UTILITIES ADVISORY COMMISSION MEETING
MINUTES OF AUGUST 7, 2019 REGULAR MEETING

CALL TO ORDER
Chair Danaher called the meeting of the Utilities Advisory Commission (UAC) to order at 7:00 p.m.

Present: Chair Danaher, Vice Chair Forssell, Commissioners Jackson, Johnston, Scharff (arrived at 7:30 p.m.), Segal, and Smith
Absent: None

ORAL COMMUNICATIONS
None.

APPROVAL OF THE MINUTES
Commissioner Johnston moved to approve the minutes of the June 5, 2019 meeting as amended. Commissioner Segal seconded the motion. The motion carried 6-0 with Chair Danaher, Vice Chair Forssell, and Commissioners Jackson, Johnston, Segal, and Smith voting yes and Commissioner Scharff absent.

AGENDA REVIEW AND REVISIONS
None.

REPORTS FROM COMMISSIONER MEETINGS/EVENTS
None.

GENERAL MANAGER OF UTILITIES REPORT
Dean Batchelor, Utilities Director, delivered the General Manager’s Report.

The Home Efficiency Genie is Now an Award Winning Program – CPAU is proud to announce that we have received a National Energy Innovator Award for our Home Efficiency Genie program. I was honored to accept the award in June at the American Public Power Association (APPA) conference. The Genie program, which began in July 2015, has been recognized for its application of creative, energy-efficient techniques, technologies and successful simplicity. The program optimizes home efficiency by providing individually tailored energy and water efficiency recommendations to residents. By providing free advice over the phone, the Genie has become a trusted and reliable resource for our customers. The House Call assessment costs a resident $149, but that cost will be reimbursed when the homeowner completes one of the efficiency projects recommended by the Genie. Learn more at efficiencygenie.com.

SunShares Solar and EV Group Buy Program Now Available - For the fifth year in a row, Palo Alto is participating in Bay Area SunShares, a solar group-buy program that allows residents in the Bay Area to pool their buying power and benefit from discounts on rooftop solar and electric vehicles. Learn more and register for the program at BayAreaSunShares.org from August 1 through November 15.
Rebates for 2019 Nissan Leaf - Through September 30, CPAU customers and employees can receive rebates on the Nissan Leaf. The APPA has partnered with Nissan to offer rebates to public power utilities for purchasing a 2019 Nissan Leaf. The rebate cannot be combined with the SunShares program.

Utility Meter Audits Beginning this Month - CPAU has contracted with Professional Meters, Inc. (PMI) to perform a field audit of all utility meters in the City. This audit is intended to help us prepare for the implementation of new business information systems and modernized metering infrastructure to improve the level of service we deliver to our utility customers. Contractors will be in residential and business areas beginning in early August. Customers will receive a notification in the mail prior to the audit with a date of when contractors will be in their area. CPAU contractors will be carrying ID badges, wearing shirts with their company logo, and driving vehicles identifiable as CPAU contractors. If there are any questions or concerns, people may contact Utilities Customer Service at (650) 329-2161.

Preparing for Seismic Hazards & Other Emergencies – Communications staff worked with the City’s Office of Emergency Services on public outreach about earthquake safety and emergency preparedness following recent earthquakes in Southern California. Unfortunate incidents like these natural disasters remind us of the importance to be prepared for emergencies at any time. The City offers many resources at cityofpaloalto.org/preparedness to help people stay informed and ready.

Municipal Service Center Open House – On July 5, the City hosted an Open House at the Municipal Services Center to showcase some of the “behind the scenes” work that we do for the Palo Alto community. The event included special project demonstrations from Utilities and other City departments along with games, prizes, music, food, and a dunk tank for City management. More than 400 attendees were able to visit with staff and learn about City services in a fun environment.

Utilities Rate Changes - On June 17, City Council approved rate changes for the electric, gas, wastewater and water utilities, which became effective on July 1. CPAU provided public outreach during the rate proposal phase and after rates were adopted, including a Utility Bill Insert delivered to customers in July. We thank the UAC for their advisement on the financial plans and rate proposals this year.

Walking and Mobile Gas Leak Surveys in Progress - This routine inspection of our gas distribution system is conducted every year to ensure the safety of all who live and work in Palo Alto. You can view a map of this year’s survey areas on the Utilities website at cityofpaloalto.org/utilities

Utility Work at Churchill – In conjunction with the Caltrain electrification project, electric lines will need to be raised along the rail line. At Churchill, new holes for power poles were bored, and streets and sidewalks are being restored. Construction is scheduled for completion on Friday.

