

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

RESOLUTION E-5326

July 11, 2024

R E S O L U T I O N

Resolution E-5326. Pacific Gas and Electric Company Advice Letter 6694-E and Supplemental Advice Letter 6694-E-A request approval of rate structures and methodology for avoiding double compensation for the Emergency Load Reduction Program for vehicle grid integration pilots pursuant to Resolution E-5192.

PROPOSED OUTCOME:

- Approves various elements of Pacific Gas and Electric Company (PG&E)'s Phase II Residential and Commercial Fleet Vehicle Grid Integration Pilots (VGI Pilots) real time pricing (RTP) rate with modifications to ensure that the rate design is reasonable and complies with the requirements of Resolution E-5192.
- Removes the time-of-use (TOU) option from the VGI Pilots and directs PG&E to enroll all TOU VGI Pilot customers on the RTP rate.
- Concludes that customer Shadow Bill credits (savings on a customer's pilot bill relative to a customer's Otherwise Applicable Tariff bill) should be tracked in the appropriate revenue and cost balancing accounts and that pilot funds should not be used for the Shadow Bill credits.
- Approves PG&E's methodology for ensuring that customers are not double compensated from the RTP rate when they receive a credit from the Emergency Load Reduction Program.

SAFETY CONSIDERATIONS:

- There are no safety considerations associated with this resolution.

ESTIMATED COST:

- There are no estimated costs associated with this resolution.

By Advice Letters 6694-E, Filed on September 2, 2022, and 6694-E-A, Filed on December 22, 2023.

SUMMARY

This Resolution approves, with modifications, the rate design for Phase II of the PG&E VGI Pilots RTP rate proposed by PG&E in Advice Letter (AL) 6694-E. This Resolution removes the TOU option from the VGI Pilots and directs PG&E to enroll all TOU VGI Pilot customers on the RTP rate. This Resolution also stipulates that customer Shadow Bill credits (savings on a customer's pilot bill relative to a customer's Otherwise Applicable Tariff bill) should be tracked in the appropriate revenue and cost balancing accounts and that pilot funds should not be used for customer Shadow Bill credit payments. This Resolution approves PG&E's methodology, proposed in Supplemental AL 6694-E-A, and alternate methodology, proposed in comments by PG&E to the draft Resolution, which ensure that customers are not double compensated from the RTP rate when they receive a credit for their participation in the Emergency Load Reduction Program (ELRP). Lastly, this Resolution disposes of the timely protest of the Public Advocates Office (Cal Advocates) and the timely response of the Vehicle Grid Integration Council (VGIC) to PG&E AL 6694-E.

BACKGROUND

Senate Bill 676 (Ch. 484, Stats. 2019) (SB 676) enacted new Public Utilities Code Section 740.16. Section 740.16 directs the California Public Utilities Commission (CPUC or Commission) to establish strategies and quantifiable metrics to maximize the use of feasible and cost-effective electric vehicle (EV) integration into the electrical grid (Vehicle Grid Integration, or VGI) by January 1, 2030. On December 21, 2020, the CPUC issued Decision (D.) 20-12-029 in Rulemaking (R.) 18-12-006 implementing SB 676. Among other things, D.20-12-029 adopted strategies to promote VGI and ordered PG&E and other investor-owned utilities (IOUs) to implement various near-term policy actions that the CPUC has found reasonable in support of these strategies.

On May 5, 2022, the CPUC issued Resolution E-5192, which approved with modifications three VGI Pilots to begin in 2022 and to run for three years, as PG&E proposed in AL 6259-E.

- **Pilot #1, Vehicle-to-Everything (V2X) Residential Pilot Program** – Residential V2X pilot program targeted at spurring the adoption of bidirectional light-duty vehicles (LDVs) at single-family homes through customer incentives, with a pilot budget of \$7.5 million.

- **Pilot #2, V2X Commercial Pilot Program** – Commercial V2X pilot program targeted at spurring the adoption of bidirectional medium- and heavy-duty vehicle (MDHD) fleets through customer incentives, with a pilot budget of \$2.7 million.
- **Pilot #3, Vehicle-to-Microgrid (V2M) Public Safety Power Shutoff (PSPS) Microgrid Pilot** – Vehicle-to-Microgrid pilot aimed at enabling behind-the-meter bidirectional EVs in PSPS-formed microgrids to support community resiliency, with a pilot budget of \$1.5 million.

Ordering Paragraph (OP) 6 of Resolution E-5192 directed PG&E to file a Tier 2 AL within 120 days proposing rate structures, including both dynamic and static TOU rate structures, for Phase II of the residential and commercial fleets pilots.

PG&E filed AL 6694-E on September 6, 2022 in response to OP 6 of Resolution E-5192, and included the following elements:

- **Summary of the VGI Pilots' RTP Rate Design.** PG&E states that the RTP rate (also referred to herein as the “dynamic rate”) will use a number of elements from PG&E's RTP rate developed in Phase II of its General Rate Case (GRC), with a few VGI-specific modifications.¹
- **Generation RTP Rate Design.** PG&E states that the generation portion of the RTP rate will be a day-ahead hourly rate that consists of the marginal cost portion of PG&E's Day-Ahead Hourly Real-Time Pricing (DAHRTP) rate approved in D.22-08-002 and it provides specific details about the Marginal Energy Cost (MEC) and the Marginal Generation Capacity Cost (MGCC).²
- **Bundled vs. Unbundled Customers.** PG&E specifies how it will elicit participation from Community Choice Aggregator (CCA) customers.³
- **Distribution RTP Rate Design.** PG&E specifies details regarding its RTP distribution rate to recover Marginal Distribution Capacity Costs (MDCC). PG&E argues that the distribution grid benefit that can be captured from local grid conditions is much smaller than the generation benefit and that only its Primary

¹ PG&E AL 6694-E at 2.

² *Id.* at 2-3.

³ *Id.* at 4-12.

Capacity costs should be recovered in its preferred approach to RTP distribution rate design.

