



## **UTILITIES ADVISORY COMMISSION MEETING MINUTES OF DECEMBER 2, 2020 MEETING**

### **CALL TO ORDER**

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Chair Forssell called the meeting of the Utilities Advisory Commission (UAC) to order at 4:02 p.m.

Present: Chair Forssell, Vice Chair Segal, Commissioners Danaher, Jackson, Johnston, Scharff and Smith

Absent:

### **AGENDA REVIEW AND REVISIONS**

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None.

### **ORAL COMMUNICATIONS**

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None.

### **APPROVAL OF THE MINUTES**

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Commissioner Scharff moved to approve the minutes of the November 04, 2020 meeting as presented. Vice Chair Segal seconded the motion. The motion carried 7-0 with Chair Forssell, Vice Chair Segal, and Commissioners Danaher, Jackson, Johnston, Scharff, and Smith voting yes.

### **UNFINISHED BUSINESS**

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None.

### **UTILITIES DIRECTOR REPORT**

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Dean Batchelor, Utilities Director, delivered the Director's Report.

- **Staffing Trends**

Difficulty in Maintaining Staff

Recruitment Process:

Since Jan, we've had 43 regular vacancies. We have hired 12 new employees and promoted 10 employees to fill these vacancies. As of today, we have 37 regular vacancies and 30 of them are actively being recruited. The non-active recruitment vacancies are either because they're frozen, pending business decision (i.e. Fiber Telecom Manager, Sr. Business Analyst), or under rotation/WOC (i.e. Mgr. Electric Operations, AD Engineering).

	Reg	Hourly	Total				
Total # of Active and Hourly Vacancies	30	1	31				
Total # of Non-Active Vacancies	13	11	24	(of which 4 reg are frozen)			
<b>Total # of Vacancies</b>	<b>43</b>	<b>12</b>	<b>55</b>				
Total # of Hires through Oct	12	4	16	(of which 12 were regular benefited positions)			
Total # of Promotions through Oct	10	0	10				
<b>Total # of Hires/Promotions through Oct</b>	<b>22</b>	<b>4</b>	<b>26</b>				

- **Clean Fuel Reward Program** - Effective November 17, all Palo Alto residents purchasing electric vehicles are eligible for a Clean Fuel Reward point-of-sale rebate of up to \$1,500 at participating car dealerships. CPAU has contributed Low Carbon Fuel Standard (LCFS) funds towards this new statewide initiative, which was approved by City Council in May 2020. CPAU expects to contribute \$300-400,000 annually for the next 10 years. All auto dealerships in Palo Alto will be notified of this opportunity to lower the cost of new electric vehicles.
- **CALeVIP** - The California Energy Commission’s California Electric Vehicle Infrastructure Project (CALeVIP), which aims to develop and implement regional incentives to support statewide adoption of EVs, has partnered with five local energy agencies to launch a \$55.2 million dollar rebate project for the installation of public access electric vehicle (EV) charging stations throughout Santa Clara and San Mateo counties. CPAU has committed \$1 million dollars of LCFS funds to receive \$1 million in grant funding for the Peninsula-Silicon Valley Project. These funds will become available to all eligible Palo Alto commercial customers to install Level 2 or Level 3 fast chargers over the next 2 years and will help install approximately 200 new chargers in Palo Alto. After a prelaunch webinar on December 2<sup>nd</sup>, applications for incentives can be submitted beginning on Wednesday, December 16, 2020.
- **Genie Virtual Assessment** - The Home Efficiency Genie is now offering a new virtual assessment platform which provides residents with a remote evaluation of their home for energy and water efficiency. Due to the COVID-19 safety protocols, the Genie program has been unable to offer the comprehensive in-home assessments that it had been providing since 2015. For a \$49 subsidized fee, this new virtual, phone and video-based platform allows residents to walk through their home with guidance from the Genie technician to review and uncover inefficiencies, comfort concerns, and even health and safety issues. For no additional charge, the virtual program also offers participants an electrification readiness evaluation as well as energy saving products like LED bulbs and a smart power strip.
- **Fiber Expansion Project** - Staff working on the citywide fiber expansion project has completed all but one of its internal fiber needs assessment interviews. Departments assessed include: Field Operations, Libraries, Office of Emergency Services, Commercial Fiber, Information Technology, Utilities Engineering, SCADA and others. A gap analysis has been created for the City fiber network in anticipation of a full system field audit. The audit will show system maintenance and capacity needs. Fiber Management Systems, which is a network tracking, planning, maintenance and production data hub, are being compared and reviewed for City use.
- **Upcoming Events**
  - Tuesday, December 8, 6:30-8:00 PM - The Importance of the Natural Environment in Meeting Our Sustainability Goals Webinar. Register [here](#) or online at [cityofpaloalto.org/climateaction](http://cityofpaloalto.org/climateaction)