Update of Utilities Strategic Plan – An update for the period January-June 2019 is available. At an all-hands meeting, CPAU employees received power packs and encouragement to join an internal working group.

Fiber to the Node - On June 24, 2019, the City Council authorized staff to change the scope of work for the Fiber Request for Proposals (RFP) and to sunset the Community Advisory Committee. Hopefully, the RFP will be issued by the end of August.

COMMISSIONER COMMENTS
None.

UNFINISHED BUSINESS
None.
NEW BUSINESS

**ITEM 1:** DISCUSSION: Discussion of Renewable Portfolio Standard Compliance Strategy Options for the City's Electric Supply Portfolio.

Jim Stack, Senior Resource Planner, reported in May and June staff presented a comparison of annual and hourly carbon accounting. The UAC seemed to agree that the hourly approach to carbon accounting is appropriate for CPAU because it is more granular and accurate. With UAC approval, staff will present an amendment to the Carbon Neutral Plan that the UAC may recommend the Council approve.

Chair Danaher confirmed the UAC's consensus for an hourly carbon accounting methodology.

Stack continued the presentation, stating in June staff presented a list of options for complying with Renewable Portfolio Standard (RPS) requirements. Because load has been dropping in recent years, CPAU has a surplus of overall resources. Staff has suggested CPAU sell excess resources, which would result in an average savings of $1.2 million annually over the next 12 years.

In reply to Commissioner Johnston's inquiry regarding the actions necessary to sell excess resources, Stack advised that staff would sell the output of the contracts to other utilities on a short-term basis. Once staff is aware of hydroelectric conditions and certain that excess resources will be available, staff will sell excess resources on a monthly or quarterly basis. Under existing policy, staff can implement the strategy upon approval.

Commissioner Smith remarked that timing of the sale of resources is important.

Chair Danaher confirmed the UAC's consensus for selling excess resources.

Stack further stated the strategy of "carbon neutral every hour" would involve selling probably all solar resources, replacing them with baseload renewable resources, and changing the dispatching of hydroelectric resources. This strategy will be cost in the range of $7 million annually. This strategy would likely not have a net impact on carbon emissions and could increase emissions. Staff recommends the UAC not consider this approach further.

Chair Danaher confirmed the UAC's consensus for eliminating the "carbon neutral every hour" approach from consideration.

Stack further recalled that staff presented a strategy of minimal compliance, which would result in significant cost savings. The strategy involves maximizing the replacement of in-state renewable resources with out-of-state resources and using banked Renewable Energy Certificates (REC). Given the potential public perception that CPAU's portfolio is dirtier than allowed under State requirements, staff recommends no further discussion of utilizing banked RECs.

Commissioner Johnston noted his skepticism of using banked RECs and his agreement with selling resources in excess of load. In answer to Commissioner Johnston's question about the use of banked RECs, Stack explained that if staff sells only the resources in excess of load, CPAU would remain well above the compliance requirement, and the number of banked RECs would continue to increase. Commissioner Johnston suggested the UAC discuss selling some of the RECs.

In reply to Chair Danaher's request for the number and market value of banked RECs, Stack indicated the number of banked RECs is 1.2 million. Their market value is roughly $25 million. To monetize banked RECs, staff would apply older banked RECs to requirements in 2020, for example, and sell RECs generated in 2020 to other utilities. CPAU would comply with its RPS requirement, but its Power Content Label (PCL) would reflect zero renewables for 2020 because RECs are not reflected in the PCL. Jonathan Abendschein, Assistant Director of Utilities Resource Management, explained that CPAU cannot sell banked RECs directly. CPAU
could sell more of its in-state renewables or trade them for out-of-state renewables. Stack added that the State does not recognize the value of out-of-state RECs in the PCL.

In answer to Commissioner Smith's query regarding the use of banked RECs in a programmed manner, Stack noted in June staff suggested using the RECs over 12 years. Each year, CPAU would appear to fall short of the compliance requirement, but in actuality CPAU would be in compliance through use of the previous year's RECs.

Abendschein suggested the UAC hear the next component of staff's proposal and return to a discussion of banked RECs with that information in mind. Chair Danaher concurred.

