-$100/MWh. In the current market, the price of RECs is over $70/MWh although it is expected to come down in a few years. Most of our solar projects are priced in the $70 range but the most recent was in the mid-$30s. Dr. Stack believed the newest geothermal contract, executed last year, was priced at $79/MWh.

Dr. Stack explained the proposal to waive the anti-speculation requirement of Section D.1 of the City's Energy Risk Management Policy. The anti-speculation requirement prevents the City from purchasing things we will not need in the future in order to sell them and make a profit. Given the huge amount of variation in our supply portfolio due to hydroelectric variability and climate change impacts, staff recommended waiving the requirement because it does not expect to have consistent surpluses in the future. This will be a core part of meeting our needs as well as helping meet our Renewable Portfolio Standard (RPS) requirements. Any resource we contract for now would probably require a waiver unless it was a contract only delivering in the winter months when the City has energy deficits.

Chair Scharff remarked he was very strongly in support and it seemed like a good deal for the Utility.

ACTION: Commissioner Phillips moved Staff recommendation that the Utilities Advisory Commission (UAC) recommend that the City Council adopt a Resolution (Attachment A) to:

1. Authorize the City Manager, or their designee, to execute Amendment No. 1 (Exhibit A to Attachment A) to the Power Purchase Agreement (PPA) with Ameresco Half Moon Bay LLC (Ameresco) to increase the generating capacity of the Ox Mountain landfill-gas-to-energy (LFGTE) project, increase the contract price, and extend the contract term by approximately 17 years;
2. Increase the maximum spending authority under the PPA from $61,800,000 to $147,200,000; and
3. Waive the application of the anti-speculation requirement of Section D.1 of the City's Energy Risk Management Policy as it may apply to surplus electricity purchases resulting from the City's execution of this amendment, due to the small increase in the facility's generating capacity and the City's need for the output to continue complying with its Renewable Portfolio Standard (RPS) procurement requirements.

Commissioner Forssell seconded the motion.

The motion carried 5-0 with Chair Scharff, Vice Chair Mauter, Commissioners Forssell, Phillips and Segal voting yes.

Commissioners Croft and Metz absent.

ITEM 6: ACTION: Utilities Advisory Commission FY 2024 - 2025 Work Plan

Utilities Director Dean Batchelor invited commissioners to have a conversation on this item and move the work plan forward.

Chair Scharff believed the scope of work plans should be as broad and flexible as possible so the UAC could take up any matter they choose.

Vice Chair Mauter wanted to define the relationship between the UAC and S/CAP. A RACI table to clarify who is responsible, who has decision-making authority, who to consult and who to inform as these efforts get underway would be very conducive to helping S/CAP and the UAC collaborate more effectively and more effectively work with Council to move some of these actions forward.

The Commission discussed changes to Standing Topics.

ACTION: Commissioner Forssell moved to approve Staff recommendation the Utilities Advisory Commission Review and Approve the Amended Utilities Advisory Commission's 2024-2025 Annual Work Plan, and Recommend the City Council Review the Work Plan and Provide Feedback

Commissioner Segal seconded the motion.

The motion carried 5-0 with Chair Scharff, Vice Chair Mauter, Commissioners Forssell, Phillips and Segal voting yes.

Commissioners Croft and Metz absent.

COMMISSIONER COMMENTS and REPORTS from MEETINGS/EVENTS

Commissioner Phillips attended a power conference at Berkeley. He learned it takes 8000 hours of training to become an authorized electrician but authorized electricians can only have one trainee working for them at a time according to California State Law. In Alberta, Canada, 210 people who had EVs were assigned into three groups. One group monitored their behavior on charging, the second group received gave a $0.035/kWh reward for off-peak charging at home, and an optimization program managed when the third group could charge. The time-of-use group changed their behavior so much, the spike moved to later in the evening. Commissioner Phillips asked staff to send slides to the commissioners.

Commissioner Segal stated this is likely her last meeting. She expressed her gratitude for having been a part of the UAC and the pleasure of working with her fellow commissioners. The quality of staff impressed her. She believed Palo Alto residents were in good hands.

Commissioner Forssell expressed gratitude to staff, commissioners and the public who comment at UAC meetings. She felt it was an honor and a pleasure to serve as commissioner. Going forward, she will watch the UAC meetings on video.

If new commissioners were not appointed within the next month, Commissioner Segal and Commissioner Forssell would be back for the next UAC meeting.

FUTURE TOPICS FOR UPCOMING MEETINGS

Commissioner Segal suggested a topic on ADUs having their own meter as the public commenter requested. Chair Scharff agreed. Utilities Director Dean Batchelor pointed out that Utilities Rules and Regulations only allow one set of services to any parcel. Utilities staff needed to have more conversations and talk to Jonathan Lait's group about permitting. Chair Scharff asked staff to put it on

the topic list and staff can address the UAC to say if rules and regulations will or will not change. Commissioner Forssell thought it was a compelling topic and remarked that ADUs need separate meters to allow for EV chargers and electrification.

NEXT SCHEDULED MEETING: May 1, 2024

ADJOURNMENT

Chair Scharff moved to adjourn.

Commissioner Phillips seconded the motion.

The motion carried 5-0 with Chair Scharff, Vice Chair Mauter, Commissioners Forssell, Phillips and Segal voting yes.

Commissioners Croft and Metz absent.

Meeting adjourned at 8:08 p.m.

Utilities Advisory Commission
Staff Report

From: Dean Batchelor, Director Utilities
Lead Department: Utilities

Meeting Date: May 1, 2024
Staff Report: 2401-2564

TITLE

Recommendation to Retain the Current WAPA Hydroelectricity Base Resource Contract Allocation From 2025-2030

RECOMMENDATION

Staff recommends that the UAC recommend that the City Council keep the City of Palo Alto's full share of its allocated hydroelectric resource under the current hydroelectricity supply contract, the 2025 Base Resource Contract from Sierra Nevada Region of the Western Area Power Administration (2025 WAPA Contract), as approved by Council in February of 2021 (Staff Report #11679).[1] No action from City Council is required to remain in the contract at the current resource allocation percentage. Staff will revisit project financial impact in 2029 and make a recommendation for the period of 2030 through 2034. The decision to reduce the contract allocation or terminate the contract will be revisited every five years until the last termination opportunity in 2049.

EXECUTIVE SUMMARY

In 2021 Council approved the 2025 WAPA Contract, which allocates to the City a 12.06299%[2] share of the WAPA contract's base resource generation from 2025-2055. As negotiated, the City has the option to reduce its allocation or terminate the 2025 WAPA Contract until June 30, 2025. The current decision is whether to recommend that Council maintain, decrease, or exit our hydroelectricity supply contract with WAPA for the years 2025 – 2030. If the City chooses to keep this contract in the electricity supply portfolio at the current allocation percentage, there will be an opportunity to reduce or eliminate the City's resource allocation share again in 2029, and every five years until the contract terminates in 2054. Exiting the contract or reducing the contract allocation share is a permanent decision through the remaining duration of the contract (2054).

[1] Staff Report 11679 https://www.cityofpaloalto.org/files/assets/public/v/1/agendas-minutes-reports/reports/city-manager-reports-cmrs/year-archive/2021/id-11679.pdf

[2] This percentage is 98% of the City's current share of the WAPA Base Resource generation. 98% of the current contract from 2005-2024 is the maximum available to the City for 2025-2054.

Staff performed extensive analysis supporting its recommendation to extend the full share of contract, which will continue to provide approximately 40% of the City's current electricity supply. The recommendation to keep the hydroelectric contract is driven by high market electricity prices, improved project cost control, and greatly improved operational flexibility of the project. CPAU staff is working alongside WAPA staff to increase flexibility of the hydroelectric resource, to mitigate risks to the project, and to improve value in the rapidly changing electricity markets of the Western U.S.

Staff would like to highlight exceptional efforts over the last eight years by federal staff at both WAPA and U.S. Bureau of Reclamation (USBR) who have worked with power customers to increase project flexibility while lowering costs. This continued partnership with power customers helps to mitigate the risks and uncertainties inherent in the contract.

BACKGROUND

The City of Palo Alto Utilities (CPAU) has been a power customer of the USBR and WAPA since 1960. The City signed the current contract in 2000 (CMR 378:00, Resolution 8007[3]) which began delivering hydroelectric power to the City in 2005 and would terminate if not extended by December 31, 2024. City Council approved the 2025 WAPA Contract extension in 2021 after nearly seven years of negotiation (Staff Report #11679[4]). This 2025 WAPA Contract extension runs from 2025-2055 unless the City decides to reduce its resource allocation percentage or exit the contract. The City can choose to reduce its resource allocation or exit the contract before June 30, 2024, and then may reconsider every five years thereafter for duration of the 30-year extension, assuming the City remains in the contract through the full extension term. Therefore, while this is potentially a 30-year extension, any decision to remain at the City's current resource allocation percentage is only binding for the next five years from January 1, 2025 to December 31, 2029. Most renewable and hydroelectricity contracts require a ten to twenty-year commitment, so the opportunity to reduce or end the contract every five years is a somewhat rare flexibility. No action will be required to keep the current allocation percentage, but as noted above, a decision to reduce the City's allocation percentage or terminate the agreement will be permanent for the remainder of the 30-year extension period.

In 2020 WAPA completed a cost-of-service study which found that power customers such as the City have overpaid over the lifetime of the project since 1930. WAPA has been returning overpaid funds to the City and other power customers since 2021 and that will continue through 2030,[5] and if the City exits the contract in 2025 then overpaid funds will not be reimbursed to the City. The contractual costs have been estimated by WAPA and USBR to be about $9M in 2025

[3] Resolution 8007 https://www.cityofpaloalto.org/files/assets/public/v/1/city-clerk/resolutions/reso8007.pdf
[4] Staff Report 11679 https://www.cityofpaloalto.org/files/assets/public/v/1/agendas-minutes-reports/reports/city-manager-reports-cmrs/year-archive/2021/id-11679.pdf
[5] WAPA's financial limitations do not allow return of funds by 2025.

escalating to about $11.5M in 2030. Contractual costs are not fixed, but WAPA and USBR aim for cost stability year to year.

The 2025 WAPA Contract governs a hydroelectricity resource which comes almost entirely from the Central Valley Project. The Central Valley Project is a federal water storage and conveyance project consisting of twenty reservoirs, ten generating power plants, three pump stations, and 643 miles of canals. The Central Valley Project can generate up to 2,000 MW and delivers about seven million acre feet of water 500 miles south each year. Most of the water delivered irrigates agriculture in the southern part of the California Central Valley. As a reference this is equivalent to moving water from Jamestown New York, on Lake Erie, to Spartanburg South Carolina. Figure 1 shows the entire project spanning much of California. Figure 2 shows a simplified diagram of the Central Valley Project focused on the reservoirs, power plants and pumping stations. CPAU currently purchases about 12% of the Base Resource hydroelectricity, which is the surplus electricity from the project and amounts to about 65% of the total generation of the Central Valley Project.

Figure 1. USBR Map of Central Valley Project- By Shannon1 - Own work, CC BY-SA 4.0, https://commons.wikimedia.org/w/index.php?curid=47015188

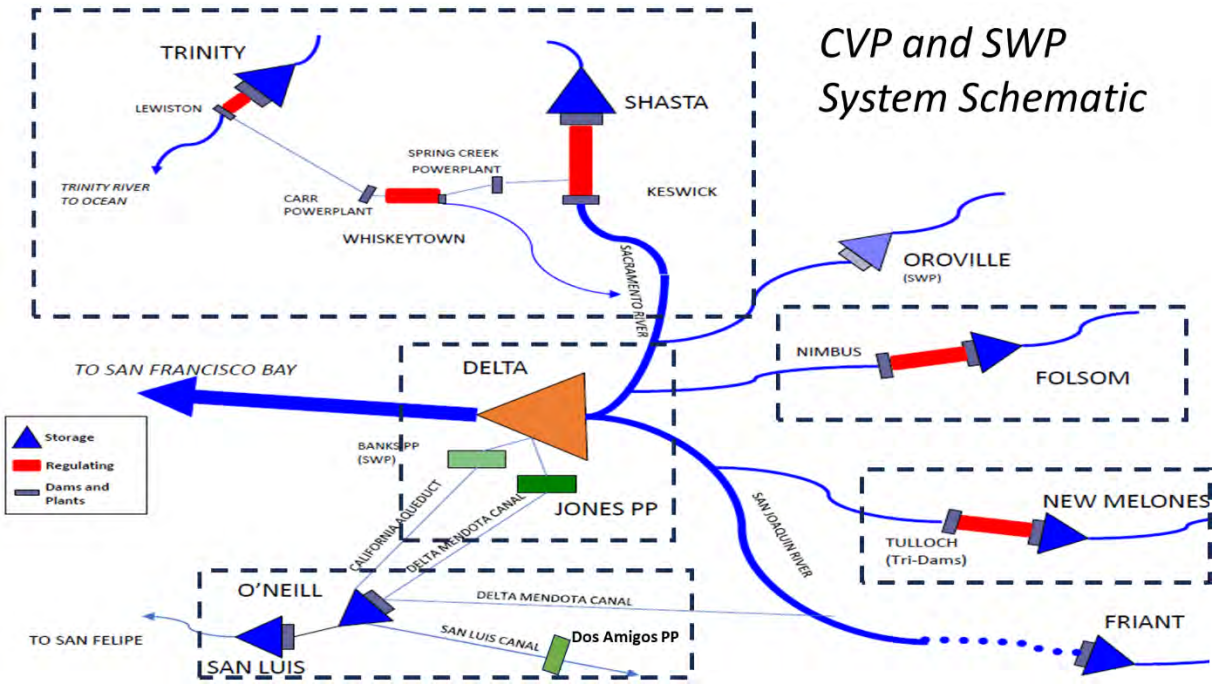


Figure 2.Simplified diagram of the Central Valley Project (CVP). A few State Water Project (SWP) units are shown when they are closely integrated or shared with the CVP. Credit: Cary Fox, USBR 2024

ANALYSIS

To determine whether or not to recommend keeping the status quo under this contract extension, staff performed detailed modeling with Ascend Analytics as well as a broader uncertainty and sensitivity analyses.

The modeling with Ascend Analytics was very thorough and granular, but staff performed supplemental sensitivity and uncertainty analysis to illustrate the magnitude of the uncertainties as well as to verify the Ascend model results with more conservative assumptions.

Ascend Analytics Analysis

Staff worked closely with the Ascend Analytics team to complete an extremely robust analysis of the energy value under the 2025 WAPA Contract, using hundreds of Monte Carlo simulations comparing WAPA to other resources and variable forward-market prices. Several large community choice aggregators use Ascend Analytics tools for valuation of electricity supply contracts as it is considered one of the best-in-class tools currently available.

Ascend uses current market prices along with planned transmission projects and generation projects to create a custom market price forecast for the California ISO area. These price forecasts by region within the California ISO are then used to generate project-specific price forecasts at each ISO node. This nodal price granularity provides improved accuracy for project revenue projections.

Staff worked alongside the Ascend Analytics team to ensure the model dispatched the hydropower from the 2025 WAPA Contract realistically, respecting hourly maximum and minimum constraints (which change daily but, but were modeled by a representative day per month) and then shaping the output around the highest priced hours. Staff ensured Ascend implemented monthly and annual total energy constraints which were tied to the precipitation of that year. Staff also worked with Ascend to sweep a broad modeling space with large variations precipitation each year and a large range of forward-market electricity prices to reflect the current unpredictable conditions.

Supplemental Sensitivity and Uncertainty Analysis

The primary purposes of the supplemental analyses were to explore a broader set of uncertainties, as well as more conservative scenarios than were considered with Ascend. The supplemental analyses by staff included:

- Input lower energy prices since forward-market prices have come down since last year when the IRP modeling was completed, and explore sensitivity of results to a broader range of prices
- Quantify the impact of highly variable precipitation as an explicit cost adder of the project as the variable generation (steady costs are an intrinsic cost of the current 2025 WAPA Contract)
- Quantify the cost to the City's electricity portfolio of the seasonal mismatch of generation from WAPA, which generates in the spring and summer, versus the City's electric portfolio needs, which are mostly in the fall and winter
- Quantify the cost adder due to the inaccurate month-ahead forecast from WAPA
- Map the magnitude of uncertainties that should be planned for via hydroelectricity reserves if City keeps its status quo allocation under the 2025 WAPA contract
- Map the sensitivity to each of the additional costs and potential regulatory risks.

Supplemental Costs Included in Analysis

Actual costs of the 2025 WAPA contract in the City's electric utility resource portfolio are greater than the contractual costs, due to: the hydrologic variability which we self-insure against and partially pass through to customers (via the large hydro adder), the high cost of supplemental energy in dry years, and the cost monthly forecasting errors. These and other costs are described in more detail below and are included as intrinsic costs to the project.

Cost of precipitation variability:

- The structure of the 2025 WAPA Contract is that CPAU must pay fully for the contracted allocation amount, no matter how much energy is generated. This means CPAU pays an extremely volatile price per unit of electricity from year to year given the extreme swings from wet to dry years in California. For example:
    - In 2022 CPAU received about 20% of long-term average generation expected
    - In 2021 CPAU received about 50% of long-term average generation expected
- Back-to-back dry years and extreme multi-year droughts are becoming more common in California, which effectively increases the reserve funds CPAU needs to self-insure against

precipitation variability through the Hydroelectric Stabilization Reserve. CPAU limits the self-insurance costs by accepting some level of volatility in electricity rates, as CPAU passes through to customers some costs in Hydro Rate Adjustment surcharge.

Cost of seasonal mismatch with CPAU electric portfolio:

- WAPA delivers electricity mostly in the Spring and Summer, when CPAU's electric portfolio already has a surplus, requiring CPAU to sell power from other projects during low price seasons, and purchase market power during higher priced Fall and Winter to comply with risk management guidelines. The seasonal mismatch to CPAU's electric portfolio is quantified and included additional cost to capture the full cost of keeping the 2025 WAPA Contract.

Cost of month-ahead forecast errors:

- Poor forecasts add cost and exposure to the day-ahead market if the energy is not delivered as expected for the current month. The month-ahead forecasts from WAPA have been shown to have persistent inaccuracies to due to the operational complexity of the project and the reservoir, streamflow, temperature, dissolved oxygen, and pumping requirements. This cost is quantified and included in staff's analysis.

Supplemental Uncertainties Included in Analysis

- Exploring a broader range of low power prices similar to 2019 power price levels as an additional conservative sensitivity analysis
- Additional environmental costs which could be added to the contract cost analysis in the future under some interpretations of the Central Valley Improvement Act
- Lower generation from the project from both climate change and additional environmental constraints which would lower absolute generation which could be implemented as part of federal and state proceedings
- Lower value generation from more generation being shifted into spring months with lower value from both reduced snowpack and additional environmental constraints being considered at the state and federal level

RESULTS

Overall, the 2025 WAPA Contract competed favorably under the large majority of scenarios explored, due to the dispatchable nature of the hydroelectricity. The improved dispatchability allows the project to generate in the late evening hours of the summer and even to some extent year-round as the overbuild of solar generation causes shortfalls of dispatchable power in the evening hours. The new flexibility of the project benefits from the increasing seasonal and hourly volatility from surplus solar in California. USBR operators are currently cycling pumped storage within the day to capture additional power revenues, backing down generation and spilling water over dams to capture negative prices, and pumping during the middle of the day to capture negative prices. These operational improvements are new in the last few years and are saving millions of dollars per year to CPAU and other power customers.

Results of Analysis with Ascend Analytics

The WAPA contract was chosen over competing resources in nearly every scenario of hundreds designed by staff and run by Ascend Analytics. The WAPA contract also had a positive net energy value in nearly every scenario. Some important caveats to these Ascend results are that the forward-market energy prices were very high last year, and that the supplemental cost of the inaccuracy of the month-ahead forecast were not explicitly added to the cost of the WAPA electric product.

Results of Supplemental Uncertainty and Sensitivity Analysis

The results of the additional uncertainty and sensitivity analysis are shown in Figure 3. Key takeaways are that the uncertainties are large especially in the latter years, but overall, the 2025 WAPA Contract will likely have a positive net value to CPAU.

The largest drivers of the positive net value are high market electricity prices and the higher likelihood of better than average generation in 2025 and 2026. The probability of relatively high hydroelectricity generation in 2025 and 2026 is due to the very high precipitation in 2023 and the average precipitation 2024.

The primary drivers of the decreasing value over time are the increasing chance of dry years over the next five years, increasing costs, and decreasing power market prices. Current market price forecasts expect prices to decline from today through 2030, and each forecast for several months has slightly accelerated this projected decline.

The largest drivers of uncertainty are the variability of power prices, variability of precipitation, and regulatory risks to the amount and timing of generation.

The magnitude of uncertainty one year out into the future is approximately $7-$15M. With climate change increasing the likelihood of multiyear droughts in the future, CPAU may need to consider increasing the hydro reserve fund to ensure rate stability.

