



**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
(Filed September 3, 2020)

**SIERRA CLUB OPENING COMMENTS ON PROPOSED DECISION REVISING
NET ENERGY METERING TARIFF AND SUBTARIFFS**

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SUMMARY OF RECOMMENDED CHANGES TO PROPOSED DECISION

For Residential Market Rate Successor Tariff Customers:

1. Eliminate the illegal and discriminatory \$8/kW Grid Benefits Charge, and instead:
 - o Require successor tariff customers to pay Non-Bypassable Charges on gross energy consumption; and
 - o Require PG&E successor tariff customers to take service under the recently approved E-ELEC rate so that, like SCE’s TOU-D-PRIME rate and SDG&E’s EV-TOU-5 rate, the electrification rates successor tariff customers must subscribe to all have a fixed charge component associated with the marginal cost of service.

For a 6 kW system, the difference in fixed charges per month between the PD and Sierra Club’s recommendations are estimated as follows:

| | PD | | | Recommendation | | |
|---------------------------------|------|------|-------|----------------|---------|---------|
| | PG&E | SCE | SDG&E | PG&E | SCE | SDG&E |
| Fixed Charge with Eligible Rate | \$0 | \$12 | \$16 | \$15 | \$12 | \$16 |
| GPC | \$48 | \$48 | \$48 | \$0 | \$0 | \$0 |
| NBC Only ⁱ | n/a | n/a | n/a | \$9.48 | \$9.36 | \$6.96 |
| Total | \$48 | \$60 | \$64 | \$24.98 | \$21.36 | \$22.96 |

2. Replace the proposed per kW Market Transition Credit for general market customers with step-downs in export compensation toward avoided cost that fix export compensation by TOU period for 15 years and do not escalate with rates.

For Existing Market Rate Residential NEM Customers:

1. Rather than renege on the Commission’s promise to retain NEM for 20 years by reducing the term of NEM enrollment to 15 years, maintain NEM for existing customers and move them to the electrification rates used for successor tariff customers after five years from interconnection.

ⁱ Per kW NBC estimates taken from Exh. PAO-01, Direct Test. of B. Gutierrez and N. Chau at 3-15:18–3-15:20, Table 3-1. To determine per kW amounts for NBCs only, the Total T&D per kW values were subtracted from the Total Combined Per kW Values. The result was then multiplied by 6 to obtain an estimate of per kW values for NBCs only on a 6 kW system.

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Pursuant to Rule 14.3(a) of the California Public Utilities Commission (“Commission”) Rules of Practice and Procedure, Sierra Club timely files these Opening Comments on the Proposed Decision Revising Net Energy Metering Tariff and Subtariffs (“PD”).¹

I. INTRODUCTION

States that have reduced rooftop solar compensation from retail rates through gradual and predictable step-downs have succeeded in maintaining solar deployment while those that made immediate and substantial cuts triggered industry layoffs and precipitous declines in installations. The PD takes the latter path. By proposing future solar customers take service under highly differentiated electrification rates, immediately cutting export compensation by 68 to 84 percent,² and imposing a discriminatory \$8/kW grid participation charge (“GPC”), the PD would eviscerate rooftop solar deployment and with it, the climate, land use, and local reliability benefits it provides to all Californians.

While the PD purports to support solar+storage deployment through a rapidly declining and untested market transition credit (“MTC”) to achieve a 10-year payback on solar and storage systems, its calculations are based on flawed assumptions that significantly understate observed system costs and ignore the many logistical obstacles the vast majority of solar installers would face in offering solar+storage systems by May of this year when the successor tariff would go into effect. The PD’s treatment of existing NEM customers is equally flawed. Rather than transition existing NEM customers to electrification rates five years from system interconnection

¹ These Opening Comments are limited to responding to the PD’s treatment of existing NEM and successor tariff general market residential customers. Low-income residential customers are addressed in separate opening comments filed jointly with GRID Alternatives and Vote Solar.

² Exh. CSA-02, Rebuttal Test. of B. Heavner and J. Plaisted at 47:10–47:15.

and achieve immediate climate, grid reliability, and non-participant benefits in a manner consistent with Commission precedent, the PD instead opts to violate the Commission's repeated commitment to NEM customers by reducing the enrollment period from 20 to 15 years.

The Commission must substantially revise the PD to correct its numerous factual and legal errors. The future of distributed generation in California is at stake. The GPC should be eliminated. It discriminates against solar customers in direct contravention of the Public Utility Regulatory Policy Act ("PURPA"). Instead, the Commission should require successor tariff customers to pay non-bypassable charges ("NBCs") on total energy consumption. This ensures solar customers fully contribute to public purpose programs and avoids the illegal discriminatory impact of the GPC. The Commission should also require PG&E successor tariff customers to take service under the now approved E-ELEC rate so that, along with SCE's TOU-D-PRIME rate and SDG&E's EV-TOU-2 rate, all successor tariff customers enroll in highly differentiated rates with a fixed charge that recovers marginal costs of service such as billing, which do not depend on customer usage.

Mirroring other states that successfully transitioned from NEM, the PD should transition the market through gradual declines in export compensation rather than the proposed MTC. While Sierra Club proposed fixed export compensation that locks in for 20 years starting at the electrification rate and declining in ten steps to avoided cost, there are multiple ways to construct step-downs in export compensation. The necessary components to include are sufficient steps to gradually transition the market and that lock in export compensation for a term sufficient to support project financing and reasonable certainty in system value.

With regard to existing customers, the PD proposes to breach the Commission's repeated commitment to allow NEM customers to retain service under the NEM tariff for 20 years. The Commission should revise the PD to instead move existing customers to electrification rates five years from interconnection. Sierra Club, along with all parties to the Joint Recommendations, including Cal Advocates, TURN, CUE, IEP, NRDC and CalWEA, supported this policy change.³ Transitioning existing NEM customers to electrification rates is consistent with Commission precedent and furthers multiple Commission policy objectives. The cost-based

³ Cal Advocates Opening Br., App. A, at A-5–A-6 (Sect. 5, Part 1) ("Joint Recommendations"). The only difference between this aspect of the Joint Recommendations and Sierra Club's position is that Sierra Club would expand the exemption from transitioning to electrification rates from CARE/FERA customers to all low-income customers, defined as households at or below 80% area median income.

nature of electrification rates reduces non-participant impacts, discourages energy use during peak periods when carbon intensity and demands on the grid are highest, and increases the operational cost savings of electric vehicles and appliances, which in turn encourages the deeper greenhouse gas reductions from the building and vehicles sectors necessary for California to meet its climate objectives.⁴ Importantly, moving existing NEM customers to electrification rates five years from interconnection will have an immediate and meaningful impact on facilitating the electrification of gas appliances and vehicles. Waiting 15 years to move those customers off NEM will not. If the Commission is indeed serious about making changes that “ensure California can meet its climate and clean energy objectives,”⁵ it should retain NEM for the promised 20-year period and instead transition existing NEM customers to electrification rates.

