BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Develop a Successor to Existing Net Energy Metering Tariffs Pursuant to Public Utilities Code Section 2827.1, and to Address Other Issues Related to Net Energy Metering.

Rulemaking 14-07-002 (Filed July 10, 2014)

COMMENTS OF THE ALLIANCE FOR SOLAR CHOICE, SOLAR ENERGY INDUSTRIES ASSOCIATION, CALIFORNIA SOLAR ENERGY INDUSTRIES ASSOCIATION AND VOTE SOLAR ON THE PROPOSED DECISION ADOPTING SUCCESSOR TO NET ENERGY METERING TARIFF

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Pursuant to Rule 14.3 of the Rules of Practice and Procedure of the California Public Utilities Commission (Commission), The Alliance for Solar Choice (TASC), Solar Energy Industries Association (SEIA), California Solar Energy Industries Association (CALSEIA) and Vote Solar (hereinafter the Joint Solar Parties or JSP) submit the following comments on the *Proposed Decision Adopting Successor to Net Energy Metering Tariff* (PD) issued on December 15, 2015.

I. Introduction

Joint Solar Parties applaud the PD for upholding full retail net metering for customers of California's investor-owned utilities (IOUs), for providing necessary certainty to future solar customers, and for expanding solar access to a broader group of Californians. Specifically, the JSP support the following determinations made in the PD: (1) imposing fixed, demand and standby charges on NEM customers is not justified; (2) allowing customers who go solar under the successor net metering tariff to be able to stay on that tariff for 20 years from the date their solar array is interconnected; (3) extending the eligibility for the net metering successor tariff to customer-sited facilities larger than one megawatt in size; (4) allowing one solar array to serve multiple service delivery points as part of virtual net metering; and (5) launching Phase 2 of the proceeding to develop an expanded virtual net metering program specifically for customers in disadvantaged communities.

While the Joint Solar Parties are overall very supportive of the PD, the PD errs on two counts. First, by ordering mandatory time-of-use rates for successor NEM tariff customers, and,

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second, by determining that transmission and New System Generation charges should be included as nonbypassable charges (NBCs) on successor NEM tariff customers. These two errors must be corrected.

Additionally, the JSP request that the Commission (i) clarify certain matters regarding the assessment of NBCs on successor NEM tariff customers; (ii) affirm that consistent with D.14-05-033, the deployment of storage paired with energy systems interconnecting under the successor tariff will not expose customers to different rate elements or incremental interconnection costs; and (iii) modify the PD such that the implementation of AB 693 is addressed in the Distributed Generation Proceeding. Finally, the JSP submit that the PD would benefit from further clarification of certain of its determinations, with specific reference to record evidence.

II. The Record Does Not Support the Imposition of Mandatory TOU Rates at This Time and Such a Move Would Likely Create Excessive Backlash; Thus TOU Rates Should Be Default, Not Mandatory, for Successor Tariff Customers.

A. The Record Does Not Support the Imposition of Mandatory TOU Rates at This Time.

The PD requires that, "as a condition of using the NEM successor tariff, all NEM customers interconnecting on or after January 1, 2018 must be on a time-of-use (TOU) rate with no option to opt out,"¹ and that once TOU rates are default for residential customers, "all customers using the NEM successor tariff"² should be required to be on TOU rates. The PD adopts this requirement with virtually no explanation and with no citation to the record.

There is no factual or legal basis for requiring mandatory TOU for customers utilizing the NEM successor tariff. In particular, the Commission does not have the evidence to make a finding that rooftop solar will "continue to grow sustainably" under mandatory TOU, as required by Public Utilities Code § 2827.1. First, future TOU periods and rate differentials are not definitively known, so parties could not use them to model solar growth. Second, while the Public Tool allowed modeling of some TOU rates that may be adopted in the future, as the Sierra Club points out in its proposal, the solar adoption results produced by the Public Tool under TOU scenarios run counter to other studies and to conventional wisdom, calling into question the Tool's ability to accurately predict solar adoption under TOU rates.³ Moreover, the Public Tool

¹ PD at 89.

² Conclusion of Law 10.

³ Sierra Club Proposal for the Net Metering Successor Standard Tariff, p. 8-9. August 4. 2015

only looks at financial return on investment and does not consider other factors at play in customers decision-making, such as risk aversion – factors that might cause some customers to decline the solar investment if it requires service under a new rate that poses greater downside risk or adds a new complication to their decision to go solar.⁴ Already, implementation of the broad restructuring of residential rates primarily through tier flattening is reducing potential solar savings. Also, it is worth noting that the Public Tool's definition of TOU periods is not granular enough to model today's TOU options offered to current utility customers. As a result, the Public Tool is not capable of modeling status quo TOU scenarios for comparison against various other policy projections.

