



**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 D. 16-01-044, and to Address Other Issues Related to Net Energy Metering.

Rulemaking 20-08-020
(Filed August 27, 2020)

**REPLY BRIEF OF
THE SOLAR ENERGY INDUSTRIES ASSOCIATION AND VOTE SOLAR**

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SUMMARY OF RECOMMENDATIONS

The Solar Energy Industries Association and Vote Solar respectfully request that the California Public Utilities Commission do the following in its decision adopting a successor Net Energy Metering Tariff:

- For residential customers who are not low-income, adopt the residential general market tariff proposal advanced by SEIA and Vote Solar comprised of the following elements:
 - For imports from the utility, the residential NEM customers of Pacific Gas and Electric Company and San Diego Gas & Electric Company (“SDG&E”) would be required to take service from one of the utility’s available untiered time-of-use (“TOU”) rates designed to promote beneficial electrification. This requirement would take effect at the outset of the NEM 3.0 program. The residential customers of Southern California Edison Company (“SCE”) would continue to be allowed to use the residential default TOU rates, as well as SCE’s electrification rate, because the design of SCE’s rates has more aggressive TOU pricing. If there is a delay in the approval of an electrification rate for SDG&E, the existing schedules DR-SES and EV-TOU-5 should be made available to the initial NEM 3.0 customers in SDG&E’s territory.
 - Compensation for exports for residential DG customers under NEM 3.0 would be gradually reduced over time from the level set in the current NEM 2.0 tariff, in a series of steps until the benefits (avoided costs, plus a resiliency adder for solar + storage systems) of behind the meter distributed generation approximately equals the cost.
 - The first step will occur in 2023 with PG&E and SDG&E residential customers required to use the electrification rate.
 - The remaining steps will reduce the export rates for all three IOUs (a specified percentage of the NEM 2.0 export rate based on retail rates), with each step triggered when specific aggregate capacities of residential systems are installed under NEM 3.0 on each IOU system.
 - A customer will retain their year-specific export compensation percentage for 20 years.
 - Interval netting of imports and exports should be retained, with the continued use of today’s one-hour interval for residential customers.
 - NEM 3.0 customers should be billed on a monthly basis, with the option to retain the current annual billing. The true-up of NEM charges and credits should

continue to occur annually, with all NEM customers moving to an annual true-up in April each year.

- A customer should be allowed to oversize their system by 50%, with annual net surplus generation compensated at avoided costs.
- Retain the current NEM 2.0 compensation structure for all non-residential customers.
- Adopt the proposals for Environmental Justice and Social Justice Communities, including low-income customers, advanced by Grid Alternatives, the Sierra Club and Vote Solar:
 - Decouple the savings on the NEM exports of qualifying low-income residential customers (defined as those with household income at or below 80% of Area Median Income) from their effective underlying retail rate and assign them a time-varying rate for their exports that is equal to the current default residential TOU rate offered by the customer's IOU in 2021.
 - Allow clean distributed generation projects located in Environmental Justice and Social Justice Communities and owned and controlled by the community to retain the NEM 2.0 structure.
- Adopt an implementation period for the successor tariff which allows sufficient time for (1) the required regulatory process; (2) customer education; (3) industry transition; and (4) billing system changes, approximately 14 months.
- Reject all proposals to modify the terms and conditions pursuant to which customers under the NEM 1.0 and NEM 2.0 tariffs take service.
- Allow all NEM customers – residential and non-residential – in all three IOU service territories, to elect Critical Peak Pricing or Peak Day Pricing rates on any rate option that they select.

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**REPLY BRIEF OF
THE SOLAR ENERGY INDUSTRIES ASSOCIATION AND VOTE SOLAR**

In accord with Rule 13.1 of the Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), the Solar Energy Industries Association (“SEIA”) and Vote Solar (“VS”) reply to the opening briefs submitted in the above-captioned proceeding on August 31, 2021.

I. INTRODUCTION

The successor general market residential Net Energy Metering (“NEM”) tariff proposal advanced by SEIA and Vote Solar is designed to bring into equilibrium, through a measured and deliberate process, two conflicting statutory directives - (1) customer-sited renewable distributed generation continues to grow sustainably;¹ and (2) the total benefits of the standard contract or tariff to all customers and the electrical system are approximately equal to the total costs.² This process is designed to reach a point at which rooftop solar+ storage growth is sustainable, *and* the costs and benefits of the successor tariff are “approximately equal.” And thus, while the Joint IOUs assert that “[t]he lens through which every aspect of [the solar parties’] proposals is presented makes the private benefits to NEM customers paramount to the costs to

¹ *Public Utilities Code Section 2827.1(b)(1).*

² *Public Utilities Code Section 2827.1(b)(4).*

nonparticipants or the value of the NEM facilities to the grid,”³ that assertion is simply not accurate. To the contrary, the evidence shows that, under the SEIA/Vote Solar proposal, customers who install solar and take service on the successor tariff will receive a decreasing level of compensation. In other words, the value proposition to the solar customer will not be as beneficial compared to the current NEM 2.0 construct. This is appropriate given declining solar costs and increasing rates. But the reduction in compensation will be done in a manner which allows the industry to grow sustainably, and, most important, allows future solar customers to incorporate on-site storage that will make their output more valuable to the system as a whole. Including storage as part of the solar installation will add significantly to the cost and complexity of that installation. If the compensation for exported power is cut too quickly and too drastically, the industry will not be able to manage the transition to paired solar and storage systems. The SEIA/Vote Solar proposal rationally balances the statutory dictates and allows the industry to evolve in a way that maximizes its contribution to meeting California’s peak grid needs and to advancing the state’s critical climate goals.

In contrast to the balanced approach offered by SEIA and Vote Solar, the Joint IOUs, and, to a comparable degree, the California Public Advocates (“CalPA”), The Utility Reform Network (“TURN”), and the Natural Resources Defense Council (“NRDC”), place sole emphasis on eliminating any and all conceivable cost shift between participants and non-participants, even if it renders the rooftop solar industry, which this Commission has spent decades and billions of dollars fostering, unsustainable. Indeed, the term “cost shift” is used **116** times in the Joint IOUs’ opening brief. A single-minded focus on reducing the cost shift is

³ Joint Opening Brief of Pacific Gas and Electric Company, San Diego Gas & Electric Company and Southern California Edison Company, R. 20-08-020 (August 31, 2021) (“Joint IOUs Brief”), pp. 95-96.

reflected in every element of the Joint IOUs’ proposal, as well as in most of the arguments on how their proposal meets the Guiding Principles. In contrast to their emphasis on ensuring “costs equal benefits” (which is not the statutory standard) they have made it crystal clear that the impact which their successor tariff proposal will have on the industry and California’s ability to retain a vibrant rooftop solar market has factored very little, if at all, into their thought process. Indeed, the Joint IOUs’ lead witness on the ability of the industry to grow after NEM reform stated on cross examination that, when she thought about what it meant to ensure that customer-sited renewable distributed generation continues to grow sustainably, she did not consider the successor tariff’s impact on the solar industry’s ability to grow.⁴

While the Joint IOUs may have the luxury of ignoring a statutory dictate, the Commission does not. As demonstrated on the record and discussed at length in SEIA’s and Vote Solar’s opening brief, the proposal advanced by the Joint IOUs, as well as those proffered by CalPA, TURN, and NRDC, will render solar and solar + storage installations an uneconomic investment for most California households. Under their harmful proposals, rooftop solar and storage will not only cease to “grow sustainably,” they will not grow at all. The Commission’s statutory mandate is to address *all* elements of PU Code Section 2827.1 in crafting a NEM successor tariff. The Commission should conclude that the SEIA/Vote Solar’s general market residential tariff proposal best balances and advances all the statutory requirements.

II. THE JOINT RECOMMENDATIONS HAVE NO PROCEDURAL OR SUBSTANTIVE MERIT AND CALL INTO QUESTION EXACTLY WHAT PROPOSAL THE PROPONENTS ARE ENDORSING

Six parties to the proceeding— all of whom share of a common view regarding net energy metering reform (i.e., immediate and drastic change is needed) - appended a common set of Joint

⁴ Tr. Vol. 2 (Joint IOUs-Tierney), p. 208, lines 11-17.

Recommendations to their respective briefs which set forth elements of a successor tariff.⁵

These Joint Recommendations should be rejected out of hand for a multitude of reasons including: (1) the JR parties are not clear in their advocacy for the Joint Recommendations; (2) the Joint Recommendations do not meet the Commission’s standard of review; (3) there is no record support for the long-term tariff proposal contained in the Joint Recommendations; (4) specific elements of the long-term successor tariff proposal contained in the Joint Recommendations have previously been refuted; and (5) there is no record support for the interim tariff proposal contained in the Joint Recommendations.

A. The JR Parties are not Clear in their Advocacy for the Joint Recommendations

While each of the JR Parties have dutifully appended the Joint Recommendations to their respective briefs, their “ask” of the Commission is unclear. Certain of these parties cite to the Joint Recommendations in their briefs, but continue to support their own previously submitted proposals (or at least portions thereof).⁶ Others support some of the Joint Recommendations, but not all.⁷ Along these lines, TURN states that the Commission “should endorse *key elements* of the Joint Recommendations relating to export compensation and a Grid Benefits Charge as an appropriate *framework* for evaluating the reasonableness of successor tariff proposals.”⁸ The

⁵ The six parties who append the Joint Recommendations to their briefs are TURN, CalPA, NRDC, the Independent Energy Producers Association (“IEP”), the Coalition of California Utility Employees (“CUE”) and the California Wind Energy Association (“CalWEA”) (collectively, “the JR Parties”).

⁶ See, e.g., Post Hearing Brief of the Natural Resources Defense Council, R. 20-08-020 (August 31, 2021 (“NRDC Brief”) p.41 (continues to support a market transition credit, yet such a mechanism is not included in the Joint Recommendations).

⁷ For example, TURN, CUE and CalWEA do not support Section 4 of the Joint Recommendations pertaining to low-income customers, while IEP does not support portions of Section 5 pertaining to transitioning NEM 1.0 and 2.0 customers to the successor tariff.

⁸ Opening Brief of the Utility Reform Network Regarding a Successor to the Current Net Energy Metering Tariff, R. 20-08-020 (August 31, 2021) (“TURN Brief”), p. 8 (emphasis added).

intent of this statement is unclear. Taken literally it means that the Commission should approve certain (but not all) elements of the Joint Recommendations, but only as a framework (not the underlying specifics) for the successor tariff. Indeed, TURN states that the specific successor tariff proposal presented in TURN’s opening brief is “fully aligned with the Joint Recommendations.”⁹ In other words, it appears that TURN is not advocating for full adoption of the Joint Recommendations but something similar.¹⁰ Similarly, throughout CalPA’s brief it describes and supports the specifics of its own proposal,¹¹ not the specifics of the Joint Recommendations. For example, CalPA requests that the Commission adopt the specifics of its proposal to compensate NEM exports at avoided costs, not the Joint Recommendations’ proposal.¹²

The confusion surrounding the Joint Recommendations is compounded by the fact that they contain proposals for *two* tariffs – one which is “interim” and would only be in effect for a couple of years, and the other which is long term, with an anticipated implementation date of January 2024. Thus, in reviewing the JR Parties’ briefs, and whatever support they advance for the Joint Recommendations, it is hard to discern whether the support applies to just the interim tariff or the long-term tariff, or both, or neither. Thus, for example, TURN states that it does not support the interim tariff as a long-term solution for a number of reasons, including that it fails to incorporate a Market Transition Credit (“MTC”) that can spur adoption by CARE customers.¹³

⁹ *Id.*, p. 68.

¹⁰ *Id.*, pp. 72-97 (advocating for the specifics of its own proposal).

¹¹ *See, e.g.*, Opening Brief of the Public Advocates Office, R. 20-08-02 (August 31, 2021) (“CalPA Brief”), p. 31 (“Cal Advocates’ proposal best balances equity concerns and the need to provide sustainable growth to BTM generation in California”), and p. 15 (“The Commission should adopt Cal Advocates’ proposal to compensate NEM exports at avoided costs.”).

¹² CalPA Brief, p. 15.

¹³ TURN Brief, p. 72.

But the long-term tariff proposal contained in the Joint Recommendations does not include a MTC either. Similarly, NRDC advocates for an MTC that does not exist in the Joint Recommendations¹⁴

Moreover, there is ambiguity in the terms of the Joint Recommendations. For example, CUE points to the fact that “[t]o provide more export compensation certainty to successor tariff customers, the Joint Recommendation offers an optional export compensation lock-in period of up to 10 years,” but then goes on to state that CUE “supports TURN’s version of this proposal to allow *new* participating customers to lock in the initial export compensation for five or ten years at the time of their initial subscription.”¹⁵ It is unclear how “TURN’s version” of the proposal is different than what is in the Joint Recommendations, but there must be a difference if one of the JR Parties is noting it.

