

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.

R.20-08-020

REPLY OF SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E), PACIFIC GAS AND ELECTRIC COMPANY (U 39-E) AND SAN DIEGO GAS & ELECTRIC COMPANY (U 902-E) TO THE ADMINISTRATIVE LAW JUDGE'S RULING SOLICITING RESPONSES TO RULING QUESTIONS

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Pursuant to the Administrative Law Judge's (ALJ's) February 28, 2023 Ruling Soliciting Responses to Ruling Questions (Ruling), and the ALJ's March 21, 2023 ruling extending the deadline to file reply comments, Pacific Gas and Electric (PG&E), Southern California Edison (SCE) and San Diego Gas and Electric (SDG&E) (collectively, the Joint Utilities)¹ respectfully submit their Reply to parties' Opening Comments on the Ruling.

I.

DISCUSSION

A. <u>Transparency and Simplicity Must be a Priority</u>

The Commission's previous decisions in this case have recognized the importance of transparency and simplicity in designing the successor tariff. Complex and opaque program/incentive structures make it difficult for the Commission to determine how much is being spent to achieve a desired outcome and confusing for customers participating in those programs. All else equal, if the choice is between a simpler structure and a more complex one to achieve a similar outcome, the simpler structure should be favored. In their opening comments, the solar industry proposes incredibly complicated structures for a VNEM successor tariff that nonetheless have a simple goal: achieve

¹ Pursuant to Rule 1.8(d), SCE is authorized to file these comments on behalf of the Joint Utilities.

compensation rates as close to the status quo as possible. In theory, the utility proposal could achieve the same goal by setting ACC Plus adders above \$0.20/kWh for all customers. Indeed, such an outcome would be preferable to the utilities to the industry proposals, as it would be straightforward to implement and clear to what degree VNEM systems are subsidized. However, such a high adder is clearly unreasonable. If approved, the completely unnecessary costs of implementing (and operating) the netting schemes proposed by the solar industry will add to the already unacceptably high burden the NEM program has placed on non-participating customers. The Commission should take the example of the Sacramento Municipal Utility District, which implemented an even simpler alternative to VNEM than that proposed by the IOUs, and disregard complex proposals which only benefit the solar industry.²

B. <u>The Joint Utilities Do Not Support Deferring a Determination in this Proceeding Pending</u> the Outcome of the Green Access Programs Proceeding

Cal Advocates recommends the Commission defer its decision on VNEM and NEMA pending a decision in the Green Access Programs (GAP) proceeding. The utilities recognize that the intended purposes of VNEM and GAPs are similar, but the resources involved are very different – GAP proposals generally are about providing crediting mechanisms to customers receiving solar generation from wholesale resources, while VNEM pertains to resources that have at least some physical and geographic relationship to the customers receiving credits. As D.22-12-056 found, there should be "a sense of urgency to transition to the successor tariff." ³ If there is to be any delay, it should only apply to VNEM, where there is at least some uncertainty to what degree ACC Plus adders should be provided. NEMA, as currently structured, is not compliant with statute and must be reformed as soon as possible.

The utilities expect other parties will agree that the GAP decision and other conditions (likely additional analysis and data collection) should be complete before the CPUC makes any changes to VNEM and NEMA. While Cal Advocates' proposal is based on the premise that the results of the GAP proceeding may make significant VNEM/NEMA subsidies unnecessary, it does not appear the positions

² SMUD provides a fixed monetary credit to benefiting meters instead of allocating metered credits. Details available at https://www.smud.org/en/Going-Green/Virtual-Solar-program.

³ D.22-12-056, p. 194

of parties opposed to updating VNEM/NEMA to align with NBT are contingent upon any particular outcome in the GAP proceeding. The Commission should therefore decline to delay considering changes that the Commission's analysis in this proceeding has demonstrated are necessary and overdue.

C. <u>Replies to Specific Party Comments regarding VNEM</u>

1. Questions 1 and 2: There is No Evidence that VNEM systems are Cost-Effective

Because these questions are essentially asking two aspects of the same underlying question ("How does the cost effectiveness of VNEM systems compare to the cost effectiveness of standard NEM systems?") the utilities reply to both collectively. No party provides any evidence that the cost effectiveness results of VNEM systems are meaningfully different than that of NEM systems. More specifically, no party provides any quantifiable evidence that the benefits of VNEM systems are meaningfully different from the benefits of standard NEM systems as measured by the CPUC's avoided cost calculator. Parties such as Ivy and CALSSA assert in responses to this question and others that VNEM system benefits are higher than standard NEM systems based on claims that VNEM systems rarely physically export to the grid. Regardless of the merit of these claims, they are a red herring to the question of what value VNEM systems provide to the electrical system. As the utilities noted in opening comments, the Avoided Cost Calculator implicitly assumes no generation is exported onto the grid. All arguments regarding how much VNEM (or NEMA) systems export are an argument over to what degree the ACC reflects an overestimate of the value produced by these systems. For the purposes of cost effectiveness analysis (including the cost shift estimates cited in Cal Advocates' comments) the utilities assume this overestimation to be on the high bookend of avoided costs.

Likewise, parties do not appear to provide any evidence that the costs of VNEM systems are meaningfully different than other NEM systems. CALSSA argues that compliance with new prevailing wage requirements will increase the installation costs of VNEM systems.⁴ While this claim

⁴ CALSSA Opening Comments, pp. 3-4.

appears dubious,⁵ if true, it undercuts any argument that NEM systems of any kind are likely to pass TRC analysis. This means that the effect of VNEM systems (just like NEM systems) is to increase total system costs, with non-participant customers bearing even greater costs to the benefit of participating customers. Moreover, given the lack of transparency into VNEM arrangements, it is unclear to what degree tenants being allocated VNEM credits actually realize bill savings in non-MASH/SOMAH projects. To the extent any vulnerable customers actually benefit from VNEM, it is at the expense of similarly situated customers.

2. <u>Question 3: Additional Data Regarding the Multi-Tenant Landscape Demonstrates</u> that Residential Tenants are Not the Beneficiaries of the VNEM Program

SCE and SDG&E were unable to provide detailed breakouts at the time of opening comments in response to this question and thus provides the data here. PG&E's data was previously provided but is reproduced here for completeness and context.

SDG&E VNEM, MASH, SOMAH Participation Data								
			Total					
NEM		Total	Capacity	DAC	DAC			
Туре	Category	Count	(MW)	Count	Capacity			
VNEM	Residential VNEM	37	1.24	24	0.55			
VNEM	Mixed Residential and Non-Residential	198	8.5	113	2.81			
VNEM	Non-Residential	107	11.54	29	2.08			
MASH	MASH	248	9.91	129	5.01			
SOMAH	SOMAH	41	2.39	12	0.64			
Total		631	33.58	307	11.09			

*PTO dates prior to March 2023

⁵ Based the September 21, 2022, Opposition of the Coalition of California Utility Employees (CUE) to CALSSA's Motion to Reopen the Record and Take Official Notice of AB 2143, any increase in installation costs is dubious. (CUE Opp., pp. 3-5.)

