Braun Blaising & Wynne, P.C.

Attorneys at Law

Summary of the Revised Proposed Decision Revising Net Energy Metering Tariff and Subtariffs

The Net Energy Metering ("NEM") Rulemaking, ("R.") 20-08-020, commenced with the issuance of the Order Instituting Rulemaking ("OIR") in August 2020. Following comments and the issuance of guiding NEM principles (D.21-02-007), the Commission issued an initial Proposed Decision ("Initial PD") on December 13, 2021 to adopt a successor NEM tariff. After receiving widespread criticism of the Initial PD, on May 9, 2022 the assigned ALJ issued a Ruling setting aside submission of the record to further explore three elements: (1) the glide path approach, (2) non-bypassable charges, and (3) community distributed energy resources ("DERs"). On June 10, 2022, parties filed opening comments (Summary), and reply comments were filed on July 1, 2022 (Summary).

On November 10, 2022, Administrative Law Judge ("ALJ") Kelly Hymes of the California Public Utilities Commission ("Commission") issued a revised PD. The Scoping Memo in this proceeding established the seven issues as the scope of issues for this proceeding. D.21-02-007 addressed Issue 1. This decision will address Issue 2 through Issue 6. A subsequent decision will address Issue 7 (consideration of additional or enhanced consumer protection elements).

The following is a summary of the revised PD, including certain comparisons to the initial PD. The summary is provided through an Executive Summary, Thumbnail Sketch and Expanded Summary to provide different levels of detail, with hyperlinks also provided to previous summaries (for a deeper dive into material).

Executive Summary

- The PD adopts a successor to the NEM tariff to improve price signals by better aligning them with the electric grid's conditions.
    - The updated billing structure is designed to optimize grid use by the tariff's customers and incentivize adoption of combined solar and storage systems.
- The successor tariff applies electrification retail import rates to new residential solar and storage customers instead of the time-of-use rates in the current tariff.
- The successor tariff replaces retail rate compensation for exported energy with Avoided Cost Calculator ("ACC") values that vary according to grid needs.
- The successor tariff provides a glide path in the form of an adder based on the values in the ACC and is designed to compensate customers for the value of their exports to the grid.
- The Commission initiated Rulemaking ("R.") 22-07-005 in July to advance demand flexibility through electric rates to broadly restructure a rate element that had been discussed in the context of a successor tariff, namely, the way fixed costs are collected from customers.

- Eligible customers of the successor tariff will have the opportunity to take advantage of new funding for up-front incentive payments for solar paired with storage systems and stand-alone storage.
    - This funding allows the Commission to offer a total of $900 million, with $630 million set aside for low-income customers, to reduce the cost of these systems.
- The Commission finds that the NEM 1.0 and NEM 2.0 tariffs should remain intact.

Thumbnail Sketch

Net Billing Structure

(a) Rate for consumption and rate paid for generation delivered to grid are different.
(b) Evaluated on a 15-minute basis.
(c) Trued-up on monthly bill, yet there still is a 12-month limit on generation where net surplus compensation is applied.

Rate structure

(a) Must be on applicable TOU Rate

Compensation for generation

(a) The ACC Calculator is used to develop fixed rates for each hour of the day, differentiated by month and by weekday versus weekend (for example, there will be a fixed rate for 4:00 pm for weekdays in July).
    a. Rates are fixed for the initial 9 years that a customer signs up.
(b) In addition to the ACC payment, there is an ACC Plus payment that is targeted at ensuring 9-year payback.
    a. Not applicable to San Diego Gas & Electric Company ("SDG&E") because SDG&E already has a 9-year payback.
    b. Only available to residential customers.
    c. Includes a table of ACC values
    d. Ramps down each year, such that new customers signing up in successive years will get a lower rate.

Change from Initial PD

(a) The Initial PD had a Market Transition Credit to try to provide a glide path. This was paid based on the installed capacity. This has been replaced by ACC Plus, which is paid on per kWh basis.
(b) The Grid Participation Charge, which was $8/kW per month, has been removed.