- **Transmission Rates.** PG&E states that transmission rates are under the jurisdiction of the Federal Energy Regulatory Commission (FERC) and cannot be altered for these pilots. Customers will continue to pay the transmission rates on their otherwise applicable tariff (OAT).⁴
- **Subscription Component.** PG&E states that it will use a subscription component, as described in ED Staff’s CalFUSE whitepaper⁵. Each customer will have a “subscription amount” of electricity that they purchase under the OAT and the RTP rate is only applied to deviations from this subscription amount. PG&E specified that it is still investigating the best way to set the subscription level, whether it be based purely on historical usage from the prior year or modified with other factors like weather conditions or more recent historical usage, and stated that piloting subscriptions in the VGI Pilots will help provide PG&E with essential data it needs to ensure that the CalFUSE model is scalable when adopted at wider scale.⁶
- **Potential Issues Needing Investigation.** PG&E highlights several issues regarding distribution prices and revenue collection that will need to be monitored over the course of the VGI Pilots. PG&E also provides an explanation for how participants will receive a “Shadow Bill” to track their incentive payments (or credits) for their performance on the dynamic rate.⁷
- **Funding.** PG&E states that it intends to file a supplemental Tier 3 AL to request that funding be transferred from the Exploring V2X Export Value Pilot, which was not approved, to the additional implementation cost of the VGI Pilots dynamic rate.⁸

⁴ *Id.* at 12.

⁵ Energy Division Staff White Paper: Advanced Strategies for Demand Flexibility Management and Customer DER Compensation, available at <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-costs/demand-response-dr/demand-response-workshops/advanced-der-and-demand-flexibility-management-workshop>.

⁶ PG&E AL 6694-E at 13.

⁷ *Id.* at 14.

⁸ *Id.* at 15-16.

- **Timing.** PG&E states that it had filed a request for extension from the Executive Director of the CPUC on August 23, 2022, to delay the start of Phase II of pilot 2 to begin by August 14, 2023.⁹

PG&E filed Supplemental AL 6694-E-A on December 22, 2023 in response to OP 6 of Resolution E-5192, and included the following elements:

- **Background.** PG&E states that it had unintentionally omitted the Emergency Load Reduction Program (ELRP) compensation strategy for dynamic rates, which is required per section 10.1 of Resolution E-5192.¹⁰
- **Proposed Methodology for Preventing Dual Compensation for VGI Pilots Customers Who are Dual Enrolled in the ELRP.** PG&E proposes to use the same methodology as the one it has proposed for the Expanded Dynamic Rate Pilots that were authorized by D.24-01-032.^{11, 12} PG&E proposes to alleviate double compensation using shadow billing – to keep RTP prices and compensation the same and redefine the “OAT” as the customer’s TOU rate minus DR credits. The customer’s bill would then be the lesser of the RTP and redefined OAT bills. It specifies that the formula as applied to VGI Pilots dynamic rate would be as follows:¹³

VGI Dynamic Rate Bill Credit = $\max(0, \text{OAT} - \text{sum}(\text{ELRP credits}) - \text{shadow bill})$

- **Dual Enrollment Alignment between VGI Pilots and Expanded Dynamic Rate Pilots.** PG&E states that, to ensure alignment between the VGI Pilots and Expanded Dynamic Rate Pilots, it proposes to use the same dual enrollment approach as the Expanded Dynamic Rate Pilots. Furthermore, PG&E proposes to align the approach for dual enrollment for the VGI Pilots with any future changes adopted for the Expanded Dynamic Rate Pilots.¹⁴

⁹ *Id.* at 17.

¹⁰ E-5192 at 23.

¹¹ PG&E Supplemental AL 6694-E-A at 1-2.

¹² As mentioned by Cal Advocates in comments to the draft Resolution, PG&E has detailed its methodology for dual enrollment for the Expanded Dynamic Rate Pilots in AL 7223-E, submitted on March 25, 2024, and further supplemented by AL 7223-E-A on June 7, 2024. The resolution of these ALs is still pending.

¹³ PG&E Supplemental AL 6694-E-A at 1-2.

¹⁴ *Id.* at 3.

NOTICE

Notice of AL 6694-E and Supplemental AL 6694-E-A was made by publication in the CPUC's Daily Calendar. PG&E states that copies of the ALs were mailed and distributed in accordance with Section 4 of General Order 96-B.

PROTESTS

In response to PG&E AL 6694-E, VGIC timely submitted a response and Cal Advocates timely submitted a protest.

VGIC's response expresses support for PG&E AL 6694-E, recommending that the AL be approved as filed. However, VGIC also includes additional information in their response to be addressed during pilot implementation and in subsequent VGI market development efforts. The additional information includes the following:

- VGIC suggests that PG&E clearly communicate that the rate is bidirectional; and
- VGIC requests that PG&E work with vendors to utilize charger or vehicle-based measurement to compensate exports, rather than utilizing the PEV Submetering Protocol adopted in D.22-08-024.

In its protest to AL 6694-E, Cal Advocates argues that the CPUC should deny PG&E's request for authorization to seek an additional \$2.1 million to implement the VGI Dynamic Rate portion of the VGI Pilots. Cal Advocates states that the request is unreasonable because PG&E proposes to spend those funds on functionalities that are largely duplicative of existing and planned PG&E functionalities. Cal Advocates asserts that PG&E fails to justify its request for additional funding to incorporate generation price calculation and price communication functionalities, as these either already exist in PG&E's DAH RTP rate infrastructure or have funds for their development allocated to the VGI Pilots.

Similarly, Cal Advocates indicates that PG&E's budget estimate includes developing a "Shadow Billing Platform," but it already tracks shadow rates in its Business EV Rate. Lastly, Cal Advocates argues that for "Customer Acquisition and Support" the costs should be minimal as PG&E will only need to retain participants into the VGI Dynamic Rate phase of the pilots.

On September 29, 2022, PG&E filed a reply to Cal Advocates' protest and VGIC's response. In response to VGIC's request that PG&E clearly communicate that the rate is

bidirectional, PG&E clarifies that the rate presented in AL 6694-E is in fact bidirectional, as directed by Resolution 5192-E.