SCE VNEM Participation Data							
Category	Total Count	Total Capacity (MW)	DAC Count	DAC Capacity			
Residential VNEM	2	0.1	0	0.0			
Mixed Residential and Non-Residential VNEM	124	4.5	32	1.5			
Non-Residential VNEM	29	6.0	5	1.1			
MASH	521	26.7	154	5.1			
SOMAH	127	9.5	67	5.1			
Total	803	46.8	258	12.8			

PG&E VNEM Participation Data								
Category	Total Count	Total Capacity	DAC Count	DAC Capacity				
		(MW)						
Residential VNEM	178	3.52	34	0.4				
Mixed Residential and Non- Residential	191	6.99	20	0.93				
Non-Residential	89	17.55	14	1.73				
MASH	857	25.08	191	5.7				
SOMAH	85	4.83	7	0.35				
Total	1,400	57.97	266	9.11				

These data reveal that non-program funded VNEM is predominantly serving nonresidential properties, not residential renters as portrayed by the industry. While the utilities believe that Virtual Tariffs (as NBTV) should remain an option for all customers, all evidence indicates that it is not an effective way of providing access to renewables for low-income customers. Even assuming that all mixed residential and non-residential arrangements predominantly provide benefits to residential accounts, this means that at most only 24.85 MW of non-program VNEM solar capacity has been installed for the benefit of multifamily tenants. This is equivalent to the amount of residential solar installed across all three IOUs in the first 5 days of January 2023.⁶ VNEM has not been an effective

⁶ Per CA DG Stats, 149.7 MW of residential solar was installed in January 2023 across all three IOUs, or 4.83 MW per day.

policy mechanism for providing access to renewables to residents of multifamily dwellings. Even ignoring all broader questions of cost effectiveness, it is unreasonable to expect VNEM to meaningfully correct the inequity of NEM adoption disproportionately benefiting owners of single-family homes.

3. Question 4: The Commission Should Reject Novel Virtual Billing Netting Schemes

Parties propose novel netting schemes as the successor to existing VNEM tariffs so as to partially retain retail rate-based compensation. Parties assert this is justified based on claims that while VNEM systems meter all generation as exports, much of this generation is actually used by other meters without being physically exported onto the distribution system. As discussed in the previous response, this is a red herring and irrelevant to the question of whether ACC based rates are a more accurate reflection of the value of the generation than retail rates.

Further, the CPUC has already determined what is an export for the purposes of the NBT: what is metered, without any netting of consumption against production.² The logic that the IOUs are obligated to instead define exports as those that are transferred over some "significant" amount of the grid could just as easily apply to standard NBT systems (for example, a row of townhomes all on a single transformer with separate NBT systems could argue that their exports should be determined collectively just as if they were a part of a VNEM arrangement). As discussed below, these netting proposals would be overly complex to implement and administer, as dynamic allocations are not done at this level of granularity today, and there would be significantly higher associated start-up and ongoing costs when compared to a tariff like that proposed by the utilities. These tariffs would also be confusing to customers – instead of compensation being based on a preset ACC rate (along with any ACC Plus Adders), an individual benefiting customers' bill would become a function of every other customer's usage in the VNEM arrangement. If the CPUC determines that compensation to VNEM systems should be higher than the value that the generation provides, the compensation should be made through a transparent and easy to understand mechanism such as the ACC Plus, not convoluted netting schemes.

⁷ D.22-12-056, FF 140, CL 28, OP 1.

Initial start-up costs and delays will be higher for the property-netting schemes proposed by Ivy, CALSSA and SEIA. Treating a VNEM arrangement as if the aggregated tenant load and generators were behind the same meter for billing purposes would require all benefitting accounts to be on the same billing cycle. Synchronizing the billing cycles across every benefitting account incurs additional cost and delays. For each change in tenancy that doesn't align perfectly with the arrangement billing cycle, an additional manual billing step would be needed to synchronize the new tenant. Furthermore, because final interval data (approximately 2,880 per benefiting account, per month) from every benefitting account would be required before billing any single account, additional delays would be common on an ongoing basis, as described further in response to Question 10 (item 9 below).

Property-netting schemes would increase variability and complexity involved in crediting and billing customers. Because credits vary based on actual energy consumption of a tenant's neighbors, predicting the cost of using energy during generation hours is impossible. The proposals raise equity issues. If one tenant uses more energy during the day, they would receive a higher benefit from the arrangement than a tenant who works outside the home during the day. There would also be impacts on conservation-- for a tenant whose day-time energy usage is netted against generation, there is less incentive to conserve energy for their neighbors' potential credits or in general. Under a property-netting scheme, incremental costs related to call center volume should be expected due to this variability and complexity.

a) <u>(i) Maintaining "Contiguous Parcels" VNEM eligibility definition is at odds with</u> the rationale offered for complex netting

Parties in favor of introducing complex netting contradict their core justification for complex billing by simultaneously proposing to maintain existing property eligibility requirements. The industry points to a single possible VNEM system configuration where all benefiting meters are behind the same service delivery point as proving that their proposed netting methodology approximates physical reality.⁸ Yet in responses to question 4c, they insist that the current allowance of VNEM

⁸ CALSSA Opening Comments, p. 5, SEIA Opening Comments, p. 7, Ivy Energy Opening Comments, p. 8

beyond a single service delivery point continue. As CALSSA acknowledges, the CPUC has expanded the types of arrangements allowed under VNEM well beyond the single service delivery point, including allowing multiple generators at multiple service delivery points to all be considered part of the same VNEM arrangement in the most recent decision. If this type of complex netting is to even be allowed, it should only be permitted for arrangements where all benefiting accounts are located behind a single service delivery point. However, the utilities instead propose to keep existing property eligibility definitions and instead implement a successor to VNEM that is simple and transparent regarding the compensation provided.

(ii) Business Practices That Violate Rule 1 and 18 are Unlawful and Must Cease

CALSSA and Ivy Energy's Opening Comments on this Ruling disclose that property owners are engaging in an unlawful business practice that violates the Commission-approved Tariffed Rules 1 and 18. The Joint Utilities respectfully requests that the Commission direct parties that such business practices are unlawful and not permitted and that if business models rely on unlawful business practices, the practice must be discontinued and the business model adjusted. The Joint Utilities also believe there are lawful mechanisms and procedures for resolving some of the issues this practice is likely designed to address, such as access to confidential customer usage data. There are Commissionapproved forms⁹ for customers to use that allow them to make other entities agents for all or particular purposes. Third parties should use those mechanisms but not in a manner that violates Rules 1 and 18.

In their comments, CALSSA contends that it is "common practice" for property owners to take over tenant accounts when installing a VNEM arrangement and in turn, bill customers for their electricity usage themselves. CALSSA also states third-party billing arrangements have recently been developed and accepted. To be clear: those practices are illegal. Each utility's Electric Rule 18 outlines various exceptions for billing customers directly, but none are applicable to the practice described by CALSSA, Ivy, SBUA and others. Contrary to SBUA's assertions, Public Utilities Code section

 $[\]underline{9}$ Electric Form 14-796.

