REPORT FROM

OFFICE OF PUBLIC ACCOUNTABILITY

Date:	September 24, 2018
To:	The Board of Water & Power Commissioners David Wright, General Manager, Department of Water & Power
From:	Frederick H. Pickel, Ph.D., Executive Director/Ratepayer Advocate
Reference:	Pilot Shared Solar Program, DWP Board Agenda 9/25/2018 Items 6B and 19

RECOMMENDATION

OPA recommends that the Board of Water & Power Commissioners approve the proposed pilot shared solar proposal ("shared solar program" or "program") for an initial year, provided, however, that the dollar limitation in the Board letter seeking approval is included in the resolution. That limit is "up to" $79 million over 20 years. Recommendations affecting years subsequent to year 1 are listed at the end of the discussion below.

DISCUSSION

OPA supports DWP proceeding with this program's first year.

DWP's proposed pilot shared solar program is a significant improvement relative to various proposals discussed in the last several years. In general, OPA believes that small, well controlled pilot programs are a good way to manage the risks of changes to basic utility service. DWP's proposal accomplishes this practice, at least for its initial year of subscription. As such, OPA's comments all pertain to the program's development after the first year.

DWP's proposed pilot combines price protection for 10 years with solar supplies. The power industry has extensive experience with fixed prices at wholesale and at retail. That history has many examples of financial distress that arise from the failure to manage future price risks when durations are long. Unfortunately, it is all too clear from this experience that the physical plant -- the installed solar panels in this instance -- do *not* necessarily "lock in" costs because over half of the rate is not generation costs. The pilot selects a 10 year fixed price by using a 10 year forecast of Tier 1 residential rates. Despite best efforts, DWP's Tier 1 rate forecast is likely to be wrong. The pilot is only cost neutral to others if what actually transpires are Tier 1 rates at or below the forecast.

Ten years ago, the residential rate had fewer and flatter tiers. Therefore, looking back to this time-frame to evaluate the rate neutrality of this pilot would be a *particularly* poor way of predicting the next 10 years. Significant changes implemented in 2016 are affecting how revenue is allocated between classes and within classes of customers.

The system average rate forecast in 2016 for 2018 was 17.3 cents per kWh. The actual system average rate today is 18.1 cents per kWh, or 4.6% higher. DWP planned for an increase of only 2.8%. In 2018 DWP has a 10.4% year-over-year system average rate increase. That exceeds the DWP's best forecast by over 370% (10.4% divided by 2.8%), *just two short years ago*. The allocation of these revenue changes to the different types of customers, and to the different fixed and variable charges, is in flux.[1] DWP may continue to experience changes brought about by decoupling revenue from sales (i.e., successful conservation), natural gas storage availability (Aliso Canyon constraints), litigation, and natural disasters. Promising some customers protection from these factors involves placing disproportionately more burdens on the non-participating customers.

Revenues forecasted in 2016, but not collected, were reallocated to lower priced tiers when the sales in higher priced tiers fell. Ten years of time will amplify this effect. The best way to grow this program successfully beyond its initial year is to actively manage above-forecasted growth of Tier 1 residential rates one year at a time, and assign the costs of that hedge only to the program's current or future participants. Hoping for regular rate reviews, and cost of service studies, is not a good strategy. The cost shift to other customers can be readily predicted, and the regularity of rate reviews cannot. It is also not a good strategy to reassign above-forecasted Tier 1 costs to the power access fee that all residential customers would pay. That would be *unduly* discriminatory.[2]

Improvements for this pilot program's second and later years could include:

1. Finding a way to deliver a cost neutral program, when and if Tier 1 rates exceed forecasted levels. (For example, buy treasury inflation protected securities in sufficient amounts to cover amounts above forecasted Tier 1 increases.)

2. Assign the costs of actively managing cost neutrality to program participants only, and shield other residential or non-residential ratepayers. (This is called "ring fencing" the program, and is a frequently used ratepayer protection.)

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[1] This is normal. Regular rate reviews are essential for maintaining a cost of service aligned with what industrial, commercial, and residential customers use.

[2] In this pilot the non-participating customers will no longer receive some of the benefit of the cheapest central solar DWP has procured thus far, despite funding its development and the transmission it needed. "But for" this pilot program, the particular solar resources and their renewable energy credits would exist anyway. This is unlike demand response, energy efficiency, distributed generation, or conservation, where positive externalities (net of negative ones) arise from the participating customer, and benefit non-participating customers.

3. Program participants who exit early could be allowed to re-enter the program only after the completion of their original term. Since 2016, utility-scale solar costs of have continued to fall, with reported market prices well below the 7 cents per kwh used for this pilot. Slowing re-entry will avoid the "churn" that exacerbates cost-shifting, as solar costs selected by DWP for the program may change significantly.

4. The Board could receive a status report on the program every six months until the program matures. The adaptive needs of the pilot program will take the form of changes delegated to the General Manager. Many advocates will care about these changes. OPA believes these changes can be explained publicly. OPA therefore recommends that design changes delegated to the General Manager could be initiated only after they are presented and explained to the Board, or if the OPA does not object to them.

DISADVANTAGED CUSTOMERS

Protection of the most vulnerable ratepayers is unlikely to be accomplished with a shared solar program, even if it is a good one.

OPA would respectfully request again that the Board seek advice from DWP on the least risky option for proceeding with all possible haste to inflation-adjust the low income, Lifeline, and medical credits for power and water rates. Selecting the best option in this area may require a higher than typical level of interaction with the City Council. Options, among others, include seeking voter approval, initiating a non-profit or charitable co-funding partner to add to City general fund monies, actively seeking judicial review of program re-design for credit costs predating constitutional changes, or re-modeling credits as the Sacramento Municipal Utility District has done.