



FINAL

UTILITIES ADVISORY COMMISSION MEETING MINUTES OF SEPTEMBER 4, 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, Segal, and Smith
Absent: Commissioner Scharff

ORAL COMMUNICATIONS

None.

APPROVAL OF THE MINUTES

Commissioner Smith remarked that a follow-up discussion regarding the use of out-of-state Renewable Energy Certificates (REC) is needed.

Commissioner Johnston moved to approve the minutes of the August 7, 2019 meeting as presented. 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.

State Proposes \$33M in New Funding for Electric Vehicle Charging Infrastructure – Tonight on your agenda is an update on the City's electric vehicle programs. One of the items we highlight is a new potential funding source, announced just last month, from the California Energy Commission (CEC) for electric vehicle charging equipment. The CEC is partnering with local energy agencies in San Mateo and Santa Clara Counties, including the City of Palo Alto Utilities (CPAU), to help accelerate installation of workplace and public charging stations. This project, which is expected to launch in spring 2020, is an initiative of the California Electric Vehicle Infrastructure Project (CALeVIP), which aims to develop and implement regional incentives to support statewide adoption of EVs. CEC is proposing \$33M in matching funds to these local agencies, pending approval by their respective governing boards or city councils. By leveraging local investment, CALeVIP funds will further expand EV charging accessibility in the region.

Special Nissan Leaf Rebates for Palo Alto Utilities Customers – The American Public Power Association (APPA) is partnering with Nissan and public power utilities to offer rebates on Nissan Leaf electric vehicles.

For a limited time only, through September 30, public power utility customers and utility employees are eligible for rebates on the 2019 Nissan Leaf Standard and 2019 Nissan Leaf ePlus. This offer cannot be combined with the discounts on EVs offered through the Bay Area SunShares program.

Try an Induction Cooktop For Free – CPAU is offering a new program in partnership with Acterra that allows customers to test out an induction cooktop. Customers can request a cooktop loaner kit for free by emailing greenathome@acterra.org or calling our Utilities team at (650) 329-2241.

The 2018 Mayor’s Green Business Leader Awards - On August 19, the City and Mayor Filseth honored 13 companies with the Mayor’s Green Business Leader Award. This award honors the exceptional efforts of Palo Alto businesses that have earned a U.S. Environmental Protection Agency Energy Star Certification, a U.S. Green Building Council’s LEED Certification, or both in 2018. This year, we honored 13 companies with a total of 34 buildings, representing over two million square feet of very efficient commercial floor space in Palo Alto.

Upcoming Events – please visit cityofpaloalto.org/workshops for details and registration on all our events.

- Free SunShares Workshop – September 21, 10 am-noon at the Palo Alto Art Center - Attend a free workshop to learn about the benefits of the Bay Area SunShares program, which offers discounts on rooftop solar and electric vehicles. At the workshop, we will share tools and resources to help you install solar and/or start driving emissions free.
- Bay Area Home Electrification Expo - Palo Alto is partnering with cities and energy agencies in Santa Clara and San Mateo Counties to host the first ever Bay Area Home Electrification Expo. The Expo will give residents and business in the area an opportunity to learn about switching from fossil fuels to clean electricity for transportation, cooking, water heating, space heating and clothes drying. There will be two events for attendees to choose from; one in the evening in Palo Alto at the Mitchell Park Community Center on October 10 or one during the day on October 12 at the Tech Interactive Museum in San Jose.

Fiber to the Home Request for Proposals (RFP) – Commissioner Smith assisted staff with revising the RFP, which has been submitted to the City Attorney for review. Hopefully, the RFP will be released within the next two weeks.

Underground Utilities in the Green Acres Neighborhood – Staff will present a report to the City Council on September 16.

COMMISSIONER COMMENTS

None.

UNFINISHED BUSINESS

None.

NEW BUSINESS

ITEM 1: DISCUSSION: Discussion of Proposed Upcoming Resiliency Workshop.