218(b)(1) does not authorize the sale of generation to tenants; it only authorizes "use."¹⁰ Moreover, because the tenant benefitting accounts also import electricity from the grid, a building owner taking over tenant benefiting accounts would be reselling power delivered by the utility in violation of Electric Rules 1 and 18.¹¹

In addition to the facial illegality, there are numerous consumer protection policy issues raised by such unlawful business practices. CALSSA raised one such issue – loss of CARE/FERA eligibility – in its filing. Allowing customers to retain such eligibility while maintaining the unlawful business practice merely layers bad policy on top of the violation of regulations and statutes. Another issue is a lack of direct relationship between the utility and inhabitants of a premise for utility alerts such as planned outages, changes to rates, safety notices and more. Additionally, if a third-party did not pay the utility, but the customer paid the third-party, it is unclear what recourse the customer would have. The Commission should clarify for these parties that the practice is unlawful and may not continue. The Joint Utilities also request direction from the Commission regarding whether it should be investigating, auditing, or otherwise attempting to discern the extent of this problem and how it should be rectified.

4. <u>Question 5: Proposals to Effectively Maintain the Status Quo for VNEM Violate this</u> <u>Proceeding's Guiding Principles and Section 2827.1</u>

Proposals that maintain retail rates for credits and/or inflated ACC plus adders tied to retail rates conflict with the Guiding Principles and the requirements of Public Utilities Code section 2827.1. The Commission has already determined that "[c]ontinuing to base export compensation rates on retail import rates does not comply with Public Utilities Code Section 2827.1" and that "retail rates

See also PUC § 218(a) ("'Electrical corporation' includes every corporation or person owning, controlling, operating or managing any electric plant...except where electricity is generated on or distributed by the producer through private property solely for its own use or the *use* of its tenants *and not for sale or transmission to others*.") (emphasis added). In addition, in contrast to subdivision (b)(1), which only refers to tenants' *use* of generation, subdivision (b)(2) allows for the use *or sale* under narrow circumstances not applicable to VNEM.

See PG&E Electric Rule 1 at Sheet 9 ("A customer may take Bundled Service or Direct Access Service or Community Choice Aggregation Service, but must take final delivery of electric power, and not resell that power.") and PG&E Electric Rule 18 ("A customer shall not furnish or use electricity received from PG&E upon premises, or for purposes, other than those specified in the customer's application for service...").

do not reflect the actual costs of the exports or the benefits the exports provide to all customers and the grid. ...¹² These findings and conclusions are just as applicable to virtual arrangements.

The requirement in Public Utilities Code Section 2827.1 that the Commission "include specific alternatives designed for growth among customers in disadvantaged communities" is not an appropriate justification for a "strong" virtual tariff, including higher export compensation that would result in payback periods shorter than the Commission's targeted 9-year payback under the NBT. The general market virtual tariff is not specifically directed at supporting disadvantaged communities, and as reflected by the data in response to Question 3, it does not. If the modified virtual tariff overcompensates participants, regardless of whether the project serves a disadvantaged community or low-income customers, the result is to shift costs on disproportionately low-income non-participants. Thus, consistent with the NBT, it is only appropriate for the virtual tariff to provide a higher ACC plus adder to low-income customers, and customers in disadvantaged and tribal communities, to meet a 9-year payback.¹³

The Commission should disregard CALSSA's assertion that a "strong" VNEM tariff is purportedly needed to "counterbalance" the changes to NEM2 to ensure customer-sited continues to grow sustainably.¹⁴ The Commission, in D.22-12-056, specifically considered the "grow sustainably" requirement in adopting the Net Billing Tariff. Namely, the Commission determined that the ACC Plus and locked-in rate schedule provided to customers interconnecting during the first five years of the NBT provided a glidepath to ensure customer-sited distributed generation grows sustainably.¹⁵ Thus, no

¹² D.22-12-056, p. 104.

¹³ D.22-12-056, p. 226, FOF 201 ("By providing greater ACC Plus adders to CARE- and FERA-enrolled households, households in disadvantaged communities, and households in California Indian Country, the Commission is promoting the growth of distributed generation in these underrepresented communities.")

¹⁴ CALSSA, p. 9.

¹⁵ See D.22-12-056 at p. 157 ("The purpose of the ACC Plus is to support the sustainable growth of distributed generation in California, as directed by statute"), p. 214, FOF 71 ("A five-year glidepath provides a balanced approach that allows for sustainable market growth…"); p. 220, FOF 134 ("The ACC Plus approach will allow the industry to grow sustainably").

"counter balancing" is appropriate or necessary and would only serve to excessively subsidize the solar industry at the expense of ratepayers.

5. Question 6: Exported Energy Should not be Credited at the Retail Rate

In addition to proposing maintaining retail rate credits, CALSSA proposes ACC Plus adders to ensure compensation rates do not decline at all from current retail rates upon implementation of the successor tariff.¹⁶ This is an collateral attack on and attempt to relitigate the finding in D.22-12-056 that "[t]he magnitude and severity of the NEM 2.0 cost shift requires immediate action by the Commission" and "[t]he glide paths proposed by CALSSA and SEIA/Vote Solar are inadequate, with respect to the length of time involved, for addressing the magnitude and severity of the cost shift."17 The Commission should reject these proposals, as they make no attempt to balance the interests of non-participants by targeting a specific payback period. While currently VNEM installed capacity is modest compared to the rest of the NEM program, the CALSSA proposal amounts to a backdoor effort to restore NEM 2.0 like credits for any customer able to configure a VNEM arrangement. The temporary extension of NEM 2.0 availability for VNEM and NEMA arrangements is already likely to trigger a shift in the industry towards selling these systems. Further, non-MASH/SOMAH VNEM capacity already largely comes from non-residential systems. That said, the utilities do support higher adders for residential VNEM systems (or a subset class, such as low-income residential customers and SOMAH participants) than those included for the standard NBT. But the adders should be calibrated to provide a specific payback period, and not to maintain the existing compensation levels the CPUC has found excessive.

6. <u>Question 7: Novel Netting Proposals Undermine the Rationale for Allowing VNEM</u> <u>Participants to Take Service on Any Rate Schedule</u>

CALSSA and SEIA both argue that VNEM participants should not face the same electrification rate requirements as standard NBT residential customers.¹⁸ In the context of their proposal to continue to provide retail-based compensation, this should be rejected for the same reasons

<u>16</u> CALSSA, p. 10.

<u>17</u> D.22-12-056, FoF 69, 70.

¹⁸ SEIA, pp. 9-10; CALSSA, pp. 11-12.

the decision required standard NBT customers to take service on a specific rate. However, CALSSA's and SEIA's arguments for why benefiting customers should be exempt confirm the fallacy of their overall approach. They cite language from the November 2022 Proposed Decision that "tenants have less ability and fewer options than property owners to install load-shifting smart devices and appliances."¹⁹ Yet, the novel netting scheme proposals would significantly vary participating customers' compensation based on their ability to load shift to match solar generation. The utility proposal to compensate all generation at avoided cost, with any necessary adders to achieve specific payback periods, is far simpler for customers and avoids the challenge the solar industry cites for why these customers should not be subject to rate requirements.

