

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

[Item #4 \(Rev. 1\)](#)

Agenda ID# 23425

ENERGY DIVISION

RESOLUTION E-5374

June 12, 2025

R E S O L U T I O N

Resolution E-5374. Pacific Gas and Electric, Southern California Edison, and San Diego Gas & Electric Resolving Virtual Net Billing Tariff and Virtual Net Energy Metering Tariffs.

PROPOSED OUTCOME:

- Adopts with modifications Pacific Gas and Electric (PG&E), Southern California Edison (SCE) and San Diego Gas & Electric (SDG&E) Virtual Net Billing Tariff (VNBT) and Virtual Net Energy Metering (VNEM) tariffs, including Solar on Multifamily Affordable Housing (SOMAH) and Multifamily Affordable Solar Housing (MASH).
- Rejects PG&E, SCE and SDG&E joint proposal to allow a VNBT or VNEM renewable energy system for the primary use of a single customer to support the option of emergency grid-charging of integrated storage.
- Directs PG&E, SCE and SDG&E to modify the VNBT and VNEM tariffs to allow benefiting account customers to access multiple tariffs.
- Directs PG&E, SCE, and SDG&E to refile advice letters establishing VNBT and amending VNEM tariffs in accordance Decision (D.) 11-06-068 and the directions and determinations of this resolution.

SAFETY CONSIDERATIONS:

- There are no safety considerations associated with this resolution.

ESTIMATED COST:

- There are no costs associated with this resolution. Memorandum accounts necessary for implementation of the virtual net billing tariff and virtual net energy metering tariffs were authorized in D.23-11-068.

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

By Pacific Gas and Electric Advice Letters 7175-E/E-A, 7333-E/E-A, and 7211-E/E-A/E-B; Southern California Edison Advice Letters 5227-E/E-A, 5342-E/E-A, and 5250-E/E-A; San Diego Gas & Electric Advice Letters 4394-E/E-A, 4476-E/E-A, and 4409-E/E-A. Filed on multiple dates.

SUMMARY

This resolution adopts with modifications: 1) the virtual net billing tariff (VNBT) proposed in Pacific Gas and Electric (PG&E) advice letter (AL) 7175-E/E-A, Southern California Edison (SCE) AL 5227-E/E-A, and San Diego Gas & Electric (SDG&E) AL 4394-E/E-A per Decision (D.) 23-11-068 Ordering Paragraph (OP) 1; and 2) the amended virtual net energy (VNEM) metering tariffs, including Solar on Multifamily Affordable Housing (SOMAH) and Multifamily Affordable Solar Homes (MASH) tariffs, in PG&E AL 7211-E/E-A/E-B, SCE AL 5250-E/E-A, and SDG&E AL 4409-E/E-A, effective upon the date that this Resolution is approved.¹

The resolution rejects the joint filing SCE AL 5342-E/E-A, PG&E 7333-E/E-A, and SDG&E AL 4476-E/E-A to amend the VNBT and VNEM tariffs to permit emergency grid charging of integrated storage. Instead, this resolution directs PG&E, SCE, and SDG&E to establish a special condition in the VNBT and VNEM tariffs to allow benefiting account customers to access multiple tariffs for combined technologies. This will enable a benefiting account customer to have behind-the-meter net billing tariff (NBT) or non-export/non-net energy metering (non-NEM) renewable energy and/or storage in addition to their VNBT or VNEM credit allocation.² This option satisfies D.23-11-068's intent to allow emergency grid-charging of storage that can serve loads during an outage, effective upon the resolution's effective date.

Decision (D.) 23-11-068 established the framework for the VNBT (in OP 1) and directed amendments to the VNEM tariffs (in OPs 8 and 9). The OP 10 of D.23-11-068 directed the Utilities to submit the amended VNEM tariffs no later than 120 days from the decision adopted date. The Utilities timely submitted their initial VNEM tariffs ALs

¹ D.23-11-068 Ordering Paragraph 12(b) and 12(c) required filing of the virtual net billing tariff (VNBT) and virtual net energy metering (VNEM) tariffs advice letters within 90 days of the adoption of the decision (which was November 16, 2023). D.23-11-068 established a 90-day sunset period for the virtual net energy metering tariff (p 8). Customers were able to access the general market VNEM (with export values matching NEM2.0) tariff on temporary basis until the VNBT was established.

² "Non-export/Non-NEM" is defined as a renewable energy system that conforms to each IOU's Rule 21 for a non-export, non-net-energy-metering (NEM) system.

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

(PG&E AL 7211-E, SCE AL 5250-E, and SDG&E AL 4409-E) on March 15, 2024. OP 12 of D.23-11-068 directs the Utilities to submit a Tier 2 AL for the VNBT within 90 days of the adopted decision. The Utilities timely submitted their VNBT ALs (PG&E 7175-E, SCE AL 5227-E, and SDG&E AL 4394-E) on February 14, 2024.

D.23-11-068 OP 4 directed a process for the Utilities to evaluate and determine a consensus approach for amending the VNBT and VNEM tariffs to permit the grid charging of storage prior to planned outages by March 31, 2024, and a Tier 2 advice letter filing within 90 days after the workshop. The Utilities hosted a timely workshop on March 25, 2024, and submitted a joint AL (SCE AL 5342-E, PG&E 7333-E, and SDG&E AL 4476-E) on July 23, 2024.

The Utilities' original and supplemental ALs for the VNBT and VNEM tariffs are approved with modifications, including a requirement to allow benefiting customers access to multiple tariffs for combining technologies. The Joint AL to permit emergency grid-charging of storage is rejected as it does not comply with requirements set forth in D.23-11-068 to be a consensus proposal and maintain the integrity of the VNBT and VNEM tariffs. The Resolution instead clarifies existing policy, acknowledging and formally allowing VNBT and VNEM customers access to multiple tariffs, to increase resiliency options and allow emergency grid charging of (non-VNEM/non-VNBT) storage prior to a known or planned outage. The outcome of this Resolution is that within 30 business days of the effective date of this resolution, the Utilities shall submit Tier 2 advice letters, one submittal per tariff, demonstrating conformance with the modifications adopted wherein.

BACKGROUND

Pursuant to California Public Utilities Code (PUC) Section 2827.1, Decision (D.) 23-11-068 adopted the virtual net billing tariff (VNBT) as a successor to the virtual net energy meter (VNEM) tariff. The customer generation virtual tariffs allow for multi-tenant properties with onsite, front-of-the-meter renewables to share the renewable energy export credits with tenants at the property.³ VNBT is a separate tariff from the net billing tariff (NBT). NBT was adopted by D.22-12-056 as part of the same rulemaking, R.20-08-020.

VNBT carries forward some VNEM tariff policies and incorporates modified NBT tariff policies. A key aspect of VNBT is facilitating residential benefiting account customers to

³ This definition should not be construed as a community solar system.

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

continue to virtually net energy imports and exports and ending that billing calculation methodology for non-residential benefiting account customers. D.23-11-068 sunset the general VNEM tariff for new customers, as of February 14, 2024, and kept open the Multifamily Affordable Solar Homes (MASH) and Solar on Multifamily Affordable Housing (SOMAH) VNEM tariffs (all are referred to herein as the VNEM tariffs unless otherwise specified).

D.23-11-068 did, however, amend all the VNEM tariffs to align key policies with the VNBT. D.23-11-068 OPs 10 and 12 directed implementation steps directing Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E), collectively “the Utilities,” to update the current VNEM tariffs, including sunsetting the general market VNEM tariff, and establish the future VNBT.

A. Establishing the new Virtual Net Billing Tariff (VNBT ALs)

On February 14, 2024, the Utilities each submitted three separate ALs, PG&E AL 7175-E, SCE AL 5227-E, and SDG&E AL 4394-E (herein also referred to as the “VNBT ALs”) to establish the VNBT. PG&E submitted partial supplemental AL 7175-E-A on October 25, 2024. SCE submitted partial supplemental AL 5227-E-A on November 8, 2024. SDG&E submitted partial supplemental AL 4394-E-A on September 27, 2024. The partial supplements corrected minor errors and significant omissions in incorporating the D.23-11-068 orders. As described in-depth below, these aspects of the proposed tariffs did not conform with the following aspects of D.23-11-068:

1. Avoided Cost Calculator (ACC) Plus adder eligibility. The PG&E and SCE ALs sought to exclude benefiting account residents that reside in new construction.⁴

⁴ PG&E AL 7175-E on Sheet 11 “The ACC Plus is not available to: (i). Customers transitioning from the NEMV/NEM2V tariff to NBTV tariff at the end of their legacy period; (ii). Non-Residential Customers; or (iii). Customers who are required to add solar (e.g., by California’s building code).”
SCE AL 5777-E on Sheet 11 “Notwithstanding the eligibility requirements for ACC Plus Adder (as described here), Qualified Customers with an eligible Renewable Electrical Generating Facility on a New Construction are not eligible to receive the ACC Plus Adder.”

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

ACC Plus adder is a cents per kilowatt-hour value on top of the exported rate for net exports.⁵

2. Net Surplus Compensation (NSC) Calculator recoupment Mechanism. The ALs added a recoupment mechanism adopted in D.22-12-056 that reduces surplus compensation to avoid double payments within the customer's relevant period. NSC payments are a cents per kilowatt-hour rate for power that customers produce in excess (more than their on-site load) over a 12-month period.
3. Carry Forward Export Credits per Resolution 5301-E. The ALs proposed to allow current tariff customers to carry forward excess export credits into their next relevant period.
4. Tariff Legacy Period Start-date. SCE's AL sought the start of the legacy period to align with Resolution 5301-E use of the interconnection application request date.

B. Amending the Virtual Net Energy Metering Tariffs (VNEM Amendment ALs)

On March 15, 2024, the Utilities each submitted three separate ALs, PG&E AL 7211-E, SCE AL 5250-E, and SDG&E AL 4409-E (herein also referred to as the "VNEM Amendment ALs"), to amend their existing VNEM tariffs. PG&E filed partial supplementals 7211-E-A on July 12, 2024, and 7211-E-B on October 18, 2024. SCE submitted AL 5250-E on March 15, 2024, and AL 5250-E-A on July 16, 2024. SCE AL 5250-E-A and PG&E AL 7211-E-B corrected errors regarding the treatment of vacant tenant units. PG&E's AL 7211-E-A filing clarified its inclusion in the tariffs, language about Prevailing Wages, pursuant to Public Utilities Code Section 769.2, were under separate a filing, PG&E AL 7173-E. SCE's AL 5250-E-A removed its reference to prevailing wages, as the language was pending under SCE AL 5183-E, that was subsequently rejected on July 10, 2024. SDG&E AL 4409-E-A amended the tariffs to automatically change a benefiting account customer due to a tenancy change-over without any action being required for the new customer. This change fixed a prior omission of Decision OPs 8(a) and 9(a). As described in-depth below, these aspects of the proposed VNEM tariffs failed to conform with the following aspect of D.23-11-068:

1. Demand Response Programs Eligibility. SCE and PG&E's ALs sought to limit demand response program eligibility for all VNEM tariffs and did not conform with the D.23-11-068 OP 8(e) for SOMAH & MASH VNEM tariffs.

⁵ D.23-11-068 OP 1(b) sets the ACC values by utility territory, and these values decrease 20 percent each year until the adder reaches zero. SDG&E tariff enrollees have a zero cents ACC Plus adder.

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

C. VNEM and VNBT Emergency Grid Charging of Storage (Joint Emergency Charging ALs)

D.23-11-068 OP 4 directed the Utilities to host a workshop to evaluate and determine a consensus approach for amending the VNBT and VNEM tariffs to allow grid charging of VNEM paired storage prior to planned outages by March 31, 2024, and a Tier 2 advice letter filing within 90 days after the workshop. D.23-11-068 stated that parties appeared to agree that a technical solution was viable such that storage could charge from the grid in advance of a planned outage (without complicating VNEM or VNBT billing) but identified a lack of detail in party comments in the proceeding (leading to D.23-11-068). The Utilities hosted a timely workshop on March 25, 2024, and had subsequent meetings with interested stakeholders. On July 23, 2024, the Utilities submitted a proposal in a joint AL - SCE AL 5342-E, PG&E 7333-E, and SDG&E AL 4476-E (. On March 14, 2025, the Utilities submitted supplemental SCE AL 5342-E-A, PG&E 7333-E-A, and SDG&E AL 4476-E-A (referred to as the “Joint Emergency Charging AL”) to replace the previous filing in its entirety.

