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.