Stack continued the presentation, stating in 2003 CPAU began adding renewable energy supplies to its portfolio. For 2019, more than 60 percent of the portfolio is composed of renewables. Renewable energy supplies exceed the State's requirement by about a 2:1 margin. Because of the large amount of hydroelectric supply in its portfolio, CPAU qualifies for a State exemption such that the portfolio may contain less renewable supply than other utilities' portfolios.

Vice Chair Forssell noted the amount of wind power and landfill gas power shown in the graph is diminishing and requested the reason for that. Stack advised that the decreasing amounts reflect the expiration of CPAU's contracts for those resources.

Stack further reported staff does not recommend continuing the current compliance strategy, which generates on average a 10 percent surplus each year. One option is to sell a portion of excess supply to serve load or to comply with the Carbon Neutral Plan. Under this option, CPAU would retain 4.5 percent of the total surplus in order to maintain its carbon neutral status under the hourly accounting approach. Another option is to sell all renewables and exceed the RPS requirement levels and purchase bucket 3 resources or out-of-state renewables. Under this option, renewable resources or hydroelectric resources would equal 100 percent of load, but 25 percent of resources would be out-of-state renewables. The PCL would depict the out-of-state renewables as unspecified resources. If business as usual continues, supply costs would not change, and the RPS level would average about 60 percent over the next 12 years. The current portfolio would have negative emissions under the annual and hourly carbon accounting methodologies. Under the option to sell a portion of excess supply, CPAU would realize about $1.2 million in cost savings annually; the surplus would decrease from 10 percent to 4.5 percent; the rate impact would be approximately 0.7 percent; and the RPS level would decrease to 51 percent. An hourly carbon accounting methodology would result in no emissions, and the PCL would reflect negative emissions. The option to sell all renewables above the RPS requirement would generate an additional $1.9 million in savings for a total savings of $3.1 million. This option would have an approximate 2 percent rate impact, but the RPS level would decrease to 40 percent. Hourly accounting would result in an emissions intensity of approximately 137 pounds per MWh, but that could be offset with the purchase of additional bucket 3 RECs. The PCL would reflect 97 pounds per MWh.

In reply to Commissioner Segal's inquiry regarding the use of cost savings, Stack related that the savings could be returned to customers through a rate reduction or applied to other types of decarbonization efforts.

Stack continued the presentation, stating an emissions intensity of 97 pounds per MWh is much cleaner than the grid average, which is around 400 or 500 pounds per MWh.

In response to Chair Danaher's query regarding adding information to the PCL, Stack indicated CPAU cannot add text to the PCL but can provide supplemental material to customers through bill inserts.

Stack continued the presentation, stating a hybrid approach would allow customers to choose one of two or more rates, similar to the PaloAltoGreen program. Customers could select a premium rate based on the current portfolio or a more expensive "carbon neutral every hour" portfolio or a lower-cost rate based on the option to sell supplies that exceed the RPS requirement. Challenges to a hybrid approach are selection of
a default rate, public messaging, confusion and frustration for customers, uncertainty around supply needs; and implementation costs.

Chair Danaher requested staff omit further presentation of the hybrid option as the UAC is not interested in it.

Stack advised that staff will return to the UAC with a formal request for a recommendation to Council regarding an amendment of the Carbon Neutral Plan to allow an hourly carbon accounting methodology. Staff may return to the UAC with additional RPS strategies. If there is interest in pursuing an approach to sell more bucket 1 resources and purchase bucket 3 resources, staff will seek feedback from the environmental community. Staff will begin selling resources that exceed load and are not required for carbon neutrality. In 2020, staff will present longer-term decisions for the portfolio.

Lena Perkins, Acting Senior Resource Planner, explained that current research indicates up to about 25 percent of trading of RECs within the western interconnect (WIC) has no net effect on total carbon emissions but does lower the costs of electricity across the interconnect. For the same impact on carbon, utilities can save $3 million a year by trading RECs. On a dollars per carbon basis, trading RECs is the most efficient option. If costs are kept low, more states and entities could potentially adopt RPS. Anecdotal and emerging research supports the theory that investors may retire nonrenewable power sources such as coal-fired plants sooner.

Chair Danaher commented that if the choice is between buying in-state and out-of-state renewable energy resources, out-of-state would be cheaper. The disadvantage is the reflection of it on the PCL.

