



UTILITIES ADVISORY COMMISSION MEETING MINUTES OF JULY 1, 2020 SPECIAL MEETING

CALL TO ORDER

Chair Danaher called the meeting of the Utilities Advisory Commission (UAC) to order at 5:33 p.m.

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

Absent: None

ORAL COMMUNICATIONS

None.

APPROVAL OF THE MINUTES

Commissioner Johnston moved to approve the minutes of the June 17, 2020 meeting as presented. Commissioner Scharff seconded the motion. The motion carried 7-0 with Chair Danaher, Vice Chair Forssell, and Commissioners Jackson, Johnston, Scharff, Segal, and Smith voting yes.

AGENDA REVIEW AND REVISIONS

None.

REPORTS FROM COMMISSIONER MEETINGS/EVENTS

None.

UTILITIES DIRECTOR REPORT

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

COVID-19 Update – Last week one of the Water/Gas/Wastewater staff members tested positive due to exposure from a family member. It effected nine other staff members. The good news is all nine tested negative and came back to work Monday, June 29th. Of the 217 staff members, 110 members are working onsite, and 107 are working from home.

Street Closures – Starting June 26th, University Avenue from Cowper to High Streets was closed to through traffic to support in-street dining and retail experiences. The closure will start slowly this weekend from Friday to Sunday, with University reopening June 28th at 10 p.m. to support traffic patterns as a result of a closure on Hamilton Avenue on June 29th for a Black Lives Matter Art Installation. Beginning on July 3rd, the University Ave. closure will run from 10 a.m. – 10 p.m. daily through August 2nd. We are aware of one media outlet writing a story on this effort likely for publication tonight or tomorrow. Staff is notifying businesses directly via email and through a digital newsletter. Social media outreach will begin this evening as well. The dedicated website on this effort is www.cityofpaloalto.org/summerstreets. California Avenue Summer Streets closure continues through

July 5th, and staff is working to gain business feedback this week to potentially expand to later in the summer.

Soft Launch of MyCPAU New Online Customer Site – MyCPAU, the improved customer website, has replaced the existing online My Utilities Account. MyCPAU offers a fast and secure way to pay your bill online and set up automatic or recurring payments. Customers are able to view monthly utility usage, learn about opportunities to lower their bills, set notification preferences and alerts, and receive direct digital support from Customer Service staff. Our customers are excited about this much-needed upgrade to our online utility customer services.

Utilities Website – Starting this month through the middle of August, Utility staff will be migrating content from the existing website onto the new platform. The final outcome will be a more robust website that will support the following Citywide and Utility goals:

- Increase information sharing, communications and community engagement
- Reflect the City's standing as the birthplace of Silicon Valley and reinforce the City's branding
- Ensure mobile capacity and ADA compliance
- Act as a springboard for the public to use other e-services offered by the City
- Expand integration with other digital communications, including social media
- Ensure the City has the ability to adapt to the evolving technology landscape. Of the approximate 3,780 pages are on the site, utilities have 445 pages that need to be updated or old content delete . It is estimated that the new site will go live at the first of the year.

In response to Commissioner Segal's question about outage information on social media platforms, Batchelor advised that the new outage management system will automatically update outage information on the website.

In reply to Vice Chair Forssell's inquiry regarding the City utilizing a .gov domain name for its website, Batchelor did not believe the web address would change.

COMMISSIONER COMMENTS

None.

UNFINISHED BUSINESS

None.

NEW BUSINESS

ITEM 1: ACTION: Election of Officers.

ACTION: Chair Danaher moved to approve the nominations of Vice Chair Forssell as Chair and Commissioner Segal as Vice Chair of the Utilities Advisory Commission. Commissioner Scharff seconded the motion. The motion carried 7-0 with Chair Danaher, Vice Chair Forssell, and Commissioners Jackson, Johnston, Scharff, Segal, and Smith voting yes.

ITEM 2: DISCUSSION: Discussion of the Demand Side Management Report for Fiscal Year 2019.

Jonathan Abendschein, Assistant Director of Resource Management, reported the Demand Side Management Report is an annual report and is intended to summarize all programs, their cost effectiveness and general effectiveness.