Debra Lloyd, Acting Assistant Director of Utilities Engineering, reported the second workshop will focus on developing action items. The workshop will likely be scheduled for the UAC meeting in either November or December. Guest speakers could be local experts. Potential topics are microgrids, a second transmission line, public communications as part of emergency preparedness and during widespread outages.

Commissioner Segal felt the use of small breakout groups was productive in the first workshop. Action items should be clearly defined and include tradeoffs if the goal of the workshop is to develop projects and priorities.

Vice Chair Forssell suggested staff from the appropriate departments would have the most relevant and specific knowledge to share with participants. The workshop should be weighted toward obtaining participants' feedback rather than speaker presentations.

Commissioner Johnston concurred with using the workshop to develop a prioritized list of projects, and staff should prepare a finite list of projects that address the issues raised in the first workshop. Staff can provide more useful information than outside experts. Perhaps staff can share best practices or useful solutions learned through real-life disasters.

Chair Danaher recommended materials clearly state whether the workshop will focus on acute, near-term disasters or mid and long-term issues. Following the workshop, staff may wish to share with the UAC the actionable and useful takeaways from the workshop.

Commissioner Smith commented that preparations for an acute disaster often apply to long-term issues. A logical goal for the workshop is developing a list of five to ten key projects that would increase the resiliency of the City of Palo Alto.

ACTION: None

ITEM 2: DISCUSSION: Discussion of Utilities Wildfire Mitigation Plan.

Tom Ting, Electric Engineering Manager, reported the risk factors for wildfire include rising temperatures, vegetation density, terrain, and drought conditions. The primary focus of the Wildfire Mitigation Plan (Plan) is to prevent overhead electric lines from causing wildfires. In 2012, the California Public Utilities Commission (CPUC) initiated development of a statewide Fire Threat Map. Publicly owned utilities received a copy of the draft map and assessed their service territories for accuracy. In 2018, the City's consultant classified all areas within the city limits west of Highway 280 as Tier 2-elevated risk. The classifications are Tier 1-moderate risk, Tier 2-elevated risk, and Tier 3-extreme risk. The CPUC updated General Order 95 with more stringent construction, inspection, and maintenance requirements for areas with a high fire threat. Staff presented the information to the Council, and the Council determined that the area within the City's jurisdiction had a high fire threat. Section (12) of Senate Bill (SB) 901 requires all utilities to prepare a Plan that must be reviewed by a qualified, independent evaluator and presented to utilities' governing bodies at public meetings. Staff has revised the Foothills Fire Mitigation Plan prepared by the Fire Department and Urban Forestry Division to address utility-related issues. Staff has informed the Urban Forestry Division of the more stringent requirements and increased the frequency of inspections and maintenance. Staff is exploring methods to de-energize the one electric circuit that extends into the Foothills and to communicate information to customers. Staff is reviewing construction practices to replace, rebuild, or reinforce the Foothills electric line, two-thirds of which is located overhead on wood poles. In addition, staff is drafting metrics to ensure the Plan is effective.

In response to Commissioner Johnston's inquiries regarding a timeframe for developing processes and procedures, Ting advised that work on processes and procedures will follow completion of the Plan, which is scheduled for the end of the year.

In reply to Chair Danaher's query about additional UAC review, Ting indicated staff will present the Plan to the Council without further review by the UAC.

In answer to Vice Chair Forssell's question of whether a timeline for implementation of Plan processes is required, Ting related that the Plan must be completed and presented to governing bodies before January 2020. There is not a requirement to prepare a timeline, but the Plan contains a timeline for activities that staff wants to complete.

ACTION: None

ITEM 3: DISCUSSION: Discussion of Updates to Customer Programs to Accelerate Electric Vehicle Adoption.

