Rooftop Solar Energy Tug of War – Resolution, Part 2

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1. Introduction

This is Part 2 of the second report on this subject. The first post was in September.

Part 1 covered discussions and findings of facts and is linked below. Part 2 will cover the main decision process and was posted the next days after Part 1.

https://energycentral.com/c/pip/rooftop-solar-energy-tug-war-%E2%80%93-resolution-part-1

This is a very important and complex subject, has many stakeholders, and will set the tone for other states that will need to go through a similar process. If you have not read Part 1 of this paper yet, it is strongly suggested that you go through the above link and start there. It will make reading this part much easier.

2. Guiding Principles

In order to maintain heading numbering consistent with the decision, I am keeping the same title headings, with each of the following headings having a single line like that below, until heading 8.3, which is the start of the main text for part 2.

Please see part 1 of this report linked in the Introduction of this part.

3. Procedural Background

Please see part 1 of this report linked in the Introduction of this part.

4. Lookback Study

Please see part 1 of this report linked in the Introduction of this part.

5. Independent Analysis of Net Energy Metering Revisions

Please see part 1 of this report linked in the Introduction of this part.

6. Proposals for Net Energy Metering Tariff Changes

Please see part 1 of this report linked in the Introduction of this part.

7. Issues before the Commission

Please see part 1 of this report linked in the Introduction of this part.

8. Revising the Net Energy Metering Tariff

Please see part 1 of this report linked in the Introduction of this part.

8.1. Reliance on the Lookback Study

Please see part 1 of this report linked in the Introduction of this part.

8.2. Analyzing Tariff Elements and Proposals

Please see part 1 of this report linked in the Introduction of this part.

8.3. Policies for the Successor Tariff

Parties presented recommended policies for the successor tariff. Of the recommended policies, most parties agree that the successor tariff should have a glide path from the current tariff to the successor and that the successor should encourage paired storage, ensure equity, and promote electrification. Disparity of opinions occurred in the specifics of these policies. Below we present the recommended policies, the varying opinions of the pros and cons for adoption, and our determinations…

8.3.1. The Successor Tariff Should Include a Glide Path

Several parties advocate for inclusion of a glide path in the successor tariff.

Previously in this decision, we stated that any proposed change to the tariff should consider the impact on the growth of the customer-sited renewable distributed generation market. We find that inclusion of a glide path is essential to balance the multiple requirements the tariff is required to meet. However, we agree with Public Advocates Office that the magnitude and severity of the cost shift requires immediate action by the Commission.

While we adopt a glide path in the successor tariff, we do so in a balanced approach that minimizes any cost shift to ensure equity among all customers, but also encourages market growth that does not occur at the undue and burdensome financial expense of nonparticipant ratepayers. *We address the design of the glide path below.*

8.3.2. The Successor Should Promote Equity and Inclusion

AB 327 mandates the Commission to adopt a successor to the existing net energy metering tariff that includes "specific alternatives designed for growth among residential customers in disadvantaged communities." Further, in D.21-02-007, the Commission adopted guiding principles to assist in the development and evaluation of a successor, one of which requires the successor to ensure equity among customers. Hence, parties addressed the issues of equity and inclusion in testimony and briefs. The discussion included general policies and, in some cases, specific tariff elements. We address the general policy aspects of equity here; proposals for equity tariff elements are discussed below…

We clarify that this definition of low-income eligibility is only for use in the successor tariff adopted in this decision. …the Commission will conduct an evaluation of the equity elements we adopt in this decision to determine whether to require future changes to these policies for both low- and moderate-income customers.

The evaluation will collect five years of data from the successor tariff to focus on both affordability and equity matters… To assist the Commission in this effort, Joint Utilities shall add an optional interconnection application form field to gather income data from customers who interconnect during the first five years of the successor tariff to inform the

equity element evaluation. Potential changes in eligibility metrics and/or benefits for low- and moderate-income customers will be reviewed after more information is made available in the affordability proceeding and after the 5-year evaluation. We anticipate potential future eligibility metrics could include expanding to a certain affordability ratio, maintaining the CARE, FERA, and disadvantaged communities' eligibility, or a combination of these metrics (e.g., CARE customers who live in disadvantaged communities), or other metrics. Following the issuance of the evaluation, parties will have an opportunity to provide comment and the Commission will consider the contents of the evaluation and associated party comments in a future decision…

Author's comment: CARE was defined at the end of section **Error! Reference source not found.**. FERA (Family Electric Rate Assistance Program) targets families whose household income slightly exceeds the CARE eligible income, the CPUC established a 50 percent enrollment goal by 2023 and a 70 percent enrollment goal by 2026, and directed tailored marketing and outreach efforts to reach the program enrollment goals.

