



DRAFT

UTILITIES ADVISORY COMMISSION MEETING MINUTES OF NOVEMBER 3, 2021 SPECIAL MEETING

CALL TO ORDER

Chair Forssell called the meeting of the Utilities Advisory Commission (UAC) to order at 5:01 p.m.

Present: Chair Forssell, Vice Chair Segal, Commissioners Bowie, Johnston, Metz, Scharff (arrived at 5:22 pm) and Smith (arrived at 5:02 pm)
Absent: Commissioner Bowie

ORAL COMMUNICATIONS

None.

APPROVAL OF THE MINUTES

Vice Chair Segal mentioned the Motion to Adjourn listed the prior UAC Commissioners Danaher and Jackson and listed Commissioner Scharff in attendance. Replace prior Commissioners with Bowie and Metz and remove Commissioner Scharff as he had left the meeting at 6:46 pm.

Commissioner Johnston moved to approve the draft minutes of the October 6, 2021, special meeting as corrected. Commissioner Metz seconded the motion. The motion carried 5-0 with Chair Forssell, Vice Chair Segal, and Commissioners Johnston, Metz, and Smith voting yes.
Commissioner Bowie and Scharff absent

AGENDA REVIEW AND REVISIONS

None.

REPORTS FROM COMMISSIONER MEETINGS/EVENTS

None.

UTILITIES DIRECTOR REPORT

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

Public Safety Power Shutoff (PSPS): On October 19, CPAU shut off power to customers in the Foothills as a safety precaution due to gusty wind conditions that presented a risk for wildfire around our utility lines. When power lines are shut off during a PSPS, crews must patrol the lines before reenergizing electricity. Since this PSPS occurred around midnight, crews had to wait until daylight to patrol the approximately 15 miles of power lines. Power was restored around noon the next day. Staff are updating PSPS communications plans and protocols to ensure that we proactively communicate with customers about potential PSPS events and provide updates as situations evolve. The City recommends that people be prepared for unexpected emergencies and utilize resources at www.cityofpaloalto.org/preparedness For more information about PSPS, please visit www.cityofpaloalto.org/outageinfo

Smart Energy Provider (SEP) Award: CPAU was recently awarded the Smart Energy Provider designation from the American Public Power Association for the third year in a row. The Smart Energy Provider award recognizes public power utilities for demonstrating leading practices in four key disciplines: smart energy program structure; energy efficiency and distributed energy programs; environmental and sustainability initiatives; and the customer experience. CPAU is proud to be recognized and will continue to strive for excellence in these areas.

Advanced Water Purification Plant Tours: Palo Alto is collaborating with Valley Water on potential siting of a regional purified water treatment facility at the former Los Altos Treatment Plant site in Palo Alto (near San Antonio Road). The facilities will include a pump station to transfer effluent from the Regional Water Quality Control Plant to Los Altos Treatment Plant site. Valley Water is currently designing the facilities, working on preparing the EIR and working with Palo Alto staff on a lease agreement, outreach, and permitting for Reverse Osmosis Concentrate. Valley Water has offered to take UAC members on an in-person tour of the Silicon Valley Advanced Water Purification Center in San Jose or you can take an online self-guided tour.

Water Supply Update: The State Water Resources Board imposed curtailments for the San Francisco Public Utilities Commission's (SFPUC) Tuolumne River diversions on August 20. SFPUC is complying with those curtailments, but also has filed a lawsuit and requested a health and safety exception for its entire service area. SFPUC was able to capture and store water, in accordance with its water rights, during the big October storm because the State Board temporarily lifted the curtailments. The Category 5 atmospheric river provided significant precipitation but is not a "drought buster." Typically the Regional Water System needs 6 to 7 atmospheric rivers a year to fill the system.

SFPUC plans to declare a water supply emergency later this year requesting 10% voluntary water use reductions system-wide for the Regional Water System. This level of reduction would bring total Regional Water System deliveries close to 2015 levels (the lowest water use year of the last drought).

Palo Alto reduced water use by 6.7% for the period of July 1 through October 31, 2021 compared to 2020. July through October bills show residential customers reduced usage by 9.3%, while non-residential customers increased water usage 5.1% compared to 2020. Non-residential increases may be linked to COVID recovery. For example, non-residential customers reduced usage by 4.4% from the same months in 2019, prior to the COVID-19 shelter in place order.