7. <u>Question 8: The Commission Should Reject "Property Netting" Proposals in Favor</u> of the Joint Utilities' Simple and Transparent Netting Proposal

Parties who propose a 15-minute "property netting" scheme to describe "what is happening to the grid" at a particular time to calculate "exports" under a virtual arrangement misunderstand how VNEM billing works today. Current VNEM tariffs (including MASH and SOMAH) allocate the aggregate kWh exported by the generating facility during the billing period. This monthly kWh is referred to as the "Gross Credit" and is allocated to each benefiter account by time-of-use periods, regardless of the actual 15-minute or aggregate use of each benefiter. Allocating the actual consumption of the generating facility to each benefiter account at every 15-minute interval based on each individual meter reads, as these parties propose, would be extremely difficult to implement and would make it virtually impossible for system owners and customers to understand how kWh are allocated without having a complete data set for every account, and every 15-min interval. This is especially true given the high level of granularity in NBT export rates. Paradoxically, customers that use the most energy during September evenings when NBT export credits are highest would be allocated more of these very valuable credits, while neighbors who have high usage in the middle of the day would be allocated less.

¹⁹ PD, FoF 194.

In addition, it is unclear what benefit adopting such a complex proposal provides. By contrast, the Joint Utilities propose a monthly allocation of the ACC value (in dollars) of the total generation from the facility, regardless of the actual meter reads for each benefitting account. The benefiter account would use such credit as "cash" that can offset any portion of the bill which will be calculated based on their applicable rate without complicated netting arrangements, rate changes, or compromising their CARE/FERA discounts. At the end of the relevant period (12-months), a "system wide" calculation would be done to determine whether "in aggregate" the on-site generation exceeded the aggregate usage of all benefiters and, if so, do a "settlement" to comply with net surplus compensation rules. The Joint Utilities' proposal is thus far simpler and transparent (as the value of the generation can be calculated by the system owner) and easier for the customer to understand. Other parties' suggestions to account for empty properties, move-in/move-outs, and other account changes could be incorporated easily in the Joint Utilities' proposal without losing simplicity and transparency. Lastly, use of the ACC plus adder construct created in the NBT can account for various customer related protection measures, as well as the legislative mandates for programs like SOMAH.

8. <u>Question 9: The Commission Should Reject Proposed Glide Path Proposals At</u> Present Compensation Levels

As stated in the Joint Utilities' response to Question 6, any glide path for VNEM should be based on achieving a set payback period, not maintaining existing retail rate compensation levels that the Commission has found are disconnected from the value of the generation.²⁰ The low level of VNEM adoption in the context of very high current compensation rates indicates that the compensation rates by themselves have little to do with why VNEM has not grown at the same pace as the standard NEM tariff. Instead, proposals such as the utilities' that provide developers, landlords, and benefiting customers with clear and transparent compensation levels are more likely to successfully spur projects than industry proposals that dramatically increase the complexity of current tariffs and make future overall compensation rates impossible to predict.

²⁰ D.22-12-056, FOF 91, 92.

Several parties suggest maintaining retail rate export compensation for the SOMAH tariff.²¹ The Joint Utilities assert that this would be inappropriate, as retail rate compensation conflicts with the Commission's adopted Guiding Principles. However, the Joint Utilities acknowledge that the SOMAH tariff may require special consideration beyond the general VNEM tariff. If the Commission believes that higher export compensation for SOMAH is necessary, it should do so in the form of an ACC Plus Adder, not maintaining retail rate compensation that will increase as retail rates continue to increase. The Commission could adopt a higher ACC Plus Adder specifically for SOMAH that is higher than the general market VNEM tariff.²² Arguments that VNEM is statutorily required for SOMAH are meritless; the cited language merely says that SOMAH participants need to be given credits on their utility bill, but has no requirements regarding what form those credits take.²³ Cal. Pub. Util. Code § 2870(g)(1) explicitly allows "other tariffs that may be adopted by the commission pursuant to Section 2827.1" as a compliant structure; the NBT as approved by D.22-12-056 is exactly such a structure.

9. Question 10. Complicated Netting Proposals Will Exacerbate Billing Delays

Various parties have commented on delays in the billing set-up for new VNEM arrangements. As discussed previously, changes have already been implemented at each IOU to improve set-up timelines. Additional changes related to collecting accurate information for the benefitting accounts just before granting permission to operate (PTO) could additionally reduce delays.

However, the proposals set-forth by CALSSA, Ivy and SEIA would exacerbate billing delays in set-up and on an ongoing basis after initial set-up for VNEM arrangements. These proposals complicate billing by requiring (1) all benefitting and generating accounts to be on the same billing cycle and (2) final interval data from all meters in the arrangement prior to billing any individual account. With approximately 2,880 15-minute intervals in an average month for one meter, the total

²¹ Sunrun, p. 11; SEIA; pp. 7-9; CALSSA, pp. 14-19; CSE, p. 1.

²² Note, however, that a recent decision by the Commission (D.23-03-007) increases the incentives (in \$/kW) provided to SOMAH systems. In establishing any ACC Plus Adder for SOMAH, the Commission should take into consideration the revised SOMAH incentives to determine a reasonable payback period of the costs not covered by the program.

²³ SunRun, p. 4

number of intervals in a single arrangement could be extremely high. Like Wi-Fi routers and other equipment, it is common to have communication issues with utility meters, which at times, require manual intervention to validate data prior to billing. With so many intervals required prior to billing any single account, delays are likely due to non-communicative meters. Instead of only impacting one customer if interval data is missing for their account, the delay would impact all customers in the arrangement equally.

The Joint Utilities' proposal simplifies how the value of the energy is allocated to benefiters (without requiring that all accounts be on the same cycle, and complex 15-minute or monthly usage offsets) and provides transparency of calculation and allocation to the system owner.

Ouestion 11. Generating System Owners Should Not Have Access to Accountholders' Private Usage Data

With the proposals set forth by SEIA, CALSSA, Ivy and others, the owner of the building and/or generator would need to have access to the consumption data of all benefiters in the arrangement to accurately understand the value of their generation. The privacy of benefiting accounts (e.g., residential tenants of a multi-family property) should be respected and they should not be required to authorize the owner of the property and/or generator to access their consumption data in order to participate in a VNEM arrangement. The Commission's tariffs, including Rule 25 for SCE, demonstrate such respect. Such data sharing is voluntary and can be accomplished using the Commission-approved Form 14-796. Crediting generator exports at ACC (plus any adders) would allow the generator owner to accurately quantify the value of their generation without requiring consumption data from customers.

11. <u>Question 12. The Commission Should Authorize an Advice Letter Process to Update</u> <u>Fees for Interconnection and Other Costs</u>

Most parties agree the current fees are reasonable in structure, with some acknowledging inflation may necessitate a need to re-evaluate the current values. Once a final decision is reached in how VNEM arrangements would be billed, the Joint Utilities recommend that the final decision instruct the Joint Utilities to use the advice letter process to update their fees to reflect actual costs.

