BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

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Order Instituting Rulemaking to Revisit Net Energy Metering Tariffs Pursuant to Decision 16-01-044, and to Address Other Issues Related to Net Energy Metering.	Rulemaking 20-08-020

REPLY COMMENTS OF THE PUBLIC ADVOCATES OFFICE ON PROPOSED DECISION REVISING NET ENERGY METERING TARIFF AND SUBTARIFFS

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TABLE OF CONTENTS

Page

I. INTRODUCTION

Pursuant to Rule 14.3(d) of the Rules of Practice and Procedure,[1] the Public Advocates Office at the California Public Utilities Commission (Cal Advocates) submits these Reply Comments on the *Proposed Decision of ALJ Hymes Revising Net Energy Metering Tariffs and Subtariffs* (PD) issued on November 10, 2022.

Cal Advocates supports the PD's attempts to manage the growing costs and inequities imposed by the current NEM 1.0 and 2.0 tariffs. The new net billing tariff ("NBT") reduces the cost shift from new customers by aligning export compensation with the benefits NEM systems provide to the grid.[2] Yet, the final decision must address two fundamental shortcomings: (1) the significant and growing cost shift from legacy NEM 1.0 and 2.0 tariffs, and (2) the proposal for new, solar-only customers consistently generates faster payback periods than the PD's stated 9-year goal. Cal Advocates urges the Commission to eliminate, or at a minimum, annually update, the glidepath for the Avoided Cost Calculator Plus Adder (ACC Plus). Further reforms are necessary to provide meaningful reductions in the cost shift to facilitate attainment of the State's climate goals, and ease cost burdens on non-NEM customers who are disproportionately lower-income and reside in disadvantaged communities.[3]

II. DISCUSSION

A. Eliminate, or at a minimum, annually update the ACC Plus Glidepath for Non-CARE and FERA customers.

The PD designed the ACC Plus to achieve "a nine-year simple payback period for a stand-alone system", an appropriate amount that "[ensures] customer-sited renewable distributed generation grows sustainably."[4] However, the ACC Plus glidepath is not necessary to maintain a 9-year simple payback period target beginning in 2024 based on the PD model. As various parties point out, the PD model's inputs are overly conservative and result in inflated ACC Plus adders that further reduce real payback periods.[5] When these assumptions are corrected to match

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[1] Rules of Practice and Procedure, Rule 14(d).

[2] FOF 88 and 93.

[3] Proposed Decision, at 180.

[4] Proposed Decision, at 77.

[5] Such inputs include lower than observed rate escalation, unreasonably high installed solar costs, and lower than observed installed system size.

with observed reality, NBT tariff customers realize payback periods faster than the 9 years the ACC Plus is designed to achieve in 2023. If the final decision does not eliminate the adder, Cal Advocates supports TURN's recommendation that adders "should be subject to adjustment over time." By locking-in incentive levels for its glidepath, the PD is determining adder incentives that will persist through at least 2036 based on today's market conditions.

1. The PD's Cost of Solar Should Not Be Further Increased.

The PD adopts a cost of solar estimate of $3.30 per watt which represents a compromise value between the NREL Annual Technology Baseline cost of $2.34 per watt and the Lawrence Berkeley National Laboratory's ("LBNL") Tracking the Sun cost of $3.80 per watt.[6] The Joint IOUs recommend the Commission use reported EnergySage solar costs of $2.80 per watt,[7] as Solar Energy Industries Association (SEIA) relied on the EnergySage database to calculate payback periods in other states.[8] These data points show that the PD's cost of solar estimate is conservatively high.

The final decision should not exceed the $3.30 per watt estimate. Using a cost of solar estimate of $2.80 per watt and assuming no ACC Plus adder, ***simple*** payback periods in 2023 for PG&E, SCE and SDG&E decline from 9.71, 10.78, and 5.96 years, to 8.26, 9.16, and 5.06 years, respectively. These payback period estimates are understated given that they assume no retail rate escalation or other state incentives (e.g., the Self Generation Incentive Program) in future years.

2. Payback Periods Must Factor Retail Rate Escalation

Several parties[9] share Cal Advocates' concern[10] that the PD's determination of ACC Plus excludes consideration of rate escalation. Specifically, the PD's method of calibrating ACC Plus amounts based on simple payback periods does not reflect the fact that actual payback periods realized by customers will be shorter. Simple payback periods assume the savings of the first year of a project will continue at the same annual amount. Yet, the evidence shows that annual savings under the NBT will increase over time, as customers will continue to offset their own use

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[6] PD, at 79-80.

[7] Joint IOUs Comments, at 7-8.

[8] Joint IOUs Comments, at 8. Interestingly, the most recent value shows a value of $2.69/watt.