In the initial joint AL, the Utilities proposed to allow a VNEM or VNBT system to be installed behind a single common area meter (described as the “resiliency account”) and only let the net export power be shared with other benefiting accounts’ virtual billing. This update would end the existing policy of separately metering a VNEM or VNBT renewable generation facility. It also would add two new elements: 1) integrated storage can charge from the grid at *any* time and 2) helps the common area meter (resiliency account) fully reduce energy imports because the generator is sized to offset 100% of the total property’s load, rather than just the load of the individual meter.⁶ The proposal meets some aspects of OP 4, however it deviates from the following core aspects of D.23-11-068:^{7, 8, 9}

⁶ Joint Emergency AL states “The storage system is configured so that it will either charge from the renewable generator or the grid at all times.” (at p. 7).

⁷ D.23-11-068 at 55-56.

⁸ D.23-11-068 Finding of Fact Number 89 states “Parties appear to agree that a technical solution could exist to enable storage in a virtual arrangement to charge from the grid prior to planned outages.”

⁹ D.23-11-068 Finding of Fact Number 25 states “Complexity and cost of installing generation at multitenant properties led the Commission to establish the policy that renewable generation installed on multitenant properties does not require onsite consumption.”

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

1. *Temporary, Emergency Charging.* The Utilities' AL requested grid charging of integrated storage on a permanent basis, instead of on a temporary and emergency basis.
2. *Maintain VNBT/VNEM Tariff Integrity.* The Utilities' AL request would allow a single customer to use energy directly from the front-of-the-meter system. VNBT/VNEM currently disallows on-site consumption of VNBT/VNEM renewable generation on a regular basis. D.23-11-068 directs that these tariffs' integrity should remain.

The supplemental Joint AL modified the original proposal in several ways to address stakeholder needs and feedback. The Utilities' supplemental proposes to increase its NEM integrity - the proper functioning and compliance of a renewable energy system to prevent misuse or inaccuracies for receiving credits for self-generated, renewable electricity. The proposal is to use export data from the net-generating output meter (NGOM) linked to the front-of-the-meter solar system to ensure generation credits are only provided for solar exports. The grid isolation requirements for back-up power are also simplified by having a disconnect mechanism that allows the Resiliency Account to operate in island mode during outages. The Resiliency Account would be treated as a generator, not a benefiting account (for the purposes of the VNEM/VNBT tariff treatment). However, within this new proposed construct, there remains no meaningful change (regarding NEM integrity) as self-consumption of the renewable energy can still occur. The Utilities' updated proposal would allow multiple Resiliency Accounts, but each must be coupled with a generation facility and separated, not integrated, energy storage. The Utilities state that the benefiting accounts could have resiliency power during an outage if they each have their own non-exporting backup power. The Utilities note that they would ensure that benefiting accounts on the SOMAH tariff could maintain their required minimum credit allocation through unspecified control systems. Several issues remain that continue to leave this proposal at odds with the direction of D.23-11-068:

1. *Temporary, Emergency Charging:* There is no change to the issue noted above.
2. *Maintain VNBT/VNEM Tariff Integrity:* The issues noted above are still present. Additionally, the proposal seeks to use the NGOM information to set a solar export cap for each billing period (kWh/month). Yet what matters most in determining the energy export value is the time of day and day of the week that that energy is discharged. The energy storage system under the supplemental's proposed configuration would still be receiving power from the on-site renewables *and* the grid. Therefore, the energy storage system could still manipulate exports to maximize revenue, from the net energy metering or net

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

billing tariff, and avoid the mandate that such revenue is limited to the renewable generation that the energy storage receives. The supplemental will still make it difficult to ensure that the exported energy is truly from the renewable generation and remains unsolved by a monthly energy export cap.

These issues are further enumerated in the discussion section.

NOTICE

Notice of ALs PG&E AL 7175-E, SCE AL 5227-E, and SDG&E AL 4394-E were made by publication in the Commission's Daily Calendar on February 23, 2024. Notice of ALs PG&E AL 7211-E, SCE AL 5250-E, and SDG&E AL 4409-E were made by publication in the Commission's Daily Calendar on March 20, 2024. Notice of joint ALs SCE AL 5342-E, PG&E 7333-E, and SDG&E AL 4476-E were made by publication in the Commission's Daily Calendar on August 8, 2024. The Utilities each stated that a copy of each Advice Letter was mailed and distributed in accordance with Section 4 of General Order 96-B.

PROTESTS

The Utilities' VNBT ALs (PG&E AL 7175-E, SCE AL 5227-E, and SDG&E AL 4394-E) were protested. PG&E AL 7175-E was timely protested by Ivy Energy on February 27, 2024, the Solar Energy Industries Association (SEIA) on March 5, 2024, and Clean Coalition on March 5, 2024. PG&E replied to parties' protests on March 12, 2024. SCE AL 5227-E was timely protested by Ivy Energy on February 29, 2024, and SEIA on March 5, 2024; to which SCE replied to parties' protests on March 12, 2024. SDG&E AL 4394-E was timely protested by Ivy Energy on February 29, 2024, and SEIA on March 5, 2024; to which SDG&E replied to parties' protests on March 12, 2024. The Utilities requested in their replies that all protests noted above be rejected.

SCE and PG&E's VNEM Amendment ALs (PG&E AL 7211-E and SCE AL 5250-E) were protested. Sunrun submitted a timely protest of both ALs on April 4, 2024. SCE and PG&E filed a timely joint reply to the protest of Sunrun on April 11, 2024, requesting the protest be rejected. VNEM Amendment AL SDG&E AL 4409-E was not protested.

The Utilities' Joint Emergency Charging AL (PG&E AL 7333-E, SCE AL 5342-E, and SDG&E AL 4476-E) was timely protested by the California Solar + Storage Association (CALSSA) on August 12, 2024. On behalf of the utilities, SCE filed a joint reply on

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

August 19, 2024, requesting the protest be rejected.¹⁰ In supplemental Joint AL 5342-E-A, SCE did not make a request to re-open the protest period. Also, Division staff did not re-open the protest period. Subsequently, related protests or replies are not considered in this resolution.¹¹

The major protested issues are described below.

A. Establishing the new Virtual Net Billing Tariffs (VNBT ALs)

1. *VNBT Data Access:* Ivy Energy's protest claims that the VNBT tariff needs to allow solar providers to regularly obtain consumption data of all benefiting accounts (within a VNBT arrangement) and support bill consolidation.¹² Ivy Energy notes it submitted a petition for modification of D.23-11-068 on these same issues. SDG&E's reply claims that Ivy Energy's request is counter to SDG&E Rule 33 *Rules Regarding Privacy Security for Energy Usage Data*. PG&E's reply states that Ivy Energy's protest is moot as it repeats policy arguments from Ivy Energy's petition for modification. Additionally, PG&E notes that the requests would violate PG&E's Rule 18 and SCE's Rule 18 as stated in the record of the D.23-11-068 proceeding, R.20-08-020.¹³ SCE's reply states that Ivy Energy's protest is improper as the petition for modification is the mechanism for which to challenge a decision in accordance with the Commission's Rules of Practice and Procedures.
2. *Departing VNBT Customers:* SEIA's protest asserts that the Utilities erred in stripping customers of earned export credits should they depart the VNBT tariff. SEIA claims this policy was not directed in D.23-11-068. PG&E's reply comments assert that SEIA repeats unfounded arguments from AL 7155-E (PG&E's net billing tariff implementation AL.) In SCE's reply, the Utility claims that issuing a final check or credit (on the customer's monthly statement) would violate direction from D.22-12-056, but that a departing VNBT customer can receive net

¹⁰ SCE stated "In accordance with Section 7.4.3 of General Order (GO) 96-B, Southern California Edison Company (SCE) on behalf of itself, Pacific Gas and Electric Company (PG&E), and San Diego Gas and Electric (SDG&E) (collectively the Joint Utilities) hereby replies to the protest of California Solar & Storage Association (CALSSA) to SCE Advice 5342-E, et al."

¹¹ General Order 96-B Section 7.5.1

¹² Ivy Energy's protest describes bill consolidation as "an option for the property owner to pay the electric utility bill on behalf of their tenants and provide a consolidated electric bill (containing both passed-through utility and solar charges) to each tenant" at 2.

¹³ Joint IOU 'Reply Comments on the February 2023 ALJ Ruling', April 4, 2023, at 8-9 and 15.

surplus compensation for the relevant period. The Utilities' replies all rejected SEIA's recommendation to allow departing customers to retain their export compensation. The Utilities state their ALs follow common practices previously established in VNEM and NEM outlining what occurs when a customer exits the tariff.

3. *VNBT Integrated Storage for Resiliency*: Clean Coalition's protest states that PG&E AL 7175-E lacks sufficient detail on how to configure a system to provide resiliency during an outage to make use of this special condition within the tariff. PG&E's reply claims that Clean Coalition's concerns are not related to the tariff and would be better addressed in the microgrid proceeding. PG&E makes note of D.23-11-068 OP 4's direction to lead a process to find a consensus approach to charge storage prior to a planned outage for resiliency purposes. PG&E suggests that this is the venue to discuss the technical solutions Clean Coalition is seeking.¹⁴ PG&E also identifies overlap with the proposed changes to permit advance grid charging for resiliency, later submitted in the Utilities' Joint Emergency Charging Advice Letters (SCE AL 5342-E, et al).
4. *VNBT Carry-Forward of Credits per Resolution 5301-E*: SEIA's protest notes its concurrence with the Utilities' reliance on Resolution 5301-E, instead of D.23-11-068, direction to carry forward credits at the end of a customer's true-up period into the next relevant period. PG&E agrees it sought to include the rollover of credits for consistency with the NBT. SEIA dissented in part against SCE AL 5227-E. SEIA stated that the ACC adder should offset generation costs first, given that customers cannot use excess generation credits to offset delivery credits at the annual true-up. SCE clarified that the ACC adder is considered the same as cash and applies to both distribution and generation components on a customer's bill.

B. Amending the Virtual Net Energy Metering Tariffs (VNEM Amendment ALs)

¹⁴ Clean Coalition proposes that there should be a streamlined process for a single-site non-utility entity to utilize distribution infrastructure during a grid outage. Second, Clean Coalition cites AL 6792-E and D.23-11-068 approval for a VNBT and VNEM renewable generation energy facility to provide load on-site during an outage so long as no load or generation registers on the account meters, and advocates that PG&E AL 7175-E lacks additional information on how to actualize this arrangement, arguing that there should be additional forms, questionnaires, technical specifications, or a staff contact to provide or advise on a cost-effective configuration that satisfies the tariff policy.

1. Demand Response Programs: Sunrun's protest of PG&E AL 7211-E and SCE AL 5250-E, filed April 4, 2024, argues that the ALs add restrictions to the SOMAH and MASH VNEM tariffs absent in D.23-11-068 and that the Utilities should remove erroneous language.¹⁵ Sunrun contends that a limit on the generation account holder participation in demand response programs was not directed for the SOMAH and MASH VNEM tariffs. Sunrun suggests that D.23-11-068 states plainly that the SOMAH and MASH VNEM tariffs are not to be designed to prohibit generation account holders from participating in a demand response program. Further, Sunrun states that D.23-11-068's orders cover "demand response programs" - plural - as the decision defines this as demand response and emergency reliability programs.¹⁶

In their joint reply to protest, SCE and PG&E agree with Sunrun's identification of the relevant orders but disagree that D.23-11-068 explicitly declined to adopt demand response restrictions for SOMAH and MASH customers based on a lack of discussion of that aspect in D.23-11-068. SCE and PG&E contend there is an error of omission in D.23-11-068 and they were not able to comment on the change in the proposed decision. However, the changes to D.23-11-068 came after the comment period on the proposed decision in which opening comments from Sunrun noted D.23-11-068's inconsistent demand energy response policy (between VNEM and VNBT) as an oversight in need of correction.¹⁷ Both Utilities attest that their ALs made a reasonable interpretation based on the claim that current demand response programs "do not have a virtual program structure to connect benefiting and generating accounts."¹⁸ PG&E and SCE claim that Sunrun's protest, if accepted, would modify demand response programs.

