



## **UTILITIES ADVISORY COMMISSION MEETING FINAL MINUTES OF AUGUST 2, 2017 MEETING**

### **CALL TO ORDER**

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

Present: Chair Danaher, Commissioners Trumbull, Schwartz, Forssell, and Johnston, and Councilmember Filseth

Absent: Vice Chair Ballantine, Commissioner Segal

### **ORAL COMMUNICATIONS**

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Bob Evans, founder of Fiber Internet Center, spoke about the Fiber Utility. He had founded Fiber Internet Center in 2001 and had been a City fiber use since before that. He was concerned about the City's fiber pricing. In 2001 he had been offered a pricing structure that involved flat \$150 pricing, but as his facility grew larger the pricing changed. He recommended that customers be involved in pricing decisions. Competitors' costs were dropping every year, unlike Palo Alto's prices, which went up. Fiber Internet Center in Palo Alto had more customers connected using AT&T fiber than City fiber. The City considered Fiber Internet Center a competitor. The City promoted Palo Alto Internet Exchange (PAIX) over Fiber Internet Center. At one point the City had promoted another provider, Hurricane, on their website, but when he requested a link for Fiber Internet Center, they denied him a presence on the website and removed Hurricane. He said it took a very long time to get a facility connected. He questioned the fees associated with service installation. There was not effective marketing of pricing changes and service commitment duration changes. He recommended requiring that new buildings be fiber-ready. He had moved his location to Mountain View. He recommended diversifying the City's power pathways to provide higher reliability. He said the City's Fiber Utility was not run competitively.

### **APPROVAL OF THE MINUTES**

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Commissioner Johnston moved to approve the minutes from the June 7, 2017 UAC meeting. Commissioner Trumbull seconded the motion. The motion carried (4-0-1) with Commissioners Danaher, Trumbull, Forssell, and Johnston voting yes, Commissioner Schwartz abstaining, and Vice Chair Ballantine and Commissioner Segal absent.

Commissioner Schwartz corrected a grammatical error on the first page of the July 12, 2017 minutes under "REPORTS FROM COMMISSION MEETINGS/EVENTS" and said that section should state "the most innovative community solar projects" were located in Colorado, not "the most innovative utilities."

Commissioner Johnston moved to approve the minutes from the July 12, 2017 special meeting with Commissioner Schwartz's edits. Commissioner Trumbull seconded the motion. The motion carried (5-0) with Commissioners Danaher, Trumbull, Forssell, Schwartz and Johnston voting yes and Vice Chair Ballantine and Commissioner Segal absent.

## AGENDA REVIEW AND REVISIONS

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None.

## REPORTS FROM COMMISSION MEETINGS/EVENTS

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Commissioner Schwartz was at the National Town Meeting in Washington DC, now renamed the Grid Evolution Summit. She encouraged the utility to send staff to the event. The integration of distributed energy resources (DERs) was a commonly discussed topic. There were ideas in that space that had previously been considered to be several years away and that were now becoming seen as commonplace. Examples include having AMI infrastructure, being able to use the data, deciding what to do with the data, using it to integrate renewables, and dealing with the topics of electrification and transportation. Having the infrastructure to take advantage of these potential capabilities was important. It sounded like a given that time-variant pricing would be available. It would make sense to have time variant pricing that took into account new pricing patterns in the market due to the duck curve. It may also make sense to create incentives for people to charge during specific times of day, such as when prices are negative. She had also been to a discussion with the 51<sup>st</sup> State group, a SEPA initiative. It would be useful for Palo Alto to be a part of those discussions.

## UTILITIES GENERAL MANAGER REPORT

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Utilities General Manager Ed Shikada delivered the General Manager's Report.

**City is Paving the Way for More Electric Vehicles with Renewable Energy:** On July 24, the City unveiled new solar panels installed on top of two public garages and electric vehicle (EV) charging stations that will be powered by the renewable energy generated on-site. A ceremony was held at the Bryant Street parking garage to celebrate the occasion. The 240 kilowatt (kW) solar canopy at this site is owned and operated by Komuna Energy, and the electricity produced is sold back to CPAU through the City's feed-in-tariff program, Palo Alto CLEAN. This is the first operational project in the CLEAN program. This moves the City toward its goal of adding a total of 1.3 megawatts (MW) of solar capacity to four City-owned parking structures downtown and near California Ave, as well as 18 new EV chargers and the capacity for 20 more.

