PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Item #21 (Rev. 1)
Agenda ID# 22015
ENERGY DIVISION **RESOLUTION E-5301**
November 30, 2023

R E S O L U T I O N

Resolution E-5301. Establishment of Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company Net Billing Tariffs as Directed by Decision 22-12-056.

PROPOSED OUTCOME:

- Approves Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) net billing tariffs, with modifications.
- Directs PG&E, SCE, and SDG&E to submit Tier 2 advice letters within 60 days of the effective date of this resolution, revising their net billing tariffs to reflect the changes directed in this resolution, with these revisions effective July 1, 2024.

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 net billing tariff were authorized in D.22-12-056.

By Pacific Gas and Electric Company Advice Letter 6848-E/6848-E-A, filed on March 24, 2023; Southern California Edison Company Advice Letter 4961-E/4961-E-A, filed on March 27, 2023; and San Diego Gas & Electric Company Advice Letter 4155-E/4155-E-A, filed on March 31, 2023.

SUMMARY

This resolution approves Pacific Gas and Electric Company (PG&E) Advice Letter (AL) 6848-E (with modifications made by PG&E AL 6848 E-A), Southern California Edison

Company (SCE) AL 4961-E (with modifications made by SCE AL 4961-E-A), and San Diego Gas & Electric Company (SDG&E) AL 4155-E (with modifications made by SDG&E AL 4155-E-A), effective upon this resolution's effective date.

Decision (D.) 22-12-056 established the framework for the net billing tariff. Ordering Paragraph 12 of D.22-12-056 directs PG&E, SCE, and SDG&E (collectively "the utilities") to file their proposed net billing tariffs in Tier 2 ALs no later than 45 days after the adoption date of the decision. The utilities timely submitted their initial ALs on January 30, 2023.

The original and supplemental ALs are approved. As detailed below, within five business days of the effective date of this resolution, the utilities shall publish uniform machine-readable spreadsheets containing the retail export compensation rates on their respective websites. Within 60 days of the effective date of this resolution, the utilities shall submit Tier 2 advice letters proposing several tariff changes articulated below. This resolution also directs a minor change in the calculation of retail export compensation rates, to be submitted in a Tier 1 AL after the next Avoided Cost Calculator update. Finally, this resolution grants the Director of the Energy Division, or their designee, authority to make technical changes to the utilities' respective interconnection portals and interface.

BACKGROUND

Pursuant to California Public Utilities Code Section 2827.1, Decision (D.) 22-12-056 was adopted on December 15, 2022. The decision adopted the net billing tariff (NBT) – a successor to the net energy metering successor tariff (NEM 2.0). Ordering Paragraph 12 (f) of D.22-12-056 directed a series of implementation procedures, including 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 file advice letters (AL) 45 days after the decision was adopted to update current NEM tariffs and establish the future NBT. On January 30, 2023, the utilities each submitted three separate ALs. PG&E AL 6848-E, SCE AL 4961-E, and SDG&E AL 4155-E (the ALs subject to this disposition) were submitted to create the utilities' new NBTs. PG&E submitted partial supplemental AL 6848-E-A on March 24, 2023; SCE submitted partial supplemental AL 4961-E-A on March 27, 2023; and SDG&E submitted partial supplemental AL 4155-E-A on March 31, 2023.

NOTICE

Notices of PG&E AL 6848-E, SCE AL 4961-E, and SDG&E AL 4155-E were made by publication in the California Public Utilities Commission's (Commission, or CPUC) Daily Calendar. PG&E, SCE, and SDG&E state that copies of the ALs were mailed and distributed in accordance with Section 4 of General Order 96-B.

PROTESTS

The California Solar and Storage Association (CALSSA) and the Solar Energy Industries Association (SEIA) timely protested PG&E AL 6848-E, SCE AL 4961-E, and SDG&E AL 4155-E on February 21, 2023.

PG&E and SDG&E responded to the protests of CALSSA and SEIA on February 28, 2023. SCE responded to the protests of CALSSA and SEIA on March 1, 2023. In their responses, the utilities indicated their intention to file supplemental ALs at a later date to address certain issues in the protests.

PG&E submitted partial supplemental AL 6848-E-A on March 24, 2023. SCE submitted partial supplemental AL 4961-E-A on March 27, 2023. SDG&E submitted partial supplemental AL 4155-E-A on March 31, 2023. On April 28, 2023, Energy Division reopened the protest period with regards to the supplemental ALs until May 18, 2023.

CALSSA and SEIA timely protested PG&E AL 6848-E-A, SCE AL 4961-A, and SDG&E AL 4155-E-A on May 18, 2023. PG&E, SCE, and SDG&E responded to those additional protests on May 25, 2023.

The major issues raised by the protests are described below.

Climate Zone Averages in Retail Export Compensation Rate Values

In their initial protests, CALSSA and SEIA propose that the Commission direct the utilities to use simple averages of Avoided Cost Calculator (ACC) values across climate zones in their calculations of retail export compensation rates. CALSSA and SEIA argue that the utilities' proposal to use weighted values is not ordered by D.22-12-056, adds unnecessary complexity, and causes transparency issues.

In its reply, PG&E asserts that since in D.22-12-056 the Commission considered having separate export values by climate zone, the Commission is interested in ensuring the geographic differentiation of export values is passed through to customers. PG&E provides a table showing the differences between simple and weighted average ACC values in which the maximum difference is 0.08 percent. To satisfy CALSSA's wish for transparency, PG&E provides the weighting factors used. In their replies, SCE and SDG&E assert that a weighted average of the climate zones' values is still an average and more closely represents avoided costs of the current mix of distributed energy resource penetration.

In its protest to PG&E's supplemental AL, CALSSA proposes that should the Commission approve weighted averaging, it should require the utilities to publish rates via AL within 45 days of the ACC update, for parties to conduct discovery and resolve disputes before the January effective date.

PG&E asserts in its reply to CALSSA's supplemental protest that CALSSA's proposal would more appropriately be made in Rulemaking (R.) 22-11-013 as part of the ACC update process.[1] In its reply, SCE agrees to CALSSA's proposal, while in its reply SDG&E disagrees that it is necessary or a good use of resources, and posits that it could delay implementation of new retail export compensation rates. SDG&E proposes that should the Commission desire the utilities to publish geographical weighting factors, the IOUs should do so on their NBT websites.

Format and Content of Published Retail Export Compensation Rates

CALSSA notes in its initial protest that the ALs provide different amounts of retail export compensation rate data in different formats. CALSSA proposes that to ensure transparency and consistency across utilities, each utility should post retail export compensation rates for every year through 2050 on its website in downloadable .csv and .xml files. CALSSA proposes that the files should all be in single column structure, with the same column headings and number formats, and in alignment with the format used by the CEC Market Informed Demand Automation Server (MIDAS); and that the format should stay up to date with MIDAS as it evolves.

PG&E's reply does not address this topic. In its reply, SCE agrees that the posting and presentation of retail export compensation rates should be consistent across the utilities

[1] Pursuant to D.22-05-002, the Commission biannually updates forecasted ACC values as part of R.22-11-013, the Order Instituting Rulemaking to Consider Distributed Energy Resource Program Cost-Effectiveness Issues, Data Access and Use, and Equipment Performance Standards.

to provide easy access and transparency. SCE states that it will coordinate with PG&E and SDG&E to provide updated indicative rates in a consistent form. In its reply, SDG&E asserts that the utilities need not present this data in an identical format because each utility has different capabilities and customer operations and marketing practices.

In its protest to the supplemental ALs, CALSSA notes that only SCE's supplemental AL states that the utilities will provide and post updated indicative retail export compensation rates in a consistent form. CALSSA argues that inconsistent data formats would cause complications for solar and storage contractors and other service providers, and proposes that the Commission schedule a workshop to find agreement on a common data format in advance of the 2024 decision on the ACC.

In its reply to CALSSA's supplemental protest, PG&E asserts that CALSSA's request for a workshop would more appropriately be made in R.22-11-013 as part of the ACC update process.