II. DISCUSSION

A. The PD Would Devastate California’s Rooftop Solar Industry and its Corresponding Climate, Air Quality, Land Use, Resiliency and Local Reliability Benefits.

1. Experiences in Other States Demonstrate the PD’s Draconian Approach to Immediately and Deeply Cutting Rooftop Solar Compensation Will Collapse the Solar Market.

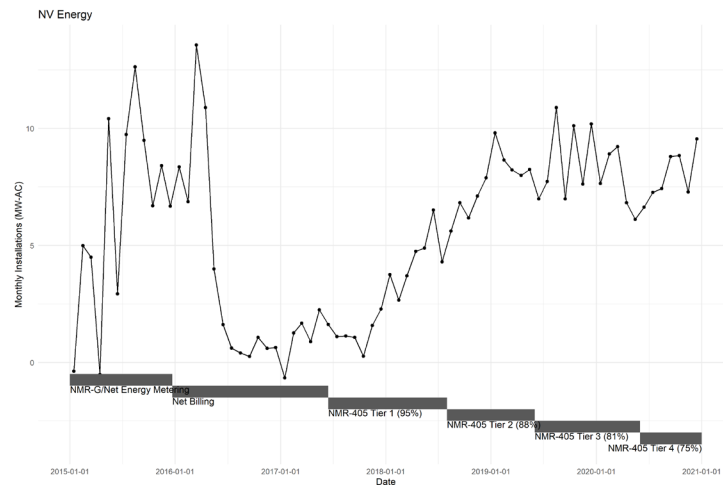
The PD’s deep and immediate changes to rooftop solar compensation will devastate rooftop solar deployment in California. Nevada provides an instructive case study. In late 2015, the PUC of Nevada (“PUCN”) moved existing and future NEM customers to avoided cost for exports through declining steps that did not vintage NEM systems, so customers installing a system would be subject to a series of reductions in export compensation that would reduce system value over time.⁶ As illustrated in the graph below, deployment plummeted when the PUCN instituted this change. In response to public backlash, including lawsuits and a ballot initiative, the PUCN adopted a legacy period of 20 years for existing NEM customers, and the state legislature passed AB 405, which set export compensation on a gradually declining path

⁴ Sierra Club Opening Br. at 8–12 (explaining the broadly agreed-upon equity, cost recovery, and climate benefits of electrification rates for customers with on-site solar). For a full discussion of the benefits, cost-impacts, and legal basis for moving existing NEM customers to electrification rates, *see* Exh. SCL-01, Direct Test. of M. Vespa at 6–23; Exh. SCL-02, Direct Test. of Dr. Camp.

⁵ PD at 122.

⁶ Modified Final Order, Docket No. 15-07041/42, (Nev. Pub. Util. Comm’n., Feb. 12, 2016), https://pucweb1.state.nv.us/PDF/AxImages/DOCKETS_2015_THRU_PRESENT/2015-7/9692.pdf.

based on percentages of the retail rate in capacity-based tranches, with a 20-year legacy period.⁷ After implementing AB 405, installations began to climb again and despite declines in export compensation, have remained stable, indicating that “a tariff with stepdowns can keep a stable rate of growth for solar.”⁸



Requiring successor tariff customers to enroll in rates with a high differential between midday and evening periods plus a fixed charge component already reduces solar compensation by approximately 20 percent.⁹ On top of this change, the PD would immediately reduce export compensation to avoided cost, an approximately 68 to 84 percent reduction from current rates,¹⁰ and impose an \$8/kW GPC. The PD’s changes are therefore far more severe and precipitous than those of Nevada. The MTC described in the PD is insufficient to blunt the impact of these changes. Setting aside flaws in the payback period calculations upon which the MTC is premised and the myriad challenges for many solar providers to be in a position to offer solar+storage systems before the MTC declines, there is no MTC in SDG&E’s service territory, and the MTC in PG&E’s and SCE’s service territories offsets a fraction of the GPC for general market customers. One can scarcely imagine a scheme more hostile to the future of distributed generation in California than that contemplated under the PD. To properly balance the statutory requirements of ensuring “customer-sited renewable distributed generation continues to grow

⁷ A.B. 405, 79th Leg. (Nev. 2017), https://www.leg.state.nv.us/Session/79th2017/Bills/AB/AB405_EN.pdf

⁸ Exh. ASO-02, Rebuttal Test. of A. Gong at 11:10–11; 12, Fig. 4: NV Energy Monthly Residential Installations.

⁹ Sierra Club Opening Br. at 21.

¹⁰ PD at 111 (*citing* CALSSA Opening Br. at 187).

sustainably” and “total benefits...are approximately equal to total costs,” the PD should be revised to provide far more gradual changes to rooftop solar compensation.¹¹

2. The PD Commits Multiple Factual Errors in Claiming it is Designed to Ensure a 10-Year Payback in Solar + Storage Systems.

The PD commits multiple factual errors in concluding that “[o]nly CALSSA disputes the NREL estimate of \$2.34 per Watt as the cost of solar,” that “this is the best estimate of the cost of solar available in this proceeding,” and that this estimate should be used to determine the impact of the PD on solar payback periods.¹² First, multiple parties to this proceeding raised concerns that cost data from NREL’s Annual Technology Baseline (“ATB”) is substantially below *actual* solar costs due to its exclusion of costs such as developer profits, developer fees, and financing fees.¹³ Multiple parties also recommended the Commission instead rely on the most recent “Tracking the Sun,” which is based off actual installed prices rather than idealized estimates.¹⁴ In contrast to the ATB, Tracking the Sun found the average cost of solar for residential customers in California was \$3.80 per Watt.¹⁵ In claiming idealized estimates of solar costs are preferable to actual market data, the PD commits legal and factual error and cannot credibly claim to be designed to achieve a 10-year payback for a solar+storage system. Moreover, while the PD asserts that “a 10-year payback period is reasonable,” the terms of the successor tariff are based off an assumption of a 10-year *simple* payback, which assumes up-front cash payment that avoids financing costs that lengthen payback periods. For all but the wealthiest customers able to pay cash for a solar+storage system, the PD’s claim of a 10-year payback is a fiction.

3. The PD Ignores Record Evidence on the Lack of Market Readiness to Immediately Deploy Solar + Storage Systems

The PD further errs in presuming customer cost is the only current barrier to widespread storage adoption. While the PD asserts it is focused on “transition[ing] the solar market to a solar paired with storage market,” its rush to do so ignores market readiness and supply chain

¹¹ Pub. Util. Code § 2827.1(b).

¹² PD at 70, 160 (Finding of Fact 51–52).