Vice Chair Forssell understood the models are recommending a limit of 25 percent on bucket 3 RECs because the WIC would have flexibility to harvest financial benefits without affecting carbon emissions. Perkins clarified that California allows 15 percent of the RPS to be bucket 2 RECs, which are out-of-state RECs and RECs not scheduled in the Independent System Operator (ISO). Between buckets 2 and 3, California allows 25 percent of the RPS to be out-of-state resources. In reply to Vice Chair Forssell's question regarding 25 percent of out-of-state resources, Stack believed the 25 percent number comes from the State limit on out-of-state resources rather than the research.

In response to Commissioner Segal's query regarding bucket 2 and bucket 3 RECs in the pie chart, Stack indicated the pie chart assumes no bucket 2 RECs but maximizing the amount of bucket 3 RECs. Staff could present an option to sell even more bucket 1 RECs and purchase bucket 2 RECs. In reply to Commissioner Segal's request for the rationale, Perkins explained that the UAC has expressed concern that the public could view it as backtracking. Abendschein added that the full range of options presented in June are theoretically on the table.

Commissioner Scharff remarked that selling a portion of excess supply is preferable to continuing the current portfolio. He suggested selling all renewables is better for the environment, but the public perception is worse. Stack clarified that selling all renewables is a better option if the cost savings are used to implement local decarbonization efforts. In answer to Commissioner Scharff’s question of which option is superior from an environmental point of view if the cost savings are not used for local decarbonization, Stack reported selling a portion of excess supply and selling all renewables are probably equivalent. In response to Commissioner Scharff’s question of the issue being the public’s perception of Palo Alto’s electricity being carbon neutral, Dean Batchelor, Utilities Director, concurred.

In answer to Commissioner Smith's inquiry of why selling a portion of excess supply is not as good as selling all renewables if cost savings are allocated to electrification infrastructure, Perkins reported the decision comes down to the amount of cost-effective carbon savings locally and the dollars per ton avoided locally. In reply to Commissioner Smith's query regarding the sale of a portion of excess supply leading to cost savings and the elimination of coal-fired plants and dirty power, Perkins agreed that it could lead to those results, but the sale of a portion of excess supply is more expensive than the sale of all renewables if local investments
are ignored. Commissioner Smith asked if it would be more expensive for the CPAU's retail customers. Perkins responded yes, $1.9 million more expensive for CPAU's retail customers and more expensive for other ISO and WIC customers overall.

Commissioner Jackson advised that his perception in June was that Commissioners were more comfortable with the strategy of selling a portion of excess supply. He was apprehensive about the strategy to sell all renewables because of concerns about CPAU power not appearing carbon neutral. He wanted to review the research materials before reaching a conclusion.

Commissioner Scharff suggested CPAU move immediately to a strategy of selling a portion of excess supply while staff explores the sale of all renewables. Staff could develop messaging that is not too complicated and that CPAU would continue to be green.

Commissioner Johnston commented that Palo Alto residents are proud of CPAU being carbon neutral. CPAU needs a simple and persuasive explanation for the public. He expressed interest in learning the reaction of the environmental community to the strategies. He supported the sale of excess supply while staff explores a strategy to sell all renewables and messaging to explain the strategy.

Commissioner Smith understood that buying RECs from other states spreads the knowledge that buying renewables is good for the planet, but the pounds of carbon by MWh is troublesome. CPAU can offset that with RECs, but offsetting does not represent CPAU's actions. Until the State changes the PCL to reflect out-of-state renewables, advocating for their purchase is difficult.

Chair Danaher did not understand the significance of the state boundary in that solar power from San Diego is no more local to Palo Alto than wind power from Wyoming, and one does not provide greater savings for the atmosphere than the other. The UAC's responsibility should be carbon neutrality at the lowest possible cost. A monthly bill insert could state Palo Alto is carbon neutral and the percentages of renewable energy, and explain that CPAU is obtaining renewables from out of state. The bill insert could also explain the PCL by saying it is an accounting methodology that ignores clean energy purchased out of state and does not reflect the actual situation. He recommended staff not allow presentational issues to prevent a savings of $2 million for ratepayers if the options are equally green. He requested staff inquire about environmental groups' opinions regarding state boundaries and obtaining renewable energy.