Separate Application of Generation- and Delivery-Related Bill Credits

In its initial protest, CALSSA states that PG&E and SDG&E propose to limit delivery-related retail export compensation credits to offsetting delivery-related charges and to limit generation-related credits to offsetting generation-related charges. For example, the value of avoided procurement costs in the ACC, and thus in the retail export compensation rate, would only be able to offset the customer's generation charges. CALSSA asserts that D.22-12-056 requires separate data columns for delivery-related and energy-related portions of the retail export compensation rate only to accommodate unbundled customers. CALSSA concludes that since bundled customers receive both types of credits from the utility, there is no need to apply them independently. CALSSA argues that if bill credit value exists disproportionately in either the energy or delivery side, customers responding to the price signal may not be able to use all of the credits if they exceed charges only on the energy or delivery side. In its protests of PG&E's and SDG&E's ALs, SEIA does not object to applying delivery- and energy-related portions of the retail export compensation rate separately, other than at the annual true-up. SEIA proposes that, to fully compensate a customer for all the costs it helped PG&E and SDG&E avoid, the utilities should calculate whether a customer is a "net producer" based on whether the combined retail export compensation rate credits for generation avoided costs and delivery avoided costs (excluding the ACC Plus credit) are larger than the combined generation and delivery charges during the relevant period.

In their replies, PG&E and SDG&E explained that the applicability of bill credits only to their respective bill components is a carryover from NEM 1.0 and NEM 2.0 practices, and that this is appropriate because D.22-12-056 did not direct a change to the practice. Further, PG&E asserts that this is necessary to maintain competitive neutrality amongst Load Serving Entities (LSE), because unbundled NBT customers would face an incentive to opt back to bundled service, as non-utility LSEs could not reduce delivery charge obligations. Finally, PG&E asserts, this would represent an asymmetric procurement obligation on the utilities by effectively requiring the utility to credit energy from oversized systems well beyond the actual consumption of the customer. SDG&E also raises competitive neutrality and asymmetric obligation issues.

In its protest to the supplemental ALs, CALSSA continues to advocate against limiting the applicability of bill credits only to their respective bill components. CALSSA asserts that treating retail export compensation rate components separately for bundled customers would be inconsistent with NEM because NEM retail export compensation is based on rates. CALSSA also asserts that community choice aggregators (CCA) could take steps to maintain competitive neutrality, proposing that CCAs could allow credits in excess of charges to result in payments to the customer.

PG&E asserts in its reply to CALSSA's supplemental protest that the Commission has no authority to require CCAs to provide such a structure, that CALSSA's suggested approach would lead to asymmetric procurement obligations and undermine competitive neutrality, and that the suggested payments would not be equivalent to the non-bifurcated credits requested by CALSSA. PG&E also asserts that its proposed approach correctly implements the intent of the decision, and that NBT credits are not so different from NEM credits that this treatment should not carry over. SCE does not address this topic in its reply. In its reply to CALSSA's supplemental protest, SDG&E asserts that CALSSA's proposed treatment would not maintain competitive neutrality with other LSEs and would likely result in NBT customers choosing the utility as their commodity provider. SDG&E argues that any credits for NBT provided by another LSE would only offset the commodity charges from that LSE, not the delivery portion of the unbundled customer's bill, while for a bundled customer, the generation credits would offset the delivery side of the bill as well. SDG&E also cites the D.22-12-056 statement that the division of the retail export credit between delivery and commodity is reasonable and considers competitive neutrality amongst LSEs as support for SDG&E's interpretation that the Commission intended for the retail export credits to maintain competitive neutrality.

Eligibility of Retail Exports for Demand Response Program Compensation

In its protest, CALSSA asserts that eligibility for demand response programs should be determined by those programs. Therefore, it proposes that the Commission direct PG&E and SDG&E to delete the language in their ALs proposing to prohibit customers that receive retail export compensation credits from also being compensated for exports in demand response programs. Similarly, SEIA asserts that these utilities' proposed prohibition is not discussed in D.22-12-056, meaning that they lack authorization to include it as part of the NBT.

In its reply, PG&E states that the language in question is in the NEM 1.0 and NEM 2.0 tariffs, and that D.22-12-056 did not authorize changing this in the NBT. In its reply, SDG&E agrees with CALSSA that eligibility for demand response programs should be determined in demand response proceedings, but concludes that NBT customers should not be made eligible to participate in such programs in the R.20-08-020 proceeding. SCE does not address this topic in its reply.

Establishing Disadvantaged Community Treatment Eligibility

CALSSA asserts in its initial protest that it will be important for utilities and customers to use the same tool to establish disadvantaged community (DAC) residence, to make sure customer expectations are consistent with utility determinations. CALSSA recommends using the CalEnviroScreen 4.0 Data Dashboard, with a property deemed eligible for the higher ACC Plus adders if the "CalEnviroScreen Percentile" is listed as 75 or greater or is blank. CALSSA further recommends that the utilities ask the interconnection applicant if the property is in a DAC and then notify the applicant during application review if the utility disagrees with the customer.

In its reply, PG&E states that it already verifies DAC status as defined in D.18-06-027[2] using CalEnviroScreen. PG&E proposes to make a link available to the DAC look-up tool to allow customers to confirm their DAC status when interconnecting under the NBT, but asserts that it is not necessary to ask customers to self-select DAC eligibility during interconnection. In its reply, SCE suggests that a mapping tool be selected as the preferred data source in coordination with the Energy Division, and that DAC status eligibility be determined through an attestation from the customer/applicant, rather than SCE validating DAC qualification or single-family home ownership at the time of application so as to prevent adding additional time to the application review process.

[2] D.18-16-027 adopted programs to promote installation of renewable generation in disadvantaged communities.

However, SCE proposes to reserve the right to audit or validate this information at a later time. In its reply, SDG&E states that this topic does not apply to it as it has no ACC Plus adder.

Lock-In Period Eligibility and Glide Path Step Determining Dates

In their initial protests, CALSSA and SEIA propose that customer eligibility for a retail export compensation rate lock-in period should be based on interconnection application submittal date rather than Permission to Operate date ("PTO" or "interconnection date"). CALSSA argues that D.22-12-056 created a lock-in period to provide customers with certainty about the terms of their investment, but that a lock-in period based on interconnection date would not provide certainty. Similarly, CALSSA proposes that a customer's ACC Plus adder level should be based on the customer's interconnection application submittal date. CALSSA argues that, as with the lock-in period, in D.22-12-056 the Commission intended the adders to provide certainty to customers, and therefore that customers' ACC Plus adder levels must depend on their interconnection application dates.

In their replies regarding establishing lock-in period eligibility, the utilities refer to language in D.22-12-056 linking the lock-in period with a customer's interconnection date. SCE adds that it believes that when submitting an application, the customer should have an informed expectation on when the system will be in operation, enabling the customer to manage uncertainty. SCE asserts that in its service area, most residential applications are submitted after the system is installed, and permission to operate (PTO) the system is granted as soon as full documentation is provided to SCE, so the difference between application date and PTO date is, as a practical matter, likely inconsequential. In its reply, SDG&E adds that this position is consistent with both NEM 1.0 and NEM 2.0 tariffs. Regarding establishing a customer's ACC Plus adder level, PG&E and SCE state in their replies that eligibility is based on enrollment date, and that submission of an interconnection application does not result in enrollment in the NBT. Only upon receiving PTO, PG&E states, is a customer enrolled. SDG&E does not address this topic in its reply as it has no ACC Plus adders.

In its protest to the supplemental ALs, CALSSA notes that PG&E's supplemental AL bases eligibility for a lock-in period on the interconnection application date as CALSSA requested. Also in its protest, CALSSA objects to the language in SDG&E's supplemental AL basing eligibility on the submittal of all documentation necessary to receive service, which CALSSA asserts would include the final building permit and would not be consistent with other eligibility triggers that are based on the submittal

date of interconnection applications that include all information except the final building permit.

In its reply to CALSSA's supplemental protest, PG&E does not discuss lock-in period eligibility, but restates the arguments in the utilities' previous replies regarding glide path eligibility. PG&E adds that D.22-12-056 states that "customers who take service on the successor tariff after the NEM 2.0 tariff sunset date, but who are temporarily billed on the NEM 2.0 tariff, will not receive the ACC Plus until the successor tariff is operationalized," and asserts that this further clarifies that customers will not receive the benefits of the NBT until they are billed on the tariff.