¹³ *See, e.g.*, Exh. ASO-01, Direct Test. of A. Gong at 5:3–9; SEIA/VS Opening Br. at 34–35; Sierra Club Opening Br. at 39.

¹⁴ SEIA/VS Opening Br. at 35; CALSSA Opening Br. at 32.

¹⁵ Exh. CSA-01, Direct Test. of B. Heavner and J. Plaisted at 67:6. Accounting for the investment tax credit and operation and maintenance, CALSSA estimated \$2.64/Watt in 2022, increasing to \$3.35 in 2024 assuming investment tax credit expiration. *Id.* at 68.

constraints of storage technologies.¹⁶ The PD contemplates a sunset for NEM 2.0 within 120 days of adoption of a final decision.¹⁷ It is not plausible that by roughly May 2022, the many solar providers that currently do not offer storage will be able to secure supplies of storage systems, adjust their marketing and train their staff in installations. These concerns are even more acute in light of global supply chain issues, increased prices for battery components and materials, and competing demands for batteries to support the rapidly growing global EV market.¹⁸ Accordingly, the PD's proposed MTC will be ineffectual in actually transitioning the market to solar+storage. While the PD claims "the purpose of this credit is to ensure the continued growth of the market," it is not designed to do so.¹⁹ Given the severe cuts contemplated under the PD and the lack of availability and market readiness for many solar providers to offer solar+storage systems, the MTC would step down before the market has had the chance to adapt to the successor tariff. Further, there is nothing in the record to suggest that future cost declines in solar+storage systems would come anywhere close to matching the 25 percent annual reduction in the MTC. The MTC does not ensure sustainable growth of customer-sited generation, and it is factual error for the PD to claim otherwise.

The distributed storage market rests on the back of the solar market.²⁰ Yet the PD would cause the market for solar-only systems to immediately collapse. Under the successor tariff terms imposed by the PD, the simple payback period for a solar-only system sized to meet a non-CARE household's load is 13.1 years in PG&E's service territory and 12.9 years in SCE's service territory when accounting for the full value of the MTC.²¹ Payback periods will increase to 14.5 and 16.5 years once the MTC has expired.²² Because these numbers reflect a simple payback period, the payback for customers that finance their systems will be even higher. Payback periods of this length will severely contract the rooftop solar market.²³ The

¹⁶ PD at 83.

¹⁷ PD at 153.

¹⁸ See CALSSA Opening Br. at 110–111.

¹⁹ PD at 117.

²⁰ CALSSA Opening Br. at 2–3.

²¹ PD, App. B at B4, Table 2: Residential Customer, post-MTC.

²² *Id.*

²³ See CSA-01, Direct Test. of B. Heavner and J. Plaisted, at 61:2–5 (“[A] seven-year cost recovery is the ‘sweet spot’ for customers to sign up for a solar energy system. The E3 whitepaper agrees with this focus on customer economics as the key to ensuring continued customer interest in solar, and includes a target cost recovery period of 7.5 years.”) (*citing* E3 White Paper at 29–32).

Commission should be under no illusions that the PD will put California’s many smaller solar companies out of business before they have the opportunity to adjust to the successor tariff and in doing so, undermines its own stated objective of transitioning the market toward solar+storage installations.

4. The PD Errs in Consulting with the CEC *After* Imposing Severe Cuts to Rooftop Solar Compensation that Threaten the Solar Mandate for New Homes under Title 24.

The PD errs in imposing dramatic and immediate cuts to export compensation without having first analyzed the impact those cuts may have on the cost-effectiveness of the Title 24 solar mandate for new homes. As the PD acknowledges, “many parties expressed concern regarding the impact of the successor tariff” on Title 24’s solar mandate, yet despite having a guiding principle requiring coordination with the CEC, the PD makes no effort to address those concerns.²⁴ If the solar mandate is no longer cost effective due to the combined impact of required enrollment in electrification rates, severe cuts to export compensation and a \$8/kW GPC, it will risk elimination.²⁵ The cost-effectiveness score for the solar mandate is sensitive to changes in export compensation.²⁶ E3’s analysis for the CEC found that reducing export compensation to avoided costs but otherwise retaining the existing NEM 2.0 structure would decrease the average benefits of rooftop PV by “about 31%,” significantly dropping the cost-effectiveness scores.²⁷ E3’s analysis did not evaluate the additional impact on cost-effectiveness of the \$8/kW GPC nor the switch to electrification rates for rooftop solar customers.²⁸ Additionally, under the successor tariff, customers installing solar pursuant to the Title 24 mandate will not be eligible for the MTC.²⁹ Yet the PD offers no analysis of the impact of the successor tariff on required Title 24 cost-effectiveness findings. Indeed, the PD devotes only one sentence to this issue, stating that the Commission “intends to collaborate with the California

²⁴ PD at 9, 155.

²⁵ Cal. Pub. Res. Code § 25402(b)(3) (requiring CEC standards to be cost-effective); Cal. Pub. Res. Code § 25402(a)(1) (requiring the CEC to update and revise standards periodically as necessary).

²⁶ SEIA/VS Opening Br. at 80–81; CALSSA Opening Br. at 40–42.

²⁷ E3, *Building Energy Efficiency Measure Proposal to the California Energy Commission for the 2019 Update to the Title 24 Part 6 Building Energy Efficiency Standards: Rooftop Solar PV System*, at 44 (Sept. 2017), <https://efiling.energy.ca.gov/GetDocument.aspx?tn=221366&DocumentContentId=27228>.

²⁸ SEIA/VS Opening Br. at 81; CALSSA Opening Br. at 41; Tr., Vol. 1 at 47:21–48:3 (C. Peterman Cross).

²⁹ PD at 117.

Energy Commission on the Title 24 regulation and its interactions with the successor tariff.”³⁰

The PD’s vague assertion of an intention to collaborate on an undefined solution to a problem created by this tariff—coordinating with the CEC after the new tariff is already adopted – makes a mockery of the Guiding Principle that the successor tariff be coordinated with Title 24 Building Energy Efficiency Standards.³¹ Given this utter lack of legitimate coordination, the PD should be revised to adopt Sierra Club’s recommendations, which allow for meaningful reductions in rooftop solar compensation while reducing the risk that the PD will undermine Title 24 solar requirements.

5. By Severely Contracting the Solar Market, the PD Deprives California of the Critical Climate, Land Conservation and Local Reliability Benefits of Distributed Generation.

While the PD asserts that the successor tariff should “ensure California can meet its climate and clean energy objectives,”³² it contains no analysis of how California will do so with the drastic reductions in distributed generation deployment that will result from successor tariff adoption. California is already falling far short in achieving the annual reductions in greenhouse gas pollution necessary to meet its 2030 climate requirements.³³ Yet in failing to provide a reasonable glidepath that allows the industry to adjust, the PD would impede a key climate, land conservation, and local reliability solution when it is most needed.