**Electric Vehicle "Charge" for Charging:** Part of the City's effort to make it easy to drive electric in Palo Alto is by expanding EV charging infrastructure throughout the City and encouraging greater "turnover" at these charging stations. As of yesterday, August 1, the City is now implementing a "charge for charging" fee at public facilities. The new fee is 23 cents per kilowatt hour (kWh). With the average charging session lasting about two hours, or 8.5 kWh, the total cost to EV drivers will be about \$2 to charge up. Chargepoint, the vendor managing the system, will send individuals a mobile notification once a charging session is complete. Drivers will have a 20 minute "grace" period to move their car, after which they will face a \$2 per hour fee if their fully charged car continues to be plugged in. The fee is intended to support expansion and use of public EV charging facilities and serve as a cost recovery mechanism for ongoing maintenance. More information about the City's EV initiatives, including an interactive map of charging station locations, can be found at [cityofpaloalto.org/electricvehicle](http://cityofpaloalto.org/electricvehicle)

**Recycled Water Project Grant and Loan Funding Applications:** Utilities is applying for two funding opportunities to extend Palo Alto's recycled water system to the Stanford Research Park. One is an application for approximately \$9M in grant funding under a new federal program called Water Infrastructure Improvement for the Nation. The other is for a \$36M loan from the California Clean Water State Revolving Fund, which provides below-market interest rate financing for projects like Palo Alto's recycled water project. Either of these funding opportunities would improve the recycled water business case set to be released in September. The applications do not commit City resources or pre-suppose a policy decision by Council to proceed with the project.

**Cap and Trade Bill Signed:** The Governor signed AB 398, the state's cap and trade bill for greenhouse gas emissions, into law on July 25. This extends the cap and trade program to 2030, which was originally set to

expire in 2020. Among other features, the program continues the use of direct allowances to utilities. CPAU uses the revenue from sale of surplus allowances to promote programs such as energy efficiency and to purchase renewable energy. Some of the allowances allocated to the gas utility are used to meet compliance obligations. As required by the cap and trade regulations, the remaining allowances are sold, and staff intends to use the revenues to purchase offsets to supply the carbon neutral program and fund gas efficiency programs.

**Update on SB 649 – Wireless Telecommunications Facilities:** SB 649 is a bill sponsored by wireless companies wanting to soon deploy 5G technology in the state. In order to do so, they need to place their equipment on various poles owned and maintained by cities throughout California. To ease the path for these companies, SB 649 seeks to streamline permitting, leasing, and financial policies as they apply to locally-owned poles. CPAU originally had concerns about how this bill might compromise worker safety and utility reliability, but we successfully worked with NCPA to lobby for amendments to address these issues. There are other concerns from the City’s perspective as to how this impacts our ability to enforce permitting and design approval processes for antenna and associated box-like equipment on streetlights, utility and other poles in the public right of way. As a result, the City as a whole will likely continue to take a position of opposition to the bill.

**SunShares Program Launches this Month:** The City is participating for the 3<sup>rd</sup> year in Bay Area SunShares, a solar group-buy program administered by Building Council for Climate Change, or BC3. Residents and employees of companies in Palo Alto along with 40 other Bay Area communities are eligible to participate. The program provides group-buy discounts through three solar installers, and negotiations are in progress with vendors to also include discounts on EV charging equipment and zero-emission vehicles. SunShares runs for a limited time only. Registration is open from August 7 through November 10. Contracts for PV installations must be signed by December 31. Participation in a solar group-buy program is part of our Local Solar Plan.

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**COMMISSIONER COMMENTS**

None.

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**UNFINISHED BUSINESS**

None.

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**NEW BUSINESS**

**ITEM 1: ACTION:** Study Session Between the Council and UAC

Jeff Hoel, resident, recommended making sure joint UAC and Council study sessions happened annually. He recommended verbatim minutes for UAC meetings. He also asked whether there was a process for the UAC to agendize an action item to provide a recommendation to Council. Subcommittees had not been helpful so far in helping the UAC send specific UAC-initiated feedback to City Council. He recommended talking to the City Council about undergrounding before any discussion of taking the topic “off the table.” He recommended getting clarity from the Council on the UAC’s priorities with respect to a second transmission line. He made some suggestions on how to agendize items for the UAC. He recommended updates to the website.

Chair Danaher noted that the UAC was able to agendize items by raising them during the section of the agenda devoted for that purpose.