[9] TURN Comments, at 6 and Joint IOUs Comments, at 8.

[10] Cal Advocates Comments, at 5-6.

at fast-growing retail rates. When future rate increases are properly accounted for, NBT customers can attain payback periods between 4.35 years and 7.65 years[11] without the ACC Plus, even assuming a conservative escalation rate of 4%.[12] Even when assuming the solar parties'[13] high cost of solar estimate of $3.80 per watt, payback periods between 5.06 and 6.94 years are achievable without the ACC Plus.[14]

Other model assumptions inflate ACC Plus adders and inaccurately extend forecasted payback periods. The IOUs estimate significantly reduced payback periods after adjusting the modeled system size and customer demand profiles to better reflect the average NEM customer and system.[15] After correcting all the aforementioned inputs (i.e. cost of solar, retail rate escalation, and system size), the model reports payback periods between 2.7 and 4.9 years for a solar-only system installed in 2023.[16] Therefore, providing successor tariff customers with ACC Plus will only perpetuate and exacerbate the inequitable cost shift.

3. The NBT is Overly Generous in Terms of Return on Investment and Cost-Effectiveness

TURN also forecasted that customers can realize 20-year internal rates of return ranging from 14.7% to 43.6% on the PD's NBT. These returns exceed the historical S&P 500 annual returns of 10%[17] with minimal risk for the customer and shows the overly generous nature of the NBT. TURN also recalculated cost effectiveness scores for the PD's NBT, finding that[18] the NBT does not represent a meaningful improvement in cost effectiveness[19] as it provides equivalent or greater value to participants compared to the NEM 2.0 tariff examined in the

[11] Calculated using the PD tool.

[12] Cal Advocates Comments, at 6. As TURN points out, the Commission recently presented information on rate trends to the Legislature and forecasted annual retail rate increases of up to 9% through 2025. TURN Comments, at 6.

[13] SEIA-VS Comments, at 3.

[14] Calculated using the PD tool.

[15] Joint IOU Comments, at 7.

[16] Calculated using the PD tool.

[17] https://seekingalpha.com/article/4502739-average-stock-market-return.

[18] When considering a more realistic 8% escalation in rates, payback periods are even shorter.

[19] From the perspective of the customer.

Lookback Study. For example, the Ratepayer Impact Measure (RIM) scores[20] hardly improved over those calculated for the NEM look back study. In fact, they worsened for SCE and SDG&E.[21] For these reasons, the Commission should disregard parties' characterization of the glidepath as too steep or inadequate to support continued solar adoption.

B. The Commission Should Reform Legacy NEM 1.0 and 2.0 Tariffs to Meaningfully Reduce the Total Cost Shift.

The PD's reforms will not meaningfully reduce the cost shift due to its inaction on legacy customers.[22] NEM 1.0 and NEM 2.0 customers will continue adding billions of dollars in costs to non-participating customers[23] every year. The Coalition of Utility Employees (CUE) estimates that over the next 10 years, the legacy NEM cost shift amounts to shifting about $40 billion[24] of cost to non-participants.[25]

CUE, the Joint IOUs and TURN[26] correctly recognize the problematic scale of the legacy NEM cost shift, and these parties as well as Sierra Club propose commonsense solutions that appropriately balance the needs of participants, non-participants, the grid, and the state's climate goals. The Commission should, at minimum, adopt such measures. These include:

- Sierra Club's proposal for legacy customers to take service on highly differentiated TOU rate five years after interconnection.[27]
- TURN's[28] proposal, which Cal Advocates also proposed in its opening comments,[29] to limit retention of legacy net metering tariffs to the original customer.

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[20] Which the PD correctly relied on to inform the successor tariff.

[21] TURN Comments, at 4.

[22] Proposed Decision, at 180.

[23] CUE Comments, at 4.

[24] This estimate is likely conservative as it averages $4 billion in cost shifting per year whereas Cal Advocates estimates a cost shift $4.6 billion/year this year alone – Cal Advocates, at 9.

[25] CUE Comments, at 4.

[26] CUE, Joint IOUs and TURN.

[27] CUE Comments, at 6; Sierra Club Comments, at 9 which also mentions support from NRDC, CA Wind Energy Association, TURN and the Independent Energy Producers Association.

[28] TURN Comments, at 11.

[29] Cal Advocates Comments, at 13.

- CUE's proposal to transition legacy NEM customers to the new tariff eight years after interconnection. This proposal is reasonable and CUE estimates that doing so will reduce the cost shift by 23%.[30]

III. CONCLUSION

For the reasons stated here, Cal Advocates' proposed changes to the Proposed Decision in its Opening and Reply Comments should be adopted.

Respectfully submitted,

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[30] CUE Comments, at 4.