1.2. Tariff Term: In comments on the draft resolution, Sunrun alleged an error in SCE's MASH VNEM tariff that it includes a nine-year tariff term for applications received on or after April 15, 2023.¹⁹ Sunrun states this limitation is counter to policies adopted in D.22-12-056 and D.23-11-068. Sunrun points to D.22-12-056's decision to defer any adjustments to both low-income VNEM tariffs (for SOMAH

¹⁵ D.23-11-068 OP 8(e) and 9(e).

¹⁶ D.23-11-068 at p. 49: "The Commission should allow virtual net benefiting tariff customers, including the generation account holder, to participate in demand response or emergency reliability programs."

¹⁷ Sunrun, "Opening Comments of Sunrun Inc. on Proposed Decision Addressing Remaining Proceeding Issues", August 22, 2023, at 2-3.

¹⁸ PG&E and SCE Joint Reply to Protest, April 11, 2024, at 3.

¹⁹ [Sunrun, Comments on Draft Resolution E-5374, May 5, 2025, at 2.](#)

[and MASH\) and the Commission's continuation of the MASH tariff with limited revisions \(not including the tariff term or legacy period\) in D.23-11-068. Sunrun posits SCE's tariff term mistake was advertently approved in SCE AL 4963-E resolving the NEM 2.0 tariffs in accordance with D.22-12-056.²⁰ Sunrun alleges that SCE misapplied the direction from D.22-12-056 OP 9 in that advice letter which reduced the general market VNEM tariffs' term to 9 years. Sunrun recommended a new ordering paragraph for this resolution requiring SCE to fix the correction, by filing a new AL updating the MASH VNEM tariffs within 30 days to provide a uniform 20-year legacy period for all customers.²¹](#)

C. VNEM and VNBT Emergency Grid Charging of Storage (Joint Emergency Charging ALs)

1. *Resiliency Account Limitation:* The Utilities jointly proposed to allow a VNEM or VNBT system to be installed behind a single common area meter (described as the "resiliency account") and only let the net export power be shared with other benefiting accounts. CALSSA's protest disagrees with the limit of one resiliency account per VNEM or VNBT arrangement stating that there is no policy basis for this limit. CALSSA's protest shared their alternative proposal to install an islanding device for the VNEM/VNBT site. Regarding the limit of one resiliency account, the Utilities' joint reply states that D.23-11-068 was not explicit about providing resiliency to all accounts at a site and suggests that providing resiliency to all accounts results in a microgrid. CALSSA asserts that the resiliency account will lose its benefiting account status – "effectively kicking the account out of VNEM/VNBT".²² The Utilities' reply clarifies that the resiliency account, while no longer a benefiting account customer of the virtual billing arrangement, is now able to "benefit in real-time, without any netting, from the renewable energy system."²³ The Utilities partially resolved this protested matter in their supplemental joint AL filing. In the supplemental proposal, the Utilities now propose that there could be multiple Resiliency Accounts at a property site, but each common area account (also called the Resiliency Account) must be

²⁰ [Energy Division Disposition Letter, April 13, 2023, "Energy Division Approval of the Pacific Gas and Electric Advice Letter 6847-E/6847-E-A, Southern California Edison Advice Letter 4963-E/4963-E-A, and San Diego Gas & Electric Advice Letter 4154-E/4154-E-A – Modifications to Existing Tariffs as Directed by Decision 22-12-056."](#)

²¹ [Sunrun, Comments on Draft Resolution E-5374, May 5, 2025, at Appendix A.](#)

²² CALSSA Protest, August 12, 2024, at 2.

²³ SCE Joint Reply to Protest, August 19, 2024, at 2.

coupled with a generation facility and separated, not integrated, energy storage. Instead of limiting each property to just one Resiliency Account, the limit is now based on the number of renewable generators with separated energy storage.

2. *Consensus Proposal Requirement:* CALSSA asserts that the Utilities did not follow D.23-11-068's direction to submit a consensus proposal. CALSSA states itself and Sunrun expressed to the Utilities an alternative proposal (described below) that the Utilities did not present a reason for rejection.²⁴ The Utilities' joint reply continues to claim that their proposal is consistent with D.23-11-068's direction to provide a consensus proposal. The Utilities joint reply states that the industry proposal for isolated operation has already been proposed and rejected in 2022 (no citation was provided) whereas the Utilities proposed multiple configurations during their efforts to solicit input prior to their AL submittal.
3. *Islanding of a Renewable Energy Facility from the grid:* CALSSA proposed that a battery should be placed in front-of-the-meter, but behind the transformer, to provide an energy reserve that is charged from the grid. In their evaluation of the CALSSA islanding alternative, as summarized in their joint reply, the Utilities found ~~that~~[the](#) approach to be inconsistent with NEM or NBT tariffs as a stand-alone energy storage system is not an eligible generation type (for the customer generation tariffs) per Public Utilities Code 2827.1.²⁵

DISCUSSION

It is reasonable and administratively expedient to consolidate the Utilities' virtual net billing tariff (VNBT) and amended virtual net energy metering (VNEM) tariffs implementation ALs with those seeking to expand the VNBT and VNEM tariffs to allow storage to charge from the grid in advance of a planned shut-off or outage pursuant to Decision (D.) 23-11-068 (also referred to herein as the Decision). The policy issues in question are interconnected and impact the same resulting tariffs ordered and amended by D.23-11-068. The Commission has reviewed the Advice Letters, protests, and finds

²⁴ CALSSA Protest, August 12, ~~2020~~[2024](#), at 2.

²⁵ [The Joint](#) Utilities suggested that stand-alone storage can be interconnected already under the ~~IOUs'~~[IOUs'](#) Wholesale Distribution Access Tariffs and operation of such a stand-alone system is under the scope of the microgrid proceeding, R.19-09-009.

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

that the following adjustments are necessary to fully implement the VNBT and VNEM tariffs.

A. Establishing the new Virtual Net Billing Tariffs (VNBT ALs)

Clarifying Matters on the Avoided Cost Calculator (ACC) Plus Adder and VNEM Transitional Customers Access to VNBT

This resolution finds that the Utilities' request for the VNBT Avoided Cost Calculator (ACC) Plus adder to exclude residential customers residing in new construction is inconsistent with D.23-11-068 and is therefore denied. The Decision's eligibility criteria require the utilities to allow any VNBT residential benefiting account customer access to the ACC Plus adder who satisfies D.23-11-068 eligibility criteria.²⁶

Pursuant to D.23-11-068, the ACC Plus adder is a cents per kilowatt-hour value provided in addition to export compensation for net exports for residential benefiting account customers and is higher for income qualified residential benefiting account customers. It is available to such residential customers for the first five years of the successor tariff as a glide path. VNBT ACC Plus adder low-income eligibility is defined as residential customers who are either 1) enrolled in California Alternate Rates for Energy and the Family Electric Rates Assistance programs; 2) live in a disadvantaged community (as defined in Decision (D.) 18-06-027); or 3) live in California Indian Country (as defined in D.20-12-003).²⁷

D.23-11-068 determined broadly that there are unique circumstances for customers participating in a VNBT or VNEM tariff arrangement in that they are not the decisionmaker for adding generation facilities to their home, they do not set their own credit allocation, and they do not have control over the sale of the property.²⁸ This policy is intended to support all new residential enrollees, including tenants, in achieving a simple payback period of nine years, given that ²⁹ tenants cannot make use

²⁶ D.23-11-068 OP 1. The adopted ACC Plus adder values for SDG&E territory are zero.

²⁷ D.23-11-068 OP 1(b).

²⁸ D.23-11-068 at 54.

²⁹ D.23-11-068 states "These [ACC Plus] adders will be available to new residential enrollees in the virtual net billing tariff to assist customers in achieving a simple payback period of nine years, with the understanding that tenants cannot make direct use of currently available investment tax credits" at 52.

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

of available tax credits that can help owners satisfy Title-24 energy mandates. There is no differentiation in VNBT export values between tenants and property owners. Given these conclusions in D.23-11-068, we are not persuaded by the Utilities arguments that the proposed AL adjustments are consistent with the Decision. The Utilities are directed to update the VNBT tariffs to reinstate ACC Plus adder eligibility to conform to D. 23-11-068 as clarified in this Resolution.

Additionally, we require the Utilities to include a common statement in the Rates section of their respective tariffs to support implementation of D.23-11-068 OP 1(b). This common statement will avoid further confusion or misinterpretation about ACC Plus adder eligibility for residents in new construction. We direct the Utilities' to include the following statement to their VNBT tariffs: *"The ACC Plus adder is available to eligible customers regardless of when their property was constructed. This includes customers with permissible temporary placement on the virtual net energy metering tariff, in accordance with Decision 23-11-068 OP 12(c), following its tariff sunset date of February 15, 2024."* The Utilities may replace common terms with acronyms if defined in the tariff and this direction is not a limit on what the Utilities may also need to add to their tariffs in order to fully implement this policy.

D.23-11-068 allowed for provisional use of the VNEM tariff until such a time the VNBT was established.³⁰ As such, the Utilities may not restrict transition customers that had temporary access to the VNEM tariff. To do so would undercut the temporary access period established by the Commission and needlessly block eligible customers from access to the ACC Plus adder or other aspects. We also clarify that any proposed VNBT tariff language imposing restrictions on VNEM transition customers *does not apply* to those with temporary access pursuant to D.23-11-068 OP 12(c) since February 15, 2024. Where the utility has expressed any such restrictions in the VNBT tariff it must be amended.

This resolution rejects SEIA's protest to limit the ACC Plus adder to discrete aspects of a customer electricity bill, like generation charges vs. delivery charges, and affirms that

³⁰ D.23-11-068 OP 12(c) states "Customers with an interconnection application date after this Sunset Date will take service and be billed on the VNEM tariff or NEMA subtariff on an interim basis and transition to the virtual net billing tariff or aggregation virtual net billing subtariff, once these are operational."

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

under the Decision, the ACC Plus adder can offset any portion of the customer's bill. D.23-11-068 OP 1(b) states "The adder will be a discrete line on the customer's utility bill, will apply to all charges, and will apply to future bills until the credit is used." This is the same policy adopted for NBT in D.22-11-056 OP 1(b). D.22-12-056 did not specify the limitation SEIA is requesting, as such SEIA's protest is rejected.

Adding Net Surplus Compensation Recoupment Mechanism to VNBT

The Utilities request to apply the adopted net billing tariff (NBT) Net Surplus Compensation (NSC) recoupment from D.22-12-056 to the VNBT is reasonable and should be approved. NSC was required in NEM 1.0 under Public Utilities Code (PUC) 2827 but is not included in PUC 2827.1 (the statute primarily pertaining to NBT and VNBT).³¹ D.23-11-068 continued the NSC calculation methodology from VNEM to VNBT.³² D.22-12-056 did the same for NBT with the addition of a second step, the NSC recoupment mechanism. That mechanism specified that the Utilities should only pay NSC when it will not result in a double payment. With the adopted NBT NSC recoupment mechanism, NBT customers only receive NSC payments when that rate is higher than the average NBT export rate from the relevant period (preceding 12 months).

D.23-11-068 does not adopt or mention the NBT NSC recoupment mechanism for VNBT. It only speaks to maintaining the same NSC process, adopted in D.11-06-016, as was previously adopted for VNEM. The Utilities' AL requests differ from their previous comments on the proposed decision, leading to D.23-11-068, that supported the NCS process as proposed.³³ It is reasonable to incorporate an NSC recoupment mechanism in the VNBT. This will increase the alignment between the two tariffs (VNBT and NBT). More importantly, the concern for double payments identified in D.22-12-056 also

³¹ Net surplus compensation (NSC) was initially required by AB 920 (2009) in PUC 2827 as bonus compensation for customer generators who had excess generation over a 12-month period. [Decision D.11-06-016](#) first implemented NSC.

³² D.23-11-068 Findings of Fact 60 and Conclusion of Law 14.

³³ Joint Utilities' comments on proposed decision (that became D.23-11-068) stated "With respect to the NBT-V, the IOUs contend that NBT-V customers should remain eligible for NSC as they were under the prior NEM-V tariff" and "The PD incorrectly characterizes the IOUs as proposing that the Commission approach Net Surplus Compensation ('NSC') for NBT-V and NBT-A to 'mirror' the same approach as was adopted for the net billing tariff." (Joint Utilities, August 22, 2023, at p 2-3).

applies to the VNBT customers as all VNBT customers are eligible for retail export compensation and NSC payments.³⁴ The double payment may occur when the same net export (kWh) first receives compensation under NBT (or VNBT) and then again under NSC. Applying the NSC recoupment mechanism for VNBT avoids double payments as defined in D.22-12-056.