In response to Commissioner Smith's inquiry regarding creating or reinstating the photovoltaic (PV) rebate fund, Abendschein recalled when staff presented the Local Solar Plan to the UAC and the Council, both wanted to encourage solar but not if it involved additional subsidies to solar customers. Consequently, staff is not considering another rebate program. Commissioner Danaher noted rooftop solar power did not

provide any carbon gains and was more expensive. In reply to Commissioner Smith's question about the public's interest in solar power, Abendschein explained that residents' interest is driven by a sense of energy independence, resiliency gains, or the desire to generate renewable energy onsite. The desire to install solar panels in Palo Alto is not driven primarily by economics.

In answer to Commissioner Scharff's question about resiliency gains requiring energy storage, Abendschein advised that more people are installing Tesla batteries with solar panels. Commissioner Scharff stated installing solar panels in Palo Alto does not achieve resiliency gains unless the customer uses a Tesla battery or service.

Commissioner Johnston requested an update regarding the State's progress toward its goal of doubling efficiency savings and how that goal affected the City's goals. Lena Perkins, Senior Resource Planner, explained that the State goal does not apply directly to public utilities' efficiency programs but is a statewide goal taking into account not just public utility efficiency programs, but also local, State, and Federal building codes and other programs. Publicly utilities were not necessarily required to double their efficiency goals. The City of Palo Alto Utilities (CPAU) committed to increasing its efficiency goals by 15% and is conceivably on track to achieve the goal. The California Energy Commission (CEC) views Palo Alto's savings as one of many efforts that could double efficiency savings. In reply to Commissioner Johnston's queries regarding measuring CPAU's energy efficiency savings and the large fluctuations in meeting water efficiency goals, Micah Babbitt, Resource Planner, related that the savings depend on the measures implemented. When customers apply for programs, staff compares their current energy usage with energy usage with the technology to be installed and tracks the change at the project level. Wet years and dry years affect water savings. In 2019, savings rose because staff began tracking water savings associated with the Green Building Ordinance, which led to a considerable amount of water savings.

Commissioner Jackson advised that, with respect to PV and storage, adding storage seems to greatly increase the complexity of a PV project and Code-compliance constraints. Perkins added that solar can operate in island mode without storage if it is wired correctly, though only when the sun was shining. PV could provide resiliency without a battery. In answer to Commissioner Scharff's question regarding the number of homes wired for island mode, Perkins believed more and more homes are being wired this way, but historically few homes were wired for island mode. In reply to Commissioner Scharff's inquiry as to CPAU's preference for homes to be wired for island mode, Perkins advised that CPAU's role as facilitator is to ensure homeowners understand what they are buying. CPAU has a number of programs to ease the solar installation process. Commissioner Jackson indicated there is an opportunity to educate the public regarding PV installation models, costs, complexity, and tradeoffs. In reply to Chair Forssell's question regarding workshops providing this information, Abendschein related that educational materials discuss storage and solar, but information related to islanding without storage may be missing. He agreed to work with staff to adapt material.

In answer to Vice Chair Segal's query regarding continued savings from nonresidential customers, Babbitt advised that the business new construction program ended a few years ago, but the savings could not be realized until the project was complete in the prior fiscal year. A fair amount of lighting could be converted to increase efficiency and provide savings moving forward. The savings from new construction depends on whether large customers have projects. In any given year, the savings could increase or decrease quite a bit. CPAU is launching new home energy and water report programs that will provide some additional savings in the coming years. CPAU is also launching a small to medium business program that will hopefully drive some additional savings. There could be a reduction in savings in the current fiscal year, but staff hopes the new programs will increase savings. Perkins added that staff expects savings to be low in fiscal year 2020 because of COVID.

Commissioner Smith referred to Appendix B of the staff report, Tables B.1 and B.2, and indicated the savings from PV on residential competes well with some of the programs highlighted in Table B.1. Commissioner Danaher believed the table is misleading because CPAU would be getting solar power for that energy anyway. Abendschein explained that there are multiple ways to look at the data. Because solar is behind the meter,