In response to VGIC's concerns around submetering and that the VGI Dynamic Rate should only apply to energy generated or consumed by EVs, PG&E agrees and clarifies that the dynamic rate only applies to the load and generation from the EV. PG&E further agrees with VGIC that the PEV Submetering Protocol Decision, D.22-08-024, does not apply to the VGI Pilots because: (1) the CPUC issued the Decision after the VGI Pilots were conceived and approved, and (2) the submetering requirements are still pending.

In response to Cal Advocates' protest, PG&E notes that this Tier 2 AL does not seek approval of the funding request. PG&E clarifies that the AL gives notice that "PG&E intends to file a supplementary Tier 3 AL to request that necessary funding be transferred from the Exploring V2X Export Value Pilot which was not approved," as was authorized by OP 3 of Resolution 5192-E. PG&E argues that it is thus appropriate to approve this Tier 2 AL and address budget allocation issues in a future Tier 3 AL process. PG&E, however, agrees with Cal Advocates that duplication of efforts should be avoided wherever possible and explains that the funding request is not duplicative of other initiatives.

DISCUSSION

AL 6694-E satisfies some, but not all, of the requirements established in Resolution E-5192, and thus certain modifications are needed to ensure that the rate structures for Phase II of the VGI Pilots are consistent with Resolution E-5192 and D.20-12-029.

1. This Resolution modifies the rate options of PG&E's VGI Pilots to only offer a dynamic rate option at this time.

In Resolution E-5192, the CPUC directed PG&E to offer both residential and commercial customers a dynamic rate structure as well as a static TOU rate, both of which must include generation capacity, line losses, distribution, and transmission components for Phase II of the residential and commercial fleets pilots.¹⁵ The motivation for providing both a dynamic and TOU option was to provide data on 1) customer preference for each option; and 2) level of customer activity for each option. PG&E was directed to submit a Tier 2 AL to describe the rate structures and implementation details, including the

¹⁵ E-5192 at 22.

following topics: (1) bill implementation, (2) pilot rate design, (3) schedule for Phase II of the pilot as described in Resolution E-5192, (4) pilot price platform vendor, and (5) Emergency Load Reduction Program compensation strategy for dynamic rates.

Resolution E-5192 specified the requirements for the dynamic rate, including that: (1) the rate be bidirectional, with consumption and exports billed or credited based on marginal costs, (2) energy costs be determined based on the CAISO market price, (3) generation capacity costs be determined on an hourly basis, (4) line loss costs be determined on volumetric consumption, and (5) distribution capacity costs be determined on an hourly volumetric basis.¹⁶

AL 6694-E specifies the RTP rate design for the VGI Pilots, incorporating several elements from PG&E's RTP rate developed in its GRC Phase 2, as well as the CalFUSE model from ED Staff's 2022 White Paper.¹⁷ PG&E describes the following main characteristics:

- A day-ahead hourly generation rate equal to the MEC and marginal generation capacity costs MGCC.
- A day-ahead hourly distribution rate.
- A transmission rate equal to the customer's OAT.
- A subscription component that helps protect the customer from bill volatility while ensuring that PG&E can collect its fixed costs and non-bypassable charges (NBCs).

In AL 6694-E, PG&E provides specific details about the design of the RTP rate and stated that the design described will make the MEC and MGCC components in the VGI Pilots' generation RTP rate equal to the DAHRTP rate approved in D.21-11-016 and D.22-08-002. PG&E states that the use of the subscription component in the VGI Pilots' RTP rate obviates the need for a Revenue Neutral Adder (RNA) as the fixed costs that were designed to be collected by the RNA will be collected in the subscription component. PG&E provides a detailed description of the hourly distribution component of the rate, which will be discussed further in the section below.

In discussion of the various elements of the VGI Pilots' proposed dynamic rate, PG&E highlights the need for more "extensive investigation" and "hopes that these pilots will assist in that effort."¹⁸ We agree that the general approach described by PG&E in AL

¹⁶ E-5192 at 21.

¹⁷ PG&E AL 6694-E at 2.

¹⁸ *Id.* at 13.

6694-E with regards to the Pilots' proposed RTP rate will provide PG&E with the necessary opportunity to investigate the elements described by PG&E. In addition, we find that the proposed main elements are aligned with the CPUC's adopted Demand Flexibility Tariff Design Principles in D.23-04-040 in the ongoing Demand Flexibility Rulemaking (R.22-07-005).

While AL 6694-E includes the required details regarding the RTP rate for the VGI Pilots, PG&E does not include any details regarding a TOU option. AL 6694-E does not include any discussion of how a customer who selects the TOU option will be credited for exports. While PG&E argues that various design elements of its proposed RTP rate would ensure that the RTP option is cost-based, there is no information provided in AL 6694-E about how export compensation for a TOU rate would be cost-based.

We find that PG&E makes a compelling argument that the proposed RTP rate can provide cost-based export compensation for the VGI Pilots customers. The proposed RTP rate also provides PG&E the opportunity to investigate optimal rate design practices for future rates that would be aligned with the CPUC's adopted Demand Flexibility Design Principles¹⁹. We find that without additional details regarding a TOU option, the CPUC cannot assess whether the VGI Pilots' customers who would elect a TOU option would be compensated for their exports in a cost-based manner.

To effectively achieve the policy goals of: (1) maximizing the learnings and benefits from the ratepayer funds authorized for the VGI Pilots, and (2) ensuring that VGI Pilots customers are compensated for their exports in a manner that is aligned with the CPUC's adopted Rate Design and Demand Flexibility Design Principles,²⁰ we find that it is reasonable for PG&E to offer only the dynamic rate option for its VGI Pilots. In the absence of sufficient evidence that the TOU option complies with CPUC direction, we decline to authorize the TOU option at this time.

2. PG&E's rate design for distribution component of the dynamic rate

Resolution E-5192 documents that the stated policy goal of the VGI Pilots was to identify ways to: (a) capture the value of V2X in meeting utility distribution service needs²¹ and (b) avoid distribution infrastructure upgrades.²² In E-5192, the CPUC

¹⁹ D.23-04-040, Decision Adopting Electric Rate Design Principles and Demand Flexibility Design Principles (R.22-07-005).

²⁰ *Id.*

²¹ E-5192 at 9.