While the NSC recoupment mechanism is approved, we now look to the input values. A key part of the NSC recoupment is the calculated average real-world retail export compensation rate for all NBT customers in a Utility's service territory over the same period to which the NBT customer's original export compensation is compared. The Utilities' ALs propose to use this NBT average value for VNBT customers. D.23-11-068 found that VNEM and NEM customers had differing system characteristics and cost shifts by enrollees, whereby a residential VNEM customer had a much lower cost-shift per enrollee and a non-residential VNEM customer had a much higher cost-shift per enrollee than a typical NEM customer.³⁵ However, on a per kWh basis, the cost shift was similar between VNEM and NEM. To achieve balance between these findings and the Utilities' initial request, we direct the Utilities to incorporate VNBT customers' (residential and non-residential) data into the calculation of the average real-world retail export compensation value for the NSC recoupment mechanism. With this amended approach, the NSC recoupment mechanism is representative of all customers and is appropriate to use for VNBT and NBT customers. The VNBT tariff will describe how the average real-world retail export compensation value is calculated, following the method used for NBT in compliance with D.22-12-056, and must include both VNBT and NBT customer data in determining that average.

Aligning Virtual Net Billing Tariff with the Net Billing Tariff Pursuant to Resolution 5301-E

³⁴ D.22-12-056 adopted a variation of the Joint Utilities' proposal to adjust net surplus compensation for NBT to minimize "double payment." The "double payment" is defined as in that Decision as "one payment at the NEM 2.0 retail export compensation rate and another at the Net Surplus compensation rate" (at 162). Even with the reduced export compensation rate under NBT, the Commission acknowledged the potential for a double payment and required that for an NBT customer with net positive exports in the 12-month annual true-up period, the NSC amount will be reduced by the NSC recoupment amount. The NSC recoupment amount is calculated using the average real-world retail export compensation rate for all net billing tariff customers in the service territory over the same period.

³⁵ D.23-11-068 Table 6 and Findings of Fact 10 and 15.

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

Resolution 5301-E adopted the carry forward of excess credits and use of the interconnection request application date as the start date for when the ACC Plus adder value is set for the legacy period for NBT. We find it reasonable to adopt both requirements for the VNBT tariff, as well as areas where Utilities require or already have alignment with Resolution 5301-E.

The carrying forward of credits is a non-controversial issue as both protestants and the Utilities agreed on this aspect of the proposed tariff design. There is nothing materially different about VNBT and NBT billing true-up processes that would hinder this alignment. VNBT shall conform with the language set out in Resolution 5301-E OP 5(b) which states “PG&E, SCE, and SDG&E shall propose that any excess generation credits or excess delivery credits remaining at the end of a customer’s relevant period (true-up period) be carried forward to the customer’s next relevant period.”

SCE’s AL request to use the interconnection request application date for determining the value of the ACC Plus adder is approved. VNBT shall conform with Resolution 5301-E on this matter. Resolution 5301-E concluded that the utilities should “[...] determine eligibility for the lock-in period by the interconnection application date, as defined in D.22-12-056.”³⁶ As D.23-11-068 directed that the ACC Plus adder construct was reasonable to use as a glide path for VNBT – having matched the amounts, availability, usage period, and step-down – it follows that VNBT should also use the same date as the NBT lock-in period eligibility determining date. Per D.23-11-068 OP 1(b) the ACC Plus adder steps down 20 percent annually until the adder reaches zero. In practice, a VNBT application received in January 2025 would “lock in” that ACC Plus adder rate for its nine-year legacy period for eligible VNBT residential customers even if it did not receive permission-to-operate in that same calendar year.

Other policies from Resolution 5301-E that shall be carried forward to the VNBT to create alignment are: 1) climate zone averages in calculating retail export ACC compensation rate values, 2) the directive that the Utilities shall publish export compensation rate spreadsheets on their respective websites by October 1st of the year the update is approved, 3) removal of prohibitions of demand response program compensation from the tariffs, and 4) the processes for verifying a customer’s

³⁶ Resolution 5301-E at 20.

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

geographic location within a disadvantaged community. Utilities captured climate zone averaging for ACC compensation rate values and the publication schedule of compensation rate spreadsheets in the proposed VNBT. The process for verifying a customer's geographic location in a disadvantaged community must be added. Demand response program prohibitions will be discussed later in this Resolution.

Ivy Energy's Protest against Virtual Net Billing Tariff is Rejected

Ivy Energy's protest does not satisfy General Order 96-B Section 7.4.2, Grounds for Protest, as it seeks to relitigate a policy issues already decided by the Commission. In D.24-09-004 the Commission denied with prejudice Ivy Energy's petition for modification of D.23-11-068, noting that the petition was an attempt to relitigate matters already decided in D.23-11-068 and provided no new evidence in support of its requests. Ivy Energy's protest and requested relief in these delegated advice letter matters are substantially the same as the proposals and relief requested and formally denied in D.23-11-068 and again denied with prejudice by D.24-09-004. As Ivy Energy's protest to these advice letters is rejected as improper.

Implementation of Virtual Net Billing Tariff

In D.23-11-068 OP 12(d) Utilities were directed to meet certain timelines for billing system implementation of the adopted tariffs. The Decision permitted over 12 months between tariff advice letter submittal and the final Utility's billing implementation completion. Given that the utilities will need to adjust and re-submit their tariffs, we issue this new schedule to accommodate the modifications to the tariffs adopted within this Resolution. Here is the new timeline:

- SDG&E and SCE are granted through ~~December 31, 2025~~June 30, 2026, to complete alignment of related necessary billing systems and transition to full implementation of the virtual net billing tariff.
- PG&E is granted through ~~March 31~~September 30, 2026, to complete alignment of related necessary billing systems and transition to full implementation of the virtual net billing tariff.
- SDG&E and SCE may request alignment with PG&E through a Tier 1 Advice Letter explaining why more time is required.

B. Amending Virtual Net Energy Metering Tariffs (VNEM Amendment ALs)*Demand Response Eligibility*

Sunrun's protest asked for the Utilities to follow D.23-11-068's direction removing barriers to demand response programs from the VNEM tariffs. We first disagree with PG&E and SCE that acceptance of Sunrun's protest will modify demand response programs and that Sunrun's concerns should be raised separately in the demand response proceeding. Neither these ALs, the R.20-08-020 proceeding, or D.23-11-068 modify demand response program eligibility.³⁷

The Commission intent is clear to encourage increased participation in demand response programs to help meet the Commission's policy objectives. D.23-11-068 noted "The Commission should *allow virtual net benefiting tariff customers, including the generation account holder*, to participate in demand response or emergency reliability programs (emphasis added)."³⁸ D.23-11-068 only opens the option for VNEM (and VNBT) customer participation in a demand response programs should there be an opportunity to do so. D.23-11-068 stated that virtual customer generation tariffs do not need to prohibit demand program and emergency reliability program participation and that doing so would put these tariffs at odds with the Commission's broader climate objectives.

Second, Sunrun is correct that D.23-11-068 outlined different treatment for the VNEM tariffs in its orders. While the Utilities are also correct that there was an omission on this subject, it was not in the manner described in their comments. The proposed decision, issued August 8, 2023, reads "The Commission should allow virtual net benefiting tariff customers to participate in demand response or emergency reliability programs."³⁹ It is notable that the text was revised to add generation account holder in the final and adopted version (as noted above). In this resolution we clarify that the Commission intended to remove the limitation on the generation account holder for demand response participation across VNBT, VNEM, SOMAH VNEM, and MASH VNEM tariffs. There is nothing materially different about VNBT from VNEM, SOMAH VNEM,

³⁷ PG&E AL 7211-E/E-A/E-B, SCE AL 5250-E/E-A, and SDG&E AL 4409-E

³⁸ D.23-11-068 at p. 49

³⁹ Proposed Decision, issued August 8, 2023, at p. 42

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

and MASH VNEM that would hinder this alignment. Therefore, we clarify here that the VNEM tariffs must not prohibit generation or benefiting account holders from participation in demand response or emergency reliability programs where they are otherwise eligible.

MASH VNEM Tariffs Term

In comments on the draft resolution, Sunrun alleged that SCE previously erred in adjusting its SCE MASH VNEM tariffs from 20 years to 9 years improperly. Sunrun's comments posit that SCE incorrectly implemented direction in D.22-12-056 that reduced the general market VNEM tariff term to nine years and improperly applied this order to SCE's SOMAH and MASH VNEM tariffs.⁴⁰ Sunrun is correct that D.22-12-056 explicitly deferred modifications to the SOMAH and MASH VNEM tariffs.^{41,42} Further, Sunrun correctly asserts that D.23-11-068 directed a set of limited changes to the MASH VNEM tariffs, enumerated in OP 8 of D.23-11-068, which did not include any changes to the legacy period or the reduction of the eligible term of twenty years to nine years. Absent correction, SCE's MASH VNEM tariffs will remain out of compliance with Commission policies, specifically, with the proper implementation of D.23-11-068 OP 8, which SCE AL 5250-E/E-A was meant to implement. SCE is obligated to amend the MASH VNEM tariffs to rectify this discrepancy and to resolve this matter accordingly if there are adversely impacted customers on or after April 15, 2023.

Guidance for Resiliency Configurations

D.23-11-068 OP 1 continued for VNBT the VNEM policy to permit front-of-the-meter renewable energy facility to operate in isolation during an emergency or planned outage, so long as the use of the on-site energy does not cause the generating account or benefiting account meters to run.⁴³ This resolution cannot adjust or amend that policy.

Clean Coalition's protest questioned a customer's ability to use this special condition without proper guidance or information. Clean Coalition's proposed guidance on

⁴⁰ Sunrun, Comments on Draft Resolution E-5374, May 5, 2025, at Appendix A (at page 5).

⁴¹ D.22-12-056 at p

⁴² D.22-12-056 at p 182.

⁴³ D.23-11-068 Findings of Fact Number 83 and Ordering Paragraph 1(i)

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

integrated storage is reasonable and should be adopted with modifications. At the same time, the Utilities' reply comments that allege that the tariff does not need further modification on how to build or design for resiliency is also accurate and should be accepted.

To bridge these positions, we find that if applicants cannot utilize the tariff, that indicates that other interconnection steps require attention and clarification. We concur with Clean Coalition's claim that the Utilities lack basic guidance on resiliency configurations and existing forms and information could be updated to increase customer understanding. We note that resilience is not only about integrated storage - customer-sited renewables can also be used for resiliency.

The Utilities are directed to update interconnection forms, their application portal, and relevant webpages to clarify that resiliency configurations are possible for customers using the VNEM tariffs and VNBT^{44, 45} [In acknowledgement of the Joint IOUs comments on the draft resolution - the Utilities may also include their microgrid tariffs in this update, with the understanding that VNBT and VNEM tariff customers with access to multiple tariffs \(as discussed below\) are not considered microgrids by default and need not meet microgrid tariff requirements unless operating as such and taking service under the microgrid tariff.](#)⁴⁶ The Utilities should review and refile interconnection forms within 90 days of the effective date of this resolution. A readily viewable, plain language statement such as "Applicants may use on-site customer generation that is eligible for the VNEM tariffs or VNBT for resiliency during an outage" is required as a minimum. Where necessary, the VNEM and VNBT forms should allow an applicant to confirm, such as via check box or similar measure, whether the applicant plans to install equipment to allow use of the VNEM or VNBT front-of-the-meter renewable generation

~~⁴⁴ D.23-11-068 Findings of Fact 27 "The Commission should require Utilities to lead a process to find a consensus approach to allow a virtual net billing tariff customer to charge their storage device from the grid prior to a planned Public Safety Power Shutoff for the purpose of resiliency."~~

⁴⁵ [D.23-11-068 Findings of Fact 27 "The Commission should require Utilities to lead a process to find a consensus approach to allow a virtual net billing tariff customer to charge their storage device from the grid prior to a planned Public Safety Power Shutoff for the purpose of resiliency."](#)

⁴⁶ [Joint IOUs, Comments on Draft Resolution E-5374, May 5, 2025 at 7.](#)

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

in a configuration that does not register energy imports or exports on the utility meters (in accordance with the tariff rules).

