

Date of Hearing: July 1, 2024

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY

Cottie Petrie-Norris, Chair

SB 1374 (Becker) – As Amended March 18, 2024

SENATE VOTE: 28-7

SUBJECT: Net energy metering

SUMMARY: Requires the California Public Utilities Commission (CPUC), by July 1, 2025, to update to a more generous compensation scheme the credits certain multiple meter customer configurations receive from behind-the-meter renewable generation facilities. This bill would thus overturn a recent CPUC decision on this topic. Specifically, **this bill:**

- 1) Requires, no later than July 1, 2025, the CPUC to ensure that any contract or tariff established by the CPUC, as part of the Net Energy Metering (NEM) program, for renewable electrical generation facilities configured to serve either multiple customers with meters on a single property (via Virtual Net Energy Metering, VNEM), or a single customer with multiple meters on a property or a set of contiguous properties owned, leased, or rented by the customer (via Net Energy Metering Aggregation, NEMA), meets the following requirements:
 - a. The eligible customer-generators may elect to aggregate the electrical load of the meters located on the property or set of contiguous properties to determine onsite consumption from the renewable electrical generation facility.
 - b. Requires the eligible customer-generators to determine the percentage of the total generation to be allocated to each account on the property or set of contiguous properties.
 - c. Each account's portion of the generation shall be subtracted from that account's consumption in each 15-minute period for billing purposes.
 - d. Requires customers to be compensated at no less than utility avoided cost for generation in excess of consumption.
- 2) Provides that parcels that are divided by a street, highway, waterway, or public thoroughfare are considered contiguous, provided that they are otherwise contiguous.

EXISTING LAW:

- 1) Requires every electric utility, defined to include electrical corporations, local publicly owned electric utilities, and electrical cooperatives, to develop a standard contract or tariff for NEM, for generation by a renewable electrical generation facility, and to make this contract or tariff available to eligible customer-generators, upon request on a first-come-first-served basis until the time that the total rated generating capacity used by eligible customer generators exceeds five percent of the electric utility's aggregate customer peak demand. (Public Utilities Code § 2827)

- 2) Requires the NEM calculation for eligible customer-generators to be made by measuring the difference between the electricity supplied to the eligible customer-generator and the electricity generated by the eligible customer-generator and fed back to the electrical grid over a 12-month period. (Public Utilities Code § 2827 (h))
- 3) Defines “eligible customer-generator” as a residential customer, small commercial customer (as specified), or commercial, industrial, or agricultural customer of an electric utility, who uses a renewable electrical generation facility, or a combination of those facilities, with a total capacity of not more than one megawatt, that is located on the customer’s owned, leased, or rented premises, and is interconnected and operates in parallel with the electrical grid, and is intended to primarily offset part or all of the customer’s own electrical requirements. (Public Utilities Code § 2827)
- 4) Provides that an eligible customer-generator with multiple meters may elect to aggregate the electrical load of the meters located on the property where the renewable electrical generation facility is located and on all property adjacent or contiguous to the property on which the renewable electrical generation facility is located, if those properties are solely owned, leased, or rented by the eligible customer-generator. Makes customer-generators electing to aggregate the electric load permanently ineligible to receive net surplus compensation. This statute was implemented via the Net Energy Metering Aggregation (NEMA) subtariff. (Public Utilities Code § 2827(h)(4)(A)(B))
- 5) Requires the CPUC, by September 30, 2013, to determine whether allowing eligible customer-generators to aggregate their load from multiple meters will not result in any increase in the expected revenue obligations of customers who are not eligible customer-generators. (Public Utilities Code § 2827(h)(4)(D))
- 6) Provides that parcels that are divided by a street, highway, or public thoroughfare are considered contiguous, provided they are otherwise contiguous and under the same ownership. ((Public Utilities Code § 2827(h)(4)(F))
- 7) Authorizes an eligible customer-generator to elect to aggregate the electrical load of multiple meters if the renewable generation facility, or a combination of those facilities, has a total generating capacity of not more than one megawatt (MW). (Public Utilities Code § 2827(h)(4)(G))
- 8) Requires, if the CPUC determines there are cost or revenue obligations for an electrical corporation that may not be recovered from customer-generators participating in NEM, those obligations must remain within the customer class from which any shortfall occurred and prohibits those obligations to be shifted to any other customer class. (Public Utilities Code § 2827(k))
- 9) Requires the CPUC, for a large electrical corporation, as defined, to have developed a second standard contract or tariff to provide NEM to additional eligible customer-generators in the electrical corporation’s service territory and imposes no limitation on the number of new eligible customer-generators entitled to receive service pursuant to this second standard contract or tariff. (Public Utilities Code § 2827.1)