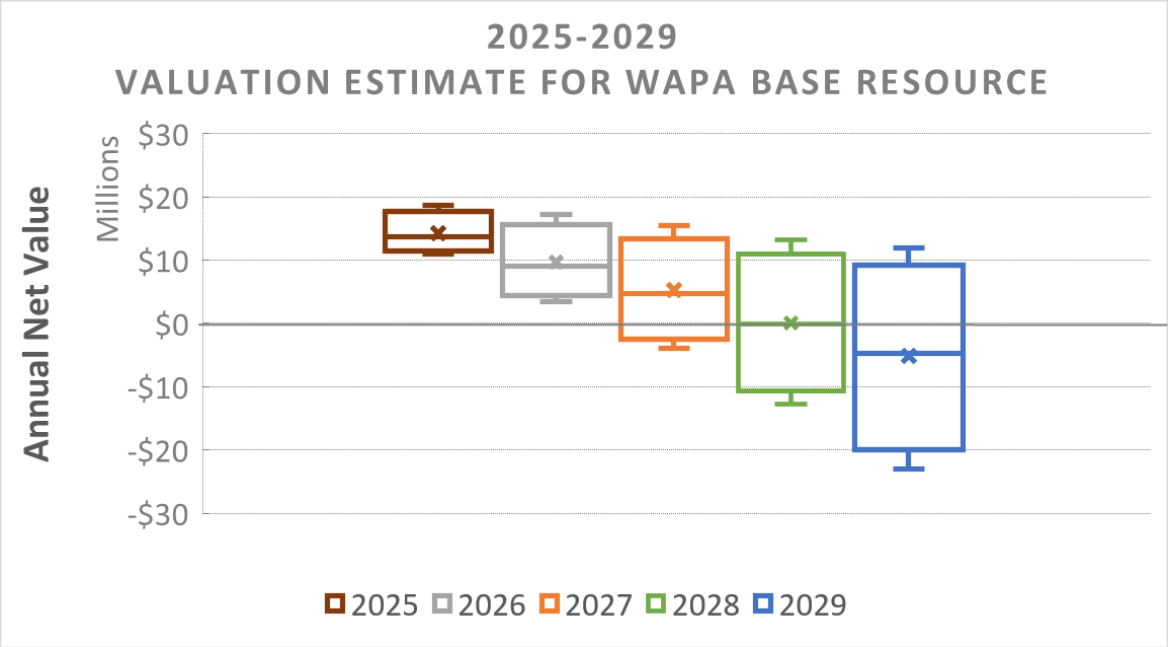


Figure 3 Results of the supplemental uncertainty and sensitivity analysis for years 2025-2029.

FISCAL/RESOURCE IMPACT

Although there is a great deal of uncertainty due to regulatory risks and precipitation uncertainty, CPAU is expected to save money in aggregate over the next five years by retaining the resource. The annual costs are estimated to be $9M in 2025 and escalate to approximately $11.5M in 2029. Alternatives to continuing with the 2025 WAPA Contract are likely substantially more expensive in the next two to three years. There are larger risks and uncertainties associated with the project in the latter two to three years of the period analyzed (2027-2029). Staff is engaged with federal staff partners to mitigate those risks as much as possible by operational improvements and facility upgrades.

POLICY IMPLICATIONS

Keeping the current resource allocation under the 2025 WAPA Contract is consistent with the 2023 Electric Utilities Integrated Resource Plan, the Utilities Strategic Plan, the Sustainability Implementation Plans, and the City's Sustainability and Climate Action Plan (S/CAP).

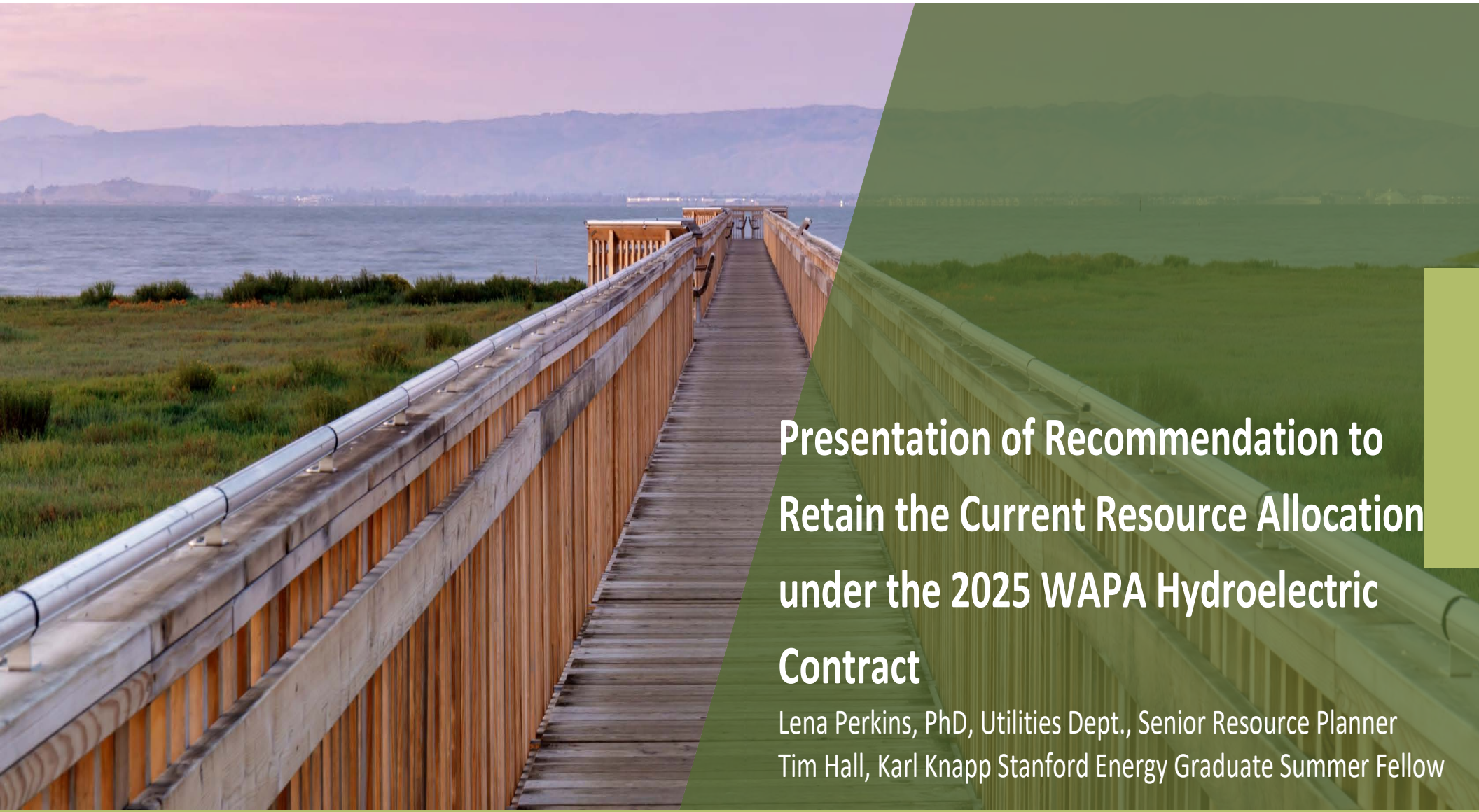
ENVIRONMENTAL REVIEW

The City Council's approval regarding remaining in this contract extension does not require California Environmental Quality Act review, because it does not meet the definition of a project under Public Resources Code Section 21065 and CEQA Guidelines Section 15378(b)(5), as an administrative governmental activity which will not cause a direct or indirect physical change in the environment. WAPA's 2025 Power Marketing Plan authorizing the contract has a Categorical Exclusion from National Environmental Policy Act (NEPA) review since WAPA is reallocating its existing resources and is not planning to increase its generation or transmission.

ATTACHMENTS
Attachment A: Presentation

AUTHOR/TITLE:
Dean Batchelor, Director of Utilities
Staff: Lena Perkins, PhD, Senior Resource Planner

CITY OF PALO ALTO



Presentation of Recommendation to Retain the Current Resource Allocation under the 2025 WAPA Hydroelectric Contract

Lena Perkins, PhD, Utilities Dept., Senior Resource Planner
Tim Hall, Karl Knapp Stanford Energy Graduate Summer Fellow

Utilities Advisory Commission: May 1, 2024

www.cityofpaloalto.org

Federal organizational structure involved in WAPA contract

U.S. Bureau of Reclamation (USBR)

- **Owns and runs dams & turbines** of Central Valley Project
- Federal Division under Dept. of Interior
- Manages 53 power plants (40 TWh, 1% of US power)

Western Area Power Administration (WAPA)

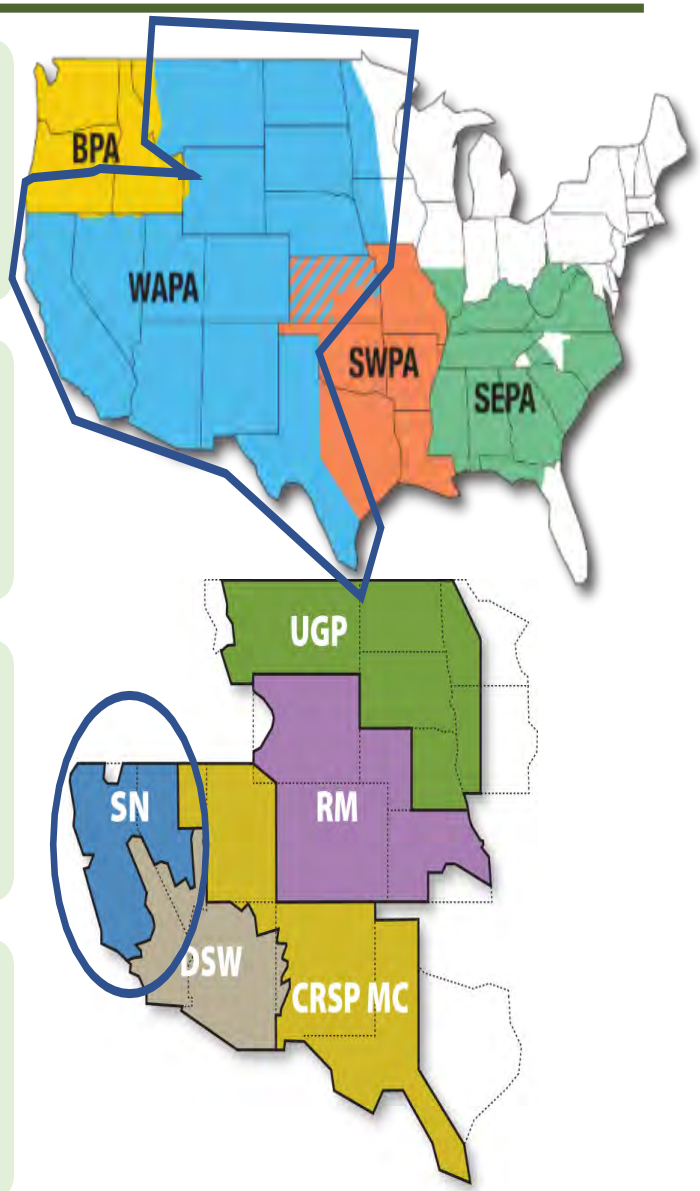
- 1 of 4 Federal Power Marketing Admin. under Dept. of Energy
- **Sell & transmit power** of 57 federal hydro (USBR, etc…)
- WAPA has 10.5 GW of capacity

Sierra Nevada Region (SNR of WAPA)

- **Palo Alto's Contract for CVP Power is with SNR of WAPA**
- 1 of 5 Regions of WAPA, 2.25GW/5.20 TWh/yr
- Primarily the Central Valley Project

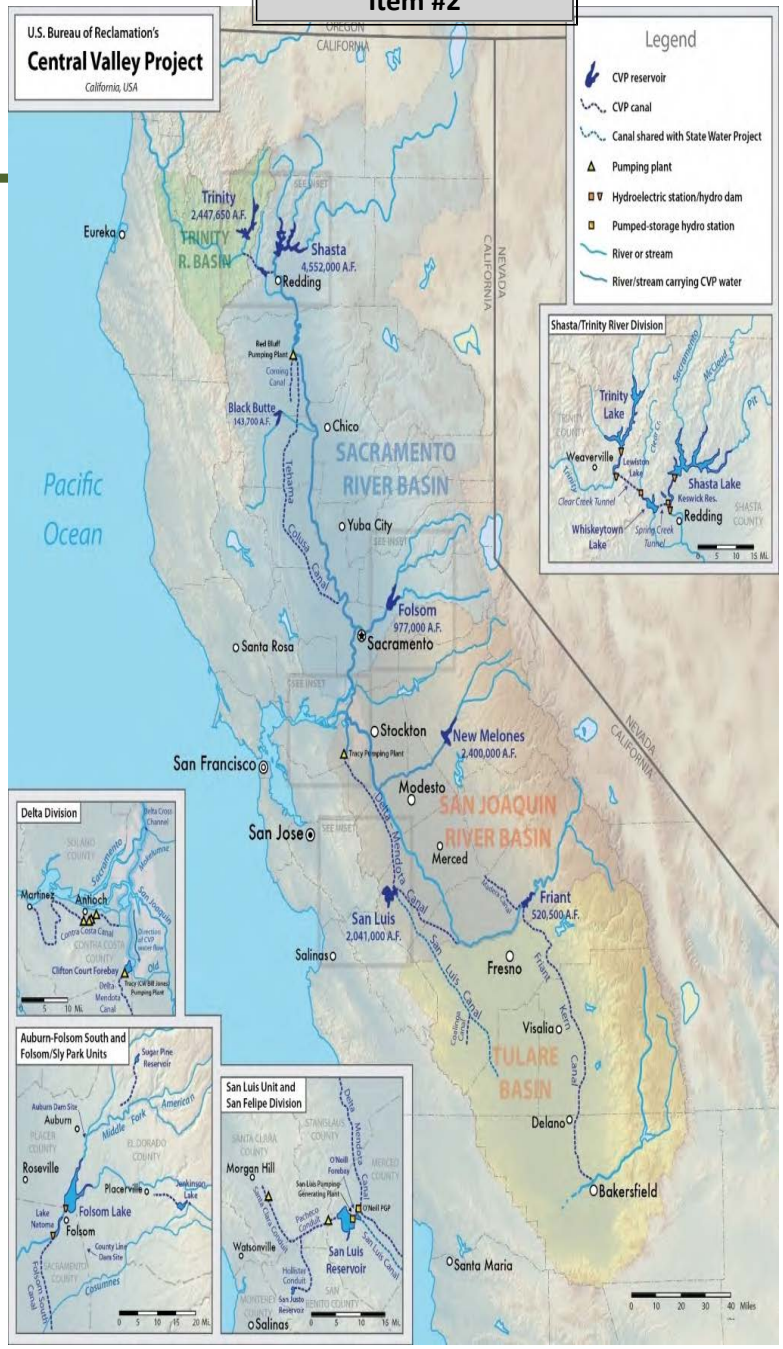
Central Valley Project (CVP)

- **Palo Alto has 12% share of the CVP Base Resource power**
- 20 dams, 10 power plants, 3 pumping stations & transmission
- Palo Alto's share is about 350 GWh/yr (40% of electricity supply)



CVP Background & CPAU History

- Central Valley Project (CVP) mostly built in 1930s & 1940s
- Federal water storage and conveyance project: 20 reservoirs, 10 generating power plants, 3 pump stations, 643 miles of canals
- Generates up to 2,000 MW, delivers ~7MAF/yr of water 500 miles south (primarily to agriculture)
- Palo Alto has been purchasing power from CVP since 1960s
- Base Resource electricity is ~ 65% of the total generation of the CVP power (extra power not needed for pumps)
- City currently purchases ~ 12% of the Base Resource hydroelectricity, (~ 40% of City's electricity supply)
- Current Base Resource contract (2005-2024) has option to extend 98% of current share through 2054
- City has option to exit or reduce 2025-2054 share until June 30, 2024
- If extended, City will also have option to exit or reduce contract in 2030



WAPA and City have worked hard to increase value & flexibility

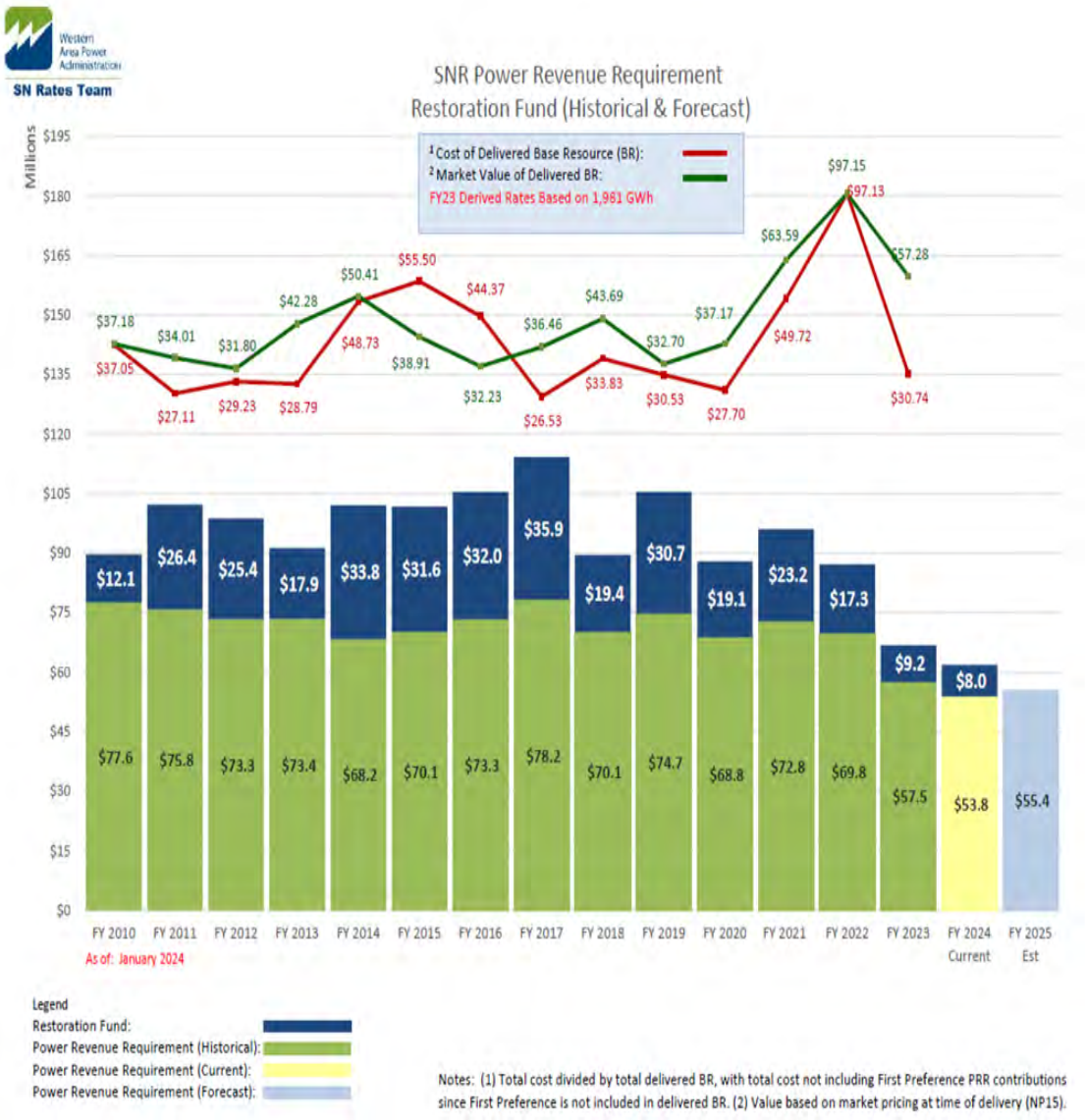
City staff has worked with WAPA and USBR since 2008 to increase flexibility

Increased revenue from better flexibility has lowered our costs

WAPA has also worked with staff to contain costs and is returning money to power customers 2019-2030

Staff is in active collaborations with WAPA and USBR to:

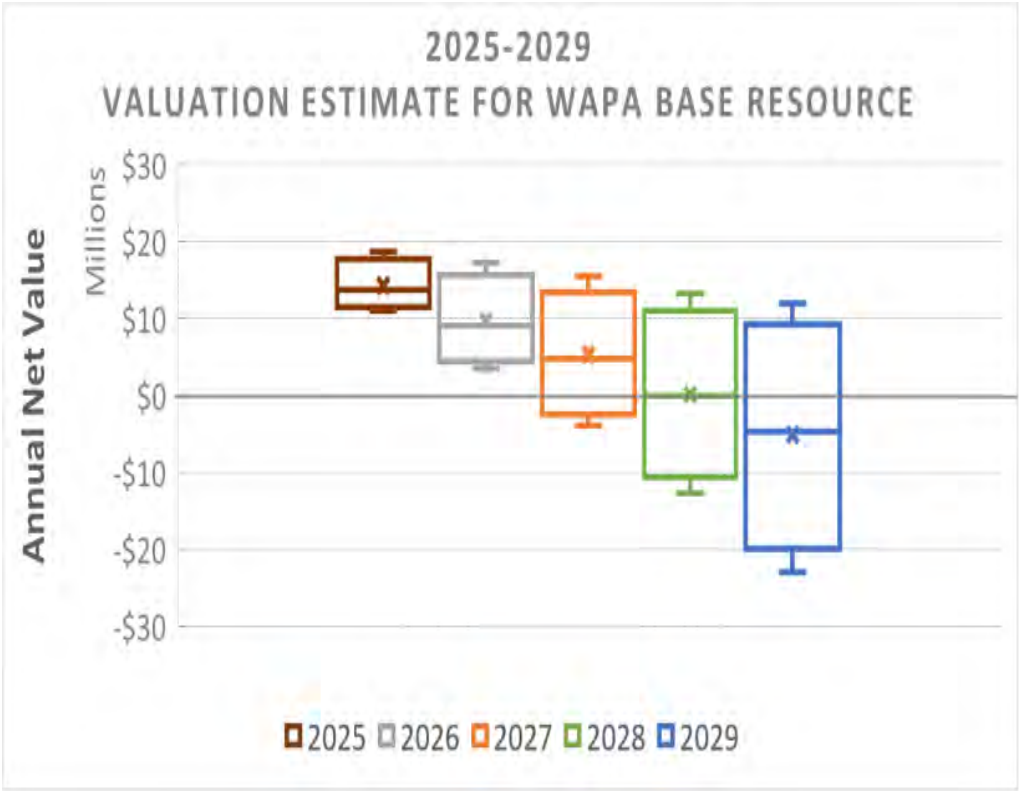
- Improve the forecasts
- Add flexibility, potentially via pumped storage, curtailing pumps, and batteries
- Optimize real-time emissions of operations



Recommend keeping 100% of 2025 WAPA Contract Extension through 2030

Positive net value driven by:

- Increased flexibility from hardware & software improvements
- High market electricity prices in evening hours
- Above average generation likely 2025 & 2026



Decreasing value over time driven by:

- decreasing power market prices
- Increasing chance of dry years from present
- Increasing cost projections

Uncertainty driven by:

- Electricity market price uncertainty & volatility
- Variability of precipitation
- Regulatory risks of lower generation & higher costs

Recommendation

- Staff recommends that the UAC recommend the City Council extend full share of 2025 WAPA Base Resource hydroelectric contract

Questions?