Drought Outreach: The City continues its public outreach about the importance of taking measures that can result in immediate water savings to assist with our conservation efforts. CPAU and Valley Water offer a variety of free services, tools, and rebate programs to help consumers use water efficiently. Visit watersavings.org and cityofpaloalto.org/water for information on these resources. Water waste can be reported through PaloAlto311 or drought@cityofpaloalto.org

Gas Safety Awareness Phone Surveys: Beginning this month, CPAU will participate in the federally-mandated Gas Overall Awareness Level, or GOAL, survey, which is a nationwide program to assess public awareness about gas safety. Residents will receive an automated phone call with a request to answer some questions about gas safety protocols, such as Call Before You Dig, to help us prevent gas emergencies. Palo Alto Utilities customers and non-customers, including emergency responders, public officials, and excavators, will be randomly selected for this poll. We thank you in advance for helping us meet our "GOAL" for safety awareness by responding to the survey if you receive the call.

Gas Safety Outreach: Per our Public Awareness Plan for gas safety, every year CPAU mails gas safety awareness brochures to every customer in Palo Alto, plus other stakeholder living near and working in Palo Alto. These brochures were distributed in late August and early September 2021.

Genie In-Home Assessments Resuming: The City's Home Efficiency Genie in-home visits were suspended in 2020 due to the COVID-19 shelter-in-place health orders, then offered in 2021 through a virtual format.

Technicians are now available again and prepared with COVID safety protocols to resume in-home efficiency assessments. The Genie also provides free over the phone energy and water efficiency advice for all Palo Alto residents. Genie advisors provide expert and impartial guidance to help residents save money on utility costs and keep you comfortable. Visit cityofpaloalto.org/efficiencygenie to schedule an appointment.

SunShares – For the sixth year in a row, the City is an outreach partner for Bay Area SunShares, a solar and battery storage discount program administered by Building Council for Climate Change (BC3). Residents must register for the discounts by November 30 and sign installation contracts by December 31, 2021. As part of its role as an outreach partner, CPAU hosted a free virtual webinar on Tuesday, October 26 from 6:30 – 7:30 pm. With 90 participants, the event was well attended, including presentations followed by an active Q&A session. As of October 22, Palo Alto leads all outreach partners in signed contracts. Six (6) residents have committed to installing solar and/or battery storage systems.

Upcoming Event: Lawn Conversion, Native Trees and Plants Workshop. Wednesday, November 17, 6 - 7:30 PM. Learn how converting your lawn to native trees and plants can help save water and money while benefiting the planet. Plus, learn about landscape rebates to help convert your lawn and care for trees during the drought.

NEW BUSINESS

ITEM 1: ACTION: Adoption of a Resolution Authorizing Use of Teleconferencing for Utilities Advisory Commission Meetings During Covid-19 State of Emergency.

Dean Batchelor, Director of Utilities, remarked with the state and county have an Emergency Order in place and Council recommends that all City Boards, Commissions and Committees approve the resolution to continue virtual meetings through January 2022. If the Commission decides not to approve the resolution, the December 2021 and January 2022 meetings will be canceled.

In answer to Chair Forssell's query regarding the January 2022 meeting, Batchelor recalled that the Council mandated that all City Boards, Commissions and Committees were not to return to in-person meetings until after January 2022. Council Member Filseth explained that Council is having hybrid meetings to allow Staff to work through any technological difficulties. He could not recall any specific date of when City Boards, Commissions and Committees could begin hybrid meetings. He noted that the intent is to have hybrid meetings with in-person attendance optional as long as mask mandates are in place.

Batchelor restated that the UAC can conduct its meetings via Zoom.

Commissioner Johnston supported the resolution if it allowed for the UAC to meet in December 2021 and January 2022. In reply to Commissioner Johnston's query regarding if the City can hold hybrid meetings, Council Member Filseth restated that Council has successfully held a hybrid meeting.

David Coale stated that the Zoom meetings are very convenient because of the 5:00 pm meeting start time.

In answer to Chair Forssell's inquiry regarding if the Commission does not adopt the resolution, Batchelor explained that he thought the Council had mandated all Boards, Commissions, and Committees not to meet in a hybrid meeting until Council has gone through the process. Chair Forssell commented that the intent is that the Commission will hold its meeting virtually until Council says otherwise. Dave Yuan, Strategic Business Manager, added that the resolution only addresses the December 2021 meeting. Chair Forssell predicted that the UAC will hold its first hybrid meeting in January 2022 and Batchelor confirmed that is correct.

Commissioner Scharff joined the meeting.

Chair Forssell mentioned that the UAC meeting start time will change to 6:00 pm in January 2022.