- 10) Requires the CPUC to ensure that the second standard contract or tariff made available to eligible customer-generators by large electrical corporations ensures that customer-sited renewable distributed generation continues to grow sustainably. Requires the CPUC, in developing this standard contract or tariff, to include specific alternatives designed for growth among residential customers in disadvantaged communities. (Public Utilities Code § 2827.1(b)(1))
- 11) Establishes the local government renewable energy self-generation bill credit transfer (RES-BCT) program which authorizes a local government (including school districts) and tribes to elect to have a bill credit applied to a designated benefiting account for electricity exported to the electrical grid by an eligible renewable generating facility and requires the CPUC to adopt a rate tariff for the benefiting account. Defines an eligible "benefitting account" under the RES-BCT program to mean an electricity account, or more than one account, located within the geographical boundaries of a local government or, for a campus, within the geographical boundary of the city, county, or city and county in which the campus is located, that is mutually agreed upon by the local government or campus and an electrical corporation. (Public Utilities Code § 2830)

FISCAL EFFECT: According to the Senate Committee on Appropriations, this bill will result in one-time costs of \$1 million over 4 years, and ongoing costs of \$460,000 annually in ratepayer funds for the CPUC to establish the tariff called for under this bill. The Committee likewise notes potential unknown costs to the state as an electrical utility ratepayer.

BACKGROUND:

Net Energy Metering (NEM) – California’s NEM program started in 1997, prompted by SB 656 (Alquist, Chapter 369, Statutes of 1995). It allows customers who install eligible renewable electrical generation facilities to serve onsite energy needs and receive credits on their electric bills for surplus energy sent to the electric grid. Most customer-sited, grid-connected solar in California is interconnected through NEM tariffs. Enrollment in the first NEM program, now colloquially known as “NEM 1.0,” continued and was phased out between 2016 and 2017. NEM 1.0 was not meant to be cost-effective. Rather, the NEM tariff, and the larger state program, was meant to encourage adoption of rooftop solar so that manufacturing and installation costs could come down. This effort was successful: rooftop solar installation grew considerably from 2006 through 2012.

The Legislature called for the revision of NEM 1.0 per AB 327 (Perea, Chapter 611, Statutes of 2013) primarily to address the cost associated with the full retail credits available under the tariff. The CPUC responded with what is commonly referred to as NEM 2.0 in 2016. Customers taking service under that tariff – NEM 2.0 – pay the cost to connect to the grid; take service on a “time-of-use” rate plan; and pay “non-bypassable” charges that are not offset with surplus energy credits. On August 27, 2020, the CPUC initiated Rulemaking 20-08-020 to develop a successor to the NEM 2.0 tariff, as part of the requirement in statute and a commitment in a previous decision to review the current tariff to address the shift in costs to nonparticipating customers. The CPUC released a proposed decision in December 2021.¹ However, the final decision was delayed while the CPUC considered party comments and evaluated alternatives. On December

¹ See *Decision Revising Net Energy Metering and Subtariffs*, CPUC, December 13, 2021, at: <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M430/K903/430903088.PDF>

15, 2022 the CPUC adopted a new decision establishing the Net Billing Tariff (NBT), or colloquially NEM 3.0.²

The NBT applied to customers who submit an interconnection application on or after April 15, 2023. The NBT made a number of changes from NEM 2.0, replacing export compensation tied to the retail rate with the avoided cost calculator (ACC) rate. The retail rate is typically a fixed amount, around 30-40¢/kWh, depending on service territory.³ The ACC-calculated rate is variable, changing for each hour per month, with different values on weekends versus weekdays. These values are meant to track grid conditions, and can range from 0.03-0.05¢/kWh on the low end for most months of the year to over \$1-\$4/kWh on the high end for select evenings (5-7pm) in August-October.⁴

The NBT eliminated the netting interval, meaning customers' imports on the first meter channel are charged the import retail rate (fixed, usually higher prices), and all recorded exports on the second meter channel are credited the retail export compensation rate (variable, only high during certain evenings).⁵ The consequence of eliminating the netting interval is that behind-the-meter consumption is incentivized (it effectively earns the retail rate), encouraging customers to install both electric vehicle charging equipment and battery storage paired with their solar. The NBT decision also did not affect existing rooftop solar customers; those legacy NEM 1.0 and NEM 2.0 customers remain on their tariff. The NBT decision also did not include any charges unique to solar customers (despite early draft decisions doing that). The result of these changes led to a drop in the compensation rooftop solar customers will receive, increasing the payback period to 9 years.⁶

According to the CPUC, as of 2021, the NEM program had enabled 1.3 million customer installations, equating to roughly 10 gigawatts (GWs) of customer-sited renewable generation, almost all of which is rooftop solar. Now, NEM systems reduce the demand on the electric grid by as much as 25% during midday when the sun is shining.⁷

NEM Configurations – While the December 2022 NBT decision² focused on single-meter properties/customers, a subsequent decision⁸ focused on NEM arrangements serving multiple meters: the Virtual Net Energy Metering (VNEM) tariff, and the Net Energy Metering Aggregation (NEMA) subtariff. It is this subsequent decision, from November 2023, that is the subject of this bill.