CITY OF PALO ALTO

Utilities Advisory Commission
Staff Report

From: Dean Batchelor, Director Utilities
Lead Department: Utilities

Meeting Date: May 1, 2024
Staff Report: 2312-2469

TITLE

Discussion of the Northern California Power Agency Issuing Bonds to Prepay for the Energy Received Under the 2025-2037 Geysers Power Purchase Agreement

RECOMMENDATION

Staff is seeking the Utilities Advisory Commission's (UAC's) input prior to staff completing the evaluation of the merits and risks of issuing bonds to prepay for the energy received under the 2025-2037 Geysers Power Purchase Agreement.

EXECUTIVE SUMMARY

The difference between tax-exempt and taxable bond yields offers the opportunity for tax-exempt entities like Palo Alto and other Northern California Power Agency (NCPA) members to structure prepay transactions to lower the cost of electric supply purchases. The current high interest rate environment and the 2025-2037 Geysers Power Purchase Agreement (Geysers PPA) provide a unique opportunity for NCPA members to authorize NCPA to issue non-recourse bonds, to take advantage of this Internal Revenue Service-approved prepayment mechanism. Such a prepay transaction is expected to yield a 5% to 8% savings on the cost of energy over the 12-year contract term of the PPA.

This staff report introduces the topic of NCPA issuing bonds to prepay the Geysers PPA and discusses the merits and risks of such a transaction. Staff is seeking UAC input on this topic as we complete the evaluation and prepare for a possible City Council recommendation in the Fall.

BACKGROUND

Geysers Power Purchase Agreement

In April 2023 Palo Alto City Council approved the purchase of geothermal energy from Calpine Corporation's Geysers Power Company LLC (GPC) over a term of up to 12 years (2025-2037) for

a total cost of up to $76.2 Million[1]. Palo Alto's purchase was a 10% share of a larger PPA executed by NCPA with the GPC on behalf of its members. Other NCPA member participants in the PPA are City of Santa Clara (70%), City of Lodi (10%), City of Alameda (5%), Cities of Biggs, Gridley, Lompoc, and the Port of Oakland (5%).

Energy Prepay Transactions

An energy prepayment is a long-term financial transaction available for municipal utilities that enables cost savings on energy purchases. Utilities participating in a 12-year prepaid energy transaction at prevailing interest rates are currently projected to enjoy a 5% to 8% discount on their energy purchase cost for the duration of the PPA. Longer duration prepaid PPAs enjoy larger discounts due to the time value of money and bond yield differentials. Higher market interest rates also result in larger discounts.

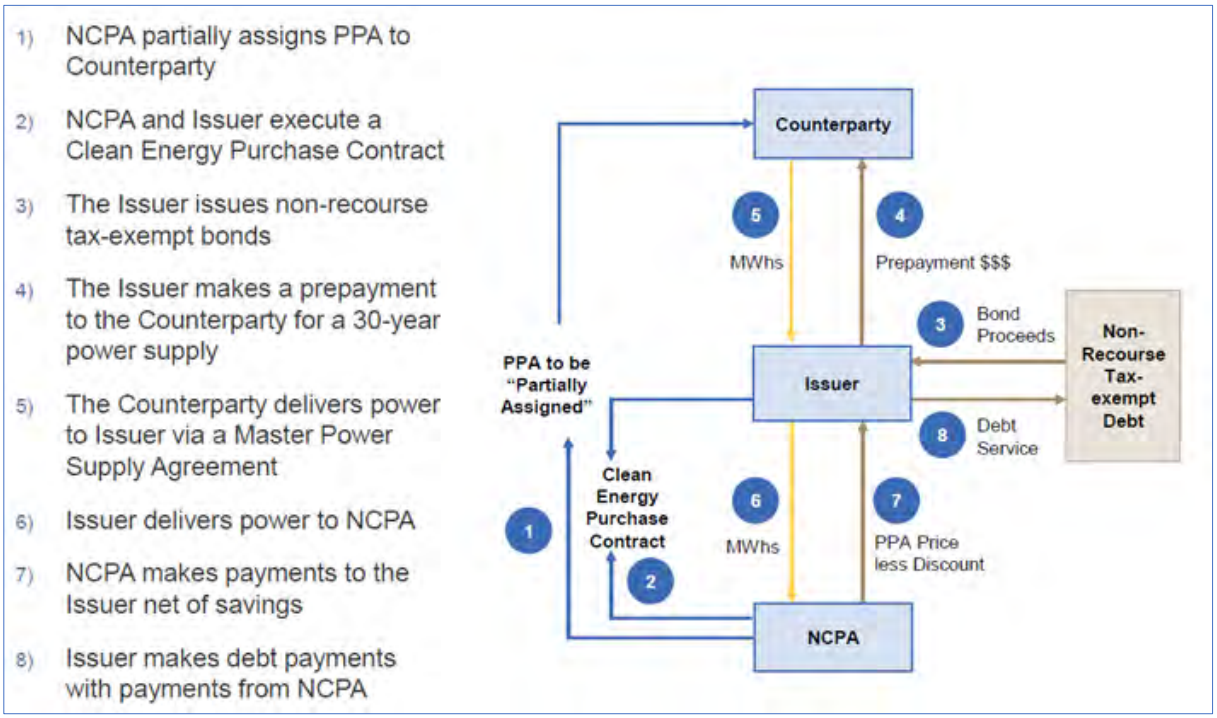
In a typical energy prepay transaction, a tax-exempt municipal electric utility (e.g., NCPA member PPA participants or Participants), a taxable financial Counterparty (typically a reputable bank that has prior experience in electricity trading and executing prepay transactions), and a municipal bond issuer (NCPA conduit - Issuer) enter into a long-term supply agreement. For the Geysers PPA prepay, this agreement is the Clean Energy Purchase Contract. The conduit bond issuing entity is set up as a non-profit and is, therefore, able to issue tax-exempt bonds. The municipal bond Issuer issues tax-exempt bonds to raise the funds for the transaction, and then flows the funds to the Counterparty.

The Counterparty utilizes the bond funds and provides a discount to the PPA participants on the power purchases based on the difference between the taxable bond rates available to the Counterparty and tax-exempt rates available to the Issuer. To enable this, NCPA would assign some of its rights under the Geyser PPA to the Counterparty, with permission from GPC.

Figure 1 below illustrates a prepayment structure. It depicts NCPA acting on behalf the member Participants, NCPA setting up a not-for-profit Issuer to issue the non-recourse bonds, and the Issuer transacting with the Counterparty, a commercial bank. GPC, the entity with which NCPA executed the 12-year PPA in 2022-23 is not shown in the illustration for simplicity. GPC would have to agree to this transaction but is not financially impacted by the prepayment.

[1] Staff Report: 2301-0706 of April 17, 2023 Packet Item 5 https://cityofpaloalto.primegov.com/Portal/Meeting?meetingTemplateId=1115

Figure 1: Illustration of a Pre-Payment Transaction Flows



Legality

Prepayment transactions are legal and codified in US Tax Law. Initially, the Internal Revenue Service (IRS) issued rules allowing tax-exempt natural gas prepayments and Congress enacted legislation specifically allowing the transactions under the National Energy Policy Act of 2005; Section 1327[2].

Impact on Balance Sheets of the Utility

Energy prepayment transactions are not viewed as debt of the public power utility participants because the utility's only obligation is to pay for energy received. There is no claim on a municipal utility by the energy prepayment bondholders who purchase non-recourse municipal tax-exempt bonds; bondholder recourse is only with the Counterparty that received the prepayment, an entity that is typically a highly rated major commercial bank.

Historical Gas and Electric Prepay Transactions

Over the past two decades, 100+ municipal gas prepayment bonds have been issued with a value totaling over $70 billion. More recently, prepaid electricity transactions have dominated the market with 10 energy prepayment transactions totaling almost $10 billion completed in the last few years with several Northern California Community Choice Aggregators (CCAs) leading this effort.

[2]National Energy Policy Act of 2005; Section 1327 https://www.congress.gov/109/plaws/publ58/PLAW-109publ58.pdf

On September 15, 2014, Palo Alto City Council adopted Resolution #9451[3], 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 is a gas prepay that has reduced the Palo Alto community's natural gas bills by about $1M per year since then.

ANALYSIS

Merits

The 12-year Geysers PPA entered into by NCPA, on behalf of participating members, offers a unique opportunity for participating members to benefit from a prepaid structured transaction. The benefit is preliminarily estimated at ~$6/MWh discount, equivalent to ~$60+ million in retail ratepayer savings over the 12-year term of the PPA. Palo Alto share of savings is ~$6 million or ~$0.5 million per year.

Risks & Mitigation of Risks

The risks associated with a prepay transactions to NCPA and its members fall into three categories: Bond holder recourse if the prepaid counterparty defaults, volumetric energy delivery risk, and regulatory risk.

Default by Pre-Paid Counterparty

The proposed deal structure, utilizing a financing conduit of NCPA (Issuer) to issue non-recourse municipal bonds, significantly minimizes the risks to the Participants. Non-recourse means the bonds are not secured or guaranteed by the Issuer (NCPA or the Project Participants). If the prepaid Counterparty experiences distress and fails to service the bondholder repayment obligation, bondholders have recourse only to the Counterparty that received the prepayment. Issuing non-recourse bonds reduces the discount Participants would receive through the prepayment transaction compared to issuing bonds that provide bondholders recourse to NCPA, but this loss of value is worth the risk mitigation provided by non-recourse bonds.

In the event of a default by the Counterparty, followed by termination, the prepaid Counterparty is obligated to make a termination payment which will be used to repay the bondholders. This is the only source of repayment funds available to bond investors in the event of a termination event. The revenues of the Participants are not pledged to repay the bond investors and rating agencies do not count prepay transactions as debt or fixed costs of NCPA or the Participants. During the 2008 financial crisis, Lehman Brothers was the counterparty of several prepayment transactions. Upon Lehman's bankruptcy, the bondholders settled directly with Lehman as opposed to the Issuer of the bonds. The issuer of the transaction(s) was not liable to the bondholder but rather lost the benefit of the discount or savings when reverting to the original terms of the PPA.

The Counterparty default risk is further reduced by selecting the Counterparty through a rigorous RFP process and by hiring a seasoned investment bank with demonstrated experience in the

[3] Resolution #9451 https://www.cityofpaloalto.org/files/assets/public/v/1/city-clerk/resolutions/reso-9451.pdf

commodity business and prepay transactions. Contractual provisions will also be put in place such that if the Counterparty fails, the PPA rights assigned by NCPA to the Counterparty revert back to NCPA.

Volumetric Risk

Volumetric risk is the risk that the Counterparty fails to provide the required energy volumes to sustain the prepay transaction. This risk is sufficiently managed in three ways. First, NCPA is proactively scheduling only a portion of the contract volumes of the assigned PPA into the prepay to hedge against potential under-generation. Next, the deal structure allows the Participants to substitute or add additional PPAs to the prepay transaction to sustain the required volumes of delivered energy. Finally, the Master Supply Agreement will provide a mechanism to backstop under-generation in the event of an outage or other unplanned event.

Regulatory Risk

Regulatory risk, though low, may materialize should the IRS change its guidance for the treatment of energy prepay transactions. Since the IRS issued rules informing the structure of these transactions 30 years ago, well over 100 such bond issuances have successfully delivered savings to their communities. If regulations do change, NCPA would assess the continuing viability of the structure and, if necessary, withdraw. Under those circumstances, NCPA would continue under the original terms of its PPA with only the downside of unmaterialized savings.

Unlike CCAs which get approval from the California Public Utility Commission (CPUC), municipal utilities must receive approval from the California Energy Commission (CEC) to preserve the renewable attributes of a PPA to meet the regulatory requirements of the renewable portfolio standards (RPS bucket 1 renewable energy credits). While the CPUC has already approved prepay energy transactions for the CCAs, the CEC has yet to officially adopt similar approvals. However, it is expected the CEC would take the same position as the CPUC largely due to a recent CEC letter provided to Anaheim Municipal Electric regarding a similar type of transaction – this aspect needs to be confirmed in the coming months before a final recommendation is made.

Proposed Prepay Structure

Most prepay transactions are very complex when structured for 20 to 30 years. They generally require Put Bonds[4] and Commodity Swap[5] providers to achieve savings of ~10% and require replacing the original PPA with a similar-sized PPA (or PPAs) upon expiration to match the maturity length of the outstanding bonds.

However, a preliminary prepaid energy structure currently being reviewed by NCPA creates a unique opportunity. The transaction is sufficiently long enough to generate a significant prepayment discount and more importantly, matures/terminates with the expiration of the Geysers PPA. There is no need to procure a new PPA or PPA(s) to "fill the bucket" unlike a 20 or

[4] A put bond is a debt instrument that allows the bondholder to force the issuer to repurchase the security at specified dates before maturity.

[5] A commodity swap is a type of derivative contract where two parties agree to exchange cash flows dependent on the price of an underlying commodity.

30-year prepay transaction. In addition, the short transaction allows for it to be sold as an amortizing structure rather than a put bond structure eliminating premiums to investors. This removes significant third-party expenses, the potential need for commodity swap counterparties, and future market uncertainty.

NCPA Member Interest & NCPA Commission Approval

NCPA and its members have been exploring prepay opportunities over the past few years. In September 2019, NCPA held a workshop educating members on the Clean Energy Savings Initiative (CESI) but the lower bond yields and lack of suitable PPAs to prepay had hampered NCPA staff from exploring this option in earnest. The execution of the Geysers PPA and higher market interest rate has now provided a unique window of opportunity to enter in to such a transaction.

On February 22, 2024, NCPA Commission "authorized the NCPA General Manager to direct staff to explore the merits and risks of a prepayment bond transaction regarding the Geysers Power Purchase Agreement; and to return to the Commission with a recommendation to continue moving forward or to discontinue this effort" (Attachment A). Attachment B contains a presentation on the topic. Since NCPA Commission approval, NCPA staff's exploration to date has not identified any new risks or hurdles.

Next Steps

Upon UAC input, staff plan to discuss the topic with the Finance Committee on June 4th. Other participating NCPA members are also discussing this transaction with their governing bodies. Based on member input and NCPA staff analysis, NCPA Finance Committee and Commission is expected to discuss findings and recommendations in June.

Potential Future Steps

If staff recommends proceeding with a prepayment transaction and the NCPA Commission approves the recommendation (June timeline), it is anticipated to take 4-6 months for NCPA staff to prepare. NCPA will need to secure professional assistance to complete the work necessary to develop, draft, and finalize the Prepaid Energy transaction documents. Professional assistance includes bond counsel, tax counsel, issuers counsel, disclosure counsel, a financial advisor, and any other consultant needed to support the completion of the prepayment transaction. The professional assistance generally works contingent upon a bond sale however, a rating agency or agencies will need to formalize a review of the proposed transaction.

The prepaid energy transaction "package" would require each Participant's City Council and/or Board to approve the transaction before approval by NCPA's Commission and before any bond sale.

FISCAL/RESOURCE IMPACT

Exploring the merits of the prepay transactions will be undertaken by NCPA staff with existing resources and minimal consulting expenditure. If directed to proceed with prepay, expenses associated with preparing and issuing bonds is estimated to range between $1 to $2 million. Palo Alto will not be directly responsible for the cost associated with bond issuance, since it will be funded from bond sales proceeds.

STAKEHOLDER ENGAGEMENT
This prepay transaction is being discussed with the UAC today and will be discussed with the Finance Committee June 04, 2024 for their input.

If found worthy to proceed and approved by the participating member governing bodies, NCPA's Commission and Finance Committee will primarily be overseeing this transaction, within parameters approved by member City Councils. Palo Alto is represented by Council Member Vicki Veenker on the NCPA Commission.

ENVIRONMENTAL REVIEW
Consideration of the prepayment transaction does not meet the definition of a project under the California Environmental Quality Act (CEQA), pursuant to the California Public Resources Code Section 21065 because it is not an activity that will cause a direct physical change in the environment.

ALTERNATIVE ACTIONS
The alternate to undertaking a prepay transaction is to do nothing. By not undertaking this transaction, Palo Alto community will be foregoing $4 to $6 million in value over the 12-year term of the PPA.

ATTACHMENTS
Attachment A: NCPA Commission Staff Report – February 22, 2024
Attachment B: Energy PrePayment Discussion Presentation by NCPA/PFM Staff

AUTHOR/TITLE:
Dean Batchelor, Director of Utilities
Staff: Shiva Swaminathan, Senior Resource Planner

A PUBLIC AGENCY
NCPA
NORTHERN CALIFORNIA POWER AGENCY

Commission Staff Report

COMMISSION MEETING DATE: February 22, 2024

SUBJECT: Approval to Explore the Merits and Risks of an Energy Prepayment Transaction

AGENDA CATEGORY: Discussion/Action

FROM:	Monty Hanks Assistant General Manager/CFO	**METHOD OF SELECTION:** N/A
Division:	Commission	
Department:	Commission	

IMPACTED MEMBERS:

All Members	☐	**City of Lodi**	☒	**City of Shasta Lake**	☐
Alameda Municipal Power	☒	**City of Lompoc**	☒	**City of Ukiah**	☐
San Francisco Bay Area Rapid Transit	☐	**City of Palo Alto**	☒	**Plumas-Sierra REC**	☐
City of Biggs	☒	**City of Redding**	☐	**Port of Oakland**	☒
City of Gridley	☒	**City of Roseville**	☐	**Truckee Donner PUD**	☐
City of Healdsburg	☐	**City of Santa Clara**	☒	**Other**	☐

If other, please specify

RECOMMENDATION:

Approve Resolution 24-22 authorizing the General Manager to direct staff to explore the merits and risks of a prepayment bond transaction regarding the Geysers Power Purchase Agreement. Staff will return to the Commission with a recommendation to continue moving forward or to discontinue this effort.

BACKGROUND:

The spread between tax-exempt and taxable bond yields offers the opportunity for tax-exempt entities like NCPA Members to structure prepay transactions to lower the cost of electric supplies to member retail customers. An energy prepayment is a long-term financial transaction available for municipal utilities that enables a meaningful power procurement cost savings opportunity. Over the past two decades, 100+ municipal gas prepayment bonds have been issued with a value totaling over $70 billion. More recently, prepaid electricity transactions have dominated the market with 10 energy prepayment transactions totaling almost $10 billion completed in the last few years with several Northern California Community Choice Aggregators (CCAs) leading this effort.

The utility (or utilities) participating in a prepaid energy transaction enjoy a 5-10% discount on their power purchase agreement (PPA) prices for the duration of the PPA agreements, with longer duration prepaid PPAs enjoying larger discounts due to the time value of money and bond yield differentials. In addition, energy prepayment transactions are not viewed as debt of the public power utility participants because the utility's only obligation is to pay for energy received. There is no claim on a municipal utility by the energy prepayment bondholders who purchase non-recourse municipal tax-exempt bonds; bondholder recourse is only with the Counterparty that received the prepayment, an entity that is typically a highly rated major commercial bank. These prepay structured transactions to arbitrage the yield differential between tax-exempt bonds and taxable bonds by the commercial bank – such transactions have been reviewed by the Internal Revenue Service (see Legality below).

The recent 12-year Geysers PPA entered into by NCPA, on behalf of Participating members, offers a unique opportunity for participating members to benefit from a prepaid structured transaction. The benefit is preliminarily estimated at ~$6/MWh discount, equivalent to ~$60+ million in retail ratepayer savings over the 12-year term of the PPA.