²² *Id.* at 13.

directed PG&E to file an AL to implement a dynamic, marginal cost-based rate structure for both residential and commercial customers. Specifically, E-5192 stipulated that for the dynamic rate, distribution capacity costs shall be determined on an hourly volumetric basis in lieu of monthly or annual demand charges.²³ The CPUC directed PG&E to design its capacity cost recovery price functions such that the dynamic prices fully recover annual PG&E generation and distribution capacity costs.

In AL 6694-E, PG&E provides details of the different rate components, and PG&E's MEC and MGCC rate components are discussed above. In PG&E's discussion of the distribution real time pricing rate design, it included the following arguments:

- "Designing an RTP rate for its Primary Capacity distribution costs is more complicated than designing an RTP rate for its generation commodity and capacity costs due to potentially requiring additional circuit forecasts and updates to its planning processes."²⁴
- "Secondary Capacity and New Business costs are much closer to the customer and a demand charge would be more appropriate for these costs."²⁵
- "Distribution Customer Costs, the EPMC multiplier, and non-allocated revenues are all fixed costs that do not depend on customer usage and are therefore also not appropriate for an RTP rate. In addition, the use of a subscription base eliminates the need to scale up rates to collect the full revenue requirement."²⁶

PG&E provides multiple options regarding how Secondary Capacity and New Business costs could be incorporated in an RTP rate given that E-5192 prohibits the use of demand charges for the VGI Pilot as follows: (1) including these costs with the Primary Capacity costs, (2) treat these costs as marginal cost but incorporate as a fixed \$/kWh adder, or (3) treat these costs as non-marginal and only collected through the subscription.

PG&E states that it uses the first option for the Valley Clean Energy (VCE) RTP Pilot.²⁷ However, it argues that option 3 should be used for the VGI Pilots instead as this arrangement would result in a cost-reduction to high load-factor customers while not increasing a customer's bill if a customer shifts their load.²⁸

²³ *Id.* at 21.

²⁴ *Id.* at 6.

²⁵ *Id.*

²⁶ *Id.* at 6-7.

²⁷ PG&E AL 6694-E at 8.

²⁸ *Id.*

A key policy objective of the VGI Pilots is to evaluate whether customer responsiveness to dynamic distribution pricing can improve circuit utilization and reduce the need for distribution grid upgrades;²⁹ therefore, it is important to ensure that there is a sufficient incentive in the volumetric component of the RTP distribution rate to encourage customer load shift behavior.

PG&E shows that scaling the distribution price to recover the Primary Capacity costs (as determined in its 2020 GRC Phase 2 proceeding) results in dynamic distribution rate that has an average cost of 1.1 cents/kWh.³⁰ PG&E's distribution revenue requirement has grown significantly since its last assessment of marginal distribution costs, which were included in PG&E's testimony for its 2020 GRC Phase 2 Application (A.)19-11-019. However, PG&E's marginal distribution costs have not yet been reassessed to incorporate the impacts of its increased distribution revenue requirement.

On April 19, 2024, PG&E submitted Advice Letter (AL) 7243-E, which proposes to update the marginal cost signals for all PG&E Real-Time Pricing (RTP) pilots and rates. In that AL, PG&E notes that illustrative rates in D. 21-11-016 were designed using marginal costs that corresponded to the revenue requirements (RRQs) of more than 4 years ago. To date, all proposals for dynamic rates have held these same marginal costs constant, even though the RRQ for generation and distribution have grown substantially, 124% and 123% respectively (adjusted for sales changes).³¹ PG&E notes that its marginal costs also have increased significantly since 2020. System Resource Adequacy values, the "short-run version" of the MGCC, have increased from \$62/kW-year in 2020 to \$183/kW-year today based on the 2020 and 2023 Market Price Benchmarks,³² while the capital costs of grid-scale batteries also increased significantly, as reflected in Inputs and Assumptions for the respective IRP Preferred System Plans. PG&E further notes that its costs to upgrade its distribution system have also increased, with increased wildfire hardening procedures and vegetation management. However, both its MDCCs correspond to the distribution RRQ of more than 4 years ago.³³ PG&E asserts that maintaining the 2020 marginal costs, which are significantly out of date, will not send a strong enough price signal to customers on the pilots. Increasing the

²⁹ E-5192 at 9.

³⁰ PG&E AL 6694-E at 5.

³¹ PG&E AL 7243-E at 2-3.

³² See Energy Division Calculation of Market Price for the Power Charge Indifference Adjustment Forecast and True up, October 2, 2023. Available at: <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/community-choice-aggregation-and-direct-access/calculation-of-mpb-2023-2024-final.pdf>.

³³ PG&E AL 7243-E at 2-3.

marginal costs will not affect average rates, but will give customers a larger opportunity to reduce their bills when they shift load.³⁴ In AL 7243-E, PG&E proposes to update its capacity marginal costs, for the purposes of setting the coefficients for dynamic prices for its RTP pilot rates only, in proportion to its RRQ changes since May 1, 2020, adjusted for sales changes.

The distribution rate design described by PG&E in AL 6694-E is not protested by any party and is not modified by this Resolution. PG&E's application to update its MGCC and MDCC for its RTP pilots will be addressed in the disposition AL 7243-E.

3. PG&E's rate design proposal for Primary and Transmission voltage level customers

In AL 6694-E, PG&E notes that customers that take service at the Primary voltage level do not incur Secondary and New Business marginal costs in their OAT, and that customers that take service at the Transmission voltage level do not incur any marginal distribution capacity costs in their OAT.³⁵ Therefore, the RTP prices for Primary customers will be the same as Secondary customers with the reduced costs reflected in the subscription charge, and all of a Transmission customer's distribution revenue would be collected through the subscription charge. These elements of the AL are not protested by any party and are not modified by this Resolution.

4. Other rate structure details in AL 6694-E

PG&E provides numerous other rate structure details in AL 6694-E with regards to: (i) the Circuit Clustering methodology it intends to use for the distribution component of its RTP rates, (ii) how it intends to address the distribution component of the RTP rate for customers on circuits that serve only a single customer or very few customers, (iii) the Transmission rates for the Pilots, (iv) a description of the Subscription component that it intends to use for the Pilots, and (v) other potential rate structure issues that it intends to investigate over the course of the VGI Pilots. These elements of the AL are not protested by any party and are not modified by this Resolution.