In response to Commissioner Danaher's inquiry about how many vacant positions are office positions and how many are field operation positions, Batchelor confirmed that the majority are field operation positions.

In reply to Commissioner Scharff's question regarding Level 2 chargers for residents, Batchelor explained that commercial and multi-dwelling facilities will be subsidized for installing Level 2 and Level 3 fast chargers.

Vice Chair Segal confirmed that the next Sustainability and Climate Action Plan (S/CAP) community webinar is Tuesday, December 8, 2020.

## **NEW BUSINESS**

### **ITEM 1: DISCUSSION: Discussion on Comparison of Water Rates and Average Bills Among Cities Supplied by San Francisco Public Utilities Commission.**

Dean Batchelor, Director of Utilities introduced Lisa Bilir who presented to the Commission.

Lisa Bilir, Acting Senior Resource Planner, reported that the analysis was conducted to answer the question posed by the Finance Committee of why the City's rates are higher than surrounding Cities who use the same supplier. Including the City of Palo Alto, there were 16 other Cities and entities that receive 100 percent of their water from the San Francisco Public Utilities Commission (SFPUC) and who are members of the Bay Area Water Supply and Conservation Agency (BAWSCA). Nine of these are cities, including Palo Alto. Residential water bills within Palo Alto are approximately 9 percent higher than the typical group of comparison utilities and commercial customers water bills are on average 4 to 7 percent higher than the typical comparison group of utilities. Among the nine cities that obtain 100% of their water from SFPUC, Palo Alto's rates are on the low end. Six of the Cities that receive 100 percent of their water from SFPUC have less than half as many customers as Palo Alto and those Cities have higher rates than Palo Alto. Redwood City has a similar number of customers, the City of Hayward has double the number of customers compared to Palo Alto, and those two Cities are the only two Cities that have lower rates than Palo Alto. Two significant factors for the increased rates was consistently higher water infrastructure investments made by the City of Palo Alto and Palo Alto's residential customer class has higher usage and accounts for a higher portion of the potable water usage than the residential customer class in the City of Hayward. Also, Hayward's non-residential customer class usage has increased over the last ten years while Palo Alto's non-residential customer class usage has decreased which puts more upward pressure on Palo Alto's rates.

In response to Commissioner Johnston's query regarding rate tiers, Bilir explained that the City has a two-tier water rate system that is based on a measure of average use and more tiers would result in a different service rate cost structure. Palo Alto's rate structure is based on the results of the cost of service and the same is true for the other cities where they have a different number of tiers. Commissioner Johnston suggested that the Utilities Advisory Commission (UAC) review the City's tier system next time water rates are discussed.

In answer to Commissioner Scharff's questions regarding infrastructure and if the City is making the right investment, Bilir confirmed that other Cities across the county are underinvesting in their infrastructure. Jonathan Abendschein, Assistant Director of Utilities, believed that the City does not over or under-invest in infrastructure projects. The reservoirs and the wells provide an appropriate level of emergency response investment. He added that the amount of storage in the reservoirs is the right amount for the existing infrastructure, but the location of them in the Foothills adds to the cost. Commissioner Scharff predicted that main replacements done in the City of Hayward would cost a similar amount that the City was paying for its replacements. In response to his inquiry of do all the reservoirs need to be updated, Abendschein commented that staff continues to explore ways to make the reservoirs more cost-efficient.