Initial Reactions to the Revised PD (as compared to the Initial PD)

(a) Oral Arguments on the Revised PD will occur on November 16, and opening comments on the Revised PD are due by November 30.
(b) The Solar industry is opposed because the Revised PD (as compared to the Initial PD) did not go further in benefitting customers that want to install solar: Sample Article

(c) The investor-owned utilities ("IOUs") are opposed because the Revised PD (as compared to the Initial PD) went too far in continuing subsidies that should be eliminated: Sample Article .

Additional Summaries

The following is a list of summaries that might be helpful in assessing the PD:

1. January 2021: Summary of Proposed Decision adopting principles to assist in the development of a successor to the current NEM tariff.
2. January 2021: Summary of final NEM 2.0 Lookback Study.
3. January 2021: Summary of White Paper on successor to the current NEM Tariff.
4. March 2021: Summary of NEM successor proposals.
5. April 2021: Summary of Second NEM Workshop on Cost Effectiveness Modeling of Parties' Proposals.
6. May 2021: Summary of E3 Cost-Effectiveness Analysis of the NEM proposals.
7. August 2021: Summary of Briefs.
8. December 2021: Summary of Initial PD.
9. January 2022: Summary of Opening Comments on Initial PD.
10. January 2022: Summary of Reply Comments on Initial PD.
11. June 2022: Summary of Opening Comments on Ruling reopening record.
12. July 2022: Summary of Reply Comments on Ruling reopening record.

Expanded Summary Outline

A. Legislative and Regulatory History of Net Metering in California

- In 1995, Senate Bill ("SB") 656 established NEM in California.
    - SB 656 added Section 2827 to the Public Utilities Code, directing every electric utility in California to develop a standard contracts or tariffs to allow eligible customer-generators to receive a financial credit on their electric bills for energy fed back to the utility's grid.
- In the first NEM tariff, referred to as NEM 1.0, customer-generators received a full retail rate bill credit for power generated by their onsite systems that was fed back into the grid when generation exceeded onsite energy demand.
    - The credits offset a customer's monthly electricity bills and could be used on subsequent bills for up to one year.
- In 2013, Assembly Bill ("AB") 327 added Section 2827.1 to the Public Utilities Code and mandated that the Commission adopt a successor to the NEM 1.0 tariff.
    - Subsequently, the Commission approved D.16-01-044, which adopted a revised NEM Tariff, now referred to as NEM 2.0.
- In NEM 2.0, customers continue to receive full retail rate credit for energy exported to the grid during a 12-month billing cycle, as well as compensation for net surplus energy.
    - NEM 2.0 customers currently pay charges that align their costs more closely with non-NEM customer costs such as a one-time interconnection fee and monthly non-bypassable charges.
    - Further, NEM 2.0 customers must take service under a time-of-use ("TOU") rate.
- D.16-01-044 established 2019 as the time for review of NEM 2.0.

B. Procedural Background

- On August 27, 2020, the Commission adopted an OIR to Revisit NEM Tariffs Pursuant to Decision 16-01-044 and to Address Other Issues Related to NEM.
- On November 19, 2020, the Commissions issued the Scoping Memo and ALJ Ruling Directing Comments on Proposed Guiding Principles ("Scoping Memo"), which established the scope of issues to be addressed in the proceeding.
- On January 21, 2021, the Commission issued a ruling presenting the NEM 2.0 Lookback Study.
- On January 28, 2021, the Commission introduced the White Paper on Alternative Ratemaking Mechanisms for DERs in California.
    - The White Paper was meant to provide a framework for parties to develop their own proposal for a successor to the current NEM tariffs.