The PD also makes TOU mandatory for successor NEM tariff customers who begin using the successor tariff before 2018, which could occur within months in SDG&E's service territory. Although tiered rates would be an option for those customers for an initial time period, they would lose that option when TOU rates are default for all residential customers.⁵ This would harm customers. Residential TOU rate structure is in such a state of upheaval that even if solar customers installing in 2016 and 2017 are sufficiently notified that they will be forced onto TOU in 2019, they will have very little information at the time they install solar as to what their future rate will look like for the vast majority of the useful life of their investment. Until new tariffs are developed and approved, solar providers will necessarily model customer savings based on existing rate schedules. Dramatically changing the financial viability of customer generation at a later date would not be fair to customers.

Although NEM customers must accept the fact of changing rates, customers generally do not expect future rate structure to differ drastically from the current structure. In the case of TOU rates, basic aspects of TOU structure, including peak and off-peak time periods, are in a state of flux due to the broad restructuring of residential rates pursuant to D.15-07-001, which ordered

⁴ See e.g., Joint Solar Parties Comments on Party Proposals at p. 49 (noting the Public Tool assumes customers have perfect knowledge of their usage patterns when, in reality customers do not, and may be reluctant to adopt solar if the value of that decision depends upon their perfect understanding of their usage patterns); Joint Solar Parties Proposal at p. 4 ("[T]he Public Tool does not model the disruptive impacts that a regime change would have on the customer-sited DG market."); See, e.g., Joint Solar Parties Reply Comments (Sep. 15, 2015), at pp. 38-39 ("[A]t a minimum, each of the other proposals would expose potential participants [to] meaningful risk of adverse federal income tax consequences. This additional risk will create additional uncertainty in the customer's value proposition which is not adequately addressed in any of the proposals and must be considered by the Commission.").

⁵ Conclusion of Law 10.

the IOUs to propose a default TOU rate for residential customers by January 1, 2018.⁶ Prior to that date, the utilities will be conducting TOU pilot programs and offering a wide variety of optional TOU rates to residential customers. Further, the Commission created a separate rulemaking, Rulemaking (R.)15-12-012, on December 17, 2015, to "consider appropriate time periods for future time-of-use rates," among other objectives. These ongoing efforts point to a time of fundamental change and significant uncertainty in the customer economics of solar power under TOU rates. Customers who install solar under tiered rates must be given the opportunity to opt to stay on tiered rates after TOU rates become default for the residential class.

The PD acknowledges that prematurely requiring mandatory TOU rates is not the right path in response to the utilities' proposals, but, in the Conclusions of Law, the PD ignores its own reasoning. In response to PG&E's successor tariff proposal, the PD states:

PG&E's proposal with respect to TOU rates for residential NEM customers would have the effect of prematurely requiring residential NEM customers to go on mandatory TOU rates, using the TOU rates at the time of the customer's system interconnection, before the conclusion of the new TOU rulemaking and the results of the 2016 and 2017 pilots are available.⁷

In response to SDG&E's successor tariff proposal, the PD states: "SDG&E's proposal for what are in effect mandatory TOU rates for NEM customers at the inception of the successor tariff is premature and suffers from the same difficulties as PG&E's TOU proposal ...^{**} and in discussing the IOU proposals as a whole, the PD states: "The IOU proposals also involve requiring NEM customers to be on existing TOU rate schedules immediately. For the reasons discussed above, this would be premature.^{**}

In taking the position that TOU rates should be default but not mandatory,¹⁰ the JSP reiterate our support for the Commission's policy direction, set forth last summer in D.15-07-001, to move residential customers to greater use of TOU rates. That order established a process for a transition to TOU rates that is gradual, that explores a variety of TOU rates designs, that provides customers with both TOU and increasing block rate options, and that emphasizes

⁶ D.15-07-001, OP 9 - OP 11.

⁷ PD at pgs. 65-66.

⁸ PD at pg. 72.

⁹ PD at pg. 75. As the Commission has stated, "TOU should be a flexible customer-empowering tool to make the load curve more manageable." Id. at p. 143.