In reply to Commissioner Smith's query of why the City's commercial average is not higher than the City of Hayward, Bilir answered that the City of Hayward does have a tiered rate for their commercial customers and Palo Alto charges a flat volumetric rate. In response to his additional questions, Bilir confirmed that commercial customers pay a flat service charge depending on meter size. She clarified that some water

meters are upsized for residential uses for fire prevention and the shape of the customer's service and as part of the cost of service study, the meter sizes were consolidated for 1" meter and smaller. There is no rate consolidation for commercial customers as there is for residential customers because commercial customers have to have a separate fire meter. The cost of service study closely studied costs and usage to set rates appropriately for each customer class in Palo Alto. Commissioner Smith believed that more investigation is needed to understand the flat volumetric rate that the City charges commercial customers.

In reply to Chair Forssell's question regarding why the comparison did not include other BAWSCA partners that are not Cities, Bilir shared that the Finance Committee had specifically requested that surrounding Cities be included in the comparison. Chair Forssell requested that a future study highlight inflection points showing the usage level above which one city's bills become more than another city's.

In answer to Vice Chair Segal's inquiry of why the study used the average of 9 centum cubic feet (CCF) when the City's average is 11 CCF, Bilir mentioned that historically the average bill comparison study used 9 CCFs and that was used for consistency and predicted that the report would not change much if 11 CCF was used. Vice Chair Segal wanted to understand what the report would be if the true average volume metric was used.

In response to Councilmember Cormack's inquiry of when the report will come back to the Finance Committee, Bilir believed it would come with the Financial Plan for the Water Utility to the new Finance Committee.

**ACTION:** None.

**ITEM 2: ACTION:** Staff Recommendation That the Utilities Advisory Commission Recommend the City Council Decline to Adopt Energy Storage System Target and Received the 2020 Energy Storage Report.

Jonathan Abendschein, Assistant Director of Utilities, introduced Lena Perkins who presented the item to the UAC.

Lena Perkins, Senior Resource Planner shared that the Energy Storage Report will be submitted to the California Energy Commission (CEC) and it shows that the City has investigated the cost-effectiveness of energy storage and examined setting targets for energy storage within the City. CPAU is required to investigate energy storage every 3-years and in 2011, 2014, or 2017, CPAU did not choose to set energy storage targets. The 2020 CPAU and Smart Energy Power Alliance (SEPA) analysis showed that energy storage is not yet cost-effective for the City. For this reason, CPAU will not be setting energy storage targets for 2020 but will continue to look at opportunities and align incentives. Batteries can be used to lower carbon emissions as well as leverage distributed batteries for society and improve resiliency in catastrophic events. The overbuilding of renewables at the utility-scale was still less costly than batteries and there is no carbon price in the State of California that is enough to make batteries more cost-effective. Batteries that are installed at a residence that has solar panels are not saving the owner money. A commercial customer could use a battery to provide demand charge mitigation and they could save money, but there is no benefit to the utility because peak demand for a commercial is not in alignment with grid peak demand. Staff suggests starting a pilot project that uses electric heat-pumps as distributed thermal storage as a less expensive alternative.

In answer to Commissioner Jackson's query regarding using smart devices to leverage flexible demand response programs, Perkins explained that differing smart electrical vehicle (EV) charging stations to be used past 10:00 pm could be valuable to the utility, wholesale market, and the grid at large. Commissioner Jackson disclosed that incentive-based communications should be sent to residential customers about what should and should not be happening as a way to encourage behavioral changes.

In reply to Commissioner Danaher's questions, Perkins confirmed that Staff continues to explore any storage that is competitively priced. In the next Energy Integrate Resource Plan for the Electric Utility, there is a comparison between solar storage and other renewables in storage compared to the full share of the

Western Base Resource Contract. In regards to Assembly Bill (AB) 2514, the bill addresses both utility and customer energy storage.

In answer to Vice Chair Segal's question regarding time of use, Perkins confirmed that it is hard to communicate with customers in a way that benefits the utility on how storage is used without time of use. It is easier to make sure there are no misalignment incentives once the time of use is implemented.