- On February 11, 2021, the Commission adopted guiding principles for the development of a successor to the current NEM tariff.
- On March 15, 2021, parties filed proposals for a successor to NEM tariff.
  - The parties discussed these proposals at a March 23-24, 2021, virtual workshop.
- Opening testimony was served on June 18, 2021, and rebuttal testimony was served on July 16, 2021.
- The Assigned ALJ presided over twelve days of virtual evidentiary hearings between July 26, 2021, and August 10, 2021.
- The Commission issued the Initial PD on December 13, 2021.
  - Following the filing of opening and reply comments, the newly assigned Commissioner requested additional time to review the proposed decision and the record.
- On May 9, 2022, the ALJ issued a ruling setting aside submission of the record to further explore three elements: (1) the glide path approach; (2) non-bypassable charges on gross consumption; and (3) community DERs.
- On June 10, 2022, parties filed comments responding to questions on these issues; reply comments were filed on July 1, 2022.
- The record was resubmitted on July 1, 2022.
- On November 10, 2022, the ALJ released the Revised PD.

C. Lookback Study

- With respect to cost effectiveness, the study found the benefits to NEM 2.0 participating customers in the form of bill savings and the federal investment tax credit ("ITC") outweigh the costs.
- With respect to cost-of-service analyses, the study indicated that for both residential and nonresidential participating customers, average bill payments prior to installing a NEM 2.0 system are higher than the cost of service.
  a. The Study found that prior to installing a NEM 2.0 system, residential customers on average pay lower bills than the utility's cost to serve them.
  b. In the case of nonresidential customers installing NEM 2.0 systems, these customers pay bills that are slightly higher than their cost of service.

D. E3 Whitepaper on NEM Revisions

- Concludes that the key to preserving a viable market is providing a glide path that includes a gradual retail export compensation rate reform and an external transitional support mechanism, a Market Transition Credit ("MTC"), that enables a reasonable payback period for new customers investing in onsite renewable generation.
- Recommends the MTC be fixed over a defined payback period for each cohort of new customers (vintage), which would be based on time, number of subscribed customers or the volume of adoption.
  - The MTC would be gradually phased out over successive vintages as technology costs decline and/or developers adjust to rate changes.

- This enables customers to afford onsite renewable generation while receiving retail export compensation rates that are increasingly aligned with the underlying value of the onsite renewable generation.
- Proposes a central element of the framework be a new successor retail export compensation rate for customers.
  - This would replace retail-rate based credits for energy injections into the grid with retail export compensation rates that reflect avoided costs and are time and seasonally differentiated.

E. Proposals for NEM Tariff Changes

- Parties individually or jointly filed proposals for a successor to the current NEM tariff.
- The PD presents an overview of each response filed on March 15, 2021.
- The overview includes a brief description of the major elements of each filed proposal.
- In a few instances, parties only presented narrowly defined proposals or recommendations.

F. Revising the NEM Tariff

- The Revised PD provides a discussion of the process for revising the NEM tariff, as follows:
  - The first building block in the decision is a review of the Lookback Study to determine the findings that should be relied upon when analyzing the tariff elements, and ultimately, the successor and related tariffs.
  - With the guiding principles, lookback study, and analysis methods determined, this decision then discuss the various elements that parties, and the white paper recommend for the successor tariff.
  - After determination of the five building blocks, this decision presents a review of the elements and proposals and adopts a successor and related tariffs.

G. Reliance on the Lookback Study

- The Lookback Study conclusions should be considered findings of fact in this proceeding and used in the analysis of proposals and adoption of a successor to the NEM tariff.
  - The Lookback Study's analysis is sound and demonstrates that NEM 2.0 negatively impacts non-participant ratepayers
  - The Lookback Study shows NEM 2.0 is not cost-effective
  - The Lookback Study shows NEM 2.0 disproportionately harms low-income ratepayers.

H. Analyzing Tariff Elements and Proposals

- *The definition of sustainable growth.*
  - The decision returns to the Commission's statement on "grow sustainably" in which the Commission stated it was not placing a greater emphasis on achieving sustainable growth over other statutory obligations.

- The sustainable growth of the solar industry must be considered to ensure the sustainable growth of customer-sited renewable distributed generation.