it reduces the measured sales. Commissioner Smith clarified that solar reduces the demand of an individual single-family resident because the resident is pulling from solar. Commissioner Danaher stated the single-family resident would use the same amount of energy either way. Commissioner Smith agreed that solar does not necessarily change individual consumption. If the source is a single-family resident's personally owned solar installation and if it reduces the demand from CPAU's source, he would consider it a savings. Abendschein reported there is significant savings potential (or generation potential, depending on one's viewpoint) to reduce the amount of energy that those customers are drawing from the grid. There is significant potential in Palo Alto. However, solar is generally not a cost effective way to reduce the amount of energy that residential or other customers draw from the grid as compared to things like efficient lighting or heating. Solar is not cost effective compared to importing that energy from outside the community. Incentive programs that are based on adding solar tend to add to the overall cost of energy for the whole community. When individual customers put solar on their roofs for their own reasons, though, it does benefit the community because the costs are borne entirely by the individual customer. Customers that install solar feel the cost is worthwhile. Commissioner Scharff agreed that subsidizing solar makes no sense. If the customer pays for solar installation, it is a big benefit to the community. Abendschein added that is why staff promotes education and group buys and tries to reduce barriers to solar. Perkins clarified that solar while solar can be cost effective for most single-family homeowners, from a utility and societal perspective, solar is not nearly as cost effective as energy efficiency.

In reply to Chair Forssell's inquiry regarding the provisions of the Green Building Ordinance and the new construction code that drove water and electric efficiency savings, Christine Tam, Senior Resource Planner, advised that the water savings come from primarily landscape requirements but also from low-flow faucets and toilets. In answer to Chair Forssell's query regarding a typical amount of water saved when comparing a new building with an older building, Tam related that she could provide the data at a later time. The Council adopted an Energy Reach Code that requires energy savings beyond the State's requirements. CPAU can claim the additional energy savings that the City mandates beyond the State. The City requires all new nonresidential construction projects be 10% or 12% higher than the State building efficiency standards. The architect or building engineer has to design the building to meet that additional efficiency requirement. In response to Chair Forssell's question regarding the new home energy reports, Lisa Benatar, Utilities Marketing Program Manager, reported the sad face has been eliminated, but text will let customers know they are not doing as well as their neighbors. Specific messaging will be sent to solar and electric vehicle (EV) customers.

In answer to Councilmember Cormack's question about actual measurable reductions, Perkins indicated Staff measures and de-rates the reductions. The reductions are more stringent than measured. The savings are "claimed" because in the past shareholder dividends from investor-owned utilities were benchmarked to validated savings. Councilmember Cormack suggested staff provide energy and water usage information in the City's twice weekly email with suggestions for activities during shelter in place.

ACTION: None

ITEM 3: DISCUSSION: Discussion and Update on the Progress in Implementing Utility Customer Programs to Facilitate Electric Vehicle Adoption in Palo Alto.

Hiroki Kelty, Program Manager, reported 107 new charging ports have been installed since the launch of the EV charger rebate program in 2017. Of the 107 ports, 7 have been installed at multifamily mixed-use properties, 61 at schools, and 39 at nonprofits. Staff expects to pay approximately \$500,000 in rebates for these installations. Participation in the program has been spurred by an increase in rebate amounts and the Technical Assistance Program (TAP). The goal is to install 180-360 ports at 60-90 sites by 2022. Currently, 30 sites are participating in TAP and considering installing anywhere from four to 20 EV ports each. Staff anticipates installation of an additional 100-plus ports through both programs by the end of the calendar year. One hundred twenty-one new Level 2 chargers and 25 new DC fast chargers have been installed throughout the City. Because of shelter-in-place orders, site visits and community outreach and events have been put on hold. Staff has used the time to develop a template for final report presentations to customers

and to work with the engineering team in reviewing transformers that may be affected by charger installations. In addition, staff is exploring virtual classes and hopes to launch them in the next six months. CPAU was awarded \$1 million in grant funding to install DC fast chargers through the California Electric Vehicle Incentive Project (CALeVIP), which will launch in the fall. Staff hopes this program will translate to about 10 DC fast chargers at key neighborhood locations. The City also contributed \$1 million in matching funds that will translate into roughly 200 workplace and multifamily chargers, which will be installed over the next two years. Staff expects \$2 million will be fully reserved once funds are available. EV programs are funded through Low Carbon Fuel Standard (LCFS) credits. \$6.1 million represents about 75% of the budget and is dedicated to funding Level 2 chargers. Staff expects this funding will lead to installation of about 600 chargers in two years. The number of ports needed to support the City's goal to reduce carbon emissions 80% from 1990 levels (the "80 by 30" goal) is estimated at 10,000. Based on current programs and business plans, about half the number of chargers the community may need could be funded. Hopefully, the private sector will install infrastructure to help meet the anticipated demand. To meet 80 by 30 goals, Palo Alto's needs are considerably higher than the State's recommendation. The estimates for chargers do not include any single-family home chargers because the number changes daily and is difficult to track. The data assumes current charging patterns, which could dramatically change over the next ten years. Staff is working on an EV charging network needs analysis. To reach 80 by 30 goals, the number of EVs in Palo Alto will have to increase from 4,500 to 42,000. Policy makers can set high incentive levels, lower electricity rates, accelerate EV charging infrastructure with additional funds, and implement mandates.