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12. <u>Question 13. "Property Netting" Will Dampen the Storage Incentive Created by</u> <u>ACC-Based Export Compensation Rates</u>

Parties appear to generally agree that moving to ACC based rates for exports will incentivize storage installations better than the status quo VNEM tariffs. However, party proposals for novel netting schemes would hinder these price signals and make storage dispatch far more challenging than it should be. Under the Joint Utilities' proposal, bill credits would be maximized by a NBTV storage facility dispatching against the value of generation as estimated by the ACC. Under "property netting" approaches, the facility would instead need to optimize against all the loads of benefiting accounts and these export credits. This would require access to real-time interval data of all benefiting meters, which carries with it significant privacy concerns – tenants would be pressured to provide private data to their landlords to maximize potential bill savings. Basing all compensation on the ACC is simpler, carries no privacy risks, and will result in higher value storage dispatch than one that optimizes for minimal virtual exports.

As discussed by CALSSA, SEIA, Sunrun, and other parties, the Joint Utilities have been working with various industry participants to provide a path for resiliency for VNEM arrangements over the course of the last year. The various parties stated that the resulting approved design and recent tariff clarifications are not sufficient and a more robust isolation arrangement should be approved. The other design proposed by CALSSA and Sunrun during these workshops includes isolating the VNEM arrangement on the utility-side of the interconnection point, wherein some or all of the generator and benefitting meters would be isolated from the grid and would continue to be energized, capturing exports and consumption while in isolated operation during a grid outage. Utilizing utility distribution equipment, including energized meters during isolation, would make the arrangement a Community Microgrid as defined in the Community Microgrid Enablement Tariff (C-MET).²⁴ Special controls and meters would need to be installed to ensure power quality, along with other requirements of developing a Community Microgrid, as described in PG&E's C-MET. PG&E understands that the costs associated

²⁴ Electric Schedule E-CMET, Community Microgrid Enablement Tariff, Sheet 9, Section 14.5

with developing a microgrid are a barrier to entry for small-to-medium-sized VNEM arrangements and is open to exploring this issue further. However, this should be explored within the microgrid proceeding, not the NEM Revisit proceeding.

CALSSA also asserts that allowing load on the generating account meter would provide resiliency in VNEM arrangements but is prohibited under the current tariffs. Allowing load on the generating account at all times to be used only for back-up purposes during grid outages seems reasonable but enforcing this provision would be impossible in practice. Instead of allowing load on the generating account at all times, utilizing a back-up loads panel in conjunction with an automatic transfer switch (ATS) would ensure the load is only utilized while the generator and storage device are operating in isolation mode. This configuration was clarified to be allowed in the latest tariff updates mentioned above. Without using a back-up loads panel and ATS, allowing load on the generating account at all times would make credit allocations to benefiting meters vary as the generating account usage varies, creating yet more confusion regarding benefiting account bills and providing less benefit to tenants. This should not be allowed in any publicly funded VNEM arrangement, like those of SOMAH, which requires at least 51% of total generation to be allocated to benefitting accounts associated with tenant meters. Allowing load on the SOMAH generating account means less generation would be allocated to benefitting tenants, so the 51% allocation requirement could not be assured to be met. In addition, VNEM/NBTV arrangements with load at the generating meter should not be eligible for higher NBTV ACC Plus adders proposed by the utilities, as the adders would assume no generation is being compensated at retail rates.

13. <u>Question 14. Battery grid charging should only be allowed ahead of PSPS events</u>

As stated previously, the Joint Utilities are not opposed to allowing customers to charge their batteries with grid energy ahead of Public Safety Power Shutoff (PSPS) events but controls need to be in place to ensure grid charging is only occurring during these times. Current certifications for Power Control Systems (CRD-PCS) do not allow for a mechanism to do this. The Joint Utilities would support a technical solution for a battery certified as "no grid charging" to charge from the grid provided that charging only occurs leading up to PSPS events.

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The issue at hand is not the ability of the energy storage system to charge from the grid leading up to a PSPS event. The issue is about maintaining integrity of the renewable characteristics of the generation in a virtual arrangement. An energy storage system could charge from the grid so it can then provide backup services to onsite load in an approved configuration (as discussed in Question 13, above). Ensuring this practice is limited to such resiliency situations is necessary.

D. Replies to Specific Party Comments regarding NEMA

14. Question 15/16: There Is No Evidence that NEMA is Cost-Effective

As with VNEM, parties provide no quantifiable evidence that the cost effectiveness results for NEMA installations are likely to be significantly different from that of other NEM installations. AECA/CFBF nonetheless makes several arguments that attempt to imply that there is.

First, AECA/CFBF again repeat claims that a CAISO report showed that "\$2.8 billion worth of transmission had been displaced by distributed energy resources" in attempting to argue that NEMA generators provide unquantified benefits.²⁵ The Commission, in this very proceeding, has already explicitly dismissed the relevance of this purported evidence, "[refuting] once and for all a misconception that continues to be argued by some parties regarding transmission avoided costs in the Avoided Cost Calculator."²⁶

Second, they claim that NEMA's ineligibility for net surplus compensation (NSC) represents a meaningful benefit for non-participating customers.²⁷ NEM tariffs require customers to size to load; NSC is intended solely to provide compensation to customers that incidentally (and unexpectedly) produce more generation than they need in a given year. Therefore, any excess generation from NEMA customers that is ineligible for NSC should be very small in volume compared to the total generation from NEMA systems and therefore insignificant.

Third, AECA/CFBF claim that the NEM 2.0 Lookback Study found agricultural customers pay more than their cost of service. The Lookback Study did no such thing – it only found

²⁵ AECA/CFBF Comments, p. 4

²⁶ D.22-12-056, p. 204

²⁷ AECA/CFBF Comments, p. 5

that non-residential NEM customers in general paid more than their cost of service. The only cost of service study approved by the CPUC to specifically examine whether or not agricultural NEM customers pay more or less than their cost-of-service was PG&E's 2020 General Rate Case Phase II Cost-of-Service study. As reflected in the table below, that study found that both non-NEM and especially NEM agricultural customers underpay their cost of service.

Table I-1: PG&E 2020 GRC Ph II Testimony Cost of Service Study

TABLE 1-2					
FULL COST OF SERVICE RESULTS (\$ MILLIONS)					

	Non-NEM Customers				NEM Customers				
	Present	Full Cost		Percent	Present	Full Cost		Percent	
Bundled	Revenue	Revenue	Change	Change	Revenue	Revenue	Change	Change	
Residential	\$2,957.4	\$2,727.2	(\$230.3)	-7.8%	\$223.5	\$433.7	\$210.2	94.0%	
Small Commercial	\$774.9	\$834.9	\$60.0	7.7%	\$61.3	\$114.5	\$53.2	86.9%	
Other C&I	\$2,584.3	\$2,395.9	(\$188.3)	-7.3%	\$208.7	\$203.4	(\$5.2)	-2.5%	
Agriculture	\$958.8	\$1,021.6	\$62.8	<u>6.5%</u>	\$197.8	\$233.9	\$36.0	18.2%	
Bundled Total	\$7,275.4	\$6,979.5	(\$295.9)	-4.1%	\$691.3	\$985.5	\$294.2	42.6%	
DA/CCA Total	\$5,491.6	\$5,249.3	(\$242.3)	-4.4%	\$590.3	\$834.3	\$244.0	41.3%	
System Total	\$12,767.0	\$12,228.8	(\$538.2)	-4.2%	\$1,281.6	\$1,819.8	\$538.2	42.0%	

This table was based on PG&E's proposed marginal costs. The final decision resulted in slightly different marginal costs; updating this analysis with what was approved by the CPUC show Agricultural NEM customers underpay their cost of service by a similar margin. Further, this updated analysis shows the results for DA/CCA customers by class; the underpayment is by an even greater margin for unbundled agricultural customers who only receive delivery service from PG&E.