Nine-Year Retail Export Compensation Rate Lock-In Period

CALSSA and SEIA in their initial protests assert that PG&E's and SDG&E's ALs contain language that would start a customer's lock-in period on January 1 of the calendar year in which the customer interconnected. CALSSA and SEIA assert that under such a structure, a customer interconnecting in December would get a lock-in period of about eight years, in contrast to the D.22-12-056 language, "retail export compensation rates for residential and nonresidential net billing tariff customers will be based on a nine-year schedule of values […]."CALSSA and SEIA propose that this should be corrected to state that each customer's lock-in period is nine years from their PTO date.

In its reply, PG&E agrees that the 9-year legacy period should run from issuance of PTO and asserts that its tariff is clear that customers will receive a 9-year legacy period. PG&E further clarifies that the nine years should run from PTO whether the customer is initially billed on NEM 2.0 on a temporary basis or takes service on the NBT from the start. PG&E argues that it would not be appropriate to give a customer temporarily billed on NEM 2.0 (which has a more generous compensation structure) a new 9-year period upon commencement of billing on NBT, as such a customer would then receive a longer legacy period than the Decision allows. In its reply, SDG&E states that it addressed this concern in its response to CALSSA's item 10.[3]

Legacy Period Eligibility Timeframe

CALSSA and SEIA note in their initial protests that SCE's AL limits customer eligibility for a legacy period to customers that interconnect between April 15, 2023 and December 31, 2027, but they assert that this should be extended to April 14, 2028 to

[3] This is covered above under the heading "Lock-In Period Eligibility and Glide Path Step Determining Dates."

incorporate a full five years. CALSSA and SEIA argue that D.22-12-056 directed that the legacy period be five full years, and they cite decision text referring to the first five years of the successor tariff, *i.e.*, the glide path transition time, as support for their position.

In their replies, PG&E and SCE state that CALSSA's and SEIA's assertion conflicts with D.22-12-056 Appendix A, Customer Explanation of Net Billing Tariff, which states "After nine years, or if you either opt out or apply to connect your system after 2027, the prices you receive will be set every two years…" Conversely, in its reply SDG&E agrees with CALSSA and SEIA that eligibility for a legacy period should extend for a full five years.

In its protest to the supplemental ALs, CALSSA argues that D.22-12-056 called its Appendix A "illustrative" and asserts that language in the Appendix should not overrule the decision itself. CALSSA also repeats its interpretation of D.22-12-056, ordering paragraph 1 (a).

In its reply to CALSSA's supplemental protest, PG&E asserts that Appendix A is not merely an illustrative example, quoting D.22-12-056 text stating that Appendix A includes a "description of the NBT developed for customers" and that the "description can be used in customer education materials such as the California Solar Consumer Protection Guide" to support this position.[4]

Transferring NBT Systems from Builder to Buyer or Tenant

CALSSA states in its protest that PG&E's and SCE's proposed tariff language allows transferring a new construction system's legacy period from the builder to the buyer or tenant if the PTO date occurred before the property sale date, but that the PTO date sometimes occurs after the property sale date. CALSSA asserts that the date of transferring a system on new construction should not be tied to the sale of the property. In addition, CALSSA asserts that PG&E's AL could be interpreted to only allow transferring a system on new construction from the builder to the buyer or tenant for subdivisions, and argues that it should be allowed for all types of construction, not just residential construction.

[4] "Pacific Gas and Electric Company's Reply to the Protest from CALSSA and Response from SEIA to Advice 6848-E-A – Supplemental: Creating Pacific Gas and Electric Company's New Net Billing Tariff (NBT) Rate Schedule Per Decision (D.) 22-12-056, Ordering Paragraph 12b" at 4.

In its reply, PG&E states that it will adopt CALSSA's proposed language on the nonresidential issue but that it does not need to for the transfer date issue, because its AL proposed to start the legacy period on the PTO date. PG&E argues that if the builder sells the unit before PTO is issued, the new owner will receive PTO in their name and this provision is then inapplicable. SCE does not address this topic in its reply.

Maintaining Legacy Status if Increasing System Size

Pursuant to Ordering Paragraph 3 of D.14-03-041, NEM customers lose eligibility to remain on legacy tariffs for their remaining legacy period if they increase their system generation by more than 10 percent of original capacity or 1 kilowatt (kW).[5] In its initial protest, CALSSA asserts that the utility ALs inappropriately remove eligibility for the remainder of a customer's legacy period upon an increase in system generation by more than 10 percent of original capacity or 1 kW, because there is no successor to the NBT to which customers can be transferred. CALSSA argues that the NBT without a legacy period is not a successor tariff to the NBT with a legacy period.

In their replies, the utilities agree that the NBT without a legacy period is not a successor tariff to the NBT with a legacy period. PG&E points to a footnote in its AL implementing this principle, "Customers making modifications and/or additions to their [renewable electrical generating facility (REGF)] that exceed the 10 percent, or 1 kW limit referenced above shall remain on this tariff until the Commission develops a successor tariff to this or directs these customers to another tariff. This requirement will only be enforced upon the development of a new NBT Successor Tariff, or by the direction of the CPUC."[6] In its reply, SDG&E states that it believes this is clarified in Special Condition 7.a of its proposed tariff, but states that it will add the last sentence of PG&E's quoted text above. In its reply, SCE proposes a similar addition, "This provision is only applicable if, at the time of the customer request for an expansion above the threshold described above, an eligible successor tariff is available and applicable to the Generating Facility. Otherwise, the legacy period for the Generating Facility will not be affected by the proposed modification."[7]

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[5] D.14-03-041 established a transition, or legacy, period for customers enrolled in NEM tariffs.

[6] "Pacific Gas and Electric Company's Reply to the Protest from CALSSA and SEIA to Advice 6848-E – Creating Pacific Gas and Electric Company's New Net Billing Tariff (NBT) Rate Schedule Per Decision (D.)22-12-056, Ordering Paragraphs 12b" at 7.

[7] "Reply to Solar Energy Industries Association and the California Solar & Storage Association Protests of Southern California Edison Company's Advice 4961-E" at 8.

Treatment of Additions to NEM 2.0 Systems

In its initial protest, CALSSA addresses Ordering Paragraph 4 of D.14-03-041, which provides that NEM customers adding more than the greater of 10 percent of a generating facility's existing capacity or 1 kW in capacity to a generating facility may either choose to meter the additions separately under the successor tariff or elect for the whole system to take service under the successor tariff. CALSSA states that PG&E's and SDG&E's ALs retain the D.14-03-041 provision, but that SCE's proposed tariff instead transitions such customers' whole systems to the NBT. Arguing against SCE's proposal, CALSSA asserts that D.22-12-056 did not explicitly order this, that implementing the D.14-03-041 provision for hybrid billing would be simpler under the NBT than under NEM 1.0 and NEM 2.0, and that SCE's proposal would discourage electrification. CALSSA proposes that the utilities should clarify the billing methodology for hybrid systems that choose to meter the original system and the addition under separate tariffs. For the methodology, CALSSA recommends that credits for exports in each hour should be applied proportionally as NEM and NBT credits based on the proportional output of the separate systems.

In its reply, PG&E states that both its NEM 2.0 tariff and NBT, as proposed in its AL, allow customers to meter additions separately under Rule 21 non-export provisions. However, PG&E states that it will add clarification to its NEM 2.0 tariff. In its reply, SCE states that it will propose to allow customers to meter additions in another eligible tariff in a supplemental AL, but that it proposes that the NBT not be such an eligible tariff. Thus, SCE proposes that additions above the threshold that customers want to meter separately will need to use Rule 21 non-export agreements. SCE states that it will clarify this in a supplemental AL. In its reply, SDG&E asserts that for NEM 2.0 systems, metering additions separately under the NBT would be infeasible because it would entail extreme complexity in billing operations. Therefore, SDG&E states customers can meter additions under another eligible tariff – with that tariff being a Rule 21 Non-Export Agreement.

Availability of 15-Minute Interval Data

CALSSA and SEIA assert in their initial protests that D.22-12-056 requires the utilities to provide 15-minute interval data to NBT customers, and therefore, the data should be available for residential customers to download without their having to request it and await a response. CALSSA and SEIA state that PG&E proposed to make the data available upon request. CALSSA adds that SCE proposed to make the data available in customer-authorized energy usage data portals, and SDG&E did not propose to make

the data available. CALSSA and SEIA propose that PG&E and SDG&E should make 15-minute data available.