5. Shadow Billing Credits for bundled and unbundled customers

In AL 6694-E, PG&E specifies that approximately 30 percent of its customers are bundled and receive both generation and distribution service from PG&E while the remainder of its customers are unbundled and receive their generation service from a

³⁴ *Ibid.*

³⁵ PG&E AL 6694-E at 11.

Community Choice Aggregator (CCA). It further states that CCAs do not offer a dynamic rate option and that a higher percentage of EV owners are located in areas which offer a CCA as an option. PG&E states that to ensure that it will elicit participation from CCAs, it will have to come to agreements with interested CCAs and suggests potential options regarding how it could effectuate the payment of Shadow Bill credits (savings on a customer's pilot bill relative to a customer's Otherwise Applicable Tariff bill) for CCA customers. This includes the possibilities of PG&E compensating unbundled customers (and invoicing the CCA for the amount) or having PG&E inform the CCA of how much they owe their customers so that the CCAs can directly compensate their customers the appropriate amounts.³⁶

As this dynamic rate for the VGI Pilots is a marginal cost-based rate, any savings on a customer's Shadow Bill (relative to a customer's OAT bill) represent avoided generation and distribution costs for the LSE and the utility respectively. As such, the generation and distribution components of the Shadow Bill credits will have to be tracked in their respective revenue and cost balancing accounts.

For bundled customers, PG&E will compensate customers for both the generation and distribution Shadow Bill credits³⁷ and it should track the associated costs in its appropriate balancing accounts. As unbundled customers receive their generation service from a CCA, they pay the generation component of their bills to their CCA. Therefore, PG&E will only be responsible for compensating and tracking the distribution component of a customer's Shadow Bill credits.³⁸

The CPUC finds it reasonable for PG&E to effectuate agreements with interested CCAs to enable CCA customers to participate in the Pilots, and to assist CCAs to appropriately compensate their customers for the generation component of the Pilot Shadow Bill credits. PG&E may use the potential options it has identified in AL 6694-E to facilitate CCA participation in the VGI Pilots.

6. Cal Advocates Protest

In its protest, Cal Advocates argues that the CPUC should deny PG&E's request for additional implementation funding of \$2.1 million as PG&E proposes to spend those funds on functionalities that are largely duplicative of existing and planned PG&E

³⁶ *Id.* at 3.

³⁷ *Id.* at 14-15.

³⁸ *Id.* at 15.

functionalities. In its reply to Cal Advocates' protest, PG&E states that this Tier 2 AL (PG&E AL 6694-E) does not seek approval of the funding request; rather this AL gives notice that PG&E seeks to file a supplementary Tier 3 AL. Further, PG&E argues that it is appropriate to approve this Tier 2 AL and address budget allocation issues in the Tier 3 AL process. PG&E, however, agrees with Cal Advocates that duplication of efforts should be avoided wherever possible and provides an explanation in response to Cal Advocates' protest asserting that the funding request is not duplicative of other initiatives.

As PG&E is not requesting additional funding as part of this AL, and instead merely states intent to file a subsequent Tier 3 AL, we find it reasonable to approve PG&E AL 6694-E as modified by this resolution and address PG&E's budget allocation issues in the Tier 3 AL process.

7. *VGIC Response*

VGIC in its response to AL 6694-E and PG&E in its response to VGIC both argue that the Plug-In Electric Vehicle (PEV) Submetering Protocol addressed in D.22-08-024 are not applicable to PG&E's VGI Pilots' implementation. VGIC claims that the PEV Submetering Decision does not apply to pilots and programs, and PG&E concurs, asserting that the Decision does not apply to the VGI Pilots because the CPUC adopted the PEV Submetering Decision after PG&E conceived of the pilots and after the adoption of Resolution E-5192. Both arguments, however, are flawed.

D.22-08-024 does not make any exception for pilots and programs, as VGIC claims. Broadly, D.22-08-024 establishes a protocol for submetering EV load, including requirements for certification and accuracy of the submeters as they are used for billing purposes. Indeed, OP 3 in D.22-08-24 directs PG&E to revise all relevant EV rates and tariffs applicable to EV charging to reference the PEV Submetering Protocol. Moreover, OP 3 also directs PG&E to update all relevant Electric Rules to reflect the adopted PEV Submetering Protocol.

Following D.22-08-024, Resolution E-5274 approved PG&E's Submetering Implementation Plan that includes relevant updates to Electric Rules and tariffs without exception for pilots and programs. Additionally, while Resolution E-5274 identifies December 2024 as the deadline for PG&E to implement automated billing for submetering, the Resolution requires PG&E to offer submetering via manual billing prior to this. In its implementation Advice Letter, PG&E estimates April 2023 as the

launch for submetering via manual billing.³⁹ Therefore, PG&E is now required to widely permit customers to enroll in PEV submetering.

PG&E's argument that it conceived of the pilot and received authorization to implement the pilot prior to the adoption of D.22-08-024 is not a basis for non-compliance with the Decision and Resolution E-5274. As D.22-08-024 and Resolution E-5247 establish rules governing submetering for EVs and direct PG&E to offer submetering to any EV customer, excluding those that are simultaneously participating in a Net-Energy Metering (NEM) program, the PG&E VGI Pilots are not excluded from compliance. While at the time of PG&E's reply the protocol had yet to be implemented, the VGI Pilots must therefore comply with the directives set forth in D.22-08-024 and Resolution E-5247.

Lastly, as the CPUC established its PEV submetering policy via Decision, the AL process is not an appropriate venue for PG&E to request modification or exceptions to that policy.