Geysers PPA Agreement

In December 2022 with Resolution 22-124, the Commission approved the Purchase Agreements between Geysers Power Company and the Northern California Power Agency (NCPA), and the Third Phase Agreement for Purchase Agreements. This action authorized NCPA to purchase, on behalf of the Participants, renewable energy products and resource adequacy capacity from Geysers Power Company beginning January 1, 2025, and continuing through December 31, 2036. The first two years' contract quantity is 50MW delivered on a 7x24 basis. In the remaining ten years, the contract quantity increases to 100MW delivered on a 7x24 basis. The value (or cost) of the PPA is more than $750 million. The Participants and their respective participation percentages include:

Table 3
Final Project Participation Percentages

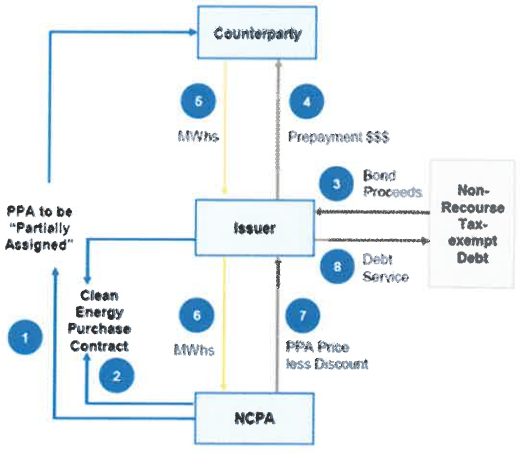
Member	Project Participation Percentages	Project Participation MW (2025 - 2026)	Project Participation MW (2027 - 2037)
City of Alameda	5.0%	2.50	5.00
City of Biggs	0.4%	0.20	0.40
City of Gridley	0.6%	0.30	0.60
City of Lodi	10.0%	5.00	10.00
City of Lompoc	1.7%	0.85	1.70
City of Palo Alto	10.0%	5.00	10.00
Port of Oakland	2.3%	1.15	2.30
City of Santa Clara	70.0%	35.00	70.00
Total:	**100.0%**	**50.00**	**100.00**

The "take and pay" agreements enable and obligate the Participants to take delivery of and pay for such electric capacity and energy and to pay NCPA for all costs it incurs for undertaking the foregoing activities as shown below.

Prepaid Energy Transaction
As mentioned earlier, the goal of an energy prepayment transaction is to reduce the cost of power purchases on quantities delivered under the prepay structure with minimal risk to the participants. The prepay structure enables publicly owned utilities to reduce their energy costs by financing the acquisition of long-term energy supplies with tax-exempt bonds. For decades, municipal utilities have used the prepayment structure as an industry standard practice to reduce costs for the purchase of natural gas.

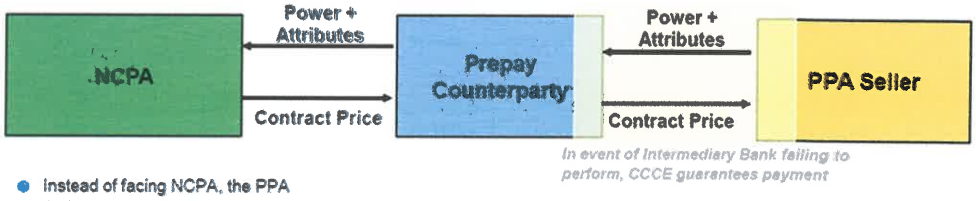
How Does a Prepay Work?
Typically, a municipal energy prepayment bond involves tax-exempt bonds issued by a conduit entity. The proceeds from the bonds are channeled through the conduit entity (municipal bond issuer - TBD), which buys the energy and immediately resells it to the utility or utilities. The conduit entity is set up as a non-profit and is, therefore, able to issue tax-exempt bonds. A pictogram of a typical is shown below:

1) NCPA partially assigns PPA to Counterparty
2) NCPA and Issuer execute a Clean Energy Purchase Contract
3) The Issuer issues non-recourse tax-exempt bonds
4) The Issuer makes a prepayment to the Counterparty for a 30-year power supply
5) The Counterparty delivers power to Issuer via a Master Power Supply Agreement
6) Issuer delivers power to NCPA
7) NCPA makes payments to the Issuer net of savings
8) Issuer makes debt payments with payments from NCPA



To summarize, a tax-exempt public electricity supplier (e.g. PPA Participants), a taxable financial counterparty, and a municipal bond issuer (NCPA conduit) enter into a long-term supply agreement called a Clean Energy Purchase Contract to pre-purchase wholesale zero-emission

clean electricity from sources like solar, wind, geothermal, and hydropower. The municipal bond issuer issues tax-exempt bonds to raise the funds for the transaction, flowing the funds to the financial counterparty. The financial counterparty utilizes the bond funds and provides a discount to the PPA Participants on the power purchases based on the difference between the taxable and tax-exempt rates.



- Instead of facing NCPA, the PPA Seller faces an Prepay Counterparty (structure remains the same)
- If Prepay Counterparty fails to pay, NCPA guarantees payment
- Under certain scenarios, assignment can be terminated, and PPA Seller goes back to facing NCPA
- The existing Scheduling Coordinator will remain the Scheduling Coordinator; the only change is that Intermediary Bank is copied on bills

Legality

Prepayment transactions are legal and codified in US Tax Law. Initially, the IRS issued rules allowing tax-exempt natural gas prepayments and Congress enacted legislation specifically allowing the transactions under the National Energy Policy Act of 2005; Section 1327.

As mentioned earlier, this prepayment structure has been utilized since the 1990s with over $100 billion of transactions completed to date. These have largely historically been utilized for natural gas procurement. The table below details prepayments that have been completed by public utilities in California including a few members of NCPA.

Date	Amt. ($000)	Issuer	Description	Beneficiary
06/2006	230,845	Vernon Nat. Gas Fin Auth	Nat Gas	City of Vernon Elec
01/2007	209,350	Roseville Natural Gas Fin Auth	Nat. Gas	City of Roseville Elec
05/2007	757,055	Northern Ca Gas Auth No. 1	Nat. Gas	SMUD
09/2007	887,360	Long Beach Bond Fin Auth	Nat. Gas	City of Long Beach
10/2007	504,445	So. Ca. Pub. Power Auth	Nat. Gas	Multiple MOUs
10/2007	251,695	Long Beach Bond Fin. Auth	Nat. Gas	City of Long Beach
08/2009	901,620	M-S-R Energy Authority	Nat. Gas	MID/Redding/SVP
10/2009	514,160	So Ca Pub Power Auth (Windy Flats)	Elec (Wind)	LADWP, Mult. MOUs
04/2010	778,665	Cal. Statewide Comm Dev Auth	Nat. Gas	SMUD
2010/11	394,700	So Ca Pub Power Auth (Milford 1 & 2)	Elec (Wind)	LADWP, Mult. MOUs
12/2018	539,615	Northern Ca Energy Auth	Gas/Elec	SMUD
Total	$5,969,510			

The prepayment structure is now being applied towards renewable energy (electricity). Thus far, 6 other CCAs have either executed or are in the process of completing a similar structure. CCAs have completed a total of 10 transactions to date for a par amount of over $8 billion.

Date	Amt. ($000)	Issuer	Description	Beneficiary
09/2021	1,234,720	California Community Choice Fin Auth	Elec (Green)	SVCE, EBCE
11/2021	602,655	California Community Choice Fin Auth	Elec (Green)	MCE
06/2022	931,120	California Community Choice Fin Auth	Elec (Green)	EBCE
12/2022	459,640	California Community Choice Fin Auth	Elec (Green)	Pioneer
01/2023	841,550	California Community Choice Fin Auth	Elec (Green)	SVCE
02/2023	998,780	California Community Choice Fin Auth	Elec (Green)	CPA
06/2023	958,290	California Community Choice Fin Auth	Elec (Green)	CPA
08/2023	997,895	California Community Choice Fin Auth	Elec (Green)	EBCE
10/2023	647,750	California Community Choice Fin Auth	Elec (Green)	CCCE
12/2023	1,038,285	California Community Choice Fin Auth	Elec (Green)	MCE
Total	**$8,710,685**			

Comparison of Prepayment Structures (Natural Gas vs. Electricity)
A prepaid electricity transaction retains many of the features common to tax-exempt natural gas prepayment transactions. Some, but not all, of these similarities include:

- A financing conduit of NCPA issues the Bonds, the interest on which is exempt from federal and State of California income taxes, to prepay for up to thirty years of commodity deliveries [Note: the proposal presented to NCPA is for a twelve-year deal];
- The proceeds of the Bonds are used to finance the prepayment; and
- If a project participant (or participants) qualified electricity requirements decline such that the participant(s) can no longer use the prepaid electricity, it has the right to request the supplier remarket the prepaid electricity.

A prepaid energy transaction also contains certain differences to tax-exempt natural gas prepayment transactions. Some, but not all, of these differences include:

- The Participant(s) assigns certain rights and obligations under the assigned PPA(s) and in many circumstances, must use reasonable efforts to assign additional PPAs in the future;
- Assigned electricity will be delivered by the Electricity Supplier to NCPA under the Mast Power Supply Agreement. NCPA will then deliver such assigned electricity to the project participants under the Clean Energy Purchase Contract; and
- To the extent the assigned PPA(s) provide an aggregate amount of electricity greater than the amount prepaid, such electricity will be delivered to the project participant and associated payments are not part of the prepaid transaction.

Risks
The proposed deal structure, utilizing a financing conduit of NCPA to issue non-recourse municipal bonds, significantly minimizes the risks to the NCPA Members who are Geysers PPA Participants. Non-recourse means the bonds are not secured or guaranteed by the referenced entity (NCPA or the Project Participants). Potential remaining risks, including volumetric, counterparty/financial, and regulatory are low and managed through the deal structure.

Volumetric risk is the risk that the PPA Seller fails to provide the required energy volumes to sustain the transaction. This risk is sufficiently managed in three ways. First, NCPA is proactively scheduling only a portion of the contract volumes of the assigned PPA into the prepay to hedge against potential under-generation. Next, the deal structure allows the Participants to substitute or add additional PPAs to the prepay transaction to sustain the required

volumes of delivered energy. Finally, the Master Supply Agreement will provide a mechanism to backstop under-generating developers in the event of an outage or other unplanned event. Even if the Prepay Counterparty fails, the recourse to the bondholder is to the Prepay Counterparty and not to NCPA, its members, or the PPA participants.

Counterparty/financial risk exists should the Prepay Counterparty experience distress and fail to service its obligations. NCPA and the Participants expect to select a Prepay Counterparty through a rigorous RFP process to hire a seasoned investment bank with demonstrated experience in the commodity business and prepay transactions.

Regulatory risk, though low, may materialize should the IRS change its guidance for the treatment of energy prepay transactions. Since the IRS issued rules informing the structure of these transactions 30 years ago, over 100 such bond issuances have successfully delivered savings to their communities. If regulations do change, NCPA would assess the continuing viability of the structure and, if necessary, withdraw. Under those circumstances, NCPA would continue under the original terms of its PPA with only the downside of unmaterialized savings.

Unlike CCAs which get approval from the California Public Utility Commission (CPUC), municipal utilities must receive approval from the California Energy Commission (CEC) to preserve the renewable attributes of a PPA to meet the clean energy goals. While the CPUC has already approved prepay energy transactions for the CCAs, the CEC has yet to officially adopt similar approvals. However, it is expected the CEC would take the same position as the CPUC largely due to a recent CEC letter provided to Anaheim Electric regarding a similar type of transaction.

Lastly, it is important to note that the energy prepayment is non-recourse to NCPA and the PPA Participants. Should a termination event occur, the Prepay Counterparty is obligated to make a termination payment which will be used to repay the bondholders. This is the only source of repayment funds available to investors in the event of a termination event. The revenues of the Participants are not pledged to repay the bond investors and rating agencies do not count prepay transactions as debt or fixed costs of NCPA or the NCPA Members who are Geysers PPA participants.

In summary, each of these risks has been identified and mechanisms have been formulated to shield NCPA and the PPA Participants from being adversely impacted. A case in point, during the 2008 financial crisis, Lehman Brothers was the counterparty of several prepayment transactions. Upon Lehman's bankruptcy, the bondholders settled directly with Lehman as opposed to the Issuer of the bonds. The issuer of the transaction(s) was not liable to the bondholder but rather lost the benefit of the discount or savings when reverting to the original terms of the PPA agreement.

Proposal Submitted to NCPA

Most prepay transactions are very complex when structured for 20 to 30 years. They generally require Put Bonds and Commodity Swap providers to achieve savings of +/- 10% and require replacing the original PPA with a similar-sized PPA (or PPAs) upon expiration to match the maturity length of the outstanding bonds.

However, a preliminary prepaid energy structure currently being reviewed creates a unique opportunity. The transaction is sufficiently long enough to generate a large prepayment and more importantly, matures/terminates with the expiration of the Geysers PPA. There is no need to procure a new PPA or PPA(s) to "fill the bucket" unlike a 20 or 30-year transaction. In

addition, the short transaction allows for it to be sold as an amortizing structure rather than a put bond structure eliminating premiums to investors. The transaction amortizes across tenors characterized by low muni/taxable ratios, producing greater spread differentials, and the cost of issuance (COI) is amortized over the term of the transaction rather than over the put bond tenors. This removes significant third-party expenses, the potential need for commodity swap counterparties, and future market uncertainty.

NCPA Member Interest
For the past several years, a few NCPA members have urged NCPA to investigate the prepay structure on their behalf. In September 2019, NCPA held a workshop educating various members on the Clean Energy Savings Initiative (CESI) but the lower bond yields and lack of suitable PPAs to prepay had hampered NCPA staff from exploring this option in earnest.

PPA Participant Meetings
At the direction of the Finance Committee, NCPA has held individual meetings with the significant share participants (SVP, Palo Alto, and Lodi) representing 90% of the Geysers PPA. Those members expressed interest in NCPA to continue exploring the prepayment opportunity.

Next Steps
If approved, NCPA and member staff plan to undertake the following steps over the next three months:

1. Explore the merits of the prepay structure for the Geysers PPA, risks, and mitigation measures;
2. Explore Bond Issuer options by discussing with bond counsel if a financing conduit may need to be created similar to how the CCAs formed the California Community Choice Financing Authority as the Issuer;
3. Project Participant communication with their governing bodies; and
4. Report to the NCPA Commission and recommendation of the next step(s), if any

Future Steps
If staff recommends proceeding with a prepayment transaction and the NCPA Commission approves (April/May), it is anticipated to take 4-6 months for staff to prepare. NCPA will need to secure professional assistance to complete the work necessary to develop, draft, and finalize the Prepaid Energy transaction documents. Professional assistance includes bond counsel, tax counsel, issuers counsel, disclosure counsel, financial advisor, and any other consultant needed to support the completion of the prepayment transaction. The professional assistance generally works contingent upon a bond sale however, a rating agency or agencies will need to formalize a review of the proposed transaction. Their fee could be as high as $400k but any expenses incurred will be funded/reimbursed from the bond sale.

The prepaid energy transaction "package" would require each PPA Participant's City Council and/or Board to approve the transaction before approval by NCPA's Commission and before any bond sale.

FISCAL IMPACT:

Rates as of October 2023 showed an estimated savings (or discount) of ~$6/MWh from the contract price, equivalent to ~$60 million in retail ratepayer savings over the 12-year term of the

PPA. This is net of all cost of issuance expenses. Please note that a higher interest rate environment helps provide higher savings.

ENVIRONMENTAL ANALYSIS:

This activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary.

COMMITTEE REVIEW:

At the November 14th meeting, staff presented the Geysers prepaid energy proposal to the Finance Committee. The Committee recommended that NCPA staff schedule individual and/or group meetings with the Geysers PPA participants to continue evaluating this unique opportunity.

At the February 13th meeting, staff presented an overview of a prepayment transaction to the Finance Committee. The Committee recommended the Commission approve the action to explore the merits and risks of prepaying the Geysers PPA.

Respectfully submitted,

RANDY S. HOWARD
General Manager

Attachments:
- Resolution 24-22

RESOLUTION 24-22

RESOLUTION OF THE NORTHERN CALIFORNIA POWER AGENCY AUTHORIZING THE GENERAL MANAGER TO DIRECT STAFF TO EXPLORE THE MERITS AND RISKS OF A PREPAYMENT BOND TRANSACTION REGARDING THE GEYSERS POWER PURCHASE AGREEMENT

(reference Staff Report #125:24)

WHEREAS, the spread between tax-exempt and taxable bond yields offers the opportunity for tax-exempt entities to structure prepay transactions to lower the cost of electric supplies to member retail customers by an average of 5-10%; and

WHEREAS, in December 2022 with Resolution 22-124, the Commission approved the Purchase Agreements between Geysers Power Company and the Northern California Power Agency; and

WHEREAS, prepayment transactions are legal and codified in US Tax Law with Congress enacting legislation specifically allowing the transactions under the National Energy Policy Act of 2005; Section 1327; and

WHEREAS, while significant risks are reduced issuing non-recourse bonds, other risks may exist that need to be evaluated and analyzed to mitigate them; and

WHEREAS, this activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary; and

NOW, THEREFORE BE IT RESOLVED, that the Commission of the Northern California Power Agency authorize the General Manager to direct staff to explore the merits and risks of a prepayment bond transaction regarding the Geysers Power Purchase Agreement and return to the Commission with a recommendation to continue moving forward or to discontinue this effort.

PASSED, ADOPTED and APPROVED this 22 day of February, 2024 by the following vote on roll call:

	Vote	Abstained	Absent
Alameda	Y		
San Francisco BART	Y		
Biggs	Y		
Gridley	Y		
Healdsburg	Y		
Lodi	Y		
Lompoc	Y		
Palo Alto	Y		
Port of Oakland			X
Redding			X
Roseville	Y		
Santa Clara	Y		
Shasta Lake	Y		
Truckee Donner	Y		
Ukiah	Y		
Plumas-Sierra	Y		

Jerry Serventi

JERRY SERVENTI
CHAIR

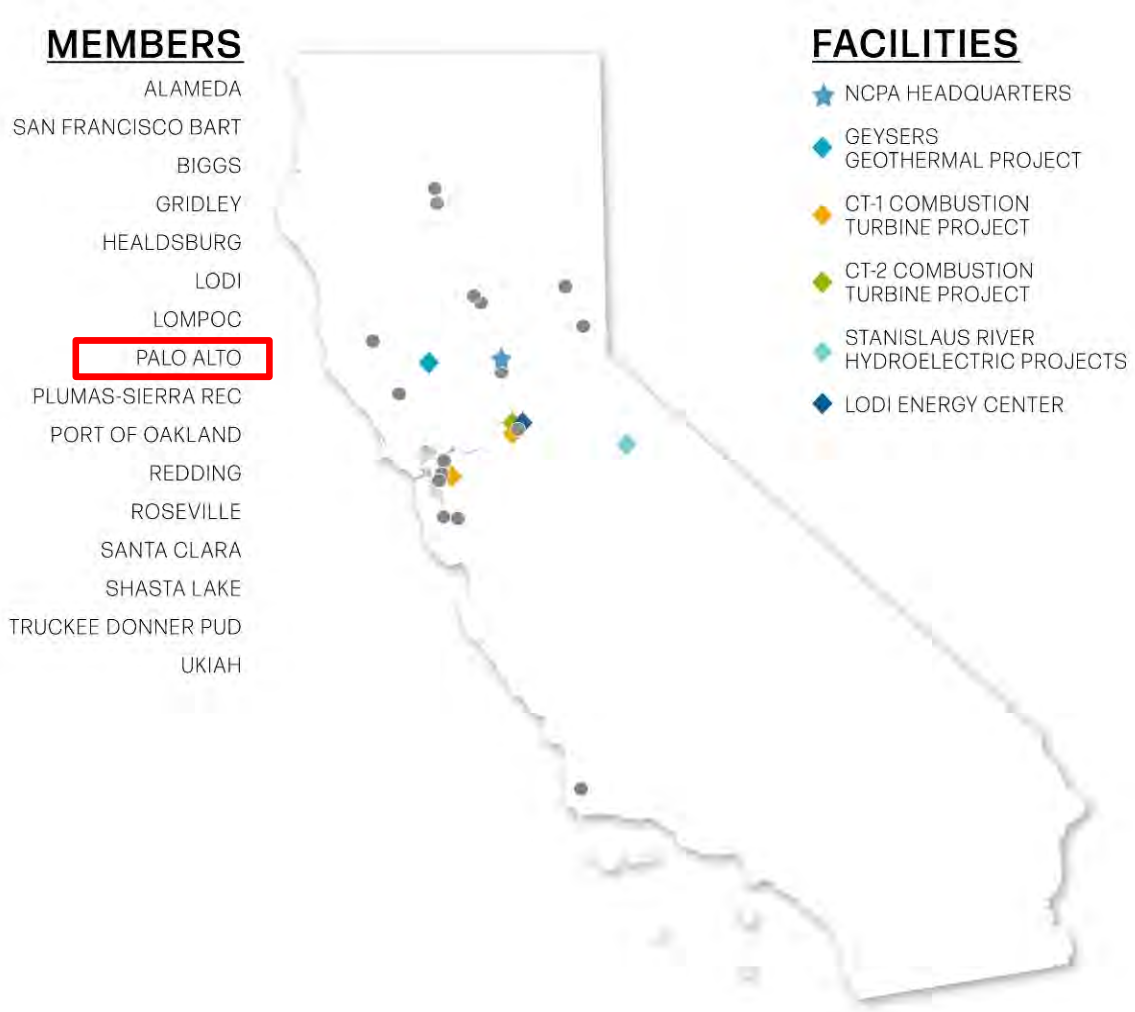
ATTEST: Carrie C. Pollo

CARRIE POLLO
INTERIM ASSIS[illegible]ARY

Geysers PPA and Prepay Opportunity

Monty Hanks,
CFO NCPA
Michael Berwanger,
Managing Director PFM

NCPA Overview



- California Joint Powers Agency established in 1968
- 15 Members and 1 associate Member serving 700,000 residents in communities throughout Northern California (city-owned / special districts)
- Builds and operates jointly-owned power plants and operates a power pool for Members
- Represents Members before legislative and regulatory bodies
- Provides Power Management Services to non-members, including Community Choice Aggregators (CCAs)

Value of NCPA Functions

Power Management

- Schedule/Dispatch loads and resources
- Ensures reliability and stability
- Creates market opportunities
- Provides aggregation savings
- Helps procure green energy

Generation Services

- Operate and maintain generation resources
- Proactive asset management
- Resource optimization
- Savings for plant owners
- Ensures reliable capacity

Legislative & Regulatory

- Represents member interests in the legislative and regulatory arena
- Credible solution-oriented leader in policy debates
- Preserves local control
- Represents needs of consumers
- Protects agency assets

Administrative Services

- Financial administration and IT services
- Manage significant industry complexity for Members
- Optimize debt service and ratings
- Recruitment of human capital
- Risk oversight of electric and gas contracts
- Financing and Debt Management

Background

- December 2022 – NCPA's Commission approved the PPA and Third Phase Agreements with Geysers Power Company
  - Palo Alto's UAC recommended Council approval in Feb 2023
  - Palo Alto's City Council approved in April 2023

Contract Price: For each MWh of Product scheduled and delivered in accordance with this Confirmation, not to exceed the Contract Quantity, Buyer shall pay Seller the Contract Price.