In its reply, PG&E states that it interpreted the D.22-12-056 order to be to allow customers to share information with vendors for the purpose of preparing more accurate bill savings estimates. It asserts that requiring customers to request the data was reasonable for reasons of both protecting consumer privacy and cost savings. In its reply, SDG&E lists this topic under CALSSA's heading for it, "PG&E should make customer data available on the existing customer portal," and states that this topic is not applicable to SDG&E.

System Size Limiting Factor

In its protest, CALSSA states that PG&E's and SCE's ALs propose the calculation of system size as the greater of CEC-AC rating and aggregate inverter capacity, while Rule 21 calculates system size as the lesser of these two measurements. CALSSA adds that SCE's AL incorrectly calculates the size of a REGF with storage, and proposes that SCE's NBT, like PG&E's and SDG&E's, should determine system size by the size of the generator, not the storage system. CALSSA also proposes that SCE should not use the greater of inverter nameplate and AC rating.

In its initial protest, SEIA proposes that SCE should state in its tariff that for a REGF paired with storage, the inverter size of the storage system is not included in the size of the generating facility.

In its reply to CALSSA's and SEIA's protests, SCE states that it did not propose modifications to the 1 megawatt (MW) language for NEM systems in its NBT AL because a clarification of this language was then pending for Commission disposition. SCE states that because all protests associated with the utilities filings have been withdrawn, SCE will clarify in a supplemental AL that NEM-ST and NBT capacity determinations should be based on SCE's Electric Rule 21, Table F.1 "System Size Limiting Factor," pursuant to D.19-03-013.

In its protest to SCE's supplemental AL, SEIA asserts that the following sentence SCE added is unclear: "The aggregate nameplate capacity of the facility is calculated by adding the capacity of all generators located at the Customer's Premises (including

Integrated or Directly Connected Energy Storage Devices, if any)."[8] SEIA argues that this language could be misinterpreted as requiring that the capacity of the storage device be added separately. SEIA proposes that SCE be required to correct this language.

In its reply to SEIA's supplemental protest, SCE asserts that SEIA misconstrues the implementation of the "System Size Limiting Factor" established by D.19-03-013. SCE states that if the REGF and energy storage are behind the same inverter, SEIA is correct that it would be inappropriate to add the capacity of the energy storage system to the capacity of the REGF because the inverter may be the "system size limiting factor." SCE continues that if each system is behind a different inverter, the REGF may export at the same time that the energy storage is discharging, and so the aggregated capacity of such a system is the sum of the operating capacity of each system (as limited by their separate inverters). SCE asserts that the applicant must demonstrate the "limiter" for each generating facility and calculate the "aggregate."

PG&E's and SDG&E's System Sizing Requirements

SEIA asserts in its protests to PG&E's and SDG&E's ALs that the D.22-12-056 requirement for a customer oversizing their system to be "expecting to increase their usage to correspond with the system size" only requires the customer's expectation and does not impose a deadline for the usage to correspond to system size. Thus, SEIA proposes the deletion of language in PG&E's and SDG&E's proposed tariffs requiring that the expected usage should correspond with the size of the system within 12 months of PTO.

In their replies, PG&E and SDG&E assert that their proposed language mirrors the decision, and that exclusion of this language would eliminate an explicit requirement for oversizing.

Allowance of a Change in Relevant Period

In its initial protests to the utilities' ALs, SEIA advocates that the Commission direct PG&E and SDG&E to create a form for customers to request a change in their true-up date, as SCE has done. SEIA also advocates that the Commission direct PG&E, SCE, and

[8] "Protest [by SEIA] of Southern California Edison Company Supplemental Advice 4961-E-A, Establishment of Southern California Edison Company's Net Billing Tariff Pursuant to Decision 22-12-056" at 2.

SDG&E to add language to their tariffs clarifying that the request can be made any time after the customer receives PTO.

In its reply, PG&E asserts that it enables NEM customers to request to change their annual true-up date by calling its Solar Customer Service Center, and that it has not received notice of issues with this process. However, PG&E states that it can provide clarity on the process in the NBT. In its reply, SCE agrees to make the requested clarification in a supplemental AL. In its reply, SDG&E agrees to have a more defined process to allow customers to request to change their annual true-up date and states that it will describe the process in a supplemental AL filing.

In its response to PG&E's, and protests to SCE's and SDG&E's supplemental ALs, SEIA states that the utilities failed to provide the promised clarity and advocates that the Commission direct them to do so. In its protest to SDG&E's supplemental AL, SEIA also asserts that a requirement in SDG&E's supplemental AL for customers to request the change at least 60 days prior to the start date of the new relevant period has not been justified and is excessive.

In its reply to SEIA's supplemental protest, PG&E disagrees that further clarification is needed, arguing that the tariff specifies the rules for service under the NBT, while ancillary processes are detailed elsewhere. PG&E asserts that the process to change one's true-up date will be made clear through NBT marketing materials. PG&E also argues that the inclusion of such a process in the tariff would increase administrative burden and expense for the utilities and Energy Division as it would require an AL to update the tariff any time the process changes. In its reply, SCE agrees to make the requested clarification in a "clean-up" AL. Like PG&E, SDG&E disagrees in its reply that there is a need to state that a change in true-up date may occur any time after PTO. SDG&E argues that as this is intuitive and therefore such a statement would be superfluous. SDG&E agrees to remove the requirement to request the change at least 60 days prior to the start date of the new relevant period.

Additional Protest Topics

In their protests, CALSSA and SEIA raise the topics of errors in the retail export compensation rate calculations due to misapplication of weekend and holiday dates; SCE's proposal to assign calendar months to billing periods in the calculation of retail export compensation credits, SCE's treatment of customers with oversized systems with regard to eligibility for net surplus compensation, SCE's disallowance of system sizing based on recent increases in usage, the process for customers to change rates, the

definition of a complete interconnection application for the purpose of distinguishing customers who will be served on the NEM 2.0 tariff on a temporary basis; and the applicability of retail export compensation credits to demand and other charges. In its protest, CALSSA additionally raises the topics of PG&E's requirements for NEM 2.0 eligibility until April 14, 2023; PG&E's treatment of customers with storage with regard to eligibility for net surplus compensation, the definition of the two types of NBT paired storage, Special Condition 7 of the PG&E NBT, and metering verification for NBT Paired Storage. In its protests, SEIA additionally raises the topics of the option to opt out of the nine-year lock-in period early, and maintenance of the legacy period upon the addition of storage.

DISCUSSION

The Commission has reviewed the original and supplemental ALs, protests, responses to protests, and comments on the draft resolution. In this section, we discuss the outstanding disputed issues and the Commission's resolution of those disputes.

Climate Zone Averages in Retail Export Compensation Rate Values

PG&E's assertion that in D.22-12-056 the Commission was interested in geographically differentiating retail export compensation rate values, fails to account for that decision's Finding of Fact 160, "[u]sing retail export compensation rates specific to climate zones does not result in significantly more accurate Avoided Cost Calculator values." As illustrated by the table PG&E provided, the differences between simple and geographically weighted average ACC values are miniscule, making the proposed calculations of adoption rates by climate zone, weighting factors, and weighted averages an unproductive use of ratepayer funds. When D.22-12-056 allowed the utilities to standardize the method of deriving retail export compensation rates based on the ACC values, it required them to do so in accordance with the findings of that decision. In addition to Finding of Fact 160, Finding of Fact 51 is relevant: "[a]nalysis of the successor tariff requires balancing multiple legislative requirements and guiding principles, and the needs of participants and nonparticipants." Guiding principle (f), adopted in D.21-02-007, [9] states that a successor to the NEM tariff should be transparent and understandable to all customers. A simple average is more transparent and easier to understand.

In order to ensure the utilities meet their December 15, 2023 billing system implementation date obligation, the utilities' proposed retail export compensation rate

[9] D.21-02-007 outlined a set of guiding principles for the reform of NEM 2.0.

calculation methodology is approved. However, within 30 days of the Commission's next issuance of ACC values in 2024, the utilities shall submit new Tier 1 ALs in which the utilities calculate retail export compensation rates using simple averages of the climate zones' ACC values and update their descriptions of the standardized export compensation rate calculation method to reflect this change. Upon approval of the ALs, the utilities shall not alter customers' existing locked-in nine-year schedules of retail export compensation rates, but shall use the rates calculated using simple averages going forward for new customers starting in 2025. Alternatively, if all three utilities can, and agree to, implement the updated methodology starting with the first NBT customers (starting on December 15, 2023), they are authorized to do so. In addition, SDG&E shall increase the level of detail in its description to match that of PG&E's and SCE's initial ALs. The utilities shall also publish the descriptions on their websites within five business days of the disposition of these ALs to aid in public understanding. The utilities shall continue to use the simple average calculation method after future ACC updates.

