

UTILITIES ADVISORY COMMISSION MEETING FINAL MINUTES OF NOVEMBER 6, 2013

CALL TO ORDER

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

Present: Commissioners Chang, Eglash, Foster Hall, Melton and Waldfogel

Absent: Chair Cook and Mayor and UAC Liaison Scharff

ORAL COMMUNICATIONS

Catherine Martineau of Canopy reiterated points made in Canopy's letter to Council regarding water rate structure concerns. She encourages the City to evaluate alternative water rate structures that do encourage the health of the urban forest. She stated that she plans to meet with the City's Urban Forester.

APPROVAL OF THE MINUTES

The motion was approved unanimously (6-0) with Chair Cook absent. The minutes from the October 2, 2013 UAC meeting were approved as presented.

AGENDA REVIEW

None.

REPORTS FROM COMMISSION MEETING/EVENTS

None.

UTILITIES DIRECTOR REPORT

Utilities Director Valerie Fong provided the following report:

1. Demand Response Pilot Program: CPAU wrapped up the summer 2013 Demand Response Pilot Program on October 15. Demand Response events were called 5 times over the course of the season, 3 of which occurred the first week of July. The seven large commercial participants included PARC, HP, VA Hospital, Palo Alto Office Center, SAP, and CPI. Together those participants committed demand reductions of 600 kW and were able to save nearly 9,000 kWh during Demand Response events. Those participants received certificates of

appreciation from the City at the facilities managers meeting on October 30. The pilot will continue next summer beginning May 1, 2014.

CPAU also worked with a local start up, Recargo, to test demand response for electric vehicles (EV). Text messages were sent to registered EV owners asking them not to charge during Demand Response events. Preliminary data indicated some level of energy reduction, but a larger data set will be needed before any conclusions can be drawn.

2. Communications Update:

- October Public Utilities Awareness Campaign---in addition to utility bill and newspaper ads, as well as providing info and giveaways to hundreds of people at various events around town, our "There We'll Be" staff video got over 300 hits.
- October Call Before You Dig Campaign---our pirate-themed effort to raise awareness about using the 811 service included TV ads, print ads and several Halloween-related events, culminating in a performance of our "Call Before You Dig" theme song before the Council on November 4. We intend to continue this campaign year round.
- 3. **EcoHome Haunted House**—over 200 children and adults explored the many booths at our Halloween event and got their fill of both candy and conservation. The Graveyard of Dead Technologies was popular as were the Pirate Booth, offering the chance to sing "Call Before You Dig" on camera and the Safety Detective Penguin Booth where kits enabling kids to make their homes safer were gobbled up like candy. Tours of the EcoHome itself mixed resource efficiency education with horror, such as when a cackling pumpkin man burst forth from a high-efficiency toilet! An additional positive aspect of this event was our coordination with Public Works and Libraries who also had educational entertainment on site.
- 4. **Water Supply Situation:** Although it's very early in the water year, it's off to a dry start and water supplies in storage are less than at this time last year. In addition, there are concerns that ash and exposed soil from the Rim Fire could lead to water quality impacts in the case of a very quick spring run-off event. Staff is monitoring the situation. It is also too early in the water year to predict the amount of hydroelectric generation that can be expected, but staff is closely monitoring that situation, as well.
- 5. **UAC Ad Hoc Budget/Financial Plan Committee:** Staff is developing a new way to present the financial forecasts for each fund and plans to provide a draft financial plan template to the UAC in December or January. The assistance of an ad hoc committee of the UAC would be helpful as the plans are being developed. This committee could also assist in the review of the CIP and Operating budgets as has been done in years past.

Vice Chair Foster requested interest of the commissioners as to who would like to serve on an ad hoc budget/financial plan review committee. Commissioners Melton and Waldfogel indicated that they would serve on such a committee.

UNFINISHED BUSINESS

None.

NEW BUSINESS

ITEM 1: PRESENTATION: Staff Presentation on the City's Fall 2013 Request for Proposals for Renewable Energy Projects and Plans for Additional Long-Term Renewable Energy Contracts
Senior Resource Planner Jim Stack provided an informational presentation on the status of the City's efforts to procure renewable energy and the results from the City's latest Request for Proposals (RFP) for new renewable energy. Stack stated that the City currently has a Renewable Portfolio Standard (RPS) of about 21% with another 3% ready to come online in the next few months. In addition, the City has executed 4 contracts for solar energy that will result in about a 50% RPS level and a 100% carbon neutral electric supply portfolio through long-term power purchase agreements (PPAs), but there is some uncertainty as to whether the solar projects will actually be completed.

