



DRAFT

UTILITIES ADVISORY COMMISSION MEETING MINUTES OF OCTOBER 7, 2015

CALL TO ORDER

Chair Foster called to order at 7:05 p.m. the meeting of the Utilities Advisory Commission (UAC).

Present: Commissioners Ballantine, Cook, Danaher, Eglash, Chair Foster, Hall, and Schwartz.
Absent: Council Liaison Scharff

ORAL COMMUNICATIONS

None.

APPROVAL OF THE MINUTES

Director Fong advised that corrections to the September 2, 2015 UAC meeting minutes were submitted with the proposed changes indicated by underscored bold face italic type as follows:

"Herb Borock recognized the importance of data and is glad that in this report is the recognition that the City should be doing data, while getting video and telephone "over-the-top". He does not agree with CTC's recommendation to provide active Ethernet to small businesses, instead it should be targeting homes. Providing active Ethernet to small businesses may cannibalize the existing "value added resellers" currently licensing dark fiber from the City. Google hired CTC to conduct a study on streamlining cities processes. Herb does not agree with a partnership model. The City should not use the Fiber Fund to pay for drop cables and customer premises equipment. Customers can pay for home connections. Active Ethernet is better than GPON for residents. A wireless survey was recently conducted and less than 10% of respondents thought it was important for the City to provide Wi-Fi service at local parks."

Commissioner Eglash moved to approve the minutes from the August 5, 2015 UAC meeting as modified with the changes submitted and Vice Chair Cook seconded the motion. The motion carried unanimously (7-0 with Commissioners Ballantine, Cook, Danaher, Eglash, Hall, Foster and Schwartz voting yes).

AGENDA REVIEW AND REVISIONS

None.

REPORTS FROM COMMISSION MEETING/EVENTS

Commissioner Schwartz said that she put together the program for smart cities week in Washington, DC in September. She taped ones that she felt would be interesting to others on the UAC and will pass those along through Director Fong. She found interesting the items on the internet of things particularly interesting. She said she will make some introductions to staff since we can learn from them.

Chair Foster asked if anyone would be attending the Silicon Valley Leadership Group's The 2015 Grid of the Future Summit in November, but no commissioner indicated they planned to attend.

UTILITIES DIRECTOR REPORT

1. Communications

- **City Aid to Fire Victims:** Last month, the City dispatched an electric utility crew to the Northern California wildland fire area to assist with power restoration efforts at NCPA facilities. Fire crews were also deployed for aid. We thank our staff for their service!
- **Tree Care During the Drought:** The City is working with Canopy and others in the community to inform customers about the City's efforts to increase public and street tree watering, as well as encourage people to continue watering their own trees. Great resources can be found at cityofpaloalto.org/water

2. Marketing Services Update

- **PaloAltoGreen Gas:** Close to 950 customers are now enrolled in our voluntary natural gas carbon emissions offset program.
- **Peninsula SunShares Program Wrap-Up:** Throughout the Bay Area, almost 1,100 community members registered for this solar group-buy program. The potential renewable energy capacity is approximately equivalent to the carbon sequestered by over 13,000 acres of forest in one year, or the annual greenhouse gas emissions from more than 3,400 passenger vehicles. Palo Alto made up 28% of the total program participation, with 294 residents requesting proposals and of those, 54 signed contracts for a total solar capacity of 236 kilowatts.

3. Quarterly Report

- In your packet, the final quarterly report for Fiscal Year 2015 includes operational reliability measures as well as financial summaries for the fiscal year. The quarterly report also provides an update on state legislation as of the end of the 2015 legislative session. Many of the bills that passed are now awaiting the governor's signature.

4. Events, Workshops and Speaking Engagements

- Staff provided several presentations this past month about drought conditions and water resources to businesses, residents and college students.
- The City hosted two workshops on water-efficient landscaping during a drought, rainwater and graywater reuse.

- Two additional landscape workshops are scheduled for October, including one this Saturday, and a hands-on planting event at City Hall later in the month. Details at cityofpaloalto.org/workshops

UNFINISHED BUSINESS

None.