¹⁰ Mandatory TOU can be considered again in 2019 when the PD directs a future Commission to reevaluate the NEM tariff.

customer education and outreach. The JSP are willing to have NEM customers move more quickly than other residential customers toward greater use of TOU rates, but effectively making TOU rates mandatory for NEM customers starting immediately when the current NEM program ends - or even starting on January 1,2018 - is too far, too fast, and would deprive NEM customers of the benefits of the more measured approach to the TOU transition that the Commission wisely adopted in D.15-07-001.

B. A Measured Approach to Implementation of Default TOU Rates for All Residential Customers Will Avoid Customer Backlash

Imposing mandatory TOU rates for solar customers before the specifics of those rates are determined would also jeopardize a smooth transition to TOU rates. In the context of residential rate redesign, the Commission recognized that customers are resistant to complicated rates that have large bill impacts or that force them to change their behavior substantially or quickly.¹¹ In this docket, the Sierra Club, which included TOU as the primary component of its NEM successor tariff proposal, cautioned against transitioning NEM customers to mandatory TOU too abruptly. As pointed out in its proposal, "Sierra Club is concerned that an abrupt transition to TOU rates with late afternoon or evening peaks, before enabling technology is widely and economically available, before providers have adjusted their marketing and outreach ... could be overly disruptive to the market and undermine the statutory requirement that a successor tariff ensures 'renewable distributed generation continues to grow sustainably.' ... The transition to default TOU rates for all residential customers in 2019 may be an appropriate point to consider applying a TOU rate to new BTM customers."¹²

The record supports the view that transitioning the majority of residential customers to TOU rates will be a delicate process that must be carefully implemented to avoid backlash. Going too far too fast could backfire by inciting public furor. Such a backlash occurred in 2007 in response to the initial requirement in the California Solar Initiative that solar customers must be on TOU rates. Public sentiment was so strong that the Legislature passed emergency

¹¹ See D.15-07-001 at p. 106 ("[A]s evidenced by the Hiner study, customers prefer simple rate structures."), p. 155 ("We are endeavoring to avoid abrupt changes here through a variety of approaches, but recognize that individual hardships may nonetheless occur. We seek to avoid that outcome to the greatest degree possible."), p. 315, Finding of Fact 78 ("To minimize the rate shock, the transition from the current four-tiered rates must be gradual"), p. 315, Finding of Fact 81 ("Customers prefer gradual rate structure changes."), p. 318, Finding of Fact 124 ("Residential customers prefer stability in their rates."). ¹² Sierra Club Proposal for the Net Metering Successor Tariff, p. 9. August 4, 2015.

legislation, AB 1714, providing the Commission with authority to waive the requirement, in June 2007, that was signed into law, and the Commission quickly used its authority because there had been a rapid decline in uptake of CSI incentives because of the mandatory TOU requirement¹³ The JSP encourage the Commission to remember this experience and not to risk a setback to increased adoption of TOU rates by residential customers as the result of an unnecessarily abrupt requirement.

In contrast, if the Commission proceeds more cautiously by making TOU rates default but not mandatory for residential solar customers, it will produce a full three years of data on customer responses before TOU rates are default for all residential customers and will gradually build acceptance for TOU rates among the residential class. The PD acknowledges the value of learning from the experiences of solar customers to inform the expansion of TOU for non-solar residential customers, stating that solar customer participation in TOU rates can "provide valuable information to the Commission and stakeholders in advance of the Commission's implementation of default TOU rates for all residential customers."¹⁴ This information will be much more valuable if TOU adoption for solar customers is generally positive than if it is fraught with controversy and customer complaints, and if it reflects the experience with default TOU rather than mandatory TOU.

Based on the above, the JSP believe Commission should stay the course on TOU rates by changing the Conclusions of Law in the PD so that TOU rates are default for solar customers but not mandatory.¹⁵

III. The PD Errs in Regard to the Charges to be Assessed as NBCs on Net Metering Customers

The PD determines that customers on the NEM successor tariff should pay NBCs in each metered interval for each kilowatt-hour of electricity they consume from the grid.¹⁶ The Joint Solar Parties do not contest this determination; however, the PD errs with respect to the specific

¹³ Uptake of CSI incentives and customer adoption of solar resumed after the mandatory TOU requirement was suspended by the Commission, and the program became the most cost-effective and successful distributed solar program in the nation.

¹⁴ PD at pg. 75.

¹⁵ Pursuant to Rule 14.3(b) of the Commission's Rules of Practice and Procedure, Joint Solar Parties' recommended changes to the Proposed Decision's findings of fact and conclusions of law are provided in Appendix A.