Hiromi Kelty, Utility Marketing Program Administrator, reported the Low Carbon Fuel Standard (LCFS) Program is administered by the California Air Resources Board (CARB). LCFS was designed to reduce the carbon intensity of transportation fuels through a goal of reducing carbon emissions from transportation by 10 percent by 2020. Electric utilities that provide electricity to charge electric vehicles (EV), such as CPAU, are eligible for LCFS credits based on the number of EVs in the utility's territory. The utility is required to monetize the credits and use the funds to benefit current and future EV drivers in California. CARB approved CPAU's participation in LCFS in 2014 and has been allocating credits to CPAU since that time. In 2015, the value of credits was approximately \$250,000. In 2018, the credits were valued at \$1.5 million. After obtaining stakeholder feedback, staff launched the EV charger rebate program for schools, nonprofits, and multiunit dwellings in 2017. Funds are also utilized to host ride-and-drive events and workshops. CPAU has installed 14 Level 2 EV chargers and launched an online EVPV calculator and a residential transformer upgrade rebate program. Staff has spent approximately \$150,000 of LCFS funds, and \$3.5 million is available for future programs. Fifty-three public ports have been installed, and the City's fleet includes four all-electric vehicles. Customer surveys conducted over the past few years found 15 percent of Palo Alto households own or drive an EV; one in three new vehicles in Palo Alto was an EV in 2017; 73 percent of EV owners charge them at home; 26 percent of solar customers own an EV; seven out of ten current EV drivers indicated they were likely to obtain a second EV; and 82 percent of these customers said they drive an EV because it is better for the environment. Of the 85 percent of Palo Alto residents who do not own or drive an EV, 37 percent are considering an EV, but 35 percent of the 37 percent do not feel they will have access to charging at home. Seventy percent are very interested in their next vehicle being an EV if EV charging is readily available. Forty-five percent would be more likely to lease or purchase an EV if a rebate is available. Ten thousand Palo Alto households or 42 percent of households live in multiunit dwellings. The lack of home charging is a major barrier to residents who live in multiunit dwellings adopting EVs. Staff prefers to fund EV chargers that are shared and used by multiple people throughout the day. Based on customer feedback, staff will focus on programs for vehicle rebates and expansion of EV charging infrastructure in order to accelerate EV penetration. Proposed expenditures include \$5.1 million in rebates for EV chargers installed at multiunit dwellings, low-income housing, nonprofits, and mixed-use properties; \$1 million as matching funds for the CALeVIP grant; \$1 million for point-of-purchase EV rebates; \$1.3 million for single-family home utility connection fee rebates, all-electric home rebates, and education and outreach expenses; and \$0.3 million to explore EV rebates for low-income households. The City Manager approved changes to the EV charger rebate program in August. Over the next three years, staff hopes to install at least 250 new ports, increase the number of EVs registered at multiunit dwellings, and reduce transportation-related emissions by 1,000 metric tons per year. The strategy for engaging stakeholders includes a meeting with community members on August 29; emails to residents regarding the UAC discussion; outreach through the Palo Alto Chamber of Commerce; commercial customer newsletters and meetings; and one-on-one contact through existing programs. In November, staff will present the CALeVIP grant to the Council. The update of the Sustainability and Climate Action Plan (S/CAP) in 2020 will provide an opportunity for evaluation and public discussion of additional programs.

In response to Commissioner Segal's inquiry regarding the loss of parking spaces at multiunit dwellings when charging infrastructure is installed, Kelty explained that multiunit dwellings are not subject to ADA requirements; therefore, the loss of parking spaces is not a barrier to installation of charging infrastructure. Owners of multiunit dwellings did not participate in the August 29 meeting. Staff and the consultant will contact owners of multiunit dwellings about future workshops.

Arthur Keller commented that the point-of-purchase rebate program will generate revenue for CPAU. Time-of-use metering should be considered a method for promoting EV charging. Vehicle-to-grid concepts will be the next phase. Staff should update EV infrastructure policies.

Commissioner Segal suggested staff also focus on increasing daytime charging.