B. The Joint Recommendations Do Not Meet the Commission’s Standard of Review

The Commission reviews “joint recommendations,” like the ones submitted by the JR Parties, using the standards applicable to settlements¹⁶ Thus, the Joint Recommendations must be reasonable in light of the record, consistent with the law, and in the public interest.¹⁷ One oft-cited element of the public interest is whether the settlement “is a reasonable compromise of positions taken by parties that represent the interests of a wide variety of customers that are affected by the terms of the [] settlement.”¹⁸ Indeed, in approving a settlement agreement

¹⁴ NRDC Brief, pp. 34-36.

¹⁵ Opening Brief of the Coalition of California Utility Employees, R. 20-08-020 (August 31, 2021) (“CUE Brief”), p.14.

¹⁶ D. 02-10-058, p. 6.

¹⁷ Rule 12.1(d) of the Commission’s Rules of Practice and Procedure.

¹⁸ D.18-11-027, Conclusion of Law 16; *see also*, D. 19-12-010, p. 12.

revising distribution-level interconnection rules, the Commission noted that “[t]he Proposed Settlement is in the public interest as it is the result of compromise and agreement among a wide range of industry and ratepayer representatives and responds to the needs of today’s distributed generation market.”¹⁹ With respect to contested settlements, the Commission takes an even closer look to determine whether the settlement “generally balances the various interests at stake.”²⁰ In this regard, the Commission has stated that it employs a heightened focus on the elements of the settlement, with that focus being on “whether the settling parties brought to the table representatives of all groups affected by the settlement.”²¹ The Joint Recommendations clearly have not met this standard.

While at first glance it may seem like JR Parties represent a diverse set of interests – consumer advocates, labor, an environmental group, and a renewable resource trade association – the reality is that the Joint Parties constitute a narrow consortium of parties which do not represent all, or even a fraction, of the interests at stake in this proceeding. The JR parties do not include any parties representing consumers who are currently, or in the future will be, customers who invest in behind the meter solar or solar + storage. Not only are the JR Parties void of any representative of behind-the-meter (“BTM”) solar customers, but they made no attempt to bring these representatives to the table.

Moreover, in looking at whether a settlement is reasonable, the Commission looks to whether the diverse group of stakeholders who participated in the negotiations “advocat[ed] positions based on rigorous analysis and technical support” and, as an outcome of these

¹⁹ D. 12-09-018, p. 3.

²⁰ D. 07-11-018, pp. 7-8.

²¹ *Id.*, p. 7 citing *Re Southern California Edison Company*, 1996, 64 Cal.P.U.C.2d 241, 267; *see also* D. 15-04-006, p. 12,

negotiations, “parties made a number of concessions relative to their initial positions on the issues of concern to them in order to reach agreement.”²² There is no evidence that such give-and-take negotiations took place or that there were meaningful concessions made. Indeed, three of the JR Parties – CalWEA, IEP, and CUE – did not even present proposals in this proceeding, so it is unclear what concessions they would have made. Moreover, it appears that when the JR Parties came to an impasse, one of the parties would just choose not to support a section of the Joint Recommendations,²³ or, in the alternative, the JR Parties included a broad range of ideas from which the Commission can select. For example, the Joint Recommendations state that the grid benefits charge (“GBC”) should be based on successor tariff customers’ BTM system size, energy production, *or* a portion of production consumed onsite.²⁴ This hardly narrows down how a GBC should be designed. Similarly, the Joint Recommendations contain two options for determining export compensation: (1) use the ACC only; or (2) use the ACC for non-energy values and actual hourly wholesale electricity prices for the energy supply value.²⁵ The individual members of the JR Parties have their preferences among the choices offered in the Joint Recommendations which they support in their respective briefs.²⁶ In short, there was no real give and take among the JR Parties and no meaningful concessions made.

²² D. 12-09-018, p. Attachment A, p. 10.

²³ For example, as noted previously, TURN does not support Section 4 of the Joint Recommendations.

²⁴ Joint Recommendations, Section 3.

²⁵ Joint Recommendation, Section 2.

²⁶ *See e.g.*, CUE Brief, p.13 (supporting use of the ACC for non-energy values and actual hourly wholesale electricity prices for the energy supply value for the purposes of setting the export compensation rate) and p. 16 (supporting the actual or estimated self-consumption attributable to BTM generation for calculation of the GBC). *See, also* NRDC Brief, p. 28 (supporting the use of hourly export values rather than values averaged across TOU periods; the Joint Recommendations offer both options).

C. There is No Record Support for the Long-Term Tariff Proposal Contained in the Joint Recommendations

In their respective briefs, when addressing Issue No. 3 in the Scoping Memo - what methods should the Commission use to analyze the program elements of a successor tariff - the JR Parties expressed a number of views. Thus, TURN stated that “the Commission should rely on the Participant Cost Test (PCT) and Rate Impact Measure (RIM) tests to evaluate the manner in which different successor tariff proposals balance the interests of participants and all customers.”²⁷ Similarly, CUE stated that a RIM value of 1.0 should be a prerequisite for a successor tariff.²⁸ However, to be “pragmatic” when considering successor tariff proposals, at a minimum, CUE asserted that the Commission “should apply a cutoff of 0.75 for the RIM score” and “only focus on the proposals from the parties...that pass the RIM 0.75 cutoff.”²⁹ NRDC opined that the RIM or cost shift estimates should be used to assess the impact on non-participants, while the PCT or payback periods should be used to assess the impact on participants.³⁰ Thus, while the JR Parties advocate for the use of various tests and metrics to assess the elements of a successor tariff, there is *nothing* on the record which provides the results of such tests or metrics for the long-term successor tariff proposal set forth in the Joint Recommendations. As discussed below, the elements of the Joint Recommendations are, for the most part, drawn from the proposals of their sponsors. However, when they are put together in varying ways, the results of the tests or metrics pursuant to which these parties have asserted the Commission must assess a successor tariff will vary. Indeed, given all the choices in the Joint

²⁷ TURN Brief, p. 6.

²⁸ CUE Brief, p. 9.

²⁹ *Id.*

³⁰ NRDC Brief, p. 17 and p. 19.

Recommendations, it is unclear exactly how the Joint Recommendations should be evaluated. In short, the metrics for the Joint Recommendations will not be the same as the results presented on the record by TURN, CalPA, and NRDC in support of their own proposals. Thus, while the JR Parties assert that the Commission must use the results of certain tests and the application of certain metrics to gauge the cost effectiveness of a successor tariff proposal, such results for the long-term successor tariff contained in the JR Parties' Joint Recommendations are simply not on the record. In fact, it does not appear they were ever calculated. There is nothing for the Commission to use to gauge the cost effectiveness of the proposal.

D. Specific Elements of the Joint Recommendations Have Previously Been Refuted

As referenced above, only three of the JR Parties submitted proposals for a successor tariff in this proceeding. Those proposals shared the key elements of (1) export compensation rate based on the ACC;³¹ and (2) assessment of a grid benefits charge (or Nonbypassable, Unavoidable or Shared Costs Charge);³² and (3) changes to the terms and conditions of service pursuant to which NEM 1.0 and NEM 2.0 customers take service.³³ CUE also supported these concepts in its testimony.³⁴ These three elements are pillars of the Joint Recommendations.³⁵ While the JR Parties have pulled the specifics of these foundational elements from their respective proposals (and in certain instances from the Joint IOUs' proposal), the fundamental

³¹ Exh. NRD-01 (Chhabra), pp. 15-16; TRN-01 (Chait) pp. 45-47; Exh. PAO-01(Gutierrez/Chau), Chapter 3, Section III.

³² Exh, NRD-01 (Chhabra)pp. 17-18; TRN-01 (Chait)pp. 48-51; Exh, PAO-01(Gutierrez/Chau), Chapter 3, Section V.B.

³³ Exh, NRD-01 (Chhabra), p. 23-24; TRN-01(Chait), p. 35; Exh. PAO-01, Chapter 4 (Gutierrez), Section II. A. 1

³⁴ Exh. CUE-01, pp. 15-18.

³⁵ Joint Recommendations, Sections 2, 3 and 5.

flaws with an export compensation rate based on the ACC (irrespective of its exact calculation), a GBC (irrespective of precision with respect to exactly what costs are recovered thereunder), and changing the terms and conditions of service for NEM 1.0 and NEM 2.0 customers remain the same. These JR Parties' proposals have not fundamentally changed merely because they are repackaged in a different format. The critical flaws which were exposed on the record and set forth in detail in the Opening Briefs of SEIA/VS and the California Solar & Storage Association ("CALSSA"), including severe consumer protection ramifications, remain the same.³⁶

The record shows that export compensation rates based on the ACC are not reasonable and should not be adopted by the Commission as part of the successor tariff because: (1) the ACC was not designed or intended to be used as a rate design tool;³⁷ (2) the ACC undervalues the solar export;³⁸ (3) the ACC can be volatile from year to year and provides no certainty to prospective customers;³⁹ and (4) an export rate based on the ACC is complicated for customers to understand.⁴⁰

Similarly the imposition of Grid Benefit Charges has been shown to be unjust and unreasonable as they (1) have the effect of limiting the economic size of solar installations;⁴¹ (2) are not consistent with cost causation;⁴² (3) are not equitable;⁴³ (4) may be illegal under the

³⁶ Opening Brief of the California Solar & Storage Association, R. 20-08-020 (August 31, 2021), ("CALSSA Brief"), pp. 97-102 and pp. 123-165; Opening Brief of the Solar Energy Industries Association and Vote Solar, R. 20-08-020 (August 31, 2021) ("SEIA/VS Brief") pp. 51-64, pp. 94-98.

³⁷ SEIA/VS Brief, pp.51-52.

³⁸ *Id.*, pp. 26-32.

³⁹ SEIA/ VS Brief, pp. 52-54; CALSSA Brief, pp. 91-92.

⁴⁰ SEIA/VS Brief, pp. 102-103; CALSSA Brief, pp. 97-99.

⁴¹ SEIA/VS Brief, pp. 58-59.

⁴² SEIA/VS Brief, pp. 59-61; CALSSA Brief, pp. 125-132.

⁴³ SEIA/VS Brief, p. 61.

Public Utilities Regulatory Policies Act;⁴⁴ (5) violate the Commission’s Rate Design Principles;⁴⁵ and (6) provide no certainty for prospective customers;⁴⁶ and (7) are complicated, hard to predict, and nearly impossible to explain to customers.⁴⁷

Finally, proposals to change the terms and conditions pursuant to which current NEM 1.0 and 2.0 customers take service break the compact that the Commission made with these customers in Decisions 16-01-044 and 14-03-041. Such an unprecedented step would have significant market and consumer protection implications.⁴⁸ Moreover, despite arguments to the contrary, allowing the NEM customer to take service on the TOU rate *of their choice* is one of the central elements of the NEM 2.0 tariff and thus is part of the Commission’s commitment to allow customers to maintain service on their current NEM tariff for 20 years.⁴⁹

Moreover, CalPA’s efforts to bolster the JR Parties’ recommendations to transition NEM 1.0 and NEM 2.0 customers to a successor tariff by calculating “a projected reduction in the NEM cost burden”⁵⁰ resulting from such transfer is for naught. As explained below, this material is extra-record and cannot be considered by the Commission.

E. There is No Record Support for the Interim Tariff

The concept of an “interim tariff” floated for the first time in the Joint Recommendations should be rejected out of hand. Commission decisions must be based on the record before the

⁴⁴ SEIA/ VS Brief, pp. 61-62; CALSSA Brief, pp.137-142.

⁴⁵ CALSSA Brief, p. 149.

⁴⁶ *Id.*, pp. 147-148.

⁴⁷ *Id.*, pp. 102-103 and pp. 150-156.

⁴⁸ SEIA/VS Brief, pp. 12-14; CALSSA Brief, pp. 227-228.

⁴⁹ SEIA/ VS Brief, pp. 124-125.

⁵⁰ Joint Recommendations, Section 5. *See also*, TURN Brief, p. 42 and CUE Brief, pp. 19-20 (referencing these extra record material).

Commission and cannot rely on extra-record information.⁵¹ In addressing extra record evidence provided in briefs, the Commission has stated:

The extra-record material contained in DRA’s briefs is inadmissible because Pacific has had no opportunity to cross-examine any witness on it. DRA contends that such material is simply argument. If that is so, it is not proper argument. The material serves no useful purpose because it cannot be considered by the Commission, either as fact or argument.⁵²

In an attempt to support their interim tariff proposal, TURN, on behalf of the JR Parties, “used its cost effectiveness model to assess the impact of the proposed interim successor tariff on residential customers with both stand-alone solar and solar plus paired storage.”⁵³ TURN’s efforts produced the results for a 20-year Total Resource Cost analysis, a 15-year Ratepayer Impact Measure, a 15-year Participant Cost Test, as well as discounted and simple paybacks for each of the three IOUs for both standalone solar and solar + storage.⁵⁴ Similar to CALPA’s efforts addressed above, TURN should not have wasted its time. The Commission cannot consider this information – it is extra record information on which no party has had the opportunity to cross examine any witness. This extra record evidence must be rejected by the Commission.