8. *PG&E's proposal for ELRP dual enrollment and methodology to avoid double compensation*

Resolution E-5192 stated that PG&E must require that residential and commercial VGI pilots participants enroll in the ELRP beginning in Phase 1.⁴⁰ Resolution E-5192 also required PG&E to propose a methodology in its rate structure AL to avoid double compensating pilot participants during ELRP events. As described in the background section above, in Supplemental AL 6694-E-A, PG&E proposes a methodology where the customer's ELRP credits are subtracted from the compensation that they would receive from the dynamic rate shadow bill as described in the formula below:⁴¹

$$\text{VGI Dynamic Rate Bill Credit} = \max(0, \text{OAT} - \text{sum(ELRP credits)} - \text{shadow bill})$$

PG&E also states that it proposes to align its methodology for ELRP dual enrollment with results of the Expanded Dynamic Rate Pilots (Expanded RTP Pilots) dual enrollment workshop or any Commission direction for the Expanded RTP Pilots.⁴²

³⁹ Resolution E-5274 page 7

⁴⁰ E-5192 (Discussion Section 10.3) at 23.

⁴¹ PG&E Supplemental AL 6694-E-A at 2.

⁴² *Id.* at 3.

PG&E's plans for dual enrollment for the Expanded RTP Pilots are detailed in AL 7223-E, submitted on March 25, 2024, and further supplemented by AL 7223-E-A on June 7, 2024. In ALs 7223-E and 7223-E-A, PG&E proposes to exclude ELRP subgroups A2, A4, and A5 from participating in the Expanded RTP Pilots as it cannot accurately address dual compensation with customers in ELRP subgroups that use aggregation since the specific incentives provided by aggregators to customers are unknown, and this information would be necessary to calculate the shadow bill incentive payments with the methodology that it proposes for the Expanded RTP Pilots.

In its comments to the draft Resolution, PG&E states that it cannot accurately address dual compensation with customers in aggregated ELRP subgroups due to the lack of information on incentive payments for aggregated customers with the methodology that it has proposed in the Supplemental AL 6694-E-A.⁴³ However, PG&E states that while it has proposed to not allow for dual participation with ELRP subgroups A2, A4, A5 in the Expanded RTP Pilots authorized by D.24-01-032, this dual participation restriction is not feasible for the VGI Pilots per Section 10.3 of Resolution E-5192, which requires that PG&E must enroll VGI Pilot participants in the ELRP program beginning with Phase I.⁴⁴ PG&E states that the only relevant ELRP subgroup for the VGI Pilot participants is A5, which is an aggregated ELRP subgroup.⁴⁵

In its comments to the draft Resolution, PG&E proposes an alternate methodology for addressing double compensation for ELRP subgroup A5 customers to allow them to participate in the VGI Pilots.⁴⁶ PG&E proposes to calculate the ELRP performance and compensation for each customer using the ELRP program parameters and assume they are receiving the full incentive, which might vary from the actual amount the customer receives from their ELRP aggregator. PG&E argues that using calculated ELRP incentives instead of aggregator-provided ELRP incentives avoids double compensation and is in line with the originally proposed methodology for the VGI Pilots. The difference between PG&E's proposed approach to preventing ELRP dual compensation for the VGI Pilots and the Extended RTP Pilots is that PG&E will allow ELRP subgroup A5 to participate in Phase II of the VGI Pilots, while PG&E has proposed that no aggregator subgroup be permitted in the Expanded RTP Pilots.

⁴³ PG&E comments to draft Resolution at 3-4. See below in comments section for summary.

⁴⁴ E-5192 at 23.

⁴⁵ PG&E comments to draft Resolution at 3-4. See below in comments section for summary.

⁴⁶ *Ibid.*

We find PG&E's alternate methodology to be reasonable and in compliance with Resolution E-5192's requirement that PG&E avoid double compensation for participants that are enrolled in ELRP. However, we also find that PG&E's alternate methodology assumes that a customer has received full ELRP compensation while the customer's actual compensation might be less. We encourage PG&E to first coordinate with the A5 aggregators to obtain the necessary information to calculate a customer's actual ELRP compensation to prevent double compensation. PG&E should only assume full ELRP compensation for a customer if the aggregator refuses to provide this information. It is reasonable for PG&E to use the alternate methodology for a customer enrolled in ELRP subgroup A5 if it is unable to obtain, from the customer's aggregator, the information necessary to calculate the shadow bill incentive payments with the methodology that is proposed in Supplemental AL 6694-E-A.

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. Section 311(g)(2) provides that this 30-day review period and a 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, this draft Resolution was mailed to parties for a 20-day comment period, and the Resolution was placed on the CPUC's agenda more than 30 days from the date that the draft Resolution was mailed.

VGIC, Cal Advocates, and PG&E filed public comments on June 25, 2024. VGIC generally supports the draft Resolution, but requests that the Commission modify the draft Resolution to allow for a TOU export option for the VGI pilots.⁴⁷ Cal Advocates opposes adoption of the draft Resolution without certain specified modifications regarding CCA participation incentive and ELRP dual compensation. PG&E provides comments regarding submetering, application of VGI rate and an updated methodology to calculate the dynamic rate incentives (annual bill credits) for a VGI Pilot customer that is dual enrolled in the ELRP. Some party comments were out of scope and only relevant comments are discussed below along with any revisions that we made to the Resolution in response to these comments. We also made minor editorial revisions for clarity and corrected typos.

⁴⁷ VGIC comments to draft Resolution at 1.

1. VGIC's request for providing VGI Pilot participants with a TOU export option

VGIC requests that the Commission modify the draft Resolution to include a TOU export option for the VGI pilots. VGIC argues that offering multiple compensation options would attract a diverse range of customers, as different customers have varying needs and preferences. VGIC states that a single export compensation design, such as RTP alone, may preclude some eligible customers from participating in the pilot. VGIC states that offering the TOU option will not interfere with the Commission's broader demand flexibility initiatives and argues that the Expanded RTP Pilots authorized by D.24-01-031 are more suited to advance learnings regarding RTP rates.

We acknowledge VGIC's concerns, however, participants in these pilots will be provided generous rate-payer funded technology incentives in order to facilitate their participation in addition to being compensated for their V2G exports. The Commission has an obligation to ensure that rates, including for exports, are just and reasonable. In recent IOU applications, the Commission has adopted RTP pricing as appropriate, cost-based compensation for a customer exports.⁴⁸ Therefore, in light of the reasons stated in the Resolution above and the discussion herein, we reject VGIC's request to require inclusion of a TOU export option in the VGI pilots.