Vice Chair Forssell supported the focus on multiunit dwellings and public charging stations. In many cases, Level 1 chargers will be sufficient for multiunit dwellings. In reply to Vice Chair Forssell's question regarding the rationale for requiring approval of Level 1 chargers, Kelty explained that Level 1 chargers charge EVs too slowly to allow the turnover of vehicles. Vice Chair Forssell hoped staff would embrace a variety of charging options for multiunit dwellings. She expressed concern about funding the installation of DC fast chargers as they may not be broadly applicable to the community. Kelty advised that EVs coming onto the market typically have DC fast-charging capabilities as a standard feature. Vice Chair Forssell cautioned staff not to overestimate the need for DC fast chargers. The rebate for low-income purchasers could be utilized for used EVs, in which case DC fast chargers may not be applicable to them. Kelty related that the CALeVIP program will support shared Level 2 chargers and Level 3 chargers accessible to the public 24 hours per day.

In answer to Commissioner Jackson's query regarding the likelihood of rebates incentivizing multiunit dwelling owners to install charging stations, Kelty related that property owners have reported increasing demand for charging stations and expressed interest in the rebate program. In response to Commissioner Jackson's inquiry about developing a rebate program for single-family rental homes, Jonathan Abendschein, Assistant Director of Resource Management, indicated the percentage of single-family rental homes is significantly lower than the overall percentage, perhaps 20-25 percent. Kelty added that staff is not planning a program for renters of single-family homes at the current time.

Commissioner Johnston was delighted for the City of Palo Alto to be a leader and a model for EV adoption. The ability of residents in multiunit dwellings to charge EVs is critical. In many multiunit developments, parking spaces are assigned. Installing a charger for each unit can be prohibitively expensive. Shared chargers require shared parking spaces. He questioned whether there was a method to address these issues. Kelty explained that many owners of multiunit dwellings are willing to consider reconfiguring parking or removing some designated parking in exchange for rebates and once they realize the cost of installing one charger is not that much less than installing 20 chargers. Most owners are installing chargers in guest parking spaces. Commissioner Johnston wanted staff to place more emphasis on installing charger infrastructure at workplaces. Kelty stated commercial and industrial customers will be eligible for the CALeVIP grant. DC fast chargers placed in certain locations could be beneficial for commuters, residents of multiunit dwellings, and Uber and Lyft drivers. Abendschein added that facility owners are more concerned about the priority of improvements than funding. Staff will increase advocacy with key accounts and explore ways to reduce barriers to installing chargers. In addition, staff will review rate structures to encourage workplace charging.

In response to Commissioner Smith's questions regarding LCFS funds, Kelty reported the balance of LCFS funds is currently \$3.5 million. The \$8 million balance is the total of all funding from 2015 to 2021. With funds from the point-of-purchase program, the grand total will be approximately \$9 million. One of the challenges of spending LCFS funds is educating property owners about installation of EV chargers. Hopefully, the technical assistance program will increase the number of EV charger projects. Another challenge is the number of parking spaces required for each development. Staff is exploring rebates for panel upgrades at single-family homes and for all-electric homes that include EV chargers. Dean Batchelor, Utilities Director, advised that large vehicles in the City's fleet cannot be electric. Over time, cars and small pickup trucks in the City fleet will be replaced with EVs. As the number of City EVs increase, the number of chargers will have to increase.

Alan suggested a program offer rebates for panel replacement that involves an intelligent feeder to the house.

Kelty reported she has not seen an intelligent panel on the market and asked anyone with information about available smart panels to share it with her.

In reply to Chair Danaher's request for information about the Genie program for commercial and multifamily buildings, Kelty clarified that the technical assistance program will be available to multiunit dwellings, nonprofits, mixed-use buildings and small to medium businesses. Chair Danaher suggested staff implement

a technical assistance program for large commercial buildings. Kelty indicated the installation of 10-20 chargers simultaneously could reduce the cost per port. Shiva Swaminathan, Senior Resource Planner, added that companies are blanketing parking lots with chargers and utilizing adaptive charging. Kelty explained the fees associated with network chargers. The high fees can discourage the adoption of EVs. Abendschein advised that the question about network chargers is whether the charger or the EV will respond to demand response signals. Swaminathan indicated network charging companies are no longer providing chargers at no cost to municipalities. Staff is not developing incentives for network charging companies but looking for grant programs that are accessible to private companies. Chair Danaher requested an update in three to four months

ACTION: None

ITEM 4: DISCUSSION: Discussion of Recycled Water Expansion Opportunities and Potential Regional Treated Wastewater Transfer.