In addition to the lack of record support for the JR Parties’ brand new interim tariff, the impracticalities of this tariff are multifold. In essence what the JR Parties are suggesting is two separate and significant upheavals of the solar market in a two-year period. Of course, none of the members of the Joint Parties would be dealing with this upheaval, so it is “no skin off their

⁵¹ Decision 12-05-024, Finding of Fact No. 2.

⁵² Decision 92-06-065, 44, CPUC 2d 694, 1992 WL 613306 (Cal.P.U.C.)

⁵³ Joint Recommendations, Section 6, “Modeling Results for the proposed Interim Successor Tariff.”

⁵⁴ *Id.*

backs.” TURN asserts that if “the Commission provides clear and decisive guidance through a final decision in this phase, a transition tariff could be implemented promptly with minimal need for delay.”⁵⁵ But this simply is not accurate. The IOUs and solar industry would need to go through the same processes as if the interim tariff was the final tariff. Thus, the IOUs would be required to change their billing systems, educate their call center and other customer service representatives, and compile and make available educational material (in multiple languages) – all for a tariff which customers will only have the option to elect for less than a two-year period. Similarly, the industry would need to adjust to the interim tariff’s regulatory framework, ramp up new product offerings in response to that framework, and develop strategies for bringing those products to market. Then, the industry and the IOUs would have to turn around and do it all again in two years. Not only is this impractical and a significant waste of resources, but there is a high risk of customer confusion with the rapid transition from one tariff to the next. This level of confusion could quickly become a consumer protection nightmare for the Commission.

SEIA and Vote Solar would also note that TURN has now modified not only the implementation proposal set forth in its own proposal, but the implementation proposal advanced in the Joint Recommendations.⁵⁶ TURN’s new implementation proposal adds yet another phase to the process. This third phase would be for implementing elements that only TURN has advanced in this proceeding, such as (1) day-ahead pricing element for the energy supply components of ACC, (2) communication/dispatch protocols for paired storage, and (3) additional paired storage rate structures and compensation for calls during CAISO Stage 2 emergencies.⁵⁷

⁵⁵ TURN Brief, p.130.

⁵⁶ *Id.*

⁵⁷ *Id.*

The efficacy and desirability of adding these elements to a successor tariff have been refuted on the record.⁵⁸ Indeed, the fact that even TURN admits that the implementation of these elements can be kicked down the road a few years is indicative that these elements are not necessary for an effective successor tariff.

III. THE LEGAL FRAMEWORK FOR NET ENERGY METERING PROGRAMS SET FORTH IN THE JOINT IOUS' BRIEF NEEDS CORRECTING

The Joint IOUs start their brief by discussing what they deem “aspects of federal and state law that are especially pertinent to the NEM reforms posed to the Commission.”⁵⁹ SEIA and Vote Solar do not disagree that there are certain elements of state and federal law which must be considered in the Commission’s adoption of a successor tariff. However, the Joint IOUs “interpretation” and “application” of the statutes is, in part, questionable.

A. The Public Utility Regulatory Policies Act Does Not Create the Constraints on Successor NEM Tariff Alleged by the Joint IOUs

1. PURPA Does Not Limit Net Metering to Offsetting the Generation Component of the Rate

As defined by the Public Utility Regulatory Policies Act (“PURPA”), net metering means:

[S]ervice to an electric consumer under which electric energy generated by that electric consumer from an eligible on-site generating facility and delivered to the local distribution facilities may be used to offset electric energy provided by the electric utility to the electric consumer during the applicable billing period.⁶⁰

⁵⁸ SEIA/VS Brief, pp. 54-55 (addressing use of wholesale market prices as part of export compensation); CALSSA Brief, pp. 182-184 (addressing TURN’s dispatch proposal).

⁵⁹ Joint IOUs Brief, p. 5.

⁶⁰ See 16 U.S.C. Section 2621(d)(11)

The Joint IOUs offer an abridged version of this definition asserting that PURPA defines NEM as an “energy for energy” transaction between an energy consumer and the utility.⁶¹ They then use their own handiwork as basis for the following statement:

PURPA’s ‘energy for energy’ definition *suggests* that federal law provides no right to offset more than the generation component of the bill given that NEM generators are net consumers, not net producers, and do not supply transmission, distribution, ancillary or other services.⁶²

The Joint IOUs cite *nothing* for this proposition. There is nothing under federal law which dictates that NEM generators are restricted to compensation for the generation portion of their rate. The Joint IOUs strained interpretation should be given no credence.

Unfortunately, the Joint IOUs compound this falsity by asserting that California’s NEM program, by affording compensation to participants that exceeds the generation component of the rate, has been in violation of federal law for the past twenty-five years.⁶³ Their suggested remedy for this purported illegality is Commission approval of a GBC.⁶⁴ In short, the Joint IOUs have offered a made-up interpretation of federal law, used this interpretation to assert that the California NEM program is in violation of federal law, and then offered a remedy for that violation – a GBC. The Commission must ignore the Joint IOUs’ efforts to bend the law to fit their narrative. Indeed, the idea that the imposition of a GBC will remedy an illegality in the current NEM program is irrational, as GBC’s are very likely in violation of PURPA’s anti-discrimination provisions.⁶⁵ While the Federal Energy Regulatory Commission (“FERC”) has yet to rule on this issue, the law clearly states that, in order to charge a NEM customer a rate

⁶¹ Joint IOUs Brief, p. 8.

⁶² *Id.* (emphasis added).

⁶³ Joint IOUs Brief, p. 9.

⁶⁴ *Id.*, p. 70.

⁶⁵ CALSSA Brief, p. 137-142; SEIA /VS Brief, pp. 61-62; Sierra Club Brief, pp. 33-35.

which differs from that charged other customers, that rate must be (1) “based on accurate data”; (2) established using “consistent system wide costing principles”; and (3) “apply to the utility’s other customers with similar load or other cost-related characteristics.”⁶⁶ GBCs would impose higher fixed charges on NEM customers even if those customers have exactly the same usage and load profile for sales from the utility as do non-NEM customers.⁶⁷ Two FERC Commissioners have indicated that such charges violate PURPA.⁶⁸

2. PURPA Does Not Require Monthly True Ups

The Joint IOUs also turn to federal law to support their advocacy for monthly true ups. In this effort they cite two decisions - *Sun Edison LLC*, 129 FERC ¶ 61146 and *MidAmerican Energy Co.*, 94 FERC ¶ 61340 - in which the FERC explained that NEM participants must be net consumers of electricity and that it will only exert jurisdiction if the end-use customer participating in the net metering program produces more energy than it needs over the applicable billing period (and thus is considered to have made a net sale of energy). The Joint IOUs conclude that if these two cases are “applied literally” they “would require *any* compensation for excess energy after a *monthly* billing period ends to be set at an avoided cost rate.”⁶⁹ The Joint IOUs thus assert that by allowing NEM participants to roll their credits forward on a monthly basis, with a true up occurring at the end of a 12-month cycle, the California NEM program is inconsistent with federal law. But here again the Joint IOUs are stretching the law to match their

⁶⁶ 18 C.F.R. § 292.305(a)(2).

⁶⁷ Exh. SVS-03 (Beach), p. 71, lines 1-4.

⁶⁸ *See Joint Statement by Chairman Glick and Commissioner Clements concurring with the June 1, 2021, Notice of Intent Not to Act re James H. Bankston, Jr. et al v. Alabama Public Service Commission* Docket EL21-64. (Commissioners concurred that the Alabama Public Service Commission may be violating FERC’s PURPA regulations by approving a monthly “Capacity Reservation Charge” of \$5.00/kilowatt (kW) based on the nameplate capacity of the customer’s system.).

⁶⁹ Joint IOUs Brief, p. 10 (emphasis added).

narrative. FERC has never stated that the true up *must* occur at the end of every month. Indeed, in the two decisions which the Joint IOUs cite, FERC clearly noted that while a one-month billing period, with excess compensation being set at an avoided cost rate, was reasonable, it also noted that other billing periods could also be reasonable.⁷⁰

B. The Public Utilities Code Does Not Prohibit Temporary Oversizing of Facilities

The Public Utilities Code defines an “eligible customer-generator” as a:

[C]ustomer of an electric utility, who uses a renewable electrical generation facility, or a combination of those facilities. . . that is located on the customer’s . . . premises and is interconnected and operates in parallel with the electrical grid and is intended primarily to offset part or all of the customer’s own electrical requirements.⁷¹

The Joint IOUs go to great lengths (devoting seven pages of their brief) to emphasize that the Commission has never deviated from the basic premise that NEM customers must be net consumers of electricity.⁷² Having undertaken this effort, its only apparent use is to push back on the proposals of SEIA/VS and Sierra Club that customers should be allowed to oversize their systems – i.e., larger than historical annual onsite load – in anticipation of potential future electric load growth.⁷³ Specifically, SEIA and Vote Solar are proposing that customers be allowed to oversize by up to 50% with an accompanying reform of the rate for net surplus compensation so that it is set equal to current avoided costs for DERs.⁷⁴ The 50% allowance for oversizing is based on a residential customer with usage of 10,000 kWh per year adding an EV

⁷⁰ *Mid-American Energy Company*, 94 FERC ¶ 61,340, at 62,262-63 (2001); *SunEdison LLC*, 129 FERC ¶ 61146, at 61,621, ft note 10 (2009).

⁷¹ PU Code Section 2827 (b)(4) (A).

⁷² Joint IOUs Brief, pp. 10-17.

⁷³ Joint IOUs Brief, p. 100.

⁷⁴ Exh. SVS-03 (Beach), p. 40, lines 3-7.

and an efficient electric water heater, both of which can be fueled primarily with off-peak solar electricity.⁷⁵ In other words, the system would be sized to load if the customer undertook the anticipated electrification. Moreover, SEIA and Vote Solar have agreed to modify their proposal in response to a suggestion made by CalPA to bring the system size more rapidly in line with load -- i.e., after five years all excess compensation would be valued at the wholesale rate.⁷⁶

Because (1) avoided costs will fluctuate over the five years which the customer is being paid that amount for its excess compensation, and (2) the customer will be paid the even lower wholesale rate for the remaining life of the system, the customer cannot count on the revenue from excess generation covering the cost of the portion of the customer's system which is the result of oversizing. Thus, customers who oversize their systems will retain a strong incentive to make sure that their usage grows over time – i.e., to make sure the system is sized to the eventual load. In other words, the oversizing will be temporary. Over time the customer will be strongly incented to once again be a net consumer.

C. The Joint IOUs Read Terms into AB 327 that Do Not Exist

1. The Meaning of “Grow Sustainably” is Made Clear by the Legislative History

One of the critical elements of a NEM successor tariff is that it must, consistent with AB 327, “ensure that the standard contract or tariff made available to eligible customer generators ensures that customer-sited renewable distributed generation continues to *grow sustainably*.” Disregarding the record of this proceeding which indicates ambiguity in term, the Joint IOUs attest that none exists and therefore the Commission can only look at the statutory language, disregarding other indicators of legislative intent. Thus, the Joint IOUs assert that “

⁷⁵ *Id.*, Attachment RTB-2, p. 24.

⁷⁶ Exh. PAO-02 (Gutierrez/Chau), p. 5-16, lines 21-26; SEIA/VS Brief, pp. 46-47.

The longstanding rules of statutory construction under California law require the Commission to first look to the plain language of the statute. “The fundamental task of statutory construction is to ‘ascertain the intent of the lawmakers so as to effectuate the purpose of the law. In order to determine this intent, we begin by examining the [plain] language of the statute’ [because] [i]t is well settled that the ‘statutory language . . . is the best indicator of legislative intent.’”⁷⁷

SEIA and Vote Solar agree that the rules of statutory construction require that the Commission first look to the plain meaning of the words used in the statute.⁷⁸ Interestingly, however, while the Joint IOUs assert that the word “*sustainably*” is not ambiguous, they proceed to offer the Dictionary.com definition of the word “*sustainable*” - “pertaining to a system that maintains its own viability.”⁷⁹ The statute does not use the word “*sustainable*.” Consulting the same source used by the Joint IOUs – Dictionary.com – shows that there is a marked difference between the definitions of the two words. “*Sustainably*” means “in a manner which can be sustained in the long term.”⁸⁰

Unlike the Joint IOUs, SEIA and Vote Solar are not attempting to claim that there is no ambiguity in the statutory language. When such ambiguity exists, the law is clear. The law requires the Commission to examine “additional sources of information to determine the Legislature’s intent in drafting the statute.”⁸¹ In particular, “[b]oth the legislative history of the statute and the wider historical circumstances of its enactment may be considered in ascertaining the legislative intent.”⁸² As discussed in SEIA and Vote Solar’s opening brief, the legislative history language refers to “whether the changes to NEM will impact the *sustained* growth of the

⁷⁷ Joint IOUs Brief, p. 19.

⁷⁸ SEIA/VS Brief, pp. 73-74.

⁷⁹ Joint IOUs Brief, p. 19-20.