NEW BUSINESS

ITEM 1: ACTION: Update on the Implementation of the Local Solar Plan and Recommendation to End the PV Partners Program, as Planned, Once the State Legislative Requirements set Forth in the California Million Solar Roofs Bill Have Been Fulfilled

Resource Planner Aimee Bailey provided a summary of the written report. Bailey reviewed the Local Solar Plan, which has a goal of generating energy from local solar photovoltaic (PV) systems to account for 4% of the City's needs by 2023. She mentioned the achievements to date including publishing a solar technical potential assessment, participating in the group buy (Peninsula SunShares) program, and expanding the Palo Alto CLEAN (feed-in tariff) program.

Bailey stated that the PV Partners Program began in 1999 and funding was expanded in 2006 in compliance with the Million Solar Roofs Act (Senate Bill 1, or SB1) in 2006. She noted that all the rebate funds for the program were reserved for residential customers in August 2014 and that there are limited remaining funds for commercial customers. Bailey said that the program would end when the funding requirements from SB1 were completed, however the Finance Committee asked that staff examine options to continue rebates for residential customers.

Commissioner Schwartz asked if there were other methods to lower the cost of solar and asked if staff has projected the costs after the Investment Tax Credit (ITC) was reduced in December 2016. Bailey responded that the solar group-buy program is one way in which lowering the cost of solar can be achieved, and that a solar market and economic potential assessment that is currently underway indicates that even with the reduced ITC, Palo Alto would still be able to achieve the Local Solar Plan goal.

Commissioner Danaher said that he was in favor of the most carbon reduction for the least cost and so he fully supports staff's recommendation.

Vice Chair Cook noted that the Finance Committee asked that options be evaluated. He asked what alternatives were examined by staff. Bailey pointed to the discussion of the alternatives examined on page 10 of the written report.

Vice Chair Cook noted that the report had a section called "Future of PV Partners", but that there is no future. Bailey stated that the program will continue until all installations are complete and the funds are exhausted from the large systems that are paid for performance over a five year period after installations.

Commissioner Hall congratulated Bailey for her very efficient presentation. He asked how the unidentified additional solar PV listed in Table 2 of the report will be achieved. Bailey noted that Net Energy Metering (NEM) is a driver in consumers' decisions to install PV. Commissioner Hall said that if the goal is 4% solar by 2023, then the 5% NEM limit would not come into play for a long time. Assistant Director Jane Ratchye said that the 4% goal was based on energy usage in megawatt-hours (MWh) per year and the 5% NEM cap was based on peak demand in megawatts (MW).

Commissioner Hall said that the timing and names of the different programs under the Local Solar Program are confusing and that staff should provide a holistic review of all the programs, rather than a piecemeal description of one at a time. Ratchye said that staff would not want to hold up one program that is ready to go until all programs are ready to go. Director Fong added that when any programs are undergoing the review process, an update on the other programs under the Local Solar Plan can be provided at the same time.

Commissioner Ballantine said that the poor performance of the thermal solar heating program is disappointing. He noted that a recent study by the DOE showed that it could be more cost-effective. He noted that thermal solar water heating is 80% efficient while solar PV is only 20% efficient. He said that he had read an article about a Montana resident who built a thermal solar water heating system that was economic using low-cost materials purchased at a local hardware store.

Commissioner Ballantine asked about progress towards the Local Solar Plan goal of 4% of the City's energy use. He asked if the goal would change as the market changes and cost decline. Bailey mentioned that the existing and planned programs are counted on to reach the goal. Commissioner Ballantine asked if staff has calculated how much solar could be achieved if every resident put solar on their roof. Bailey said that the solar technical potential analysis referred to in the report has been done and that 300 MW is technically possible if economics are not an issue. The technical potential took into account all roof area in the City that could possibly accommodate solar PV based on roof tilt, aspect and lack of significant shading.