8.3.3. The Successor Should Promote Electrification

No party opposes the promotion of electrification by a successor tariff, but there is disparity regarding the approach. … in this section, we discuss general policies regarding the relationship between net energy metering and electrification.

Author's comment: By electrification the commission means replacing existing equipment that emits greenhouse gas (GHG) with equipment that receives its energy through electricity. Examples of this include replacing gasoline-powered vehicles with electric vehicles (EVs), natural gas fueled central heat and hot water heating with heat pumps (electric powered), gas-fueled cooking stoves with electric stoves, etc.

We address one additional policy consideration with respect to net energy metering and electrification. First, parties submit the successor tariff should advance California's electrification goals by allowing new customers to oversize their systems by 50 percent, as this would allow solar customers to grow their loads through the purchase of electric vehicles and electric appliances over time…

*While we agree that the Commission has consistently sent a message that net energy metering systems should be sized to load, these messages were conveyed prior to the contemplation of the electrification policy. We find the above parties proposal, will further promote electrification and should be adopted. We make one modification; net surplus generation will be compensated at the current net surplus compensation rates, as described below. …**the Commission require utilities to compensate customer qualifying facilities for net surplus generation for "random, modest, inadvertent net exports" at the Default Load Aggregation Point (DLAP) price. We find no reason to revise this standard. Following the SCE current practice, customers across all three Joint Utilities' territories who oversize their systems shall attest that they expect to increase their usage accordingly in the next year. This will prevent oversizing that is not designed to meet a future increase in onsite annual load.***

8.3.4. The Successor Should Transition the Solar Market to a Solar Paired with Storage Market

…most parties also agree that storage resources have the ability to increase the benefits of net energy metering solar to the grid…

We agree that the addition of storage provides greater benefits to both the customer and the grid. For example, Joint Utilities highlight that "paired storage can help manage the problems created by generation (since behind-the-meter solar cannot be curtailed), in that such excess energy can be stored…to meet load at its peak later in the day." ***Joint Utilities contend "paired storage will reduce our dependency upon carbon emitting resources." Joint Utilities also assert financial benefits to customers, maintaining that, "storage allows the customer to use energy generated by their panels during low-value midday hours later in the day when the sun is not shining and energy prices are at their highest, shortening the system payback period****" …*

While we acknowledge the benefits of storage, we also recognize that the current cost of storage creates cost-effectiveness concerns as noted by the Lookback Study. The Lookback Study found that the TRC test's benefit-cost ratio is consistently higher for solar PV systems when compared to paired storage systems. The study surmised that this "suggests that while energy storage systems can achieve higher avoided cost benefits, the incremental costs of energy storage are greater than the avoided cost benefits they currently provide" but "future energy storage cost reductions would tend to improve the TRC for [paired storage] systems." The current cost of storage also presents a barrier to widespread adoption in the near-term…

One party references an analysis performed by E3, where E3 estimated that the addition of a battery increased the length of a NEM 2.0 customer's payback period by 14 to 25 percent, depending on the utility. We note, however, this same analysis indicates a higher TRC test results for NEM 2.0 solar paired with storage and NEM 2.0 solar. With these facts in mind, ***it is and will continue to be Commission policy to encourage paired solar [+storage]. We do so with both costs and benefits in mind… we adopt a successor tariff with this balance at the forefront.***

8.4. Elements to Include in the Successor Tariff

Parties presented recommended policies for the successor tariff. Of the recommended policies, we find the structure of the successor tariff should be revised to be a better version of net billing, with an export compensation rate better aligned with the value exported energy provides to the grid based on when the value in terms of energy is provided. Hence, export compensation should be based on avoided cost values and successor tariff customers should pay for their usage of the grid. Further, the import rate should align with our prior determination of promoting paired storage and electrification. Finally, in order to ensure that customer-sited renewable distributed generation continues to grow sustainably, we find a glide path in the form of a Market Transition Credit offers a better option for balancing the needs of participants and all other ratepayers. We discuss each of the elements below.

8.4.1. Compensation Structure and Export Rate

Net billing allows the dollar value of credits to be set at a different level than the energy's import price…

Continuing to base export compensation on retail rates does not comply with Public Utilities Code Section 2827.1, thereby conflicting with one of our guiding principles. Retail rates do not reflect the actual costs of the exports or the benefits the exports provide to the utilities and the grid, both of which we need to ensure are approximately equal pursuant to Section 2827.1. We acknowledge Public Advocates Office's analysis that basing export rates on retail rates has resulted in compensation levels 3.8 to 5.4

times higher than the benefits they provide to the electrical systems in the form of avoided costs. ***We conclude that export compensation should be based on values derived from the Avoided Cost Calculator. Using avoided cost values instead of the retail rate brings the cost of the successor tariff for utilities closer to its value, thus complying with two other guiding principles: ensuring equity among customers; and maximizing the value of the resource to all customers and to the electrical system…***