The City released the latest RFP due to the uncertainty associated with development of the solar projects and the fact that some existing contracts expire in 2021 creating a "cliff" when new renewable resources are needed. In addition, the prices for long-term renewable energy contracts are still very low. Stack indicated that the prices for the proposals in response to the RFP were similar to the ones received last year with even slightly lower prices for the best projects.

Stack stated that staff is currently interviewing the developers that submitted the top proposals and is expecting to negotiate one, or possibly two, PPAs. The schedule at this time is to have the UAC review the PPA(s) in February 2014, followed by Finance Committee review in March 2014 and Council consideration in April 2014.

Commissioner Chang asked if the City demanded any development security for the uncertain PPAs. Stack replied that there are development securities required for the last 4 solar PPAs and this RFP also asks for securities. Stack stated that the amount of the security depended upon the project start date, with \$50/kW required for projects that start in 2014, \$75/kW for projects starting in 2015 and \$100/kW for projects starting in 2016.

Commissioner Melton said that the amount of surplus or deficit for supplies depends on the hydro year and so we could end up with surplus power even without new contracts. He asked what happens if the City must sell the excess supplies on the spot market and what expectation we have. Stack stated that "bucket 1" renewable resources are valuable and the price for such resources is currently high and expected to remain high in the future, if we have to sell surplus renewable resources.

Commissioner Eglash asked what the technologies were for the top 10 proposals. Stack replied that 8 were new solar PV projects and 2 were existing wind projects. Commissioner Eglash asked when evaluating them, if the technologies are weighed equally and if they differ in terms of timing, or financing risk. Stack indicated that the projects are scored based on viability (site control, permitting, proposer experience) and the output from the projects are valued based on the generation profile so that solar energy, which is generally produced during more valuable peak hours, has a higher value than wind energy.

Noting that financing is an issue for the 4 executed solar PPAs, Commissioner Eglash asked how financing risk was evaluated for the proposals received through the new RFP. Stack responded that staff determines where they are planning to obtain financing by examining the company's balance sheet, or if they are planning to secure financing from banks, and the company's track record for obtaining financing on other projects. Stack added that if the project is further along in terms of its development and is "shovel ready," then financing is more easily obtained.

Commissioner Eglash asked how, if we don't have renewable energy and have dry hydro, the City can still be carbon neutral. Stack replied that in that case, the City would buy bucket 3 Renewable Energy Certificates (RECs) as we are doing this year to achieve carbon neutrality.

Commissioner Eglash noted that the supply resources do not exactly follow the load every hour, every day, or every month. He asked how staff thinks about the future of spot markets in the as they may change within a day. Commissioner Eglash added that in the future, there could be so much solar on the grid that the value/price at certain times could fall substantially, or generation could be curtailed. Commissioner Eglash stated that in other parts of the world, there are already examples when the market prices are negative and resources must be curtailed, or pay the negative prices to generate. Stack replied that currently, the prices are higher in the summer and in the peak hours, but that could change in the future. He added that it is difficult to model or predict future market prices, especially within the day and that some of these projects may be able to provide ancillary services and they can be turned down or off in the case of negative prices. Stack added that the solar PPAs include provisions to turn off the resource if the market price is negative. Commissioner Eglash stated that the issue of negative pricing is not abstract and we should consider the possibility of changing prices in the future for resources such as wind and solar.

Commissioner Waldfogel noted that traditionally, the electric fund has built up reserve funds in wet years and drawn down on them in dry years, and wonders if this will still be the case in the future when the new renewable energy contracts begin. Assistant Director Jane Ratchye commented that staff will continue to optimize the City's hydro resources in the future, even with the addition of new renewable resources. Stack added that when the new resources come online, the City may enjoy even greater surpluses in wet years, given that we will be able to sell not only energy but also renewable energy credits (RECs) into the market.