Significant additional distributed solar is needed in addition to utility-scale generation to meet California’s SB 100 requirements due to the land use constraints of utility-scale resources.³⁴ The SB 100 Joint Agency Report projects 69.4 GW of additional utility-scale solar coming online by 2045, which will carry an approximately 500,000 to 600,000 acre footprint.³⁵ California’s open spaces, working lands, and sensitive habitats are already threatened by

³⁰ PD at 155.

³¹ PD at 9 (citing Guiding Principle (e)).

³² *Id.* at 122.

³³ See, e.g. Andrew Sheller, *California isn’t cutting its greenhouse gas emissions fast enough. Here’s why*, Sacramento Bee (Dec. 14, 2021), <https://www.sacbee.com/news/politics-government/capitol-alert/article256557156.html> (noting California achieved an average 1.3 percent GHG reduction in 2017–2019 and will need 4 percent annual reductions to meet 2030 GHG targets).

³⁴ See Exh. SCL-01, Direct Test. of M. Vespa at 28:30–29:1 (citing CEC, CPUC, CARB, *2021 SB 100 Joint Agency Report Summary, Achieving 100% Clean Energy Electricity in California*, at 10, Docket No. 19-SB-100 (Mar. 15, 2021)). Contrary to party statements otherwise, the inclusion of customer-sited solar deployment as a fixed input in the SB 100 Report’s analysis rather than an output of the model does not indicate that such deployment is unnecessary to meet the state’s objectives.

³⁵ Sierra Club Opening Br. at 25, fn. 88.

development pressure, including the development of utility-scale solar plants.³⁶ In contrast, rooftop solar does not result in land use impacts because it is sited on the existing built environment. Not only does the PD fail to grapple with the increased land use pressures and feasibility of even greater levels of utility scale solar than needed to comply with SB 100, but it commits factual error in suggesting the land use benefits of rooftop solar are accounted for in the Avoided Cost Calculator.³⁷ They are not.³⁸

Distributed solar also provides local capacity and reliability benefits that utility-scale resources cannot given many local capacity areas are urbanized and largely built-out. Approximately two-thirds of local capacity requirements are being met with gas-fired generation, which contributes to localized air pollution and cannot be retired absent deployment of other in-basin generating resources.³⁹ As CAISO has noted, rooftop solar provides local generation that battery storage can then utilize to meet local reliability needs in the event of transmission contingencies.⁴⁰ Absent continued deployment, California will lose a key tool in reducing its dependency on gas-fired generation in local capacity areas. Yet the PD ignores this important benefit in developing the successor tariff, kicking the can down the road to consider quantifying locational and other benefits of distributed generation “at a future time.”⁴¹ Given the severe market contraction that will result from the PD’s adoption, even assuming the Commission finally accounts for the locational value of distributed generation,⁴² the market will no longer be in a position to timely react. By disregarding the full benefits rooftop solar provides, the PD violates the requirement that the successor tariff account for its “total benefits,”⁴³ and moves California backward in ending its reliance on gas-fired generation.

³⁶ *Id.* at 25–26.

³⁷ PD at 61.

³⁸ E3, *2021 Distributed Energy Resources Avoided Cost Calculator Documentation Version 1b*, (June 22, 2021) (no mention of land use or conservation), <https://willdan.box.com/v/2021CPUCAvoidedCosts>.

³⁹ Sierra Club Opening Br. at 27 (citing CPUC, *The State of the Resource Adequacy Market – Revised*, at 17 (Jan. 13, 2020); R.19-11-009, *CAISO Final Local Capacity Technical Study for 2021*, at 3 (May 1, 2020)) <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M3339/K545/339545100.PDF>.

⁴⁰ Sierra Club Opening Br. at 27–28 (noting CAISO VP’s express statement that behind the meter solar increases the opportunity for storage to “be a major player” in serving local capacity needs).

⁴¹ PD at 60.

⁴² The Commission stated it would develop locational values five years ago in the NEM 2.0 decision but failed to do so. D.16-01-044, *Decision Adopting Successor to Net Energy Metering Tariff*, at 61 (Jan. 28, 2016) (“D.16-01-044”).

⁴³ Pub. Util. Code § 2827.1(b)(4).

B. The Commission Should Eliminate the Discriminatory and Illegal Grid Participation Charge and Replace it with Non-Bypassable Charges on Total Energy Use and Enrollment in Electrification Rates with a Fixed Charge Component Approximately Equal to Marginal Customer Costs.

1. The PD's Grid Benefits Charge Violates PURPA

The PD adopts an \$8/kW GPC to “recover lost utility revenues” when customers reduce their purchases of grid-supplied electricity.⁴⁴ The GPC collects costs of grid services, including transmission and distribution service and, in doing so, violates PURPA’s prohibition on discriminatory charges on customer-generators. Rooftop solar customers have rights as qualifying facilities (“QFs”) under federal law that include the right to purchase services such as supplementary or backup power from their utility at a just, reasonable, and non-discriminatory rate.⁴⁵ The Commission may only approve a different charge for rooftop solar customers than applies to non-solar customers—such as the GPC—if based on “consistent systemwide costing principles” and only “to the extent that such rates apply to the utility’s other customers with similar load or other cost-related characteristics.”⁴⁶ The GPC fails to meet these criteria. Indeed, the PD arrived at the \$8/kW charge by arbitrarily picking a number that was higher than that proposed by PAO but lower than the Joint IOUs and, unlike both those proposals, is the same across utilities “to be easy to understand.”⁴⁷ Accordingly, the PD commits legal error by imposing a GPC with absolutely no cost basis.

The GPC also collects costs common to solar and non-solar customers—distribution and transmission based on inconsistent costing principles. Distribution and transmission costs are collected through both the fixed GPC and the volumetric import rates from solar customers while only collected from non-solar customers through their volumetric import rate. This results in the solar customer paying more for electricity than the non-solar customer who imports the same amount of grid-supplied electricity (i.e., “with similar load or other cost-related characteristics”).⁴⁸ For example, under the GPC when the solar customer goes on vacation, they

⁴⁴ PD at 97.

⁴⁵ 18 C.F.R. §§ 292.203(a), 292.204 (setting forth eligibility criteria for “qualifying small power production facilities” that include “renewable resources” as a primary energy source and up to 80 MW as maximum size); 292.305; 16 U.S.C. § 824a-3(a), (c); *FERC v. Mississippi*, 456 U.S. 742, 750–51 (1982); 18 C.F.R. § 292.305(a)(1)(ii) (rates “[s]hall not discriminate against any qualifying facility in comparison to rates for sales to other customers served by the electric utility”).

⁴⁶ 18 C.F.R. § 292.305(a)(2).

⁴⁷ PD at 126–127.