ACTION: Commissioner Metz moved Staff recommendation that the Utilities Advisory Commission (UAC) Adopt a Resolution (Attachment A) authorizing the use of teleconferencing under Government Code Section 54953(e) for meetings of the Utilities Advisory Commission (UAC) and its committees due to the Covid-19 declared state of emergency.

Seconded by Commissioner Johnston. Motion carries 6-0 with Chair Forssell, Vice Chair Segal and Commissioners Johnston, Metz, Scharff and Smith voting yes.
Commissioner Bowie absent

ITEM 2: ACTION: Staff Recommends the UAC Recommend the City Council Accept a Presentation on Current and Pending State Legislation and Approve the Continued use of the 2021 Legislative Guidelines Through 2022

Heather Dauler, Acting Compliance Manager summarized several, but not all, legislation that the City has been tracking: Senate Bill (SB) 556, was about wireless facilities on City-owned poles and utility poles. CMUA and NCP opposed the vetoed bill. SB 378 is a bill that was signed into law and it requires local governments to allow micro trenching for the installation of underground fiber. Micro trenching is not a preferred method of the City. The Publicly Owned Utility (POU) community was successful in amending in language that stated that a locality may prohibit micro trenching if it is determined that it will specifically affect public health or safety. Assembly Bill (AB) 758 allows electric POU to utilize rate reduction bonds and the City did submit letters of support. AB 242 was a cleanup bill that aligned the Power Source Disclosure Deadline with the deadline for data verification. SB 323 established certainty in the water rate-setting process by establishing a statute of limitations on judicial challenges to water or sewer rate increases. SB 427 allows water agencies to adopt an ordinance to enhance penalties for water theft. Senate Concurrent Resolution (SCR) 49 formally recognizes the first full week of October as Public Power Week, a previously informal observation.

In reply to Commissioner Metz's query regarding if the City tracks non-utility-specific bills such as SB 9, Dauler explained that the state lobbyist who works through the City Manager's Office does track bills outside of utility bills.

Dauler moved to the arrearage programs that are available to the City. Arrearage programs are programs where the state and the federal government have allocated money for unpaid utility bills. The state is implementing two arrearage programs to help pay for any accrued debit that was obtained between March 4, 2020, and June 15, 2021. The electrical and natural gas utility program is called the California Arrearage Payment Program (CCAP) Program and for the water and wastewater utility, the program is called California Water and Wastewater Arrearage Payment Program (CWWAP). The California Municipal Utilities Association (CMUA) has established a working group that works directly with the agency that is developing the arrearage programs. City staff will be submitting to the state data, that is based on a survey and the utility application, that indicates the number of arrearages the City has. After submittal, the City will receive an allocation amount which will be received by the City's Utility Department with customers receiving a credit on their bill. Dauler mentioned that the current legislative guidelines have been working very well to support the collaborative involvement with Customer Support Services and workings with CMUA.

Concerning what can be expected in the 2022 legislative session, Staff identified several key areas as possible legislative topics next year. Those areas are: grid reliability, wildfire and vegetation management, advancing clean energy, electric vehicles (EV), drinking water and lead, and COVID recovery. Senator Becker introduced SB 67 in January 2021 which would have established a 24/7 clean energy standard program with a goal of 100 percent of electric load being supplied by eligible clean energy resources by year 2045. Dauler noted that 2045 is the year by which the State of California aspires to have 100 percent clean energy being delivered to residents and businesses. The bill would have required significant increases in storage across the state, a

sharp increase in supply costs, a restructuring of the supply portfolio, and a significant change in how hydro is dispatched across the state.

Many agencies spoke with Senator Becker's policy advisors expressing concerns about impacts and the bill was shelved very early in the legislative session. There are indications that Senator Becker will bring the bill back in the 2022 legislative session but with a focus on a 2030-2045 compliance mechanism. Senator Becker has been appointed as Chairmen to the new Senate Subcommittee on Clean Energy. The goal of the subcommittee is to achieve a 100 percent clean electrical grid. Staff recommended that the Commission recommend the City Council approve the 2022 Utilities Legislative Policy Guidelines.

In reply to Commissioner Metz's inquiry regarding what the definition is for cost-effective in Guideline Number Ten, Dauler explained that the City normally opposes any legislation that is not cost-effective. The definition of cost-effective depended upon what the policy objective is and the definition is subjective. The City strives to deliver reliable services at a cost-effective approach for customers. Commissioner Metz stated that Renewable Energy Credits (REC) should be included in the discussion when determining if legislative action is cost-effective. Dauler added that Staff reviews the legislative action in a holistic approach.