In reply to Chair Forssell's queries, Perkins disclosed that she explored water pumped hydro storage and found out that there are a lot of operational and operator constraints in how the system is managed currently. Abendschein added that the amount of water storage within the Foothills is very small, but there is an opportunity to replace the pressure reducing valves with a turbine to capture power. In regards to the Self Generation Incentive Program (SGIP) Fund, Perkins noted that the fund is only available to investor-owned utilities. In response to Chair Forssell's question regarding is there a carbon price at which point storage would become effective, Perkins confirmed that \$200 a ton is the price carbon would have to be for it to be cost-effective for residential, but it could be already cost-effective in terms of EV chargers.

**ACTION:** Commissioner Johnston moved, seconded by Commissioner Jackson that the Utilities Advisory Commission (UAC) recommend that Council accept staff recommendation to adopt no energy storage targets in 2020 under AB2514. The motion carried 7-0 with Chair Forssell, Vice Chair Segal, and Commissioners Danaher, Jackson, Johnston, Scharff, and Smith voting yes.

The UAC took a 5-minute break at 5:34 pm.

**ITEM 3: DISCUSSION:** Discussion and Update on the FY 2022 Preliminary Utilities Financial Forecast and Rate Projections.

Eric Keniston, Senior Resource Planner reported that it would be beneficial if the Gas Utility and Waste Water Collection Utility receive a 3 percent rate increase for FY 2022.

Lisa Bilir, Acting Senior Resource Planner disclosed that a 3 percent increase would result in a \$1.24 per month increase for residential customers and a \$0.24 per CCF of winter average usage increase for commercial customers. The drivers for the rate increase was due to large infrastructure projects on the 5-year horizon for the Waste Water Treatment Plant as well as the ongoing Capital Improvement Projects (CIP) for the collection system. The rate trajectory will likely not require any cost cuts during the 5-year forecast period, however, there is uncertainty in the timing of treatment cost increases and cost cuts may be needed even with the 3 percent increase in FY 2022. The Alternate proposal is zero percent increase for FY 2022 and 5 percent increase in each subsequent year. Under this scenario, \$3 to \$4.5 million cost cuts would be needed between now and FY 2026 in order to keep reserves above minimum levels.

In response to Commissioner Scharff's question regarding residential customers averages, Bilir explained that the wastewater rate for a residential dwelling unit is a flat monthly charge and the 9 ccf average is the median.

Staff continued with their presentation. A Cost of Service Study is underway for the Waste Water Collection Utility with an outside consultant and the results will be presented to the UAC in early 2021. The Regional Water Quality Control Plant (RWQCP) treats sewage from six communities and is managed by the City's Public Works Department. The City pays roughly 36 percent of the Waste Water Treatment Fund expenses with the other five partners paying the remainder. Treatment costs were predicted to increase steeply due to rehabilitation work being done to the RWQCP and collection costs were increasing at an inflationary level. The Long-Range Facility Plan that was completed in 2012 identified key maintenance projects that needed to take place at the RWQCP. Those projects include the replacement of the sedimentation tank which costs \$17 million, outfall pipeline costing \$11 million, laboratory/operation center costing \$59 million, and secondary treatment upgrades costing roughly \$88 million. Key drivers involved in the rate increase for wastewater collection included salary and benefits costs for existing staff as well as large CIPs every other year.

In answer to Commissioner Smith's question about if staff's model included the projection for the sale of effluent to the Santa Clara Valley Water District, Karin North, Assistant Director of Public Works clarified that no revenue would be received from Santa Clara Valley Water District for the sale of effluent until after the Regional Purification Center is built. The City continues to make investments at the RWQCP to meet current National Pollutant Discharge Elimination System (NPDES) permit requirements. In reply to his inquiry regarding if the Regional Purification Center project is reflected in the year on/year off replacement plan, North confirmed that it is included in the long-range projections for the Wastewater Utility, but the City will pay only a small portion of the costs. Abendschein clarified that the orange bars on the chart showing the on/off year replacement plan are costs for the collection system, not for the treatment plant.