PG&E and SCE's reply to the protest correctly notes the other forums where these matters can be further addressed. As such, the Utilities are advised to bring this issue to the attention of the Interconnection Discussion Forum or other critical forums to consider how to expand educational, engineering, or technical support for interested applicants.⁴⁷

C. VNEM and VNBT Emergency Grid Charging of Storage (Joint Emergency Charging AL)

Resiliency and the Grid Charging of Integrated Storage in Advance of Outage or Emergency

As noted above, D.23-11-068 accepted parties' statements that it is feasible to allow limited emergency charging to improve resiliency configurations of customer-sited renewables. Given the joint advice letter and protest, it appears that there is no technology or communication protocol readily available to receive a signal from the utility to allow for the temporary, rapid, and emergency-based charging of a VNEM or VNBT integrated storage system from the grid.⁴⁸ The direction in D.23-11-068 OP 4 cannot be met as directed. As discussed below, the Utilities joint AL is rejected for not satisfying the Decision's requirements. This Resolution provides guidance to the Utilities on how to satisfy the Decision order and this guidance must be incorporated in the Utilities' ALs ordered by this Resolution.

Resiliency Account Limitation

The Utilities' proposal limits the generation facility and energy storage to the needs of an individual common area account (the Resiliency Account). We agree with CALSSA's protest that there is no reason to limit one account per property to be a resiliency account. The Utilities' joint supplemental AL partially resolves this protest by allowing multiple Resiliency Accounts at a site, but still only allows one customer load (or Resiliency Account load) to be coupled with a generation facility and separated

⁴⁷ The Interconnection Discussion Forum, established by Resolution ALJ-347, service list can be reached through ixforum@cpuc.ca.gov.

⁴⁸ This issue was apparent in both the original and supplemental joint advice letter.

energy storage. Under this construct there can only be more than one Resiliency Account if there is more than one generation facility, and the generation facility, separated energy storage, and Resiliency Account must share a service delivery point. The Utilities' proposal would discourage integrated energy storage that could support an entire site or multiple common area accounts which should be options at the property owner's discretion. It would also be a step backwards from the VNEM policy in D.22-12-056 which ended the requirement to co-locate general market VNEM generation and its assigned beneficiaries at a shared service delivery point.⁴⁹ Forcing larger VNEM/VNBT systems to be co-located with a common area meter is unlikely to achieve the directions of D.23-11-068.⁵⁰ The Utilities' proposal overly complicates the VNEM tariffs and VNBT. It fails to provide satisfactory options to support better resiliency configurations that can advance charge from the grid before an outage. A limit of one Resiliency Account per generation facility with separated energy storage does not align with the policies adopted in D.23-11-068 and fails to adhere to standards for VNBT and VNEM.

Consensus Proposal Requirement

The Utilities did follow a "consensus approach" between themselves and industry as directed in OP 4 of D.23-11-068. The Utilities' provided evidence in their AL filing of proposing multiple options and hosting the stakeholder workshop. The approach or development leading to the initial advice letter submittal was executed in a manner consistent with Commission direction. CALSSA's assertion that the Utilities did not follow D.23-11-068's direction to submit a consensus proposal is rejected. Further, the Utilities continued to engage with CALSSA in informing its supplemental AL filing.⁵¹

⁴⁹ D.22-12-056 OP 9.

⁵⁰ Building electrical and fire safety standards are not under the purview of the Commission nor did parties provide information on their relevance. These standards do impact options and costs for co-location of energy storage with habitable spaces. While not considered in this Resolution it is an external factor worth noting, and we infer is connected to CALSSA's comments on construction costs and practicality.

⁵¹ Joint Emergency Charging AL (filed on March 14, 2025) stated "Upon further discussion amongst the IOUs and CALSSA, the IOUs are submitting this Supplemental AL with the objective of describing a configuration that will allow energy storage systems that are part of a virtual Arrangement to charge from the grid in anticipation of a PSPS event and to provide resiliency services (in a grid-isolated operating mode) during the subsequent outage" (at p. 3).

Islanding of a Renewable Energy Facility from the Grid

The islanding designs proposed in Clean Coalition and CALSSA's protests seek to allow a front-of-the-meter VNEM/VNBT renewable generation system or stand-alone storage to island from the grid with a switch at the transformer and use the grid infrastructure. In D.23-11-068 Finding of Fact 26, the Commission noted that it declined in that proceeding to allow grid charging of onsite storage under the successor VNEM tariff. For parties' future consideration, if meters run during an outage, the utilities will need to have a clear way to timestamp and monitor loss and reconnection back to the grid. It appears this issue falls into the same signaling and communication gap that made OP 4 of D.23-11-068 inactionable. We agree with the Utilities' reply comments that such complex designs would be better addressed in the microgrid proceeding, interconnection discussion forum or another future proceeding as appropriate.⁵² These portions of Clean Coalition's and CALSSA's protests are rejected.

After incorporating feedback from CALSSA, the Joint Emergency Charging AL (filed on March 14, 2025) clarifies the proposal on how to island the Resiliency Account. The Utilities propose a simple disconnect switch. The switch would be placed between the main meter and the generation facility, energy storage, and Resiliency Account ~~in order~~ to island this configuration effectively. Although this is an important clarification made in the supplemental, it does not appear to materially deviate from the currently approved policies to allow islanding.⁵³ It remains that more complex proposals, should they be beneficial to improving resiliency configurations, would be better addressed in a different venue as noted above.

Rejection of Utilities' Joint Emergency Charging AL

The Utilities' proposal on joint emergency charging shows their interest and support in combining behind-the-meter renewables (including integrated storage) and virtual billing arrangements. It also takes a broad approach allowing charging at *any time*

⁵² [Joint Utilities' advice letter reply comments to the protests referred to the microgrid proceeding, R.19-09-009, which was closed with Decision 24-11-004 and re-opened by an application for rehearing request filed by Applied Medical Resources Corporation on December 18, 2024.](#)

⁵³ ALs PG&E 6792-E-A, SCE 4917-E-A, and SDG&E 4119-E-A amended the VNEM tariffs and D.23-11-058 added the same provision for VNBT.

instead of in response to Public Safety Power Shutoff events or other planned outages. However, we find the proposal does not satisfy the D.23-11-068 order to facilitate temporary, emergency charging and undermines key tenets underlying VNEM and VNBT policy. If allowed the proposal upends the current front-of-the-meter configuration and attendant policy on which VNEM and VNBT are based. It would complicate net surplus compensation calculations for the Resiliency Account(s), and the export values for the renewable generation could be manipulated by the separated energy storage. Decision 23-11-068 rejected a similar proposal, property-level netting, due to similar challenges. There, the Commission agreed with the Utilities that it would be complex to implement and administer, and up-end tenant incentives to conserve energy.^{54,55} Public Utilities Code 2827.1 does not permit stand-alone energy storage to be eligible as a renewable resource qualifying for export compensation under the customer generation tariffs. The Utilities state they “are proposing to remove permanently the controls that prevent the ES [energy storage] charging from the grid due to the impracticality of having the customer or the IOUs modify or monitor such settings.”⁵⁶ The Utilities vaguely describe real-time monitoring of a power control system as ‘not easy’ without further detail.⁵⁷ We infer from the Utilities’ joint AL that this is a technical market barrier, and not an immutable one. Therefore, this justification is insufficient, and approval of the proposed framework is counter to statute. Existing rules, which comply with the statute, already provide guidance on how to resolve OP 4 of D.23-11-068 as explained in the next section.

Also, it is unclear from the joint AL how a capacity cap, not a minimum, supports the Utilities in meeting SOMAH VNEM tariff requirements that at least 51% of a SOMAH project’s solar exports are dedicated to tenants (for at least 20 years). The Utilities’ unwillingness to have a prescriptive approach for the SOMAH VNEM tariff, instead proposing to rely on unspecified control systems, lacks sufficient detail to support appropriate review or approval.⁵⁸ We find that under this proposal, SOMAH

⁵⁴ D.23-11-068 at 35.

⁵⁵ D.23-11-068 “However, the Commission finds that the DER Shared Tariff, and especially property netting, presents environmental, economic, equity, and legal conflicts or barriers” at 36.

⁵⁶ SCE 5342-E-A, et al [7.11](#), at 11.

⁵⁷ SCE 5342-E-A, et al [7.11](#), Footnote #13

⁵⁸ SCE 5342-E-A, et al [7.11](#), at 14.

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

VNEM tariff customers could not exercise the resiliency option as proposed in the Joint Emergency Charging AL without jeopardizing PUC 2870 requirements to primarily reduce tenant monthly energy bills.⁵⁹

Therefore, the Utilities' proposal for joint emergency charging set out in SCE AL 5342-E/E-A, PG&E AL 7333-E/E-A, and SDG&E 4476-E/E-A is hereby rejected.

VNEM and VNBT Resiliency Guidance and Clarification

The Commission's emergency grid charging direction in D.23-11-068 came from party comments responding to the proceeding's invitation to propose new or revised tariff elements to enable a VNEM successor tariff with storage to provide benefits.⁶⁰ The Decision also explained that this direction, resulting in OP 4, was for "the purpose of resiliency."⁶¹ Given technology limits, parties' lack of consensus and the Utilities' now rejected proposal, we order the utilities to adopt the following in their tariffs, to provide multi-tenant properties options for on-site renewables that can be arranged in various resiliency configurations. This direction provides necessary clarification on the application of existing Commission rules to the VNEM and VNBT tariffs to ensure consistency with the outcome directed in D.23-11-068. With this specification, the tariffs will comply with D.23-11-068 OP 4, and these adjustments will be integrated with those outlined previously in this Resolution.

We clarify that the VNBT and VNEM tariffs should be structured to allow benefiting account customers to be multi-tariff customers. This is in accordance with D.05-08-013, which directed how tariff and interconnection agreements can address sites where multiple technologies are employed. This direction aligns with the Utilities' proposal to combine behind-the-meter generation and virtual billing, and this clarification is crucial to prevent proposals that could compromise existing VNEM/VNBT policies. Multi-tariff access permits simultaneous participation in VNBT/VNEM, NBT, and/or non-export,

⁵⁹ PUC 2870(f)(2) states "The commission shall require that the electricity generated by qualifying renewable energy systems installed pursuant to the program be primarily used to offset electricity usage by low-income tenants. These requirements may include required covenants and restrictions in deeds."

⁶⁰ D.23-11-068 at 57-58.

⁶¹ Ibid at 59.

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

behind-the-meter storage.^{62,63} It also removes limits on the number of generating facilities at a site that can be used for resiliency. It satisfies the D.23-11-068 policy intent to support additional resiliency configurations as the NEM/NBT systems and non-export, behind-the-meter storage will have the ability to charge storage from the grid in advance of an outage.

The multi-tariff option for NEM/NBT customers was approved in D.05-08-013, before VNEM was established. D.05-08-013 tackled the issue of combined technology sites, where more than one tariff may apply. It directed that a net generating output meter may be required for non-NEM generators for billing, assessing rates or special charges or planning, but other non-NEM generators may not require such a meter to fulfill regulatory requirements.⁶⁴ These arrangements are still allowable in the NBT and acknowledged within each Utilities' Rule 21. D.05-08-013 directed that for distributed generation facilities "that operate under two tariffs applicable to different technologies, utility tariffs should prohibit any provision or methodology that prevents exports from a NEM generator even if the non-NEM generator is operating".⁶⁵ In simpler terms, this Decision stated that NEM generators can send their surplus energy back to the grid, even if there are operating non-NEM generators at the same location.

Decision (D.) 11-07-031 expanded the VNEM tariff to all multi-tenant property customers, and did not prohibit individual benefiting account customers from also adding a behind-the-meter distributed energy resource. The basis for the VNEM expansion was to permit any residential, commercial, industrial multi-tenant property to receive the benefits of a solar energy system and net energy metering (which permitted multiple tariffs).⁶⁶ Multiple generation facilities were permitted, so long as the facility and the benefiting customer(s) shared a service delivery point. This resulted in

⁶² Non-export refers to a separate non-NBT/NEM non-export agreement under Rule 21 that could be part of a multi-tariff (VNEM-MT) interconnection. This agreement would carry liability insurance requirements and other potential fees as non-NBT/NEM.

⁶³ The mention here of VNEM does not indicate that customers may access tariffs that are now closed; this clarification applies to customers currently on VNEM prior to its sunset date per D.23-11-068.