General Manager / Assistant City Manager Ed Shikada said the staff report for this item summarized the upcoming workload and some potential topics for discussion. Staff was prepared to modify and use the staff report as a way to introduce any topics the UAC wanted to discuss at the joint study session.

Commissioner Schwartz said it was problematic that the UAC had not been consulted on the scheduling of the community focus group for the Utilities Strategic Plan. To have a good focus group it was important to have a good outreach process that involved reaching out to leaders in the community, community groups like Acterra, the neighborhood groups, and business groups, and having community leaders reach out to their networks.

Shikada said the role of the UAC in that workshop was open for discussion, and staff intended to push the community meeting to October, possibly replacing the October UAC meeting.

Commissioner Schwartz noted an article about cohousing projects. She had been thinking about the fact that 30% to 50% of utilities employees were going to retire in the coming years. She wondered if there were ways to help attract people already tied to the Bay Area using creative ideas like cohousing projects or partnerships with local community colleges. It was important for utilities to communicate the heroic nature of the work of system maintenance and operation. She recommended discussing these issues as part of the joint study session. She also recommended discussing reliability comprehensively at that meeting. She asked whether the UAC would passively accept topics from the Council or whether the UAC could introduce topics for discussion at the study session.

Councilmember Filseth said the UAC had latitude in the topics of discussion it asked the Council to discuss at the joint study session. Staffing was a reasonable topic to discuss.

Chair Danaher said to make the meeting effective it was necessary to have a framework for the meeting. It was important to get the Council's feedback on what their priority issues were, then bring up UAC-initiated topics to develop a good work plan for the coming year.

Shikada referred the UAC to the attachment to the staff report. If this were a helpful framework for the study session discussion the UAC could use it or modify it as a basis for the study session.

Commissioner Johnston found the attachment helpful. He felt resiliency was a broad topic and important to discuss. Moving forward on smart meter installations was also important.

Commissioner Forssell felt the four items mentioned in the staff report as potential topics were what she wanted to talk about, but in the reverse order from the way they were listed in the report. She wanted to have a discussion of local solar in general, given the duck curve and the economics of rooftop solar, and not just limiting that discussion to community solar. It was worth discussing the integrated resource plan and the strategic planning process, and focusing minimally on looking back at 2017. It was also important to talk about long-term drought potential and the issue of long-term water supply and hydroelectric power as it related to climate change.

Chair Danaher thought it was helpful to think about the agenda in terms of categories. The first discussion might be "Council priorities." A second discussion might be "Policy Areas," during which different Council members might express policy views. This section might be introduced by a short summary discussing the cost of local solar as compared to utility-scale solar, and could result in identifying some of the Councilmembers' views on subsidies for solar. Other topics might include undergrounding and how to promote EV chargers.

Commissioner Schwartz said cost was not the only issue to look at with respect to local solar. Having an energy source within Palo Alto could contribute to resiliency if buildings were set up to be able to operate independently of the grid during curtailments. The UAC was able to provide value by looking deeper into potential policies that sound good in principle, but are not as worthwhile when you try to implement them.

Chair Danaher said Vice Chair Ballantine had explained that solar on its own did not provide resiliency.

Commissioner Schwartz agreed with this, but noted that if the solar system were designed with connected storage, it added to resiliency.

Commissioner Forssell said it would be helpful to understand the Council's objectives when they previously set the 4% local solar goal.

Councilmember Filseth said there had been turnover in the Council and there may be different priorities now than at the time the Local Solar Plan was adopted.

Chair Danaher recommended introducing the topic by listing out the different costs of local and utility-scale solar and what the City's compliance requirements were.

Jonathan Abendschein, Assistant Director of Resource Management said there were no remaining State mandates aside from net metering for local solar, and that the Local Solar Plan required no subsidies from non-participating ratepayers. For example, the Community Solar program involved having the subscribers rather than non-participating ratepayers pay the excess cost for the installed community solar.

Chair Danaher said not all of the costs had been covered by the subscribers.

Abendschein said staff could address this topic in more detail at the joint study session.

Councilmember Filseth shared his back of the envelope analysis. Assuming local solar costs about 7 cents per kWh more than utility scale solar, the cost of getting 4% of the City's energy from local solar could cost more than \$2 million per year, and it was important to discuss what value the community got out of local solar and who paid the additional costs.