In reply to Commissioner Johnston's query regarding a congestion fee that would be waived for EVs, Kelty indicated staff has discussed such a fee and looked at programs around the world. Staff is accepting feedback on a direction for the program. Commissioner Johnston believed a congestion fee is a less extreme version of a fee on fossil-fuel vehicles and worth consideration.

Vice Chair Segal favored charging for parking with a waiver for EVs and inquired about the amount of funding needed to install all the needed ports. Kelty advised that the average cost per port has been about \$11,000. PG&E's average cost thus far is \$18,000 per port. The cost depends on the infrastructure at the site.

Commissioner Scharff felt the goal is unattainable. The EV adoption rate would have to increase 7% per year to reach the goal. He questioned whether the number of existing chargers support the number of existing EVs and asked if anyone thinks the EV adoption rate would be 14% in 2021. Kelty suggested by 2029, the adoption rate will be a lot higher than it is now. Commissioner Scharff wanted to focus on scaling up the installation of EV chargers to be ahead of the curve. The City could not reach an 80% adoption rate unless the State takes action. Low-income people cannot afford to purchase vehicles often; therefore, equity should be considered as well as environmental benefits. The 80% goal is so high that it could make the City do things that seem extreme, such as banning fossil-fuel vehicles. He expressed concern that staff is spending resources on investigating unattainable actions like fossil-fuel vehicle bans. An incremental and practical approach to EV adoption would foster better results.

Commissioner Smith remarked that funding and staff resources are insufficient. The funding gap is at least \$90-\$100 million. In response to his inquiry about what portion of the \$90-\$100 million related to CPAU costs, Jonathan Abendschein, Assistant Director of Resource Management, did not believe any of it is related to CPAU staffing, and the costs were not insignificant. For example, processing permits for the 30 sites currently in the TAP would require 0.25-0.5 Full-Time Equivalent (FTE) of engineering time plus some portion of an FTE for field staff over a couple of years. Scaling up to the levels needed to achieve 80 by 30 goals would require hiring 5-10 new engineers to begin processing applications. Staffing capacity is a real issue. In reply to Commissioner Smith's query regarding the only barrier being the lack of staffing, Abendschein suggested the processes could be improved such that less staffing is needed. Commissioner Smith related that his main goal for the programs and projects would be their impact. A program or project that reduced the estimated numbers by a scale or order of magnitude would be worthwhile. The gap needs additional thought.

Commissioner Jackson did not believe a time-of-use electrical rate would be an effective incentive for electrification related to EV charging, cooking, HVAC, and water heating. He did not think the combination of automated metering infrastructure (AMI) and time-of-use rates is a substitute for an all-electric rate or a lower EV charging rate. Abendschein advised that Proposition 26 requires all rates to be cost-based. CPAU is not allowed to create incentive rates for EVs. The issue with tiered rates is that a customer who adds an EV or a heat-pump water heater is pushed into the second tier. The purpose of tiered rates is to encourage efficiency. Adding an EV is an efficient use of energy, but an EV uses more energy. A higher first tier is intended to prevent customers from being penalized. Staff has been exploring ways to implement those rates. Choosing a cost-based design is a big challenge. Time-of-use rates relieve the issue because it moves away from tiered rates, and customers are not pushed into the second tier. He noted that electricity for EV charging is cheaper than gasoline, in contrast to electricity for uses like space heating, which is more expensive than natural gas.