2. Cal Advocates' request to remove language addressing CCA participation incentives

Cal Advocates requests that the Commission modify the draft Resolution to remove the discussion, findings, and ordering paragraphs (OPs) regarding CCA incentives for the VGI Pilot. Cal Advocates argues that it filed a timely protest to PG&E's AL 6909-E-A on May 23, 2024, opposing the implementation of CCA incentives. Cal Advocates also requests that the Commission modify the findings of the draft resolution to include a finding regarding PG&E's AL 6909-E-A

We acknowledge Cal Advocates' argument that the issue of CCA incentives is currently pending before the Commission in AL 6909-E-A. Therefore, we find it reasonable to remove the discussion of CCA incentives from this Resolution, as requested by Cal Advocates. The Resolution's findings and OPs have also been modified to remove references to CCA incentives. We partially adopt Cal Advocates' recommendations for a new finding regarding PG&E's AL 6909-E-A.

⁴⁸ D.23-11-006 – Decision Adoption Dynamic Export Rate Pilot for SDG&E.

3. Emergency load reduction program dual participation

Both Cal Advocates and PG&E provided comments to the draft Resolution regarding PG&E's Emergency Load Reduction Program (ELRP) Dual Participation proposal, which was specified in PG&E's Supplemental AL 6694-E-A. This Supplemental AL was not protested and was thus approved in the draft resolution without discussion.

In comments to the draft Resolution, Cal Advocates requests that the Commission should include a detailed discussion of PG&E's proposal from 6694-E-A.⁴⁹ Specifically, Cal Advocates points out that in AL 6694-E-A, PG&E has proposed to align its eligibility and compensation calculation methodology for dual participants in the VGI Pilots and the ELRP with the approach it has proposed for the Expanded Dynamic Rate Pilots authorized by D.24-01-032 (Expanded RTP Pilots). PG&E's dual participation implementation plans are detailed in AL 7223-E, submitted on March 25, 2024, and further supplemented by AL 7223-E-A on June 7, 2024. Cal Advocates requests that the Commission should modify the draft Resolution to: (i) include the entire record on PG&E's various proposals for dual participation for the VGI Pilots and Expanded RTP Pilots; and (ii) clarify that ELRP subgroups A2, A4, and A5 are excluded from participation in the Expanded RTP Pilots and thereby should be excluded from the VGI Pilots as well.

In its comments to the draft Resolution, PG&E states that it cannot accurately address dual compensation with customers in ELRP subgroups that use aggregation since the specific incentives provided by aggregators to customers is unknown, and that information is necessary to calculate the shadow bill incentive payments (i.e., dynamic rate bill credits) with the methodology that it has proposed in the Supplemental AL 6694-E-A.⁵⁰ PG&E states that while it does not propose to allow for dual participation with ELRP subgroups A2, A4, A5 in the Expanded RTP Pilots authorized by D.24-01-032, this restriction is not feasible for the VGI Pilots. PG&E highlights that Section 10.3 of Resolution E-5192, requires that PG&E must enroll VGI Pilot participants in the ELRP program beginning with Phase I.⁵¹ PG&E states that the only relevant ELRP subgroup for the VGI Pilot participants is A5. PG&E also argues that Dual Enrollment in ELRP will increase participation in Phase II of the VGI pilots since ELRP provides an exemption to the Rule 21 interconnection UL 1741 supplemental certifications requirements, which many EVSE models do not currently have. PG&E proposes an alternate methodology for addressing double compensation for ELRP subgroup A5

⁴⁹ Cal Advocates comments to draft Resolution at 4-5.

⁵⁰ PG&E comments to draft Resolution at 3-4.

⁵¹ E-5192 at 23.

customers participating in the VGI Pilots. PG&E proposes to calculate the ELRP performance and compensation for each customer using the ELRP program parameters and assume the customer is receiving the full incentive amount, which might vary from the actual amount the customer receives from the customer's ELRP aggregator. PG&E states that using calculated ELRP incentives instead of aggregator-provided ELRP incentives avoids double compensation and is in line with the originally proposed methodology for the VGI Pilots per supplemental AL 6694-E-A. The only difference between its proposed approach to preventing ELRP dual compensation for the VGI Pilots and the Extended RTP Pilots is that PG&E will allow ELRP subgroup A5 to participate in Phase II of the VGI Pilots, and no aggregator subgroup would be permitted in the Expanded RTP Pilots.

We find PG&E's proposal outlined above to be reasonable and in compliance with Resolution E-5192's requirement that PG&E avoid double compensation for participants that are enrolled in ELRP if it is unable to obtain, from aggregators, the information necessary to calculate the shadow bill incentive payments with the methodology that is proposed in Supplemental AL 6694-E-A. We have modified the resolution to include a discussion of PG&E's updated proposal for VGI pilot participants that are dual enrolled in ELRP subgroup A5. We also acknowledge that Resolution E-5192 required PG&E to enroll VGI pilot participants in ELRP and that therefore, PG&E's methodology for VGI Pilot dual participation will be different from the Expanded RTP Pilots. PG&E will allow ELRP subgroup A5 to participate in Phase II of the VGI Pilots, and no aggregator subgroup is proposed to be permitted in the Expanded RTP Pilots. We have added a section in the discussion section that details PG&E's original proposal as outlined in the Supplement AL 6694-E-A, and have included relevant information regarding the differences in the rules regarding dual participation in ELRP subgroup A5 for the VGI Pilots as compared to the Expanded RTP Pilots.

4. Participation of customers who choose to submeter their EV load in Phase II of the VGI Pilots

PG&E states that customers who choose to submeter their EV load may not be able to participate in Phase II of the VGI Pilots at launch due to additional development required to accommodate submetering.⁵² PG&E highlights that OP 6 of the draft Resolution directs them to offer VGI Pilot customers the option to submeter their vehicle load in compliance with Decision (D.) 22-08-024 and Resolution E-5247. PG&E states that it initially interpreted D. 22-08-024 as not inclusive of already active or

⁵² PG&E comments to draft Resolution at 1-2.

approved pilots and therefore did not prepare the necessary requirements with the third-party vendor for submetered customers in the VGI Pilots.