…using this approach to ensure the costs and benefits are approximately equal, as instructed by the Legislature, should lead to positive outcomes for customers and nonparticipating ratepayers. We are not swayed by the arguments that the Avoided Cost Calculator is volatile and inconsistent. Except for the 2020 version, the Avoided Cost Calculator has consistently reflected the value of exported energy, year after year. We agree that the Avoided Cost Calculator values will ensure export compensation is based on the benefits they provide to the system and will, therefore, reduce the previously confirmed cost shift. While we recognize the warning to proceed in a measured fashion, we have other elements and tools that we can use to produce such a measured approach…

Lastly, we acknowledge parties position that export compensation rates should be easily understood… We agree with Public Advocates Office that customers will be able to understand that their exports are compensated on a per kilowatt-hour basis without having to understand the avoided cost components.

8.4.2. Nonresidential Successor Tariff

We have found that while the TRC and PCT scores for the nonresidential sector are above 1.0, in looking at the RIM and other factors, the nonresidential sector of NEM 2.0 is not cost-effective. We have also found that the structure of NEM 2.0 is not compliant with the guiding principles. In Section 8.4.1 above, we conclude that retail rates have no connection to the actual costs of the exports or the benefits the exports provide to the utilities and the grid, both of which we need to ensure they are approximately equal, pursuant to Section 2827.1. As such, ***we find adopting similar export rates for new nonresidential net energy metering customers is reasonable. Furthermore, requiring the same export compensation rate for all net energy metering customers will maintain equal treatment between nonresidential and residential customers, thus complying with guiding principle b, ensuring equity among customers.***

8.4.3. Import Rate

There is considerably more consensus amongst parties with respect to import rates. With a few exceptions, many parties agree that moving toward highly differentiated time-of-use rates will address several objectives…

Requiring the successor tariff customers to take service on time-of-use rates with a high off-peak/on peak price differentiation (i.e., highly differentiated time-of-use rates) will meet several guiding principles in this proceeding. ***Most importantly, we agree that highly differentiated time-of-use rates will vastly improve the pricing signal to customers. These rates will incentivize them to divert energy usage to lower-priced hours when the solar system is producing and/or when charging storage, rather than using this energy at expensive times when the grid's energy supply is constrained. As a result, rates are closer to the cost of service. This maximizes***

the value of the generation to all customers and to the electrical system and ensures equity among all customers. Adoption of these import rates will also encourage electrification and help California reach its greenhouse gas reduction goal, thus coordinating the successor tariff with our energy policies. *We agree that the rates should be available to all customers and should not be focused solely on net energy metering customers… Accordingly, in the successor tariff, customers shall be required to take service on the rates that are available to all customers and have high time-of-use price differential between summer weekday peak and summer weekday off-peak periods. We discuss this in more detail in Section 8.5 below.*

8.4.4. Grid Benefits Charges

In support of the adoption of grid benefits charges in this proceeding, parties consider the grid benefits charge essential to ensuring net energy metering customers pay for the costs they impose on the system. Joint Utilities explain that when net energy metering customers avoid paying volumetric rates when self-generating, they avoid paying certain aspects of the bill for which all customers are responsible including grid services such as transmission, distribution, and cost allocation mechanism; policy mandates such as CARE, program subsidies for energy efficiency programs, public purpose programs, the Wildfire Fund, and Nuclear Decommissioning; and the costs of utility-provided customer services. These costs (which are currently only assessed via the volumetric rate) are thus shifted to non-net energy metering customers in addition to their own costs for these items. Joint Utilities further explain that behind-the-meter solar without paired storage, "does not decrease the need for the distribution or transmission system and resiliency, reliability, and safety upgrades to that infrastructure." Joint Utilities assert utilities through ratepayers "continue to pay generation legacy costs, as well as procure new generation to instantly meet net energy metering customer demand should their systems be, for whatever reason, unavailable to serve all or part of their load." …

Joint Utilities explain that the volumetric rate approach was a practical approach when one-way grid imports were the default supply option. Now, with a system of imports and exports using the grid, Joint Utilities contend the volumetric rate approach is no longer practical.