Commissioner Schwartz said that an issue for solar PV penetration is not just distributed generation, but distributed financing. She asked if staff has done any studies about why, or why not, consumers put solar on their roofs. She asked if staff has done any market segmentation studies to determine what may actually be installed. Bailey said that the next step beyond the technical potential study is to conduct the economic and market potential study, which is currently underway. Commissioner Schwartz advised that these decisions are emotional issues, not just economic issues.

Commissioner Eglash said that he completely supports staff's recommendation. However, he noted that the written report makes it sound like we have been hugely successful in implementing solar so far and doesn't make it abundantly clear that we intend to continue encouraging solar in the City even after the PV Partners Program funding runs out. Bailey confirmed that that is the case. Commissioner Eglash noted that the report does not convey clearly to the reader that the City, despite ending PV Partners, CPAU continues to strongly

promote solar in the City. He suggested that in future reports, we frame the discussion to focus on the past program successes and look toward the Local Solar Plan as the next step for furthering solar generation in Palo Alto. Director Fong thanked Commissioner Eglash for the feedback and ensured that the report to the Finance Committee would be clearer about that.

Chair Foster noted that he strongly supports the development of a community solar program since solar is not available to all, especially renters or customers with shaded roofs. He is pleased to see the other programs that are under development.

ACTION: Chair Foster moved that the UAC support staff's recommendation to end the PV Partners program when the legislative mandates from SB1 are fulfilled. Vice Chair Cook seconded the motion. The motion passed unanimously (7-0) with Commissioners Ballantine, Cook, Danaher, Eglash, Foster, Hall and Schwartz voting yes.

ITEM 2. DISCUSSION: Conversion of the PaloAltoGreen Gas Program From an Opt-In to an Opt-Out Program

Chair Foster noted that this item is on the agenda due to support for the idea expressed from members of the community.

Public Comment

Sandra Slater commended the commission for keeping sustainability on the agenda. She said that it's time to move the needle now. She noted that research shows that participation will be much higher if the program was converted to an opt-out program. She said that the program could be changed to make the program supportable by all income levels. Converting the program to an opt-out program is something the City could do that would have an immediate, positive impact.

Lisa Van Dusen said that the program is not perfect since it is backed by offsets, but we shouldn't let the perfect be the enemy of the good. We could pay even more by purchasing more aggressive offsets. There could be mechanisms to get out of the program during an "amnesty period" and low income customers on the Rate Assistance Program could be retained as opt-in customers. She said that there was so much staff effort for the PaloAltoGreen (electric) program just to achieve 24% participation and that there would be savings from lower marketing and administration costs in an opt-out program.

Chair Foster said that the money paid by PaloAltoGreen Gas (PAGG) program participants fund offsets that pay to convert waste into methane that is burned to produce renewable electricity at a dairy farm in Wisconsin and that this wouldn't be done without the revenue from the offsets. Assistant Director Jane Ratchye indicated that this is correct. She said that the offsets that back this program are very high quality as they are selected only from those protocols that have been certified for use in the state's cap-and-trade auction by the California Air Resources Board. One of the requirements of those protocols is that the offset be "additive", or from a project that would not have been done without the monetary support from the sale of the offsets. Chair Foster said that he supports an opt-out program and that the additional cost is only \$5 to \$6 per month for the average resident.

Commissioner Ballantine noted that there are ongoing costs to maintain an anaerobic digester. He said that people who opt-in are causing something real to happen. The greenhouse gas emissions reductions from those sources would not otherwise happen without programs like PAGG.