⁸⁰ <https://www.dictionary.com/browse/sustainably#>

⁸¹ *Olson v. Automobile Club of Southern California*, 42 Cal. 4th 1142, 1147 (2008).

⁸² *Dyna-Med, Inc. v. Fair Employment & Housing Com.*, 43 Cal. 3d 1379, 1387 (1987).

industry” and noted several matters that could impact such *sustained* growth such as changes in the investment tax credit and changes in depreciation.⁸³ As the Joint IOUs point out, the word sustained means “maintained at length without interruption or weakening.”⁸⁴ It is this type of growth which the legislators were contemplating when they added the words “grow sustainably” to the statute.

Not surprisingly, the Joint IOUs implore the Commission to ignore the legislative history, asserting that “[t]here is no justification to resort to inferior indicators of legislative intent, such as legislative history materials, when the plain language of the statute is unambiguous, as is the case here.”⁸⁵ The Joint IOUs are thus asking the Commission to ignore clear evidence of the legislature’s intent, which was for the Commission to examine any proposed change to the tariff in light of its impact on the growth of the customer-sited renewable DG market. This the Commission cannot do.

2. There is No Ratepayer Indifference Standard in AB 327

Public Utilities Code Section 2827.1(b)(4) requires the Commission to “ensure that the total benefits of the standard contract or tariff to all customers and the electrical system are *approximately equal* to the total costs.” The Joint IOUs have equated this dictate with the requirement to achieve “ratepayer indifference”⁸⁶ and have used this purported requirement as a basis for the Commission to adopt portions of their proposal.⁸⁷ Section 2827.1 does not contain a

⁸³ SEIA/ VS Brief, pp. 74-75, citing *Assembly Committee on Utilities and Commerce, Bill Analysis of AB 327 (Perea) – As Amended*: September 6, 2013, available at http://www.leginfo.ca.gov/pub/13-14/bill/asm/ab_0301-0350/ab_327_cfa_20130911_131650_asm_comm.

⁸⁴ Joint IOUs Brief, p. 20.

⁸⁵ *Id.*, p .21.

⁸⁶ Joint IOUs Brief, p. 19.

⁸⁷ *Id.*, p. 71 (“It is reasonable for the Commission to assess a similar [GBC]charge here to achieve the ratepayer indifference principles set forth in AB 327.”).

ratepayer indifference criterion.

“Ratepayer indifference” is the concept that non-participating ratepayers should be entirely indifferent as to the participation of other ratepayers in a policy or program—they should be left unaffected by the policy, with zero cost shifts.⁸⁸ A requirement that the benefit of the successor tariff “approximately equal” the costs is not the same as ratepayer indifference. Indeed, during consideration of AB 327, the Legislature deliberately stripped language from the bill that directed the Commission to “preserve nonparticipant ratepayer indifference.”⁸⁹ And in the same year that the legislature passed AB 327, they passed AB 43 which contained a ratepayer indifference standard.⁹⁰ Thus, the Legislature understood AB 327 contained a standard different from ratepayer indifference.

IV. ISSUE 2: WHAT INFORMATION FROM THE NET ENERGY METERING 2.0 LOOKBACK STUDY SHOULD INFORM THE SUCCESSOR AND HOW SHOULD THE COMMISSION APPLY THOSE FINDINGS IN ITS CONSIDERATION

The Joint IOUs assert that the Lookback Study⁹¹ “should be an evidentiary pillar for NEM reform.”⁹² Similarly CalPA asserts that Commission should rely on the findings and data described in the Lookback Study.⁹³ The Lookback Study, however, is not evidence. It was not

⁸⁸ See Decision 15-01-051(implementing SB 43, which created the Green Tariff Shared Renewables program. The bill required: “The commission shall ensure that charges and credits associated with a participating utility’s green tariff shared renewables program are set in a manner that ensures nonparticipant ratepayer indifference for the remaining bundled service, direct access, and community choice aggregation customers and ensures that no costs are shifted from participating customers to nonparticipating ratepayers.).

⁸⁹ See Exh. CSA-01 at Attachment 8.

⁹⁰ See CALSSA Brief, p. 13.

⁹¹ *Net Energy Metering 2.0 Lookback Study*, Verdant Associates LLC (January 21, 2021) (“Lookback Study”).

⁹² Joint IOUs Brief, p. 21.

⁹³ CalPA Brief, p. 6.

presented by a party to this proceeding, it was not sworn to under penalty of perjury, its authors were not made subject to cross examination. While SEIA and Vote Solar are not advocating that the Commission ignore the study, its findings cannot be “evidentiary pillars.” Moreover, on a more practical level, the Lookback Study has a narrow focus – the cost effectiveness of systems installed under the NEM 2.0 tariff – and does not address all the elements which the Commission is statutorily required to address in formulating a successor tariff.

The Lookback Study presents some overarching themes which the Commission can use as points for further investigation.⁹⁴ The findings of the study, however, cannot be the basis upon which the Commission renders any element of its decision in this proceeding.

V. ISSUE 3: WHAT METHOD SHOULD THE COMMISSION USE TO ANALYZE THE PROGRAM ELEMENTS IDENTIFIED IN ISSUE 4 AND THE RESULTING PROPOSALS, WHILE ENSURING THE PROPOSALS COMPLY WITH THE GUIDING PRINCIPLES

SEIA and Vote Solar’s opening brief addresses the various metrics which the Commission should utilize in assessing the program elements of a NEM Successor tariff. SEIA and Vote Solar explained how the application of the Total Resource Cost test must be tempered because the 2021 ACC resulted in all parties’ proposals scoring less than 1.0 on the test in the first year of the successor tariff.⁹⁵ SEIA and Vote Solar also illustrated how its proposal will achieve a gradual and significant improvement in the balance of the benefits and costs of distributed solar and solar + storage systems, by improving the RIM scores over time⁹⁶ and why a true valuation of the benefits of solar + storage installation necessitates that a “resiliency

⁹⁴ SEIA/VS Brief, pp. 8-10.

⁹⁵ *Id.*, pp. 11-12.

⁹⁶ *Id.*, pp. 18-19.

adder” be incorporated into the RIM analysis.⁹⁷ SEIA and Vote Solar also addressed the societal benefits of distributed generation and how such benefits should be considered in the Commission’s cost effectiveness evaluation of NEM successor tariff proposals.⁹⁸ Finally, SEIA and Vote Solar discussed the use of payback periods as a means of assessing participant impacts; most importantly how the payback periods that result from the proposals offered by the Joint IOUs, CalPA and TURN do not allow customers to earn a return on their investment sufficient for the market to grow sustainably.⁹⁹ SEIA and Vote Solar will not repeat those arguments in response to other parties’ presentations. However, there are several statements made in other parties’ briefs regarding the SEIA/Vote Solar proposal and supporting testimony which are simply inaccurate or “misinterpret” the proposal. We address those below.

A. The Ratepayer Impact Measure as a Metric for Analysis of the Successor Tariff

The Commission is charged with equitably balancing the interests of participants and nonparticipants. As detailed in SEIA/VS’s opening brief, this balance must look beyond the precise score on a stringent RIM test and factor in other considerations and benefits that will be realized by all Californians.¹⁰⁰ Nonetheless, SEIA and Vote Solar undertook a strict RIM analysis of our proposal and presented it to the Commission.¹⁰¹ Certain parties accuse SEIA/VS of attempting to inflate or mask the results of their RIM analysis.¹⁰² But these accusations are false and/ or unsubstantiated.

⁹⁷ *Id.*, pp. 26-28.

⁹⁸ *Id.*, pp. 28-32.

⁹⁹ *Id.*, pp. 32-35.

¹⁰⁰ SEIA/VS Brief, pp. 23-26.

¹⁰¹ Exh. SVS-04 (Beach), pp. 24-25, Figures 1-3.

¹⁰² TURN Brief, p. 27; Joint IOU Brief, p. 96.

1. SEIA/ VS Performed a RIM Analysis Using the 2021 ACC

At the time of submittal of direct testimony in this proceeding, the Commission had not yet approved the 2021 ACC. Accordingly, SEIA/VS analyzed their NEM successor tariff proposal using the Commission-approved 2020 ACC that was in effect on that date. Subsequently the Commission approved the 2021 ACC. In their opening brief, the Joint IOUs assert that SEIA/VS “refused to analyze their proposal using the operative ACC.”¹⁰³ As purported proof of this assertion they point to SEIA/VS response to a data request in which SEIA and Vote Solar responded that they intended to address the impacts of the 2021 ACC on their proposal in their July 16, 2021, Rebuttal Testimony,¹⁰⁴ which we did. Section C of Exhibit SVS-04, entitled “Adapting the Vote Solar / SEIA Proposal to the 2021 ACC,” contains analysis of the SEIA/Vote Solar proposal using the Ratepayer Impact Measure, as well as illustrating the impacts of the 2021 ACC on the societal benefits afforded by BTM resources.¹⁰⁵ Based on this analysis, SEIA and Vote Solar adjusted their proposal to add an estimated additional three years of export rate step-downs with each providing a further 10% reduction in the export percentage for each annual tranche of capacity.¹⁰⁶ The Joint IOUs assertion that the SEIA/VS proposal has not been analyzed under the operative ACC is blatantly false.

2. RIM Scores for a Blended Solar and Solar + Storage Proposal is Necessary to Inform the Commission of the Impact of the SEIA/VS NEM Successor Tariff Proposal.

TURN faults the fact that SEIA/VS calculated RIM scores for a blend of solar and solar + storage installations for each step of its successor tariff and urges the Commission to reject the

¹⁰³ Joint IOUs Brief, p. 98.

¹⁰⁴ Exh. IOU-02 Attachment B, p. B-14 (SEIA/VS response to DR Question 3).

¹⁰⁵ Exh. SVS-04 (Beach), pp. 22-31.

¹⁰⁶ *Id.*, p. 23, lines 4-6.

scores on this basis.¹⁰⁷ TURN provides no rationale for this request other than “the Commission should instead review individual technology cost-effectiveness results as the basis for authorizing incentives specific to each technology or application.”¹⁰⁸ Setting aside the fact that TURN’s statement is a mere matter of opinion with no record support, the SEIA/VS general market proposal, unlike TURN’s, is not seeking any upfront incentives for solar or solar + storage customers. More importantly, however, the SEIA/VS general market proposal – a key pillar of which is a stepdown of the percentage of retail rate received by the customer for its exports – is premised on an increasing percentage of customers adopting storage. Many parties to this case – including the Joint IOUs – recognize that customers’ desire to improve the resiliency of their electric service is driving more customers to adopt storage paired with solar.¹⁰⁹ Customers also seek to add storage to manage large differences between on-peak and off-peak rates, and the SEIA/VS proposal would require NEM 3.0 customers to use electrification rates that have large TOU rate differences. Accordingly, undertaking a RIM analysis with a blended portfolio of solar and solar + storage is the only accurate way for SEIA/VS to inform the Commission of the impact of its NEM successor tariff proposal on all customers.

3. The Value of Resiliency Should Be Accounted for in a RIM Analysis

Certain parties challenge SEIA and Vote Solar’s contention that the value of resiliency should be accounted for in the RIM analysis. Thus, the Joint IOUs argue that “SEIA/VS witness Beach attempts to turn a private benefit of residential solar +storage into a system resiliency benefit”¹¹⁰ and TURN asserts that “[a]bsent a specific demonstration that resiliency benefits

¹⁰⁷ TURN Brief, p. 27.

¹⁰⁸ *Id.*

¹⁰⁹ Exh. Joint-01 (Tierney), at pp. 39-40 and 43-44.

¹¹⁰ Joint IOU Brief, p. 96.

would be shared with, and realized by, non-participating customers, they should be deemed private benefits that are not appropriately included in the Societal Test.”¹¹¹ Thus, it appears that the primary contention of these parties is not that resiliency benefits do not exist, but they are confined to those who own the solar + storage systems. While SEIA and Vote Solar addressed this argument to a limited degree in our opening brief, it bears repeating --these parties are ignoring the reality of the world in which we are living. “Black sky” events that interrupt the grid for prolonged periods are dominating the news of late with the pervasive wildfires in Northern California, the catastrophic hurricane which recently hit the Louisiana coast, and the cold snap last winter that left customers in Texas and surrounding states without power for many days. During such events, communities banding together and neighbors helping neighbors are not abstract concepts, as evidenced in this exchange between SEIA/ VS witness Beach and the attorney for TURN:

Q. If I have a neighbor with solar plus storage and they remain energized during a system outage because they have on site generation and they refuse to let any of their neighbors access their power during an outage, what specific resiliency benefits would you assume were provided to the community?

A. I find your hypothetical to be unrealistic. And, you know, for the reasons I state in this response.

Q. So, you think it is reasonable for the Commission to assume every customer with solar and paired storage will provide services to their neighbors in the event of an outage?