Staff continued with their presentation and moved to the Wastewater Operation Reserve. The Wastewater Operation Reserve will be brought close to a minimum balance in FY 2026 due to capital costs needed on the collection side as well as increased costs on the treatment side. Staff moved to the Water Utility where Staff proposed a zero percent increase in FY 2022. The FY 2020-year end Operation Reserve was above guideline levels and projected to be at target levels by year-end of FY 2022. In the most recent Financial Plan, Council approved a plan to make more active use of the Water Utilities CIP Reserve. Staff projected there to be a 5 percent annual increase in the Water Utility beginning in FY 2023 to FY 2026 due to a series of wholesale cost increases anticipated to begin in FY 2023. The City receives its water from the Hetch Hetchy system and included in the water supply cost is the upkeep of that system. The City has its own distribution system within the City that is operated and maintained by the City. The supply cost for the Water Utility is roughly 40 percent of the total cost with distribution making up the remaining 60 percent. The long-term cost trends show that the distribution system cost will increase 3 percent annually and the supply costs are predicted to increase by 6 percent annually. The largest cost driver for increased supply costs is the Water System Improvement Program (WSIP) but the program benefits the City by making sure the water supply system is seismically sound.

Keniston continued the presentation by presenting the Electric Utility. He reported that a \$10 million loan was taken from the Electric Special Project Reserve to help the Operations Reserve maintain its target level. One \$5 million payment has already been made but Staff suggested to not make another payment until FY 2022 or FY 2023 due to COVID-19 impacts.

In response to Chair Forssell's questions regarding what the Electric Special Project Reserve is used for and if there are upcoming projects, Keniston answered that the reserve pays for large projects that would otherwise need to be bond-financed. One project in the pipeline is the Smart Grid Project.

In reply to Vice Chair Segal's inquiry of if undergrounding utilities can use the Electric Special Projects Reserve, Keniston answered no. Abendschein mentioned that the UAC and Council have a policy role in setting the use of the Electric Special Project Fund and undergrounding could be included in the list of approved uses.

Keniston continued the presentation and declared that reserve margins are at the minimal level. Some combination of reserve withdrawals, cost reductions, or rate increases may become necessary if sales continue to decline. Overhead costs have decreased, transmission costs continue to increase, and as renewable projects come online, the long-term generation costs should remain stable. Distribution costs drivers include medical and retirement benefits, increased CIPs due to an aging system, underground construction continues to be more expensive than above-ground utilities, and additional line crew expenses. Customer electric bills continue to be below Pacific Gas and Electric (PG&E)'s bills by 34 percent. If a 5 percent rate increase is not adopted for subsequent years, the Electric Supply Operating Reserve will fall below the minimum mark. Moving to the Gas Utility, it was mentioned that the cost of maintaining the distribution system is the main driver in the rate increase. Staff recommended a 3 percent rate increase for the Gas Utility for FY 2022. If a zero percent increase were adopted, \$5.4 million would be needed for as one-time cost reduction in FY 2023 and FY 2024 to keep reserves above the minimum. Staff has been seeing lower sales in the Gas Utility than was predicted.

In answer to Commissioner Johnston's query about where the additional \$5.4 million reductions would come from, Keniston predicted that there would be delays in CIPs most likely.

Continuing with the presentation, Keniston noted that the Gas Utility served roughly 20,000 customers through 18,000 service lines and 205 gas mains which were all fixed costs. Roughly 60 percent of the Gas Utility cost structure is fixed cost and the other 40 is related to supply costs. Long-term predictions indicated that the utility will increase due to inflation and market-driven costs. Distribution costs were trending at an increase of 2- to 3-percent over the next 5-years. Customer's gas bills were still falling below PG&E at 8 percent on average.

In reply to Vice Chair Segal's query about defaults on bills, Keniston concurred that delinquent payments continue to rise. Dave Yuan, Strategic Business Manager added that there have been more bankruptcy filings, but in terms of residential installment plans, staff has requested that customers call back when the local emergency has been called off so that staff knows the true outstanding balance.