Commissioner Segal noted CPAU could save money by selling all renewables and could have a bigger net effect in whether greenhouse gases come from Palo Alto, Wyoming, or Missouri. If CPAU can cumulatively reduce emissions by retiring coal plants earlier, the messaging can state not only is CPAU keeping Palo Alto clean but it is contributing beyond Palo Alto's borders.

Vice Chair Forssell was less concerned with the community's perception because she was unsure of the number of residents who read the PCL. She was more concerned about the public perception of Palo Alto as a role model. She expressed interest in taking another look at resources procured directly and being thoughtful about the mix of things CPAU is controlling more directly.

Stack advised that staff will present some options around new contracts for wind or other resources next year when discussing renewal of the Western contract. Last year, staff reviewed options such as wind power from New Mexico, which appears to be low cost and a good complement to hydroelectric resources.

Chair Danaher noted the 2017 PCL states the power mix as 100 percent hydroelectric and renewable. The column labeled California power mix states 34 percent natural gas and 4 percent coal. Clearly, the UAC supports selling a portion of excess supply and exploring the sale of all renewables.

Commissioner Scharff felt the ability to state CPAU power is carbon neutral and to explain how it is carbon neutral is important. Support from environmental groups will be helpful.
Abendschein indicated staff will consider the use of banked RECs in the context of a strategy to sell all renewables.

**ACTION:** None

**ITEM 2: DISCUSSION: Discussion of Palo Alto's Water Supply Reliability.**

Jonathan Abendschein, Assistant Director of Resource Management, reported CPAU has some opportunities in the coming year or two to review options for improving water supply reliability through Bay Area Water Supply and Conservation Authority (BAWSCA). Staff wishes to obtain some sense of the value of water supply reliability to the community.

Lisa Bilir, Resource Planner, requested feedback regarding the sufficiency of Palo Alto's water supply reliability during a drought and the amount customers are willing to pay for greater water supply reliability during drought. She requested the UAC's input regarding the community's interest in supplementing the current water supply reliability during drought. CPAU receives 100 percent of its potable water supply from the San Francisco Public Utilities Commission (SFPUC). The City uses some recycled water at City facilities. CPAU has eight emergency water wells and seven storage reservoirs. During the last drought, the State mandatory cutback level was 24 percent, and water customers conserved 31.4 percent during the cutback period. Some temporary restrictions implemented during the drought became permanent restrictions after the drought. Since the last drought, water consumption has not increased to pre-drought levels. In 2019, BAWSCA customers' consumption has been approximately 8 percent lower than in 2013.

In reply to Chair Danaher's question about high rainfall amounts contributing to reduced consumption, Bilir suggested the temporary restrictions that became permanent may have contributed to reduced consumption.

Bilir further reported in the first half of fiscal year 2019 Palo Alto customers reduced their consumption by almost 11 percent from 2013 consumption. CPAU implemented a drought surcharge during the drought, but it has been removed. One of SFPUC's level of service goals is not to have more than a 20-percent cutback during a drought. SFPUC plans for an 8.5-year dry period based on actual conditions from the 1987-92 and 1976-77 droughts combined. During a drought, SFPUC allocates water approximately one-third to SFPUC retail customers and two-thirds to wholesale customers through the Tier 1 Plan. Water is allocated among wholesale customers through the Tier 2 Plan. Tier 1 and 2 Plans become effective when the SFPUC declares a 20-percent shortage. SFPUC did not declare a shortage in the recent drought because the State mandated reductions.

In reply to Commissioner Scharff's request for additional details regarding SFPUC not declaring a shortage in the recent drought, Bilir explained that in an unprecedented move, the State set reductions for each urban retail water supplier in the state. Under the State reductions, Palo Alto was required to reduce usage by 24 percent. Staff does not believe the State will mandate reductions in the future. Karla Dailey, Senior Resource Planner, added that the State has indicated it prefers not to mandate reductions in the future. The State has moved toward a regulatory framework of conservation as a way of life.

Bilir continued the presentation, stating CPAU usage levels have decreased slightly in 2019. A 23-percent reduction from the levels of 2018 or 2019 may be harder to achieve in the future because it would require reducing usage to a historically low level. The historical record indicates more serious droughts have occurred in the past and have lasted for ten or more years. With climate change as a factor, future water shortages may be more frequent and more severe.