² D. 22-12-056

³ See PG&E's 2024 residential TOU at ~45¢ here:

https://view.officeapps.live.com/op/view.aspx?src=https://www.pge.com/assets/rates/tariffs/Res_Inclu_TOU_Current.xlsx

⁴ Values relative to SDG&E's Energy Export Credits under the NBT; <https://www.sdge.com/solar/solar-billing-plan/export-pricing>

⁵ Pg. 129, D. 22-12-056

⁶ CPUC, "Fact Sheet: Modernizing NEM to Meet California's Reliability and Climate Goals;" November 10, 2022. <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/net-energy-metering-nem/nemrevisit/final-fact-sheet-nem.pdf>

⁷ CPUC Fact Sheet; "Modernizing California's Net Energy Metering Program to Meet our Clean Energy Goals." December 13, 2021.

⁸ D. 23-11-068

As shown in Figure 1, in a traditional NEM arrangement a customer's solar system (1) is located on the same side of the meter (2) as the customer's load. Any electricity generated in excess of that serving onsite load is sent to the grid (3) and compensated at a specified export rate.

Figure 1: Schematic of various NEM tariff arrangements, showing traditional NEM (left), VNEM (center), and NEMA (right).



In the VNEM tariff system, the solar facility is installed on the building roof or nearby, often on a carport (1), multiple customers with individual meters receive credits for the electricity (2), and the property receives grid electricity through one service delivery point (3). No load is allowed at the generation meter, so that the solar facility sends its generation to the electrical grid, while tenant and common area units consume energy from the grid. The compensation from the generation is allocated between the tenant and common area units – as pre-determined by the generating account holder, usually the landlord – via monthly utility bill credits. (Note the term “grid” here is being liberally applied to any infrastructure beyond the customer’s meter; a characterization some of the supporters of this bill dispute.)

In the NEMA tariff system, the solar facility may be installed onsite or on adjacent or contiguous properties (1), serving a single customer with multiple meters on these adjacent or contiguous properties (2), and sized relative to load such that participating customers receive no net surplus compensation for their generated electricity. The customer receives a credit determined dynamically (every 15 mins) based on each benefiting meter’s usage allocation for each month.

VNEM was originally adopted as a tariff to facilitate benefits to tenants from a solar energy system installed on an affordable housing complex without master metering hardware or site-specific electric utility infrastructure upgrades, as part of the Multifamily Affordable Solar Housing (MASH) Program. In 2008, the CPUC authorized the expansion of VNEM to apply to any multitenant property that installs a generation facility, not just affordable housing. Currently, utilities have just under 3,000 properties interconnected to the grid under a VNEM tariff with a cumulative solar capacity of about 138 MW.⁹ This is a low participation rate. For comparison, there are almost 15,300 MWs of cumulative capacity operating under a NEM tariff today.¹⁰ Most VNEM projects and capacity participate in the low-income options: MASH or the Solar on

⁹ Pg. 69, *Ibid.*

¹⁰ <https://www.californiadgstats.ca.gov/charts/>

Multifamily Affordable Housing (SOMAH) program tariffs.¹¹ Only one utility, Pacific Gas & Electric (PG&E), reports any existence of the use of storage combined with solar in the VNEM tariff (one customer, with a capacity of 13 kilowatts of battery storage.)¹²

NEMA was adopted pursuant to SB 594 (Wolk, Chapter 610, Statutes of 2012), to allow customers the ability to install one generation facility sized to serve the entire load of these meters (up to one megawatt) as opposed to separate facilities at each meter. This arrangement acknowledged that for many it was too cost-prohibitive to require individual solar facilities behind each meter on the customer's account. Per statute, NEMA is predicated on the CPUC making a determination that aggregating the load from multiple meters would not result in an increase in the costs for customers not participating in the NEMA tariff. Customers who elect to participate in NEMA are prohibited from receiving net surplus electricity compensation. As a subtariff of NEM, the CPUC determined in Resolution E-4854 that the statewide cap of 5,256 MW (allocated per IOU) and sunset of July 1, 2017,¹³ apply to the NEMA tariff.¹⁴ Currently, utilities have about 13,000 properties interconnected to the grid under a NEMA subtariff with a cumulative solar capacity of about 1,000 MW.¹⁵ Based on data provided in the proceeding,¹⁶ PG&E customer participation is split between residential (2,307 properties), non-residential (2,357 properties), and mixed residential and nonresidential (2,387 properties). The cumulative capacity of three property types range from 25.95 MW, to 557.9 MW. Utilities reported that combined solar and storage installations participating in NEMA is about 181 of the 13,000 properties.