A. Well what it’s based on is looking at, you know, what actually happens in communities during these extreme events. I really recommend that you read Rebecca Solnit’s book, the Paradise Built in Hell, that I refer to in that data request response which provides a lot of data and documentation about what

¹¹¹ TURN Brief, p. 29.

happened after the 1906 earthquake. Or what happened in Hurricane Katrina. What happened in these extreme events. And I hopefully that would persuade you that your hypothetical is not realistic.¹¹²

The reality is that the resiliency benefit of a solar + storage installation is not confined to the owner but redounds to the larger community.¹¹³ There is no evidence on the record to the contrary.¹¹⁴

In addition to its general aversion to the idea that neighbors will actually “share their wealth” during times of crisis, TURN also puts forth some questionable arguments for rejection of the resiliency adder. First, TURN questions the scope of the events which are considered when calculating the resiliency adder. Thus, TURN argues that:

There is no general view amongst the parties on the method for considering what types of events allow for resiliency benefits. For example, SEIA/VS witness Beach suggested that only outages representing “dark-sky” events that are “measured in days” should be considered, a metric that excludes short-term outages and Public Safety Power Shutoff (PSPS) events for most customers. It is not clear whether other parties also limit their consideration of resiliency to these extreme events.¹¹⁵

While TURN is correct that SEIA/VS was conservative in its calculation of the resiliency benefit, limiting them to “dark sky” events that are measured in days,¹¹⁶ factoring in shorter term outages, such as PSPS events, would only *increase* the value of the adder, it would not reduce or eliminate it.

¹¹² Tr. Vol. 8 (SEIA/VS- Beach), p.1336, line 16 to p.1337, line 16.

¹¹³ See Tr. Vol. 7 (SEIA/VS-Beach), p. 1235, line 18 to p.1236, line 11.

¹¹⁴ See also, Opening Brief of Protect Our Communities Foundation, R. 20-08-020 (August 31, 2021) (“PCF Brief”), pp.21-23 (addressing the value of resiliency).

¹¹⁵ TURN Brief, p. 30.

¹¹⁶ Specifically, assuming seven days of outages in 10 years. See Tr. Vol. 8 (SEIA/VS-Beach), p. 1339, lines 26-28.

TURN's criticism of the way SEIA/VS computed the resiliency adder is equally puzzling. In short, SEIA/VS calculated the capital costs of a portable inverter electric generator from 2.5 kW to 5.5 kW in size and added operating and environmental costs during an extended outage (i.e., the generator would be used for seven days out of every ten years).¹¹⁷ This cost to own and operate the generator is equivalent to the resiliency benefit provided by the solar + storage system.¹¹⁸ TURN asserts that this methodology is "highly problematic," but the only problem TURN cites is highly contrived. TURN asserts that the methodology used by SEIA/VS to calculate the resiliency adder "suggests that new ratepayer-funded subsidies to deploy gas powered generators by individual customers would also be cost-justified."¹¹⁹ TURN might be suggesting it, but SEIA/VS certainly are not, as Mr. Beach made clear on the record when questioned by TURN on this point.¹²⁰ Moreover, TURN seems to think that a solar + storage customer would receive some sort of subsidy equivalent to the resiliency adder. That is not the case.¹²¹ The resiliency adder is simply valuing a benefit which exists as the result of the solar + storage installation.

Finally, both TURN and the Joint IOUs raise the fact that the Commission declined to include a resiliency adder as part of the ACC. Thus, they reason that the Commission should once again reject it. As addressed in SEIA/VS's opening brief, the fact that the Commission rejected including a resiliency value in the ACC is not relevant.¹²² The ACC is looking at the

¹¹⁷ Exh. SVS-03 (Beach), Attachment RTB-2 Attachment B, p. B-2.

¹¹⁸ Tr. Vol 8 (SEIA/VS-Beach), p. 1341, lines 15-20.

¹¹⁹ TURN Brief, p. 30.

¹²⁰ Tr. Vol. 8 (SEIA/VS-Beach), p. 1343, p. 8 to p.1349, line 22.

¹²¹ Tr. Vol. 8 (SEIA/VS-Beach) p. 1343, lines 1-3.

¹²² SEIA/VS Brief, pp. 26-27.

benefits when the grid is working and when utilities can avoid costs on their own system due to people producing their own power. Resiliency is a benefit of solar + storage installations that comes into play when the grid is not working and customers cannot use it to obtain electricity.¹²³ As discussed above, resiliency benefits redound substantially beyond the owner of the installation. As such it is a value which should be taken into a consideration when accessing the cost and benefits of behind-the-meter solar paired with storage.

4. RIM Scores Should Be Viewed in Light of Larger Policy Goals

The Commission is charged with equitably balancing the interests of participants and nonparticipants. It is the opinion of SEIA and Vote Solar that in order to do this, the Commission must look beyond the precise score on a stringent RIM test and factor in other considerations, certain of which adhere to the benefit of all Californians and others which highlight the deficiencies of a strict application of the RIM test. SEIA and Vote Solar presented these additional considerations in our opening brief, one of which is California’s need for the clean generation that distributed solar provides to meet its GHG emission reduction goals, as documented on the record.¹²⁴

In response to this evidence the Joint IOUs state that the solar parties “attempt to make a mutually exclusive false choice between utility-scale solar and customer-sited renewable generating facilities when research shows both play an important role in achieving California’s environmental policy goals.”¹²⁵ Not true. As clearly stated by SEIA/VS witness Beach:

California will require an extensive and diverse mix of new renewable generation, and much of this generation will come from utility-scale renewables. However,

¹²³ Tr. Vol. 8 (SEIA/VS-Beach), p. 1279, lines 7-27.

¹²⁴ SEIA/VS Brief, pp. 24-25. citing Exh. SVS-04 (Beach), p. 5, lines 9-12 and D. 19-11-016 authorizing 3.3 GW of near-term procurement in 2021-2023 and D. 21-06-035 authorizing 11.5 GW of mid-term procurement in 2023-2026.

¹²⁵ Joint IOUs Brief, p. 96.

the state would commit a serious error to rely only on utility-scale renewables. ... The sustained and steady growth of DERs provides a vital and necessary hedge against the uncertainties and constraints faced by utility-scale renewables.¹²⁶

SEIA and Vote Solar have not argued that utility-scale renewables and DERs are mutually exclusive. Both are needed to meet the state's goals and this need should be factored into the Commission's assessment of NEM successor tariff proposals.¹²⁷

Similarly, TURN is incorrect in its statement that “[i]n testimony, SEIA/VS urge the Commission to make determinations, in this proceeding, about the relative mix of large- and small-scale renewables that should be developed to satisfy broad resource planning objectives.”¹²⁸ TURN cites to Exh. SVS-01 in support of its statements,¹²⁹ but Exh. SVS-01 does not address the mix of large- and small-scale solar. If TURN meant to reference the testimony of Mr. Beach, then that testimony does not request the Commission to make a determination of the mix of large- and small-scale renewables. Rather Mr. Beach testified as to why the Commission should not rely exclusively on large-scale renewables.¹³⁰

B. Societal Benefits Should be Considered in the Commission's Formulation of a Successor Tariff

Several parties muddy the record evidence regarding the societal benefits provided by distributed energy resources by either unintentionally or purposefully misconstruing the testimony of SEIA/VS witness Beach on this issue.

¹²⁶ Exh. SVS-03 (Beach), p.7, lines 29-32 and p. 9, lines 16-17,

¹²⁷ CalWEA argues that there would be no need for increased utility scale solar if the amount of planned distributed generation was cut in half. *See* Opening Brief of the California Wind Energy Association, R. 20-08-020 (August 31, 2021), p 4. CalWEA's assertions are based on modeling which were shown on cross examination of CalWEA's witness to be deficient. CALSSA Brief, pp. 45-47.

¹²⁸ TURN Brief, p. 46.

¹²⁹ *Id.*, ft. note 125.

¹³⁰ Exh. SVS-03 (Beach), p. 7, line 24 to p.8, lines 21.

First, the Joint IOUs assert that the solar parties argue for the use of the Societal Cost Test (“SCT”) in this proceeding, despite the fact that it has not been fully formulated by the Commission.¹³¹ But this is not accurate. The Commission describes the SCT as “structurally similar to the TRC test, but the Societal Cost Test quantifies the change in the total resources costs to society as a whole rather than to only the utility and its ratepayers.”¹³² SEIA and Vote Solar did not apply the SCT test in the analysis of our successor NEM tariff proposal. SEIA and Vote Solar have made abundantly clear that the purpose of the evidence presented on societal benefits is to demonstrate the additional environmental and economic values of distributed solar and solar-plus-storage to the citizens of California. No party contends that these benefits do not exist. The fact is that these added benefits are not captured by a stringent adherence to the RIM test. AB 327 requires the Commission to consider the “total benefits” of distributed solar to “all ratepayers.” The purpose of a fair and transparent valuation of societal benefits is to put them into common terms (dollars) with the direct benefits to ratepayers, precisely so that societal benefits can be considered and given their due weight in Commission decisionmaking. The societal benefits that SEIA and Vote Solar have calculated clearly are part of the total benefits of distributed renewable resources to the ratepayers in the service territories of the utilities that this Commission regulates. The Commission must consider these benefits in formulating a successor tariff.¹³³

Second, the Joint IOUs, NRDC and TURN highlight the fact that certain of the societal benefits which SEIA and Vote Solar attest are derived from distributed generation are also

¹³¹ Joint IOUs Brief, p 57; *see also* TURN Brief, p.33.

¹³² D. 19-05-019, p.10.

¹³³ SEIA/VS Brief, pp. 29-30.

derived from utility-scale solar. Thus, the Joint IOUs and NRDC assert that SEIA/VS's quantitative discussion fails to take such comparability into account,¹³⁴ while TURN states:

By cherry-picking any potential societal benefits of customer-sited generation and considering them in isolation, without any comparison to alternatives, SEIA/VS fail to provide any rational basis for the Commission to evaluate these values in this proceeding.¹³⁵

The Joint IOUs' and NRDC's statements are misleading, while TURN's misses the point.

SEIA/VS witness Beach clearly discussed how many of the societal benefits of distributed solar also are provided by utility-scale solar.¹³⁶ But distributed solar provides incremental benefits *over* what is provided by utility-scale solar.¹³⁷ Contrary to TURN's assertion, SEIA and Vote Solar have provided a rational basis for the Commission to evaluate societal values in this proceeding. Beyond that, the process of quantification in which we have engaged provides the Commission with additional useful, science-based data on the relative magnitude of the various societal benefits that DER systems provide.¹³⁸

The Joint IOUs also make a halfhearted attempt to diminish the valuations of certain, but not all, of the societal benefits of distributed generation addressed by SEIA and Vote Solar. First, they fault SEIA and Vote Solar for not using an outdated social cost of carbon ("SCC").¹³⁹ It is unclear why the Joint IOUs would want the Commission to rely on outdated data rather than the SCC metric that SEIA and Vote Solar have proposed, which is a prominent example of the latest peer-reviewed science. Second, the Joint IOUs argue that SEIA and Vote Solar have overstated

¹³⁴ Joint IOUs Brief, p. 58; NRDC Brief, p.14.

¹³⁵ TURN Brief, p. 33.

¹³⁶ Exh. SVS-03 (Beach), pp. 20-21.

¹³⁷ Exh. SVS-03 (Beach), pp. 21-23.

¹³⁸ See Exh. SVS-03 (Beach), p. 26, lines 1-19.

¹³⁹ Joint IOUs Brief, pp. 57-58.

the value of the reduction of out-of-state methane leakage. The Joint IOUs claim that “after correcting several miscalculations in the SEIA/VS analysis the benefit of reduced out of state methane leakage is negligible.”¹⁴⁰ But SEIA and Vote Solar have demonstrated that it is in fact the Joint IOUs “corrections” which are in error. If the Commission were to buy into the Joint IOUs analysis, it would be agreeing that out-of-state gas supplies have less than one-third the leakage rate of gas produced within the state,¹⁴¹ which of course makes no sense. Finally, the Joint IOUs complain that SEIA/VS quantifies air quality benefits “using a draft analysis from the IDER proceeding instead of the interim air quality adder adopted in D.19-05-019.” Again, the Joint IOUs would have the Commission rely on outdated data, rather than a more recent, more comprehensive evaluation of the air quality impacts performed by the Commission’s consultant E3 for the purposes of establishing a more robust adder.¹⁴²

Finally, and perhaps most inexplicable, the Joint IOUs assert that “the solar parties make similar apples to oranges comparisons to energy efficiency and electric vehicle (EV) charging to inflate the societal benefits of NEM.”¹⁴³ The Joint IOUs provide no record cite for this assertion. SEIA and Vote Solar can only say that our analysis of societal benefits did not consider either energy efficiency measures or EV charging, much less use such resources to inflate the quantified benefits.

¹⁴⁰ *Id.*, p.58.

¹⁴¹ SEIA/VS Brief, p. 31.

¹⁴² See December 9, 2020 Workshop Presentation, R. 14-10-003, slide 20  [2020 ACC Research Update](#)

¹⁴³ Joint IOUs Brief, p. 97.