- *Cost effectiveness approaches and the consideration of other benefits.*
  - Avoided costs should be determined in the routine update of the ACC, which will then be used as inputs in the four standard practice manual tests to determine cost-effectiveness in resource-specific proceedings, including this NEM revisit.
  - The avoided costs determined in the ACC are the utilities' marginal costs of providing electric service to customers.
    - These can be avoided when the demand for energy decreases because of DERs, and are, thus, the benefits of using DERs.
  - The Commission declines to adopt resiliency adders.
  - The Commission declines to adopt the proposed societal benefits of an updated social cost of carbon metric, a reduced methane leakage multiplier, and an avoided future transmission cost metric.
  - With respect to land use conservation, the Commission is not persuaded by the arguments for a land-use societal benefit.

- *The appropriate length of time for a NEM participant payback period.*
  - The successor tariff should target a nine-year simple payback for a stand-alone solar system, equivalent to nearly $100 in monthly bill savings.
  - The 2013 and 2017 NREL studies show that consumers look at monthly bill savings when making economic decision on adopting solar.
  - The decision adopts a simple payback metric: the cost of the system divided by first-year bill savings. This metric will be used to determine the glide-path incentive amount. The number of years to payback should reflect all costs of stand-alone solar and solar paired with storage adoption.

- *The adopted cost of solar is $3.30 per watt.*
  - The decision finds a reasonable cost of solar is between $2.34 and $3.80 per watt.
  - The Commission recognizes this value does not account for the fact that over one-quarter of installations require main electrical panel upgrades, and a percentage of installations may experience permitting and interconnection delays, both of which would lead to higher costs.

I. 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, promote equity and inclusion, promote electrification, and should transition the solar market to a solar paired with storage market.

J. Elements to Include in the Successor Tariff:

- Of the recommended policies, the structure of the successor tariff is revised to be a better version of net billing, with a retail export compensation rate better aligned with the value exported energy provides to the grid based on when the energy is provided.
- Retail export compensation rates should be based on avoided cost values and successor tariff customers should pay for their usage of the grid.
- The import rate should align with the prior determination of promoting paired storage and electrification.
- To ensure that customer-sited renewable distributed generation continues to grow sustainably, a glide path, in the form of ACC Plus, offers a better option for balancing the needs of participants and all other ratepayers.

- *Retail Export Compensation Rate Structure*
    - The decision concludes that the retail export compensation rate should be based on values derived from the ACC.
    - Using avoided cost values instead of the retail import rate brings the cost of the successor tariff for IOUs closer to its value, thus complying with two other guiding principles: (1) ensuring equity among customers; and maximizing the value of the resource to all customers; and (2) to the electrical system.
    - The decision declines to adopt the SEIA/Vote Solar or CALSSA stepped-down approach that continues to base retail export compensation rates on the retail import rate.
    - Retail export compensation rates based on the ACC sends more accurate price signals and promotes solar paired with storage.

- *Nonresidential Successor Tariff*
    - It is reasonable to adopt retail export compensation rates for all new successor tariff customers. Requiring the same retail export compensation rate for all new customers will maintain equity between nonresidential and residential customers.

- *Import Rate*
    - There was considerable consensus among parties with respect to import rates. With a few exceptions, parties agree that moving toward highly differentiated TOU rates will address several objectives.
        - Highly differentiated TOU rates will vastly improve the pricing signal to customers which will incentivize customers to divert energy usage to lower-priced hours when their system is producing and/or when charging storage, rather than using this energy at expensive times when the grid's energy supply is constrained.
    - Customers should be required to take service on the rates that (a) are available to all customers and (b) have high TOU price differential between summer weekday peak and summer weekday off-peak periods.

- *Grid Benefits Charges*
  - The decision declines to adopt a grid benefits charge as part of the successor tariff.
  - After the filing of briefs in this proceeding, the Commission initiated R.22-07-005, a Rulemaking to Advance Demand Flexibility Through Electric Rates.
    - R.22-07-005 is a more appropriate venue to consider the issue of accurately calculating a customer's energy and grid usage while ensuring that grid preparation for the intermittent decrease and increase of usage.