CPUC November 2023 VNEM and NEMA Decision. In the December 2022 NBT decision, the CPUC declined to adopt changes to the VNEM or NEMA tariffs, instead indicating their intention to revisit those tariff designs at a later date. Nearly a year later, in November 2023, the CPUC adopted a decision concerning VNEM and NEMA.¹⁷ In the decision the CPUC noted – for PG&E VNEM customers – a cost shift to be over \$15,300 per nonresidential customer, compared to \$1,857 per residential customer. The actual value of the cost shift on a kilowatt basis was approximately the same between these customer types – \$365/kW for residential and \$385/kW for nonresidential¹⁸ – so the stark difference arises from the nonresidential accounts having much larger systems per individual customer.

Due to this finding, as well as a robust discussion on ensuring equity between residential customers that are homeowners (and thus take service under a traditional NEM tariff) and renters (that would likely take service under VNEM), the CPUC adopted different netting requirements between residential and nonresidential accounts under Net Billing Tariff – Virtual (NBT-V) arrangement. The CPUC adopted a 15-minute unit-level netting of consumption and generation

¹¹ Table 1, pg. 12, D. 23-11-068. 955 facilities for general market, versus 1,879 for MASH/SOMAH.

¹² Pg. 12, D. 23-11-068

¹³ PUC § 2827(h)(B); after cap or sunset is reached, program is subject to CPUC discretion but statute directs “*there shall be no limitation on the amount of generating capacity or number of new eligible customer-generators entitled to receive service...*” pursuant to PUC § 2827.1(c)

¹⁴ Pg. 5, Reso E-4854, June 15, 2017;

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M190/K169/190169188.PDF>

¹⁵ Pg. 69, D. 23-11-068

¹⁶ R. 20-08-020; Table 10, pg. 82, D. 23-11-068

¹⁷ D. 23-11-068

¹⁸ Table 5, pg. 26; D. 23-11-068

for residential customers, which is meant to approximate the availability of “self-consumption” provided to single-meter NBT properties.

The consequence of this is that for eligible residential accounts, rather than the entire generated export being credited at the ACC-rate, a portion of the export would receive a credit based on the retail rate. For nonresidential accounts, the CPUC decision declined to adopt a similar approach, so that all generating electricity would receive a credit based on the ACC value. As such the decision adopted different requirements for residential versus nonresidential customers, specifically noting two separate customers: 1) benefitting customers taking retail service on residential rates and 2) nonresidential benefitting customers not taking retail service on residential rates.

For NEMA, the CPUC decision notes no obligation to continue the program, stating the authorizing statute only required NEMA as part of NEM 1.0 and the statutory NEM 1.0 cap of ~5,256 MWs had been reached.¹⁹ Regardless, the CPUC adopted a Net Billing Tariff – Aggregation (NBT-A) to optimize land resources, including locating solar facilities on agriculturally underperforming land. The CPUC noted this land optimization provided “additional benefits but only to the subtariff customers, not all customers.”²⁰ The CPUC elected not to allow for netting/self-consumption. While the decision does not go into great detail regarding netting/self-consumption for NEMA, it does express concerns about interconnection costs in relation to NEMA and found that savings from net surplus compensation do not compensate for higher utility costs caused by NEMA subtariff customers.

COMMENTS:

- 1) *Author’s Statement.* According to the author, “The California Public Utilities Commission’s recent rule changes unfairly penalize non-residential utility customers – including apartment buildings, schools, community colleges, universities, water agencies, city facilities, farms, and shopping centers – by taking away any benefit for self-consuming their own on-site solar generation, if it is metered separately from their other usage. It is simply a matter of fairness that all customers can self-consume the power that they generate on their property and that multiple-metered customers get the same treatment as everyone else and not be required to sell their power to the utility at low prices and immediately buy it back at much higher retail prices. SB 1374 requires the CPUC to update its tariffs for situations with multiple meters to give credit for self-consumption in an equivalent way to how self-consumption is handled for single-family homes, multifamily residential customers, and non-residential customers with a single meter. SB 1374 will ensure that all utility customers with on-site generation are given fair and equal treatment for the energy that they self-consume.”
- 2) *This bill.* SB 1374, if chaptered, would reverse a CPUC decision establishing the NBT-V and NBT-A tariffs for customers developing rooftop solar (or other qualifying facilities) in multiple-meter arrangements. Under this bill all NBT-V and NBT-A customers would be authorized to net exports and imports in 15 minute intervals. As mentioned above, netting for “self-consumption” was raised by multiple parties, yet the CPUC’s decision granted this unit-level netting only to residential customers under NBT-V. Table 1 below

¹⁹ Pg. 73, D. 23-11-068

²⁰ Pg. 78, D. 23-11-068

shows how these tariffs have evolved with each iteration of NEM policy, as well as what is proposed under this bill.