⁴⁸ *See* 18 CFR § 292.305(a)(2).

will have to pay the full GPC for that month, even though their usage of solar power behind the meter may drop substantially. Similarly, if the system is down for a period to replace the inverter, the customer will still pay the GPC as though the system is operating. Conversely, a residential customer without a rooftop solar system who goes on a month-long vacation would pay almost nothing toward the shared costs allocable to the GPC because those costs would be assessed based on their minimal volumetric usage. Collecting the same distribution and transmission costs through a fixed charge from solar customers (in addition to embedded in their kilowatt hour charge) while collecting from non-solar customers only based on their kilowatt hour consumption discriminates in violation of federal law.

The PD's imposition of a GPC is virtually unprecedented and has been subject to legal challenge where it has been imposed. The Arizona Corporation Commission ("ACC") recently rejected a grid charge that is conceptually indistinguishable (although significantly smaller) than the PD's GPC as inconsistent with both Arizona law and PURPA.⁴⁹ Other states have similarly rejected grid charges and other charges specific to customers with solar that were designed to increase revenues from solar customers than non-solar customers with similar grid-supplied electricity consumption pay.⁵⁰ The only state commission to approve a grid charge for solar

⁴⁹ Decision No. 78317 at 358, (Ariz. Corp. Comm'n Nov. 9, 2021) ("[u]nder state and federal law, a utility may not discriminate against DG solar customers, and it must justify any difference in treatment based on accurate data and consistently applied cost-allocation principles, including that charges applied to DG customers also apply to non-DG customers with similar load characteristics.").

⁵⁰ Order ¶¶ 45–47, Docket No. 18-WSEE-328RTS (Kan. Corp. Comm'n, Feb. 25, 2021); Recommended Decision, Case No. 17-00255-UT (N.M. Pub. Reg. Comm'n, June 29, 2018). Adopted in pertinent part by the Public Regulation Commission of the State of New Mexico; Order, at 198, Case No. U-20162 (Mich. Pub. Serv. Comm'n, May 2, 2019), <https://mi-psc.force.com/sfc/servlet.shepherd/version/download/068t0000004SM3yAAG>; Adopting the Administrative Law Judge's Proposal for Decision, Notice of Proposal or Decision, at 285–86 (Mich. Pub. Serv. Comm'n, Mar. 5, 2019), <https://mi-psc.force.com/sfc/servlet.shepherd/version/download/068t0000004HLiHAAW>; Staff Briefing Papers, at 9, Docket No. E999/CI-16-512 (Minn. Pub. Utils. Comm'n, Nov. 9, 2017), <https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=showPoup&documentId={80B77D5F-0000-C61B-9997-5A54425728AD}&documentTitle=201711-137125-01>; see also *In re Westar*, 460 P.3d 821, 825, 827 (Kan. 2020) (finding a demand charge only imposed on solar customers to be discriminatory because it results in solar customers "paying more for their electricity than other customers" with similar usage); Report & Order, at 60–69, Docket No. 13-035-184 (Utah Pub. Serv. Comm'n, Aug. 29, 2014) (rejecting a proposed charge that would recoup revenues that DG customers avoid by reducing usage); *In re Proposed Adoption of Rules of the Minn. Pub. Utils. Comm'n Governing Cogeneration and Small Power Production*, Docket No. E-999 (R-80-560), 1983 WL 908113 at *3, *64 (Minn. PUC, Mar. 7, 1983) (even when connected to costs, an additional charge for customer-generators discriminates compared to how the same costs are collected from non-generators).

customers is the Alabama Public Service Commission,⁵¹ and that charge is subject to an enforcement action in federal court for violating PURPA.⁵² FERC Chairman Glick and Commissioner Clements specifically commented that Alabama’s grid charge likely violates PURPA’s prohibition on discriminatory charges for solar customers.⁵³ Were the Commission to adopt the proposed GPC, California would join the ranks of Alabama in improperly imposing discriminatory fees on its rooftop solar customers and be subject to challenge for violations of federal law.

2. Requiring Solar Customers to Pay NBCs Based on Total Energy Consumption Enables Full Contributions to NBC-Funded Programs and Avoids the Legal Pitfalls of the Discriminatory GPC.

Under NEM 2.0, customers pay non-bypassable charges (“NBCs”), defined in D.16-01-044 to include the Public Purpose Charge, Nuclear Decommissioning Charge, Competition Transition Charge, and Department of Water Resources bond charges, on imported energy.⁵⁴ While the PD states that “[t]he disagreement in this proceeding is whether the list of charges should be expanded,”⁵⁵ the proceeding also presented the question of whether the list of existing NBCs should be imposed on total energy consumption for successor tariff customers rather than only on imported energy.⁵⁶ Requiring NBCs to be assessed on total energy consumption does not present the same PURPA concerns as the PD’s contemplated GPC because NBCs are not “rates for sales” of electricity from the utility to the customer—which is what PURPA’s non-discrimination provision covers.⁵⁷ Instead, they are taxes used to support programs. Accordingly, whereas distribution and transmission costs are costs of providing service and cannot be charged differently for NEM customers versus non-NEM customers, an NBC on gross

⁵¹ New York imposes a charge on solar customers that is intended to collect only non-bypassable public benefit costs that all customers pay but are not otherwise collected from net-metered customers. Order Establishing Net Metering Successor Tariff, at 26–27, Case No. 15-E-0751 (New York Pub. Serv. Comm’n, July 16, 2020). The charge, unlike APS’s GAC, does not collect costs common to all residential customers, nor does it require solar customers to pay more for electricity imports than non-solar customers with similar usage. Sierra Club proposed the same type of charge here.

⁵² Pet. for Enforcement Under the Pub. Util. Regulatory Policies Act of 1978, FERC Docket No. EL-2164 (Mar. 1, 2021) (Accession No. 20210331-5332).

⁵³ *Bankston v. Ala. Pub. Serv. Comm’n*, 175 FERC ¶ 61,181 (2021) (Glick, Chairman, and Clements, Comm’r, concurring).

⁵⁴ D.16-01-044 at 89.

⁵⁵ PD at 101.

⁵⁶ *Id.* at 105. See, e.g., Sierra Club Opening Br. at 29–30 (proposing existing NBCs be imposed on gross consumption).

⁵⁷ 16 U.S.C. 824a-3(c).

consumption does not run afoul of PURPA because it is not collecting costs of providing electricity to the NEM customer. Unlike the scenario described above where a solar customer would be required to pay the full GPC even if away from home for a month and using minimal energy, that customer would not pay NBCs since they are based on per-kWh energy use. Requiring NBCs on total energy consumption therefore does not discriminate between solar and non-solar customers while also ensuring important public purpose programs are fully funded from all ratepayers as customers adopt solar+storage systems and decrease their grid-imported energy.