Commissioner Scharff remarked that the guidelines have worked well in the past and that it has been beneficial to give Staff board direction. He could not recall an instance when Staff has taken direction on legislation that Council did not support. He noted that Staff does check in with Council if they are unsure about a specific bill, but Staff does need the ability to act quickly.

Chair Forssell agreed that the guidelines are working. In reply to her question regarding the local control guideline, Dauler clarified that just because the guidelines allow Staff to support or oppose a bill, that does not always happen. She noted that there is a fair amount of Staff discretion where Staff considers several components before deciding on the best approach. In answer to Chair Forssell's query regarding why the City opposed SB 67, Dauler disclosed that the City did not take a position on SB 67. Staff expressed to Senator Becker's office that the City supports the policy's objections, but the mandates, deadlines and compliance dates were unreachable.

ACTION: Commissioner Scharff moved Staff recommendation that the Utilities Advisory Commission (UAC):

- 1) Accept the staff presentation regarding current and pending state legislation, and
- 2) Recommend the City Council approve the continued use of the 2021 Utilities Legislative Policy Guidelines through 2022

Seconded by Vice Chair Segal. Motion carries 6-0 with Chair Forssell, Vice Chair Segal and Commissioners Johnston, Metz, Scharff and Smith voting yes.
Commissioner Bowie absent.

The UAC recessed at 6:02 p.m. and returned at 6:10 p.m.

ITEM 3: DISCUSSION: Discussion and Presentation on the Impact of Decarbonization on the Resiliency of Single Family Homes in Palo Alto

David Coale found the report very interesting and appreciated that the City conducted the analysis. He remarked that his home can function on 3 kilowatt hour (kWh) per day, not including space heating. He concluded that the amount of energy to get by in an emergency is much less than what was indicated in the report for a long-period outage. He appreciated that the report stated that bicycles are a more reliable way to travel around the City.

Lena Perkins, Sr. Resource Planner introduced the City's Fellow from Stanford Shoja Jahangard-Mahboob who drafted the report. She noted that the report is the first step in understanding the impacts and opportunities for the resiliency of all-electric single-family homes in Palo Alto.

Shoja Tanner Jahangard-Mahboob reported that the City has the Sustainability and Climate Action Plan (S/CAP) which has a goal of achieving an 80 percent reduction in greenhouse gas emissions (GHG) by the year 2030. To achieve this goal, the City must increase building energy efficiencies, reduce natural gas in homes and electrify the vehicle fleet. The objective of the report was to assess the resiliency consequences of fully electrifying single-family residential homes in the City, and any additional vulnerabilities caused by switching from multiple fuels sources to a single source. The framework for the analysis was first to assess the resiliency of electricity, natural gas and gasoline systems within the City, then evaluate three major disasters or outage scenarios, then assess existing mixed-fuel homes resiliency, then assess the resiliency of all-electric homes and then lastly, investigate options for all-electric homes which are more resilient than existing homes. The three disasters and/or outage scenarios that were used in the report were a major earthquake, a Palo Alto only power outage and a cyberattack. The results of the analysis concluded that current mixed fuel homes and current all-electric homes have similar resiliency ranging from extremely moderate to low impacts during an outage. All-electric with solar and storage homes, and all-electric with natural gas generator homes would experience low to no impacts during an outage. There are several options available to homeowners to increase their home's resiliency. These options included rooftop solar and storage systems, mobile power stations, building insulation and higher-efficiency appliances and many others. The City also has several initiatives underway to increase resiliency such as adding a second set of electric transmission lines to the City and undergrounding lines in the Palo Alto Foothills. Key takeaways from the report included of all-natural gas appliances, only stoves and gas tank water heaters work when power is out, all-electric homes resiliency could be enhanced with a wide array of products, the resiliency of EV is equal or better than gas-powered cars in a major disaster and a 7.6 kilowatt (kW) solar panel system and 13.5 kWh battery is enough to generally meet most the energy needs of an all-electric home.

Commissioner Smith stated that this was an excellent report and he was thrilled that the City of Palo Alto initiated this exploration. In answer to his's question regarding the recommended size of a solar array that is needed during a disaster, Jahangard-Mahboob answered that the first step was to investigate the average appliance energy use across the State of California and then that was compared to Palo Alto specific energy uses. Perkins added that based on the Rocky Mountain Institute Study conducted for the City of Oakland, the most economical size of a solar array for an all-electric home was 7 kW.