We agree that the current design of the retail rates no longer provides the ability to accurately calculate all of a customer's energy and grid usage, with respect to net energy metering customers… ***Hence, we find a grid benefits charge in combination with the retail rate will provide improved accuracy, in the case of net energy metering customers.*** *The addition of the grid benefits charge will lead to just and reasonable rates for all customers, decreasing the cost shift currently created by the inaccuracies related to the two-way street of imports and exports. Further, we agree that net energy metering customers cause costs even when not directly importing energy from the grid…* ***The grid benefits charge will enable the Commission to create a successor tariff that ensures equity among customers and is accurately based on the generator's costs and benefits to the system as a whole.***

8.4.5. Nonbypassable Charges

The Commission previously determined that those taking service on the NEM 2.0 tariff would be required to pay nonbypassable charges on each kWh of electricity they consume from the grid in each metered interval. D.16-01-044 determined the nonbypassable charges to be assessed on NEM 2.0 customers are the public purpose

program charge, nuclear decommissioning charge, competition transition charge, and the Department of Water Resources bond charge.

Author's comment: The commission left the above ruling intact.

8.4.6. Market Transition Credit

The Market Transition Credit, as proposed in the White Paper, is meant to provide a glide path for the successor tariff, creating both a gradual rate reform and an external transitional support mechanism designed specifically to enable a reasonable payback period for customers investing in onsite renewable generation. Explaining the credit would be flexible, the White Paper suggests the credit would also be sensitive to cost declines. The White Paper proposes the credit would be fixed over a defined payback period for each net energy metering customer vintage and could be based on time, number of subscribed customers, or the volume of net energy metering generator adoption…

We have already determined that the inclusion of a glide path is essential to balance the multiple tariff requirements but the lengthy glide paths proposals by participants are inadequate. ***Thus, we find the Market Transition Credit provides the best approach to the glide path. We disagree that a Market Transition Credit is too difficult to administer. In the White Paper E3 also describes options the Commission could adopt to use the Market Transition Credit as a glide path, providing the flexibility to ensure ratepayer equity while also ensuring that customer-sited renewable distributed generation continues to grow sustainably. As we discuss in Section 8.5 below, we have reviewed these options and created a Market Transition Credit that meets all these needs.***

8.4.7. Minimum Bill

Because we are adopting a grid benefits charge in this decision, a minimum bill is no longer necessary and will not be adopted as an element of the successor tariff.

8.4.8. Netting

Currently, NEM 2.0 nonresidential customers have a 15-minute netting interval and residential customers have a one-hour netting interval. Joint Utilities explain that the current netting policy – to net imports and exports within each metered interval – is a billing construct to measure the kilowatt-hour consumption to which nonbypassable charges should be applied. Joint Utilities contend this does not have to continue. Joint Utilities recommend implementation of instantaneous netting where the meter automatically performs the netting of customers' exports and consumption. ***Joint Utilities further recommend the Commission implement the process where all recorded imports on the first meter channel are charged the retail rate, and all recorded exports on the second meter channel are charged the export compensation rate. Joint Utilities contend this is a very easy process****…*

Reducing the netting interval exposes more of the customers' imports and exports to net billing, which we have found is more aligned with system costs. As one of our principles is to adopt a tariff that maximizes the value of customer sited renewable generation to all customers and to the grid, ***we find instantaneous netting is more consistent with cost-based compensation and should be adopted as part of the successor tariff. To allow customers to have the most accurate data possible, the utilities shall***

include both channels of data in their customer-authorized energy usage data portals.

8.4.9. True-Up Period

Currently, net energy metering customers receive a monthly bill and, if the customer generates more bill credits than they use during that month, they can carry forward the excess credits to the following months, within a 12-month period. This is considered the annual true-up. If the net energy metering customer incurs a bill greater than zero, they can carry forward the amount due to the next month, within a 12-month period. This is referred to as annual billing. On an annual basis, based on the customer's interconnection date, each net energy metering customer's bill is trued-up and the customer either pays the amount owed or receives compensation for any credits at the Net Surplus Compensation rate.

Joint Utilities propose that the annual true-up be converted to a monthly true-up. Joint Utilities contend the current annual true-up undermines greenhouse gas goals because it does not incentivize customers to shift load out of the on-peak period and it results in non-participating customers paying more for energy exports than they are worth. Further, Joint Utilities assert requiring monthly true-ups is consistent with federal law.

We maintain annual true-ups for both residential and nonresidential customers, meaning credits can be carried forward to future months within a 12-month billing period.