VI. ISSUE 4: WHAT PROGRAM ELEMENTS OR SPECIFIC FEATURES SHOULD THE COMMISSION INCLUDE IN A SUCCESSOR TO THE CURRENT NET ENERGY METERING TARIFF?

In its opening brief SEA/Vote Solar addressed several program elements which should be made part of a successor NEM tariff including:

- Changes to the compensation structure should be made gradually;¹⁴⁴
- The export compensation rate should be based on easy-to-understand concepts;¹⁴⁵
- Customers on the successor tariff should have a monthly billing option;¹⁴⁶
- The successor tariff should advance the state’s electrification goals, including allowing customers to oversize their systems;¹⁴⁷
- The successor tariff must advance the installation of storage;¹⁴⁸ and
- The existing NEM 2.0 compensation structure should be maintained for non-residential customers.¹⁴⁹

SEIA will not repeat the arguments advanced in its open brief regarding the critical nature of these elements to a successor tariff but will use this section of its reply to address other parties’ criticisms of certain of these elements.

A. Changes to the Compensation Structure Must be Made Gradually

The Joint IOUs assert that the solar parties “advance the concept of “gradualism” to delay reform.”¹⁵⁰ In this regard, they opine that the “Legislature passed AB 327 in 2013. SEIA/VS and CALSSA’s dilatory proposals would perpetuate the problem AB 327 mandates the Commission

¹⁴⁴ SEIA/ VS Brief, pp. 37-39.

¹⁴⁵ *Id.*, pp. 39-40.

¹⁴⁶ *Id.*, pp. 40-41.

¹⁴⁷ *Id.*, pp. 41-42.

¹⁴⁸ *Id.*, pp. 43-47.

¹⁴⁹ *Id.*, pp. 47-50.

¹⁵⁰ Joint IOUs Brief, p. 100.

reform for 27 years after the bill’s enactment.”¹⁵¹ But that simply is not accurate. The fallacy of such assertion was made clear by SEIA/VS witness Beach when, on cross examination, he was asked to concede that under the SEIA/VS general market proposal, distributed generation would not be cost effective for a protracted period of time.

Q. So, if [the tariff] was not cost effective at that time [2029] and the customer received 20 years of legacy treatment in 2029, I am saying 2049, that would be basically 36 years after AB 327 for a tariff that is not cost effective, right?

A. I’m... I’m not agreeing with you that the tariff would not be cost effective then. I mean the intent of this proposal is to get us to cost-effectiveness in 2030. So, I am not convinced that we cannot get there. So, I guess I would disagree with your... your conclusion.¹⁵²

The SEIA/VS proposal is designed to reduce export compensation at a pace which will bring the successor tariff to cost effectiveness within an approximate nine-year period. The gradualism allows for the reconciliation of what could otherwise be viewed as conflicting dictates under AB 327 – allowing renewable distributed generation to grow sustainably and ensuring that benefits approximately equal costs.

Indeed, it is not solely solar providers that are advocating for a gradual change in the export compensation. As highlighted by the Sierra Club, the NEM Lookback Study supports a gradual reduction in the export rate.¹⁵³ The Lookback Study shows that the level of installed capacity dropped the year NEM 2.0 was adopted and gradually increased back to previous levels.¹⁵⁴ As asserted by the Sierra Club, “[t]his information supports a gradual transition

¹⁵¹ *Id.*

¹⁵² See. Tr. Vol. 8 (SEIA/VS-Beach), p.1365, line 22 to p.1366, line 7 (note that in her cross examination, the Joint IOU attorney asserted that the tariff would not be cost effective for a period of 36 years after the passage of AB 327, so it is unclear where the reference to 27 years cited in the brief comes from).

¹⁵³ Sierra Club Opening Brief, R. 20-08-020 (August 31, 2021) (“Sierra Club Brief”), p.6.

¹⁵⁴ Lookback Study, p.3.

toward avoided cost compensation to give customer-sited generation providers time to adjust to decreased export compensation and a new tariff structure.”¹⁵⁵ The changes to the compensation structure for the NEM 2.0 tariff in comparison to the NEM 1.0 tariff were modest in comparison to what is being considered in this proceeding, providing further support for the need for measured change.

B. The Export Compensation Rate Should be Based on Easy-to-Understand Concepts

Customers’ willingness to invest in solar or solar + storage is ultimately tied to their ability to understand the basis upon which they will be compensated. Setting an export compensation rate at a percentage of the retail rate ties compensation to a metric – the retail rate – with which customers are already familiar. The success of net metering to date shows that customers are willing to make significant, personal, long-term investments in clean energy on the basis of compensation structured around the retail rate. As explained in SEIA/VS’s opening brief, proposals advanced by other parties that call for compensation of exports at the ACC value, plus the layering on of other charges such as grid access charges, break that link with retail rates. This would require residential customers to learn and have confidence in a whole host of new concepts that are far from understandable.¹⁵⁶

TURN challenges proposals which tie the export compensation rate to the retail rate, asserting that such proposals “presumptively violate” the dictate of AB 327 that the benefits of the successor tariff “approximately equal” the costs, as they result in “escalating cost shifts over time.”¹⁵⁷ These assertions fail to recognize that SEIA/VS’s general market proposal will reduce

¹⁵⁵ Sierra Club Brief, p. 6.

¹⁵⁶ SEIA/VS Brief, pp. 39-40.

¹⁵⁷ TURN Brief, p. 98.

export rates over time by substantial percentages. For PG&E and SDG&E, the reduction will increase to as much as 80% by 2030 – such that the export rate in 2030 would be just 20% of the retail rate.¹⁵⁸ These proposed reductions are far greater than expected rate escalation.¹⁵⁹ In addition, the avoided cost benefits of customer distributed generation also will be escalating over time, at a rate that is well above the expected increase in retail rates.¹⁶⁰ The RIM analyses that SEIA/VS have performed assemble all of this information using 25-year levelized values, and show that cost shifts will be gradually and substantially reduced over time,¹⁶¹ contrary to TURN’s erroneous assertion that cost shifts will escalate.

TURN also criticizes the SEIA/Vote Solar export compensation mechanism for its purported failure to incorporate adjustments in the event that the Investment Tax Credit (“ITC”) is extended.¹⁶² SEIA/Vote Solar’s proposal factored in current law – i.e., residential solar customers will no longer be eligible for the ITC after 2023.¹⁶³ TURN admits that is not possible to predict future changes to federal tax policy with any level of confidence,¹⁶⁴ but still argues that “[g]iven the significant impact of the ITC on the payback period for a residential customer, and the major role it plays in financing assumptions, the Commission should ensure that any

¹⁵⁸ Exh. SVS-04 (Beach), p.23, Table 3.

¹⁵⁹ SEIA and Vote Solar used a rate escalation of 3.5% per year to 2030 (i.e. rates will be 32% higher in 2030 than in 2022).

¹⁶⁰ See Exh. SVS-04 (Beach), pp. 24-25, Figures 1 through 3 (the direct benefits from distributed generation, even without factoring in the resiliency benefit, grow from 5-7 cents/kWh in 2022 to 15-23 cents/kWh in 2030, an increase of about 15% *per year* from 2022 to 2030, far above any anticipated rate escalation).

¹⁶¹ See Exh. SVS-04 (Beach), pp. 24-25, Figures 1 through 3.

¹⁶² TURN Brief, p. 105.

¹⁶³ Tr. Vol 8. (SEIA/VS-Beach), p. 1294, lines 23-28.

¹⁶⁴ TURN Brief, p. 105

successor tariff is capable of adapting to changes in the availability and level of the ITC.”¹⁶⁵ TURN, of course, does not state how the Commission should do this.

The reality is, as explained by SEIA /VS witness Beach, it is impossible to consider changes to the SEIA/VS export compensation mechanism that should result from a change to the ITC until the parameters of that change are known.¹⁶⁶ The Commission could then take up that issue in an appropriate proceeding.¹⁶⁷

C. The Successor Tariff Should Advance the State’s Electrification Goals

In its opening brief, SEIA and Vote Solar demonstrated how our proposed general market successor tariff advanced the state’s electrification goals and discussed how a robust solar market is necessary for the state to achieve those goals.¹⁶⁸ Several parties to this proceeding point to the NEM program as an impediment to electrification which will continue absent Commission adoption of their respective proposals.¹⁶⁹ These parties also claim that the SEIA/VS and CALSSA proposals will impede electrification. These assertions do not hold up to even a modicum of scrutiny.

To support their assertions that NEM harms electrification, these parties place increasingly high IOU electric rates at the doorstep of NEM customers. These parties fail to mention the IOUs’ rapidly increasing transmission revenue requirement or the ever-increasing expenditures for wildfire mitigation. As attested by PCF witness Powers:

[T] he annualized IOU transmission charges to ratepayers have risen by approximately \$2.3 billion per year since 2007. This is over four times higher

¹⁶⁵ *Id.*, p. 106.

¹⁶⁶ Tr. Vol. 8 (SEIA-Beach), p. 1296, line 15 to p.1297, line 2.

¹⁶⁷ *Id.*, p. 1297, lines 2-16.

¹⁶⁸ SEIA/VS Brief, p.

¹⁶⁹ *See* CalPA Brief, p.35; NRDC Brief, p. 3.

than the \$500 million per year NEM solar cost of service cost shift identified by E3 and Verdant in the Lookback Study.¹⁷⁰

The reality is that there are a number of reasons why rates are high and increasing in California, and no party has demonstrated that net metering cost impacts are the largest driver of recent rate increases. Just as it would be inappropriate to argue that the Commission should direct the IOUs to slash the amount they spend on wildfire mitigation in order to reduce rates and thus advance the state's electrification goals, it does not make sense to suddenly gut compensation for onsite clean energy customers in service of those electrification goals.

In fact, the installation of solar or solar + storage is often a precursor to electrification. As highlighted in SEIA and Vote Solar's opening brief, the *Lookback Study* confirmed that NEM has become a foundational facilitator of electrification. The study shows that customers in PG&E's and SDG&E's service territories increased their electric usage by approximately 30% after adding solar.¹⁷¹ As confirmed by the study, a customer's investment in a solar system is often the precursor and catalyst for their adoption of other types of DERs such as electric vehicles and electric appliances.¹⁷² Indeed this linkage between NEM and electrification was confirmed by CalPA witness Rounds who agreed that, according to "social preference theory and economics," an individual with a BTM solar system is more likely to adopt an electric vehicle than an individual who does not have such a system.¹⁷³

A healthy solar market is not an impediment to electrification, it is a necessity.

¹⁷⁰ Exh. PCF-24 (Powers), p. 15.

¹⁷¹ *Lookback Study*, Table 3-1.

¹⁷² *Id.*, p. 62. Customers often install solar PV while at the same time investing in an electric appliance, an electric vehicle, or making an expansion to the home.

¹⁷³ Tr. Vol. 5 (CalPA-Rounds), p.89, line 28 to p.896, line 7.

D. The Successor Tariff Should Not Contain Elements Which Are Inequitable, Under Value Solar, Create Consumer Protection Issues and Are Not Fully Developed

In our opening brief SEIA and Vote Solar addressed several components which should not be included in a successor tariff: (1) an export rate based on the ACC;¹⁷⁴ (2) a grid benefits charge;¹⁷⁵ (3) nonbypassable, unavoidable shared costs charge;¹⁷⁶ (4) market transition credits;¹⁷⁷ (5) monthly true ups;¹⁷⁸ and (6) instantaneous netting.¹⁷⁹ SEIA and Vote Solar illustrated how these elements are discriminatory, volatile, inequitable, confusing, not consumer-friendly, and inaccurately devalue distributed solar and storage resources. Again, SEIA and Vote Solar will not repeat the record evidence demonstrating that the Commission should exclude these elements from a successor tariff but will highlight certain erroneous arguments made by other parties to support their inclusion.

1. Compensating Exports at Avoided Costs is not a Tried-and-True Methodology

In support of their proposal to set the export compensation rate at avoided costs as determined by the ACC, the Joint IOUs assert that:

The approach of compensating exports according to their actual value is neither novel nor untested. To the contrary, it is common among jurisdictions that have replaced net metering, including several California municipal utilities, two small multi-jurisdictional utilities subject to CPUC regulation, as well as in Nevada, where the solar industry has continued to thrive.¹⁸⁰

¹⁷⁴ SEIA/VS Brief, pp. 51-57 and pp. 101-102.

¹⁷⁵ *Id.*, pp. 58-63 and pp. 102-103.

¹⁷⁶ *Id.*, pp. 64-66.

¹⁷⁷ *Id.*, pp. 66-69.

¹⁷⁸ *Id.*, pp. 69-71.

¹⁷⁹ *Id.*, pp. 71-72.

¹⁸⁰ Joint IOUs Brief, p. 63; *see also* NRDC Brief, p. 27; TURN Brief, pp. 123-124.