¹⁶ PD, Conclusion of Law 2, at p 119.

charges that should be included within the NBCs to be assessed on NEM customers. Consistent with the record of this proceeding, the PD must be modified to state, first, that such charges are limited to public purpose program (PPP) charges, nuclear decommissioning (ND) charges, competition transition charges (CTC), and the Department of Water Resources (DWR) bond costs and, second, that NEM customers will not be assessed transmission charges or New System Generation charges, as is now contained in the definition of NBCs referenced in Footnote 99 of the PD.¹⁷

Without discussing the specific NBC charges, the text of the PD states generally that it is reasonable for NEM customers to pay NBCs because "nonbypassable charges support important programs that are used by and benefit all ratepayers, including NEM customers"¹⁸ and "this is a reasonable change to the NEM tariff regime that is unlikely to have a significant impact on the economics of customer generation systems."¹⁹ While these statements are justified with respect to PPP, ND, CTC and DWR charges, based on Commission precedent and the Public Tool modeling contained in the record, they are not justified with respect to the transmission and the New System Generation charges.

There is no record basis for asserting that assessing transmission and New System Generation charges on NEM customers as NBCs would not have a significant impact on the economics of customer generation systems. It is notable that the only NBCs included in the Public Tool were the PPP, ND, CTC and DWR bond costs.²⁰ The fact is that, transmission and New System Generation charges can be substantial; for example, SDG&E's residential transmission charges are 2.5 cents per kWh, i.e. about 12% of SDG&E's average residential rate. SDG&E's transmission charge is larger than the sum of SDG&E's four standard NBCs (PPP, ND, CTC, and DWR). SCE's New System Generation charge is about 1 cent per kWh. As the Public Tool did not model transmission or New System Generation charges as NBCs, it is

¹⁸ *Id.* at p. 88.

¹⁷ Footnote, without discussion, defines NBCs with reference to Decision (D.) 13-10-019, an order which established an economic development rate (EDR) for PG&E, as: These charges are: transmission charge, Public Purpose Program Charge, Nuclear Decommissioning Charge, Competition Transition Charge, New System Generation Charge, and Department of Water Resources bond charge.¹⁷

¹⁹ *Id.* at pp. 88-89.

²⁰ See the Revenue Requirements model of the Public Tool, at the sheet "RR Calculations" in Rows 932 to 1008. The definition of NBCs which the Commission's consultant E3 used in developing the Public Tool is consistent with the Energy Division's understanding of the NBCs which were under consideration for application to NEM customers in this proceeding. See Energy Division Staff Paper on the AB 327 Successor Tariff or Contract (June 3, 2015), p. 1-24.

unknown exactly what impacts these substantial charges would have on system economics, adoption rates, or the balance of NEM benefits and costs. However, it is likely that the impacts would be significant, contrary to the justification in the PD for this change in NEM policy.

Similarly, the transmission and New System Generation charge do not "support important programs"²¹ to which NEM customers should contribute based on their full delivered volumes. Indeed, the essence of distributed generation (DG) is that it is interconnected at the distribution level, serves the on-site load plus neighboring customers on the distribution system, does not use the transmission system to deliver the exported power, and allows the utility to avoid transmission costs for the full quantity of DG output.²² Thus assessing NEM customers a "transmission charge" NBC on the full delivered volumes, instead of on just the net usage from the grid (as is the practice today), would result in the utility over-recovering its transmission costs and would fail to reflect accurately the transmission costs that NEM customers cause to be incurred. Likewise, the New System Generation Charge addresses costs caused by local area reliability constraints, and distributed generation systems located in such constrained areas of the grid allow the utilities to avoid those reliability-related generation costs. Including the New System Generation Charge would also, in effect, prejudge the findings of the Distribution Resources Planning proceeding's (R.14-08-013) Locational Net Benefit Analysis, which is assessing the locational resource adequacy value of distributed generation among other technologies and values. It is reasonable for NEM customers to contribute to transmission and New System Generation costs as they do today, based on their net usage from the grid. The current treatment of these costs is consistent with the Commission's prior orders on departing load charges for customer generation, which have not included either transmission or New System Generation charges in the costs applicable to customer generation departing loads, which include NEM customers.²³

²¹ Unlike the program costs for low income subsidies, energy efficiency, demand response, renewable and storage incentives, and nuclear decommissioning that are covered by the PPP and ND charges, the transmission and New System Generation charges do not cover costs for specific programs for which there are broad customer and societal benefits.