8.5. The Successor Tariff

To distinguish this tariff from the two prior net energy metering tariffs, we break from the previous nomenclature and do not refer to this tariff as NEM 3.0 but rather refer to it as the Net Billing tariff. *In the successor tariff, the adopted elements are rationalized and balanced to meet the needs of the grid, participating customers, and all other customers, as well as the environment. We discuss each of the elements of the new tariff below and describe how it meets the multiple requirements of the guiding principles. To illustrate an example of how to ensure customer understanding of the successor tariff, we provide a description of the net billing tariff developed for customers in Appendix A. Such a description can be used in customer education materials such as the California Solar Consumer Protection Guide.*

8.5.1. Export Compensation Based on Avoided Cost Calculator Values

In Section 8.4.1, we determined that export compensation should be based on values derived from the Avoided Cost Calculator…

We previously stated that we would balance all requirements and principles. Accordingly, we set the export compensation rate at averaged monthly values for each hour, differentiated between weekday and weekend. For example, the hour of 3 p.m. to 4 p.m. on weekdays in July 2023 will have the same export compensation rate. *While we agree with Joint Utilities that hourly values complicate the bill structure, we find that averaging the values across days in a month acknowledges the general trends in differences between hours and months and results in accurate values.* ***We agree that setting export values at an hourly interval instead of a time-of-use interval results in one set of export values across all rates, which is more transparent for developers and customers.*** *This approach also yields more accurate*

signals for customer generators to reduce imports from the grid and for battery storage to dispatch during the hours most valuable to the grid.

To enable solar providers to predict customer savings, the values for the first five years following a customer's interconnection date will be based on a five-year schedule of values for each hour from the Avoided Cost Calculator. The Avoided Cost Calculator used will be the most recent calculator, adopted as of January 1 of the calendar year of the customer's interconnection date. *Parties recommend options for locking in the values: one year, 10 years and 20 years. We find that five years is preferable because, like all forecasts, the Avoided Cost Calculator forecast values get increasingly uncertain as we move further away from the present.* ***The certainty of the adopted five-year lock-in period helps to ensure that customer-sited renewable distributed generation continues to grow sustainably and enhances consumer protection measures, while providing transparency to customers.***

Following the five-year lock-in period, export compensation will be based on averaged monthly avoided cost values, as previously described, but calculated by the version of the Avoided Cost Calculator adopted as of January 1…

8.5.2. Market Transition Credit as a Path to Solar Paired with Storage

We recognize adoption of the revised export compensation rates will lead to less export compensation for successor tariff customers as compared to NEM 1.0 and NEM 2.0 customers. This will enable the Commission to meet the requirement that the tariff is based on the costs and benefits of the generators. However, we also recognize the need and requirement that customer-sited distributed generation continues to grow sustainably. To attain this growth, the market needs to transition to one that is solar paired with storage. Hence, as we previously determined, we find inclusion of a glide path is essential and the Market Transition Credit is the best and most transparent approach. Below we describe our adopted Market Transition Credit that will be available to all successor tariff customers for the first four years of the successor tariff and will ensure a reasonable level of annual bills savings. To assess affordability and equity concerns, the Commission will conduct an evaluation of the Market Transition Credit, along with the equity elements, to determine what changes, if any, need to be made to the Market Transition Credit. As previously described, this evaluation will be conducted in five years from the complete implementation of the successor tariff, i.e., when all three of the Joint Utilities have implemented the successor tariff.

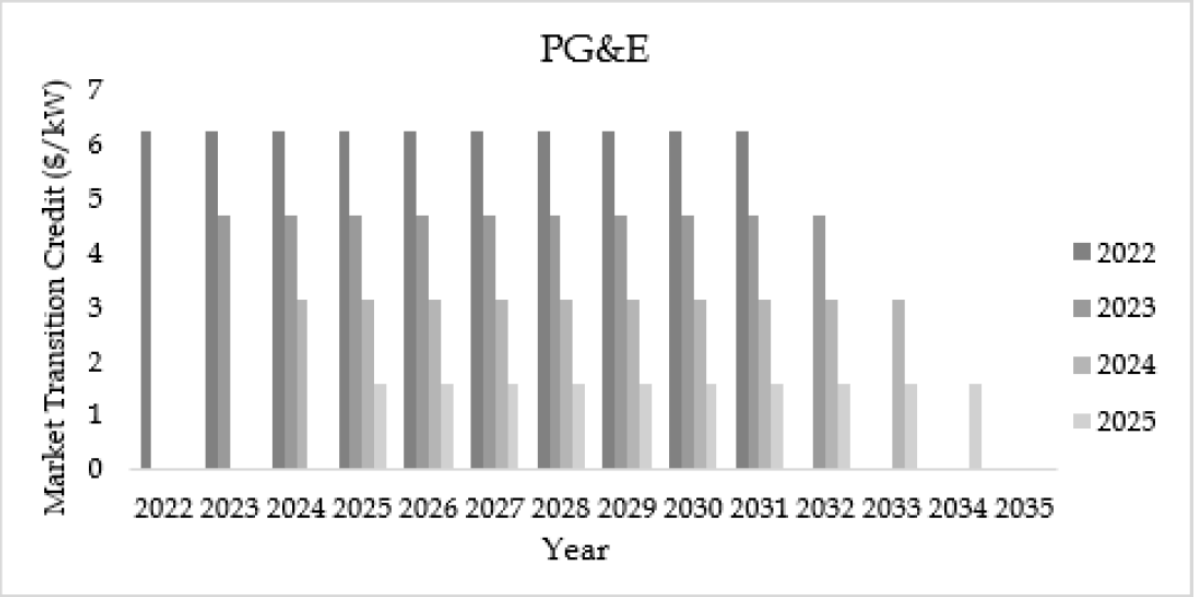
We begin with eligibility requirements… ***the Market Transition Credit will be available to all successor tariff customers who enroll in the successor tariff over the course of the four years starting with the initial implementation of the successor tariff. We also do not restrict eligibility by technology type, initially. However, we determined the successor should promote paired storage; thus, the Market Transition Credit will allow for a ten-year payback period for solar paired with storage.*** *Customers who are required to install solar pursuant to the new construction requirements of the California Energy Commission 2019 update to the Title 24 Building Energy Efficiency Standards are not eligible for the Market Transition Credit. While the purpose of this credit is to ensure the continued growth of the market, at its foundation, the credit is meant to provide an incentive to customers to install customer-sited renewable distributed generation…*