⁶⁴ D.05-08-013 Finding of Facts 1 and 2.

⁶⁵ D.05-08-013 OP 2.

⁶⁶ D.11-07-031 Finding of Fact 2 states "VNM tariffs should be expanded to allow any residential, commercial or industrial multi-tenant or multi-meter property to take VNM service and thereby receive the benefits of a solar energy system and net energy metering."

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

sites having multiple front-of-the-meter generation facilities depending on their physical building, meter, and grid connection configurations.

D.22-12-056 made limited changes to VNEM: [and declined to make any changes to the SOMAH and MASH VNEM tariffs, leaving them as-is, until later in the proceeding.](#)⁶⁷

Namely, it eased restrictions on where renewable facilities were located on a participating property's site or its adjacent parcels and allowed for separate generators' exports to be combined. It also directed utilities to identify ways to facilitate storage. This directive was carried forward into the VNBT tariff in D.23-11-068.⁶⁸ D.23-11-068 also recognized that "future changes could be implemented to address ongoing or new challenges to solar systems paired with storage on the VNEM or virtual net billing tariffs" (at 55). D.23-11-068 also continued the imperative of D.21-12-031 to identify all pathways to facilitate storage for resiliency.⁶⁹ While enabling VNEM and VNBT properties and customers to utilize multiple tariffs does not directly adjust the front-of-the-meter solar system, it does provide the desired outcome for the property to increase its resiliency through a mix of system types. With the VNEM/VNBT multi-tariff policy, a property can have larger VNEM/VNBT generator(s) intermixed with smaller solar/storage or non-NEM/non-export storage that can operate independently during an outage.⁷⁰

Allowing VNEM and VNBT properties to use multiple tariffs enables a benefiting customer to also install behind-the-meter storage or solar with storage. For example, a multifamily property owner could install a behind-the-meter, non-export battery energy storage system to keep a common area load (like an apartment building's elevators and stairwell lighting) running during an outage and still receive its allocation of

⁶⁷ [D.22-12-056 at p 182.](#)

⁶⁸ D.23-11-068 at 54-55.

⁶⁹ D.23-11-068 at 56.

⁷⁰ This resolution recognizes that there is no "one-size fits all" when it comes to multi-tenant properties. System designs are reviewed and approved on an individual basis during the interconnection process between a utility and a customer.

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

front-of-the-meter solar credits during normal operations.⁷¹ Multi-tenant sites can allow a distinct account or accounts to use their own power without impacting VNEM or VNBT export credit sharing. ~~Multiple tariff access ameliorates the Utilities' use of a monthly renewable generation capacity cap, which will further complicate VNEM/VNBT billing, especially for SOMAH VNEM customers.~~ D.22-12-056 and D.23-11-068 allow for all generators' exports at a site to be combined and shared proportionally based on the site's allocation agreement.

In comments on the draft Resolution, the Joint IOUs raised concerns that SOMAH and MASH VNEM tariff customers also accessing the NBT tariff may complicate maintaining adherence to those programs' requirements.⁷² While the MASH VNEM tariff remains open to new customers, most tariff participants likely would have gained access as a part of their participation in the now closed MASH program and all SOMAH VNEM tariff customers are program participants of SOMAH. Most SOMAH and MASH VNEM tariff property owners must maintain a fixed allocation or percentage of solar generation credits to tenants, in accordance with their accepted program terms, which might be upset by also including access to NBT for all benefiting account customers. The Joint IOUs' comments also make some speculations against the draft resolution for MASH and SOMAH customers that tenants are unlikely to seek to install their own generating facility and that property owners cannot afford such systems, but such speculations are not relevant to the resolution's tariff determinations.⁷³

We therefore determine that MASH and SOMAH VNEM tariff benefiting account customers seeking access to multiple tariffs, may only access Rule 21 non-export compliant systems in addition to their SOMAH or MASH VNEM tariffs. This is a modification of the Joint IOUs' request to only allow Rule 21 non-export systems for *all* VNEM tariffs seeking to use multiple tariffs. Instead, we only adopt this for the

⁷¹ Behind-the-meter storage or solar with storage would require the associated inverter to operate in isolation, i.e., be a grid-forming inverter, with appropriate design to operate local loads during a grid outage. A variety of configurations are possible for resiliency employing combinations of generation resources, bypass switches, and isolation devices that can be explored by customers and the Utilities in the future, but this resolution does not determine any details of such configurations.

⁷² Joint IOUs, Comments on Draft Resolution E-5374, May 5, 2025, at 5-6.

⁷³ Joint IOUs, Comments on Draft Resolution E-5374, May 5, 2025 at 6.

[SOMAH and MASH VNEM tariffs.⁷⁴ This approach balances the objectives in D.23-11-068 to maintain support of low-income households and expand access to resiliency options without complicating those programs' requirements.](#)

The Commission has never prohibited VNEM or VNBT customers from access to multiple tariffs. This understanding is partially mirrored by the ~~Utilities~~[Joint IOUs](#) where they acknowledge that benefiting accounts could have non-export storage behind their individual meters [in the Joint Emergency Charging AL](#).⁷⁵ This resolution makes clear that D.05-08-013 allows access to multiple tariffs applies to benefiting account customers under VNEM (including SOMAH and MASH tariffs) and VNBT arrangements.

Therefore, we direct that the VNEM and VNBT tariffs state in an explicit special condition that VNEM and VNBT benefiting account customers, not generating accounts, are authorized to utilize multiple tariffs. This does not apply in the case where the generation account holder is also a benefiting account customer, ~~such that~~ [in this case the](#) customer's benefiting account(s) can [still](#) access multiple tariffs for combined technologies.

A VNBT or VNEM benefiting account customer, not the generator account(s), is allowed to simultaneously be a net billing tariff customer or have a compliant non-export energy system behind their meter (so long as the customer meets those other requirements). Such a benefiting account customer is a Virtual Net Billing Tariff – Multi-tariff (VNBT-MT) or Virtual Net Energy Metering Multi-tariff (VNEM-MT) customer in accordance with D.05-08-013. VNBT-MT and VNEM-MT arrangements are intended to primarily provide resiliency per D.23-11-068. There is no limit on the number of such customers per VNBT/VNEM arrangement or network. [SOMAH VNEM-MT and MASH VNEM-MT have limited access to Rule 21 non-export systems as noted above.](#)

[The Joint IOUs' comments on the draft resolution raised questions on 1\) how to ensure virtual tariff generators are sized to load if other behind-the-meter or non-export generators are installed at the same or different times and 2\) how annual true ups](#)

⁷⁴ [Joint IOUs, Comments on Draft Resolution E-5374, May 5, 2025, at 6 and 8.](#)

⁷⁵ SCE AL 5342-E-A, et al, at 3.

should work if those periods do not coincide.⁷⁶ These questions were previously addressed in Appendix A of the draft resolution, showing how to apply existing rules from D.23-11-068 and D.22-12-056 in harmonizing multiple tariffs, however Appendix A is updated to increase clarity.

Resolution 4481-E established account fees for VNEM, upheld by D.23-11-068 for VNBT customers. In keeping with those adopted fees, a utility may *also* charge a VNEM-MT or VNBT-MT customer an additional set-up fee of \$25 per benefiting account and is capped at \$500 per arrangement or network. These set-up fees may not be charged for tenancy change-overs. This does not adjust, replace or alleviate any fees for NBT or non-export systems. These VNBT-MT fees may be adjusted for inflation at a utility's request following the request process adopted by D.23-11-068.

See Appendix A, which the utilities must follow in developing tariff language.

The last issue on this matter is what constitutes the difference between a multi-tenant property with access to multiple generation types/tariffs and a microgrid. In their comments on the draft resolution, the Joint IOUs assert that NBT or Rule 21 generators, for a single customer, cannot enable resiliency during an outage, unless they also meet the islanding requirements in the behind-the-meter microgrid tariff. In the opinion of the Joint IOUs, without such a rule, allowing a benefiting account to install a generating facility does not solve for resiliency as directed herein. As an alternative, the Joint IOUs propose only allowing Rule 21 non-export systems if those systems meet the islanding requirements of a behind-the-meter microgrid. While the Joint IOUs' recommendations are not fully adopted, except for the alternative for SOMAH and MASH VNEM tariffs, due to the significance of the issue raised, we address it here.

A microgrid is a system of interconnected loads and generation sources that can act as a single, controllable entity able to connect to the grid or disconnect from the grid and operate in an islanded configuration during a grid outage. Microgrids may be configured behind-the-meter, with all loads and generation sources on the customer's side of the meter, or in front-of-the-meter, where utility infrastructure distributes electricity between premises. In both cases, it can be islanded in times of grid outage.

⁷⁶ Joint IOUs, Comments on Draft Resolution E-5374, May 5, 2025, at 4.

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

The parameters and rules for implementing microgrid tariffs were addressed in a separate rulemaking (R.) 19-09-009. Outside of outages, per the Commission's microgrid policies, customer-owned distributed energy resources would follow their applicable tariff, like VNEM or VNBT.

The Joint IOUs reference PG&E's behind-the-meter microgrid tariff. As no specific reference within that tariff was provided, we infer the Joint IOU statements to rely on PG&E's definition of a microgrid from Rule 18, Section B.2, and backup generation requirements from PG&E's Greenbook and Distribution Interconnection Handbook.⁷⁷ The definition of a microgrid in Rule 18 or per PU Code 8370 cannot universally be applied and adjusting the VNEM and VNBT tariffs would not extend to the NBT or Rule 21 non-export tariffs. A utility's Greenbook and Distribution Interconnection Handbook must also be followed as part of the typical interconnection process; these manuals cover many different types of installations, not just microgrids.

Allowing VNEM and VNBT customers to access multiple tariffs does not automatically result in the creation of a microgrid. An individual benefiting account customer at a multi-tenant site may or may not have access to the front-of-the-meter system in a resiliency configuration. The Joint IOUs did not propose incorporation of behind-the-meter microgrid requirements in the Joint Emergency Charging AL, which would have allowed use (during an outage) of a front-of-the-meter solar system and behind-the-meter battery for resiliency to a single customer. The Joint IOUs' comments on the draft resolution did not address why the Joint Emergency Charging AL differed on this matter. The Joint IOUs also did not address how these matters connect to the existing resiliency option in the VNEM and VNBT tariffs, which allows for islanded use of the front-of-the-meter system to one or more benefiting accounts during an outage.

We decline to adopt the Joint IOU proposal (from comments on the draft resolution) to incorporate components of the microgrid tariff into the VNEM and VNBT tariffs as it would create a circular reference, whereby the microgrid tariffs already allow customers whose generators operate in parallel with the grid under normal operation, e.g. NEM, VNEM, NBT, VNBT, and Rule 21 non-export systems. Additionally, we decline to partially incorporate rules from another tariff as doing so falls outside the

⁷⁷ Ibid.

intended scope of this Resolution and could compromise the Commission's ability to manage or modify microgrid rules in the future or create unintended policy overlaps.

We acknowledge the safety issues raised by the Joint IOUs' feedback. While we have removed tariff barriers, this does not mean that every multi-tenant site can access multiple customer-generation tariffs due to various external factors like site space, energy infrastructure, fire code, etc. Should such a multi-tariff installation be feasible, there are additional considerations dependent on the benefiting account customer's or customers' desired outcomes for resiliency which may require also following the microgrid tariffs. The clarifications provided within this resolution are intended to maximize resiliency options for multi-tenant sites under the current policy framework.⁷⁸

After careful consideration, we reach these findings: 1) the IOUs' available microgrid tariffs incorporate NBT, NEM, Rule 21 non-export, VNEM and VNBT eligible generators without further modification (of the virtual tariffs); 2) individual (VNEM-MT or VNBT-MT) benefiting account customers are not required to also access on-site front-of-the-meter generators during an outage; and 3) this resolution does not change safety or engineering requirements for islanding or isolated operation that are already incorporated in the interconnection process (pursuant to a utility's Rule 21, its Greenbook manuals or its interconnection guidelines). Therefore, no modifications to the VNEM or VNBT tariffs are adopted based on the Joint IOUs' comments to the draft resolution regarding microgrids. Renewable energy facilities interconnected under VNEM, subtariff VNEM-MT, VNBT, or subtariff VNBT-MT are not obligated to operate in a microgrid configuration. The customer and their utility determine if the customer's desired system configuration qualifies as such.