In answer to Chair Danaher's question about future reductions taken from the 2013 or 2018 usage levels, Bilir advised that the reduction would be based on water usage in the most recent non-drought year. The usage from the most recent non-drought year assumes many conservation measures.
In reply to Commissioner Scharff’s inquiry regarding the ability to comply with future reductions because of ongoing conservation measures, Dailey concurred in part that ongoing conservation does make future reductions difficult. If all users decrease consumption in a drought, the limited amount of water available will serve more users. CPAU will be subject to State regulations and will have to comply with some conservation targets. In answer to Commissioner Scharff’s query regarding additional measures residents could implement, Dailey advised that the State will provide new targets that CPAU will have to meet over a long time period. CPAU will have to continue aggressive conservation measures.

Vice Chair Forssell remarked that if all communities are reducing usage, the likelihood that a cutback is triggered decreases. Abendschein added that climate change and regulatory changes could offset the impacts of decreased consumption and lead to similar or worse drought cutbacks.

Chair Danaher reiterated that a 23-percent cutback will be more difficult to achieve now than in 2013.

Bilir continued the presentation by requesting the UAC consider the following questions: (1) is a 23-percent water use reduction during a drought enough supply reliability; (2) can the community sustain a 23-percent reduction; and (3) if Palo Alto could participate in a project that limited water use reductions to 20 percent or less, would the community be interested in such a program and at what cost to the community. BAWSCA has determined there will be additional water needs in dry years and identified strategies of water transfers and storage to meet the additional needs. In Palo Alto, water conservation and efficiency programs continue. Staff is investigating water reuse and use of groundwater. Preliminary studies estimate about 20 percent of the potable groundwater supply could be pumped; however, the use of groundwater may be restricted during multiyear droughts.

Commissioner Smith questioned whether a decrease of 23 percent to 20 percent would be a significant reduction. Dailey advised that discussions have focused on a 5 percent change, such as 23 percent to 18 percent. The Water Shortage Contingency Plan implements different measures at different levels.

In response to Commissioner Johnston’s inquiry regarding the source of the additional water for which CPAU pays, Dailey indicated the source may be water transfers or water storage. CPAU could contribute funds to a water storage project and receive rights to use the water. BAWSCA has been focusing on projects for dry years versus projects such as a desalinization plant.

Commissioner Scharff commented that providing feedback is difficult in the absence of a project. The water purification project at the Regional Water Quality Treatment Plant is a long-term and interesting project. Having more water security would be worth an additional cost. In his experience, the out years of water protection are the most expensive, and the marginal return on that often begins to deteriorate. Perhaps CPAU could build its own water storage facility.

Commissioner Segal expressed interest in a breakdown of water usage between commercial and residential and between indoor and outdoor and whether an individual ratepayer has any control over how his conservation efforts are applied. Bilir related that 72 percent of water is consumed for indoor uses.

Commissioner Smith commented that the discussion concerns making the community resilient against something that might happen. In answer to his query regarding the use of graywater for irrigation, Dailey indicated CPAU offers programs to assist customers with installing graywater systems and with lawn replacement. In response to his inquiry regarding encouraging programs that create a resilient community or that store water, Dailey reported CPAU will continue to pursue conservation programs. Water consumption for outdoor uses in Palo Alto likely exceeds the amount the State will mandate. The question for the UAC concerns whether SFPUC’s level of service goal is sufficient for Palo Alto or does the community want additional water supply so that it does not have to reduce as much as required. Abendschein explained that the 23-percent cutback is relative to the usage level. The 23-percent cutback applies to the amount of water.
imported; therefore, alternative water resources can reduce the amount of water imported and lead to compliance with the cutback. Commissioner Smith encouraged staff to explore creating or identifying alternative water sources.

In reply to Vice Chair Forssell's inquiry about mandated cutbacks being gradual, Bilir explained that SFPUC's Tier 1 and 2 Plans are in place for droughts that result in a 20-percent water shortage. SFPUC level of service goal is not to require cutbacks greater than 20 percent. A cutback could be 5 percent or 10 percent. The Tier 2 plan for allocating water to wholesale customers does not apply to shortages greater than 20 percent. If a shortage is declared greater than 20 percent, the allocation of water will have to be determined. Vice Chair Forssell requested time to discuss the issues with neighbors before providing input to staff’s questions.