Version	Standard (NEM, NBT)	Virtual (VNEM, NBT-V)	Aggregation (NEMA, NBT-A)
<i>Program Design</i>	<ul style="list-style-type: none"> • Same customer, one meter • All generation first serves onsite load –load behind generator meter. • Export kWh based on metered exports net consumption. 	<ul style="list-style-type: none"> • Multiple customers, multiple meters • All generation exports – No load allowed at the generation meter other than that necessary for the operation of the generator. • Export credits based on a pre-determined allocation by the property owner. 	<ul style="list-style-type: none"> • Same customer, multiple meters • Most generation exports – Generator meter may have load and receive export credit allocations. • Export credit amounts matched against load – determined dynamically based on meter usage. • No compensation for surplus export beyond what covers usage.
NEM 1.0	Export credit based on the full retail rate.		
<i>NEM 2.0</i>	Export credit based on the retail rate less non-bypassable charges. Nonbypassable charges based on each benefiting meter's usage from the grid.		
<i>NBT (NEM 3.0)</i>	Export credit based on the ACC.	Residential: export credit either 1) retail rate for allocated kWh matched by usage, or 2) based on the ACC for all allocated kWh in excess of usage kWh. Non-residential: export credit based on the ACC.	Export credit based on the ACC.
<i>SB 1374</i>	--unchanged--	Export credit either 1) retail rate for kWh matched by usage, or 2) based on the ACC for kWh in excess of usage kWh.	

The supporters of this bill contend the CPUC decision should be changed and believe the CPUC’s decision lacked explanation as to why the same approach for residential customers under NBT-V should not also apply to nonresidential customers. They argue the CPUC’s decision will make it economically infeasible to install solar projects at schools, farms, and multifamily properties. In the case of multifamily properties, supporters contend that the landowner will have a vastly diminished incentive to install

solar or other onsite renewable generation due to nonresidential accounts not receiving the higher export compensation under netting. They indicate this will result in renters not realizing their benefits under NBT-V, even as the tariff provides their accounts may be netted for self-consumption, the more generous option. This particular concern does not seem to have been discussed in the CPUC's decision. However, the need to address existing costs and cost shifts to better align all NEM-related programs was raised, repeatedly. Many of the supporters of this bill contend that the treatment of self-consumption will determine the ability of future customers to participate in the program, and believe the CPUC decision goes too far in changing this treatment.

- 3) *Self-Consumption*. Under NBT for the traditional single customer, single meter system, both the generation and consumption of electricity occur behind the same meter, as shown in Figure 1 above. The utility only has knowledge of generation sent to, and consumption from, the grid; consumption behind-the-meter – for the most part – appears as load reduction. For VNEM and NEMA accounts, utilities have knowledge of both the system generation with a unique meter for generation output, and consumption with a unique import meters. “Self-consumption” in these circumstances is an accounting convention in order to credit a certain portion of exports (those matched with usage in a certain interval) at a higher rate. It needn't be connected to the actual physics on the grid.

The CPUC's decision on NBT-V, however, recognized that residential customers in multitenant arrangements would be disadvantaged relative to residential customers in single family homes under NBT. The CPUC noted an inequity among residential customers, should they adopt a NBT-V solely based on ACC rates, and instead determined “fifteen-minute unit-level netting in the NBT-V will approximate the availability of self-consumption provided to residential NBT customers and will provide commensurate compensation between homeowners...and renters.”²¹

The CPUC declined to adopt such approximations for nonresidential customers or customers seeking to aggregate across multiple meters. The supporters of this measure note the unfairness in excluding these customers, noting this bill will ensure “fair and equal treatment for the energy that they self-consume.” They state the CPUC decision forces these customers to export all the energy they produce and buy it back from the utility at four times the cost (i.e., export at ACC, import at retail).

The CPUC decision discussed self-consumption under VNEM extensively, acknowledging that “when generation and customer meters share a physical connection to the grid, either at the meter bank through a shared bus bar or at the transformer, self-consumption can occur.”²² However, the CPUC went on to note that long-standing policies of the VNEM tariff never required onsite consumption (i.e. all customers load behind the same meter as the generator) due to it being “costly and resource-heavy.” As a result, the CPUC notes in PG&E territory, 77% of VNEM generation and load share a transformer, while only 41% of VNEM and low-income virtual tariffs do.²³ The CPUC also noted that past VNEM decisions made it easier to install the generation anywhere on the property (such as a parking lot), which decreases the likelihood of self-consumption.