Herb Borock remarked that the agenda description should have indicated an action item. The executive summary in the staff report refers to future water shortages, but they were not mentioned when the City gave a portion of its water supply to the City of East Palo Alto. The Measure E site is not an appropriate location for a recharging facility. Selling the Regional Water Quality Control Plant (RWQCP) is not a good idea.

Karla Dailey, Senior Resource Planner, recalled presenting the UAC with a Business Plan for the Phase III pipeline project, which is an extension of the existing non-potable water distribution system to Stanford Research Park. In November 2018, staff presented the Phase III project and other potential water reuse projects identified in the Northwest County Recycled Water Strategic Plan (Strategic Plan) to the Council. In April 2019, staff held a public meeting to provide more details and gather public input about the potential options. Palo Alto's potable water is supplied by the San Francisco Public Utilities Commission (SFPUC), approximately 85 percent of which is taken from the Tuolumne River. The City utilizes approximately 10 million gallons of water per day at a cost of approximately \$2,000 an acre foot. Local water reuse from the RWQCP could provide about 50 percent of Palo Alto's water demand, but significant investment is needed for water treatment and conveyance. Purple pipe is a non-potable water distribution system, and the water can be used for landscape irrigation, industrial processes, and toilet flushing. Indirect potable reuse (IPR) involves injecting purified water into an aquifer and withdrawing it as groundwater and consuming it as potable water. Direct potable reuse (DPR) involves injecting purified water into a distribution system. The State has not developed regulations for DPR. Approximately 5 percent of wastewater is used to produce non-potable recycled water. Protecting the Bay is one of the Council's top priorities. The Bay benefits from water reuse. The Strategic Plan addresses the exploration of water reuse within the service territory. Water reuse can be categorized as non-potable reuse (NPR), satellite non-potable reuse, IPR, and DPR. Satellite non-potable reuse has been eliminated as a potential City project because it is cost prohibitive. However, private companies may consider satellite non-potable reuse projects. Staff estimates the cost of both SFPUC water and groundwater extraction at \$3,000 per acre foot in 2030

Phil Bobel, Public Works Assistant Director, advised that the first part of a potential agreement with the Santa Clara Valley Water District (Valley Water) involves Valley Water funding a small salt removal plant at the RWQCP to enhance the quality of recycled water produced at the RWQCP. The second part of a potential agreement involves the transfer of approximately half of the RWQCP's effluent to Valley Water for reuse in the South County. Valley Water would likely utilize effluent for IPR first and DPR second. Under the potential agreement, the amount of water reuse would increase from 1,000 acre feet to 14,000 acre feet. The parties to the agreement would be the Cities of Palo Alto and Mountain View and Valley Water. The minimum flow delivery would be 9 million gallons of water per day (MGD) or 10,000 acre feet per year. The contract term would be 76 years. The salt removal plant would be owned and operated by Palo Alto and located on the RWQCP site. Valley Water would contribute \$16 million of the \$20 million projected capital cost. Valley Water would fund and own a purification facility.

In reply to Chair Danaher's question regarding the rationale for the water supply option, Bobel explained that the option would require Valley Water to make water available to Palo Alto or Mountain View at cost.

In answer to Vice Chair Forssell's query regarding the amount of water provided and requested under the agreement, Bobel clarified that the 10,000 acre feet of effluent transferred to Valley Water would be provided by the RWQCP. Palo Alto's portion of the 10,000 acre feet of effluent is almost the same as the 3,500 acre feet Palo Alto could request under the water supply option. Staff will negotiate terms with the smaller RWQCP partners in 2020. The RWQCP would transfer effluent, while Palo Alto would receive potable water under the water supply option.