²² See, e.g., Joint Solar Parties Reply Comments on Policy Issues Associated with Development of NEM Successor Standard Contract or Tariff (Mar. 30, 2015), at pp. 13; Joint Post-Workshop Comments at pp. 16-17.

²³ See D.03-04-030, which determined that customer generation departing load (CGDL) charges should include DWR bond and power charges, CTC, and, for SCE, the Historic Procurement Costs (HPC). DWR power charges and the SCE HPC have been fully recovered. D.08-09-012 determined that CGDL

The PD's basis for its definition of NBCs is a prior Commission decision regarding economic development rates (EDRs). The definition of NBCs used in D.13-10-019 to develop EDRs in PG&E' service territory is not reasonable in the completely different context of assessing NBCs on NEM customers. Essentially, in D.13-10-019 the Commission divided PG&E's overall rate into "three components parts that, when added together, equal the total rate paid by a ratepayer pursuant to our Phase II GRC determinations" -- (1) marginal costs of providing service, (2) NBCs, and (3) headroom."²⁴ In determining the EDR, the Commission established a price floor to ensure that the minimum rate for any customer reflected the annual payment of the marginal cost of providing service and the payment of all NBCs²⁵ -- i.e., the discounted EDR tariff resulted in a shortfall only in the recovery of the headroom portion. As the Commission does not have jurisdiction over transmission rates and does not calculate marginal transmission costs, the Commission included PG&E's transmission costs as part of NBCs for the purpose of calculating the price floor for EDRs, instead of as a marginal cost.²⁶ This ensured that PG&E collected its transmission costs from EDR customers, whose additional load increases transmission and distribution costs. NEM customers present a completely different circumstance - they produce power that is entirely produced and consumed on the distribution system, without use of the transmission system. Thus, a customer adding on-site generation reduces transmission costs for the power that they produce, and they should be charged for transmission only on their net use of power from the grid. The same logic applies to New System Generation charges, which NEM customers can avoid because they are located in local reliability areas and their output reduces the need for new local reliability-related generation whose above-market costs are collected through the New System Generation charges. As a result, the definition of NBCs for NEM customers should not include these avoidable rate components for transmission or New System Generation charges.

charges should <u>not</u> include the above-market costs of new generation resources acquired by the utilities, where those above-market costs are recovered through the Cost Allocation Mechanism (CAM) adopted in D.06-07-029. See pp. 14-26 and Conclusions of Law Nos. 1-3. The New System Generation charge recovers above-market costs that are allocated via the CAM.

²⁴ D.13-10-019, pp. 7-8.

²⁵ *Id.*, p. 40, Finding of Fact 13.

²⁶ See *Id.* at pp. 4, 17.

IV. Clarifications Regarding the Assessment of NBCs on NEM Customers Are Necessary

A. NBCs Should Be Presented on NEM Customer Bills as an Additional Line Item Charge

The PD should be modified to make clear that the additional contribution of NEM customers to NBCs should be presented on the customer's bill as an additional line item charge. This line item would be calculated each month as the sum of the applicable NBC charges (PPP, ND, CTC, and DWR) times the difference between (1) the customer's total metered consumption (as stated in the PD on page 89, "the full amount of electricity the NEM successor tariff customer receives from the grid") and (2) its net usage ("the total metered consumption minus the energy sent to the grid"). As NEM customers already pay for NBCs on their net usage, this additional charge will ensure that NEM successor tariff customers pay NBCs on the full amount of power they receive from the grid. This added line item will allow the utilities to implement this aspect of the PD without the need to charge a different rate for NEM imports than the rate used to determine credits for NEM exports.²⁷ This bill presentation will thus preserve the essential "running the meter backward" simplicity of the NEM transaction while informing the NEM customer of their additional contribution to the important programs covered by the PPP, ND, CTC, and DWR charges.

B. NBCs Should Not be Assessed on Virtually Delivered Generation Under a VNM Agreement and NEMA

The PD states that "VNM systems should be subject to the same requirements regarding nonbypassable charges and interconnection costs as systems under the standard successor tariff."²⁸ Under the NEM successor tariff NEM customers will not pay NBCs for any self-generation used onsite within one billing interval, but solely on excess power delivered to the grid. Given the construct of VNM arrangements -- i.e., generation is not consumed behind a single meter but is virtually "delivered" to benefitting service accounts through after-the-fact allocation of bill credits -- in order for VNM systems to be "subject to the same requirements"

²⁷If this bill presentation proposal is not adopted, the utility will have to credit NEM exports at a rate that is less than what it charges for NEM imports, with the difference being the amount of the NBCs. This will be confusing to customers and different than the standard crediting of NEM exports at the same rate charged for NEM imports.