Vice Chair Cook noted that the PaloAltoGreen (PAG) Electric program was effectively converted to cover everyone via the carbon neutral program and was a great way to transfer the new goal. He asked why PAGG was not made an opt-out program originally. Vice Chair Cook added that Community Choice Aggregation (CCA) programs were successful because they were opt-out programs. Ratchye replied that the carbon neutral electric supply is not the same as PAG and that it was not developed as a transition from PAG. She noted that PAG purchased Renewable Energy Certificates (RECs) for 100% of a residential customer's load at a cost of 1.5 cents/kWh, or about 12% more than the normal electric rate. On the other hand, the carbon neutral electric supplies consist of about half carbon-free hydroelectric supplies, renewable supplies that are eligible under the state's Renewable Portfolio Standard (RPS) and that RECs are purchased for the balance of the needs. It is expected that by the end of 2016, the City's RPS will be 57% and with hydro supplies (given a normal hydro year), no RECs will be needed for carbon neutral electric supplies. She said that the state's new goal for an RPS of 50% would result in carbon neutrality anyway at no additional cost in a normal hydro year. However, the increased cost of PAGG for participants is 12 cents per therm, or about 12% more than the normal gas rate of about \$1 per therm. She said that the additional cost for PAGG was a consideration for making the program an opt-in program like PAG when the program was originally conceived. In addition, the program was just launched in January 2015 (and has yet to roll out a comprehensive marketing campaign for the program) and staff was hoping to determine the community's appetite for the program. Ratchye agreed that CCAs are successful opt-out programs, but that they are generally no more costly than the alternative from the local utility so participants are not paying any extra to be "slammed" into a CCA.

Vice Chair Cook said that our rates are allowed to go up with the carbon neutral electric supplies and asked what the threshold is for an opt-out versus an opt-in program.

Chair Foster replied that the comparison of PAGG to the carbon neutral plan is different—like apples and oranges—since the carbon neutral electric supplies is not an opt-out, or opt-in, program, but is the electric supply for all customers. The percentage increase in cost to electric rate payers by going carbon neutral is small compared to the percentage increase to a customer by paying for participation in PAGG. He said that PAGG should be compared to the PAG electric program.

Chair Foster asked if there is any legal reason that City Council could not adopt an opt-out program. Senior Deputy Assistant City Attorney Jessica Mullan said that a legal analysis would have to be completed and the answer may depend on the program design.

Commissioner Schwartz asked if the point of the program was to reduce gas use or raise revenue. Chair Foster responded that neither of those options is the point, but that the objective is to reduce greenhouse gas (GHG) emissions associated with customers' gas use.

Commissioner Schwartz said that she agreed that more people will do an opt-out program, but that we need to make sure that participants truly want to participate. We need to provide a very easy way for people to opt-out and not be penalized for any of the months they were enrolled if they don't want to be. A good outreach campaign could be a good way to increase awareness of the issue and it could have an impact of increasing customers' awareness. She said that the program could be a bridge for people to become more conscious of using energy and would not just be a way to buy ourselves out of the problem.

Commissioner Hall suggested that we not act too hastily, but develop a program like this over time, similar to the carbon neutral portfolio adoption. He said that he suspects that there would be a percentage of consumers that would find out later that they were enrolled in a "voluntary" program and feel cheated. A way forward could be to develop a carbon negative plan and start with a surcharge that would fund a solution to global warming. He said it could be a program that would be broadly advertised to ensure that everyone would be aware of the program.

Commissioner Schwartz noted that she had seen an effective "cow power" video, which is an example of how the communication can be done in a playful way that would let people understand that we are in this together, which is a compelling message for many people. She added that it would be a good messaging experiment.

Commissioner Eglash thanked the public commenters. He also complimented the UAC for placing the item on the agenda and allowing this discussion to take place. Commissioner Eglash said that when he weighs the advantages and disadvantages of opt-in versus opt-out, he would like to avoid disgruntled customers and any worry about customer satisfaction. The greatest danger of an opt-out plan is potential customer dissatisfaction. We devote a lot of time to customer satisfaction with the utility. He said it is more risky in this respect and as the price becomes significant, the danger becomes worse. He said that, with a full marketing campaign, is it still plausible that people would not be in the program that wouldn't want to be. He added that perhaps a very successful campaign would result in the same participation of an opt-out and an opt-in program. Commissioner Eglash indicated that he is leaning towards maintaining PAGG as an opt-in program. He added that there should be no action on the item at this time since there is no staff analysis, no fiscal analysis or legal analysis completed at this time. The discussion is conceptual at this point; there is no proposed design for an opt-out program.