Commissioner Johnston found the report interesting and encouraging for folks who are nervous about converting their home to all-electric. An important point of the analysis shows that folks are better off with an all-electric home with solar and storage. In reply to his prediction that it is not enough to have solar panels if the home does not have storage, Jahangard-Mahboob answered that is partially right. He noted that there is a solar inverter system, which is cheaper than solar storage, and those allow rooftop solar to be routed directly to appliances, but it can only go up to 2 kilowatts (k) of electricity. In response to Commissioner Johnston's query regarding why it is not feasible to route power from the solar panels to the home directly, Jahangard-Mahboob explained that most solar power systems are wired to the grid and not directly to the home. Perkins added that if the solar panels are not wired directly to the grid, the system will not generate power. If the system is wired to a transfer switch to the home, then it can function as a backup generator. Shiva Swaminathan, Senior Resource Planner, added that there would be no energy from the system at night. In answer to Commissioner Johnston's question regarding if the City should make the permitting process easier for inverters to be installed, Perkins mentioned that if there is a transfer switch in the home, that switch can be permitted similar to a whole-house natural gas back generator. She agreed that folks should know that if a solar panel system is installed in the cheapest easiest fashion, that they will not be able to power their home in the case of a grid outage. Commissioner Johnston agreed and encouraged Staff to

educate the community on what they need to do if they do want their solar panel system to provide power in an emergency.

Chair Forssell called on Mr. Coale to provide comments. Mr. Coale confirmed that when the power goes out, the inverter disconnects to keep the lineman safe who may be repairing the line. He mentioned that there is one inverter on the market that when the power goes out. It supplies a separate outlet with 2,000 watts of power, but only during the day. Commissioner Johnston found that information very intriguing and encouraged Staff to promote that inverter more as the City moves forward with electrification.

Vice Chair Segal found the presentation very informative. In response to her question regarding the cost of a backup system, Jahangard-Mahboob disclosed that a natural gas backup generator is between \$8,000 to \$10,000 and a solar and storage system is between \$15,000 to \$20,000. Vice Chair Segal encouraged the City to implement ways to make permitting easier as well as explore initiatives to reduce the cost for solar panel systems. Perkins confirmed that Staff will be exploring cost and ways to reduce the cost.

In reply to Commissioner Smith's query regarding if the report looked at what the average monthly usage of electricity for a single-family home is in Palo Alto and what was the average, Jahangard-Mahboob answered that the information was part of the study and that he would forward the full report to Commissioner Smith. Commissioner Metz recalled that the average was around 800 kWh a month for mixed energy and 1,200 kWh for all-electric homes.

In answer to Chair Forssell's query regarding air conditioners, Perkins confirmed that new construction will often have air conditioning and some homeowners of existing homes are installing air conditioning units to mitigate smoke. Staff has been encouraging folks to install heat pumps. In response to Chair Forssell's inquiry regarding smart control panels, Jahangard-Mahboob explained that folks can specify on a smart panel where power should go during a power outage. Perkins added that one smart grid on the market allows folks to differentiate loads by using specific circuit breakers. There is a pilot program available to utilities who are interested in using the smart panels without solar or storage as a means to avoid upgrading the existing electrical service as well as an emergency application.

ACTION: None

COMMISSIONER COMMENTS

Commissioner Scharff announced that he is now Chairmen of the Northern California Power Agency (NCPA) Legislative and Regulatory Affairs Committee.

Commissioner Metz announced that he has continued to investigate neighborhood-level emergency preparedness and response. He requested that on a future agenda that the UAC discuss his findings. Chair Forssell explained that the official mechanism for Commissioners to put an item on the agenda is to do a Commissioner Memo with another Commissioner. Commissioner Metz thanked Director Batchelor and Utility Staff for their time.

FUTURE TOPICS FOR UPCOMING MEETINGS: December 01, 2021

Commissioner Johnston requested an update regarding the second transmission line, with an emphasis on security.

Commissioner Metz proposed a follow-up discussion on resiliency and emergency preparedness.

Chair Forssell mentioned that there was an article in the paper that discussed a cybersecurity audit that took place within the City. She asked if there was any interest from the Commission to hear from Staff about their position regarding the article and to frame the discussion more towards utility cybersecurity.

Vice Chair Segal wanted to bring back cybersecurity for discussion.

Dean Batchelor, Utilities Director, mentioned that Staff plans to bring cybersecurity back to the UAC at the January 2022 meeting.

NEXT SCHEDULED MEETING: December 01, 2021

Commissioner Scharff moved to adjourn. Commissioner Johnston seconded the motion. The motion carried 6-0 with Chair Forssell, Vice Chair Segal, and Commissioners Johnston, Metz, Scharff, and Smith voting yes. Commissioner Bowie absent.

Meeting adjourned at 7:02 p.m.