The NEM tariffs of the referenced multi-jurisdictional and California municipal utilities are not on the record of this proceeding, nor have the Joint IOUs provided any of the specifics of the terms and conditions of those tariffs. Thus, we do not know the credited avoided costs in comparison to the applicable retail rates, nor do we know whether these utilities assess a GBC on NEM customers, nor do we know whether these utilities employ monthly or annual true ups. There is no evidence on whether such tariffs have resulted in the continued sustainable growth of distributed solar for these small utilities. Vague references to the terms of small utilities' NEM tariffs are not a basis for the Commission to adopt the Joint IOUs proposal.

In contrast to the lack of detail regarding the referenced multi-jurisdictional and California municipal utilities, we do know the specifics regarding the current export compensation rate in Nevada. It is not, as stated by the Joint IOUs, based on avoided costs, but a percentage of retail rates.¹⁸¹

2. GBCs Are Not “Appropriate and Necessary”

Citing to nothing in the record, the Joint IOUs assert that “A GBC is appropriate and necessary given that the evidence shows that NEM customers, like all customers, rely on the utility transmission and distribution grid nearly every hour of every day.”¹⁸² Similarly, in support of its version of a GBC, TURN asserts that, “[w]ith respect to Transmission and Distribution costs, the Commission should recognize that these rate components collect many costs that are not affected by a customer’s decision to invest in self-generation.”¹⁸³ This sentiment is echoed by CalPA, who states that “most distribution and transmission costs are

¹⁸¹ Exh. SVS-01 (Gallagher), p. 12, lines 9-14.

¹⁸² Joint IOUs Brief, p.71.

¹⁸³ TURN Brief, p. 80.

fixed and therefore do not change with a customer's usage level.”¹⁸⁴ As addressed in SEIA/Vote Solar's opening brief, arguments that the utility must maintain the same level of distribution and transmission capacity (and costs) that they would have absent rooftop solar are out of touch with utility planning.¹⁸⁵ Setting that aside, however, solar customers are paying for transmission and distribution costs in the same manner as all other customers – when they draw generation from the grid. No party disputes this fact.¹⁸⁶ The Joint IOUs are correct that all customers rely on the utility grid nearly every hour of the day. But if a non-solar customer shuts down its home, cutting off all means of drawing energy from the grid, and leaves the country for a year, they are not charged as if they are steadily drawing power from the grid during that period – instead, they are charged at most a small monthly minimum bill, or, for some rate classes, a monthly fixed customer charge. They are not charged transmission and distribution costs; they are not charged for public purpose programs or other nonbypassable charges. Similarly, if a non-solar customer buys a new set of energy-efficient appliances that reduce its electricity draw from the grid by a substantial amount, the utility does not make up that lost revenue by charging the customer as if that reduction never occurred. The issue is not whether solar customers rely on the utility transmission and distribution grid nearly every hour of every day, the issue is whether they should be required to pay for that right in a manner that is fundamentally different from all other similar customers. They should not.

Both TURN and CalPA make note of the fact that SEIA/VS witness Beach agreed that that no costs of grid hardening for existing transmission and distribution facilities are avoided

¹⁸⁴ CalPA Brief, p. 21.

¹⁸⁵ SEIA/VS Brief, p. 60.

¹⁸⁶ Tr. Vol 3 (Joint IOUs – Morien), p. 431, line 20 to p.432, line 3.

through customer adoption of solar or storage.¹⁸⁷ The avoidance of those costs is not the point. The point is that solar customers will pay for the costs of grid hardening the same way as non-solar customers – when paying the full retail rate on all imports from the grid.

Perhaps the argument could be made that a cost like grid hardening should be paid by all customers equally, as it is a wildfire prevention measure, and all customers may benefit equally.¹⁸⁸ But such equality is not possible when utility rates are being used as a means to fund a project. A customer with a small house and less electricity use will pay less towards the wildfire prevention measure than a customer with a larger house and more electricity use. They both may benefit equally from the wild fire prevention measure, but they are not paying for it equally. The reality is that customers pay for the grid based on how much they use the grid, and a customer that serves a portion of their load using on-site solar – or that reduces their load through energy efficiency – will and should pay less because they make less use of the grid.

3. Monthly True Ups Are Not Justified

Under the Joint IOUs' proposal, NEM customers will be trued-up monthly, as opposed to the current practice of annual true-ups. Specifically, the customer will no longer be allowed to carry forward credits from one month to the next, at the dollar value of the credits based on the TOU period in which the net credit was produced. Instead, under a monthly true up, in any TOU period in which the customer has net exports *for a month*, those net exports would be compensated at the low net surplus compensation rate – they cannot be carried forward.

¹⁸⁷ TURN Brief, pp. 80-81; CalPA Brief, p. 21.

¹⁸⁸ Even this assumption of equal benefit may not be true. To date, wildfire smoke has had wide impacts, but the wildfires themselves have impacted residents of rural communities or those living in the wildland/urban interface more than those who live in major cities.

SEIA and Vote Solar demonstrated that monthly true ups were not necessary to address consumer protection issues, as the Joint IOUs have contended, and result in inaccurately depressing the value of solar or storage output during on-peak periods.¹⁸⁹ The Joint IOUs have taken a different tactic in their opening brief, arguing that a monthly true-up “is consistent with the federal law approach to using the monthly billing period to determine the amount of net exports that should be compensated at the avoided cost rate.”¹⁹⁰ There is no “federal approach” requiring a monthly true up. As discussed above, while FERC has noted that a one-month billing period, with excess compensation being set at an avoided cost rate, was reasonable, it also stated that other billing periods could also be reasonable.¹⁹¹

The Joint IOUs also argue that the annual true up “creates unintended consequences that undermine California’s GHG goals.”¹⁹² Thus, they argue that the annual true up which “allows banking of credits generated during the day to offset nettable charges from consumption at a later date, creates a mismatch in value” and thus “[a]llowing this policy to continue, will disincentivize customers from shifting load out of the on-peak period.”¹⁹³ However, as Joint IOU Witness Morien acknowledged, rates with high, cost-based TOU differentials “are designed” to encourage load shifting, and a customer enrolled in a rate with cost-based TOU differentials would still have an incentive to load shift due to the price signals in the rate even without the enactment of the Joint IOUs monthly netting proposal.¹⁹⁴ Under SEIA/Vote Solar’s

¹⁸⁹ SEIA/VS Brief, p.p. 69-71.

¹⁹⁰ Joint IOUs Brief, p. 67.

¹⁹¹ *Mid-American Energy Company*, 94 FERC ¶ 61,340, at 62,262-63 (2001); *SunEdison LLC*, 129 FERC ¶ 61146, at 61,621, ft note 10 (2009).

¹⁹² *Id.*

¹⁹³ *Id.*, p. 68

¹⁹⁴ Tr. Vol. 4 (Joint IOUs- Morien), p. 588, lines 9–18.

proposal, customers will be required to take service under an electrification rate, thus retaining the incentive to shift load.

VII. ISSUE 5: WHICH OF THE ANALYZED PROPOSALS SHOULD THE COMMISSION ADOPT AS A SUCCESSOR TO THE CURRENT NET ENERGY METERING TARIFF AND WHY? HOW DOES THE PROPOSAL MEETS GUIDING PRINCIPLES? WHAT IS THE APPROPRIATE TIMELINE FOR IMPLEMENTATION?

A. The Commission Should Adopt the SEIA/Vote Solar General Market Proposal and the Equity Proposal Advanced by GRID Alternatives, Sierra Club and Vote Solar

The Commission should adopt the SEIA/Vote Solar general market proposal as the successor to the current NEM tariff for residential customers and retain non-residential customers on the current NEM 2.0 tariff. As demonstrated in the SEIA/VS opening brief and this reply brief, the SEIA/VS proposal allows for the Commission to balance the competing goals of market sustainability and cost effectiveness, while also advancing the state's other policy goals and taking into account critical consumer protections. The Commission also should adopt the proposal for Environmental Justice and Social Justice Communities, including low-income customers, advanced by GRID Alternatives, the Sierra Club and Vote Solar. The proposal advanced by Grid Alternatives, et al will work in conjunction with the SEIA/VS proposal to ensure that all the statutory mandates and Guiding Principles for the creation of a successor tariff are met.

B. SEIA / Vote Solar Proposal Meets All the Guiding Principles While Other Parties' Proposals Do Not

SEIA and Vote Solar's opening brief explained in detail how (1) our general market proposal met all the guiding principles adopted by the Commission for use in assessing successor

tariff proposals, and (2) how various parties' proposals failed to meet certain of those guiding principles. Below we amplify on the latter and also respond to arguments raised regarding the purported failure of the SEIA/ Vote Solar proposal to adhere to all of the guiding principles.¹⁹⁵

1. Guiding Principle 1: A successor to the net energy metering tariff should comply with the statutory requirements of Public Utilities Code Section 2827.1

Included in this guiding principle is the statutory dictate that the successor tariff “ensures that customer sited generation continues to grow sustainably. When reviewing Joint IOUs’ brief, it became clear that they were advancing a proposal that gave no real consideration to whether the solar market in California would continue to grow. They view continued growth and cost effectiveness as irreconcilable.¹⁹⁶ Other parties continue to rely on the Title 24 New Solar Homes Mandate as the panacea for the sustainable growth renewable distributed generation, despite record evidence to the contrary.

(a) The Joint IOUs’ Proposal is Indifferent to Whether it will Enable the Rooftop Solar Industry to Grow Sustainably

As noted above, the Joint IOUs’ lead witness on the ability of the industry to grow subsequent to NEM reform stated on cross examination that when she thought about what it meant to ensure that customer-sided renewable distributed generation continues to grow sustainably, she did not take into account the successor tariff’s impact on the solar industry’s ability to grow.¹⁹⁷ Given the views of their lead witness, it is not surprising the Joint IOUs did not do much to defend her position on brief. Rather their discussion of this issue is a “cut and paste” job, simply lifting verbatim the prepared testimony of witness Tierney addressing market

¹⁹⁵ Interestingly, CalPA fails to address how its proposal meets all the Guiding Principles, despite instructions from the ALJ to include such in brief.

¹⁹⁶ Joint IOUs Brief, p. 21.

¹⁹⁷ Tr. Vol. 2 (Joint IOUs-Tierney), p. 208, lines 11-17.

growth and inserting it in their brief.¹⁹⁸ The Joint IOUs ignore the fact that, for the most part, the record shows that the Dr. Tierney’s testimony disregards relevant facts and draws broad sweeping unsubstantiated conclusions regarding the state of the California solar market if the Joint IOUs’ proposal is adopted. SEIA and Vote Solar thoroughly addressed Dr. Tierney’s testimony regarding market growth in the wake of NEM reform of the type envisioned by the Joint IOUs in our opening brief, and we will not repeat that argument here.¹⁹⁹ The errors and discrepancies in Dr. Tierney’s testimony are also addressed in the opening briefs of CALSSA and Protect our Communities Foundation (“PCF”).²⁰⁰

The Joint IOUs do briefly divert from their cut and paste job of Dr. Tierney’s testimony to assert the following:

Reducing export compensation in the manner proposed by the Joint Utilities will not hinder the ability of the customer-sited renewable generating industry to continue to grow in a self-sustaining manner. As SEIA/VS witness Gallagher conceded at hearings, the export compensation rate Nevada provides to its NEM customers is between six and seven cents and the retail rate is between nine and eleven cents, and the solar market is continuing to grow and sustain itself in that state. Thus, there is substantial evidence to conclude the Joint Utilities proposed ECR will produce the same outcome for the industry, while rectifying the cost shift as required by AB 327.²⁰¹

The Joint IOUs willingness to bend the law and the facts to support their position are nowhere more evident than in this paragraph. First, the Joint IOUs assert that reducing the export credit in the way they propose will not hinder the rooftop solar industry’s ability to grow in a “self-sustained” manner. But “self-sustained” is not the legislative standard against which the Commission must gauge any NEM successor tariff proposal.

¹⁹⁸ Joint IOUs Brief, pp. 31-51 (copied from pp. of Exh. IOU-01)

¹⁹⁹ SEIA/VS Brief, pp. 82-90.

²⁰⁰ PCF Brief, pp. 35-41.

²⁰¹ Joint IOUs Brief, p 65.

Second, the Joint IOUs imply that SEIA witness Gallagher made a great concession by agreeing on cross examination that the export compensation rates in Nevada are between 6 and 7 cents per kWh and the retail rates there are between 9 and 11 cents per kWh. But the Joint IOUs mis-cite the transcript. Mr. Gallagher agreed that the export compensation rates for Sierra Power and Nevada Power were 7.0 and 7.6 cents per kWh respectively, while their import rates were 9.4 and 10.4 cents per kWh respectively.²⁰² All that tells you is that export compensation rates for Sierra Power and Nevada Power are approximately 75 percent of the retail rate. This is hardly the deal that the Joint IOUs are offering in California. Moreover, the fact that the Nevada market is continuing to grow does not rest solely on the value of the export compensation rate. The Joint IOUs fail to mention that the Nevada utilities do not assess a grid benefit charge on solar customers, they apply monthly netting and allow customers to carry forward extra credits indefinitely.²⁰³

Finally, and most outrageously, the Joint IOUs conclude, based on the reference to the Nevada market, that “there is substantial evidence to conclude the Joint Utilities proposed ECR will produce the same outcome for the industry.”²⁰⁴ There is not only no “substantial evidence,” but *no evidence* whatsoever to support this conclusion. The vast majority of solar exports will occur in the off-peak hours of the middle of the day; Joint IOUs are proposing off-peak rates that will range between 2.8 to 6.0 cents per kWh for SDG&E, 2.6 to 5.1 cents per kWh for PG&E, and 3.4 to 6.3 cents per kWh for SCE.²⁰⁵ Further, the IOUs have proposed large grid benefit charges that essentially will result in compensation for power used behind the meter at the same

²⁰² Tr. Vol. 9 (SEIA.VS-Gallagher), p. 1463, line 13 to p.1464, line 16.