These findings underscore the importance of the previously stated direction for the utilities to offer improved guidance to multi-tenant customers seeking to create resiliency configurations. As well as the direction to allow the IOUs to collect additional fees from interested customers (in accessing multiple tariffs) to alleviate administrative costs for interconnection.

⁷⁸ D.24-11-004 and D.21-01-018

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

E. Virtual Net Energy Metering and Virtual Net Billing Tariffs Prevailing Wage Acknowledgment of D.23-11-068 Ordering Paragraph (OP) 33

Lastly, we must acknowledge that D.23-11-068 OP 33 also directed tariff changes regarding prevailing wages, pursuant to PUC 769.2, as noted in some of the Utilities' AL requests. Nothing in this Resolution adjusts OP 33 of the Decision. The compliance filings directed here must also comport with OP 33 and any compliance advice letter filings pursuant to that same order. The Utilities should follow the ~~direction~~[directions](#) in General Order 96-B on how to incorporate material that may be pending [or is approved](#) under another AL submittal.

F. Conclusion

In conclusion, where the Utilities had previously submitted, or supplemented, their tariffs, those are adopted except where the Utilities are directed to utilize other tariff language and/or follow guidance specified in this resolution. Additionally, the rejected Joint Emergency Charging AL is not adopted. The Utilities must refile Tier 2 ALs separately for the VNEM tariffs, SOMAH VNEM tariff, MASH VNEM tariff, and VNBT tariff.

COMMENTS

[The proposed draft resolution was mailed to parties in accordance with](#) Public Utilities Code Section 311(g)(1) ~~provides that this Resolution must be served on all parties and subject to at least 30 days public review. Any comments are due within 20 days of the date of its mailing and publication on the Commission's website and in accordance with any instructions accompanying the notice.~~[were allowed. As per](#) Section 311(g)(2) ~~provides that this~~[there was a](#) 30-day review period and 20-day comment period ~~may be reduced or waived upon the stipulation of all parties in the proceeding.~~[. The California Solar + Storage Association \(CALSSA\); Pacific Gas and Electric, San Diego Gas & Electric, and Southern California Edison \(the Joint IOUs\); and Sunrun timely filed comments.](#)

~~The 30-day review and 20-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for~~

~~comments and will be placed on the Commission's agenda no earlier than 30 days from today.~~

We have made the following changes to the resolution in response to party comments:

- To ease implementation, we have modified our guidance on multi-tariff components (in Appendix A) regarding system sizing, installation phasing, annual true-ups, and non-bypassable charges.
- To harmonize VNEM netting practices with the timing of net export compensation values, we provide greater guidance in Appendix A.
- The Resolution now acknowledges complexity stemming from program requirements for MASH and SOMAH VNEM tariffs and clarifies that those customers may only access Rule 21 non-export systems in tandem to the SOMAH and MASH VNEM tariffs.
- Clarifies the definition between VNEM Multi-Tariff or VNBT Multi-Tariff and a Behind-The-Meter or Multiple Property Microgrid Tariff to provide greater guidance to the utilities and potential customers of one or more of those tariffs.
- Acknowledges that updates to the IOU interconnection forms and portals could also refer to their respective microgrid tariffs.
- Confirm that the duration of the MASH and SOMAH tariffs was unchanged by D.22-12-056 and D.23-11-068 and remains a 20-year term.

Here we address party comments on the draft resolution that we decline to accommodate.

Regarding OP 4 of D.23-11-068, CALSSA's comments opined that the draft resolution's orders do not allow paired storage to charge from the grid. The infeasibility of rapid emergency charging is addressed in the resolution. D.23-11-068 reached its order on the basis that a "technical solution could exist," but the Joint Emergency Charging Advice Letter did not offer a technical solution and acknowledges that such a solution does not currently exist.⁷⁹ CALSSA states this does not resolve OP 4 of D.23-11-068, but is

⁷⁹ D.23-11-068 at page 59

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

supportive of the overall direction that VNEM/VNBT customers should have access to multiple tariffs.

Both CALSSA and the Joint IOUs are concerned that the draft resolution does not allow paired storage to do rapid, emergency charging to provide on-site resiliency. In the Joint Emergency Charging Advice Letter, the proposal did not include an option for paired storage, rather it proposed separate stand-alone storage. Without further evidence that a technical option does exist to implement OP 4, as written and directed, these claims cannot be relied upon for this matter.

The Joint IOUs claim that there is no precedent for allowing a multi-tariff configuration under virtual tariffs. First, they claim that D.05-08-013 cannot apply to the VNEM tariffs or VNBT since they did not exist at the time of its approval. We dismiss this reasoning as there is no limit in applying established rules, so D.05-08-013 can apply regardless of whether this specific scenario existed at the time of its approval. We contend that the underlying logic of D.05-08-013 remains relevant, and as noted in the resolution, the principles of equity and fairness can also be applied here to support its relevancy and applicability to the VNEM tariffs and VNBT. The Joint IOUs also stated that D.11-07-031 explicitly adopted a prohibition against benefiting accounts having their own generating facility for the VNEM tariffs. However, the Joint IOUs base this conclusion on text from D.11-07-031, that in their words “implicitly”, not *explicitly*, created such a limit.⁸⁰ Lastly the Joint IOUs claim that these Decisions (D.05-08-013 and D.11-07-031) do not relate to OP 4 of D.23-11-068. We reiterate here that this resolution finds that OP 4 of D.23-11-068 is currently inactionable. It would be a misrepresentation to assert that this resolution attempts to apply D.05-08-013 and D.11-07-031 to specifically implement OP 4 of D.23-11-068.

The Joint IOUs’ comments provide estimates of the cost range to implement a multi-tariff requirement and adjust their billing systems to implement these changes. PG&E identifies an estimated \$15-18 million. SCE identifies \$10 million and SDG&E estimates the cost at \$4 million. These cost estimates have a wide range, both within PG&E and

⁸⁰ Joint IOUs Footnote Number 4 states “ See D.11-07-031, p. 16 ... implicitly acknowledging that such customers could not install their own generating facility” at page 3 (Comments on Draft Resolution E-5374, May 5, 2025).

across the utilities. Joint IOUs did not provide comparative budget data to understand if it represents a meaningful increase beyond what each will spend on these tariffs without the multi-tariff special condition. R.20-08-020 did not collect data from the IOUs on billing system costs, only implementation timeframes, when adopting the successor net billing tariffs.⁸¹ The utilities' estimates are concerning, and it is unclear from Joint IOU statements whether these reflect the actual policy changes identified in the draft resolution or are connected to larger technology issues with IOU billing systems, or could be covered under billing modernization initiatives which could reduce these costs.⁸² In D.23-11-068 OP 12(f), the Joint IOUs were authorized to record costs for implementation of the virtual net billing tariff in the memorandum account established in OP 12(a) of D.22-12-056.

The resolution does adopt some policy changes based on the Joint IOU comments, as summarized in the list at the start of this section, which should support meeting the previously identified deadlines in this resolution without further modification.

Regarding demand response programs, the Joint IOUs restate arguments against allowing demand response program participation, particularly for generation account holders. We will reiterate again that the VNEM tariffs and VNBT do not set eligibility for demand response programs. This argument has been addressed previously within this resolution, and we find that its restatement does not alter its merit.

Sunrun expressed that the Joint Emergency Charging Advice Letter would have created a new option for multifamily property owners. The Resolution's determinations permit the same kind of equipment arrangement, along with many other possible arrangements, without undercutting the VNBT or VNEM tariffs. Sunrun also asks that the Commission "broadly makes clear to the utilities and all stakeholders that the door remains open to additional pathways [for resiliency]."⁸³ The Commission made a similar acknowledgement within the body of D.23-11-068.

All other requests not addressed here are denied.

⁸¹ D.22-12-056 Findings of Fact 246 and 247 and D.23-11-068 Ordering Paragraph 12

⁸² Pacific Gas & Electric Application (A.) 24-10-014

⁸³ Sunrun (May 5, 2025) at page 4

FINDINGS

1. It is administratively expedient to combine the advice letters on the establishment of the virtual net billing tariff (VNBT) and amended virtual net energy metering (VNEM) tariffs.
2. D.23-11-068 set the eligibility criteria for the Avoided Cost Calculator (ACC) Plus adder for the virtual net billing tariff.
3. D.23-11-068 identified that all residential enrollees, including tenants, shall have access to the simple payback of 9 years as the basis for the tariff export policy, but there are key differences between tenants and property owners.
4. [D.22-12-056 deferred any adjustments to the SOMAH and MASH VNEM tariffs.](#)
5. [D.23-11-068 maintained the 20-year terms for the SOMAH and MASH VNEM tariffs.](#)
- 4.6. VNBT does not require any distinction between tenants and property owners for export values.
- 5.7. VNEM tariff customers with temporary access after February 15, 2024, shall not have restrictions within the VNBT once it is available.
- 6.8. It is reasonable to establish certain common language in the tariffs to avoid confusion or misinterpretation.
- 7.9. It is reasonable to maintain policies that align the VNBT with the net billing tariff, especially those already directed in D.23-11-068.
- 8.10. Limiting the ACC Plus adder to the generation portion of the customer's bill does not improve the customer's compensation or result in more efficient or sustainable behavior to benefit the grid.
- 9.11. The Commission's concern for double payments with net surplus compensation also applies to such payments for the generation of virtual net billing tariff customers.
- 10.12. It is reasonable to add the net surplus compensation recoupment mechanism used in the net billing tariff to any such payments for virtual net billing tariff customers.
- 11.13. Resolution 5301-E tariff modifications were limited to the [Joint](#) Utilities' net billing tariffs.
- 12.14. It is reasonable to accept [the Joint](#) Utilities' proposal to apply Resolution 5301-E orders to the VNBT where that alignment improves parity between those customers, is administratively expedient for the Utilities, or increases outcomes for all ratepayers.
- 13.15. Ivy Energy's protests repeat a policy argument made in its petition for modification against D.23-11-068, which was denied by Decision 24-09-004.

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

- ~~14.~~16. There is no change to demand response programs from policies within R.20-08-020.
- ~~15.~~17. Removing program participation barriers within the VNBT or VNEM tariffs does not alter demand response programs' eligibility or related billing.
- ~~16.~~18. D.23-11-068 defined "demand response programs" as including both demand response programs and emergency reliability programs.
- ~~17.~~19. D.23-11-068 intended to align VNBT and VNEM tariff for removing barriers to demand response programs.
- ~~18.~~20. The [Joint](#) Utilities lack basic guidance and education on how to satisfy the resiliency configuration allowable under VNEM tariffs and VNBT.
- ~~19.~~21. The [Joint](#) Utilities' interconnection forms, interconnection application portal, and relevant explanatory webpages should make the VNBT and VNEM tariff option for resiliency clear and understandable for applicants.
- ~~20.~~22. Interested applicants should be able to self-attest to their utility if a resiliency configuration is desired or planned so that the utility and applicant can take the appropriate next steps.
- ~~21.~~23. Interconnection forms should follow the tariff and facilitate access to the customer's desired tariff and special conditions therein.
24. [D.22-12-056 did not adopt modifications to the low-income, SOMAH and MASH VNEM tariffs and deferred any decisions until later in the proceeding.](#)
25. [D.23-11-068 approved limited changes to the MASH VNEM Tariffs not including its term or legacy period.](#)
26. [The Commission did not adjust the MASH VNEM tariff term from twenty years to nine years, effective April 15, 2023, per D.22-12-056.](#)
27. [It is reasonable to request SCE correct their error about reducing the eligible term or legacy period for any impacted MASH VNEM tariff customers.](#)
- ~~22.~~28. The VNEM tariffs and VNBT allow a resiliency configuration for on-site renewables. Associated interconnection forms, and related materials, may not counter or create barriers to this outcome.
- ~~23.~~29. The direction in D.23-11-068 OP 4 cannot be met as directed. There is no technology or communication protocol to allow temporary, rapid emergency charging of VNEM or VNBT integrated storage.
- ~~24.~~30. Without modification, the VNEM and VNBT tariffs cannot support temporary grid charging of integrated storage at this time.
- ~~25.~~31. The Utilities' proposal for rapid, emergency grid charging allows direct consumption from the front-of-the-meter renewable generation facility, limits resiliency to one end-user, and allows energy storage charging at any time. It also

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

removes the integration of energy storage from the renewable energy generation facility. These allowances do not satisfy the direction or the spirit of D.23-11-068.