Chair Danaher agreed it was important to provide the right information to inform the discussion. He went back to his outline of the agenda, which started with a first agenda item focused on Council direction on UAC priorities, then a second agenda item on policy discussions, including local solar, and then a third agenda item on information the UAC wanted to draw Council attention to, including the workforce issues that Commissioner Schwartz had raised earlier.

Commissioner Trumbull recommended having a focused discussion by talking about what has happened in the past, what is planned for the future, and one significant topic, which he believed should be the Utilities Strategic Plan. He did not think it was productive to talk about solar and try to get a policy decision from the Council, given the wide range of issues they had to cover at a policy level.

Chair Danaher disagreed, saying much of the UAC had expressed that it was important to talk about solar. He thought it was important, even if it would not be possible to get a formal policy decision from the Council. The Council would know about the topic in advance, and he would be able to discuss it with the Mayor and Vice Mayor prior to the meeting. He agreed with Commissioner Trumbull's other comments.

Shikada said the structure recommended by Commissioner Trumbull would work as a way to organize the study session and that the study session could be used as a way to get feedback from Council on local solar, if not a decision. He would not be surprised if the Council were very open to recommendations from the UAC on this topic. Staff could organize upcoming agenda items and the strategic plan direction to reflect Council feedback.

Chair Danaher appreciated the ideas raised in the staff report, and recommended staff set an agenda for the August 21 meeting and that Commissioners e-mail suggestions to Chair Danaher or Vice Chair Ballantine to share with staff in setting the agenda. He suggested an attachment with information, an overview of the strategic plan, and a separate agenda for the meeting.

Commissioner Forssell thought it would be good to have verbatim minutes, and was interested to hear Council's thoughts on their priorities with respect to the fiber utility, including what level of subsidy they would be open to when considering a business plan.

Chair Danaher said it would also be helpful to understand how Council wanted the issue of the fiber utility to be presented to them.

Commissioner Schwartz said some progress had been made on the issue through work done by the UAC last year, and she hated to think the City was back at the beginning of the discussion.

Chair Danaher said the interesting question Commissioner Forssell was asking was how much the Council was willing to subsidize the system. It was a different perspective that had not been discussed, he thought.

Commissioner Johnston said it would be helpful to clarify the UAC's role in the fiber utility as compared to the Citizen's Advisory Commission on Fiber.

**ACTION:** No action

**ITEM 2: DISCUSSION:** Discussion of Developing a Flexible Distributed Energy Resource Plan and Forecasting Long Term Customer Electrical Loads in Palo Alto

Senior Resource Planner Shiva Swaminathan noted several other staff members who are working on distributed energy resources (DERs) strategy and implementation, including Sonika Choudhary, Lena Perkins, Eric Wong and numerous other staff members from Utility Program Services group working on DER programs daily. He described what DERs were: they were typically installed at a customer's premises, changed the character of the loads the City served, and could act as a replacement for services typically provided by central station energy generation. He gave some examples of DERs. He listed some existing City policies related to DERs, and noted that generally the City's practice has been to facilitate customer adoption of DERs when there was a City policy or when it was cost-effective from a societal perspective. He gave an overview of historical utility programs applicable to a variety of DERs. He requested feedback on a set of proposed strategic principles for integrating distributed energy resources.

Commissioner Johnston asked if it was possible to speed up smart grid investments.

Swaminathan said prior Council direction had been to defer action because smart grid investments had not been cost effective. Implementation timeline is expected to be 2021, and is dependent upon the successful implementation of our Customer Information System (CIS), planned for in the coming years.

Commissioner Schwartz endorsed the approach of enabling customers to invest their own money in technologies that were not yet cost effective. With respect to demand response, she talked about a service that allowed you to be a part of a voluntary demand response program even if you did not have a smart meter. She also recommended looking at participating in smart thermostats and peer to peer battery sharing solutions available in the marketplace to learn from them in the next 5 years. She also talked about Hawaii's approach to targeted AMI deployment.

Commissioner Forssell expressed support for the guiding principles. She appreciated the effort to ensure the distribution system could handle increased DER penetrations. She asked what stress tests were undertaken for the distribution system.

Swaminathan outlined elements of the stress test – high and low load growth scenarios for the overall community, localized distribution transformer loading, and level of PV penetration.