Keniston reiterated that gas sales have been drastically lowering than what was predicted and with a 3 percent increase, staff believed that the gas sale estimates will return to recovery mode in FY 2023. Staff continues to monitor the utility.

Councilmember Cormack reported that Council had a wide-range business recovery discussion and it was discovered that it could take up to 4-years to recover economically from the COVID-19 pandemic. There was also a discussion regarding a hybrid option of employees working half a week in the office and the other half at home.

Keniston continued that with a 3 percent increase for FY 2022 following by a 5 percent increase in subsequent years, the Gas Operating Reserve is projected to drop down to the minimum mark in FY 2023 and will not recover until FY 2025 and FY 2026. With a zero percent increase in FY 2022, that would result in a \$5.4 million cost cut to keep the reserve above minimums.

In answer to Chair Forssell's question regarding rapid escalating construction costs, Yuan confirmed that construction costs continue to go up steadily but not as fast as it was. Batchelor concurred that construction cost increases are still taking place over all the utilities.

In reply to Commissioner Danaher's questions, Keniston disclosed that staff always projects an average water year and there is a Hydroelectric Stabilization Reserve within the Electric Utility that is used during drought years. There was roughly \$12 million in the Hydroelectric Stabilization Reserve.

In response to Commissioner Smith's queries, Keniston confirmed that the increase that was adopted for the Renewable Energy Certificates (REC) was included in the projections.

In answer to Chair Forssell's inquiries, Keniston restated that with a zero percent rate increase in the Electric Utility, the cost cuts would most likely come from CIPs. Bachelor confirmed that the main replacement project was already reduced in size to keep reserves at a healthy level. Another possible project to find cost cuts is to postpone the cross-bore project for another year. Chair Forssell supported a 3 percent increase for FY 2022 for the Gas and Wastewater Utilities.

Commissioner Danaher also supported a 3 percent increase for the Gas and Wastewater Utilities.

Commissioner Johnston announced his support of staff's recommended increases to the Gas and Wastewater Utilities.

Vice Chair Segal concurred with her colleague's support of the increase and believed that a no rate increase would result in a delay of critical CIPs and most likely make them more expensive in later years.

Commissioner Scharff affirmed his support for staff's recommended 3 percent increase for both utilities.

**ACTION:** None

**ITEM 4: ACTION:** Selection of Budget Subcommittee

Commissioner Jackson, Commissioner Smith, and Vice Chair Segal volunteered to be on the Budget Subcommittee.

**ACTION:** None

**REPORTS FROM COMMISSIONER MEETINGS/EVENTS**

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None.

**FUTURE TOPICS FOR UPCOMING MEETINGS:** January 02, 2021

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Chair Forssell requested that Commissioners disclosed if the item they wish to see come before the Commission is a discussion item or an informational item.

Commissioner Danaher appreciated the upcoming update on EV charging developments. In response to his question about what the Development Center presentation is, Batchelor confirmed that it will be a presentation regarding home electrification and the permit process. Commission Danaher requested an informational item each month regarding billing trends and user trends. Chair Forssell agreed with that suggestion.

Commissioner Smith wanted to see a financial forecast and cost presentation on the dark fiber network.

Batchelor reported that an update on underground utilities will be brought forward to the Commission in possibly February or March of 2021. Commissioner Scharff wanted staff to include in that report the total cost, possible rate increases, and timeframe to underground all utilities in the whole City. Batchelor disclosed that a previous study was done and the study predicted it would cost roughly \$300 million to underground all utilities within 3 years. Another factor for underground utilities was if the City had strong wills to move to full electrification and if so, that may be an opportunity to move utilities underground.

**NEXT SCHEDULED MEETING:** January 02, 2021

Vice Chair Segal moved to adjourn. Commissioner Jackson seconded the motion. The motion carried 7-0 with Chair Forssell, Vice Chair Segal, and Commissioners Danaher, Jackson, Johnston, Scharff, and Smith voting yes. Meeting adjourned at 6:52 p.m.

Respectfully Submitted  
Tabatha Boatwright  
City of Palo Alto Utilities