Format and Content of Published Retail Export Compensation Rates

D.22-12-056, ordering paragraph 12 (b), requires the utilities to "provide the details of the successor tariff and all subtariffs, as adopted in this decision" in these ALs. The decision text relevant to publishing retail export compensation rates is:

> Further, Joint Utilities shall coordinate to provide uniform machine-readable spreadsheets containing the export values for each vintage of Avoided Cost Calculator updates. The spreadsheets shall include separate columns for delivery-related and energy-related portions of the retail export compensation rate to accommodate unbundled customers. In Section 8.7, this decision directs Joint Utilities to submit advice letters implementing the successor tariff; Joint Utilities shall: (1) describe the standardized method and provide the retail export compensation rates in the required advice letter; and (2) articulate which components of the Avoided Cost Calculator are under the jurisdiction of the utilities in the case of unbundled customers. Joint Utilities shall also include an example of the spreadsheet as an attachment to the required advice letter.[10]

The utilities did not comply with the requirement to coordinate. In the absence of a jointly stated utility preference for a uniform spreadsheet format, CALSSA's proposals for the publishing location, file type, contents, and other characteristics of the uniform machine-readable spreadsheets are reasonable. However, rather than publishing retail

[10] D.22-12-056 at 147.

export compensation rates through 2050 as CALSSA proposes, the utilities shall publish the rates for the next 20 years, in alignment with the 20-year requirements of D.20-08-001.[11] The utilities shall coordinate and publish such spreadsheets on their respective websites within five business days after the effective date of this resolution. Following future updates to the ACC, the utilities shall publish such spreadsheets to their respective websites by October 1 of the year the update is approved. Finally, PG&E did not comply with requirement (2) in the quote above. PG&E shall include this information in its "NBT Modifications AL" described below.

Separate Application of Generation- and Delivery-Related Bill Credits

CALSSA is correct that the methodology proposed by the utilities could result in the unintended consequence of slightly dampening the retail export compensation price signal during key hours when the grid is most strained and is emitting the most greenhouse gases. However, the utilities are correct that the Commission directed that NEM requirements continue to apply to the NBT unless explicitly altered by D.22-12-056, and that they have an obligation to treat bundled and unbundled customers indifferently.

The utilities' proposal to separately allocate generation and delivery credits is approved. However, D.22-12-056 adopted ACC-based retail export compensation. Therefore, within 60 days of the effective date of this resolution, the utilities shall submit new Tier 2 ALs with an effective date of July 1, 2024 in which the utilities shall propose that if, at the end of a customer's relevant period (true-up period), the customer has excess generation credits or excess delivery credits, that balance of credits is carried forward to the next relevant period. These ALs will herein be referred to as the "NBT Modifications ALs." Though SCE's NBT Modification AL will be effective on the above date, for the reasons outlined in the Comments section below, SCE is authorized to implement the carry forward feature concurrently with its implementation of the changes to the Virtual and Aggregation net billing systems.

Eligibility of Retail Exports for Demand Response Program Compensation

PG&E's assertion that its proposed language prohibiting NBT customers from being compensated for exports in demand response programs is in "the" NEM 1.0 and NEM 2.0 tariffs is misleading. This language is only in PG&E's NEM tariffs, not the other utilities' tariffs. As CALSSA, SEIA, and SDG&E note, D.22-12-056 did not address

[11] D.20-08-001 adopted standardized inputs and assumptions for calculating estimated first year and first 20 years electric utility bill savings from residential photovoltaic solar energy systems.

this topic. The decision directed the utilities to allow NBT customers to enroll in critical peak pricing or peak day pricing rates, neither of which provide compensation for exports. Since the inclusion of this proposed language would be making a change from the NEM tariffs for SDG&E, and no party showed why the proposed language is needed, the protestors' request is granted. PG&E and SDG&E shall remove this prohibition from the tariffs in their NBT Modifications ALs.

Establishing Disadvantaged Community Treatment Eligibility

CALSSA's request for the utilities to ask the interconnection applicant if the property is in a DAC was rejected in the disposition of PG&E AL 6849-E/-E-A, SCE AL 4962-E/-E-A, and SDG&E AL 4156-E/-E-A. The utilities' proposed methods of verifying a customer's geographic location in a DAC are approved, including the proposal in PG&E's reply to CALSSA's protest to make a link available to the existing DAC look-up tool. The Commission clarifies that, though SCE's proposed customer attestation is not adopted, SCE must still make the preferred mapping or address look-up tool available to customers. Further, the utilities shall state on their websites the inputs required for that tool to produce the correct boundaries for DACs.

SCE is correct that being required to validate single family home ownership could add time to the application review process, as could being required to validate resident-ownership. Therefore, this resolution clarifies that to implement the requirement that customers be resident-owners of single-family homes to qualify for low-income treatment in the NBT under the DAC residence provision of D.22-12-056, ordering paragraph 1(b), PG&E and SCE shall verify that customers have residential accounts with one meter.

Lock-In Period Eligibility and Glide Path Step Determining Dates

The utilities are correct that submission of an interconnection application does not automatically result in enrollment in the NBT, and that starting the lock-in period on the interconnection date is consistent with both NEM 1.0 and NEM 2.0 tariffs. However, it is true that, as argued by SEIA, CALSSA, and PearlX respectively, customers have no control over utility delays that may occur in processing interconnection applications; customers should not be penalized for utility delays; and under the utilities' proposals, customers would have no recourse if interconnection did not occur by the expected date. If customers lack confidence that they will receive the benefits of the lock-in period and/or a certain glide path step, they may base their decisions on the possibility of not having benefits that the Commission intended to provide via D.22-12-056.

Therefore, the utilities are directed to state in their NBT Modification ALs that they determine eligibility for the lock-in period by the interconnection application date, as defined in D.22-12-056.

The Commission notes, in reference to PG&E's and SCE's replies, that the Customer Explanation was provided to illustrate an example of a way to communicate information to customers, and should not be relied upon in preference to the ordering paragraphs or more detailed parts of the decision.

Nine-Year Retail Export Compensation Rate Lock-In Period

All parties agree that the lock-in period should be for nine years from the date of interconnection."[12] PG&E's supplemental AL proposes language in accordance with this position. However, SDG&E's supplemental AL does not amend this section of the NBT, leaving in place language that makes the lock-in period last for nine years from January 1 of the calendar year in which the customer was interconnected. SDG&E shall include within its NBT Modifications AL proposed changes to its tariff language to provide eligible customers with a retail export compensation rate lock-in period that is nine years from the date of interconnection, effective (retroactively to) April 15, 2023.

Legacy Period Eligibility Timeframe

In its protest, CALSSA omitted the final sentence of the ordering paragraph it cited for its claim: "Tariff customers enrolling after the five-year glide path will not receive a lock-in period for Avoided Cost Calculator values."[13] The availability of a legacy period is linked to that of the ACC Plus glide path, which CALSSA acknowledges is the first five calendar years of the NBT. D.22-12-056 creates this link in the legacy period section (section 8.5.1) and in ordering paragraph 1(a).[14]

The discussion of the legacy period eligibility timeframe, which D.22-12-056 terms the "transition time," in the legacy period section (section 8.5.1) of the decision is not explicit about the meaning of "during the first five years of the tariff." This phrase can mean during the first five years in which the tariff exists, as opposed to meaning for five years from the tariff's start date. The decision's glide path section (section 8.5.2) uses almost the same phrase, "for the first five years of the successor tariff." There, the decision clarifies that this refers to calendar years, stating that "[a]t the end of each

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[12] D.22-12-056 at 163.

[13] D.22-12-056, Ordering Paragraph 1 (a).