The monthly Market Transition Credit we adopt will be consistent throughout the year for a customer, easily understood on the bill, with the only changes occurring on the tenth anniversary of the customer's interconnection date. The credit will be provided to customers for ten years from the date of interconnection and will be available to customers installing any type of behind-the-meter technology.

The glide path portion of the Market Transition Credit will be a stepped-down approach. The Market Transition Credit level will be in effect over four years. ***The initial Market Transition Credit will be available to residential customers that submit interconnection applications after the NEM 2.0 sunset date and before December 31 of the year the three utilities complete implementation of the successor tariff. Each year thereafter, the Market Transition Credit will decrease by 25 percent a year, as measured from the first-year credit rate until the credit reaches zero****…*

Aligning the timing of the step-downs with calendar years will assist with customer understanding. Again, each customer that is eligible for the Market Transition Credit will receive the credit for a period of ten years from their interconnection date. ***The Market Transition Credit glide path for residential non-CARE participant customers of each of the Joint Utilities is illustrated in Figure 3 through Figure 5 below.***

Figure 3



Note that the dates on the legend on the right are the dates when a residential customer first enrolls in the successor tariff (submits interconnection application).

Figure 4

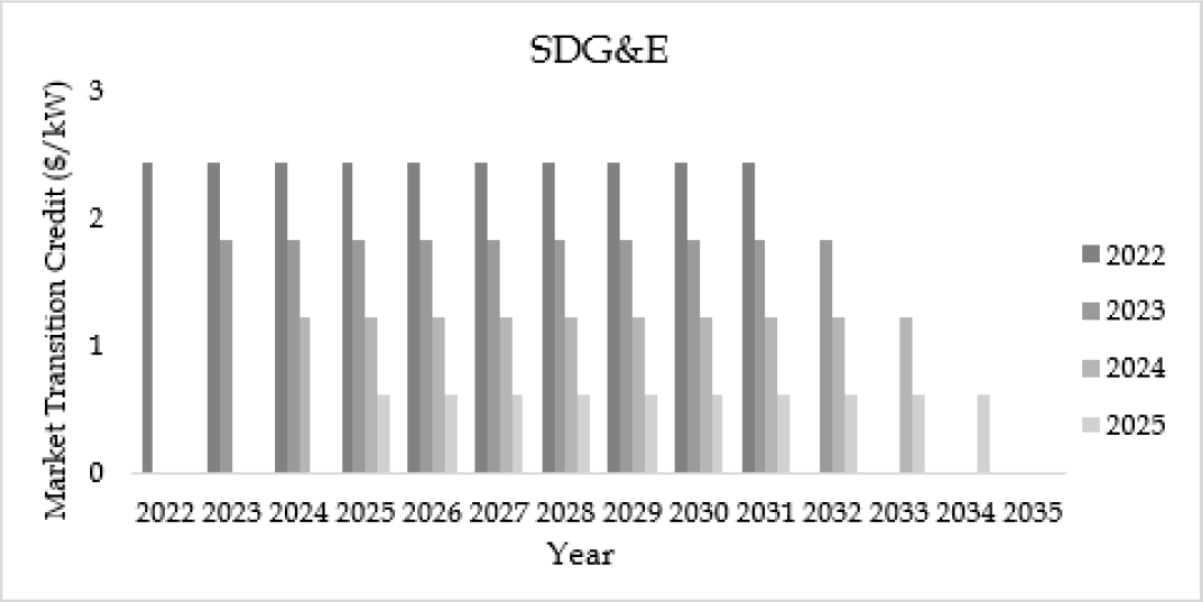
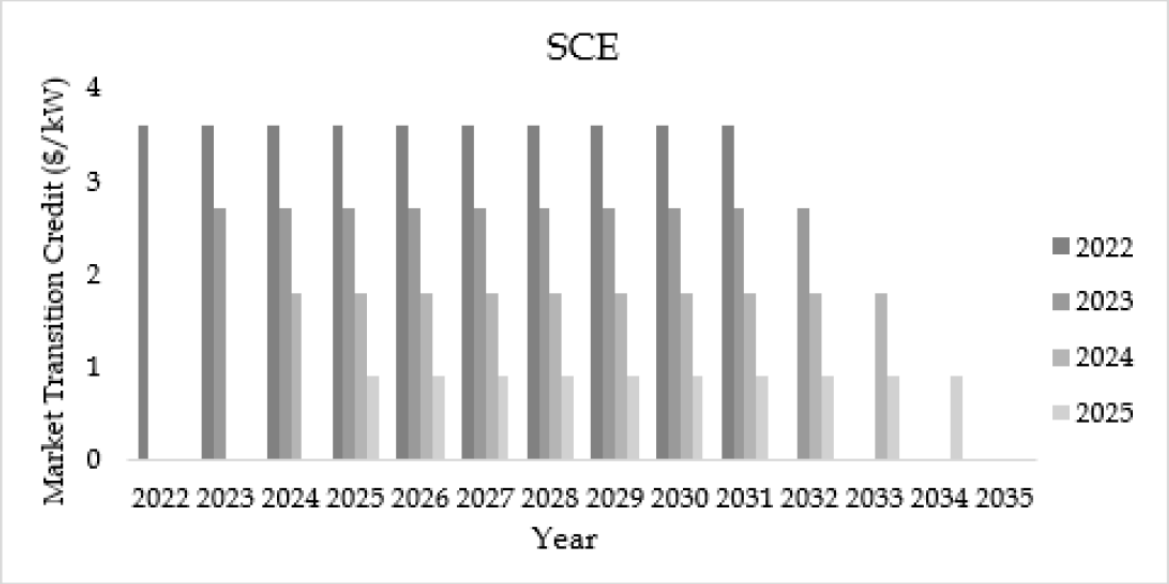


Figure 5



Lastly, the Market Transition Credit will be funded by all ratepayers.

The adopted initial Market Transition Credits are provided in Table 5 below. *The initial Market Transition Credits are designed to achieve a 10-year payback period (as defined in the Commission modeling) for a solar and storage adopter who does not receive an SGIP incentive, has a system sized to 100 percent of load on an annual basis, and takes service on one of the eligible import rates discussed in the next section.*