Non-NEM Customers					NEM Only				
Bundled	Present Revenue	Full Cost Revenue	Change	Percent Change	Present Revenue	Full Cost Revenue	Change	Percent Change	
Residential	\$2,957	\$2,749	(\$209)	-7%	\$224	\$437	\$214	96%	
Small	\$775	\$760	(\$15)	-2%	\$61	\$114	\$53	87%	
Other C&I	\$2,582	\$2,472	(\$110)	-4%	\$209	\$211	\$2	1%	
Agriculture	\$959	<u>\$993</u>	<u>\$34</u>	<u>4%</u>	<u>\$198</u>	\$230	\$32	<u>16%</u>	
Bundled Total	\$7,273	\$6,973	(\$300)	-4%	\$691	\$992	\$300	43%	
DA/CCA	Present Revenue	Full Cost Revenue	Change	Percent Change	Present Revenue	Full Cost Revenue	Change	Percent Change	
Residential	\$2,222	\$1,980	(\$243)	-11%	\$186	\$384	\$199	107%	
Small	\$790	\$760	(\$30)	-4%	\$71	\$124	\$ 53	75%	
Other C&I	\$2,338	\$2,329	(\$9)	0%	\$304	\$324	\$20	6%	
Agriculture	<u>\$141</u>	<u>\$145</u>	<u>\$4</u>	<u>3%</u>	<u>\$26</u>	<u>\$32</u>	<u>\$6</u>	<u>25%</u>	
DA/CCA Total	\$5,491	\$5,213	(\$277)	-5%	\$587	\$864	\$277	47%	
System Total	\$12,764	\$12,187	(\$577)	-5%	\$1,278	\$1,856	\$578	45%	

Table I-2: PG&E 2020 GRC Ph II, Cost of Service Study Updated per Final Decision

Fourth, AECA/CFBF contradict themselves on whether agricultural NEM systems cause cost shifts to other customers. A paragraph after claiming "there is no material cost shift from agricultural NEMA customers to other customers," AECA cites a memorandum from 2012 that "the levelized net total cost of non-residential NEM facilities averages \$0.03 per kWh-exported." This citation is in turn referring to the CPUC's 2010 NEM Cost Effectiveness Study. AECA/CFBF goes on to make a difficult to parse comparison of this 0.03/kWh cost shift estimate to metrics used in calculating the Power Charge Indifference Adjustment (PCIA). This is an inappropriate comparison; \$0.03/kWh was the estimate of the net cost shift per kWh exported of non-residential systems over a decade ago, not the allin cost of the generation that would be comparable to the market price benchmark of other generation resources. AECA/CFBF goes on to cite this 13-year-old study (which still finds a cost shift from nonresidential systems) as evidence that there is no cost shift from agricultural NEM customers today. More recent estimates (such as analysis conducted by the CPUC in this very proceeding) find higher cost shifts from non-residential solar. Likewise, AECA/CFBF claim that the Verdant NEM 2.0 Lookback Study did not find that agricultural NEM customers shift costs, when the Lookback study does exactly that. Table 1-3 of the Lookback Study, reproduced below, shows that Agricultural NEM projects, even using the 2020 ACC, fails the ratepayer impact measure (RIM) test by a significant margin.

Table I-3

Halltan	Customer	Weighted Average Benefit-Cost Ratio						
Uniny	Sector	РСТ	TRC	RIM	PA			
	Agriculture	1.72	1.19	0.41	590.70			
0005	Commercial	1.79	1.12	0.37	437.07			
PGAE	Industrial	1.47	1.17	0.51	6,128.90			
	Residential	1.83	0.69	0.31	28.77			
	Agriculture	1.23	1.43	0.85	337.88			
SCE	Commercial	1.32	1.35	0.72	96.86			
SCE	Industrial	1.16	1.34	0.87	880.11			
	Residential	1.62	0.80	0.43	8.20			
	Agriculture	1.51	1.25	0.53	821.47			
SDC 8 F	Commercial	1.87	1.18	0.37	1,344.24			
SDG&E	Industrial	1.57	1.21	0.49	16,696.43			
	Residential	2.08	0.76	0.29	100.09			
Total		1.77	0.84	0.37	22.98			
	Utility PG&E SCE SDG&E Total	UtilityCustomer SectorPG&EAgriculturePG&ECommercialIndustrialResidentialAgricultureCommercialSCEIndustrialResidentialResidentialAgricultureCommercialIndustrialResidentialSDG&EAgricultureIndustrialResidentialAgricultureCommercialIndustrialResidentialTotalTotal	UtilityCustomer SectorPCTAgriculture1.72PG&ECommercial1.79Industrial1.47Residential1.83Agriculture1.23Commercial1.32Industrial1.16Residential1.62Industrial1.62SDG&ECommercial1.87Industrial1.51Commercial1.57Residential1.57Total1.77	UtilityCustomer SectorWeighted AveragePCTTRCAgriculture1.721.191.12Commercial1.79Industrial1.47Industrial1.47Residential1.83Agriculture1.23Agriculture1.32Industrial1.16Industrial1.16Industrial1.62Residential1.62Agriculture1.51Industrial1.87Industrial1.57Industrial1.57Industrial1.57Industrial1.57Industrial1.57Industrial1.57Industrial1.57Industrial1.57Industrial1.57Industrial1.57Industrial1.77O.84	UtilityCustomer SectorPCTTRCRIMAgriculture1.721.190.41Commercial1.791.120.37Industrial1.471.170.51Residential1.830.690.31Agriculture1.231.430.85Commercial1.321.350.72Industrial1.161.340.87SCEResidential1.620.800.43Agriculture1.511.250.53Industrial1.871.180.37SDG&ECommercial1.871.18Industrial1.571.210.49Total2.080.760.29			

TABLE 1-3: SUMMARY OF COST-EFFECTIVENESS RESULTS BY CUSTOMER SECTOR AND UTILITY

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AECA/CFBF, responding to utility testimony showing the degree to which this cost shifting occurs when using the 2021 ACC claims "the 2021 ACC has not been adopted by the Commission for purposes of evaluating the potential for NEM cost shift."²⁸ At the time of testimony, the ACC was in fact <u>required</u> by the Commission for all DER cost effectiveness analysis.²⁹ Today, the 2022 ACC is required for such analysis, and the answer is unchanged.