Commissioner Danaher requested a quarterly informational report listing the number of chargers installed at workplaces, multifamily/mixed-use properties, schools, and nonprofits. In answer to his query regarding tracking the usage of charging stations, Kelty indicated staff tracks statistics for the City's public chargers. Once the draft final report has been finalized, it can be shared with Commissioners and members of the public. Commissioner Danaher commented that utilization data over time would determine whether the programs are effective. Kelty noted usage rates for EV chargers around the world are 10-17% because of the pandemic. Commissioner Danaher clarified his interest in utilization rates over the next five years. In response to his inquiry about the profit from chargers offsetting installation costs, Shiva Swaminathan, Senior Resource Planner, explained that the City's General Fund, not CPAU, owns the chargers. The breakeven charge is 26 cents per kilowatt hour (kWh), which assumes no cost for the chargers. Kelty added that the utility industry views EV chargers as a business opportunity because they lead to more electricity sales. Commissioner Danaher recalled that at least one company will install chargers at no cost in exchange for advertising on the charger. Obtaining third-party payments for chargers would be great. Energy savings will be generated by different traffic patterns and people switching from cars to smaller vehicles. Therefore, the number of chargers and EVs estimated in the presentation may be exaggerated. The decision to purchase an EV is driven by the cost of the vehicle. The cost of EVs will decrease quite a bit over the next four to five years, which will drive adoption more than incentives. Kelty advised that studies have shown an EV is less expensive to own and operate than a gas-powered vehicle over the life of the vehicle, even though EVs currently cost about \$20,000 more than a gas-powered vehicle up front.

Commissioner Scharff questioned whether charging the breakeven rate is smart given that a profit could fund the installation of more chargers, whether high goals have resulted in a misallocation of resources, and whether other programs could have more impact for less cost. The impact of programs should always be considered.

Swaminathan advised that EV chargers will not result in a revenue stream for the City because the rate charged does matter. The rate for EV charging at a residence with a PV system is in the range of 10 cents. The industry consensus is owning a charging network will not generate a profit. With limited resources of a couple of million dollars a year, the focus on multifamily homes, mixed-use properties, and low-income is providing the most bang for the buck. The installation of chargers is driven by customer demand with a subsidy from CPAU.

In answer to Commissioner Scharff's questions regarding the rate charged at charging stations in multifamily housing and electricity being less expensive than gas, Swaminathan indicated the rate charged at multifamily housing is closer to 25-30 cents per kWh. Electricity for charging is less expensive than gasoline primarily when an EV is charged at a single-family home with a PV system. From a societal viewpoint, some people feel EVs are not cost effective if grant funding is not considered. Customers feel EVs are cost effective because of the grants, tax breaks, and a rate of 10 cents per kWh.

Councilmember Cormack reported the Council asked staff to present a realistic understanding of what it would take to achieve the goal set by a prior Council. The discussion of the goals and high interventions are worth the time and staff resources. A simple quarterly report of charging station numbers would be a good investment. Another way to think about the number of charging stations installed and to be installed is the percent of eligible sites with an EV charger. Shared EVs in low-income communities is worth remembering.

Kelty appreciated the UAC's comments. Staff grapples with balancing resources, developing equitable programs, and having the greatest impact on emissions.

ACTION: None

ITEM 4: ACTION: Staff Recommendation that the Utilities Advisory Commission Recommend the City Council Amend the City's Electric Supply Portfolio Carbon Neutral Plan and Electric Utility Reserves Management Practices.