Commissioner Hall supports the plan to secure additional renewable energy supplies and suggested that the City "take a risk" of being long prior to 2021 to have enough to cover the

shortages that are known to occur after the aforementioned "cliff." Stack indicated that it is possible the City could issue another RFP requesting projects that could be built in the next several years, but that don't start delivering to the City until 2021.

Vice Chair Foster asked how easy it is to find renewable energy to meet needs in a quick time frame. Stack replied that the City is generally able to find renewable energy in the marketplace and can issue an RFP and negotiate and execute contracts fairly quickly.

Vice Chair Foster asked if prices for renewable energy are expected to stay low. Stack replied that they are low now, but may increase in future depending on state RPS policies and federal tax policies.

Vice Chair Foster indicated that staff should consider giving some weight to innovative technologies. He also stated that he was not a supporter of landfill-gas-to-energy projects.

ITEM 2: ACTION: Staff Recommendation that the Utilities Advisory Commission Recommend that the City Council Adopt a Resolution to 1) Terminate the City's Natural Gas Direct Access Program by Repealing Gas Rate Schedule G-4; 2) Eliminate Fixed and Custom Gas Commodity Rates for Large Commercial Customers by Repealing Gas Rate Schedule G-11 and G-12; and 3) Effect the Changes by Amending Gas Rate Schedules G-3 and G-8 and Utility Rules and Regulations 2, 3, 5 and 13

Vice Chair Foster indicated that the recommended action made sense since no customers were on the rates to be eliminated, the proposed rule changes were for consistency and the result would be a streamlined process.

ACTION:

Vice Chair Foster moved the staff recommendation and Commissioner Chang seconded the motion. The motion carried unanimously (6-0) with Chair Cook absent.

Commissioner Hall stated that he supported the recommendation, but noted that the long definitions section (Rule and Regulation 2) did not include definitions for gas transportation or gas distribution and recommended including those to add clarity for readers. Director Fong indicated that these definitions can be added either as this report goes forward or when we do a larger clean-up of the rules and regulations.

ITEM 3: ACTION: Staff Recommendation that the Utilities Advisory Commission Recommend that Council Continue the Palo Alto Clean Local Energy Accessible Now (CLEAN) Program at the Rate of 16.5 cents per Kilowatt-hour for a 20-Year Contract and a Program Cap of 2 Megawatts Vice Chair Foster asked for public comment on this item.

Craig Lewis, CLEAN Coalition, stated that the experience in CLEAN programs throughout the country is that it takes some time for projects to develop after introduction of the programs. He stated that the price should be sufficient to have program takers and he expects that this will occur next year. Lewis said that Palo Alto's program is well structured and that the price is

fair, but that property owners need to be educated and may not be motivated by making extra money from leasing their roofs. Similar programs elsewhere have been able to attract participants and been fully subscribed. Lewis stated that the CLEAN Coalition will help to find developers and property owners to take advantage of the program. He stated that he supports the staff recommendation to continue the program at the existing price.

Commissioner Waldfogel asked Lewis what it will take to get developers to take up the program offering. Lewis responded that, fundamentally, it will take education with property owners. He has had meetings with about 15 property owners and they need to spend the time to understand how the program can work. He indicated that parking structures are prime candidates for using the CLEAN program and that PV systems provide other benefits such as shade for parked cars.

Howard Lee, Palo Alto resident, stated that he agreed with Craig Lewis's recommendation to continue the CLEAN program. He stated that time is needed for property owners to get comfortable with the business model. This is a somewhat new idea for developers and extending the program for another year should yield some participation since opportunities will come, but take time to develop.

Assistant Director Jane Ratchye provided a brief presentation summarizing the written report. She stated that when Council increased the price from 14 cents per kilowatt-hour (¢/kWh) to 16.5 ¢/kWh at the end of 2012, Council also directed staff to return when the 2 megawatt (MW) cap was reached or after one year. Staff is now returning after one year and has reevaluated the price and recommends continuing with the 16.5 ¢/kWh and the 2 MW cap.

Commissioner Melton noted that the City moved from cost-based to market-based pricing, but based on the input from the two speakers, there is professional opinion that the program will succeed in time and he supports the staff recommendation to continue the program at the same price and that there was no basis to lower the price.