Last, AECA/CFBF repeat their arguments that Resolution E-4610 did not rely on the then existence of the NEM cap to find that NEMA would "not result in an increase in the expected revenue obligations of customers who are not eligible customer-generators." This position is flatly contradicted by AECA/CFBF's contemporaneous comments on the draft of E-4610, as noted in the Joint Utilities'

²⁸ AECA/CFBF Comments, p.9

See May 21, 2021 Procedural Email Providing Guidance on Party Testimony, served to the R.20-08-020 service list, indicating that preliminary analysis of cost-effectiveness would use the draft 2021 Avoided Cost Calculator and that results would be updated when the 2021 ACC was finalized. Further, the ALJ reminded parties that, "cost-effectiveness analysis should be conducted in the manner directed by D.19-05-019. Further, D.16-06-007 requires that cost-effectiveness evaluations for distributed energy resources shall use the most recent version of the Avoided Cost Calculator".

opening comments. Also, lest they or other parties claim these comments were taken out of context,

SEIA's contemporaneous comments make the same argument regarding the primacy of the NEM cap:

The Solar Energy Industries Association (SEIA)¹ supports the Draft Resolution's determination that allowing eligible customer-generators to aggregate their load from multiple meters, pursuant to Senate Bill (SB) 594 (Wolk, 2012), will not result in an increase in the expected revenue obligations of customers who are not eligible customer-generators, and, indeed could result in a decrease. This conclusion is appropriately grounded in two key factual elements: (1) SB 594 does not change in any way the statutory cap on net energy metering (which currently is 5% of an electric utility's aggregate customer peak demand); and (2) net energy metering aggregation will primarily be utilized to offset the load of non-residential meters and, thereby, will increase the proportion of larger NEM projects relative to smaller residential projects. Because non-residential customers have lower rates in comparison to residential customers, any potential cost to non-participating ratepayers from non-residential NEM projects.²

The evidence is clear: NEMA as it currently exists "[results] in an increase in the expected

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revenue obligations of customers who are not eligible customer-generators," and must be significantly

reformed if aggregation is to be continued. AECA/CFBF's attempts to claim otherwise are contradicted

by their previous statements and the sources they cite.

15. <u>Question 17. SCE and SDG&E Update Data on NEM-A Adoption They Were</u> Unable to Provide in Opening Comments

SDG&E NEMA Participation Data									
NEM		Total	Total	DAC	DAC				
Туре	Category	Count	Capacity	Count	Capacity				
NEMA	Residential	2944	20.49	1782	11.5				
NEMA	Mixed Residential and Non-Residential	231	7.05	20	0.61				
NEMA	Non-Residential	320	47.18	110	14.54				
Total		3495	74.72	1912	26.65				

*PTO dates prior to March 2023

³⁰ Comments of the Solar Energy Industries Association on Draft Resolution E-4610, September 5, 2013

SCE NEMA Participation Data								
NEM Type	Category	Total Count	Total Capacity (MW)	DAC Count	DAC Capacity (MW)			
NEMA	Residential	1,004	4.4	97	0.5			
NEMA	Mixed Residential and Non-Residential	2,238	72.5	280	2.7			
NEMA	Non-Residential	3,059	117.8	311	5.7			
Total		6,301	194.7	688	8.9			

*PTO dates prior to March 2023

16. <u>Question 18. NEMA Shifts Costs to Non-Participants</u>

AECA/CFBF repeats arguments already addressed by the Joint Utilities in response to questions 15 and 16 above.

17. <u>Question 19. There is Consensus that the Commission Should Not Mandate</u> Participation in DR or EE

There appears to be consensus that participation in demand response (DR) or energy efficiency (EE) programs should not be a condition of participation in a NEMA successor tariff. However, AECA/CFBF make the claim that "without NEMA there is no agricultural participation."³¹ This is hyperbole – while NEMA is significant for the agricultural NEM sector, 42% of PG&E's agricultural NEM interconnections by MW through the end of 2022 did not utilize NEMA.³²

18. <u>Question 20. The Commission is Statutorily Obligated to Reform NEMA</u>

CFBF/AECA argues that the Commission is statutorily obligated to retain NEMA under Public Utilities Code section 2827 and that Public Utilities Code Section 2827.1 does not apply. This argument is meritless. The only reference to the aggregation of meters in Section 2827 appears in subdivision (h) of the statute. Subdivision (h) describes how "the net energy metering calculation shall be made" and the rules that apply in making the annualized net energy metering calculation.³³ It is only

<u>31</u> AECA/CFBF Comments, p. 12

³² Based on PG&E analysis of Interconnection database; 247 MW of 584 MW, or 42%, of agricultural interconnections did not use aggregation.

³³ Pub. Util. C. § 2827(h).

in detailing the net energy metering calculation rules that load aggregation is authorized.³⁴ There is not a separate statute governing net energy metering aggregation as CFBF/AECA suggest³⁵; it is merely a calculation rule under net energy metering subject to the provisions of subdivision (c) of the statute.

Subdivision (c) of Section 2827 states: "Except as provided in paragraph (4) and in Section 2827.1, every electric utility shall develop a standard contract or tariff providing for net energy metering,..." (Emphasis added.) This very paragraph even refers to accurate billing pursuant to the calculation rules at subdivision (h). Paragraph (4) of subdivision (c) then goes on to state: "(D) Beginning July 1, 2017, or upon reaching the net metering program limit of subparagraph (B), whichever is earlier, the obligation of a large electrical corporation to provide service pursuant to a standard contract or tariff shall be pursuant to Section 2827.1 and applicable state and federal requirements." If the legislature had intended for the load aggregation calculation rule for net energy metering to continue indefinitely, it knew how to make such a carve out and would have so stated, but that is not what the legislature did. The only carve out it created was to maintain the onsite and sized to load requirements. Moreover, nothing in the statute indicates that the net energy metering calculation for aggregating meters falls outside the "standard contract or tariff." As CFBF/AECA acknowledge and as described in the Commission's NEM2 decision (D.16-01-044), load aggregation is a sub-schedule within the standard net energy metering tariff.³⁶ That load aggregation is listed as a "special condition" in the utilities' tariffs does not remove it from the standard tariff; indeed, there are several "special conditions" in the NEM and NEM2 tariffs, including special conditions describing billing, rates, net surplus compensation, legacy provisions, etc.37

Thus, load aggregation is a calculation rule under the net energy metering statute, is part of the standard net energy metering tariffs and, pursuant subdivision (c) of Section 2827, it is subject to

<u>³⁴</u> Pub. Util. C. § 2827(h)(4).

³⁵ CFBF/AECA, p. 16.

<u>36</u> CFBF/AECA, p. 16; D.16-01-044, p. 99.

³⁷ See PG&E Electric Schedule NEM2 (<u>ELEC_SCHEDS_NEM2.pdf (pge.com)</u>).