In response to Chair Danaher's request for projections of water demand, Dailey indicated the projections indicate demand will decrease slightly. SFPUC has a contractual obligation to provide 184 MGD to all wholesale customers in perpetuity. If SFPUC cannot obtain sufficient supply from the Tuolumne River, it would have to purchase water and pass the cost to wholesale customers. The future cost of water and pressures on the source are unknown. Valley Water has not made plans for the use of the effluent; therefore, the effluent could possibly be returned to the RWQCP. Base water supply for drought years and normal years are different, and staff needs to analyze options for both. The potential agreement with Valley Water is unique in that Valley Water does not contract with individual agencies for water. The water supply option is a tool for Palo Alto to address the unknown future of water supply. Valley Water participates in many water supply projects, which could provide water to Palo Alto under the water supply option. If Valley Water constructs a purification plant in Palo Alto, it could provide water to Palo Alto under the water supply option. Bobel added that if Valley Water wheeled water supply through another entity, such as SFPUC, the wheeling costs would be part of the cost to Palo Alto. The water supply option allows Valley Water and Palo Alto to keep their options open.

Bobel further reported a number of people at the public meeting wanted to ensure strong environmental benefits are associated with the potential agreement. The only real constraint to the potential agreement is the City relinquishing control of half of the RWQCP effluent for 76 years. The water supply option was negotiated in response to that constraint.

Garth Hall, Valley Water, remarked that the concept of desalinating recycled water is compelling. Valley Water has operated a plant similar to the one contemplated under the agreement since 2014. Reducing the salinity of recycled water has contributed to the increased usage of recycled water. Effluent from the RWQCP will advance Valley Water toward its goal for water reuse, avoid Valley Water's use of imported water, and decrease the salinity of groundwater.

Gary Kremen, Valley Water Board Member, commented that Palo Alto would receive \$1 million per year and the opportunity to participate in Valley Water's diverse water supply. If the Bay Delta Plan is approved, the Tuolumne River water supply will be reduced.

In reply to Chair Danaher's query regarding the contract terms, Mr. Kremen indicated Palo Alto would pay the same cost as other agencies in North County under the water supply option. Chair Danaher preferred Palo Alto's cost to be the average water cost of Valley Water projects. Mr. Kremen felt the assurance of future water supply is more important than cost. Dailey clarified that Palo Alto could purchase groundwater from Valley Water at the same rates other agencies pay for groundwater. The City would not utilize the water supply option as the first alternative supply. Valley Water manages the groundwater basin quite well. In preparing the Strategic Plan, staff identified sustainable yield numbers for groundwater that met approximately half of Palo Alto's needs without causing adverse effects.

Arthur Keller, speaking as an individual, noted the cost for NPR could be \$6-\$85 million. IPR is not as feasible as NPR for Palo Alto because the closest recharge location is in Cupertino. Palo Alto residents may object to hard water obtained through IPR or DPR. The City does not need 3 MGD of non-potable water. The City should

clearly indicate its desire for 3 MGD of potable water. The City will need 3 MGD of potable water in the event of a major supply break from the SFPUC.

Dave Warner did not understand how water reuse would reduce the amount of water taken from the Tuolumne River. Dailey explained that Palo Alto's and Mountain View's use of recycled water would increase if its salinity is reduced, which would reduce the use of Tuolumne River water. In addition, the amount of imported water would be reduced. Mr. Warner felt that reduction would be a small amount of water. From a reliability perspective, the benefit of transferring effluent to Valley Water is not immediately obvious.

Chair Danaher suggested a discussion of the tentative agreement return to the UAC in October or early November and Commissioners identify areas of concern in the time remaining. Abendschein clarified that a Council study session on the agreement is scheduled for September 23. Dailey added that the staff presentation for the study session would be the same as that presented to the UAC. In January, the UAC will review the Strategic Plan and make a recommendation to the Council. The potential agreement is following a different track because staff wants to apply for State funding, and the deadline to apply is December 31. Depending on Council feedback during the study session, staff could present the potential agreement to the Council in November for approval.