- *Non-bypassable Charges*
  - The successor tariff should continue to assess non-bypassable charges ("NBCs") based on the energy that successor tariff customers import from the grid.
  - The decision maintains the four NBCs adopted in D.16-01-044: the public purpose program charge, nuclear decommissioning charge, competition transition charge, and the Wildfire Fund Non-Bypassable Charge, and affirms that, as was the case in D.16-01-044, these charges will continue to be non-bypassable for successor tariff customers.
  - Successor tariff customers cannot offset these four NBCs with bill credits from exported energy.

- *Glide Path*
  - This decision finds the ACC Plus to be superior to either the Market Transition Credit or the retail rate step-down approaches because of its direct linkage to the adopted retail export compensation value.
    - The MTC has no direct linkage to either the current retail export compensation rate structure of NEM 2.0 or the future structure of ACC-based values.
    - While the retail rate step-down approach is linked to the current compensation structure, the glide path will be provided to successor tariff customers who have never received compensation based on the retail rate for their exported energy.
  - Basing the glide path on the ACC values ensures that values are current, as these values are updated every two years, whereas changes to retail rates and TOU periods can be slow.

- *Minimum Bill*
  - The decision declines to establish a minimum bill requirement as part of the successor tariff.
    - The decision clarifies, however, that certain rate schedules for which successor tariff customers are eligible may require a minimum bill.
  - R.22-07-005 is a more appropriate venue to consider the issue of a minimum bill.

- *Netting Intervals for the Successor Tariff*
    - Currently, NEM 2.0 nonresidential customers have a 15-minute netting interval and residential customers have a one-hour netting interval.
    - The decision adopts a no-netting approach, and as such the metered interval approach is no longer relevant.
        - The Commission finds that hourly netting could lead to additional strain on the grid, which does not meet the requirements of the statute.
        - No netting is more consistent with cost-based compensation and should be adopted as part of the successor tariff.
            - This modifies the practice adopted in D.16-01-044 and clarified in D.19-04-019, wherein NBCs were assessed on the kilowatt-hours consumed in each metered interval net of exports under the NEM successor tariff.
    - In lieu of netting, the decision adopts a process for establishing an adjustment factor that can be used with hourly production estimates and consumption data.
        - The Commission finds an adjustment factor to be useful as a proxy for no netting.
        - The IOUs are directed to propose adjustment factors through a Tier 3 advice letter to be submitted no later than 90 days from the adoption of this decision.
            - Following a Commission resolution on this Tier 3 advice letter, the adopted adjustment factor can be incorporated into the bill savings inputs and assumption requirements for developers.
            - The IOUs will update the adjustment factors in a Tier 1 advice letter annually thereafter.

- *True-Up Period*
    - The decision declines to revise the true-up period.
        - Annual true-ups are maintained for both residential and nonresidential customers of the successor tariff, meaning bill credits can be carried forward to future months within a 12-month billing period.
    - Customers may make a one-time request that their true-up date be changed going forward to use any generation credits accrued in the summer, which will alleviate winter bills.
    - However, the decision requires residential customers and nonresidential customers to pay their bills monthly, meaning customers must pay all incurred charges every month.

- *Rate Structure*
    - The rate structure of the successor tariff will include a highly differentiated TOU rate and NBCs.
    - Other related rate elements include the interconnection fees, net surplus compensation, and the true-up period.

  - The decision makes no changes to the calculation of Net Surplus Compensation established by D.11-06-016.
  - Other elements of the rate structure remain the same as in the NEM 2.0 tariff.
  - Interconnection fees remain unchanged from D.16-01-044.