While determining gross consumption could involve a separate meter, the Commission should ensure successor tariff customers have the option of using methodologies that avoid the added cost of separate metering and minimize administrative complexity, such as a per-kW charge based on average system performance.⁵⁸ Specific methodologies for determining NBCs for successor tariff customers could be finalized through an advice letter process and use data on modeled system performance to estimate annual generation and the average percentage of that generation that is consumed behind the meter.

3. In Lieu of the GPC, The PD Should Require PG&E Successor Tariff Customers to Enroll in E-ELEC so All Eligible Rates Include a Fixed Charge Component Align with the Average Marginal Cost of Service.

The PD proposes that PG&E successor tariff customers enroll in its EV2-A rate, SDG&E customers in EV-TOU-5, and SCE customers in TOU-D-PRIME.⁵⁹ EV2-A does not have a fixed charge component, EV-TOU-5 has a \$16 monthly customer charge, and TOU-D-PRIME includes a monthly charge of approximately \$12.⁶⁰ While parties including the Joint IOUs and Sierra Club had proposed E-ELEC be an eligible rate for PG&E successor tariff customers, the PD commits factual error in rejecting this proposal, asserting that PG&E’s E-ELEC rate has “not yet approved by the Commission.”⁶¹ E-ELEC, a highly differentiated electrification rate with a \$15 monthly fixed charge “that will reduce the marginal cost of electrification for residential

⁵⁸ For example, depending on the utility, Cal Advocates estimates NBCs would amount to between \$1.16 and \$1.56 per kW. Exh. PAO-01, Direct Test. of B. Gutierrez and N. Chau at 3-15, Table 3-1.

⁵⁹ PD at 124, Table 6.

⁶⁰ SDG&E, *Electric Vehicle Plans*, <https://www.sdge.com/residential/pricing-plans/about-our-pricing-plans/electric-vehicle-plans> (last visited Jan. 6, 2021); SCE, *Rate Options for Clean Energy Technology* <https://www.sce.com/residential/rates/electric-vehicle-plans> (last visited Jan. 6, 2022) (TOU-D-Prime has a \$0.40 daily charge).

⁶¹ PD at 124.

customers and therefore support the state’s policy goals surrounding electrification of residences and transportation,” was approved in D.21-11-016.⁶²

Fixed charges are most appropriately assessed for “costs that do not depend on the customer’s usage,” such as “the cost of hooking up to the system,” and limited to “about the 12 to 15-dollar range.”⁶³ In contrast, charges like the GPC can “drive customers away from solar and storage DERs, even though solar provides the less-expensive, on-site, off-peak clean power needed to supply other types of DERs, and storage addresses the state’s critical needs for peak capacity and improved resilience.”⁶⁴ Together with assessing NBCs on gross consumption, requiring PG&E successor tariff customers to enroll in E-ELEC ensures all successor tariff customers pay their marginal customer costs and fully contribute to public purpose programs without having the deleterious impact on DER deployment of the PD’s impermissible GPC.

C. To Actually Transition the Market, the PD Should Replace its Transition Credit with Step-Downs in Export Compensation Based on Cumulative Capacity of Installed Systems.

The PD commits factual error in suggesting that “[t]he glide path portion of the Market Transition Credit will be a stepped-down approach as recommended by SEIA/Vote Solar, CALSSA, and Sierra Club.”⁶⁵ Critically, the glidepath recommended by Sierra Club was based on new installed capacity rather than time to respond to actual market conditions.⁶⁶ In contrast, the PD would both impose steep and immediate cuts to rooftop solar compensation in addition to a MTC that declines 25 percent annually regardless of deployment levels, there is a significant risk the MTC would evaporate before the market has adjusted to the new tariff, assuming it even can. The PD should be revised to provide step-downs based on installed capacity in each IOU service territory rather than annual reductions.

⁶² D.21-11-006, *Decision Adopting Marginal Costs, Revenue Allocation, and Rate Designs for Pacific Gas and Electric Company*, at 115 (Nov. 19, 2021).

⁶³ Tr., Vol. 8 at 1419:5–12 (T. Beach, SEIA/Vote Solar). *See also* NEM Lookback Study at 52–55 (identifying marginal customer costs, defined as “costs associated with various customer costs, including but not limited to the customer’s transformer, conductors, meter, and billing processing,” as \$156/year for PG&E customers, \$124/year for SCE, and \$152/year for SDG&E).

⁶⁴ Exh. SVS-03, Direct Test. of T. Beach at 37:18–22.

⁶⁵ PD at 119.

⁶⁶ Sierra Club Opening Br. at 22–23 (recommending a glide path based on installed capacity rather than time based on lessons learned from the California Solar Initiative program, where time-based adjustments to incentive levels created artificial market conditions around transition times and failed to respond to actual market conditions).

To effectively transition the market, the Commission should aim to modify existing mechanisms rather than create untested new ones. In lieu of immediately dropping export compensation to avoided cost and creating a bill credit, the PD should be revised to simply step-down export compensation to avoided cost. This ensures an orderly and gradual reduction in NEM compensation through a mechanism (export compensation rates) that solar providers are familiar with and can more easily adjust to than a novel bill crediting system that adds an additional layer of complexity. While the PD finds the “glide path proposal by CALSSA and SEIA/Vote Solar” inadequate,⁶⁷ the PD errs in pivoting to a bill credit structure rather than keeping the export compensation step-down structure with modifications. For example, adjustments could include: no escalation in export compensation with retail rates as proposed by Sierra Club; shortening the term a customer would receive export compensation above avoided cost from 20 to 15 years; and setting initial export compensation at a level below current retail rates varying by utility to reflect the relative differences in rates. This structure provides needed continuity to the solar market and longer-term certainty to enable project financing⁶⁸ while also incentivizing solar+storage systems. As the PD notes, because successor tariff customers are required to take service under an electrification rate, the high peak to off-peak differential already provides an incentive “to divert energy usage to lower-priced hours when the solar system is producing and/or when charging storage.”⁶⁹ This incentive will increase over time as export compensation stays constant for a 15-year lock-in while retail rates continue to escalate.

In addition, the PD’s approach to setting export compensation at averaged monthly values by climate zone is overly complicated and should be simplified to conform to the Guiding Principle that the success tariff be “understandable to all customers and should be uniform, to the extent possible, across all utilities.”⁷⁰ First, most, if not all parties using the avoided cost calculator as a basis to derive export compensation used values that were averaged across utility service territory, not by individual climate zone.⁷¹ There are sixteen climate zones in California

⁶⁷ PD at 73.

⁶⁸ The PD’s proposal to lock-in export compensation for only 5 years is wholly inadequate. *Id.* at 180–181. To be financed, projects require longer range certainty. *See* Exh. SVS-04, Rebuttal Test. of T. Beach at 20:6–20:8, 48:5–48:20. Accordingly, Sierra Club recommends the PD be revised to provide certainty on export compensation rates for 15 years.