Chair Foster indicated that he disagrees that the participation rates for opt-in versus opt-out will converge with a great marketing campaign. He added that this is a discussion item on the agenda tonight so no action can be done.

Commissioner Schwartz said that customer satisfaction depends on whether you are transparent or not. The fact that CPAU cares about being green will show that an opt-out

program is consistent with the brand. She added that safeguards to allow folks to opt-out will be consistent with the transparent message.

Commissioner Eglash said that many people in Palo Alto take pride in the City's environmental efforts. He stated that safety, reliability, and low cost are primary considerations and to impose a greener solution that costs extra money is hazardous and must be done carefully.

Commissioner Ballantine noted that offset resources are finite and that pressures from supply and demand will eventually bite us as the price for offsets will increase as demand increases. He added that an opt-out program would require sufficient offsets to be supplied.

Commissioner Danaher said that the PAGA program has an environmental benefit, a psychological benefit, and a moral benefit. He said that the best idea is to make the program neither opt-in or opt-out, but our gas supply for everyone. He added that an opt-out program still allows people to opt-out easily since it could be very easy to go to the website and opt out.

Commissioner Hall said that we could conduct a poll to see what the customers' response would be to an opt-out program. He said that we should want to have this information before making a decision.

Commissioner Schwartz advised against a poll as it would defeat the purpose of communicating the benefits of an opt-out program. Commissioner Danaher added that the poll would only be answered by the small number of people who read and respond to email.

Commissioner Foster said that the program could be designed so that anyone who failed to opt-out early enough could still get their money back. He asked if the UAC could make a motion to recommend that the Council direct staff to develop an opt-out program. Director Fong stated that it can be added to the rolling calendar. Mullan added that the item is agendaized as a discussion item and that the Commission can add it as a future item to be agendaized under Item 4 on this meeting's agenda.

Vice Chair Cook thanked the public commenters. Commissioner Hall added his appreciation of the input from the public commenters, even if some commissioners disagree.

ITEM 3. DISCUSSION: Concept & Establishment of UAC Work Plan and Related Subcommittees
Public Comment

Jeff Hoel said that he doesn't know what this item is about since no materials were provided in advance of the meeting. He said that subcommittees separate from the main group so that private discussions can be conducted. He asked what do subcommittees do and how do they assist the commission. He said a report back to the commission from the subcommittee did not happen last month on the fiber issue.

Director Fong stated that this item was put on the agenda at the request of Chair Foster, Vice Chair Cook and Commissioner Eglash.

Commissioner Eglash acknowledged that this is an unusual item on the agenda. He stated that it was put together with assistance of Chair Foster, Vice Chair Cook, Director Fong, and Sr. Deputy City Attorney Jessica Mullan. The idea of developing a UAC Work Plan is to make sure that the UAC is addressing its highest priority items. This idea stems from the last joint meeting of the Council and UAC when many of the Council members identified five issues that were of interest. A sample work plan could be developed to show the status of these five topics. This is not intended to document what has been agreed on, develop positions, or direct staff resources. The rolling calendar is a list of all items, but does not show the detail on desired outcomes or next steps. One idea is to agendaize subcommittee report outs at UAC meetings. The UAC bylaws is silent on a work plan. He noted that the UAC receives a quarterly Utilities update, which often addresses many items on the work plan. He said that if the UAC decides to have a work plan, it needs to develop a process for updating the work plan—it could be by the UAC with input from the subcommittees. It could be done by the Director of Utilities, but he doesn't want to increase staff's work load. The work plan could be distributed at UAC meetings and made available to the public at the meeting and online.

Chair Foster said he was supportive of the idea of the work plan since prioritization is important and he noted that almost all items are driven by CPAU staff. He said that the UAC should own this and not take staff time.

Vice Chair Cook agreed that establishing priorities and following through on them is valuable.

Commissioner Danaher said that it is important to be organized and that this proposal takes it a step further than the rolling calendar.