- *Terms of Service and Billing Rules*
  - Except for the import rate itself, the adopted successor tariff will be available to an enrolled customer for a period of nine years from the interconnection to allow for sufficient time for the customer to pay for their investment while protecting other ratepayers from undue financial burden.
  - The decision clarifies that the legacy period is linked to the customer who originally causes the system to be installed, not to the system itself.
  - The decision also clarifies that a customer currently taking service under NEM 2.0 may add battery storage to the customer's existing distributed generation system without altering their NEM 2.0 status.
  - The IOUs are directed to propose a process to notify customers when their solar systems interconnected under the NEM or Net Billing tariffs appear to be offline for a period of seven days or more.

K. Related Subtariffs:

- *Low-income customers*
  - The decision approves the same structure for low-income customers, including the same retail export compensation rates as other customers.
  - For the purposes of the successor tariff, low-income customers are defined as residential customers enrolled in CARE or FERA. The Commission declines to broaden the definition of low-income with respect to the successor tariff.
    - For this group, the CARE and FERA discount will not be applied to the retail export compensation rate, as is currently done in NEM 2.0.
  - An equity fund has been created by the legislature. These funds will be administered through the SGIP proceeding (R.20-05-012).

- *Virtual NEM ("VNEM") and NEM Aggregation ("NEMA")*
  - The decision adopts the same structure for VNEM and NEMA.
  - The current tariff (i.e., NEM 2.0) for the low-income sub tariffs of VNEM for Multifamily Affordable Solar Housing ("MASH") and Solar on Multifamily Affordable Housing ("SOMAH") is maintained.
  - The decision does not require VNEM customers to enroll in the highly differentiated electrification TOU rates adopted.
  - The decision maintains the netting intervals for each of the two sub tariffs as they currently exist.

- *Community Project Tariffs*
  - The Commission declines to adopt a successor tariff specifically for community distributed energy resources in the decision, as the Commission deems it premature. There are currently aspects of community solar that are being discussed or considered in other proceedings.
  - A full examination in a narrower context is warranted through the consolidated applications related to Disadvantaged Communities Green Tariff and Community Solar Green Tariff programs (A.22-05-022 et al.).

- *Revisions to NEM 1.0 and NEM 2.0 Tariffs*
  - The Commission finds that the NEM 1.0 and NEM 2.0 tariff should remain intact.
  - The Commission has the authority to revise the legacy NEM 1.0 and NEM 2.0 tariffs, but the outcome could result in an inequity.

L. Implementation of the Successor Tariffs

- <u>Step 0:</u> Adoption of the "final" decision and the beginning of the NEM 2.0 Sunset Period. Customers submitting a completed interconnection application prior to the end of the Sunset Period will be considered applicable for the NEM 2.0 tariff.

- <u>Step 1:</u> Within 30 days of the adoption of the final decision, the IOUs will each submit an information-only Tier 1 advice letter to provide the details of the successor tariff and all subtariffs.

- <u>Step 2:</u> Within 60 days of the adoption of the final decision, the IOUs will each submit a supplemental advice letter containing rate factors based on the applicable revenue requirements and associated tariff sheets.

- <u>Step 3:</u> Energy Division is authorized to dispose of the advice letters from Step 1 and Step 2.

- <u>Step 4:</u> No later than 120 days after adoption of the final decision, the Commission will implement the NEM 2.0 tariff sunset, marking the end of the Sunset Period, at which time no additional customers will be permitted to take service under the NEM 2.0 tariff.
  - Eligibility for inclusion in the Sunset Period will based on the interconnection application date, which will protect customers who are in the process of contracting for NEM 2.0 tariff service.

- <u>Step 5:</u> Within 12 months following adoption of the final decision, the IOUs will complete alignment of related necessary billing systems and transition to full implementation of the successor tariff.

M. Evaluation of the Successor Tariff

- The evaluation will collect three years of data after full implementation of the successor tariff and will follow a similar process as conducted in the Lookback Study, reviewing the entire successor tariff but with a focus on affordability, equity, and grid benefits.
- Given the Commission's desire to promote solar paired with storage, the decision adds to the evaluation an analysis of battery dispatch trends.