²⁰³ See Exh. IOU-01 (Tierney), p. 33, Table II-3 (reproduced in Joint IOUs Brief, p. 36).

²⁰⁴ Joint IOUs Brief, p. 65.

²⁰⁵ Exh. IOU-01 (Kerrigan), p. 124-125, Tables IV-21, IV-22, and IV-23

low ACC-based rates used for export compensation.²⁰⁶ The Joint IOUs' proposal combined with the 2021 ACC will result in residential bill savings of just 5.8 cents per kWh for PG&E, 6.4 cents per kWh for SCE, and 6.0 cents per kWh for SDG&E.²⁰⁷ This is significantly less than the compensation of 8 to 9 cents per kWh²⁰⁸ currently available in Nevada. Moreover, there is evidence in the record that the cost of solar in Nevada is lower than in California,²⁰⁹ and the Nevada compensation model is far simpler, understandable, and certain than the Joint IOU proposal. By no means does the continued growth of solar in Nevada indicate that the same results will be obtained under the Joint IOUs' proposal in California.

(b) The Title 24 New Homes Solar Mandate Does Not Ensure Sustainability of the Rooftop Solar Industry

Certain parties like CalPA and NRDC continue to point to the Title 24 New Solar Homes mandate as evidence that the rooftop solar industry will continue to grow.²¹⁰ SEIA and Vote Solar have demonstrated why this is in fact not the case. CalPA, however, asserts in its opening brief, that the "Title 24 Mandate is subject to cost-effectiveness evaluations, which Cal Advocates' proposal will pass."²¹¹ The record does not contain evidence of a cost effectiveness evaluation performed by CalPA comparable to the one that the CEC performed for the New

²⁰⁶ Exh. SVS-04 (Beach), at p. 43: "the Joint IOUs' GAC would be based on the solar customer's bill savings at the retail rate, less the avoided costs from the ACC. This would enable the utility to collect, for the customer's solar output that is consumed BTM, all of the costs that the utility would have collected in the absence of the solar unit, except for the ACC-based avoided costs. When combined with the export rate set directly using the ACC, the Joint IOUs' proposal essentially amounts to compensating a solar customer at the current ACC rate for all of its output."

²⁰⁷ Exh. SVS-04 (Beach), p. 37, Table 7 (the NEM 3.0 row).

²⁰⁸ This assumes that a residential customer uses 50% of output behind the meter and exports the other 50%.

²⁰⁹ Exh. IOU-01, Appendix B, pp. B-43 and B-46, citing solar bids from Energy Sage of \$2.52 per watt in Nevada versus \$2.82 per watt in California.

²¹⁰ See, e.g., CalPA Brief, p. 33; NRDC Brief, p.24.

²¹¹ CalPA Brief, p. 34.

Solar Homes mandate - quite the opposite. Similarly, NRDC maintains that the New Solar Homes Mandate is not at placed at risk by the proposals for the NEM successor tariff made in this proceeding,²¹² but its supporting rationale does not hold water.

Specifically, on cross examination, CalPA witness Buchholz was questioned as to whether CalPA performed a cost effectiveness analysis using a methodology comparable to that of the CEC, he stated that they had not.²¹³ The reality is that the cost effectiveness analysis performed by E3 for the New Homes Solar Mandate used a 30-year present value of solar avoided costs in 2020 of \$2.26 per kW for the value for all generation.²¹⁴ This value is equivalent to 11.5 cents/kWh with no degradation in output, or 12.3 cents/kWh with 0.5%/year degradation (with a 3% discount rate)²¹⁵ – a value significantly higher than the one being proposed by CalPA.²¹⁶ And, when using this avoided cost value, the CEC found that the New Solar Homes mandate was not cost effective in certain climate zones.²¹⁷ For CalPA to declare that its proposal is cost effective under the mandate is not defensible.

NRDC uses a different tactic, arguing that, if a NEM successor tariff proposal passes the Participant Cost Test (i.e., has a score of 1.0 or greater), then it will pass cost effectiveness test under Title 24.²¹⁸ Setting aside whether that is in fact true or not, review of E3's analysis shows

²¹² NRDC Brief, p. 24.

²¹³ Tr. Vol. 12 (CalPA-Buchholz), p. 2122 lines 10-18.

²¹⁴ Exh. PAO-7, Excerpt from Rooftop Solar PV System Report: prepared by E3 for the 2019 Standards update, p. 35, Table 11.

²¹⁵ Exh, SVS-4 (Beach), p. 10, footnote 21.

²¹⁶ Exh. PAO-01 (Gutierrez), p. 3-22, Tables 3-3, 3-4 and 3-5.

²¹⁷ Exh. SVS-05, "Frequently Asked Questions 2019 Building Energy Efficiency Standards," p.7.

²¹⁸ NRDC Brief, p. 24.

that the proposals the Joint IOUs, TURN and CalPA do *not* pass the PCT.²¹⁹ While NRDC’s proposal does pass, as demonstrated in SEIA and Vote Solar’s opening brief, it is so full of holes that it is not feasible to implement.²²⁰

In contrast to CalPA and NRDC, TURN seems to have abandoned the assertion made in testimony that there was no reason to believe that its proposal would impact the cost effectiveness of the New Solar Homes Mandate.²²¹ Rather it is now asserting that the Commission does not have to worry about whether the adopted NEM successor proposal conflicts with the mandate. Thus, TURN asserts:

Although several parties argue that the Commission must ensure that a successor tariff is designed to satisfy the cost-effectiveness tests used by the Energy Commission under the Title 24 program, there is no statutory basis for this claim. Public Utilities Code §2827.1(b) directs the Commission to establish the successor tariff “notwithstanding any other law” and does not include any references to building codes or the Title 24 program as a relevant criterion. *Had the Legislature wished for the Commission to coordinate the development of the successor tariff to accomplish other state policy goals, or to coordinate with the Energy Commission, these requirements would have been included in the statutory text.*²²²

TURN’s argument is troublesome on many levels. On a most basic level, given that AB 327 was enacted in 2013 and the New Solar Homes mandate was not adopted until 2019, there was no practical way that the mandate could have been referenced in the statute. But, more importantly, TURN would have the Commission ignore other state policy goals when adopting a successor tariff. Thus, under TURN’s view of the world – i.e., if the legislature had wanted the Commission to coordinate the successor tariff with other state policy goals it would have stated

²¹⁹ Energy + Environmental Economics, *Cost-effectiveness of NEM Successor Rate Proposals under Rulemaking 20-08-020, a Comparative Analysis* (June 15, 2021), p. 4.

²²⁰ SEIA/VS Brief, pp. 68-69.

²²¹ Exh. TRN-01 (Chait), p. 41, line 27 to p.42, line 2.

²²² TURN Brief, p. 61 (emphasis added).

so specifically - the Commission is free to ignore the state’s decarbonization and electrification goals, and the associated integrated resource plan, when designing the successor tariff. Not only is that bad policy, but it is also directly contrary to one of the guiding principles of this proceeding.

As a fallback plan to the Commission ignoring the New Solar Homes mandate in its entirety, TURN asserts that the Commission can rely on the community solar option under the mandate. Thus, TURN asserts that “[t]he availability of a community solar tariff would provide an alternative for compliance with the Title 24 New Solar Homes Mandate that provides options to home builders and preserves the cost-effectiveness of the mandate regardless of the successor tariff adopted by the Commission.”²²³ While TURN is correct that this option is available, it would require the establishment of a viable community solar program in each IOU service territory which has not happened to date. Indeed, despite the Commission’s adoption in 2015 of a community solar program for third-party developers in all three IOUs service territories - the Enhanced Community Renewables (ECR) program – no ECR projects have been developed successfully over the last six years.²²⁴

2. Guiding Principle 3: A successor to the net energy metering tariff should enhance consumer protection measures for customer-generators providing net energy metering services.

The Joint IOUs note that customer understanding is “a critical component of consumer protection.” They further state that “[c]ustomer understanding will be important along a number of fronts: (i) assessing bill savings projections before they invest in solar; (ii) validating bill savings once they have gone solar; and (iii) understanding how their behavior or additional

²²³ TURN Brief, p. 13

²²⁴ Exh. SVS-04 (Beach), p. 46, lines 21-22.

technologies will impact their overall electricity costs once they are on a NEM billing structure.”²²⁵ SEIA and Vote Solar agree, but there is nothing in the Joint IOUs’ proposal which will enhance understanding of any of these elements. The Joint IOUs make bold statements such as that their proposed “compensation rate for solar exports would simplify Reform Tariff billing and improve customers’ ability to understand projected and realized bill savings” and that their proposed Grid Benefits Charge will make the customer’s bill “more transparent and understandable.”²²⁶ The Joint IOUs, however, are making these statements despite (1) the obvious complexity of their proposal, (2) the fact that monthly true ups would mean that exported power in a month could be billed at two very different rates, and (3) the fact that their proposed rate elements (including the export rates and the grid benefits charges) will change every year in unpredictable ways. Moreover, they also make these assertions without having done any customer surveys or engaged in any other customer interactions to gauge the clarity of their proposal to the average consumer.²²⁷

There is nothing consumer friendly about the Joint IOUs proposal. It is highly complex, introducing concepts and rate elements that consumers are not at all familiar with and that will change every year in unpredictable ways; even the Joint IOUs’ own witness could not explain how she would present their tariff proposal to a customer in an understandable manner.²²⁸

²²⁵ Joint IOUs Brief, p. 107.

²²⁶ *Id.*, pp. 110 and 11.

²²⁷ Tr. Vol. 4 (Joint IOUs-McCutchen), p. 637, lines 19-24.

²²⁸ *Id.*, p. 631, lines 26-18.

3. Guiding Principle 6: A successor to the net energy metering tariff should be transparent, understandable to all customers and should be uniform, to the extent possible, across all utilities

As noted in SEIA/Vote Solar’s opening brief, this principle is aligned with Guiding Principle 3: transparency and understandability are hallmarks of consumer protection.

Not surprisingly the Joint IOUs offer up the same unsupported statements in an effort to make their proposal appear to be in alignment with Guiding Principle 6:

The design of the proposed Reform Tariff is more transparent and understandable to customers in that it sends more direct and clear price signals to customers about the continued need to pay for grid services and public programs (through the Grid Benefits Charge). The Reform Tariff also improves transparency around the value of exports. This will be easier for customers to understand than the current NEM 2.0 structure, under which the value of export is tied to the customers retail rate.²²⁹

As noted above the Joint IOUs have offered *nothing* but unsubstantiated statements that their proposed successor tariff, which is full of complex charges and unfamiliar concepts, will be easier for customers to understand than the current NEM structure.

The only other thing the Joint IOUs offer under this principle is a reference to the transparency provided under their proposed VODE tariff, which they are not even advancing for adoption in this proceeding.²³⁰ In short, the Joint IOUs have offered nothing to support their assertion that their successor tariff proposal is transparent and understandable to all customers.

VIII. CONCLUSION

In undertaking its deliberations in this proceeding, the Commission should pause for a moment and look back at the past 20 years and the policies they have crafted which have resulted

²²⁹ Joint IOUs Brief, p .90.

²³⁰ Joint IOUs Brief, p. 90; Exh. IOU-01 (Kerrigan), p.149 lines 14-17 (“We do not propose that the VODE would be available for customers on the same timeline as the core tariff. Rather, this option could be developed at a later date as needed.”).

in a vibrant rooftop solar market in the state. It is time to take the next step in the evolution of this market. That step should be an advancement towards an industry in which the primary product is solar + storage – a product which will maximize solar’s contribution towards meeting California’s peak grid needs, while advancing the state’s critical climate goals. But that step must be a measured one. If the compensation for exported power is cut too quickly and too drastically, the industry will not be able to manage the transition to paired solar and storage systems. The SEIA/Vote Solar proposal rationally balances the AB 327 dictates of a market which is growing sustainably while working towards cost-effectiveness and allows the industry the time necessary to make the next transition in the evolution of the state’s solar policy goals.

Respectfully submitted, this 14 day of September 2021, at San Francisco, California.

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²³¹ In accord with Rule 1.8, the representative of the Solar Energy Industries Association has authorization to sign this Brief on behalf of Vote Solar.