32. The microgrid tariffs, adopted within R.19-09-009, allow use of generators that operate in parallel with the grid under NBT, NEM, VNBT, VNEM or Rule 21 non-export.

33. A front-of-the-meter renewable generation facility that can be utilized during an outage is not necessarily a microgrid.

34. There is no need to incorporate microgrid tariff rules into the VNEM, subtariff VNEM-MT, VNBT, or subtariff VNBT-MT as this would be duplicative of the microgrid tariff rules.

~~26.~~35. D.05-08-013 for access to multiple, customer-generation tariffs applies to VNBT and VNEM tariffs.

~~27.~~36. VNBT and VNEM multi-tariff allows benefiting account customers to access multiple tariffs as a means to install smaller, discrete behind-the-meter systems that can be installed for the purposes of resiliency.

~~28.~~37. VNBT and VNEM multi-tariff creates alignment with NBT and NEM customers.

~~29.~~38. VNBT, NBT, VNEM, and NEM system sizing rules, export compensation, and NSC calculations, including the NSC recoupment mechanism, can be combined for customers with access to multiple tariffs.

~~30.~~39. It is reasonable that any VNBT or VNEM multi-tariff customer who elects to establish multi-tariff billing should be charged an initial fee. The amount for that fee should be set in accordance with the direction determined in Resolution 4481-E.

THEREFORE IT IS ORDERED THAT:

1. The request of Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E) to implement D.23-11-068 OPs 1, 8, and 9, as detailed in Advice Letters PG&E 7175-E/E-A and 7211-E/E-A/E-B; SCE 5227-E/E-A and 5250-E/E-B; SDG&E 4394-E/E-A and 4409-E/E-A, are approved with the following conditions and modifications:

- a) The Virtual Net Billing Tariff (VNBT) must follow the Avoided Cost Calculator (ACC) Plus Adder eligibility criteria adopted in Decision (D.) 23-11-068 without modification and as clarified in the Discussion section of this resolution. The tariff must ~~also~~ follow and state *"The ACC Plus adder is available to eligible customers regardless of when their property was constructed. This includes customers with permissible temporary placement on the virtual net energy metering tariff, in accordance with Decision 23-11-068 OP 12(c), following its tariff sunset date of*

February 15, 2024." This statement may be adjusted to accommodate the abbreviations of common terms defined in the tariff.

- b) The VNBT must include the Net Surplus Compensation recoupment mechanism detailed in D.22-12-056. The average real-world retail export compensation value, used in that mechanism, must include all net billing tariff data, including virtual net billing customers' data.
 - c) The VNBT will follow the modifications adopted in Resolution 5301-E for
 - 1) carry-forward credits process (Ordering Paragraph 5b), 2) use of the interconnection request application date as the start of the ACC Plus Adder legacy period (Ordering Paragraph 5d), 3) use of climate zone averages in calculating retail export ACC Compensation values (Ordering Paragraph 2), and 4) processes for verification of a customer's geographic location within a disadvantaged community.
 - d) The VNBT and Virtual Net Energy Metering (VNEM) Tariffs shall not prohibit generating account holders or benefiting account customers from participation in demand response programs, including emergency reliability programs.
 - e) The Benefiting Account Customers of the VNBT and VNEM Tariffs are authorized to be multi-tariff customers in accordance with D.05-08-013 and the rules stated in the Discussion section and Appendix A of this resolution. PG&E, SCE, and SDG&E must add a special condition stating that benefiting account customers are eligible to be multi-tariff customers: and incorporating the adopted policies.
 - e)f) The SOMAH and MASH VNEM tariff term of twenty years was not adjusted by D.23-11-068 or D.22-12-056. SCE must revise its MASH VNEM Tariffs accordingly and restore tariff access, if needed, for any impacted customers.
 - f)g) PG&E, SCE, and SDG&E are authorized to charge an initial set-up fee of \$25 per multi-tariff customer benefiting account with a cap of \$500 per property for the Virtual Net Billing Tariff and Virtual Net Energy Metering Tariffs. PG&E, SCE and SDG&E may annually request to raise this multi-tariff customer fee pursuant to the process adopted in Decision 23-11-068.
2. Within 90 days following the effective date of this resolution, Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E) shall review interconnection forms, application portals, and associated webpages to determine if the current Virtual Net Energy Metering and Virtual Net Billing Tariff special condition, to allow operation of renewable energy facilities in isolation of the grid, is readily identifiable with clear, plain language. Customers must be able to signal their interest in and/or request this option or access to multiple tariffs of the reviewing Utility during the interconnection process.

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

- a) Within 120 days following the effective date of this resolution, PG&E, SCE, and SDG&E must correct deficiencies and submit a Tier 1 Advice Letter explaining corrective actions and/or requesting to update forms.
3. No later than 60 days following the adoption of this resolution, Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E) shall submit Tier 2 advice letters, for their Virtual Net Billing Tariff and Virtual Net Energy Metering tariffs, proposing the tariff modifications specified in these orders and further enumerated in the Discussion section of this resolution and Appendix A. These modifications shall become effective upon the date this Resolution is approved.
4. Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E) shall follow these timelines for billing systems transition to the virtual net billing tariff: No later than December 31, 2025, for SDG&E and SCE, and no later than March 31, 2026 for PG&E. SDG&E and SCE may file a tier 1 advice letter prior to December 31, 2025 to request use of the later enablement date of March 31, 2026.

This Resolution is effective today.

Commissioner Signature blocks to be added
upon adoption of the resolution

The foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on June 12, 2025; the following Commissioners voting favorably thereon:

Commissioner Signature blocks to be added
upon adoption of the resolution

Dated June 12, 2025, at Sacramento, California

APPENDIX A

APPENDIX A

Virtual Net Billing Tariff Multi-Tariff (VNBT-MT)

A virtual net billing tariff (VNBT) benefiting account customer, not the generator account(s), is allowed to simultaneously be a net billing tariff customer, or other future tariff developed pursuant to PUC 2827 or 2827.1, or have a compliant non-export energy system so long as the customer meets those other requirements. Such a benefiting account customer is a Virtual Net Billing Tariff – Multi-tariff (VNBT-MT) customer in accordance with D.05-08-013. VNBT-MT arrangements are intended to primarily provide resiliency per D.23-11-068. There is no limit on the number of such customers per VNBT arrangement or network.

VNBT and NBT legacy periods or ACC Plus adder eligibility duration may not be combined or altered as a result of access to multiple tariffs. A customer is allowed to depart from one tariff and not the other(s). Nothing in the VNBT tariff alters treatment in the NBT or other tariffs unless otherwise specified in that tariff.

[Utilities may charge account set-up fees in accordance with Resolution E-5374.](#)

Virtual net billing tariff multi-tariff customers will have the following adjustments:

- [System Sizing](#): If a multi-tariff customer chooses to access NBT and VNBT, they must abide by the existing VNBT rule to cap the size of their combined facilities' load at no more than part or all their prior annual usage (kWh). Annual usage (kWh) will be determined based on that individual customer's past annual usage as the NBT renewable generation facility is for individual, behind-the-meter use. In other words, a VNBT multi-tariff customer with an NBT facility may not have the capacity of their combined facilities (installed and allocated capacity) together generate more than their individual prior annual usage (kWh).
- [Virtual Allocation of Energy Credits](#): VNBT residential benefiting account customers' dedicated allocation of export credits will be used to reduce any imports (kWh) in the netting interval. If the residential customer has a positive net NBT export (kWh) prior to their allocation of VNBT energy credits, [\(kWh\)](#), those VNBT credits ~~will only still~~ receive ~~ACC (along with ACC Plus adder if eligible)~~ export compensation in accordance with the rules of the VNBT tariff. ~~In this regard,~~ VNBT is secondary to a [residential](#) customer's behind-the-meter resource(s). [for reducing or offsetting their import load. VNBT non-residential](#)

benefit account customers' dedicated allocation of export credits is received as dollars (\$), not as a virtual energy reduction (kWh); there is no ordering needed for non-residential VNBT-MT. Net Surplus Compensation for VNBT and NBT: Multi-tariff customers with access to VNBT and NBT will follow NBT Net Surplus Compensation rules. The benefiting account customer's 12-month true-up periods must align, which may require an initial adjustment.

- ~~Multi-tariff customers with access to VNBT and NBT will follow NBT Net Surplus Compensation rules.~~
- for VNBT and Non-export: Multi-tariff customers with access to VNBT and a non-export system(s) will follow NBT Net Surplus Compensation rules. The benefiting account customer's 12-month true-up periods must align, which may require an initial adjustment.
- Metering: Following the precedent set by D.05-08-013, any VNBT multi-tariff customer must install at their cost, or the property owner's cost, individual meters for the separate generators or breakers that prevent export from the non-net metering generator.

~~Utilities may charge fees account set-up fees in accordance with Resolution E-5374.~~

Non-bypassable Charges: These will not be duplicated or doubled if a customer has access to VNBT and NBT. However, any such charges that are unique to a given tariff will apply. Virtual Net Energy Metering Multi-tariff (VNEM-MT)

A virtual net energy metering (VNEM) benefiting account customer, not the generator account(s), is allowed to simultaneously be a net billing tariff customer, or other tariff developed pursuant to PUC 2827 or 2827.1, or have a compliant non-export energy system so long as the customer meets those other requirements. Such a benefiting account customer is a Virtual Net Energy Metering Tariff – Multi-tariff (VNEM-MT) customer in accordance with D.05-08-013. VNEM-MT arrangements are intended to primarily provide resiliency per D.23-11-068. There is no limit on the number of such customers per VNEM arrangement or network.

The VNEM tariff legacy period may not be combined or altered as a result of multi-tariff treatment. A benefiting account customer is allowed to depart from one tariff and not the other, ending their multi-tariff status. Nothing in the VNEM tariff alters treatment in the NBT unless otherwise specified in that tariff. VNEM tariff status does not provide access to the closed NEM tariffs.

[Utilities may charge account set-up fees in accordance with Resolution E-5374.](#)

VNEM multi-tariff customers will have the following adjustments:

- If a multi-tariff customer chooses to access NBT and VNEM, they must abide by the existing VNEM rule to cap the size of their combined facilities' load at no more than part or all their prior annual usage (kWh). Annual usage (kWh) will be determined based on that individual customer's past annual usage as the NBT renewable generation facility is for individual, behind-the-meter use. In other words, a VNEM multi-tariff customer with an NBT facility may not have the capacity of their combined facilities (installed and allocated capacity) together generate more than their individual prior annual usage (kWh).
 - [As the VNEM tariff was sunset by D.23-11-068, there is no future scenario whereby an NBT or non-export facility could have been installed prior to the VNEM tariff generator\(s\).](#)
 - [For SOMAH and MASH VNEM tariffs - only Rule 21 non-export systems are permitted. These systems are not limited to storage devices, but to any energy generator or storage permissible under Rule 21.](#)
- VNEM benefiting account customers' dedicated allocation of export credits will be used to reduce any imports (kWh) in the netting interval. If the customer has a positive net export (kWh) prior to their allocation of VNEM energy credits, those VNEM credits will only receive export compensation in accordance with the rules of its VNEM tariff. In this regard, VNEM is secondary to a customer's behind-the-meter resource(s).
- Multi-tariff customers with access to VNEM and NBT will follow NBT Net Surplus Compensation rules.
- Multi-tariff customers with access to VNEM and a non-export system(s) will follow VNEM Surplus compensation rules.
- Multi-tariff customers with access to VNEM and NBT will follow the NBT netting intervals. If this requires meter upgrades that will be at the cost of the VNEM multi-tariff customer(s) and/or property owner.
- Following the precedent set by D.05-08-013, any VNEM multi-tariff customer must install at their cost, or the property owner's cost, individual meters for the separate generators or breakers that prevent export from the non-net metering generator.

~~Utilities may charge fees account set-up fees in accordance with Resolution E-5374.~~

PG&E AL 7175-E, 7333-E, 7211-E; SCE AL 5227-E, 5342-E, 5250-E;
SDG&E AL 4394-E, 4476-E, 4409-E/SAL

- Net Surplus Compensation: The benefiting account customer's 12-month true-up periods must align, which may require an initial adjustment.

END OF APPENDIX A