Jim Stack, Senior Resource Planner, reported that, in March, staff proposed updating the carbon accounting methodology in the Carbon Neutral Plan to use an hourly emissions factor. With the budget impacts of the COVID situation, staff has focused on finding new sources of revenue from the electric supply portfolio. In May the UAC discussed the concept of selling more in-state renewables (Bucket 1 Renewable Energy Credits, or RECs) and purchasing out-of-state renewables (Bucket 3 RECs) to achieve carbon neutrality. Staff requests feedback regarding a timeframe for staff to execute transactions and use of the resulting revenue. The difference between a Bucket 1 and a Bucket 3 REC is that in the former case the electricity is delivered with the REC and in the latter case it is separated from the REC. From an environmental or carbon standpoint, staff views in-state and out-of-state renewables as identical. Unfortunately, the State does not agree. State regulations do not allow the reporting of out-of-state RECs as renewable or zero carbon on the Power Content Label (PCL). Under the Renewable Portfolio Supply (RPS) mandate, the Electric Utility has to meet 75% of the renewables requirement using in-state resources. That requirement leads to a price differential between in-state and out-of-state resources. Because the Electric Utility's portfolio consists entirely of in-state renewables and hydroelectric power, the Electric Utility has far more in-state renewables than required under the RPS mandate. Selling some of the renewables at a high premium and purchasing out-of-state renewables at a much lower premium would lead to potential revenue. Staff proposes to sell as many in-state renewables as possible and purchase only enough out-of-state renewables to achieve carbon neutrality. As of July 1, staff estimates the transactions will generate potential revenue of \$3.8 million in fiscal year (FY) 2021 and slightly more than \$3 million in each of the succeeding four fiscal years. Council approval of the proposed action is needed. Staff plans to present the proposal to the Council on August 17th, which could reduce the amount of revenue the Electric Utility receives in the current fiscal year. Staff is in the process of selling surplus renewables that exceed the community's annual electric load, which will consume most of the July renewables and the beginning of August renewables. If the Council approves the proposal in mid-August, the Electric Utility will realize slightly less than \$3.8 million. Staff proposes limiting transactions to FY 2021 and 2022. The proposal will impact the PCL. The calendar year 2021 RPS level will change from 62% to 36%, and staff will have to report some unspecified sources in the portfolio. The carbon emissions intensity, which will be reported for the first time this year, would change from 6 kg CO₂/MWh to 102 kg CO₂/MWh. This carbon emissions intensity on the PCL will be considerably higher than if these REC exchanges did not take place, but would still be below the average statewide emissions intensity. Staff proposes allocating \$1 million per year to building electrification and local decarbonization programs with the remainder utilized to reduce electric rates. Staff also proposes creating a new Cap and Trade Program Reserve Fund for these revenues.

In response to Vice Chair Segal's query regarding the difference between revenue from selling Bucket 1 RECs and revenue from the Cap and Trade Program, Stack indicated they are different revenue streams. The proceeds from selling the RECs would flow into the General Utilities Fund. A large portion of the proceeds from selling the allowances will fund renewable energy purchases. Jonathan Abendschein, Assistant Director of Resource Management, advised that staff has clear guidance that allowance revenue can be used for local decarbonization programs. Staff continues to explore the availability of other revenue streams for those

programs. Selling renewables that were previously funded with allowance revenue frees up allowance revenue for use towards local decarbonization programs in a way that is clearly legally defensible.

Commissioner Scharff requested clarification of the primary driver for the use of cap and trade allowance revenue in staff's proposal. Abendschein explained that the \$1 million proposed for local decarbonization programs will be funded through allowance revenue. The earnings used to offset the economic impacts of COVID have no relationship to the allowance revenue.

In reply to Commissioner Smith's inquiry about whether there is a requirement to limit the transaction period to two years, Stack indicated there is no requirement and it is the Council's decision whether to limit the program duration. In answer to Commissioner Smith's question about losing revenue if the Council does not approve the two-year period and subsequently extend the time period for the subsequent three fiscal years, Stack responded that if the Council does not approve the sale of Bucket 1 RECs in August, some revenues would be lost. To receive the maximum revenue from the sale of Bucket 1 RECs, they have to be sold before the energy is generated. The sales can be spread throughout the year, but the bulk of renewables come in the summer months with solar generation. Staff proposed limiting the transactions to two fiscal years thinking the budgetary impacts of COVID-19 are likely to have been mitigated within two years. In March, the UAC seemed to support selling only the renewables that exceed the annual load. Commissioner Smith felt the Council rescinding its authorization or directing staff to cease selling RECs would be easier than staff obtaining an extension or reauthorization of the sale of RECs in 2022. He preferred to authorize the sale of RECs without a time limit. In June, a primary driver of the UAC's discussion was to provide critically needed funds for either rate reduction or decarbonization programs. The ultimate goal of the UAC's discussion was providing a source of funding for local decarbonization. The method for expending the funds or establishing a reserve fund is logical. He was less comfortable with utilizing the funds to offset rates given the UAC's decision to hold rates flat and preferred to invest the funds in electrical infrastructure to support local decarbonization.

Commissioner Johnston noted the policy represents a big change in the way the community understands the Electric Utility's carbon neutrality and will require a lot of explanation. He supported the change; however, a review of the policy in two years would reveal the community's response to the explanation of carbon neutrality. He agreed with using some of the revenue for local decarbonization efforts as a way to help explain that the Electric Utility remains true to its environmental goals while generating needed revenue for the City.