²¹ Findings of Fact #50, pg. 204, D. 23-11-068

²² Pg. 31, D. 23-11-068

²³ Findings of Fact #24, pg. 201; D. 23-11-068

As a result, the CPUC declined to base the NBT-V on the “presumption of onsite self-consumption.”²⁴ The decision was silent as to “self-consumption” for NEMA, except to note it can occur on the generating account (i.e., any load behind the meter located on the same property as the renewable resource).²⁵

- 4) *What is Fair?* The fundamental principles raised in the discussion of self-consumption are two-fold: 1) if you are generating your own power on your property, you should be able to consume that power; and 2) if you are using the grid, you should pay your fair share of the costs of that grid usage. The gulf in the discussion around “self-consumption” seems to arise in the tension between these two principles; and a lack of agreement as to what is physically occurring on the system. This bill – in authorizing self-consumption for all VNEM and NEMA customers – favors the circumstances where customer load is located close to the generation, such as behind the same transformer as acknowledged by the CPUC. However, as noted above, this is not always the case under either tariff arrangement. In some circumstances – such as a NEMA arrangement where multiple contiguous parcels spread out for miles (such as on some farms); and cross roads or bodies of water, as permitted in this bill – the notion of self-consumption strains credulity. However, the supporters of this bill would likewise argue that the CPUC decision overly favors the idea of grid usage by preventing unit-level netting under either tariff, except for residential VNEM accounts.

If a boundary is established whereby on one side one might reasonably consider the customer as “self-consuming,” while on the other the customer is using the grid, this bill would be boundless. All customers in all circumstances would be allowed to “self-consume.” Opponents of this measure advocate that the boundary should be drawn – and has historically been drawn – at the customer meter. They argue that is where long-standing utility policy has established the boundary. Everything occurring behind the customer’s meter is load management, but as soon as it crosses the meter it is part of the utility grid, regardless of if that electron serves load a foot or a football field away. The utilities note that our grid operates as a *system*, and like our highway system you pay for its construction and maintenance not based on how often or how long it is used but whether you used it at all. Moreover, the notion of an “insignificant usage of the grid” is one that has been debated at the CPUC for decades, with the CPUC consistently rejecting it.²⁶

Nevertheless, this bill – in claiming self-consumption for practices that are not always physically self-consumption, and evoking fairness in self-consuming based on the CPUC deciding that an approximation (not physical reality) was appropriate for residential VNEM accounts – asks the Legislature to settle this dispute in favor of on-site generators.

Given the complexity of these arguments, the conflating between physics principals and accounting practices, and the very real customer costs at stake if the boundary is not drawn appropriately, the committee recommends amendments to direct the CPUC to determine under what circumstances on-site self-consumption is occurring. The committee further recommends amendments to limit the provisions of the bill to only

²⁴ Pg. 32, D. 23-11-068

²⁵ Pg. 85, D. 23-11-068

²⁶ For instance, the CPUC rejected arguments that retail sales on distribution circuits do not utilize transmission facilities in D.03-02-068.

apartments (under VNEM) and schools (under NEMA) until such a CPUC determination occurs. And the committee recommends clarifying statements to ensure costs shifted to non-participants are minimized, by requiring all participants be subject to any applicable nonbypassable charges, flat rates, or minimum bills.

- 5) *Bill Mechanics.* The language in this bill groups both VNEM and NEMA tariffs under one subdivision, and applies changes that may be suitable to one tariff onto both. For instance, allowing eligible customer-generators to “elect to aggregate” under VNEM may mean the tenants – which meet the definition of eligible customer-generator in PUC § 2827 – have the power to decide whether to install a solar array on their apartment complex. This is not how VNEM operates; the generating account (i.e., the property owner) makes the decision. Or viewed another way, the “elect to aggregate” language under VNEM could permit landlords to consolidate tenant accounts, in violation of longstanding statutory master meter prohibitions. Either way, it is not a suitable way to describe the operations under VNEM. *As such, the committee recommends amendments to separate the bill into two parts – one for VNEM and one for NEMA – so that changes appropriate to each tariff may be isolated and inappropriate provisions removed.*
- 6) *Further Protections Needed.* This bill provides the self-consumption arrangement to all virtual tariff arrangements, including the unique tariffs designed to serve multi-tenant affordable housing properties eligible under the Multifamily Affordable Solar Housing (MASH) and Solar on Multifamily Affordable Housing (SOMAH) programs. In the November 2023 decision, the CPUC declined to change the MASH and SOMAH tariffs, leaving the compensation at the more financially generous rate.²⁷ This bill would inadvertently revoke that. *As such, the committee recommends amendments to exclude the MASH and SOMAH tariffs from the bill.*

7) *Related Legislation.*

AB 2256 (Friedman) directs the CPUC to conduct an independent cost-of-service analysis evaluating the standard contract or tariff developed by the CPUC’s decision, “Decision Revising Net Energy Metering Tariff and Subtariffs,” issued December 15, 2022. Status: Held – Assembly Committee on Appropriations.