⁶⁹ PD at 97.

⁷⁰ *Id.* at 9 (citing Guiding Principle (f)); 113–115.

⁷¹ *See, e.g.*, Tr., Vol. 5 at 816:1–12 (C. Kerrigan, Joint IOUs) (Joint IOUs clarifying that proposal is to use avoided cost values averaged across utility service territory, not by climate zone).

with ten in PG&E service territory.⁷² In requiring export compensation be determined by climate zone, the PD fails to provide uniformity even across utility service territory, much less across California and commits legal error by needlessly running afoul of Guiding Principle (f). Second, changing export compensation on an hourly basis is difficult for customers to understand, particularly given customers will enroll in TOU rates with the same import rate across TOU periods. To be understandable, export compensation should be based on avoided cost values that are averaged across TOU period for each utility service territory, not climate zone.

D. The PD Errs by Reneging on the Commission’s Repeated Commitment to Keep Existing NEM Customers on the NEM Tariff for 20 Years Rather than Achieving Immediate Climate and Ratepayer Benefits and Remaining Faithful to Commission Precedent by Moving Existing NEM Customers to Electrification Rates Five Years From Interconnection.

1. Transitioning Existing NEM Customers to Electrification Rates is Consistent with Commission Precedent; Shortening the Legacy Period for NEM is Not.

Past Commission decisions have determined that both NEM 1.0 and NEM 2.0 customers are guaranteed the option to remain on NEM until 20 years after their date of interconnection.⁷³ With the PD, the Commission goes back on its word.⁷⁴ A deal is a deal. Californians making the financial decision to invest in rooftop solar systems justifiably relied on repeated Commission decisions unequivocally stating that NEM could be retained for 20 years. With the PD, the Commission sends the signal to the market and to the million Californians that invested in solar systems that it is an institution that cannot be trusted. The Commission should honor its

⁷² See PG&E, *Understand Your Energy Statement*, (customer-facing resource explaining that PG&E’s ten climate zones have varying baselines used to calculate customer bills), https://www.pge.com/en_US/residential/your-account/your-bill/understand-your-bill/important-definitions/common-rate-terms.page; R.18-07-006, *Affordability Metrics Framework Staff Proposal* at 9, Fig. 1 (Jan. 24, 2020) (map showing climate zones and electric utility service territories), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M325/K620/325620620.PDF>.

⁷³ D.14-03-041, *Decision Establishing a Transition Period Pursuant to Assembly Bill 327 for Customers Enrolled in Net Energy Metering Tariffs*, at 18–20 (Apr. 4, 2014) (“D.14-03-041”) (holding NEM 1.0 customers have a right to stay on NEM 1.0 for 20 years from their individual interconnection date), <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M089/K386/89386131.PDF>; D.15-07-001, *Decision on Residential Rate Reform for Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company and Transition to Time-of-Use Rates*, at 154–155 (July 13, 2015) (“D.15-07-001”); D.16-01-044 at 100–101 (holding that NEM 2.0 customers also have a right to stay on NEM 2.0 for 20 years from their interconnection date).

⁷⁴ PD at 149 (shortening the NEM duration for existing NEM customers from 20 to 15 years).

commitment to retaining NEM for 20 years and reject shortening the term to 15 years as contemplated under the PD.

Retaining NEM for 20 years as promised by the Commission does not mean there cannot be adjustments to the underlying rates and overall compensation for existing NEM customers. As Sierra Club explained throughout this proceeding, while the Commission has been clear that NEM customers have the right to retain NEM for 20 years, this guarantees a continuing right to the NEM overlay (retail rate compensation for exports) on their rates, not to any particular underlying rate or rate structure.⁷⁵ Changes to the underlying rates and rate structures through which NEM customers take service is permitted and the Commission has repeatedly signaled that changes to rates should be expected. For example, in D.16-01-044, the Decision adopting NEM 2.0, the Commission stated:

To avoid any misunderstanding, we reiterate our observation in D.15-07-001 that [NEM] customers do not have any entitlement to the continuation of any particular underlying rate design, or particular rates. The 20-year period we designate applies only to a customer-generator's ability to continue service under the NEM successor tariff established by this decision.⁷⁶

These repeated findings are also explicitly stated to prospective NEM customers in the Commission's Solar Consumer Protection Handbook.⁷⁷ To mitigate the impact of changing rate structures for existing NEM customers, the Commission has allowed customers to remain on their existing rates for at least five years.⁷⁸ Ensuring a NEM customer can stay on their existing rate for five years is the balance the Commission has struck between moving to rates that better align with grid conditions and avoiding abrupt impacts for NEM customers to provide greater certainty.⁷⁹ Changing the underlying rate structure to which NEM customers subscribe—provided any such change occurs after five years of a customer subscribing to NEM—is in keeping with Commission precedent. The PD's shortening of the NEM legacy period is not.

⁷⁵ Sierra Club Opening Br. at 43–45.

⁷⁶ D.16-01-044 at 100–101. *See also* D.15-07-001 at 154–155 (reiterating that NEM customers do not have the right to retain their underlying rate, and that rates and rate structures regularly change); D.14-03-041 at 19 (acknowledging that expected changes to residential rate design could reduce customer bill savings from NEM participation).

⁷⁷ CPUC, *California Solar Consumer Protection Guide*, at 16 (Jan. 2021), https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/solar-guide/solar-consumer-protection-guide-2021_english.pdf.

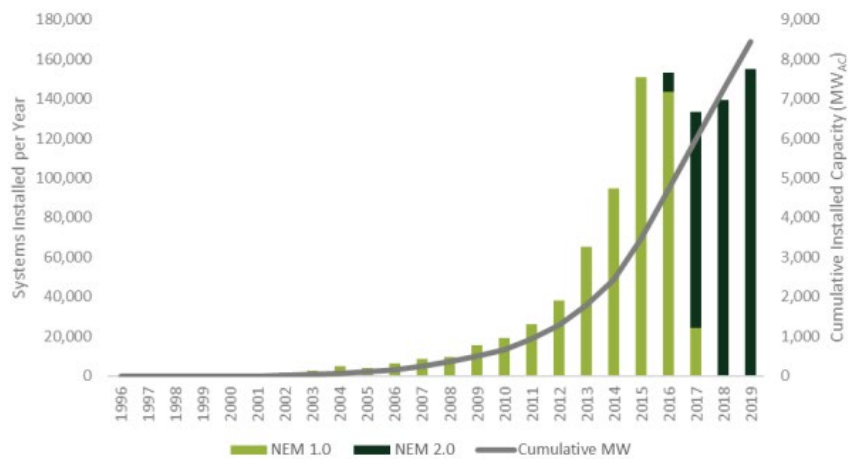
⁷⁸ *Id.*

⁷⁹ D.16-01-044 at 93–94.