Commissioner Scharff concurred with Commissioner Johnston's comments. The change in the PCL will seem to indicate the Utility is no longer carbon neutral. There will be a cost to changing the policy. Staff believes the community can overcome the apparent loss of carbon neutrality with the proper education. He would support the sale of RECs to avoid deep cuts to the Electric Utility budget and to fund decarbonization programs. In two years, the Council should review PCL issues, the community's response to education, continued authorization of the sale of RECs and, if appropriate, allocation of revenues.

Commissioner Jackson noted the potential for \$15 million in revenue. The funding needed to reduce emissions by a substantial amount is huge. Some of the revenue could be used to lower rates and help ratepayers. RECs should be sold for as long as possible because the sales will not cause a net increase in carbon in the western U.S. and the revenues will be used primarily for decarbonization purposes. The Council can revoke the authorization at any time.

Commissioner Danaher said a helpful analogy is the production of non-GAAP financial statements by corporations. Staff could produce an analogous "non-GAAP PCL" as part of the community education. The change in the PCL should not be that hard to explain. He supported a Council review of the policy in two years. In two years, there could be more data on the value of out-of-state RECs that challenges assumptions.

Vice Chair Segal concurred with a Council review in a couple of years. In the short term, an allocation of some of the earnings to support the Utility and ratepayers is appropriate. Over time, earnings should go more

toward decarbonization because that is a compelling reason to support the sale of RECs. City communications could be an opportunity to provide the explanation that is not allowed on the PCL.

Commissioner Jackson stated the messaging should emphasize \$15 million in funding for decarbonization programs rather than a change in the PCL.

Chair Forssell remarked that her opinion has changed to support the sale of RECs. Accepting Bucket 3 RECs and showing the money that can be saved and the uses for it have some value that could be considered alongside the change in the PCL. In reply to her query regarding the customer electric supply carbon content report required by Attachment A, Item 6c, Stack explained that with statewide changes to the PCL, the Electric Utility is required to report carbon intensity. Since 2013, staff has reported to the Council regarding the Carbon Neutral Plan and RPS progress. With both of those reports, a report of the electric supply portfolio's carbon content is redundant. Chair Forssell noted the report required by Item 6c seems to address educating customers about the PCL. Item 6c should remain in the Carbon Neutral Plan. Abendschein proposed pairing the report with the PCL. Chair Forssell agreed and stated a review of the policy in two years is appropriate.

ACTION: Commissioner Scharff moved to recommend the Council:

1. Adopt an amendment to the Carbon Neutral Plan to:
 - (a) modify the definition of carbon neutrality to use an hourly emissions accounting standard;
 - (b) minimize electric supply portfolio costs by authorizing the exchange of bundled RECs from the City's long-term renewable resources (Bucket 1 RECS) for RPS-eligible, unbundled RECS (Bucket 3 Recs) to the maximum extent possible while maintaining compliance with the State's RPS regulations;
 - (c) for calendar years 2020-2024, authorize the purchase of Bucket 3 RECs to neutralize any residual emissions resulting from the switch to an hourly emissions accounting methodology; and
 - (d) continue to provide a report of the electric supply portfolio's carbon content to supplement the mandated Power Content Label.
2. Create a Cap and Trade Program Reserve in the Electric Fund which will hold revenues from the sale of carbon allowances freely allocated to the Electric Utility under the State's Cap and Trade Program;
3. Direct staff to return to Council in 2022 to review the City's authorization to minimize electric supply portfolio costs by authorizing the exchange of bundled RECs from the City's long-term renewable resources (Bucket 1 RECs) for RPS-eligible, unbundled RECs (Bucket 3 RECs), to the maximum extent possible, while maintaining compliance with the State's RPS regulations; and
4. Direct staff to return to Council with a review of the Carbon Neutral Plan by the end of 2024 to evaluate the effectiveness of these policy changes and to modify them, if necessary, with particular attention to mitigating the cost of hourly emissions.

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.

Commissioners discussed the amount of funding to be allocated to local decarbonization efforts, the use of a dollar amount versus a percentage, and the language that reflects the UAC's intent.

ACTION: Commissioner Danaher moved to recommend the City Council, consistent with the City's Cap and Trade Revenue Use Policy adopted in January 2015, (1) for the first two years, allocate at least one-third of the revenue to local decarbonization efforts and (2) thereafter prioritize local decarbonization efforts. Commissioner Scharff seconded the motion. The motion carried 7-0 with Chair Forssell, Vice Chair Segal, and Commissioners Danaher, Jackson, Johnston, Scharff, and Smith voting yes.