"**Contract Price**" is as follows:

Contract Years	Price ($/MWh)
January 1, 2025 – December 31, 2036	$69.41 per MWh of Product

Contract Quantity:

Contract Years	Contract Quantity
January 1, 2025 – December 31, 2026	50 MW of the Product delivered on a 7x24 schedule
January 1, 2027 – December 31, 2036	100 MW of the Product delivered on a 7x24 schedule

RA CAPACITY PRICE TABLE

Contract Year/Month	RA Capacity Flat Price ($/kW-month)
2025-2036	$7.00

Geysers Power Company PPA

Table 3
Final Project Participation Percentages

Member	Project Participation Percentages	Project Participation MW (2025 - 2026)	Project Participation MW (2027 - 2037)
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City of Lompoc	1.7%	0.85	1.70
City of Palo Alto	10.0%	5.00	10.00
Port of Oakland	2.3%	1.15	2.30
City of Santa Clara	70.0%	35.00	70.00
Total:	**100.0%**	**50.00**	**100.00**

Geysers Power Company PPA

	ENERGY	RA
2025	$30,401,580	$4,200,000
2026	$30,401,580	$4,200,000
2027	$60,803,160	$8,400,000
2028	$60,803,160	$8,400,000
2029	$60,803,160	$8,400,000
2030	$60,803,160	$8,400,000
2031	$60,803,160	$8,400,000
2032	$60,803,160	$8,400,000
2033	$60,803,160	$8,400,000
2034	$60,803,160	$8,400,000
2035	$60,803,160	$8,400,000
2036	$60,803,160	$8,400,000
	$668,834,760	**$92,400,000**

Financing Assumptions and Results

Summary of Results

		Non-Recourse
Energy Savings ($/MWh)	$5.35	$4.94
Total Savings ($)	$51.5m	$47.6m
PA Share of Savings	*$5.15m*	*$4.76m*
Total Savings (%)	7.71%	7.12%
Rates as of	*10/12/2023*	*4/11/2024*
Prepayment Bond Par	$441m	$454m
Discount Rate	6.23%	5.48%
Weighted Avg COF	4.53%	3.85%
Spread	1.70%	1.63%

Prepayment Transaction Background

- **Goal** – Reduce cost of power purchases by 5% to 8%
- **How –** Leverage the use of tax-exempt bonding capacity to secure long-term supply

Background

- Codified in the U.S. tax law
- Used since the 1990s largely for natural gas transactions
- Over 100 transactions totaling over $70 billion completed in the U.S. – mostly for gas
- Ten energy prepayment transactions totaling $9.8 billion were completed last few years for five California Community Choice Aggregators:

  - East Bay Community Energy
  - Silicon Valley Clean Energy
  - Marin Clean Energy
  - Pioneer Community Energy
  - Clean Power Alliance
  - Central Coast Community Energy

History of Completed Prepayments by CA Utilities

Date	Amt. ($000)	Issuer	Description	Beneficiary
06/2006	230,845	Vernon Nat. Gas Fin Auth	Nat Gas	City of Vernon Elec
01/2007	209,350	Roseville Natural Gas Fin Auth	Nat. Gas	City of Roseville Elec
05/2007	757,055	Northern Ca Gas Auth No. 1	Nat. Gas	SMUD
09/2007	887,360	Long Beach Bond Fin Auth	Nat. Gas	City of Long Beach
10/2007	504,445	So. Ca. Pub. Power Auth	Nat. Gas	Multiple MOUs
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Total	**$5,969,510**			

History of Completed Prepayments by CA CCAs

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10/2023	647,750	California Community Choice Fin Auth	Elec (Green)	CCCE
12/2023	1,038,285	California Community Choice Fin Auth	Elec (Green)	MCE
01/2024	1,101,625	California Community Choice Fin Auth	Elec (Green)	SVCE
Total	**$9,812,310**			

Prepayment Transaction Overview

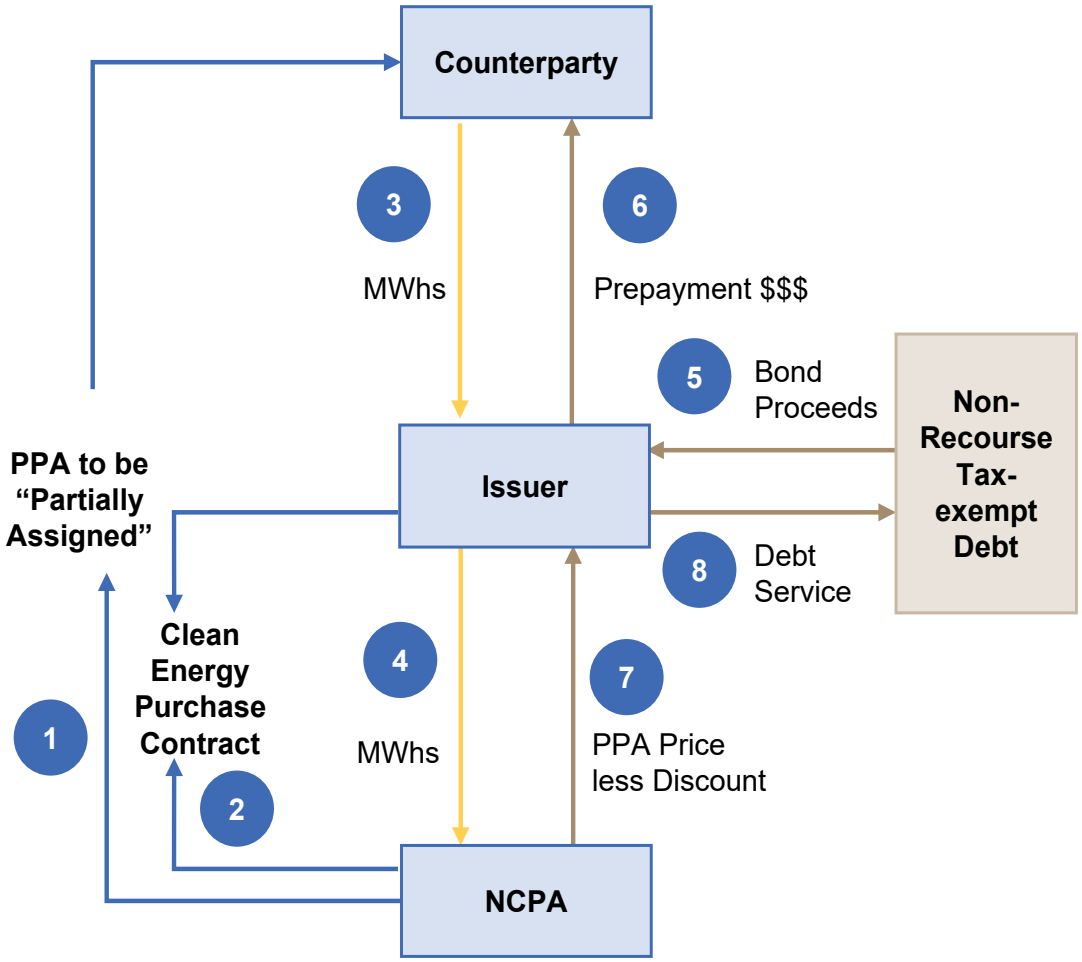
- **PPA assignment and prepayment** – will represent a percentage of power (~90-95%) to account for maintenance or unplanned outages
- **Investment Bank's Credit Rating** – bonds are non-recourse to the Issuer and Participating Members meaning if the Prepayment Counterparty fails, they are responsible for a termination payment which would cover the bondholders
- **Timing is key** – interest-rate sensitive meaning prepaid energy transactions rely on the relationship between the tax-exempt market and the taxable market to provide benefits to both the municipal utility and the counterparty
- **Savings** – driven by interest-rate spreads, term of prepay, and size
- **Potential counterparties** – Goldman Sachs, RBC, JPM, Morgan Stanley

Entities Involved in an Energy Prepayment Transaction

- **Participants/NCPA** – Have an existing Power Purchase Agreement for clean energy.
- **Prepay Counterparty** – Typically a financial institution with a commodity presence or a financial institution partnered with a commodity market participant
- **Issuer** – A bond issuing entity formed for the sole purpose of selling the prepayment bonds, typically a Joint Powers Authority ("JPA").
- **Existing Power Supply Counterparty –** Agrees to partial assignment of the existing PPA
- **Bond Investors** – Purchase the non-recourse prepayment bonds

Summary of an Energy Prepayment Structure Mechanics

1) NCPA partially assigns PPA to Counterparty
2) NCPA and Issuer execute a Clean Energy Purchase Contract
3) The Counterparty delivers power to Issuer via a Master Power Supply Agreement
4) Issuer delivers power to NCPA
5) The Issuer issues non-recourse tax-exempt bonds
6) The Issuer makes a prepayment to the Counterparty for power supply
7) NCPA makes payments to the Issuer net of savings
8) Issuer makes debt payments with payments from NCPA



Favorable Risk Allocation – "Take and Pay" Structure

Worst Case –> Transaction terminates and NCPA/Participants no longer receive expected savings

Risk	Mitigation
Counterparty default on energy delivery	NCPA only pays for energy if/when Counterparty delivers the energy Counterparty assumes debt obligations in the event of Supplier default
NCPA receives too much energy and is unable to have Qualified Use and/or has to meet new renewable mandates in the future	Counterparty will remarket the energy to qualified entities to ensure NCPA compliance with Qualified Use
Debt obligation could obligate NCPA over long-term Rating agency treatment of prepay debt	Debt is non-recourse to NCPA, and NCPA's obligation is take and pay. Rating agencies do not count prepay transactions as debt or fixed costs of NCPA

Why this is a Unique Opportunity?

- **Non-Recourse Bonds**
  - Prepay Counterparty will owe a termination payment which is what secures bondholders should the transaction terminate before PPA expiration
  - Ratings are of the Prepay Counterparty
  - Does not impact Participating Members' balance sheet
  - If terminated, reverts to the original terms of the PPA (no savings)
- **12y Term vs. 30y Term**
  - This transaction ends with the expiration of the Geysers PPA
  - No need to "replace" the Geysers PPA with other liked-sized PPA(s)
- **Bond Issuance**
  - ~$450m to cover prepayment and cost of issuance
- **Estimated Savings**
  - Approximately ~$45-50m in savings (~7%) subject to interest-rate sensitivity
  - Palo Alto share ~$4-5m over PPA term (12y)

Next Steps

- Education of a prepayment transaction to the staff, advisory boards, and/or councils of the Geysers PPA Participating Members
  - Seek feedback/guidance if NCPA should keep the process moving forward
- Continue discussions with the California Energy Commission (CEC)
  - CEC has not provided official guidance on prepays and RPS but stated:
    - It's still a long-term contract
    - The product is unchanged
    - No substitution
    - RECs are not unbundled and still posted in the participants' WREGIS account(s)
- NCPA's Finance Committee / Commission in May 2024
  - Seek recommendation/approval to form the financing team
  - Determine "Bond Issuer" options with bond counsel
  - Solicit RFP for prepayment counterparty

Next Steps

- Palo Alto – Finance Committee Input – June 4th
- NCPA – August 2024 for an informational update
  - Status of CEC discussions, Anaheim Electric prepay transaction
  - Status of bond financing docs, update of est. savings, market conditions, and review of the schedule
- Fall/Winter 2024, seek Geysers PPA Participants' City Council approvals and NCPA's Commission approval to issue bonds
  - Finalize legal documents, obtain ratings
  - Seek approval for a target and minimum savings
    - e.g. target 7%, 4% minimum
  - Issue bonds at an opportune time to maximize savings (above minimum target approved)

Questions

CITY OF PALO ALTO

Utilities Advisory Commission Staff Report

From: Dean Batchelor, Director of Utilities
Lead Department: Utilities

Meeting Date: May 1, 2024
Staff Report: 2401-2505

TITLE

Utilities Advisory Commission Recommendation to Adopt a Resolution Amending the Gas Utility Long-term Plan (GULP) Objectives, Strategies and Implementation Plan, Amending the Gas Utility Reserves Management Practices, Amending the FY 2025 Gas Fund Budget, 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

Staff recommends that the Utilities Advisory Commission (UAC) recommend the City Council (Council) adopt a resolution (Attachment A):

(1) Amending the Gas Utility Long-term Plan (GULP) Objectives, Strategies and Implementation Plan which includes collecting funds via a gas price mitigation adder (Adder) to manage potential future short-term natural gas price spikes;

(2) Amending the Gas Utility Reserves Management Practices;

(3) Amending the FY 2025 Gas Fund Budget Appropriation by Increasing the Gas Operating Revenues by $2,200,000; 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), effective November 1, 2024.

EXECUTIVE SUMMARY

The proposed amendments to the GULP Objectives, Strategies and Implementation Plan will provide a mechanism for the City to mitigate the impact on customers and the Gas Utility of future short-term natural gas commodity price spikes such as the one that occurred in the winter of 2022-23.

The proposal maintains the practice of basing gas commodity charges on the monthly market index. In addition, funds collected via a gas price mitigation adder (Adder) to the Gas Commodity Charge will accumulate in the Gas Rate Stabilization Reserve, to mitigate the impact of future short-term natural gas market price spikes.

Staff recommends an Adder of 10.3 cents per therm (estimated 5.2% increase on an annual bill). As this funding accumulates, the City would gradually reduce the maximum Gas Commodity Charge from the current $4 per therm. The funding collected over four years with a 10.3 cent Adder is estimated to be $11.3 million. This is estimated to be sufficient to maintain the Commodity Charge at $2 per therm for a single month even if the market prices spike to as high as $5 per therm in that month.

BACKGROUND

The Shift to Market Price-Based Commodity Charges

In 2012, Resolution 9244[1] changed the gas purchasing strategy from one in which gas commodity rates[2] changed about once per year to one in which a monthly market price-based charge was passed through to customers. In the 10 years prior to that change, the majority of Palo Alto's natural gas needs were met through fixed-price gas purchases. This strategy succeeded in achieving relatively stable gas supply costs, and hence, relatively stable commodity rates. In times of declining market prices, however, Palo Alto's costs and resulting commodity rates were higher than the market and higher than Pacific Gas & Electric's (PG&E) rates which change on a monthly basis and generally mirror the market. Council's approval of monthly market price-based commodity rates reduced the need for financial reserves and reduced the need for staff resources to manage the gas portfolio.

Gas Commodity Price spike of Winter 2022-23

During winter 2022-23, natural gas prices rose dramatically across the western United States. Entering that heating season, there was upward pressure on prices due to a confluence of factors including: (a) historically cold December temperatures, (b) 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. However, those fundamental market conditions alone did not explain the sudden and extreme increase in natural gas prices which is currently 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.

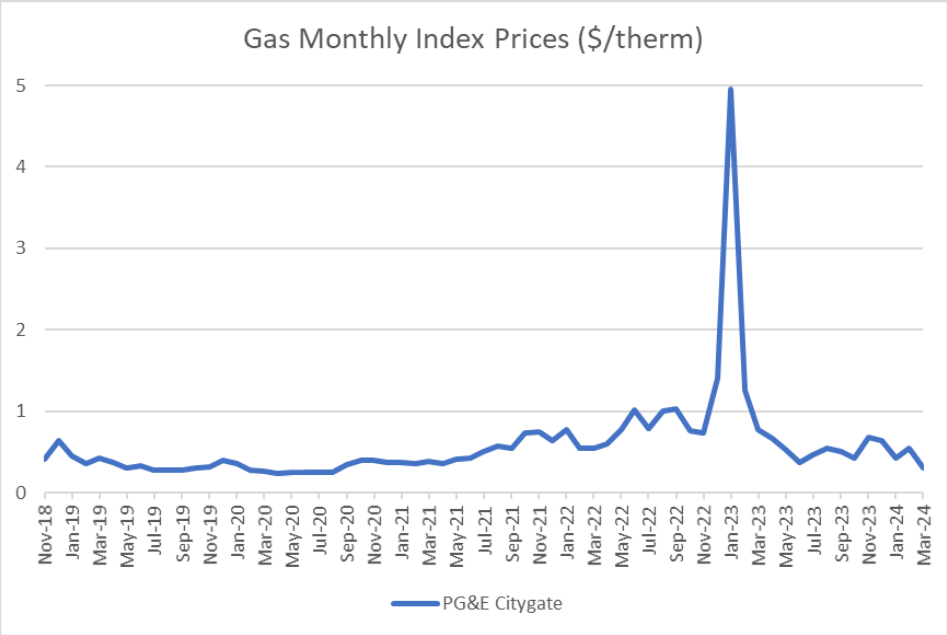
Figure 1 shows the published gas market monthly indexes from November 2018 through March 2024 for the PG&E Citygate hub in Northern California, including the winter 2022-23 price surge.

[1] Resolution 9244 https://www.cityofpaloalto.org/files/assets/public/v/1/city-clerk/resolutions/reso-9244.pdf

[2] Gas Commodity Rates https://www.cityofpaloalto.org/files/assets/public/v/1/agendas-minutes-reports/reports/city-manager-reports-cmrs/year-archive/2011/id-2106-110111.pdf

January 2023 natural gas prices were five times greater than November 2022 prices. The PG&E Citygate hub is a delivery point for Palo Alto's gas purchases and the index on which Palo Alto's gas commodity rates are based.

Figure 1 – Gas Market Prices



When staff began to see signs of higher gas prices in late November and early December 2022, customers were informed through utility bill messaging, website notices, social media, email newsletters, and other community forums. Customers were encouraged to save energy to dampen the impact of rising prices on their utility bills.

On December 19, 2022[3], Council adopted Resolution 10090[4] which increased the maximum allowed Gas Commodity Charge from $2 per therm to $4 per therm. Because the January 2023 gas market monthly index of nearly $5 per therm exceeded the higher maximum Council-approved Gas Commodity Charge, the full cost of January gas was not recovered through rates; instead, about $1.84 million was withdrawn from the Gas Operations Reserve to cover the shortfall.

Recognizing the significant impact on customer bills, the City offered resources to customers including access to free home efficiency assessments and utility bill payment arrangements. In April 2023 Council approved gas and electric (Staff Report 2303-1209)[5] rebates of $2.4 million,

[3] December 19, 2022 https://www.cityofpaloalto.org/Departments/City-Clerk/Citys-Meeting-Agendas/Meeting-Agendas-and-Minutes

[4] Resolution 10090 https://www.cityofpaloalto.org/files/assets/public/v/1/city-clerk/resolutions/resolutions-1909-to-present/2022/reso-10090.pdf

[5] Staff Report 2303-1209 https://cityofpaloalto.primegov.com/Portal/viewer?id=1954&type=0

funded by the City's General Fund, to compensate residential customers for the high energy bills they experienced.

Capped-Price Winter Natural Gas Purchasing Strategy through October 2024

In response to the dramatic and unprecedented price spike, Council approved a capped-price winter natural gas purchasing strategy in September 2023[6] for the gas year November 2023-October 2024 by adopting Resolution 10126[7]. The Gas Commodity Charge continues to be based on a monthly market index price. The capped-price winter natural gas purchasing strategy involved purchasing price caps on the City's cost of gas for December-February, limiting the price the City paid for gas to $2 per therm for a portion of City's anticipated gas needs. The impact on customers of what is, in essence, an insurance policy to mitigate the potential for a repeat of high winter gas prices, was limited to a maximum 15 cents per therm (estimated 7.6% increase to annual bill) applied for 12 months to customer usage through the Gas Commodity Charge.

Within the cost constraints approved 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 total cost of the price caps, or insurance, was $1.5 million. Spread out over the entire year, an adder of $0.055 per therm is currently applied to the Gas Commodity Charge through October 2024. This represents approximately $1.81 per month on a typical residential customer's 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 monthly market index price remained under $2 per therm for the December 2023, January 2024, and February 2024 months, so the City did not make use of the contracted price caps it had purchased.

In addition to approving the capped-price winter natural gas purchasing strategy, Council directed staff to explore other alternatives for managing potential commodity price spikes in the future.

ANALYSIS

Establishing a New Strategy for Mitigating Short-term Gas Price Spikes Beginning November 2024

Staff's proposal maintains the practice of purchasing gas based on a monthly market index price. A gas price mitigation adder (Adder) will be included in the Gas Commodity Charge. The funds will accrue in the Gas Supply Rate Stabilization Reserve. Funds in the reserve can be utilized to offset potential future short-term price spike impacts.