Commissioner Eglash said that the dilemma is not whether to continue the program, but at what price. He recalled that there was angst last year with whether and how much to pay more than renewable energy could be purchased on the market. He said that the question is how much the ratepayers should encourage local solar and noted that any amount over 9.9 ¢/kWh is a subsidy from ratepayers to property owners. Commissioner Eglash said that because of this subsidy, he struggles with this issue and, although he would love to see solar locally, these are long-term contracts that obligate the ratepayers to pay more for solar power.

Commissioner Eglash continued that on one hand, there needs to be some consistency in the pricing. He indicated that the proposal is both too aggressive (with the price of 16.5 ¢/kWh) and too cautious (only allowing 2 MW). He asked whether offering a lower price for a longer time period or for a larger cap would be workable. He wondered if an alternative such as 15 ¢/kWh for 2 MW, then 12 ¢/kWh for 10 MW until 2017 could be considered. Setting pricing for a longer period could address the long-term predictability for property owners such that the

higher price would be only available until end of 2014 and then would fall after that time. Ratchye indicated that the program proposal is not to end the program at the end of 2014, but to return at the end of one year or when the cap was reached to re-assess the price. She added that the City would like to get some uptake with the program and, if there is a run on the program because of the 16.5 ¢/kWh price, we can adjust the price after reaching the cap.

Commissioner Eglash asked what would happen if the price was set to a very high number. Director Fong indicated that the Finance Committee set the 2 MW cap on total program size to cap the risk with the intent that staff would return with an updated and lower price once the 2 MW are fully subscribed.

Commissioner Waldfogel asked how many projects would it take to use up the 2 MW cap. Utilities Marketing Engineer Lindsay Joye stated that the cap could be used up with just 2 to 3 large projects, but she has also heard from developers with smaller projects so there could be more.

Commissioner Waldfogel asked Joye if she agreed with the speakers that they need more education before participating. Joye agreed with the comments and stated that it's not their primary business so property owners need time to evaluate the program.

Commissioner Waldfogel said that, because of the subsidy, it would be awkward if one developer were to take half or two-thirds of the program capacity.

Vice Chair Foster indicated that he supports the staff recommendation despite the small subsidy. He stated that the City has been subsidizing solar over the years through the rebate program (PV Partners). He added that lowering the price to 12 or 15¢/kWh would not be productive at this time, but that the hope is that the price could be lowered in the future after the first 2 MW is used up.

Commissioner Hall said that he supports the recommendation, but would be uncomfortable if we extended the price after the 2 MW is filled since he would want to limit the subsidy.

Commissioner Chang said she supports the recommendation, but recommends ratcheting down the price after reaching the 2 MW cap as she shares the concern regarding the subsidy.

Commissioner Eglash stated that the price is aggressive and doesn't want to douse the enthusiasm before there are any takers. However, he stated that it needs to be clear that the price/subsidy will have to fall. He said that it should be clear that the 16.5 ¢/kWh is a limited time offer.

Commissioner Waldfogel stated that if the City is willing to offer 16.5 ¢/kWh, it could be structured to have 18 ¢/kWh for 1 MW, then 15 ¢/kWh for the second MW. Commissioner Chang responded that the commission has heard that it's not a totally economic decision.

Commissioner Eglash indicated that he was not eager to go to 18 ¢/kWh since he is still somewhat uncomfortable with the 16.5 ¢/kWh.

ACTION:

Commissioner Melton moved staff's recommendation. Vice Chair Foster seconded the motion. The motion carried unanimously (6-0) with Chair Cook absent.

ITEM 4: ACTION: <u>Selection of Potential Topic(s) for Discussion at Future UAC Meeting</u> Commissioner Hall indicated that he would like to see a briefing on smart grid topics.

Vice Chair Foster asked if the PaloAltoGreen Gas program on the rolling calendar for the UAC's December meeting was for action. Director Fong replied that this would be an action item complete with rate schedules. Vice Chair Foster indicated that he would like to discuss the potential for a redesigned PAG electric program at some point, too. Commissioner Eglash reminded his fellow commissioners that staff developed a number of ideas and that he understands that staff is working still on this issue.

ACTION:

None.

COMMISSIONER COMMENTS

None.

Meeting adjourned at 8:31 p.m.

Respectfully submitted, Marites Ward City of Palo Alto Utilities