The Commission took a break from 8:29 p.m. to 8:35 p.m.

ITEM 5: ACTION: Staff Recommendation that the Utilities Advisory Commission Recommend to Council Whether to Direct Staff to Evaluate the Impact of Including Upstream Emissions and Using a 20-Year Time Horizon for Global Warming Potential on the Community's Carbon Emissions.

Chair Forssell questioned whether this item can be continued to the August meeting. Commissioner Danaher stated a recommendation to the Council is not necessary if Director Batchelor intends to report the information. Chair Forssell understood one of the options was more expensive and would require Council approval. Commissioner Danaher did not believe the second option would provide more information or be more accurate than the first option.

Lena Perkins, Senior Resource Planner, advised that the UAC may continue the item if it wishes.

Commissioner Scharff preferred the first option.

Perkins noted the estimate would assess upstream emissions using both a 100-year and a 20-year global warming potential of emissions.

Vice Chair Segal concurred with Commissioner Danaher's comments. Including a 20-year time horizon for internal purposes would be a worthwhile exercise.

In reply to Commissioner Johnston's question regarding the methodology to estimate the upstream emissions from electricity, propane and liquid fuels and the additional resources needed to do that, Perkins indicated in order to use numbers for any sort of decision-making that might involve trading off carbon-reduction actions meant to address different types of fuels or to look at a dollar per carbon mitigated, all fuel systems need the same system boundary. If staff is doing an estimate, adding the other energy streams will not extend the time beyond the week of staff time noted in the report. Commissioner Johnston preferred to have the additional information if it does not increase staff time.

Chair Forssell supported the inclusion of upstream emissions. Including both a 100-year and 20-year global warming potential is an interesting and valuable idea, and both views have value.

In answer to Commissioner Danaher's query, Dean Batchelor, Utilities Director, advised that Council approval is not required.

ACTION: None.

ITEM 6: DISCUSSION: Discussion of the FY21 Council-Adopted Budget Overview.

Dave Yuan, Strategic Business Manager, reported FY 2021 gas rates will increase by 2% to avoid future rate increases of 8%-10% and to maintain reserve levels within guidelines. Fiber and storm drain rates will increase by 2.5%. All other rates will remain unchanged. The average increase for a monthly residential bill will be approximately 0.5% or \$1.50. Five vacant positions have been frozen for FY 2021 and will not impact operations, projects, or programs. Staff is reorganizing CPAU Engineering into two divisions, one for Electric and Fiber and one for Water, Gas, and Wastewater. The Electric Capital Improvement Program (CIP) was reduced by \$2.4 million, building electrification by \$300,000, the Gas CIP by \$3 million, and the Wastewater Collection CIP by \$700,000. No changes were made to the Carbon Neutral Gas carbon offset program, the cross-bore safety inspection program, the AMI project, the Corte Madera Reservoir replacement project, and the Fiber Network Expansion project. Operation Reserve Fund balances, with the exception of Wastewater, fall within guidelines. The Wastewater Reserve Fund balance is not a concern because it has fewer variable factors.

In reply to Commissioner Smith's query regarding growth in the Fiber Reserve Fund, Yuan explained that the balance increases by approximately \$2 million dollars per year plus interest.

ACTION: None.

ITEM 7: ACTION: Selection of Potential Topic(s) for Discussion at Future UAC Meeting.

Vice Chair Segal requested a discussion of the feasibility of closing the Gas Utility and a potential timeframe for doing so.

Commissioner Danaher requested an update regarding the fiber expansion project in the fall. Dave Yuan, Strategic Business Manager, advised that the consultant will address the UAC in August.

Commissioner Scharff requested an update regarding a second interconnect. Councilmember Cormack concurred, especially in light of the Public Safety Power Shutoffs.

Commissioner Scharff proposed the UAC meet in the morning hours. Commissioner Danaher preferred evening meetings. Commissioner Scharff suggested the UAC meeting earlier in the evening. Chair Forssell requested staff poll Commissioners for meeting times between 4:00 and 5:30 p.m.

ACTION: None

NEXT SCHEDULED MEETING: August 5, 2020

Commissioner Jackson moved to adjourn. Commissioner Danaher 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 8:57 p.m.

Respectfully Submitted
Tabatha Boatwright
City of Palo Alto Utilities