Chair Danaher seconded previous support for the strategic principles. He recommended more specifics on strategic principle 3, listing examples of the types of work staff would do to facilitate customer adoption

such as reducing barriers to permitting. He also encouraged staff to look investments that can be undertaken now, even if unneeded, that may create greater value later, and cited enabling vehicle-to-grid type technologies now as an example of such “future proofing.”

Commissioner Forssell recommended using some low probability but high impact scenarios when developing stress tests for the distribution system, as well as the impacts to the distribution system. She cited an analogous example of a low probability, high impact scenario that had a financial impact, where customers sign up for a higher cost community solar projects and then do not follow-through with paying for it.

Swaminathan acknowledge many type of stress tests could be looked at it, from both a DER perspective and from a broader utility-wide perspective such as load growth due to a large server farm moving into town or large customers leaving if there is direct access in the future.

Commissioner Schwartz mentioned that load growth due to EV charging is a good problem to have from a utility perspective, when most other utilities worry about declining loads. She also outlined how utilities can show leadership by coming up with ways to assist with EV adoptions in the most effective way and underscored the role AMI would play in this regard.

Chair Danaher also recommended prioritizing programs based on the cost of carbon reduction, such as those established by past studies.

Abendschein mentioned that such analysis is being undertaken behind the scenes as staff evaluates and recommend customer programs for implementation, and promised to present such analysis in public in the future.

**ACTION:** No Action

**ITEM 3:** ACTION: Staff Recommendation that the Utilities Advisory Commission Recommend that the City Council Approve Policy Objectives for the 2017 Wastewater Collection Utility Cost of Service Analysis  
Senior Resource Planner Eric Keniston presented three general objectives for the proposed Wastewater Collection Cost of Service (COSA) study, and asked if the commissioners had any additions, comments or concerns they wanted addressed in the study.

Commissioner Johnston supported the staff recommendation.

Commissioner Trumbull asked staff to clarify how sewer rates were charged.

Keniston noted that residential customers were charged a flat rate, based on class averages, while non-residential customers were charged a rate based on water consumption. As not all residential units charged for wastewater are billed directly for water, such as in apartments, tying sewer bills to water usage has not been feasible in the past. This could be evaluated for the future.

Chair Danaher asked staff to confirm that one goal of the study was to determine if there could be different class averages for different types of customers.

Keniston affirmed this.

Commissioner Schwartz asked if a larger house with more plumbing fixtures may have a different rate than a smaller home, and whether the difference between rates would be large or small.

Keniston replied that low water usage months would be the proxy for outflow, and allocations would be evaluated based on that.

Commissioner Schwartz stated she was a proponent of having allocations to smaller homes be smaller than to larger homes.

Councilmember Filseth asked whether landscaping and irrigation were included in wastewater calculations.

Keniston mentioned that these were factored out when performing calculations.

Abendschein stated that census figures show that multi-family residences have fewer people on average, and thus lower indoor consumption.

**ACTION:** Commissioner Danaher made a motion to recommend that the Utilities Advisory Commission recommend that the Council approve the Policy Objectives for the 2017 Wastewater Collection Utility Cost of Service Analysis. Commissioner Trumbull seconded the Motion. The motion carried unanimously (5 - 0) with Vice Chair Ballantine and Commissioner Segal absent.

**ITEM 4. DISCUSSION:** Discussion of Electric Integrated Resource Plan – California Wholesale Energy Market Overview and Electric Portfolio Cost Drivers

Senior Resource Planner Monica Padilla acknowledged fellow Senior Resource Planners Jim Stack and Shiva Swaminathan and Assistant Director Jonathan Abendschein for their contributions towards the development of the UAC report and presentation along with staff from the Northern California Power Agency (NCPA), Dave Dockham and Tony Zimmer, for their contributions in developing the slides related to the California Wholesale Market.

Padilla provided a two-part presentation with the first part focused on the California wholesale electricity market and Palo Alto's role in the market. The second part focused on the Electric portfolio and key cost drivers and uncertainties.

Padilla explained how Palo Alto's interaction with the wholesale market is primarily through NCPA as NCPA is responsible for managing Palo Alto's electric load and resources within-the-month of delivery all the way through real time, while City staff focuses on managing load and resource needs beyond the current month. NCPA is Palo Alto's billing agent and provides settlements services after the fact and as the City's scheduling coordinator is responsible for interactions with the California System Operator (CAISO) on behalf of the City.

Padilla explained the role of the scheduling coordinator and the unique arrangement Palo Alto and other NCPA members share with the CAISO under a metered-subsystem agreement. This agreement enables NCPA's participating members to operate a sub-control area with the CAISO and thus follow their own load and resources in real-time.