In answer to Chair Danaher's inquiry about the UAC providing input regarding the potential agreement, Councilmember DuBois expressed interest in having UAC feedback and the UAC providing feedback to individual Councilmembers. Dailey noted the Council packet is released two weeks prior to the date of the Council meeting, which would be around the time of the UAC's November meeting.

In reply to Vice Chair Forssell's query regarding the Strategic Plan, Dailey advised that staff will not seek UAC input regarding specific concept options in the next three months.

In response to Commissioner Johnston's question about the City's rights to water, Bobel reported the agreement will not affect the City's existing rights to obtain water from SFPUC or to pump groundwater. Commissioner Johnston felt some of the local water reuse projects are quite interesting, and DPR should be explored further. Bobel explained that the 50 percent of retained effluent will accommodate a pilot project for DPR. Large-scale DPR is not infeasible because the City can exercise the water supply option to get the same amount of water back from Valley Water.

In answer to Chair Danaher's question of the amount of potable water obtained from the effluent transferred to Valley Water, Bobel indicated approximately 3 MGD. The City would transfer 3 MGD of effluent to Valley Water and in 16 years could request Valley Water provide 3 MGD of potable water.

In reply to Commissioner Smith's queries of whether Strategic Plan concepts concern primarily piping and of whether the capital cost could exceed \$20 million, Dailey clarified that it is development of the concept options, which include treatment and conveyance. Bobel indicated the \$20 million was a best estimate and included a small amount for escalation of construction costs. Valley Water would pay Palo Alto \$1 million per year for each year it receives the effluent. Under the agreement, Valley Water would not take the effluent for the first 13 years of the agreement. Dailey added that Valley Water would pay \$200,000 a year until it takes the effluent. Valley Water will pay \$16 million towards the local plant, which will reduce the salinity level of recycled water that is used in Palo Alto and Mountain View. Mountain View is currently using potable water for irrigation. With a decrease in the salinity of recycled water, Mountain View will increase its use of recycled water for irrigation. Under the water supply option, Valley Water would obtain the lowest cost water to provide to Palo Alto, and Palo Alto would pay the cost of the water.

In answer to Chair Danaher's question of whether Valley Water's payment of \$1 million is indexed, Bobel replied yes.

Vice Chair Forssell expressed support for the agreement. She inquired about energy use during water purification and the effect of sea level rise on groundwater. Mr. Hall reported Valley Water did not believe sea level rise would encroach into the groundwater basin in the 21st century. Dailey added that sea level rise could result in artesian wells. Bobel advised that some Bay experts are concerned that sea level rise could cause saltwater intrusion into the groundwater basin. The Strategic Plan states there will be an impact but did not quantify the impact well. The purification process is energy intensive, but energy usage could be adjusted to time of day.

Batchelor advised that a continued discussion can be scheduled for the UAC's October meeting. Chair Danaher suggested Councilmember DuBois advise the UAC whether the Council wants input following the study session.

Chair Danaher suspected the cost of water under the water supply option would be based on a particular project rather than a blended rate.

Nina Hawk, Valley Water Chief Operating Officer, explained that Valley Water distributes its costs evenly. Valley Water does not provide an assured water supply to retailers. The water supply option is unique as is the partnership and the receipt of effluent. The water supply option provides a unique guaranty for Palo Alto.

ACTION: None

ITEM 5: ACTION: Selection of Potential Topic(s) for Discussion at Future UAC Meeting.

Vice Chair Forssell expressed interest in visiting CPAU facilities at some point, and wondered if other Commissioners shared her interest. Batchelor offered to notify Commissioners if there were future opportunities to join a tour.

ACTION: None

NEXT SCHEDULED MEETING: October 2, 2019

Meeting adjourned at 10:17 p.m.

Respectfully Submitted
Tabatha Boatwright
City of Palo Alto Utilities