²⁸ PD at p. 95.

regarding NBCs as the standard successor tariff, they must not be required to pay NBCs for electricity produced and consumed onsite.

Similarly, for NEM Aggregation (NEMA) customers, the PD would benefit from added clarity on how NBCs should be applied. The PD states, "[C]ustomers on the NEM successor tariff should pay all nonbypassable charges in each metered interval for each kilowatt-hour of electricity they consume from the grid." Because a "customer" in a NEMA arrangement involves multiple meters, consumption from the grid in each interval for those customers is not measured by one meter but must be measured as net consumption across all of those meters. The purpose of the NEMA tariff option is to allow a single customer with multiple meters on their property to treat those meters as one load and have equivalent treatment under NEM as customers with only one meter. The PD reinforces this, saying, "NEMA customers, like customers using the VNM tariff, are compensated the same way as all NEM customers; only the aggregation feature is different." Because generators in NEMA arrangements are sized to customer demand, NEMA arrangements are net exporters of power during many intervals just like individual NEM customers are, and thus assessing charges on customer-generators as a whole rather than meter by meter will still result in very significant additional NBC charges.

The PD should be clarified to effectuate its intent that VNM and NEMA be subject to the same requirements under the successor tariff as other participants. This outcome can be accomplished by basing the new NBC fee on the difference between monthly net consumption and the sum of net consumption in each interval in the month.

V. The PD Would Benefit from More Explicit References to the Record

While the PD is generally well reasoned, the JSP believe it would benefit from explicit references to the record in regards to a few issues.

First, in addressing the requirement "that the total benefits of the standard contract or tariff to all customers and the electrical system are approximately equal to the total costs,"²⁹ the PD appropriately rejects the use of the Ratepayer Impact Measure (RIM) Test, which focuses only on the impacts on nonparticipants, as the sole means of making that determination.³⁰ Moreover, the PD appears to suggest that the proper test to satisfy Section 2827.1(b)(4) is the

²⁹ Cal. Pub. Util. Code § 2827.1(b)(4).

³⁰ The PD appropriately reasons that, "Since nonparticipants are not the focus of concern in Section 2827.1(b), the RIM test cannot be the exclusive way to look at impacts.

Total Resource Cost (TRC) test, which assesses whether the total cost of solar DG is greater or less than the cost savings to the utility that result, thereby representing "the combination of the effects of a program on both the customers participating and those not participating in a program."³¹ The PD also correctly notes that the legislative history of Section 2827.1(b) supports using the TRC test, stating that, "[t]he Legislature deliberately expanded the scope of statutory concern from 'nonparticipating customers' to 'all customers and the electrical system."³² Accordingly it would be appropriate for the PD to be modified to make a specific a finding that the TRC test is the primary test for measuring compliance with 2827.1(b)(4). According to the Standard Practice Manual, it is the TRC test that "represents the combination of the effects of a program on both the customers participating and those not participating in a program."³³

Most importantly, while the PD is correct to note that all of the costs of NEM are known but not all of the benefits, the record provides ample support for finding that the successor tariff developed within the PD is in total compliance with Section 2827.1(b)(4)'s requirement that the costs and benefits of the successor tariff are "approximately equal" - even with an incomplete accounting of the benefits. Because the Commission recognizes that an accounting of the benefits of NEM is incomplete, the Commission could support a finding that the benefits and costs are approximately equal even if the TRC test score is somewhat less than one. Notwithstanding this, SEIA and Vote Solar's proposal achieved a TRC score greater than 1 and paralleled the PD in that it maintained NEM without significant modifications and included a sensitivity case in which NEM customers paid both nonbypassable charges (NBCs) on delivered loads and upfront interconnection costs.³⁴ Similarly, CALSEIA's proposal also generated TRC results greater than 1.35 Like the PD, CALSEIA's proposal maintained full retail NEM but assessed NBCs on customer generators beginning at a later date.³⁶ Likewise, TASC's proposal maintained full retail NEM and included a scenario in which NEM customers paid NBCs for gross consumption and also achieved TRC scores greater than 1.³⁷ The PD could therefore benefit from making a finding, based on these and other examples in the record, that the NEM

³¹ See PD, Appendix B; California Standard Practice Manual at p. 18.

³² PD at p. 54.