Table 5 Adopted Initial Market Transition Credit By Utility			
Customer Segment	**PG&E**	**SDG&E**	**SCE**
Residential	$1.62/kW[353]	$0/kW	$3.59/kW
Low-Income	$4.36/kW	$0/kW	$5.25/kW
Nonresidential	$0/kW	$0/kW	$0/kW

8.5.3. Rate Structure

The rate structure of the successor tariff will include several elements, all of which we have determined, in ***Section 8.4 above, to be reasonable: a highly differentiated time-of-use rate and a grid benefits charge, which we rename as the Grid Participation Charge, that includes nonbypassable charges. The Grid Participation Charge will not be applicable to nonresidential customers, who will only be responsible for the nonbypassable charges.*** *Other related rate elements include the interconnection fees, net surplus compensation, and the true-up period.*

We begin with the time-of-use rate. As previously stated, requiring highly differentiated time-of-use rates will vastly improve the pricing signal to customers and meet several guiding principles in this proceeding.

Author's Comment: There are a few pages of discussions about which existing rate schedule might be applicable to the new tariff. I am currently taking my electric service from PG&E under a time-of-use rate schedule (ELECTRIC SCHEDULE E-TOU-D). The schedule is not terribly long (5 pages), but it is terribly complicated, and I don't believe that I nor my readers need to go down this rabbit-hole.

As part of the rate structure, ***we adopt a Grid Participation Charge to enable the Commission to create a successor tariff that ensures equity among customers and is accurately based on the costs and benefits of the generator. We find the name "Grid Participation Charge" sends a clear message to the customer that they are paying to use the grid. The charge will be a fixed monthly charge based on the number of kilowatts installed in a residential customer's system.*** *Because most nonresidential customers already have fixed and demand charges included in rates, we find it reasonable to only apply the Grid Participation Charge to residential customers…*

…we adopt the monthly Grid Participation Charges shown below in Table 8.