Commissioner Scharff believed Palo Alto's landscaping infrastructure, particularly the canopy, should be protected. The amount of water consumption correlates directly to the size of residents' lots. Dailey explained that communities with more outdoor irrigation reduce consumption more. The extra 5 percent could be used for irrigation. She questioned whether the community would value being able to irrigate landscape an additional day per week during a drought. Commissioner Scharff felt most customers would support a 2 percent rate increase if they knew they would have water to protect the canopy.

Chair Danaher expressed interest in having a ranking of projects based on cost effectiveness. Another cutback is going to be difficult to achieve. Perhaps staff could encourage the State to utilize a base year of 2013 for future cutbacks so that communities are not punished for ongoing conservation efforts.

**ACTION:** None

**ITEM 3:** DISCUSSION: Discussion of Outreach and Response Required for Wildfire Safety, PG&E Public Safety Power Shutoff Program, and Local Outages.

Catherine Elvert, Communications Manager, reported staff has been communicating with PG&E and other stakeholders to understand the potential impacts of PG&E's Public Safety Power Shutoff Program. PG&E has been communicating its plans to de-energize powerlines when conditions pose a high risk for wildfire related to utility infrastructure. CPAU takes electricity from PG&E's major transmission lines. If PG&E shuts down a major transmission line that serves Palo Alto, there could be impacts to CPAU's power supply. In the event of a statewide incident, Palo Alto could be impacted by rolling blackouts. CPAU is working with partners and other utilities to understand the program's effects; to establish clear communication with PG&E and protocols for PG&E's notifications; and to develop local communication plans to inform customers. PG&E hopes to provide a notice 24-48 hours in advance of a shutoff, but PG&E cannot guarantee this. The Foothills area is probably most at risk for wildfire conditions. CPAU will make decisions regarding the Foothills area based on the best interests and safety of customers and on staff's knowledge of infrastructure in the area. CPAU is taking measures to mitigate the potential for wildfire. Staff is developing a Wildfire Mitigation Plan, which may be complete by the end of the year.

Chair Danaher advised that backup power sources for hospitals, public safety, and the like are in place. Perhaps PG&E could provide a map of the service area for each transmission line so that staff could make its own decisions. PG&E shutting down a transmission line 100 miles away from Palo Alto may impact the amount of power that is provided to Palo Alto's grid.

In response to Commissioner Scharff's question about Palo Alto receiving all or no power, Dean Batchelor, Utilities Director, advised that PG&E may move reduced capacity among transmission lines such that cities along the transmission lines have rolling blackouts.

In answer to Commissioner Segal's question about the Foothills area, Batchelor related that the line in the Foothills area is not a transmission line. It serves the 70 customers in the Foothills area. Staff will install a switch at the base of the line so that power can be shut off and will explore relocating the line.
In reply to Commissioner Johnston's inquiry about the amount of CPAU's electric generation and whether it is dedicated to specific uses, Batchelor indicated CPAU has four units that can provide 5 MW of service. On a typical day, customers utilize 180 MW. The generators require some power in order to start. He has asked staff to develop a cost for bringing 50-60 MW of power into the City.

In response to Vice Chair Forssell's inquiry regarding the percentage of load that is commercial versus residential, Elvert responded 85 percent commercial and 15 percent residential. Commercial customers will likely provide the 25-30 percent curtailment. Dedicated key account representatives communicate directly with the responsible people at large business customers; therefore, CPAU should be able to shed load quickly by communicating with the large customers.

**ACTION:** None

**ITEM 4: ACTION:** Selection of Potential Topic(s) at Future UAC Meetings.
Commissioner Johnston suggested a discussion of recycled water include recycled water as an alternative water resource during a drought.

Commissioner Segal requested information regarding the impact of recycled water on water quality and a tutorial regarding the rights to use utility poles and placement of wireless facilities on utility poles.

In reply to Vice Chair Forssell's question, Dean Batchelor, Utilities Director, reported plans for a resiliency workshop are tentative.

Chair Danaher requested an update regarding networking or futureproofing electric vehicle (EV) charging and an update regarding staffing. Batchelor advised that the number of vacant positions has dropped from 44-45 to 32. Critical positions have not been filled. The majority of vacant positions are in the Electric Utility.

**ACTION:** None

**NEXT SCHEDULED MEETING:** September 4, 2019

Meeting adjourned at 9:10 p.m.

Respectfully Submitted
Tabatha Boatwright
City of Palo Alto Utilities