[14] D.22-12-056 at 146 and Ordering Paragraph 1 (a) ("the glide path transition time").

calendar year (e.g., December 31, 2023), the adder will decrease by 20 percent a year…" It then continues, "[a]ligning the timing of the step-downs with calendar years will assist with customer understanding…" Further, the decision shows glide path steps based on calendar years and ending after 2027 in Figures 3 and 5.[15]

Also, D.22-12-056 was careful not to adopt a longer transition time than necessary, anticipating trends that would contribute to sustained growth of customer-sited renewable generation after the first five years of the tariff.[16] Considering these facts, the December 31, 2027 end to the transition time (i.e., the time in which legacy periods are available) proposed by PG&E and SCE is reasonable. In its NBT Modifications AL, SDG&E shall alter its NBT's language to end the five-year glide path after December 31, 2027. As directed in D.22-12-056, the utilities shall align the glide path steps with calendar years, such that the first step ends on December 31, 2023.

Transferring NBT Systems from Builder to Buyer or Tenant

As PG&E points out, if the builder sells the unit before PTO is issued, the new owner will receive PTO in their name and the legacy period will start on the PTO date, in alignment with the direction of D.22-12-056. The utilities' proposals are reasonable and are approved.

Maintaining Legacy Status if Increasing System Size

PG&E's and SCE's proposed language remedies the issue identified by CALSSA and are approved. In SDG&E's supplemental AL, it did not add the sentence to which it referred in its reply to CALSSA's initial protest. SDG&E shall add the sentence to its NBT in its NBT Modifications AL.

Treatment of Additions to NEM 2.0 Systems

CALSSA's proposal that hybrid NEM and NBT systems with a separately metered addition should receive credits for exports in each hour in proportion to the output of the separately metered components would create an administrative burden on the Utilities and would be inconsistent with the determination in D.22-12-056 not to use hourly netting in the NBT. The utilities' proposals are reasonable and are approved.

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[15] D.22-12-056 at 154-156.
[16] D.22-12-056 at 145.

Availability of 15-Minute Interval Data

Parties have provided disparate viewpoints on this issue and the Commission does not have enough information to make a final determination on the matter at this time. Further, this issue is directly within the scope of R.22-11-013 Phase One, Track Two pursuant to that proceeding's *Assigned Commissioner's Scoping Memo and Ruling* question, "[w]hat rules and requirements should the Commission develop or modify to improve data access to support the following: a. enable customers and other entities to make informed decisions on selecting, adopting, evaluating, and utilizing DERs […]?"[17] The Commission finds that this issue is best suited for consideration in R.22-11-013. The utilities shall propose any changes to their systems needed to implement this finding within their NBT Modifications AL. Alternatively, in the case that making the changes earlier would reduce administrative burden, the utilities are authorized to propose an earlier effective date of the NBT Modifications AL or to submit a separate Tier 1 AL.

System Size Limiting Factor

The Commission agrees with CALSSA that the NBT should be consistent with Rule 21 in calculating system size as the lesser of the system's CEC-AC rating and aggregate inverter capacity. The utilities are authorized to cross-reference the relevant section in Rule 21 instead of incorporating the language from Rule 21 into the NBT.

SCE is correct that if the REGF and storage are each behind a different inverter, the REGF may export at the same time that the energy storage is discharging, and so the aggregated capacity of such a system is the sum of the operating capacity of each system. This is also true if each system is behind the same inverter. The calculation may omit energy storage systems that are certified as non-export storage or have a non-export relay installed, or have a power control system that ensures exports do not exceed the capacity of the REGF. Alternatively, a power control system that ensures exports do not exceed 1 MW may be used in the calculation of a system's size for the purposes of the NBT. The utilities shall coordinate to propose uniform language to this effect in their NBT Modifications ALs.

PG&E and SDG&E shall propose language on both of the above topics in alignment with SCE's in their NBT Modifications ALs.

[17] Assigned Commissioner's Scoping Memo and Ruling at 6.

PG&E's and SDG&E's System Sizing Requirements

SEIA is correct that D.22-12-056 only requires a customer expectation of the usage corresponding with the system size. Furthermore, neither the decision nor PG&E's and SDG&E's proposed tariffs specify consequences for this expectation not being met, making the utilities' proposed requirement meaningless. However, the utilities are correct that the requirement should not be deleted, as that would omit a decision requirement. To reflect the decision language, PG&E and SDG&E shall change "should materialize" to "should be expected to materialize" in their proposed requirement in their NBT Modifications ALs.

Allowance of a Change in Relevant Period

SDG&E's intent to remove its proposed requirement to request a change in relevant period at least 60 days prior to the start date of the new relevant period is reasonable. SDG&E shall propose this change in its NBT Modifications AL. With regards to all other issues raised on this topic, the utilities' proposals are reasonable and are approved.

Additional Protest Topics

The additional protest topics raised by CALSSA and SEIA were agreed to by the utilities, have been disposed of in relation to other ALs, are now moot, are requested changes from NEM 2.0 not authorized by D.22-12-056, or are to be dealt with in the forthcoming NBT Modifications AL. Therefore, the Commission does not order the utilities to take any action on them beyond what is already directed through the NBT Modifications AL described herein.

The various interpretations of applicable decision requirements and rules exhibited in the ALs, protests, and replies are resulting in ongoing changes to the utilities' interconnection processes, as demonstrated in this Discussion section of the resolution and in D.22-12-056. In order to implement the issues addressed in this resolution and address unforeseen issues, it is reasonable to grant the Director of the Energy Division or their designee authority to make technical changes to the utilities' respective interconnection portals and interface via letter.

COMMENTS

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. Section 311(g)(2) provides that this 30-day review period and 20-day comment period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day review and 20-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, the draft resolution was mailed to parties for comments, and was placed on the Commission's agenda no earlier than 30 days from the date that the draft resolution was mailed. The utilities, CALSSA, SEIA, and PearlX timely submitted comments on the draft resolution on November 20, 2023.

Climate Zone Averages in Retail Export Compensation Rate Values

The utilities request a clarification related to the draft resolution's direction to submit ALs within 30 days of the next issuance of updated ACC values. They request that the updated methodology for climate zone averages only apply to retail export compensation rates produced with the 2024 release of the ACC. As a result, these changes will only be applicable to customers in 2025. This request is reasonable and is granted. Alternatively, if all three utilities can and agree to implement the updated methodology starting with the first NBT customers (starting on December 15, 2023), they are authorized to elect to do so. The resolution is modified accordingly.

Format and Content of Published Retail Export Compensation Rates

CALSSA explains in its comments that because the publication date of the ACC varies, the publication of NBT export compensation rates should occur 20 days after the publication of the updated ACC, rather than the arbitrary date of October 1 of that year.

We note that, should the ACC face publication delays, the utilities maintain the ability to request an extension via letter to the Executive Director of the CPUC to extend the October 1 deadline. As such, CALSSA's request is denied.

Separate Application of Generation- and Delivery-Related Bill Credits

The utilities disagree with the draft resolution's finding that the NBT should carry forward any excess generation or delivery credits to the customer's next relevant period. They state that D.22-12-056 did not change the existing NEM practice of zeroing out excess generation credits that are not net exports at the end of the year. The utilities

also argue that in compliance with PURPA,[18] customers with excess generation at the end of the annual billing period must instead be paid Net Surplus Compensation for their excess generation. Finally, they argue that D.22-12-056 determined that maintaining the existing NEM true-up practice is required by AB 327's mandate that the NBT balance the various requirements of the statute, including to rectify the cost shift.

SEIA disagrees that generation- and delivery-related bill credits should be applied separately. Its comments state that it would take too long for customers to use up accumulated excess generation credits, and that this methodology is inconsistent with the intent of D.22-12-056 to ensure a certain payback period and to incent the beneficial use of storage through a price signal. SEIA argues that the solar industry has been selling solar using assumptions based on D.22-12-056 and the model used to develop it. Further, SEIA argues that the Commission did not direct this methodology in D.22-12-056 when discussing the annual true-up, and that directing the utilities to offset excess generation credits against delivery charges does not prevent CCAs from competing on fair and equal basis. CALSSA also makes the price signal and solar industry sales-related arguments above, and CALSSA and PearlX make the CCA-related argument.

The utilities are incorrect that the draft resolution's direction is contrary to that of D.22-12-056, which adopted ACC-based retail export compensation. PURPA is not applicable as it governs the treatment of excess generation (kWh), not excess credits ($). D.22-12-056 adopted retail export compensation based on the ACC, not on the ACC minus a certain amount each year, to meet the requirements of AB 327. Thus, the utilities' request to change this direction is denied.