2. Transitioning Existing NEM Customers to Electrification Rates Will Provide Immediate Climate Benefits by Encouraging Electrification of Fossil-Fueled Appliances and Vehicles; Any Climate Benefits of Shortening the NEM Legacy Period are Distant and Speculative.

The climate crisis demands immediate and rapid greenhouse gas (“GHG”) reductions and an end to fossil fuel reliance. For a PD that purports to further California’s climate goals and electrification, shortening NEM enrollment duration to 15 years for existing customers is a far inferior policy tool compared to moving existing customers to electrification rates five years from interconnection. Setting aside the successor tariff’s chilling effect on DER deployment from its illegal and significant GPC, it will be years before the vast majority of NEM customers conclude their 15-year NEM subscription period, as illustrated in the graph below from the NEM Lookback Study.⁸⁰

FIGURE 3-1: NUMBER AND CAPACITY OF NEM SYSTEMS INSTALLED BY NEM 1.0 VS. NEM 2.0



In contrast, moving existing NEM customers to an electrification rate five years from interconnection would capture all NEM 1.0 customers—who are currently permitted to enroll in tiered rates and are therefore not discouraged from using energy during high GHG periods—and would provide immediate and strong price signals to avoid peak energy use. Moreover, as demonstrated in the uncontested analysis of Sierra Club Witness Dr. Camp, rate schedules “E-ELEC, EV2, and TOU-D PRIME provide incentive for solar NEM customers to electrify their homes and vehicles by reducing their operational cost.”⁸¹ For example, under Dr. Camp’s analysis, with electrification of gas appliances and vehicles, a NEM 1.0 customer in Fresno that

⁸⁰ NEM Lookback Study at 24.

⁸¹ Exh. SCL-02, Direct Test. of Dr. Camp at 3:17–19.

moved to E-ELEC would have annual bill savings of \$754 relative to their prior tiered rate.⁸² With electrification comes substantial reduction in climate pollution as solar customers that electrify their appliances and vehicles reduce household GHG pollution by 59 to 78 percent.⁸³ As described by both Sierra Club and the Joint Recommendations, at least three months prior to switching to the electrification rate,⁸⁴ the IOU should provide marketing and outreach to existing NEM customers that includes information on technologies and available incentives that can improve system value, such as heat pump water and space heaters, electric vehicles, and batteries.⁸⁵ In addition to cost savings from electrification and load shifting technologies, materials would also explain the climate benefits of electrification and how using energy during periods of mid-day solar generation and limiting evening usage reduces climate and air pollution.

California has over 1 million residential solar customers. As the Commission has recognized, electrification of homes with solar is a high opportunity area, or “low hanging fruit,” in decarbonizing California’s buildings.⁸⁶ Yet most existing NEM customers are on rates that fail to send strong price signals to electrify. Electrification rates coupled with marketing and outreach on benefits and available incentives can reach this important market segment and accelerate building and vehicle electrification. The time to send this price signal and jumpstart building electrification is now. Accordingly, the PD errs in claiming transitioning existing NEM customers to the successor tariff in 15 years instead of 20 “supports our objective to promote electrification.”⁸⁷ If the Commission is serious about NEM reform that achieves climate benefits, it will move existing NEM customers to electrification rates.

3. The PD Commits Factual Error by Claiming the Proposed Storage Rebate for Existing NEM 2.0 Customers will Promote Storage Because the Successor Tariff’s High GPC Would Significantly Increase Customer Bills.

The PD would offer NEM 2.0 customers a \$0.20/Wh storage rebate, which would be

⁸² *Id.* at 16–17.

⁸³ *Id.* at 3:15–16; 4:3–6.

⁸⁴ Sierra Club originally proposed several potential electrification rates for existing NEM customers to transition to. Exh. SCL-01 at 2:16–28. The Commission could provide those options or require enrollment in the same rates to which successor tariff customers must subscribe.

⁸⁵ Sierra Club Opening Br. at 40; Joint Recommendations at A-9.

⁸⁶ Exh. SCL-01, Direct Test. of M. Vespa at 2:1–2 (citing CEC, *Session 2 Presentation – IEPR Commissioner Workshop on Building Decarbonization – Building Decarbonization & the CPUC*, at Slide 10 (May 25, 2021)).

⁸⁷ PD at 150.

available for four years and decrease by 25 percent each year.⁸⁸ A Tesla Powerwall provides 14,000 Wh of total energy, yielding a \$2,800 rebate for NEM 2.0 customers that move to the successor tariff within a year of PD adoption.⁸⁹ The average NEM 2.0 system size in SDG&E service territory is 5.6 kW.⁹⁰ This means that if an average NEM 2.0 customer were to accept this rebate and move to the successor tariff, that customer would now be charged close to \$45 per month under the PD’s GPC. That customer would also be required to enroll in SDG&E’s EV-TOU-5 rate, which includes a \$16 customer charge.⁹¹ Therefore, in exchange for a one-time \$2,800 rebate, the NEM 2.0 customer would now face over \$60 in monthly fees, or over \$720 per year. In less than four years, the PD’s storage “incentive” would be consumed by new monthly fees and the former NEM 2.0 customer would now be faced with substantial new charges that would not have been incurred had the customer remained on the NEM tariff for the remainder of their term. The PD’s suggestion that its storage incentives “support our objective to promote storage”⁹² is factual error. Because the draconian terms of the successor tariff would result in significant economic loss to potential participants, these incentives will largely go unutilized and discourage storage investment. To offer an effective storage incentive that moves existing NEM customers to the successor tariff, the Commission should revise the PD to move existing customers to electrification rates, increasing the value proposition of storage, and then offer an incentive to a successor tariff that does not include fixed charges of the magnitude contemplated under the PD.

III. CONCLUSION

For the reasons set forth above, Sierra Club respectfully requests the Commission modify the PD as set forth in Sierra Club’s Summary of Recommendations.

Dated: January 7, 2022

Respectfully submitted,

/s/ Matthew Vespa

Matthew Vespa

⁸⁸ PD at 150.

⁸⁹ Tesla, *Tesla Powerwall 2 Datasheet*, https://www.tesla.com/sites/default/files/pdfs/powerwall/Powerwall_2_AC_Datasheet_EN_NA.pdf. A power wall provides 13,500 Wh of usable energy. *Id.*

⁹⁰ NEM Lookback Study at 30. In PG&E service territory, the average NEM 2.0 system size is 5.3 kW and for SCE service territory, average system size is 6.9 kW. *Id.*

⁹¹ SDG&E, *Schedule EV-TOU-5* (Nov. 1, 2021), https://tariff.sdge.com/tm2/pdf/ELEC_ELEC-SCHEDS_EV-TOU-5.pdf; PD at 182.

⁹² PD at 150.

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