AB 2619 (Connolly) requires the CPUC to develop, by 2027, a new solar tariff to replace the current net billing tariff. Requires that the new tariff be structured to ensure achievement of an annual rate of rooftop solar installation sufficient to meet anticipated needs described in the Joint SB 100 Report. Reverts all NBT customer-generators to the prior net energy metering (NEM) tariff, until the new tariff is available in 2027. Status: *In Utilities and Energy Committee.*

8) *Prior Legislation.*

AB 1139 (Lorena Gonzalez) directed the CPUC to adopt a new NEM standard contract or tariff, which the bill defines as the “replacement tariff,” by August 1, 2022, and requires an electrical IOU to offer the replacement tariff to an eligible customer-generator by

²⁷ Pg. 66, D. 23-11-068

December 31, 2023. If the CPUC fails to act, the CPUC is required to adopt a new tariff under terms prescribed by the bill. Status: Died – Assembly Inactive file.

AB 327 (Perea) instituted several rate reforms and required the CPUC to adopt a successor NEM tariff no later than December 31, 2015. Status: Chapter 611, Statutes of 2013.

SB 594 (Wolk) among its provisions, authorized NEMA to allow an eligible customer-generator to aggregate the electrical load from multiple meters, and NEM credits are shared among all property that is attached, adjacent, or contiguous to the generation facility. Required that a customer-generator must be the sole owner, lessee, or renter of the properties in order to utilize NEMA. Status: Chapter 610, Statutes of 2012.

SB 656 (Alquist) required every electric utility, including electrical corporations, which offer residential service to develop a standard tariff providing for NEM to eligible customer-generators. Applies only to those systems that produce up to 10 kilowatts and would be restricted to 0.1 percent of a utility's peak demand. Status: Chapter 369, Statutes of 1995.

REGISTERED SUPPORT / OPPOSITION:

Support

350 Conejo
350 Humboldt
350 Humboldt: Grass Roots Climate Action
350 Sacramento
350 South Bay LA
350 Southland Legislative Alliance
350 Ventura County Climate Hub
Acterra Action for A Healthy Planet
Acterra: Action for A Healthy Planet
Advanced Energy United
Affordable Development 2002 LLC
Affordable Development 3612 LLC
Affordable Development 3745 LLC
Affordable Development 380 LLC
Affordable Development 5616 LLC
Affordable Development 818 LLC
Affordable Development 820 LLC
Agricultural Council of California
Agricultural Energy Consumers Association
Alameda County Democratic Party
Almond Alliance
Aztec Solar INC.
Ballona Institute
Ban Sup (single Use Plastic)
Bay Area Community Services
Benicians for A Safe and Healthy Community

Bryce Nesbitt
CA Cotton Ginners & Growers Association
Cadem Renters Council
California Alliance for Community Energy
California Apartment Association
California Association of Local Housing Finance Agencies
California Association of Local Housing Finance Agencies (CAL-ALHPFA)
California Association of School Business Officials
California Association of School Business Officials (CASBO)
California Association of Winegrape Growers
California Building Industry Association
California Building Industry Association (CBIA)
California Climate & Agriculture Network (CALCAN)
California Climate Voters
California Construction & Industrial Materials Association
California Democratic Party
California Democratic Renters Council
California Farm Bureau
California Fresh Fruit Association
California Housing Partnership
California Housing Partnership Corporation
California League of Food Producers
California Solar & Storage Association
California State Pta
California's Coalition for Adequate School Housing (CASH)
Californians for Energy Choice
Change Begins With Me (INDIVISIBLE)
Citadel Roofing and Solar
Clean Coaliton
Clean Earth 4 Kids
Cleaneearth4kids.org
Climate Action California
Climate Action Campaign
Climate Breakthrough
Climate Reality Project San Fernando Valley Chapter
Climate Reality Project, Los Angeles Chapter
Climate Reality San Francisco Bay Area Chapter
Cloverdale Indivisible
Coalition for Adequate School Housing
Coastal Lands Action Network (CLAN)
Community College Facility Coalition
Contra Costa Moveon
County School Facilities Consortium
Courageous Resistance of The Desert
Crenshaw Subway Coalition
Culver City Democratic Club
Custom Power Solar
Defend Ballona Wetlands
Domo Modular LLC

East Bay Housing Organization - Ebho
East Bay Housing Organizations
East Valley Indivisibles
Eden Housing
Elders Climate Action (ECA) Northern California (NORCAL) and Southern California (SOCAL)
Chapters
Elders Climate Action, Norcal and Social Chapters
Elders Climate Action: Northern California
Elders Climate Action: Southern California
Engie North America
Environment California
Extinction Rebellion San Francisco Bay Area
Feminists in Action (formerly Indivisible CA 34 Womens)
Genup
Glendale Environmental Coalition
Glendale Environmental Coalition
Green Schoolyards America
Greenbank Associates
Grossmont Union High School District
Habitable Designs
Hammond Climate Solutions
Hang Out Do Good
Harris & Kaen INC
Hed
Hillcrest Indivisible
Homefed Corporation
Housing Action Coalition
Humboldt Unitarian Universalist Fellowship's Climate Action Campaign
Indian Valley Indivisibles
Indivisible East Bay
Indivisible 36
Indivisible 41
Indivisible Alta Pasadena
Indivisible Auburn CA
Indivisible Beach Cities
Indivisible CA 45
Indivisible Ca-25 Simi Valley Porter Ranch
Indivisible Ca-43
Indivisible California Green Team
Indivisible Claremont / Inland Valley
Indivisible Colusa County
Indivisible El Dorado Hills
Indivisible Elmwood
Indivisible Euclid
Indivisible Los Angeles
Indivisible Manteca
Indivisible Marin
Indivisible Media City Burbank
Indivisible Mendocino