Padilla reviewed some of the key issues facing California's wholesale market including over-generation as a result of the State's Renewable Portfolio Standard policies and how the CAISO, and Palo Alto through NCPA is responding to the challenge including the use of economic bidding to discourage generation in certain hours. Additionally, the CAISO is expanding market opportunities through the development of the Energy Imbalance Market (EIM) and support for an expansion of the CAISO beyond California. Padilla shared that staff supports all efforts to improve market efficiency, but is cautious about the expansion of the CAISO and the potential for additional transmission costs being imposed on California ratepayers.

Commissioner Schwartz asked a question about California's ability to achieve carbon reduction goals in light of Pacific Gas and Electric's (PG&E's) announcement to close the Diablo Canyon Nuclear Power Plant.

Padilla explained that the plan to close the plant was due to the large expense to recommission the plant and the PG&E's future load uncertainty due to the proliferation of community choice aggregators. She also



acknowledged that the State plans to achieve a high renewable portfolio standard and meet its carbon reduction goals without the use of nuclear energy, including Diablo Canyon.

Commissioner Schwartz indicated that the marginal resource is fossil-fuel based and not carbon-free like nuclear energy.

For the second part of the presentation, Padilla focused on key electric portfolio cost drivers including:

- Western Base Resource
- Renewable Portfolio Standard; and
- CAISO and transmission costs

Padilla explained how transmission costs are now a significant portion of the cost to deliver energy and that forecasts for transmission access charges continue to increase. She explained that Palo Alto works closely with other NCPA members, the California Municipal Utilities Association, the Transmission Agency of Northern California and the Bay Area Municipal Transmission group to advocate for fair and just transmission rates.

For the cost uncertainty portion of the presentation, Padilla shared that staff generally tracks two types of risk, or cost uncertainty: recurring risks and large cost uncertainties. Recurring risks are those associated with supply variability, most notably hydroelectricity, changes in wholesale market prices, and congestion and delivery costs associated with the solar portion of the electric portfolio (which was a relatively new risk to the portfolio). She explained how staff is trying to understand this cost variability and establish better ways to manage it.

As for large cost uncertainties, Padilla identified revenue requirements associated with the City's Western Base Resource contract and transmission-related costs as creating the greatest level of cost uncertainty going forward. Padilla also mentioned that from a retail revenue stand point, the City faces uncertainty due to load degradation either from distributed generation and/or the possibility of direct access.

Padilla closed her presentation with a summary of the work plan for developing Electric Integrated Resource Plan and the next steps which includes providing an overview of the City's two large hydroelectric resources and a discussion of how to achieve carbon neutrality goals for the electric portfolio through the analysis of alternative portfolios.

Several commissioners provided positive feedback to staff on the quality and depth of the presentation. There were no additional questions.

**ACTION:** No action.

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

Chair Danaher asked staff to confirm whether it would be possible to move the Strategic Plan community focus group.

Shikada confirmed it was possible and staff would follow up.

Chair Danaher recommended staff present information to help the discussion.

Shikada thought by October staff would have some preliminary thoughts on the structure of the strategic plan, and would present that and seek community feedback. The focus group was intended to be informal, not a Brown Act meeting.

Shikada noted there would be a discussion of the crossbore audit at the City Council and that staff would return to the UAC for a discussion of this issue.

Chair Danaher asked whether there would be a future discussion of the low income and other customer populations.

Abendschein said staff was evaluating options and planning to return with information on this issue.

Chair Danaher asked that the issue of resiliency be discussed in the future.

Shikada said this would be an issue discussed in the Strategic Plan.

Chair Danaher also asked about agendizing a discussion related to operation of the fiber utility, including the issues raised during Oral Communications.

Shikada said he would like to discuss the topic with staff first.

Commissioner Schwartz asked whether staff had looked at customer analytical tools that were becoming available.

Abendschein said staff used some analytical tools, but was interested in hearing more about the tools Commissioner Schwartz was referring to.

Commissioner Forssell said she would like to receive some basic education on the fiber utility and how it had been built and was operated. She had also enjoyed hearing about Customer Service at the previous meeting and would be interested in hearing more.

**ACTION:** No action

Meeting adjourned at 9:45 p.m.

Respectfully Submitted,  
Marites Ward  
City of Palo Alto Utilities