Table 8 Adopted Monthly Grid Participation Charge for Successor Tariff Customers			
Customer Segment	**PG&E**	**SDG&E**	**SCE**
Residential	$8.00/kW	$8.00 kW	$8.00 kW
Low-Income	$0/kW	$0/kW	$0/kW
Nonresidential	$0/kW	$0/kW	$0/kW

Other charges in the successor tariff are comparable to the NEM 2.0 tariff.

The decision has several subsections in this section (8.5) that deal with increasingly unexciting details of the tariff, and also modeling the tariff, and metrics for cost-effectiveness. I'm not going into these.

8.6. Related Subtariffs

Related subtariffs are tariffs for specialized customer groups. I'm also not going into these.

8.7. Implementation of the Successor Tariff

This decision has affirmed that NEM 2.0 creates a cost shift between participating customers and nonparticipant ratepayers. Hence there is a sense of urgency to transition to the successor tariff. However, the record of this proceeding indicates changes to each utility's billing systems and supporting platforms to bill customers on the successor tariff will take 12 to 24 months following the issuance of a final decision. *With these implementation challenges in mind, we adopt the implementation schedule below.*

Step 1: Within 30 days of the adoption of this decision, Joint Utilities shall each submit an information-only Tier 1 Advice Letter to provide the details of the successor tariff, as adopted in this decision. *The individual advice letters shall summarize Joint Utilities' interpretation of how the successor tariff will be structured and include indicative levels of price components.*

Step 2: Within 45 days of the adoption of this decision, Joint Utilities shall each submit a supplemental advice letter containing rate factors based on the applicable revenue requirements and associated tariff sheets. *These supplemental advice letters provide the industry with the details necessary to inform customers about the successor tariff, including consumer protection elements such as updated or new disclosure documents. Joint Utilities shall ensure the tariff language is standardized across all three utilities.*

Joint Utilities recommend short timelines for these first two steps. Public Advocates Office recommended a 90-day turnaround. We find any unnecessary delay in providing this information to the behind-the-meter industry could lead to potential harm to the industry's ability to grow sustainably.

Step 3: No later than 100 days after the adoption of this decision, Energy Division will dispose of the advice letters from Steps 1 and 2.

Step 4: No later than 120 days after the adoption of this decision, the Commission will implement a tariff sunset on NEM 2.0, after which time no additional customers will be permitted to take service under the NEM 2.0 tariff. *Joint Utilities recommend establishing the buffer period based on the interconnection application date. We find this buffer period will protect customers who are in the process of contracting for NEM 2.0 tariff service. Customers submitting interconnection applications after this sunset date will take service and be billed on the NEM 2.0 tariff and then be transitioned to the successor tariff once it is operationalized. Any delay in Step 3, the processing of the advice letters in Steps 1 and 2, will result in an equal, day-for-day, extension of time in Step 4. Customers signing an installation, lease or PPA contract after this sunset date will take service and be billed on the NEM 2.0 tariff and then be transitioned to the successor tariff once it is operationalized.*

Further, for customers taking interim service on the NEM 2.0 tariff, Joint Utilities propose a reduction of these benefits during the interim period. This would add an unnecessary layer of complexity. Instead, customers taking NEM 2.0 service on an interim basis will receive the full benefits of NEM 2.0 until the transition to the successor tariff. Once transitioned, these customers' export rates will be based on a five-year schedule of Avoided Cost Calculator described above…

Step 5: Within 12 months following adoption of this decision, Joint Utilities will complete alignment of related necessary billing systems and transition to full implementation of the successor tariff. *Joint Utilities state that billing system upgrades for each of the utilities are currently in progress and contend this will result in delays to implementation. However, we find the delays unreasonable and require full implementation of the successor tariff no later than one year from issuance of this decision.*

Public Advocates Office recommends enrollment of customers on the successor tariff by early 2022, which we find would not allow behind-the-meter industry providers to sufficiently train their sales force and customer service representatives, and revise marketing material and contracts. The overall transition from NEM 2.0 to the successor tariff is as expeditious as reasonably possible to prevent additional contribution to the cost shift, ensure the compensation for these services is cost-effective, and initiate the storage and electrification benefits of the successor tariff.

LAST TWO SECTIONS:

Sections 9, and 10 are required in each decision. They are important, but largely routine, and I believe I have mostly covered their content. These are described below:

Section 9, Comments on Proposed Decision

The process for submitting comments to this decision.

Section 10, Assignment of Proceeding

The Commissioner and ALJ assigned to this proceeding.

Findings in Fact:

A succinct statement of each of the 207 findings.

Conclusions of Law:

A succinct statement of each of the 54 conclusions.

Order:

This is the ALJ's Order, it is proceeded by "**IT IS ORDERED that:"**

And it is 7 pages long.