Regarding the arguments by SEIA, CALSSA, and PearlX, the Commission is satisfied that the tariffs will be consistent with D.22-12-056 if excess credits are carried forward from year to year. Contrary to parties' arguments, D.22-12-056 did not guarantee customers an exact simple payback period given the natural variation in customer usage and system generation. Moreover, customers know that bill savings estimates are uncertain, as this is clearly described in the California Solar Consumer Protection Guide that the Commission requires the solar industry to provide to residential customers, pursuant to D.18-09-044.[19] Also, it is the Commission's expectation that the solar industry has been transparent with customers during this transition period, providing information to customers that the NBT was not finalized and that changes could occur,

[18] The Public Utility Regulatory Policies Act of 1978.
[19] D.18-09-044 adopted NEM consumer protection measures.

especially given that the utilities provided their proposals to separately apply generation- and delivery-related bill credits in their ALs in January 2023, which the Commission required to "provide the industry with the details necessary to inform customers about the successor tariff."[20] Any deviance from these consumer protections that has occurred to date should not affect the Commission's decision on the appropriate tariff structure. Finally, customers may be able to avoid this issue by increasing their electricity usage through electrification measures and/or by incorporating the separate application of generation- and delivery-related bill credits into their decisions on the sizing of their solar and storage systems. In regard to further arguments by these parties, the Commission's intent for NBT customers' beneficial use of storage does not supersede its findings regarding the structure of the NBT nor its directive that NEM requirements continue to apply to the NBT unless explicitly altered by D.22-12-056.[21]

This resolution's clarification on the treatment of generation- and delivery-related bill credits correctly balances the Commission's stated intents to ensure consistency with NEM, competitive neutrality, ACC-based retail export compensation, and accurate price signals. The resolution is modified accordingly.

SCE requests more time to implement this decision beyond the draft resolution's July 1, 2024 deadline, stating that its IT resources will be fully occupied throughout 2023 with implementation of other features of the NBT, and that allowing credits to carry forward after the annual true up would be a new feature. SCE requests that the Commission allow it to implement the carry forward feature concurrently with its implementation of the changes to the Virtual and Aggregation net billing systems, asserting that combining these efforts should give SCE enough time and create cost efficiencies. SCE's request is reasonable and is granted. The resolution is modified accordingly. Until implementation has been completed, SCE shall report on its progress in its Net Energy Metering and Net Billing Tariff Annual Reporting Advice Letter established in D.22-12-056.

Establishing Disadvantaged Community Treatment Eligibility

Based on a concern about customer confusion, CALSSA requests that the utilities explicitly state the exact tool they will use and the inputs required for that tool to produce the correct boundaries for DACs. It also requests that the tool have an address

[20] D.22-12-056 at 195.
[21] D.22-12-056 at 138.

look-up function. Consumer protection is essential for a well-functioning REGF (e.g., rooftop solar) market. This request is reasonable and is approved. The resolution is modified accordingly.

Lock-In Period Eligibility and Glide Path Step Determining Dates

CALSSA, SEIA, and PearlX request that the draft resolution be amended to state that the date of a complete application be used as the date which determines eligibility for the lock-in period and glide path. SEIA objects to the draft resolution's conclusion that the lock-in period eligibility and glide path step determining date should be the interconnection date, like the lock-in period starting date. SEIA cites a D.16-01-044 finding that bases a customer's NEM successor tariff legacy period on their interconnection application date. SEIA also argues against the usefulness of the "informed expectation" of system operation propounded by SCE, asserting that customers have no control over delays in permitting or utility backlogs which could delay the processing of interconnection applications. CALSSA agrees with SEIA, adding that if a customer submits a complete application on December 1 but is not granted permission to operate until January 15, the customer should not be penalized for the utility delay. PearlX also agrees, adding that an "informed expectation" on when the system will be in operation is not the same thing as certainty, because the customer has no recourse if that expectation is not met. Finally, PearlX objects to the draft resolution's statement that "linking the lock-in period with a customer's interconnection date is appropriate, since submitting an application to enroll in a tariff does not guarantee that one may enroll in the tariff." PearlX asserts that basing a customer's lock-in period on the date of application does not conflict with D.22-12-056 because only once the customer successfully enrolls will the nine-year legacy period at the locked-in rates go into effect. The utilities do not address this issue in their comments.

SEIA's first argument does not apply to this issue, since the purpose of the cited D.16-01-044 finding was to provide a legacy period to NEM successor tariff customers. D.22-12-056 has created new legacy period requirements and provisions for NBT customers. However, we are persuaded by parties' arguments regarding the consequences of utility delay and the possibility of separating the lock-in period eligibility and glide path step determining dates from the lock-in period and glide path start dates. The request of SEIA, CALSSA, and PearlX is granted and the resolution is modified accordingly.

Availability of 15-Minute Interval Data

CALSSA, SEIA, and PearlX assert that 15-minute interval data should be available for residential customers to download without having to request the data and wait for a response from the utility. The commenters note that SCE's approach of making the data instantly available is more efficient than PG&E's approach to have customers request the data. The utilities did not comment on this issue. This request is best suited for consideration in R.22-11-013 Phase One, Track Two. The resolution is modified accordingly.

System Size Limiting Factor

CALSSA requests that the Commission address the issue of whether to use the lesser of inverter nameplate capacity and CEC-AC rating or the greater of those two measures when calculating an NBT system's size. CALSSA advocates using the former definition of system size, asserting its appropriateness from an engineering standpoint and citing to the calculation in Rule 21 and D.19-03-013.[22] Conversely, the utilities assert that the use of the lesser of the inverter nameplate capacity and CEC-AC rating does not account for cost responsibility if the inverter is over 1 MW but the CEC-AC rating is not. Thus, the utilities argue that, for safety and maximum potential system impact, the inverter should be used for the purpose of determining REGF system size (and cost responsibility).

CALSSA requests that only solar capacity, not the sum of solar capacity and energy storage capacity, be included when calculating system size. CALSSA argues that in real world applications batteries do not discharge to the grid simultaneously as the co-located solar is producing at full power. CALSSA asserts that NBT provisions may differ from Rule 21 provisions that are implemented for safety purposes.

If storage is included in the calculation of system size, the utilities request clarification as to whether the draft resolution's proposed rule applies to energy storage systems that are certified as non-export storage or have a non-export relay installed, or have a power control system that ensures exports do not exceed the capacity of the REGF. Also, PG&E states that aggregating the capacity of an REGF plus storage system is a departure from the existing NEM rules for the purpose of cost responsibility, and requests clarification as to whether this aggregated sizing rule also applies to NEM 1.0 and 2.0 systems that add storage.

[22] D.19-03-013 adopted refinements to the interconnection of distributed energy resources under Rule 21.

Finally, PG&E requests that it be allowed to simply cross-reference the relevant section in Rule 21, asserting that a cross-reference is sufficient, while incorporating the actual language from Rule 21 creates issues when the rule is changed in a different proceeding, and yet remains static in the tariff incorporating the original text.

The Commission agrees with CALSSA that the NBT should be consistent with Rule 21 in calculating system size as the lesser of the system's CEC-AC rating and aggregate inverter capacity. Also, since this resolution requires the inclusion of the capacity of Integrated or Directly Connected Energy Storage Devices in the capacity calculation, the utilities are incorrect that using the lesser measure does not account for cost responsibility in the situation where the inverter is over 1 MW, but the CEC-AC rating is not. PG&E and SDG&E shall propose language aligned with SCE's in their NBT Modifications ALs. The resolution is modified accordingly.

The scenario raised by utilities – of not applying the proposed rule on including storage in the calculation of system size to energy storage systems that are certified as non-export storage or have a non-export relay installed, or have a power control system that ensures exports do not exceed the capacity of the REGF – is in alignment with modifications made to Rule 21 pursuant to D.20-09-035.[23] Alternatively, a power control system that ensures exports do not exceed 1 MW may be used in the calculation of a system's size for the purposes of the NBT. The utilities shall coordinate to propose uniform language to this effect in their NBT Modifications AL. The resolution is modified accordingly.

To maintain consistency and because changes to the NEM 1.0 and NEM 2.0 tariffs are not in the scope of this resolution, this sizing rule shall not apply to NEM 1.0 and NEM 2.0 systems that add storage that meets the requirements for an "enhancement or addition."

PG&E's request to cross-reference the relevant section in Rule 21 instead of incorporating the language from Rule 21 into the NBT is reasonable and is granted. The other utilities are also authorized to do so. The resolution is modified accordingly.