Staff recommends an Adder of 10.3 cents per therm (estimated 5.2% increase on an annual bill). Based on this recommendation, an estimated $2.8 million per year will accumulate each year with a total estimated balance of $11.3 million after 4 years if no funds are withdrawn to mitigate short-term market price spikes in the interim. This is in line with the maximum adder approved by Council for the current winter capped price strategy. Historically, PG&E's gas commodity rates

[6] September 2023 https://cityofpaloalto.primegov.com/Portal/Meeting?meetingTemplateId=13026
[7] Resolution 10126 https://portal.laserfiche.com/Portal/DocView.aspx?id=67825&repo=r-704298fc

have been about 6% higher than Palo Alto's Gas Commodity Charge; the proposed Adder is comparable to this difference.

As the funds accumulate in the Gas Rate Stabilization Reserve, staff will recommend reducing the customer maximum Gas Commodity Charge. At this time, it is anticipated that this retail maximum rate, currently $4 per therm, will be recommended in FY 2026-27 to be $3.50 per therm, in FY 2027-28 to be $2.75 per therm, and in FY 2028-29 to be $2 per therm. Actual recommendations for each year will be made as part of the budget process, and will be based on the actual amount in the reserve fund and the then-current projections regarding the size of the rate spike that could be mitigated by the reserves.

Staff anticipates that as of November 2028, the rate mitigation adder will have raised $11.3 million. This would be enough to maintain the Gas Commodity Charge at $2 per therm for a single month even if market index prices increased to $5 per therm for that month. The highest price during the 2022-23 winter price spike was nearly $5 per therm.

In four years, staff will return to Council with a recommendation to either continue, eliminate or make changes to the Adder. A reserve balance larger than $11.3 million will provide more protection against potential higher and/or longer duration market index price spikes.

Table 1 below illustrates the reduction of the maximum Gas Commodity Charge over four years as well as the maximum market index prices spikes and corresponding frequency of months (1, 2, or 3) protected against by the funds collected funds over 1-8 years assuming no fund withdrawals to mitigate short-term market price spikes in the interim and assuming the Adder is kept in place throughout the eight year period.

Table 1 – Gas Commodity Charges and Market Price Protection ($ per therm)

	Max Gas Commodity Charge	Max Price Spike (1 Month)	Max Price Spike (2 Months)	Max Price Spike (3 Months)
After Year 1	$4.00	$4.75	$4.38	$4.25
After Year 2	$3.50	$5.00	$4.25	$4.00
After Year 3	$2.75	$5.00	$3.88	$3.50
After Year 4	**$2.00**	**$5.00**	**$3.50**	**$3.00**
After Year 5	$2.00	$5.75	$3.88	$3.25
After Year 6	$2.00	$6.50	$4.25	$3.50
After Year 7	$2.00	$7.25	$4.63	$3.75
After Year 8	$2.00	$8.00	$5.00	$4.00

Gas Commodity Charges are one part of the City's monthly gas volumetric and service charges[8], which are listed in the City's gas rate schedules and shown by month. If approved by Council, the strategy will be implemented effective November 1, 2024. Changes to the rate schedules are shown in Attachment A and include the changes proposed in the FY 2025 Financial Plans which will be considered by Council in June 2024. .

[8] https://www.cityofpaloalto.org/files/assets/public/utilities/rates-schedules-for-utilities/residential-utility-rates/monthly-gas-volumetric-and-service-charges-residential.pdf

GULP Revisions

The September 2023[9] GULP update modified the purchasing strategy to include the capped-price winter natural gas purchases. The new strategy, if adopted, requires changes to GULP as shown in Table 1 below. 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 for consideration in a separate staff report.

Table 2 – Gas Utility Long-term Plan Revisions

GULP	Current	Proposed
Objective 1	Pass a market supply cost signal through to customers with measures to protect against price spikes applied during winter months.	Pass a market supply cost signal through to customers with measures to mitigate the impact of short-term natural gas market price spikes.
Strategy 1	a. Purchasing natural gas at monthly and daily market index prices; b. Changing gas supply rates monthly to reflect market prices; and c. 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	a. Purchasing natural gas at monthly and daily market index prices; b. Changing gas supply rates monthly to reflect market prices; c. Collecting funds in the Gas Rate Stabilization Reserve to manage potential short-term price spikes; and d. Utilizing those funds if a short-term natural gas market price spike occurs.

[9] September 2023 https://cityofpaloalto.primegov.com/Portal/Meeting?meetingTemplateId=13026

Implementation Plan Item 1	Implement market-based supply purchases and commodity rates with measures to protect against price spikes applied during winter months by: a. Developing a new purchasing plan to be approved by the Director of Utilities; and b. Conducting customer communication and outreach.	Implement market-based supply purchases and commodity rates with measures to protect against price spikes by: a. Adding 10.3 cents per therm to the Gas Commodity Charge from November 2024 through October 2028; and b. Conducting customer communication and outreach.

Revisions to the Gas Utility Reserves Management Practices

Staff recommends modifying Section 7 in the Gas Utility Reserves Management Practices, which are the guidelines followed in the Utility's financial planning process, to reflect the new reserve and strategy:

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 and to mitigate the impact of short-term gas market price spikes. 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, except gas price mitigation revenues that may be held in the Rate Stabilization Reserve until needed.

The Gas Utility Reserves Management Practices, including the changes proposed to that document in the FY 2025 Financial Plan is included in Attachment A.

Fixed Price Purchases Alternative

An alternative to staff's proposal is to purchase some portion of winter gas needs (winter is the most likely time period when a market price spike could occur) at fixed prices. The downside of this strategy is that the City's cost of gas could deviate significantly from the market price, either higher or lower. This alternative would require structural changes in the way the Gas Commodity Charge is established for the months during which fixed-price purchases are included in the portfolio, as well as a significant amount of staff resources to implement.

Continuation of the Capped Price Winter Natural Gas Purchasing Strategy

A second alternative is to continue the strategy of purchasing insurance against high market prices. The cost of that insurance varies, and the product is not commonly traded and is expected to be costly. Like familiar types of insurance, premiums are not refunded if the insurance is not

used. The cost would occur every year and may or may not provide value to Palo Alto's rate payers.

Return to Pass-through without Short-term Price and Cost Protection
Another alternative is to return to the pre-2023 strategy. Customers will not be protected from short-term natural gas market price spikes. Council may consider a higher maximum Gas Commodity Charge to protect the Gas Utility from costs greater than what may be recovered through rates.

Variations of Staff Recommendation
There are three variables embedded in staff's recommendation which, if changed, yield different results. A higher Adder would result in more than the estimated $11.3 million collected over 4 years and vice versa. A longer period over which the Adder is applied results in more funds collected. A slower or more modest decrease in the maximum Gas Commodity Charge would provide less protection for the rate payers but more protection for the Gas Utility Operations Reserve. A combination of changes to the three variables offers an array of alternatives.

The table below summarizes the considerations for staff's recommendation and the alternatives.

Table 3 – Summary of Staff Recommendation and Alternatives

Alternative	Description	Consideration
Staff Recommendation (self-insured)	10.3 cents per therm Adder; four years; decrease max Commodity Charge to $2 per therm;	Estimated $11.3 million reserve balance
Variation	Higher/lower Adder	Larger/smaller reserve balance = more or less price protection
Variation	Longer/Shorter collection period	Larger/smaller reserve balance = more or less price protection
Variation	Leave max Commodity Charge high/reduce max Commodity Charge faster	More price protection for the Gas Utility/more price protection for the customer
Fixed-Price Purchases	Purchase some fixed-price gas for the winter months	Commodity Charges will be higher or lower than the market price and PG&E's rates
Capped Price Winter Purchases (Insurance from the market)	Replicate the winter 2023-2024 strategy	Cost and availability of insurance is uncertain; cost is sunk whether insurance is needed or not
Return to previous strategy	Pass through market price with no price mitigation	Customers pay market price in all scenarios, may consider higher maximum Commodity Charge

FISCAL/RESOURCE IMPACT

Staff recommends Council approval of a gas price mitigation adder of 10.3 cents per therm to be applied the Gas Commodity Charge for four years which is estimated to result in the collection of $11.3 million. The Adder equates to an estimated increase of 5.2% on the median monthly residential customer bill; the estimated increase will be 5.6% for the winter bill months (November-March) and 5.2% for the summer bill months (April-October). This is lower than the maximum Gas Commodity Charge impact of 15 cents per therm (estimated 7.6% on an annual bill) approved by Council for the capped-price winter natural gas purchasing strategy through October 2024.

Table 3 shows the median monthly residential customer bill and the projected impact based on the 10.3 cents per therm Adder.

Table 3

Median Monthly Residential Bill - Projected Impact				
Season	Therms	Bill Estimate	Bill Increase $	Bill Increase %
Winter (Nov-Mar)	54	$ 99.80	$ 5.57	5.6%
Summer (Apr-Oct)	18	$ 40.52	$ 1.86	4.6%
Annual	33	$ 65.22	$ 3.40	5.2%

STAKEHOLDER ENGAGEMENT

With the UAC's recommendation, staff plans to seek approval of the proposal from the Finance Committee in June 2024 and Council in August 2024, and to implement the Council-approved strategy beginning November 2024. If adopted by Council, the City website will be updated to reflect the change in the Commodity Charge calculation in the Monthly Gas Volumetric and Service Charges[10] document. In addition, customers will be notified via utility outbound communications and marketing updates.

ENVIRONMENTAL REVIEW

Council's approval of amendments to the FY 2025 Gas Fund budget appropriation, amendments to the Gas Utility Long-term Plan (GULP) Objectives, Strategies and Implementation Plan, and amendments to the Gas Utility Reserves Management Practices 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

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

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
Attachment A, Exhibit 1: Gas Utility Long-Term Plan
Attachment A, Exhibit 2: Gas Utility Reserve Management Practices
Attachment A, Exhibit 3: G-1 Effective 2024-11-01
Attachment A, Exhibit 4: G-2 Effective 2024-11-01
Attachment A, Exhibit 5: G-3 Effective 2024-11-01
Attachment A, Exhibit 6: G-10 Effective 2024-11-01
Attachment B: Presentation

AUTHOR/TITLE

Dean Batchelor, Director of Utilities
Staff: Jason Huang, Senior Resource Planner

Resolution No.
Resolution of the Council of the City of Palo Alto Amending the Gas Utility Long-term Plan Objectives, Strategies, and Implementation Plan, Amending the Gas Utility Reserves Management Practices, Amending the FY 2025 Gas Fund Budget, 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)

R E C I T A L S

A. On March 7, 2011, the Council adopted Resolution No. 9151, approving the Gas Utility Long-term Plan Objectives, Strategies and Implementation Plan (the "Plan"), amended on April 23, 2012 via Resolution No. 9244 and on September 18, 2023 via Resolution No. 10126.

B. On May 1, 2024 staff presented the Utilities Advisory Commission and the Council information proposing a third amendment to Resolution No. 10126, to further amend the Plan to include a gas price mitigation strategy, which will collect funds to mitigate the impact of short-term gas price spikes on customer rates.

C. Pursuant to Chapter 12.20.010 of the Palo Alto Municipal Code, the Council of the City of Palo Alto may by resolution adopt rules and regulations governing utility services, fees and charges.

D. On June _, 2024, the Council adopted Resolution ____, approving the Fiscal year 2025 Gas Utility Financial Plan including the Gas Utility Reserves Management Practices.

E. Implementing the gas price mitigation strategy requires amending the FY 2025 Gas Fund Budget revenue by $2,200,000.

F. Implementing the gas price mitigation strategy requires amending the Commodity Charge cost component of 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); attached and incorporated as Exhibits C through F to this Resolution.

The Council of the City of Palo Alto does hereby RESOLVE as follows:

SECTION 1. The Council hereby approves the amendments to the Gas Utility Long-term Plan Objectives, Strategies and Implementation Plan (GULP), attached to this Resolution as Exhibit A.

SECTION 2. The Council hereby approves the amendments to the Gas Utility Reserve Practices, attached to this Resolution as Exhibit B.

SECTION 3. Resolution No. 10126 is hereby amended in so far as the Plan, as amended, is hereby approved.

SECTION 4. The Council hereby approves increasing the FY 2025 gas operating revenues by $2,200,000.

SECTION 5. Pursuant to Section 12.20.010 of the Palo Alto Municipal Code, Utility Rate Schedule G-1 (Residential Gas Service) is hereby amended to read as attached and incorporated to this Resolution as Exhibit C. Utility Rate Schedule G-1, as amended, shall become effective November 1, 2024.

SECTION 6. Pursuant to Section 12.20.010 of the Palo Alto Municipal Code, Utility Rate Schedule G-2 (Residential Master-Metered and Commercial Gas Service) is hereby amended to read as attached and incorporated to this Resolution as Exhibit D. Utility Rate Schedule G-2, as amended, shall become effective November 1, 2024.

SECTION 7. Pursuant to Section 12.20.010 of the Palo Alto Municipal Code, Utility Rate Schedule G-3 (Large Commercial Gas Service) is hereby amended to read as attached and incorporated to this Resolution as Exhibit E. Utility Rate Schedule G-3, as amended, shall become effective November 1, 2024.

SECTION 8. Pursuant to Section 12.20.010 of the Palo Alto Municipal Code, Utility Rate Schedule G-10 (Compressed Natural Gas Service Service) is hereby amended to read as attached and incorporated to this Resolution as Exhibit F. Utility Rate Schedule G-10, as amended, shall become effective November 1, 2024.

SECTION 9. The City Council finds as follows:

a. Revenues derived from the gas rates approved by this resolution do not exceed the funds required to provide gas service.

b. Revenues derived from the gas rates approved by this resolution shall not be used for any purpose other than providing gas service, and the purposes set forth in Article VII, Section 2, of the Charter of the City of Palo Alto.

SECTION 10. The Council finds that the fees and charges adopted by this resolution are charges imposed for a specific government service or product provided directly to the payor that are not provided to those not charged, and do not exceed the reasonable costs to the City of providing the service or product.

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SECTION 11. The Council finds that approving the changes to the FY 2024 Gas Fund budget appropriation and Plan does not meet the California Environmental Quality Act's (CEQA) definition of a project under Public Resources Code Section 21065 and CEQA Guidelines Section 15378(b)(5), because these actions are administrative governmental activities which will not cause a direct or indirect physical change in the environment. The Council finds that changing the Commodity Charge cost component of gas rates to meet operating expenses and financial reserve needs 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.

INTRODUCED AND PASSED:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

ATTEST:

_____ _____

City Clerk Mayor

APPROVED AS TO FORM: APPROVED:

_____ _____

Assistant City Attorney City Manager

_____

Director of Utilities

_____

Director of Administrative Services

Adopted April 23, 2012 via Resolution 9244
Amended September 18, 2023 via Resolution 10126
Amended XXXXX, 2024 via Resolution XXXXX

Proposed Gas Utility Long-term Plan (GULP)
Objectives, Strategies and Implementation Plan

GULP Objectives:

1. Market price transparency – Pass a market supply cost signal through to customers with measures to mitigate the impact of short-term gas market price spikes.~~protect against price spikes applied during winter months.~~
2. Supply Cost Management – Lower delivered gas cost over the long term.
3. Energy Efficiency – Ensure the deployment of all feasible, reliable, cost-effective energy efficiency measures.
4. Climate Protection – Reduce the carbon intensity of the gas portfolio in accordance with the Sustainability and Climate Protection Plan.
5. Parity with PG&E – At a reasonable cost, protect the City's interests and maintain access to transportation on par with PG&E's core customers.

GULP Strategies:

1. Pass a market supply cost signal through to customers with measures to mitigate the impact of short-term gas market price spikes by: ~~protect against price spikes applied during winter months by:~~
   a. Purchasing ~~natural~~ gas at monthly and daily market index prices;
   b. Changing gas supply rates monthly to reflect market prices; and
   c. Collecting funds in the Gas Rate Stabilization Reserve to manage potential short-term price spikes; and
   d. Utilizing those funds if a short-term gas market price spike occurs.
   ~~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~~.
2. Lower delivered gas cost over the long term by:
   a. Acquiring pipeline assets that yield supply costs below market and meet operational needs;
   b. Taking advantage of the City's low cost of capital to acquire gas supply and assets; and
   c. Optimizing existing assets.
3. Ensure the deployment of all feasible, reliable, cost-effective energy efficiency measures by:
   a. Developing a ten-year gas efficiency plan every four years maintaining consistency with the electric energy efficiency goals update schedule; and
   b. Considering the impacts of electrification on gas demand.
4. Reduce the carbon intensity of the gas portfolio in accordance with the Climate Protection Plan by:
   a. Terminating the PaloAltoGreen Gas program established by Resolution 9405; and
   b. Designing and implementing the Carbon Neutral Gas Plan to achieve carbon reduction with no more than a 10 cent per therm rate impact.
5. At a reasonable cost, protect the City's interests and maintain access to transportation on par with PG&E's core customers by:
   a. Participating in the regulatory and legislative arenas when the potential impact on

the City is aligned with the cost to intervene and the probability of success;

a. Negotiating with PG&E for fair access to transportation and storage; and
b. Exploring potential joint action with other public agencies.

GULP Implementation Plan:

1. Implement market-based supply purchases and commodity rates with measures to mitigate the impact of short-term gas market price spikes by:~~protect against price spikes applied during winter months by:~~
   a. Adding 10.3 cents per therm to the Gas Commodity Charge from November 2024 through October 2028~~Developing a new purchasing plan to be approved by the Director of Utilities~~; and
   b. Conducting customer communication and outreach.

2. Pursue below-market assets available through the Gas Transportation and Storage Settlement by:
   a. Evaluating the pipeline capacity reservation options available; and
   b. Contracting with PG&E for any pipeline capacity with an estimated cost below the forecasted market value.
3. Monitor the prepay market and prepare for implementation in preparation for a future MuniGas transaction.
4. Implement gas efficiency programs to meet the gas efficiency goals.
5. Track and report on gas efficiency by:
   a. Providing quarterly updates to the UAC about the gas efficiency programs; and
   b. Providing annual updates to Council on gas efficiency achievements compared to the goals and overall cost effectiveness.
6. Continue evaluating new gas efficiency technologies and undertake pilot studies where appropriate.
7. Pursue potential modifications to the Carbon Neutral Gas Plan by:
   a. Determining an acceptable premium, if any, to be paid for a local offset project if and when a certified project is identified; and
   b. Investigating alternatives to offsets, including methods involving voter approval.

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)
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)
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)
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 and to mitigate the impact of short-term gas market price spikes. 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, except gas price mitigation revenues that may be held in the Rate Stabilization Reserve until needed.

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 ~~an amount~~ 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. ~~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.~~

RESIDENTIAL MASTER-METERED AND COMMERCIAL GAS SERVICE

UTILITY RATE SCHEDULE G-2

A. APPLICABILITY:

This schedule applies to the following Customers receiving Gas Service from the City of Palo Alto Utilities:

1. Commercial Customers who use less than 250,000 therms per year at one site;
2. Master-metered residential Customers in multi-family residential facilities.

B. TERRITORY:

This schedule applies anywhere the City of Palo Alto provides Gas Service.

C. UNBUNDLED RATES:

	Per Service
Monthly Service Charge:	$149.2429.78

Supply Charges:	Per Therm
1. Commodity (Monthly Market Based)	$0.10-$4.00
2. Cap and Trade Compliance Charges	$0.00-$0.25
3. Transportation Charge	$0.00-$0.25
4. Carbon Offset Charge	$0.00-$0.10
Distribution Charge:	$1.02820.8941

D. SPECIAL NOTES:

1. Calculation of Cost Components

The actual bill amount is calculated based on the applicable rates in Section C above and adjusted for any applicable discounts, surcharges and/or Taxes. On a Customer's bill statement, the bill amount may be broken down into appropriate components as calculated under Section C.

The Commodity Charge is based on the monthly natural gas Bidweek Price Index for delivery at PG&E Citygate, adjusted to account for delivery losses to the Customer's Meter. The Commodity Charge also includes adjustments to account for Council-approved programs implemented to reduce the cost of Ggas, including a municipal purchase discount[1], and $0.103 per therm to mitigate the impact of short-term market

1 Adopted via Resolution 9451, on September 15, 2014.

price spikes[2].~~and a maximum $0.15/per therm cost for capped price winter natural gas purchases[3].~~

The Cap and Trade Compliance Charge reflects the City's cost of regulatory compliance with the state's Cap and Trade Program, including the cost of acquiring compliance instruments sufficient to cover the City's Gas Utility's compliance obligations. The Cap and Trade Compliance Charge will change in response to changing market conditions, retail sales volumes and the quantity of allowances required.

The Carbon Offset Charge reflects the City's cost to purchase offsets for greenhouse gases produced when Gas is burned~~in the burning of natural gas~~. The Carbon Offset Charge will change in response to changing market conditions, changing sales volumes and the quantity of offsets purchased within the Council-approved per therm cap.

The Transportation Charge is based on the current PG&E G-WSL rate for Palo Alto, accounting for delivery losses to the Customer's Meter.

The Commodity, Cap and Trade Compliance, Carbon Offset and Transportation Charges will fall within the minimum/maximum ranges set forth in Section C. Current and historic per therm rates for the Commodity, Cap and Trade Compliance, Carbon Offset and Transportation Charges are posted on the City Utilities website.[4]

{End}

2 Adopted via Resolution XXXX on _____, 2024

~~3 Adopted via Resolution 10126, on September 18, 2023.~~

4 Monthly gas and commodity and volumetric rates are available ~~here~~here, or by visiting https://www.cityofpaloalto.org/files/assets/public/utilities/business/business-rates/monthly-gas-volumetric-and-service-charges-commercial.pdf

LARGE COMMERCIAL GAS SERVICE

UTILITY RATE SCHEDULE G-3

A. APPLICABILITY:

This schedule applies to the following Customers receiving Gas Service from the City of Palo Alto Utilities:

1. Commercial Customers who use at least 250,000 therms per year at one site;
2. Customers at City-owned generation facilities.

