



August 26, 2021

SMUD Board Members

Via: Electronic Mail

Dear President Bui-Thompson and members of the SMUD Board of Directors:

350 Sacramento is a local grassroots organization committed to equitable solutions that accelerate the transition to a sustainable future, with atmospheric carbon dioxide levels below 350 ppm. SMUD's 2030 Zero Carbon Plan is an important local contributor to that effort, and we fully support the SMUD Board's commitment to achieving these ambitious near-term climate goals. We also strongly support SMUD's commitment to advancing environmental justice and empowering frontline communities. We will be working with you to achieve those ends.

We are writing to offer comments and specific recommendations regarding the *SMUD Chief Executive Officer & General Manager's Report and Recommendation on Rates and Services* (GM Report) issued on June 17, 2021. We believe that this current rate proposal will have a significant effect on SMUD's Zero Carbon Plan and its implementation details must be weighed carefully.

Proposed new Net Energy Metering rate (NEM). The new rate proposes to change the compensation rate for exported solar-generated power to 7.4 cents per kilowatt-hour, effective January 2022. SMUD staff based this price on the Value of Solar Study conducted by the consultant E3 last year; the GM report recommends the price be adjusted every four years.

However, the E3 Value of Solar Study acknowledges a range of value for the societal benefits provided by customer-sited solar and solar plus storage systems. These societal benefits included reductions in carbon emissions, avoided fugitive methane emissions, reduced air pollution, and reduced land usage. Under the scenario, where customer solar and solar + storage displaces natural gas, the estimated societal values range from \$0.018 to \$0.072 per kilowatt hour.¹ We believe SMUD could justifiably support an initial export compensation of

¹ SMUD Value of Solar and Solar + Storage Study, September 2020, Page 4.

approximately \$0.10 per kilowatt hour based on the high end of this range.²

SMUD will need a robust solar industry to implement its ambitious plans for bringing solar + storage projects to Sacramento customers. Appropriate compensation for exported power is vital to the ongoing viability of the rooftop solar industry. A large abrupt change in export compensation may make it more difficult for SMUD to meet its 2030 goals which will depend on the implementation of customer-sited solar + battery storage.

Recommendation: We encourage the SMUD Board to adopt a higher initial export compensation rate for energy sold back to SMUD from new “Solar and Storage Rate” participants after December 31, 2021.

Virtual Net Metering (VNEM). We are pleased to see that SMUD is committed to bringing the benefits of solar to low-income customers living in multifamily housing through a new Virtual Net Energy Metering program (VNEM). We understand the details of this program will be forthcoming. We support a low income VNEM program design that assures no up-front charge for customers participating in the program and continued availability of the Energy Assistance Program Rate and/or Medical Equipment Discount Rate. We also support the sharing of energy cost savings directly with the residents of multifamily housing.

However, the principle that the benefits of solar should be available to people living in multifamily housing should be applied widely. This would expand solar availability to people often with lower incomes but not covered by SMUD’s targeted low-income VNEM program and make solar more equitably distributed in SMUD’s service area.

Recommendation: We support the prioritization of developing the VNEM rate for low-income customers in affordable housing complexes. But, we also believe that SMUD should allow VNEM for all customers in multi-family housing.

Vintaging Implementation for Existing Solar Customers. SMUD proposes extending the current NEM export purchase rate for existing solar customers to almost ten years. However, some newer solar installations may have projected paybacks beyond that 10 year deadline, while older installations may have already paid off their systems. We believe a more rational and fair program would be to implement the new NEM rate for any NEM customers based on how long they have enjoyed the current rate relative to their expected payback period. This threshold length of time should be equal to a reasonable payback period or a common loan and depreciation period, 15 years for example. Once customer solar installations were past that threshold period, they would be assigned to the new NEM rate.

² As one example, recent data regarding methane’s massive greenhouse effect (U.N. International Panel on Climate Change 2021 report, see their Figure SPM.2) indicate environmental costs of methane releases may be substantially greater than previously assessed.

Recommendation: Implement the new NEM export price for existing solar customers once they have received prior NEM rates for a reasonable threshold payback period, such as 15 years.

Battery Storage. We strongly support SMUD’s proposed incentives for battery storage systems. We believe that solar systems paired with battery storage can offer superior value for SMUD and for carbon reduction compared to standalone solar systems. We applaud SMUD for proposing innovative options on dispatching customer-stored energy that will provide benefits both to the customer and to the SMUD electric system. We look forward to seeing the details of how this Virtual Power Plant program will be implemented.

Recommendation: Given the importance of battery storage to clean energy reliability, SMUD needs to substantially incentivize battery installations until battery costs decline enough to be attractive on their own.

Critical Peak Pricing. We strongly support an optional Residential Critical Peak Pricing (CPP) rate that will enable customers to be part of the solution in building a zero carbon future for Sacramento. However, the GM Report provides only a high-level overview of the proposed CPP, which will be effective only during summer months and provide a discount for off-peak pricing and a price adder during called events. If SMUD expects 30,000 storage participants to help meet its Carbon Zero goals, it should demonstrate the cost benefits for their relatively large investment in batteries. This is particularly true for existing solar customers contemplating upgrading to solar + storage since participation in the CPP program will entail losing their grandfathered pricing status for the sale of export generation.

Recommendation: SMUD must provide more detail on pricing and conditions of the proposed CPP rate if prospective customers can be expected to commit to storage investments and enlistment in this program.

Stability for future solar/storage adopters. Finally, we seek clarification on SMUD’s intent to make changes to the export compensation going forward. Details for Rate Schedule SSR which would go into effect on January 1, 2022 state that “SMUD will update export compensation every four years, starting in 2026, using a combination of publicly available local indices and SMUD actual costs.”³ What is not clear from the GM Report is whether customers who install solar or solar + storage between January 1, 2022 and January 1, 2026 will see a reduction in their export compensation, or whether the new export compensation would only apply to systems installed after January 1, 2026. We would support that latter interpretation and would strongly oppose an interpretation that would create substantial uncertainty for customers who might invest in solar or solar + storage during the next four years.

Recommendation: We urge the SMUD Board to consider locking in the export

³ SMUD GM Report, Page 36, Table 5.

compensation rate for a period equivalent to an expected project payback or loan amortization period – 15 years for example. We believe adding this feature to the program design will help provide clarity and stability in financial decision making by prospective solar customers.

We appreciate your consideration of our comments and recommendations and look forward to working closely with the SMUD Board as you implement the 2030 Zero Carbon Plan.

Respectfully submitted,



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