Commissioner Schwartz asked if the work plan gives the UAC a platform to talk about some of the issues, or even write something up. She asked if this would provide a way to share subcommittee discussions with the public.

Commissioner Eglash responded that it was unfortunate that Commissioner Schwartz doesn't feel like she has that opportunity now. He said that, if there is something to share, the item can be discussed at UAC meetings. For example, the budget subcommittee always reports out at the meeting when the budget is reviewed by the UAC. He added that there is also the possibility of preparing a colleagues memo that could be distributed to the commission and public. He said that it should be part of the job of the subcommittee to report on discussions to the full commission.

Commissioner Schwartz said that she would certainly like to share items with fellow commissioners and can use the mechanisms that already exist. She asked what incremental impact a work plan would have.

Commissioner Hall agreed that subcommittee report-outs are good and the subcommittees should not go adrift. He expressed concern about implementing any new process that may add burden of time or work for staff. He suggested a mid-course check-in with City Council could be beneficial to discuss progress and make sure the UAC is going in the right direction.

Commissioner Eglash said that he was not sensing a strong sense of support from the commissioners.

Commissioner Ballantine asked if the work plan would only apply to subcommittees.

Commissioner Eglash replied that it is independent from the subcommittees—it is to have a central place to manage complex, important items to keep track of them and to remind us of where we are on each item. Usually, a subcommittee is named for most important work items since subcommittees allow for detailed work for a subset of the commission and the work plan allows a single place for the status of the items that are the most important.

Commissioner Schwartz stated that, if this would give her a structure for discussing items not on the rolling calendar that she would like to address, she would support it.

Chair Foster recommended that the UAC try the work plan and see how it works. He said that there is no downside to trying it for three to six months, and that there seemed to be some logic in the Chair taking responsibility for keeping it updated.

Commissioner Eglash agreed with the notion of trying it for several months and then evaluate.

Commissioner Danaher asked if the UAC could use the work plan to come up with topics that the UAC wants to have addressed.

Mullan said that this is a discussion item on the agenda so that there will be no formal action taken. She noted that any commissioner should consult the City Attorney's Office if there are any questions about the Brown Act. She added that there is a mechanism under the UAC bylaws for a subset of commissioners to prepare a "Commissioners Memo" for discussion by the full commission. She added that the agenda item "Commissioner Comments" is another place that can be used to convey information to the rest of the commission.

ITEM 4. ACTION: Selection of Potential Topic(s) for Discussion at Future UAC Meeting

Chair Foster requested that solar thermal systems could be added as a discussion item with no staff time required, but just a reminder of past staff memos on the topic being available. Danaher supported adding that item.

Commissioner Hall remarked on the drop in gas use noted in the quarterly report provided at the meeting. He asked if the drop in gas usage would have a rate impact and asked if a response could be added to the Director of Utilities report for an upcoming UAC meeting, or added to a future agenda. Assistant Director replied that every year, the financial plans for all funds are revised with the latest usage forecasts and cost estimates and that this issue would be fully addressed then. Commissioner Hall said he'd like to see a brief discussion earlier than that.

As an employee of the Santa Clara Valley Water District, Commissioner Hall recused himself for discussion on the last item and left the meeting at 9:20 pm.

ITEM 5. DISCUSSION: Update and Discussion on Impacts of Statewide Drought on Water and Hydroelectric Supplies

Senior Resource Planner Karla Dailey provided an update on the impact of the drought. She provided a graph showing that the three-year period of 2012 to 2014 was extremely hot and dry.

Commissioner Schwartz said that she went to someone's house with a beautiful artificial lawn and that we could take a photo of such a backyard to show what can be done to reduce water usage.

COMMISSIONER COMMENTS

Commissioner Schwartz noted that at the last UAC meeting, she asked how many people have access to broadband and that she has since determined that everyone in the City has access to broadband. She said that no one in our City cannot get access to the internet.

Meeting adjourned at 9:26 p.m.

Respectfully submitted,
Marites Ward
City of Palo Alto Utilities