Section 2827.1. The Commission therefore has no obligation to continue net energy metering aggregation at all and is obligated under Section 2827.1 to reform the tariff to eliminate cost-shifting.³⁸

19. Question 21. Reform of NEMA is Required to Comport with Law and Policy

CALSSA argues that "It is unlikely that any major change to NEMA will be consistent with the statutory requirement that the successor tariff 'ensures that customer-sited renewable distributed generation continues to grow sustainably.' If export rates are dramatically reduced, it is logical to conclude that customers will act rationally and there will be less solar adoption."³⁹ This bald assertion is unsupported. As the Joint Utilities show above and in their opening comments, the Commission has no statutory obligation to continue to offer any version of NEM, including NEMA, which is inherently tied to the capped NEM 1.0 tariff, as authorized by Public Utilities Code section 2827.⁴⁰ If the Commission adopts a NEMA successor tariff, it should use the same export compensation rates as the NBT.⁴¹ All metered exports from the NBTA generator account should be compensated at these rates. This will ensure that the NEMA tariff does not increase costs to non-participating customers, as is required by SB 594.

20. <u>Question 22. The Commission Should Reject Netting Schemes that Result in Cost</u> Shifting

As discussed in previous responses, the netting requested by CALSSA would result in cost shifting to other customers and therefore violates statutory requirements.

³⁸ Pub. Util. C. § 2827.1(b) ("Notwithstanding any other law, the commission shall develop a standard contract or tariff, *which may include net energy metering*, for eligible customer-generators with a renewable electrical generation facility that is a customer of a large electrical corporation...").

³⁹ CALSSA, p. 24 (footnote omitted). Other parties argue for more generous compensation for NEMA customers than that provided by the NBT. See also, CFBF, *passim*;

⁴⁰ Joint IOUs, pp. 16-17.

<u>41</u> Joint IOUs. P. 18.

21. <u>Question 23. There is Consensus that NEMA Customers Should Be Served On Rates</u> <u>Consistent with NBT Customers</u>

There appears to be consensus that the same rate requirements as the standard NBT should apply to any successor version of NEM-A.

22. <u>Question 24. NEMA Costs Should Not be Shifted to Non-Participants</u>

Neither CALSSA nor AECA/CFBF present any evidence that NEMA does not result in shifting of responsibility for paying fixed costs to other customers. NEMA customers should be responsible for paying fixed costs that they currently avoid.

23. <u>Question 25. Avoided Cost-Based Compensation Is Appropriate for Load</u> <u>Aggregation Arrangements</u>

CALSSA argues that the Commission does not have NEMA cost effectiveness data and "cannot infer cost effectiveness or cost of service based on analysis that is not specific to NEMA."⁴² CALSSA makes no concrete suggestions as to why NEMA cost effectiveness results are likely meaningfully different than those of standard NEM installations in their responses to questions 15 and 16. At most, they argue compliance with prevailing wage requirements will increase the costs of NEMA systems going forward. As addressed above in the context of VNEM in response to Questions 1 and 2, this claim is dubious, but even if true, this would mean that NEMA systems are <u>less likely</u> to pass TRC. Nothing in the record suggests that NEMA systems are more likely to be expected to pass TRC (let alone not cause significant cost shifting). Nevertheless, the utility proposal to compensate all NBTA exports at ACC based credits would, by definition, be sufficient compensation for a resource that passes TRC.

⁴² CALSSA Opening Comments, p. 25

24. <u>Question 26. Dynamic Allocation Should Continue if Load Aggregation is</u> <u>Maintained</u>

If the commission continues to offer an aggregation tariff, the Joint Utilities agree with the Agricultural parties and CALSSA in support of keeping the dynamic allocation of the current NEMA tariff. Doing so would minimize costs or delays in implementation.

D. <u>Replies to Specific Party Comments regarding Fuel Cells</u>

1.Question 27/28: The Use of DERs, Including Fuel Cells, to Address Reliability,
Capacity, and Emissions Targets is Outside the Scope of This Proceeding

Multiple parties responded to the questions regarding fuel cells (Questions 27 and 28) by arguing that recent proceedings dealing with a variety of topics, including reliability, capacity, and emissions targets, impact how the Commission should consider the NEMFC tariff. The arguments seem to generally claim that the needs in these proceedings justify the need to continue providing fuel cellspecific subsidies through the NEMFC tariff. The Joint Utilities agree that it is reasonable and important to consider what work is going on in other proceedings, but there is nothing in the referenced proceedings that is specific to fuel cells or that clearly impacts the status of the NEMFC tariff, including justifying the continued need for fuel cell-specific tariff or extending the current NEMFC deadline for commencement of operation. These proceedings are looking at incentive levels for the services they are procuring and are not dependent on compensation from NEMFC when considering the value or reasonable compensation levels for these services. In fact, because fuel cells that operate on biogas could participate in NBT and there are multiple new opportunities for compensation for DERs, including fuel cells, that are already in place or in development as part of the proceedings referenced by parties, a special NEM tariff for fuel cells is less necessary now than previously. Even customers with fossil fuelpowered fuel cells can offset their onsite load at the retail rate by operating on a non-export tariff (CARB permitting). Therefore, the Joint Utilities do not support or believe there is justification to extend the NEMFC deadline for commencement of operation beyond December 31, 2023.

Additionally, the proceedings mentioned by parties are looking at DERs in general and are not exclusive to fuel cells nor have they identified fuel cells as a technology that inherently has an

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advantage over any other DER technology. An example of where the Commission has recently argued against treatment of one DER technology over another is D.22-12-003, in which the Commission denied the petition by Bloom Energy Corporation to consider adopting a distributed energy resource reliability and resilience tariff. While the Commission denied the petition because it had already considered and decided not to adopt a similar proposal within the preceding 12 months through at least two proceedings, Rulemaking 19-09-009, and Rulemaking 20-11-003, the decision also clearly articulated that it did not view singling out a specific technology for special treatment was appropriate, stating:

The petition focuses on a single class of activities or resources — high-capacity factor DERs such as fuel cells. The petitioner would have tariff eligibility limited to DERs with a capacity factor of at least 80 percent and capable of continuous operation for a minimum of 120 hours and operate during any stage alert, among other criteria. This criterion applies to a very limited subset of DERs. **High-capacity factor DERs reflect only one segment of DERs technologies available. We agree with CEDMC that Bloom's proposal is narrowly focused and excludes many other types of behind-the-meter DERs. A single tariff, as contemplated by petitioner, would cause California ratepayers to subsidize a single technology class at a special, higher cost rate.** This is incongruent with Rule 6.3(a). Fuel cells, the most prominent high-capacity factor DER and the petitioner's product, reflect only one of an array of resources, under a range of policies and programs, that may be responsive to the State's reliability and resiliency needs. We agree with SCE and SDG&E that it would be inappropriate for the Commission, or for interested stakeholders, to carve out a single resource or even a very limited group of resources for a separate rulemaking as the Petition requests. <u>43</u>

Therefore, the Joint Utilities do not believe the additional proceedings cited by parties

would have an impact on the status of the NEMFC tariff, including justifying the continued need for a

fuel cell-specific tariff or extending the operational deadline for the NEMFC tariff beyond December 31, 2023.

II.

CONCLUSION

For all the reasons described in the Joint Utilities' opening comments and above, the

Commission should adopt reformed virtual tariffs that are as simple and transparent as possible and in alignment with the NBT.

⁴³ D.22-12-003, pp. 7-8 (internal footnotes omitted) (emphasis added).

Respectfully submitted on behalf of the Joint Utilities,

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