Other

The utilities state that they assume that Ordering Paragraph 6 is intended for details of the Interconnection process that may not have been specified through the Decision or this resolution, but that the Ordering Paragraph is ambiguous. They therefore request

[23] D.20-09-035 modified Rule 21, including regarding the use of power control systems.

the addition of "for the purpose of implementing D.22-12-056." In order to address unforeseen issues, the request is denied. However, in light of these comments and for additional clarity, we clarify that this authority is specific to the utilities' interconnection portals and interface and does not extend to the utilities' underlying billing systems.

FINDINGS

1. Ordering Paragraph 12 (f) of Decision (D.) 22-12-056 directed Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) (collectively, "the utilities") to submit Tier 2 advice letters (AL) proposing tariff language for the net billing tariff (NBT).

2. On January 30, 2023, the utilities timely submitted PG&E AL 6848-E, SCE AL 4961-E, and SDG&E AL 4155-E. The utilities subsequently submitted supplemental ALs PG&E AL 6848-E-A on March 24, 2023, SCE AL 4961-E-A on March 27, 2023, and SDG&E AL 4155-E-A on March 31, 2023.

3. The intent of climate zone averaging for the retail export compensation rate in D.22-12-056 was simple averaging of climate zones rather than weighted averaging.

4. D.22-12-056 requires the utilities to publish clear and accessible information on their websites about the NBT retail export compensation rate and to articulate which components of the Avoided Cost Calculator (ACC) are under the jurisdiction of the utilities in the case of unbundled customers.

5. The ACC-based value of generation credits and delivery credits may not be granted to customers under the utilities' proposed methodology.

6. The tariffs will be consistent with D.22-12-056 if excess credits are carried forward from year to year.

7. Customers can avoid having excess credits by adjusting the relationship of their electricity usage and their renewable electrical generating facility (REGF) capacity.

8. The treatment of generation- and delivery-related bill credits in this resolution correctly balances the Commission's stated intents to ensure consistency with net energy metering requirements, competitive neutrality, ACC-based retail export compensation, and accurate price signals.

9. Language prohibiting NBT customers from being compensated for exports in demand response programs is not directed by D.22-12-056.

10. Requiring the utilities to validate single-family home resident-ownership of customers in disadvantaged communities could add time to the application review process.

11. A customer's eligibility for the retail export compensation rate lock-in period is determined by the date of interconnection application.

12. It is the intent of D.22-12-056 that the retail export compensation rate lock-in period shall be nine years from the date of interconnection.

13. It is the intent of D.22-12-056 that the five-year glide path shall be aligned with calendar years, such that the first step ends on December 31, 2023 and the last step ends on December 31, 2027.

14. If a builder sells a unit before permission to operate is issued, the new owner will receive permission to operate in their name and the legacy period will start on the date on which permission to operate is granted.

15. The utilities' proposed requirements affecting customers making modifications and/or additions to their REGF that exceed
10 percent or 1 kW and separately metering the addition are reasonable.

16. The utilities' proposed language allowing customers making modifications and/or additions to their REGF that exceed the 10 percent or 1 kW to remain on the net billing tariff until the Commission develops a successor tariff or directs such customers to another tariff is reasonable.

17. The issue of the availability of 15-minute interval data is best suited for consideration in Rulemaking 22-11-013.

18. The SCE proposal related to rules for the calculation of system size is in compliance with D.22-12-056.

19. D.22-12-056 requires a customer applying to oversize their system to be expecting to increase their usage to correspond with the system size within 12 months of interconnection and does not impose a deadline for the usage to correspond to system size.

20. The proposal by SDG&E to remove its proposed requirement to request a change in relevant period at least 60 days prior to the start date of the new relevant period is reasonable.

21. The ALs with modifications detailed in this resolution comply with D.22-12-056.

THEREFORE IT IS ORDERED THAT:

1. Pacific Gas and Electric Company advice letters 6848-E and 6848-E-A, Southern California Edison Company advice letters 4961-E and 4961-E-A, and San Diego Gas & Electric Company advice letters 4155-E and 4155-E-A are approved.

2. Within 30 days of the Commission's next issuance of ACC values in 2024, Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) shall submit Tier 1 advice letters with net billing tariff retail export compensation rates calculated using simple averages of the climate zones' Avoided Cost Calculator values and with descriptions of the standardized export compensation rate calculation method that reflect this change. Upon approval of the ALs, the utilities will not alter customers' existing locked-in nine-year schedules of retail export compensation rates, but will use the rates calculated using simple averages going forward for new customers starting in 2025. Alternatively, if all three utilities can, and agree to, implement the updated methodology starting with the first NBT customers (starting on December 15, 2023), they are authorized to do so. SDG&E shall increase the level of detail in its description to match that in the descriptions by PG&E and SCE. PG&E, SCE, and SDG&E shall also publish the descriptions on their websites within 5 business days of the disposition of these advice letters. The utilities shall continue to use the simple average calculation method after future Avoided Cost Calculator updates.

3. Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) shall publish machine-readable spreadsheets on their respective websites.
    a. The spreadsheets shall be uniform across PG&E, SCE, and SDG&E, and shall contain the net billing tariff retail export compensation rates for the next 20 years in downloadable .csv and .xml files in single column structure, with the same column headings and number formats, and in alignment with the format used by the CEC Market Informed Demand Automation Server.
    b. The first spreadsheets shall be published within five business days after the effective date of this resolution. Following future updates to the Avoided Cost Calculator, Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) shall publish updated machine-readable spreadsheets to their respective websites by October 1 of the year the update is approved. PG&E, SCE, and SDG&E shall maintain the spreadsheet format's alignment with the CEC Market Informed Demand Automation Server.

4. To establish that a customer is a resident-owner of a single-family home in a disadvantaged community and therefore qualifies for low-income treatment under the net billing tariff, PG&E and SCE shall verify that the customer has a residential account with one meter.

5. PG&E, SCE, and SDG&E shall submit Tier 2 advice letters within 60 days after the effective date of this resolution proposing the tariff modifications specified here and further enumerated in the Discussion section of this resolution. These modifications shall become effective July 1, 2024.
    a) PG&E shall articulate which components of the Avoided Cost Calculator are under the jurisdiction of the utilities in the case of unbundled customers.
    b) 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 is authorized to implement the carry forward feature concurrently with its implementation of the changes to the Virtual and Aggregation net billing systems. Until implementation has been completed, SCE shall report on its progress

in its Net Energy Metering and Net Billing Tariff Annual Reporting Advice Letter established in D.22-12-056.

c) PG&E and SDG&E shall remove the language prohibiting net billing tariff customers from being compensated for exports in demand response programs.
d) PG&E, SCE, and SDG&E shall clarify the criteria for determining eligibility for the retail export compensation rate lock-in period and glide path as directed in the Discussion section of this resolution.
e) SDG&E shall make the retail export compensation rate lock-in period nine years from the date of interconnection, effective (retroactively to) April 15, 2023.
f) SDG&E shall end the five-year glide path, and customer eligibility for a legacy period, after December 31, 2027.
g) SDG&E shall provide that the requirement affecting customers making modifications and/or additions to their renewable electrical generating facility that exceed 10 percent or 1 kilowatt will only be enforced upon the development of a new net billing tariff successor tariff, or by the direction of the Commission.
h) PG&E and SDG&E shall require that customers applying to oversize their systems expect increased usage to materialize within 12 months of interconnection.
i) PG&E, SCE, and SDG&E shall propose any changes to their systems needed to implement the finding that the issue of the availability of 15-minute interval data is better suited for consideration in Rulemaking 22-11-013. Alternatively, in the case that making the changes earlier would reduce administrative burden, PG&E, SCE, and SDG&E are authorized to propose an earlier effective date of this advice letter or to submit a separate Tier 1 advice letter.
j) PG&E and SDG&E shall align their rules for the calculation of system size with those proposed by SCE and approved in this resolution.
k) SDG&E shall remove its proposed requirement to request a change in relevant period at least 60 days prior to the start date of the new relevant period.

6. The Director of the Energy Division, or their designee, is granted authority to make changes to the utilities’ respective interconnection portals and interface.

This resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed, and adopted at a conference of the Public Utilities Commission of the State of California held on November 30, 2023; the following Commissioners voting favorably thereon:

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Rachel Peterson
Executive Director