Indivisible Normal Heights
Indivisible Oc 46
Indivisible Oc 48
Indivisible Petaluma
Indivisible Resisters Walnut Creek
Indivisible Ross Valley
Indivisible Sacramento
Indivisible San Diego Centra
Indivisible San Diego Central
Indivisible San Jose
Indivisible San Pedro
Indivisible Santa Barbara
Indivisible Santa Cruz County
Indivisible Sausalito
Indivisible Sebastopol
Indivisible Sf
Indivisible Sf Peninsula and Ca-14
Indivisible Sonoma County
Indivisible South Bay LA
Indivisible Stanislaus
Indivisible Ventura
Indivisible West Side LA
Indivisible Yolo
Ivy Energy
Jkb Energy
Jkb Living
Labor Network for Sustainability
Laguna Beach; City of
Livermore Indivisible
Local Clean Air Energy Alliance
Local Clean Energy Alliance
Long Beach Alliance for Clean Energy
Long Beach Environmental Alliance
Long Beach Unified School District
Los Angeles Indivisible
Los Angeles Unified School District
Menlo Spark
Mill Valley Community Action Network
Mothers Out Front California
Mt. San Antonio Gardens Resident Committee on Conservation & Sustainability
Mutual Housing California
Ndg Real Estate
New Buildings Institute
Nexamp
Normal Heights Indivisible
Oakland Unified School District
Oakview Comunidad
Ofi 2275 LLC
Ofi 2290 LLC

Orchard City Indivisible
Our Revolution Long Beach
Pacific Solar & Wind
Panoramic Interests
Pearlx Infrastructure, LLC
Progressive Democrats of America, California
Progressive Democrats of American, California
Progressive Democrats of Santa Monica Mountains
Prologis Management, LLC
Recolte Energy
Redwood Energy
Resources for Community Development
Rewiring America
Rhoades Planning Group
Rooted in Resistance
San Diego Energy District
San Diego Unified School District
San Jacinto Unified School District
San Joaquin Valley Democratic Club
San Jose Community Energy Advocates
San Luis Obispo Mothers for Peace
San Mateo Climate Action Team
Santa Clara County Office of Education
Santa Clara County School Boards Association
Santa Cruz Climate Action Network
School Energy Coalition
Scudder Solar Electrical Energy Systems
Sd Affordable Development LLC
Sfv Indivisible
Silicon Valley Youth Climate Action
Social 350
Solano County Democratic Central Committee
Solar Energy Industry Association
Solar Rights Alliance
Solar Technologies
Solarcraft
Solargain West
Solvista Farm
Sonoma County Democratic Party
Steve Brown, Volunteer Organizer for Citizens Climate Lobby (as Individual)
Strategic Energy Innovations
Studio Kda
Sunflower Alliance
Sunnova Energy Corporation
Sunpower by Quality Home Services
Sunpower Corporation
Sustainable Mill Valley
Sustainable Rossmoor
Sustainable Silicon Valley

Sustainable Systems Research Foundation
Ten Strands
Tenants Together
The Austin Group
The Climate Alliance of Santa Cruz County
The Climate Reality Project, San Fernando Valley
The Climate Reality Project: Silicon Valley
The Harker School
The R&d Lab
The Resistance Northridge-indivisible
Together We Will - Los Gatos
Together We Will Contra Costa
Tracy Unified School District
Tww/indivisible - Los Gatos
Ukiah Unified School District
Undauntedk12
Usgbc Ca-duplicate
Usgbc-ca
Valley Women's Club of San Lorenzo Valley
Valta Energy LLC
Vector Green Power, LLC
Venice Resistance
Vincent Casalaina, Willard
Vindium Real Estate
Vote Solar
West LA Democratic Club
Western Agricultural Processors Association
Western Growers Association
White Metal Golf
Wicks Roofing and Solar INC
Wine Institute
Winston Oak LTD
Women's Alliance Los Angeles
Women's Energy Matters
Yalla Indivisible

Opposition

California State Association of Electrical Workers
California Wind Energy Association
Coalition of California Utility Employees
Edison International and Affiliates, Including Southern California Edison
Pacific Gas and Electric Company
Pacific Gas and Electric Company and Its Affiliated Entities
Public Advocates Office
San Diego Gas & Electric
San Diego Gas and Electric Company
Southern California Edison

Oppose Unless Amended

The Utility Reform Network (TURN)

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