 ³³ California Standard Practice Manual, October 2001 at pg. 18; CALSEIA successor tariff proposal at pg. 15.

³⁴ See SEIA/Vote Solar Proposal at pp. i, 31-32, 38, 41-42.

³⁵ See CALSEIA Proposal at pp. 2, 3-4, 8-9.

³⁶ Id.

³⁷ See TASC Proposal at pp. 42-44, Appendix A at p. 27..

successor tariff satisfies Section 2827.1(b)(4). The JSP encourage the Commission to update the PD to take this step.

Further, as the JSP have explained at various points in the docket, use of the TRC test and a broader set of societal benefits is appropriate based on how the utilities have evaluated their own program proposals.³⁸ The PD appears to dismiss the significant societal benefits of renewable DG that were quantified and presented on the record as "outside the scope of the Commission's expertise" or as "beyond the competence of this proceeding," despite admitting that many of these benefits "have recently increased in societal importance, such as GHG reduction benefits."³⁹ Frankly, to dismiss these benefits as not playing a role in the decision is to accord them a value of zero. The JSP do not believe that the Commission places zero value on these societally important benefits. The Commission does not need to adopt an exact quantification of the societal benefits are significant, and, combined with the direct benefits of net metered DG, support a finding that the NEM successor tariff satisfies Section 2827.1(b)(4).

Lastly, to the extent the PD does consider RIM test results to any extent, it errs in putting stock in the Energy Division's illustrative "bookend cases" for the Public Tool and must more clearly acknowledge that parties presented RIM test results from the Public Tool that are at or above 1.0. The PD correctly notes that the SEIA/Vote Solar proposal presents results that "break the 1.0 barrier"⁴⁰ but fails to reference scenarios in the CALSEIA proposal that exceed 1.0.⁴¹ The PD then references parties' Public Tool results using the "Two rate tiers; High DG value" case in its conclusions about costs and benefits. This is done without any discussion of the merits of Public Tool inputs from that illustrative case versus the scenarios that produce RIM results higher than 1.0. In presenting the bookend cases, Energy Division was clear that it was not presenting those scenarios as the most accurate inputs.⁴² The Commission in its decision cannot

³⁸ See TASC Proposal at pp. 20-22 (discussing utility EV proposals, distribution resource plans, and general rate case proposals using a broad set of benefits beyond direct energy benefits).

³⁹ PD, at p. 58.

⁴⁰ PD at p. 57.

⁴¹ Proposal of the California Solar Energy Industries Association for the Net Energy Metering Successor Tariff, August 3, 2015, Table 6 at p. 11.

⁴² "Energy Division Staff Paper on the AB 327 Successor Tariff or Standard Contract," June 3, 2015 at p.
1-4 ("By including illustrative NEM successor tariff/contract scenarios in this paper, Staff is not intending to recommend or favor a particular scenario. Rather, by including these illustrative scenarios, Staff is

use results of model runs using those inputs without finding that those inputs are more accurate than those presented by parties.

VI. AB 693 Implementation Should Be Addressed in the Distributed Generation Proceeding

The PD determines that the "[p]lan for implementation and administration of the Multifamily Affordable Housing Solar Roofs program established by AB 693" will be addressed in the next phase of this proceeding.⁴³ This determination is problematic because the scope of this proceeding is limited to the successor tariff and alternatives for disadvantaged communities, whereas AB 693 is not limited to disadvantaged communities.⁴⁴ Section 2870 (a)(3) defines eligibility as a property either located in a disadvantaged community *or* at which "[a]t least 80 percent of the households have incomes at or below 60 percent of the area median income."

The JSP are strongly supportive of the provision in the PD to adopt in principle an expanded VNM program for disadvantaged communities,⁴⁵ and we appreciate that the Commission intends to consider that program in the broader context that includes AB 693. We are concerned, however, that the Commission is incorrectly thinking of AB 693 as a program that is specifically intended to address disadvantaged communities. The actual intention of AB 693 is more akin to the Multifamily Affordable Solar Housing (MASH) program than it is to the NEM successor tariff. The more natural fit for implementation of AB 693 is R.12-11-005, where MASH and other similar programs have been considered. This modest change in venue would not preclude the Commission from considering the impacts of AB 693 as it develops an expanded VNM program. If the Commission chooses to implement AB 693 within this proceeding, it will need to issue a revised scoping memo that makes clear that the proceeding will consider incentive programs for distributed generation throughout the state.

intending to provide parties with examples of how to use the Public Tool to evaluate their and others' proposals.).