B. TERRITORY:

This schedule applies anywhere the City of Palo Alto provides Gas Service.

C. UNBUNDLED RATES:

	Per Service
Monthly Service Charge:	$682.85~~593.79~~

	Per Therm
Supply Charges:	
1. Commodity (Monthly Market Based)	$0.10-$4.00
2. Cap and Trade Compliance Charges	$0.00-$0.25
3. Transportation Charge	$0.00-$0.25
4. Carbon Offset Charge	$0.00-$0.10
Distribution Charge:	$1.0179~~0.8852~~

D. SPECIAL NOTES:

1. Calculation of Cost Components

The actual bill amount is calculated based on the applicable rates in Section C above and adjusted for any applicable discounts, surcharges and/or Taxes. On a Customer's bill statement, the bill amount may be broken down into appropriate components as calculated under Section C.

The Commodity Charge is based on the monthly natural gas Bidweek Price Index for delivery at PG&E Citygate, adjusted to account for delivery losses to the Customer's Meter. The Commodity Charge also includes adjustments to account for Council-approved programs implemented to reduce the cost of gas, including a municipal

purchase discount[1], and $0.103 per therm for mitigating the impact of short-term natural gas market price spikes[2] ~~and a maximum $0.15/per therm cost for capped price winter natural gas purchases[3].~~

The Cap and Trade Compliance Charge reflects the City's cost of regulatory compliance with the state's Cap and Trade Program, including the cost of acquiring compliance instruments sufficient to cover the City's Gas Utility's compliance obligations. The Cap and Trade Compliance Charge will change in response to changing market conditions, retail sales volumes and the quantity of allowances required.

The Carbon Offset Charge reflects the City's cost to purchase offsets for greenhouse gases produced in the burning of natural gas. The Carbon Offset Charge will change in response to changing market conditions, changing sales volumes and the quantity of offsets purchased within the Council-approved per therm cap.

The Transportation Charge is based on the current PG&E G-WSL rate for Palo Alto, accounting for delivery losses to the Customer's Meter.

The Commodity, Cap and Trade Compliance, Carbon Offset and Transportation Charges will fall within the minimum/maximum ranges set forth in Section C. Current and historic per therm rates for the Commodity, Cap and Trade Compliance, Carbon Offset and Transportation Charges are posted on the City Utilities website.[4]

2. Request for Service

A qualifying Customer may request service under this schedule for more than one account or meter if the accounts are located on one site. A site consists of one or more contiguous parcels of land with no intervening public right-of- ways (e.g. streets).

3. Changing Rate Schedules

Customers may request a rate schedule change at any time to any applicable City of Palo Alto full-service rate schedule.

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1 Adopted via Resolution 9451, on September 15, 2014.

2 Adopted via Resolution XXXX on _____, 2024

~~3 Adopted via Resolution 10126, on September 18, 2023.~~

4 Monthly gas and commodity and volumetric rates are available here, or by visiting https://www.cityofpaloalto.org/files/assets/public/utilities/business/business-rates/monthly-gas-volumetric-and-service-charges-commercial.pdf

LARGE COMMERCIAL GAS SERVICE

UTILITY RATE SCHEDULE G-3

{End}

COMPRESSED NATURAL GAS SERVICE

UTILITY RATE SCHEDULE G-10

A. APPLICABILITY:

This schedule applies to the sale of ~~natural gas~~Gas to the City-owned compressed natural gas (CNG) fueling station at the Municipal Service Center in Palo Alto.

B. TERRITORY:

Applies to the City's CNG fueling station located at the Municipal Service Center in City of Palo Alto.

C. UNBUNDLED RATES:

	Per Service
Monthly Service Charge:	$100.93~~87.77~~

	Per Therm
Supply Charges:	
Commodity (Monthly Market Based)	$0.10-$4.00
Cap and Trade Compliance Charges	$0.00-$0.25
Transportation Charge	$0.00-$0.25
Carbon Offset Charge	$0.00-$0.10
Distribution Charge	$0.0166~~45~~

D. SPECIAL CONDITIONS

1. Calculation of Cost Components

The actual bill amount is calculated based on the applicable rates in Section C above and adjusted for any applicable discounts, surcharges and/or Taxes. On a Customer's bill statement, the bill amount may be broken down into appropriate components as calculated under Section C.

The Commodity Charge is based on the monthly natural gas Bidweek Price Index for delivery at PG&E Citygate, adjusted to account for delivery losses to the Customer's Meter. The Commodity Charge also includes adjustments to account for Council-approved programs implemented to reduce the cost of gas, including a municipal purchase discount[1], and $0.103 per therm for mitigating the impact of short-term natural gas market price spikes[2].~~and a maximum~~

1 Adopted via Resolution 9451, on September 15, 2014.

2 Adopted via Resolution XXXX on _____, 2024

COMPRESSED NATURAL GAS SERVICE

UTILITY RATE SCHEDULE G-10

~~$0.15/per therm cost for capped price winter natural gas purchases[3].~~

The Cap and Trade Compliance Charge reflects the City's cost of regulatory compliance with the state's Cap and Trade Program, including the cost of acquiring compliance instruments sufficient to cover the City's Gas Utility's compliance obligations. The Cap and Trade Compliance Charge will change in response to changing market conditions, retail sales volumes and the quantity of allowances required.

The Carbon Offset Charge reflects the City's cost to purchase offsets for greenhouse gases produced when Gas is burned~~in the burning of natural gas~~. The Carbon Offset Charge will change in response to changing market conditions, changing sales volumes and the quantity of offsets purchased within the Council-approved per therm cap.

The Transportation Charge is based on the current PG&E G-WSL rate for Palo Alto, accounting for delivery losses to the Customer's Meter.

The Commodity, Cap and Trade Compliance, Carbon Offset and Transportation Charges will fall within the minimum/maximum range set forth in Section C. Current and historic per therm rates for the Commodity, Cap and Trade Compliance, Carbon Offset and Transportation Charges are posted on the City Utilities website.[4]

{End}

~~3 Adopted via Resolution 10126, on September 18, 2023.~~

4 Monthly gas and commodity and volumetric rates are available here, or by visiting https://www.cityofpaloalto.org/files/assets/public/utilities/business/business-rates/monthly-gas-volumetric-and-service-charges-commercial.pdf

RESIDENTIAL GAS SERVICE

UTILITY RATE SCHEDULE G-1

A. APPLICABILITY:

This schedule applies to the following Customers receiving Gas Service from City of Palo Alto Utilities:

1. Separately-metered single-family residential Customers;
2. Separately-metered multi-family residential Customers in multi-family residential facilities.

B. TERRITORY:

This schedule applies anywhere the City of Palo Alto provides Gas Service.

C. UNBUNDLED RATES:

	Per Service
Monthly Service Charge:	$16.114~~.01~~

Tier 1 Rates:	Per Therm
Supply Charges:	
1. Commodity (Monthly Market Based)	$0.10-$4.00
2. Cap and Trade Compliance Charge	$0.00-$0.25
3. Transportation Charge	$0.00-$0.25
4. Carbon Offset Charge	$0.00-$0.10
Distribution Charge:	$0.782868~~07~~

Tier 2 Rates: (All usage over 100% of Tier 1)	
Supply Charges:	
1. Commodity (Monthly Market Based)	$0.10-$4.00
2. Cap and Trade Compliance Charge	$0.00-$0.25
3. Transportation Charge	$0.00-$0.25
4. Carbon Offset Charge	$0.00-$0.10
Distribution Charge:	$2.00161~~.7406~~

RESIDENTIAL GAS SERVICE

UTILITY RATE SCHEDULE G-1

D. SPECIAL NOTES:

1. Calculation of Cost Components

The actual bill amount is calculated based on the applicable rates in Section C above and adjusted for any applicable discounts, surcharges and/or Taxes. On a Customer's bill statement, the bill amount may be broken down into appropriate components as calculated under Section C.

The Commodity Charge is based on the monthly natural gas Bidweek Price Index for delivery at PG&E Citygate, adjusted to account for delivery losses to the Customer's Meter. The Commodity Charge also includes adjustments to account for Council-approved programs implemented to reduce the cost of gas, including a municipal purchase discount[1], and $0.103 per therm for mitigating the impact of short-term natural gas market price spikes[2] ~~and a maximum $0.15/per therm cost for capped price winter natural gas purchases[3]~~.

The Cap and Trade Compliance Charge reflects the City's cost of regulatory compliance with the state's Cap and Trade Program, including the cost of acquiring compliance instruments sufficient to cover the City's Gas Utility's compliance obligations. The Cap and Trade Compliance Charge will change in response to changing market conditions, retail sales volumes and the quantity of allowances required.

The Carbon Offset Charge reflects the City's cost to purchase offsets for greenhouse gases produced in the burning of natural gas. The Carbon Offset Charge will change in response to changing market conditions, changing sales volumes and the quantity of offsets purchased within the Council-approved per therm cap.

The Transportation Charge is based on the current PG&E G-WSL rate for Palo Alto, accounting for delivery losses to the Customer's Meter.

The Commodity, Cap and Trade Compliance, Carbon Offset and Transportation Charges will fall within the minimum/maximum ranges set forth in Section C. Current and historic

1 Adopted via Resolution 9451, on September 15, 2014.
2 Adopted via Resolution XXXX on _____, 2024
~~3 Adopted via Resolution 10126, on September 18, 2023.~~

per therm rates for the Commodity, Cap and Trade Compliance, Carbon Offset and Transportation Charges are posted on the City Utilities website.[4]

2. Seasonal Rate Changes:

The Summer period is effective April 1 to October 31 and the Winter period is effective from November 1 to March 31. When the billing period includes use in both the Summer and the Winter periods, the usage will be prorated based on the number of days in each seasonal period, and the charges based on the applicable rates for each period. For further discussion of bill calculation and proration, refer to Rule and Regulation 11.

3. Calculation of Usage Tiers

Tier 1 natural gas usage shall be calculated and billed based upon a level of 0.667 therms per day during the Summer period and 2.0 therms per day during the Winter period, rounded to the nearest whole therm, based on meter reading days of service. As an example, for a 30 day bill, the Tier 1 level would be 20 therms during the Summer period and 60 therms during the Winter period months. For further discussion of bill calculation and proration, refer to Rule and Regulation 11.

{End}

4 Monthly gas and commodity and volumetric rates are available here, or by visiting https://www.cityofpaloalto.org/files/assets/public/utilities/rates-schedules-for-utilities/residential-utility-rates/monthly-gas-volumetric-and-service-charges-residential.pdf

CITY OF PALO ALTO

Recommendation to Amend the Gas Utility Long-term Plan and the Gas Utility Reserves Management Practices

Utilities Advisory Commission

May 1, 2024

www.cityofpaloalto.org

Background

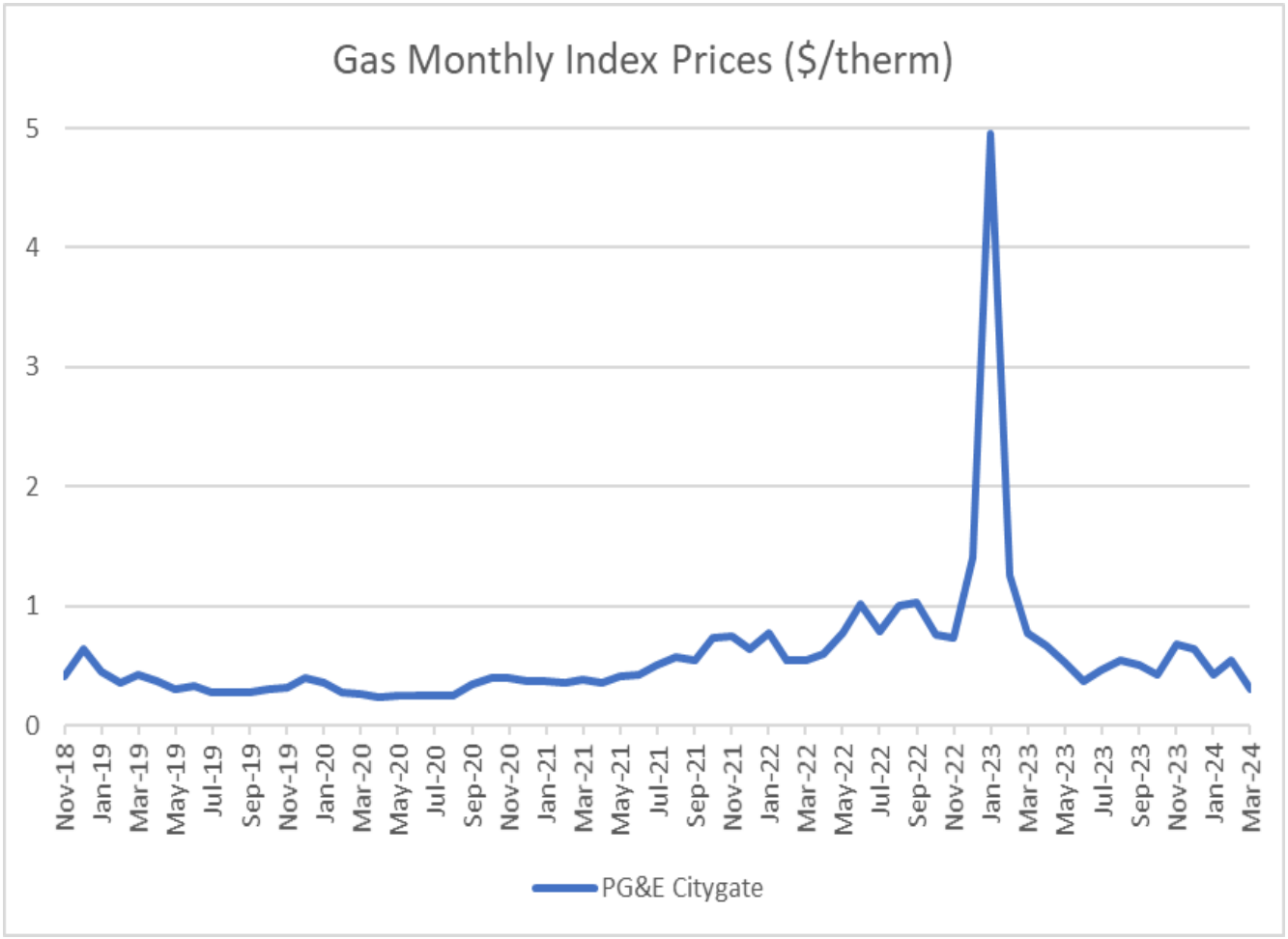
- Prior to 2012, most of Palo Alto's gas was purchased at fixed prices resulting in relative rate stability
- In 2012, Council approved a market price pass-through strategy (with a maximum Commodity Charge)
- Market prices remained under the previous Council-approved $2/therm maximum Commodity Charge until Winter 2022-23

CITY OF PALO ALTO

Winter 2022-23 Price Surge

- November 2022: western U.S. gas prices started rising
- Staff communicated to customers about the expected higher prices
- December 2022: Council increased the $2/therm maximum Commodity Charge to $4/therm
- Monthly index price for January 2023 was nearly $5/therm
- Reserves ($1.84 million) were utilized to cover a portion of the price increase

Gas Monthly Index Prices



Council Approved a Capped-Price Winter Gas Purchasing Strategy for Winter 2023-24

CITY OF PALO ALTO

- Continued purchasing gas at prices tied to a market monthly index
- Council-approved $0.15/therm maximum impact to Commodity Charge in order to purchase price cap "insurance"
- For December, January and February, about half of anticipated gas demand purchased with $2/therm price cap
- Cost for winter 2023-24 price cap:
  - $1.5 million
  - $0.055/therm applied to Commodity Charge November 2023 – October 2024
  - About $1.80/month for typical residential customer
- Gas prices remained under $2/therm

CITY OF PALO ALTO

Staff Recommends Funding Reserve to Self-insure Against Future Short-term price Spikes

- Fund Gas Rate Stabilization Reserve for gas price mitigation purposes
- Include $0.103/therm in Commodity Charge for 4 years to fund reserve
- Target $11.3 million in funding, full protection of one month price spike up to $5/therm (winter 2022-23 peak) or lower peaks for more months
- Gradually lower maximum Commodity Charge from $4/therm to $2/therm by end of year 4

Levels of Market Price Protection

CITY OF PALO ALTO

	Max Gas Commodity Charge	Max Price Spike (1 Month)	Max Price Spike (2 Months)	Max Price Spike (3 Months)
After Year 1	$4.00	$4.75	$4.38	$4.25
After Year 2	$3.50	$5.00	$4.25	$4.00
After Year 3	$2.75	$5.00	$3.88	$3.50
After Year 4	**$2.00**	**$5.00**	**$3.50**	**$3.00**
After Year 5	$2.00	$5.75	$3.88	$3.25
After Year 6	$2.00	$6.50	$4.25	$3.50
After Year 7	$2.00	$7.25	$4.63	$3.75
After Year 8	$2.00	$8.00	$5.00	$4.00

Customer Bill Impact

CITY OF PALO ALTO

Median Monthly Residential Bill - Projected Impact				
Season	Therms	Bill Estimate	Bill Increase $	Bill Increase %
Winter (Nov-Mar)	54	$ 99.80	$ 5.57	5.6%
Summer (Apr-Oct)	18	$ 40.52	$ 1.86	4.6%
Annual	33	$ 65.22	$ 3.40	5.2%

CITY OF PALO ALTO

Reserve Funds Collected – Different Adder Scenarios

$11.3 million Target	$ 0.103	$ 0.090	$ 0.060	$ 0.030
After Year 1	$ 2,816,478	$ 2,458,540	$ 1,639,027	$ 819,513
After Year 2	$ 5,632,956	$ 4,917,081	$ 3,278,054	$ 1,639,027
After Year 3	$ 8,449,433	$ 7,375,621	$ 4,917,081	$ 2,458,540
After Year 4	**$ 11,265,911**	$ 9,834,161	$ 6,556,107	$ 3,278,054
After Year 5	$ 14,082,389	**$ 12,292,701**	$ 8,195,134	$ 4,097,567
After Year 6	$ 16,898,867	$ 14,751,242	$ 9,834,161	$ 4,917,081
After Year 7	$ 19,715,344	$ 17,209,782	**$ 11,473,188**	$ 5,736,594
After Year 8	$ 22,531,822	$ 19,668,322	$ 13,112,215	$ 6,556,107
After Year 9	$ 25,348,300	$ 22,126,863	$ 14,751,242	$ 7,375,621
After Year 10	$ 28,164,778	$ 24,585,403	$ 16,390,269	$ 8,195,134
After Year 11	$ 30,981,255	$ 27,043,943	$ 18,029,295	$ 9,014,648
After Year 12	$ 33,797,733	$ 29,502,483	$ 19,668,322	$ 9,834,161
After Year 13	$ 36,614,211	$ 31,961,024	$ 21,307,349	$ 10,653,675
After Year 14	$ 39,430,689	$ 34,419,564	$ 22,946,376	**$ 11,473,188**
After Year 15	$ 42,247,166	$ 36,878,104	$ 24,585,403	$ 12,292,701

CITY OF PALO ALTO

Comparison of Alternatives

Alternative	Description	Consideration
Staff Recommendation (self-insured)	10.3 cents per therm Adder; four years; decrease max Commodity Charge to $2 per therm;	Estimated $11.3 million reserve balance
Variation	Higher/lower Adder	Larger/smaller reserve balance = more or less price protection
Variation	Longer/Shorter collection period	Larger/smaller reserve balance = more or less price protection
Variation	Leave max Commodity Charge high/reduce max Commodity Charge faster	More price protection for the Gas Utility/more price protection for the customer
Fixed-Price Purchases	Purchase some fixed-price gas for the winter months	Commodity Charges will be higher or lower than the market price and PG&E's rates
Capped Price Winter Purchases (Insurance from the market)	Replicate the winter 2023-2024 strategy	Cost and availability of insurance is uncertain; cost is sunk whether insurance is needed or not
Return to previous strategy	Pass through market price with no price mitigation	Customers pay market price in all scenarios, may consider higher maximum Commodity Charge

CITY OF PALO ALTO

Proposed Changes to GULP

GULP	Current	Proposed
Objective 1	Pass a market supply cost signal through to customers with measures to protect against price spikes applied during winter months.	Pass a market supply cost signal through to customers with measures to mitigate the impact of short-term natural gas market price spikes.
Strategy 1	a. Purchasing natural gas at monthly and daily market index prices; b. Changing gas supply rates monthly to reflect market prices; and c. 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	a. Purchasing natural gas at monthly and daily market index prices; b. Changing gas supply rates monthly to reflect market prices; c. Collecting funds in the Gas Rate Stabilization Reserve to manage potential short-term price spikes; and d. Utilizing those funds if a short-term natural gas market price spike occurs.
Implementation Plan Item 1	Implement market-based supply purchases and commodity rates with measures to protect against price spikes applied during winter months by: a. Developing a new purchasing plan to be approved by the Director of Utilities; and b. Conducting customer communication and outreach.	Implement market-based supply purchases and commodity rates with measures to protect against price spikes by: a. Adding 10.3 cents per therm to the Gas Commodity Charge from November 2024 through October 2028; and b. Conducting customer communication and outreach.

