



City of Palo Alto
Utilities Advisory Commission Staff Report

(ID # 13707)

Meeting Date: 12/1/2021

Title: Informational Update on the Utilities' Quarterly Report for Q3 of Calendar Year 2021 (Q1 of FY 2022)

From: Director of Utilities

Lead Department: Utilities

Recommendation

This report is for information only. No action is required.

Executive Summary

Attached is an update on water, gas, electric, wastewater collection and fiber utilities, efficiency programs, legislative/regulatory issues, utility-related capital improvement programs, operations reliability impact measures and a utility financial summary, and is for the Utilities Advisory Commission's information. This update [Attachment A](#) has been prepared to keep the Council and Utilities Advisory Commission apprised of the major issues that are facing the water, gas, electric, wastewater collection and fiber utilities. A separate quarterly report on the financial position of each utility will be delivered going forward whenever the City closes its books for FY 2022. [Attachment B](#) contains the Gas Utility Annual Infrastructure Maintenance and Replacement Report.

Items of special interest in this report are summarized below:

COVID-19 Impacts: The COVID-19 shelter in place order significantly affected utility loads and sales in FY 2021:

- Electric utility demand for CY 2021 to-date (January through September) was 10% below the average of CY 2018 and CY 2019 loads, primarily due to lower commercial electric use. Lower electric loads were accounted for in FY 2021 and FY 2022 financial forecasts. (Section 1.6.2)
- Gas utility demand for CY 2021 to-date (January through September) was 11% below the average of CY 2018 and CY 2019. Gas use has been lower in the commercial sector, though not as low as in 2020. (Section 2.5.2)
- Water utility demand for CY 2021 to-date (January through September) was 6% above the average of CY 2018 and CY 2019 loads, primarily due to dry conditions. Commercial water use has not decreased the same way electric and gas use decreased. Staff expects this to

change as the City and other agencies promote water conservation in the face of the current drought. (Section 4.5.2)

- Wastewater revenues were not significantly affected by the pandemic in FY 2021, as discussed below.
- Fiber revenues were 15% below average due to a high number of disconnections in FY 2021. (Section 5.4.1)

Electric Utility:

- Output from the City's hydroelectric resources is low. Precipitation was less than 50% of average in the watersheds feeding these resources. Generation was 61% of long-term average in FY 2021 and is projected to be 59% of long-term average in FY 2022. (Section 1.1.2)
- REC sales revenue net of Bucket 3 REC purchases from the REC Exchange program for calendar year 2021 is \$3.7 million to-date. Additional REC purchases and sales may be made before the end of the calendar year depending on supply conditions. (Section 1.1.3)
- An undergrounding construction project was completed in October 2021. Several other projects are either recently completed or in the design phase with construction due to begin later in 2021 or in 2022. (Section 1.2)
- Vacancies remain high for the electric utility, particularly for electric linespeople. Due to a shortage of linespeople across the industry and challenges in hiring journey level linespeople, CPAU is expanding the linespeople apprenticeship program to develop in-house talent. The apprenticeship program takes approximately four years for an employee to become a journey level linesperson. During this period, CPAU will supplement existing crews with contractors for overhead and underground maintenance, emergency response, capital improvement projects, and customer connections. (Section 1.4)
- Reliability goals include being in the first quartile of utilities nationally for System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI), which indicate the frequency and total duration of outages experienced by all customers, and in the second quartile for Customer Average Interruption Duration Index (CAIDI), which indicates the average restoration time, the amount of time customers actually affected by an outage in a given year are out of power. Year-end numbers are expected to be close to the goals. (Section 1.5)
- Electric sales for the first quarter of FY22 were about 4% lower than projected, and revenue was about 2% lower. If this trend continues, greater rate increases may be needed in FY23, and/or the Hydro Rate Stabilization may need to be used. (Section 1.6)

Gas Utility:

- Gas sales were slightly higher than forecasted for Q1 of FY22. Cost and revenue were significantly higher due to increasing natural gas market prices. (Section 2.5)
- The total gas supply cost passed through to customers, including the commodity charge, transmission charge, and environmental charges (Cap and Trade Program costs and Carbon Neutral Gas Program cost) have increased 20% since January of 2021. This equates to roughly a 9% increase in the system average gas rate. (Section 2.1.1)

- A gas main replacement project is currently in progress (GS-13001) and the City is in the midst of a two year inspection project to find cross bores. (Section 2.2)

Wastewater Utility:

- An overview of the status of the Regional Water Quality Control Plant (RWQCP) rehabilitation projects is provided, including an overview of the financing plan for the projects. The first project to begin construction will be the primary sedimentation tank rehabilitation. (Section 3.1)
- A sewer system rehabilitation project (SSR 30) is scheduled for Council consideration in December of 2021. (Section 3.2)
- Wastewater Utility revenue for Q1 FY22 was 4% lower than budget. (Section 3.4)

Water Utility:

- The 2020-2021 water year was one of the hottest and driest in the last 60 years. Total storage in the Hetch Hetchy system (Hetch Hetchy Reservoir, “Water Bank” at Don Pedro Dam, and other reservoirs) was 68% full as of October 1, 2021 (normal is about 82%). The SFPUC operates its storage to handle a multi-year drought. (Section 4.1)
- In August the state curtailed diversions on the Tuolumne River. In response, the SFPUC filed a lawsuit and is applying for a health and safety exemption from curtailment because per capita use on the system is extremely low. The SFPUC is expected to declare a water shortage emergency, a required step to apply for the health and safety exemption and is expected to continue to ask for voluntary water use reductions. (Section 4.1)
- Water sales are higher than forecasted due to the drought, but this is expected to change as more calls for voluntary water conservation are made. Drought, capital projects, and other cost increases are expected to reduce reserves to target level by FY 2023. (Section 4.5)
- A rebuild of the City’s Corte Madera Reservoir is in progress to improve seismic safety. Construction is expected to be complete in April 2023. A water main replacement project is currently being designed, and construction is expected to start in June 2022. (Section 4.2)

Fiber Utility (Section 5):

- Magellan Advisors has completed 30% of the engineering design for the fiber backbone and fiber-to-the-home (FTTH) which includes designs for running overhead and underground lines and route optimization. Staff is identifying potential sites for three fiber huts which will be strategically located (i.e. north, south, west) to serve the entire city. (Section 5.1)
- The City launched the Palo Alto Fiber Engagement Portal. The goal of the online platform is to inform the community about the Palo Alto Fiber initiative and encourage engagement around the community. The website explains what fiber is, the benefits of fiber, how to get involved, resources that may be useful to the community, and how to contact the City for more information. (Section 5.1)
- As of September 2021, fiber revenues for FY 2022 are projected to be \$3.6 million, which is 18% below the budget forecast of \$4.4M. The decrease in FY 2022 fiber sales is due to a higher number of disconnections than projected as a result of the pandemic. Commercial

customers are consolidating office buildings in Palo Alto, moving out of California, or closing their business. (Section 5.4)

Customer Programs (Section 6):

- The City launched its Business Advantage Program in March 2021 to help local businesses tune their HVAC units for efficiency. Businesses also got an HVAC inspection, a new MERV 13 filter, and advice on tuning the HVAC to increase indoor air flow in line with [ASHRAE recommendations for reducing airborne infectious aerosol exposure](#). 53 systems have been installed, and 11 additional businesses have been approved for installation. (Section 6.1.1)
- The City continues to promote its multi-family and workplace EV charger programs. See Section 6.1.2 for more detail.
- Funding for EV charger programs is provided by the Low Carbon Fuel Standard (LCFS) program. Revenues for this program fell significantly during the pandemic, as summarized in Section 6.2.1.

Communications: A digest of major outreach efforts is provided in Section 7, including outreach related to drought, the public safety power shutoff program in the Foothills, and utility scams.

Legislative and Regulatory: Major legislative and regulatory items are summarized in Section 8.