 $^{^{43}}$ PD at 112.

⁴⁴ All commenters agreed that AB 693 covers a broader universe of properties than those located in disadvantaged communities.

⁴⁵ Conclusion of Law 19.

VII. The Decision Should Clarify that Systems Interconnecting Under the Successor Tariff with Storage Should Be Treated Equivalently to Systems Interconnecting Without Storage

In D.14-05-033, the Commission determined that storage systems that qualify as an "addition or enhancement" to a renewable facility participating in the NEM program, pursuant to the California Energy Commission's Renewables Portfolio Standard Guidebook, should be treated as part and parcel of those systems and therefore should enjoy the same exemptions that NEM eligible systems receive "under the current NEM tariffs.⁴⁶ In establishing the NEM successor program, the Commission should clarify that the underlying logic of D.14-05-033 still holds and find that storage systems deployed in tandem with energy systems participating in the successor tariff should continue to be treated as a component of those systems with which they are paired. As such, these systems should not be subject to any different rate elements or interconnection charges than similarly situated systems that not include storage.

VIII. The Decision Should Allow Equipment and Workmanship Warranties to Be Separate

The PD requires the IOUs to verify, "that a warranty of at least 10 years has been provided on all equipment and the installation of that equipment."47 In the construction industry, manufacturers provide warranties on equipment and contractors provide warranties on installation of the equipment. It would be duplicative for local contractors to issue separate warranties on equipment, and it would not be reasonable to require them to hold sufficient bonds to do so. Hence, the decision should allow contractors to provide warranties only for workmanship, with equipment warranties covered by manufacturers.

IX. Conclusion

Based on the foregoing, the Joint Solar Parties respectfully request the Commission adopt the PD with the above requested changes.

⁴⁶ D.14-05-033, pg. 10. ⁴⁷ Conclusion of Law 21.

Respectfully submitted January 7, 2016, at San Francisco, California.

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⁴⁸ Consistent with CPUC Rule of Practice and Procedure 1.8(d), counsel for SEIA is authorized to sign and tender these comments on behalf of the other parties constituting the JSP.

APPENDIX A

APPENDIX A

The Joint Solar Parties provide the following recommended changes to the findings of fact and conclusions of law in the *Proposed Decision Adopting Successor to Net Energy Metering Tariff* issued on December 15, 2015.

Findings of Fact

11. Based on the analytic tools and information currently available for use by the Commission, it is **not**-possible to come to a **comprehensive**, reliable, and analytically sound determination of the benefits and costs of the NEM successor tariff to all customers and the electric system.

31. Continuing net energy metering with NEM successor tariff customers paying charges for interconnection and nonbypassable charges for all electricity consumed from the grid, as well as being on an applicable TOU rate, will provide electric service to customers on the NEM successor tariff at just and reasonable rates.

38. The AB 693 program would address barriers to the growth of customer-sited renewable DG for residents of **low-income larger** multifamily rental buildings **in disadvantaged communities**, but it would not provide any incentives for the residents of disadvantaged communities who live in other housing arrangements.

Conclusions of Law

9. Residential customers using the NEM successor tariff whose systems are interconnected at any time during 2018, and at any time during 2019 that is prior to the institution of default residential TOU rates, should<u>, by default</u>, take service on an existing TOU rate or <u>participate in any</u> TOU pilots that are designed to include NEM successor tariff customers.

10. In order to better align the NEM successor tariff with residential customers' responsibilities generally, to promote customers' awareness of, and to provide incentives to reduce, the impact of their electricity usage on the electrical system, once the Commission has instituted default TOU rates for residential customers, all customers using the NEM successor tariff established by this decision should be <u>placed required to stay</u> on <u>a their</u> default TOU rate, or on another available TOU rate otherwise applicable to them, in order to begin or continue to use the NEM successor tariff.

14. In light of the substantial work that the Commission has undertaken, but not yet completed, **that will lead to better analytic methods and information** with respect to the specific benefits of distributed energy resources, **and the substantial work that the Commission has undertaken, but not yet completed, that will lead to significant changes to residential rates** (including the institution of default TOU rates), the Commission should determine that the benefits and costs of the NEM successor tariff to all customers and the electric system are **approximately equal not well characterized at this time**.

21. In order to promote safety and reliability of customer-sited renewable distributed generation systems, each IOU should verify, as part of each interconnection request for a NEM successor

tariff system, that **a warranty warranties** of at least 10 years **has have** been provided on all **essential** equipment and the installation of that equipment.

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