Proposed Changes to Gas Utility Reserves Management Practices

CITY OF PALO ALTO

Amend Section 7

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 and to mitigate the impact of short-term gas market price spikes. 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, except gas price mitigation revenues that may be held in the Rate Stabilization Reserve until needed.

Next Steps

- Finance Committee Consideration June 4, 2024
- Council Consideration August 2024
- Implement Council-approved strategy in October 2024 for gas year November 2024-October 2025

Recommended Motion

Utilities Advisory Commission Recommends Council Approve a Resolution

(1) Amending the Gas Utility Long-term Plan (GULP) Objectives, Strategies and Implementation Plan which includes collecting funds via a gas price mitigation Adder to manage potential future short-term natural gas price spikes;
(2) Amending the Gas Utility Reserves Management Practices;
(3) Amending the FY 2025 Gas Fund Budget Appropriation by Increasing the Gas Operating Revenues by $2,200,000; 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), effective November 1, 2024

Utilities Advisory Commission
Staff Report

From: Dean Batchelor, Director Utilities
Lead Department: Utilities

Meeting Date: May 1, 2024
Staff Report: 2403-2756

TITLE
Staff Recommends That the Utilities Advisory Commission Recommend the City Council Adopt the Proposed Operating and Capital Budgets for the Utilities Department for the Fiscal Year 2025

RECOMMENDATION
Staff recommends the Utilities Advisory Commission recommend the City Council adopt the Proposed Operating and Capital Budgets for the Utilities Department for Fiscal Year 2025

BACKGROUND
Linked and referenced below are the FY 2025 Proposed Operating and Capital budgets for the Utilities Department. Due to the number of pages of the CIP budget, staff only printed the CIP overview fand five year forecast of each utility for FY 2025 – FY 2029.

The entire Utilities CIP budget for FY 2025 – FY 2029 with the individual project pages can be downloaded and viewed in full from the links below:

Preliminary Proposed Utilities Capital Budgets for FY 2025 – FY 2029

- Electric CIP[1]
- Fiber Optic CIP[2]
- Gas CIP[3]

[1] Electric CIP https://www.cityofpaloalto.org/files/assets/public/v/1/agendas-minutes-reports/agendas-minutes/utilities-advisory-commission/archived-agenda-and-minutes/agendas-and-minutes-2024/04-apr-2024/new-folder/electric-fund-cip.pdf
[2] Fiber Optic CIP https://www.cityofpaloalto.org/files/assets/public/v/1/agendas-minutes-reports/agendas-minutes/utilities-advisory-commission/archived-agenda-and-minutes/agendas-and-minutes-2024/04-apr-2024/new-folder/fiberoptics-fund-cip.pdf
[3] Gas CIP https://www.cityofpaloalto.org/files/assets/public/v/1/agendas-minutes-reports/agendas-minutes/utilities-advisory-commission/archived-agenda-and-minutes/agendas-and-minutes-2024/04-apr-2024/new-folder/gas-fund-cip.pdf

- Water CIP[4]
- Wastewater CIP[5]

The entire Utilities Operating budget for FY 2025 can be downloaded and viewed in full from the link below:

- Preliminary Proposed Utilities Operating Budget for FY 2025[6]

Please refrain from discussing the preliminary proposed budget materials with Council or the public until after Monday, April 29, 2024 when the budget is published.

ATTACHMENTS
Attachment A: UAC – FY25 Budget Presentation

AUTHOR/TITLE:
Dean Batchelor, Director of Utilities
Staff: Anna Vuong, Senior Business Analysist

[4] Water CIP https://www.cityofpaloalto.org/files/assets/public/v/1/agendas-minutes-reports/agendas-minutes/utilities-advisory-commission/archived-agenda-and-minutes/agendas-and-minutes-2024/04-apr-2024/new-folder/water-fund-cip.pdf
[5] Wastewater CIP https://www.cityofpaloalto.org/files/assets/public/v/1/agendas-minutes-reports/agendas-minutes/utilities-advisory-commission/archived-agenda-and-minutes/agendas-and-minutes-2024/04-apr-2024/new-folder/wastewatercollection-fund-cip.pdf
[6] Preliminary Proposed Utilities Operating Budget for FY 2025 https://www.cityofpaloalto.org/files/assets/public/v/1/agendas-minutes-reports/agendas-minutes/utilities-advisory-commission/archived-agenda-and-minutes/agendas-and-minutes-2024/04-apr-2024/new-folder/fy-2025-preliminary-budget-utilities-operating_9945.pdf

CITY OF PALO ALTO

UTILITIES ADVISORY COMMISSION

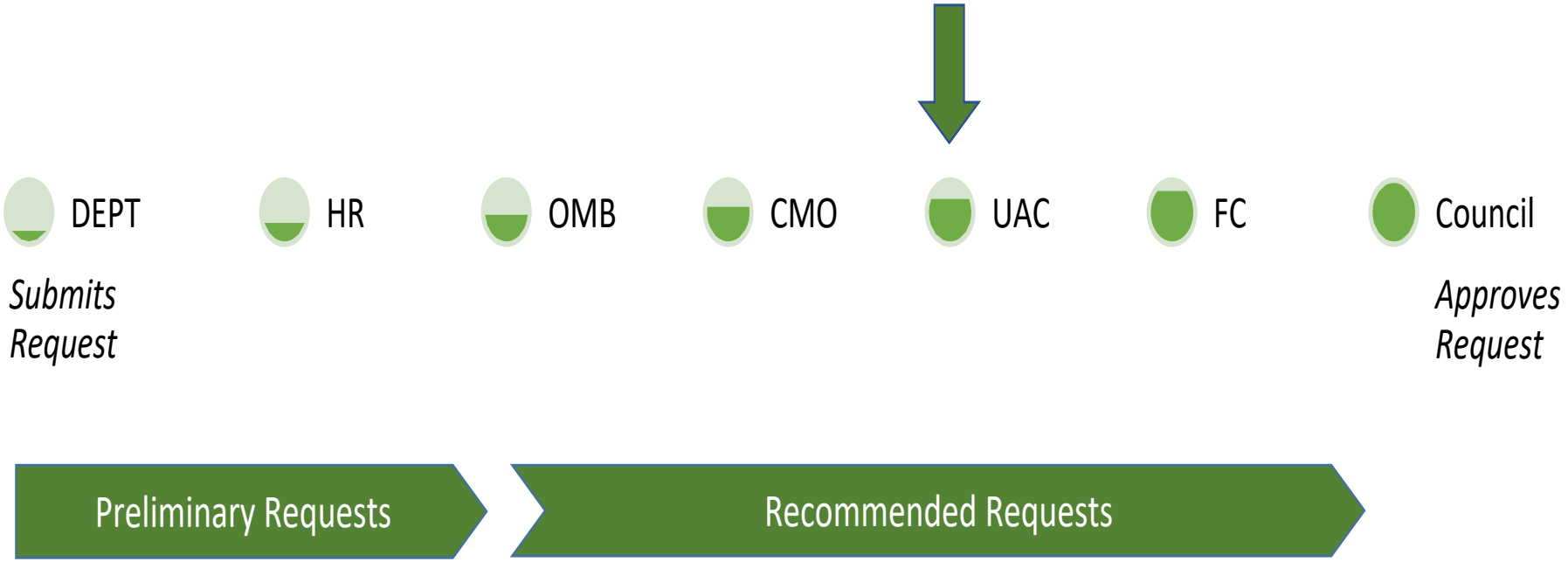
Preliminary Proposed FY 2025 Utilities Operating and Capital Budgets

MAY 1, 2024

www.cityofpaloalto.org

BUDGET REQUEST PROCESS

General review process for staffing, budget, and project changes



PROJECTED CHANGE IN RESIDENTIAL MEDIAN BILL - SFPUC

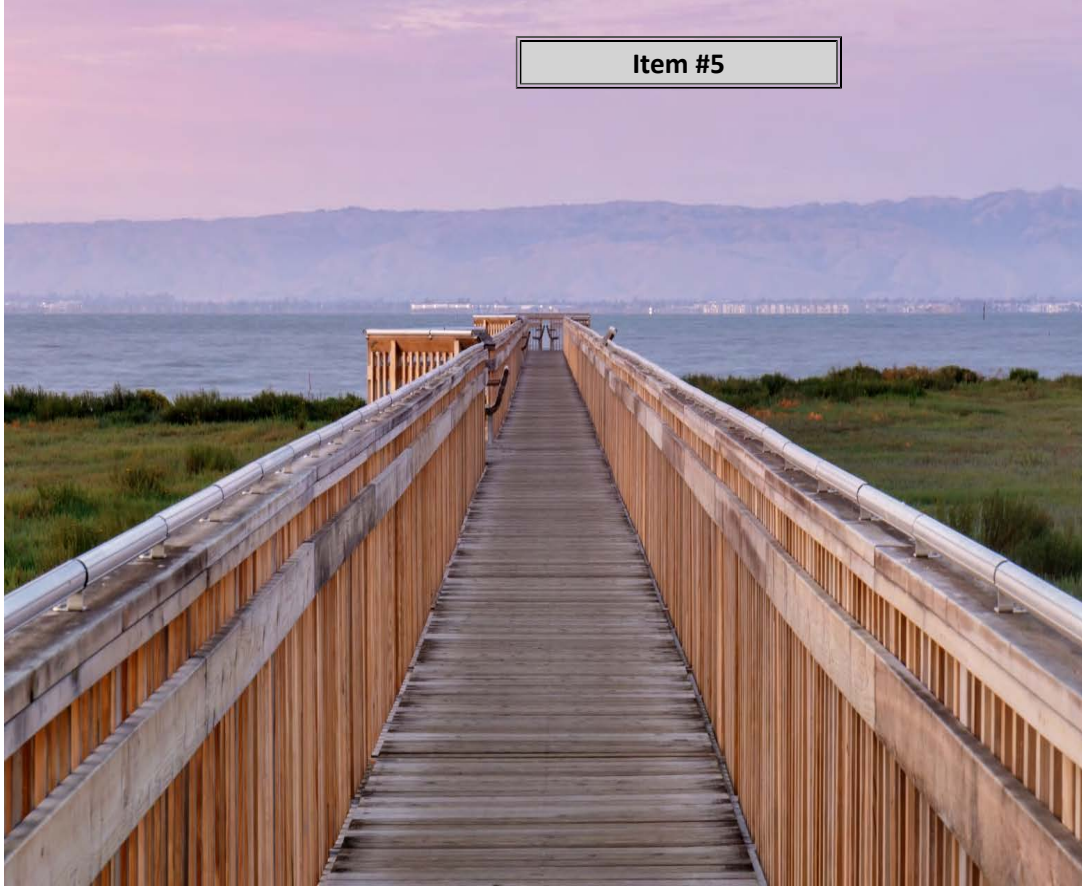
	FY 2024 (effective July 1, 2023)	FY 2025 (Projected)	FY 2026	FY 2027	FY 2028	FY 2029
Electric Utility [1]	-$5.80 -5%	$7.00 9%	$4.60 5%	$4.80 5%	$5.10 5%	$5.30 5%
Gas Utility [2]	$5.20 8%	$6.30 9%	$5.40 7%	$5.70 7%	$5.20 6%	$5.60 6%
Wastewater	$4.00 9%	$7.30 15%	$5.00 9%	$5.50 9%	$5.30 8%	$5.00 7%
Water Utility	$5.20 5%	$11.40 11%	$9.20 8%	$13.70 11%	$15.20 11%	$7.70 5%
Refuse	$0.00 0%	$0.00 0%	$1.50 3%	$1.50 3%	$1.60 3%	$1.60 3%
Storm Drain [3]	$0.80 5%	$0.40 3%	$0.40 3%	$0.50 3%	$0.50 3%	$0.50 3%
Monthly Bill Change [4]	**$9.40 3%**	**$33.60 9%**	**$27.10 7%**	**$32.90 7%**	**$34.10 7%**	**$26.60 5%**

1) *FY 2025 projection incorporates results of cost-of-service analysis*
2) *Based on general fund transfer of 11.9% of gross revenue in FY25; gas rate changes shown with commodity rates held constant; actual gas commodity rates vary monthly*
3) *Storm Drain fees increase by CPI index annually per approved 2017 ballot measure (2.6% in FY 2025)*
4) *Based on an FY 2023 monthly residential bill of $369*

DEPARTMENT FY 2024 ACCOMPLISHMENTS

- Public/private partnership with Tesla for Hanover Substation
- Approval of the Reliability and Resiliency Strategic Plan for the Electric Utility
- AMI Meters: approximately 30,000 or 40% installed
- Established pilot area boundaries for Grid Modernization (Grid Mod) and Fiber-to-the-Premise (FTTP) projects.
- New OMS for improved outage communications

FY 2024 STAFFING REPORT
Authorized 258 FTE



Hires and Promotions

- 17 External
- 9 Promotions

Separations

- 5 Retirements
- 5 Voluntary

Recruitment and retention strategies

- Department Human Resource Liaisons
- Childcare assistance
- PAUSD K-12 enrollment

CITY OF PALO ALTO

ELECTRIC FUND

MAY 1, 2024

ELECTRIC - ACCOMPLISHMENTS AND INITIATVES

FY 2024 ACCOMPLISHMENTS

- Launched the Advanced Heat Pump Water Heater (HPWH) Program
- Completed Phase 1 and 2 of Foothills Fire Mitigation
- Completed electric cost of service study

FY 2025 INITIATIVES

- Electrification related business processes, efficiency programs, and TOU rates
- Rebalance the electric supply portfolio
- Design and identify pilot area for whole residential home electrification and gas decommissioning.
- Enhance and accelerate HPWH installations

ELECTRIC – FUND HIGHLIGHTS pages 9-22

REVENUES $261M

YoY Increase $20.1M or 8.4% ↑

- Bond financing
- Net sales
- Return on investments

EXPENSES $272M

YoY Increase $5.0M or 1.9% ↑

- Capital improvements
- Salaries & Benefits, increase 6.04 FTE
- Contracts and General expenses

ELECTRIC – CAPITAL IMPROVEMENT

CIP Category	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Customer Connections	$2.7M	$2.7M	$2.7M	$2.7M	$2.7M
System Improvements	$23.7M	$10.0M	$8.3M	$5.7M	$5.8M
Grid Modernization	$40.0M	$50.0M	$50.0M	$50.0M	$50.0M
Grand Total	**$66.4M**	**$62.7M**	**$61.0M**	**$58.4M**	**$58.5M**

ELECTRIC – GRID MODERNIZATION

Multi year one-time project, FY 2024 – FY2030

Overhead - Years 1 through 4, purchase and construction to upgrade all overhead areas

Substation - Years 5 and 6, construction to upgrade substation transformers, purchase equipment in Year 3

Underground - Years 6 and 7, construction to upgrade all underground areas, purchase equipment in Year 5

(1) EL-14000 Coleridge/Cowper/Tennyson 4/12kV,
(2) EL-17001 East Meadow Circles 4/12 kV,
(3) EL-11003 Rebuild Underground District 15,
(4) EL-13003 Rebuild Underground District 16,
(5) EL-14002 Rebuild Underground District 20,
(6) EL-17000 Rebuild Underground District 23,
(7) EL-16000 Rebuild Underground District 26,
(8) EL-19003 Rebuild Underground District 30
(9) EL-08001 Underground District 42, and
(10) EL-08001 Underground District 43

CITY OF PALO ALTO

FIBER FUND

MAY 1, 2024

FIBER - ACCOMPLISHMENTS AND INITIATVES

FY 2024 ACCOMPLISHMENTS

- Finalized pilot area for Fiber-to-the-Premise (FTTP)
- Allocated internal resources for FTTP business

FY 2025 INITIATIVES

- Expand the fiber backbone network
- Conduct cost and benefit analysis study
- Launch Palo Alto Fiber Internet in the pilot area

FIBER – FUND HIGHLIGHTS pages 23 - 29

REVENUES $4.5M

YoY Decrease $0.02M or 0%

- Increase in Return on Investments
- Offset by decrease in Net Sales

EXPENSES $25.3M

YoY Decrease $3.8M or 13.1% ↓

- Capital Improvement

FIBER – CAPITAL IMPROVEMENT

CIP Category	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Fiber Optics – System Improvement	$0.2M	$0.2M	$0.2M	$0.2M	$0.2M
Fiber Optics – System Rebuild	$12.5M	$13.0M			
Fiber-to-the-Premises (FTTP)	$8.0M	$13.0M			
Fiber Customer Connections	$0.2M	$0.3M	$0.3M	$0.3M	$0.2M
Grand Total	**$20.9M**	**$13.5M**	**$0.5M**	**$0.5M**	**$0.4M**

CITY OF PALO ALTO

GAS FUND

MAY 1, 2024

www.cityofpaloalto.org

GAS - ACCOMPLISHMENTS AND INITIATVES

FY 2024 ACCOMPLISHMENTS

- Federal grant award for Natural Gas Distribution Infrastructure Safety and Modernization
- Gas commodity mitigation purchase strategy
- Gas Main Replacement 24A

FY 2025 INITIATIVES

- Complete construction of Gas Main Replacement 24B
- Cross-bore Phase IV
- Conduct study and identify proof of concept area for downsizing gas system

GAS – FUND HIGHLIGHTS
Pages 30 - 43

REVENUES $70.4M

YoY Increase $3.4M, 5.2% ↑

- Net sales
- Return on investments

EXPENSES $68.5M

YoY Decrease $7.5M or 9.9% ↓

- Capital Improvement
- Utility Purchases
- S&B, add 1.24 FTE

GAS – CAPITAL IMPROVEMENT

CIP Category	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Customer Connections	$0.8M	$0.7M	$0.7M	$0.7M	$0.7M
Main Replacements	$6.6M	$4.2M	$6.7M	$4.7M	$7.4M
System Improvements	$2.1M	$1.1M	$1.1M	$1.1M	$1.1M
Grand Total	**$9.5M**	**$6.0M**	**$8.5M**	**$6.5M**	**$9.2M**

CITY OF PALO ALTO

WASTEWATER FUND

MAY 1, 2024

WASTEWATER - ACCOMPLISHMENTS AND INITIATVES

FY 2024 ACCOMPLISHMENTS

- Sanitary Sewer Replacement Project 31 (WC-19001)

FY 2025 INITIATIVES

- Complete Sewer Master Plan Study

WASTEWATER – FUND HIGHLIGHTS pages 45 - 54

REVENUES $26.0M

YoY Increase $2.3M, 9.7%

- Net sales

EXPENSES $25.1M

YoY Decrease $0.2M

- Capital Improvement

WASTEWATER – CAPITAL IMPROVEMENT

CIP Category	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Customer Connections	$0.5M	$0.5M	$0.5M	$0.5M	$0.5M
Sewer Replacements	$1.0M	$2.0M	$3.0M	8.0M	$3.5M
System Improvements	$1.1M	$1.1M	$1.2M	$1.8M	$1.2M
Grand Total	**$2.6M**	**$3.6M**	**$4.6M**	**$10.3M**	**$5.2M**

CITY OF PALO ALTO

WATER FUND

MAY 1, 2024

WATER - ACCOMPLISHMENTS AND INITIATVES

FY 2024 ACCOMPLISHMENTS

- Water Main Replacement Project 28 (WS-14001)
- Water Regulation Stations (WS-07000)
- Started the One Water Plan

FY 2025 INITIATIVES

- Water Main Replacement Project 29 (WS-15002)
- Water Seismic Project – Park and Dahl Reservoirs
- Complete alternative water resources for One Water Plan

WATER – FUND HIGHLIGHTS pages 55 - 65

REVENUES $56.5M

YoY Increase $2.9M or 5.4%

- Net sales
- Return on investments

EXPENSES $58.1M

YoY Decrease $18.6M or 24.2%

- Capital Improvement
  - Tank

  Non WMR year

WATER – CAPITAL IMPROVEMENT

CIP Category	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Customer Connections	$0.9M	$1.0M	$1.0M	$1.1M	$1.1M
Main Replacements	$0.4M	$9.4M	$0.5M	$10.4M	$0.6M
System Improvements	$2.5M	$2.0M	$2.1M	$2.2M	$2.3M
Water Tank Seismic Upgrade	$3.5M	$7.0M	$7.0M	0.9M	$1.0M
Grand Total	**$6.8M**	**$19.4M**	**$10.6M**	**$14.6M**	**$5.0M**

CITY OF PALO ALTO

POSITION CHANGES

New and reclassifications

RECOMMENDED POSITION REQUESTS

Cross Connection Control Program, +2.0 FTE

- 1.0 FTE Project Coordinator
- 1.0 FTE Meter Technician

Grid Modernization, +6.0 FTE

- 2.0 FTE Electric Project Engineers
- 1.0 FTE Heavy Equipment Operator/IR
- 1.0 FTE Utilities Installer Repairer
- 1.0 FTE Cement Finisher
- 1.0 FTE Electrician – Lead

Customer Support, +1.0 FTE

- 1.0 FTE Project Coordinator

RECOMMENDED POSITION RECLASS

Water Transmission - Reclassifications

- 4.0 FTE Water System Operator II to Utilities Installer Repairer
- 2.0 FTE Sr. Water System Operator to Utilities Installer Repairer - Lead

STAFF RECOMMENDATION TO UAC FOR APPROVAL

Staff requests that the Utilities Advisory Commission (UAC) recommend that the Council approve proposed FY 2025 Utilities Operating Budget.

Staff requests that the Utilities Advisory Commission (UAC) recommend that the Council approve proposed FY 2025 Utilities Capital Budget.

CITY OF
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