In its comments, PG&E states that it will now work with the VGI Pilots vendor to develop the necessary requirements per the draft Resolution.⁵³ PG&E highlights challenges that it anticipates enabling subtractive billing for submetered customers, including additional processes and structures needed to appropriately match submetered EV data from the Meter Data Management Agent (MDMA) with the customer's existing main meter account. PG&E states that it is unlikely that PG&E will be able to allow customers who submeter their EV load to participate on the VGI Dynamic Rate at the launch of Phase II of the pilots unless they choose to apply the VGI Dynamic Rate to their full premise's meter load. PG&E states that it will develop a timeline and implementation plan with the vendor to enable submetering in Phase II of the VGI Pilot as soon as possible which will likely be in early 2025 and will analyze other possible solutions, such as leveraging PG&E's internal manual billing structure, to support submetering customers interested in the Pilot in the interim.

We find that the requirements to offer PEV submetering as an option to customers, as the Commission established in D.22-08-024 and Resolution E-5274, apply to PG&E's pilot.

5. PG&E's clarifications regarding application of VGI Dynamic Rate to full premise load, eligible rates, and timing of Phase II launch

PG&E clarifies that the VGI Dynamic Rate, unless a customer is able submeter their load, will apply to the whole home. PG&E argues that this approach is appropriate as the EV has the potential to lower site load as well as export energy to the grid.

PG&E also clarifies that customers on the following rates are eligible to participate in Phase II of the VGI Pilots: Residential (EV2A and E-ELEC), Commercial (B-6, B-10, B-19, and B-20), and Business EV rates (BEV-1 and BEV-2).

Lastly, PG&E clarifies that it had been approved an extension request by the Executive Director on January 12, 2024, which permits Phase II launch to be extended until the VGI Pilots meet the following three factors: (i) A minimum of two technology providers per pilot capable of grid-tied operations; (ii) At least 15 interconnected customers/EVSEs enrolled per pilot, or that PG&E is otherwise convinced that the

⁵³ Ibid.

market is ready for vehicle-to-grid based on agreements with Original Equipment Manufacturers (OEM); and (iii) The readiness of the pilot cloud platform (which is expected Fall 2024).

FINDINGS

1. D.20-12-029 adopted strategies to promote VGI and ordered PG&E and other investor-owned utilities to implement various near-term policy actions in support of the strategies.
2. Resolution E-5192 approved three V2X pilots proposed by PG&E in Advice Letter (AL) 6259-E to begin in 2022 and run for three years.
3. E-5192 directed PG&E to offer both residential and commercial customers a dynamic rate structure as well as a static time-of-use (TOU) rate, both of which must include generation capacity, line losses, distribution, and transmission components for Phase II of the Residential and Commercial Fleets Pilots (VGI Pilots).
4. Ordering Paragraph (OP) 6 of Resolution E-5192 directed PG&E to file a Tier 2 AL proposing rate structures for the VGI Pilots.
5. E-5192 directed PG&E to file an AL to implement a dynamic, marginal cost-based rate structure for both residential and commercial customers to effectively achieve the policy goals of: (1) maximizing the learnings and benefits from the ratepayer funds authorized for the VGI Pilots, and (2) ensuring that VGI Pilots customers are compensated for their exports in a manner that is aligned with the CPUC's adopted Rate Design and Demand Flexibility Design Principles.
6. E-5192 directed PG&E to design its capacity cost recovery price functions for both generation and distribution capacity such that the dynamic prices fully recover annual PG&E generation and distribution capacity costs.
7. E-5192 identified that a key policy objective of the VGI Pilots is to evaluate whether customer responsiveness to dynamic distribution pricing can improve circuit utilization and reduce the need for distribution grid upgrades; therefore, it is important to ensure that there is a sufficient incentive in the volumetric component of the RTP distribution rate to encourage customer load shift behavior.
8. PG&E filed AL 6694-E on September 6, 2022, in response to OP 6 of Resolution E-5192.

9. The RTP rate structure proposed by PG&E in AL 6694-E can provide cost-based export compensation for customers participating in the VGI Pilots and provides PG&E the opportunity to investigate optimal rate design practices for future rates that would be aligned with the CPUC's adopted Demand Flexibility Design Principles.
10. AL 6694-E did not include any discussion about how customers selecting the TOU option will be credited for exports.
11. Without additional details regarding a TOU option, the CPUC cannot assess whether VGI Pilots customers that elect a TOU option would be compensated for their exports in a cost-based manner.
12. PG&E's distribution revenue requirement has grown significantly since its last assessment of marginal distribution costs, which was part of PG&E's testimony for its 2020 GRC Phase 2 Application (A.)19-11-019.
13. On April 19, 2024, PG&E submitted Advice Letter 7243-E, which proposes to update the marginal cost signals for all PG&E Real-Time Pricing pilots and rates, including the VGI Pilots.
14. It is reasonable for PG&E to effectuate an agreement with CCAs participating in the VGI Pilots to assist a CCA in calculating an unbundled customer's generation Shadow Bill credits, which will be paid by the unbundled customer's CCA.
15. It is reasonable to conclude that the rules governing submetering for electric vehicles (EVs) in D.22-08-024 and Resolution E-5247 also apply to the VGI Pilots.
16. D.22-08-024 and Resolution E-5247 direct PG&E to offer submetering to any EV customer upon the approval of that Resolution.
17. E-5192 required that PG&E must enroll residential and commercial VGI Pilots participants in the ELRP beginning in Phase 1 and required PG&E to propose a methodology in its rate structure AL to avoid double compensating pilot participants during ELRP events.
18. PG&E filed Supplemental AL 6694-E-A on December 22, 2023 in response to OP 6 of Resolution E-5192, and included a proposal for a methodology avoiding double compensation for a customer dual enrolled in the ELRP that would subtract a customer's annual sum ELRP credits from the customer's VGI Dynamic Rate Bill Credit.
19. In comments to the draft Resolution, PG&E proposed an alternate methodology to the approach it proposed in Supplemental AL 6694-E-A for customers dual enrolled in ELRP subgroup A5, it proposed to calculate the ELRP performance and compensation for each customer using the ELRP program parameters and

assuming they are receiving the full incentive, which might vary from the actual amount the customer receives from their ELRP aggregator.

- (a) PG&E's alternate methodology is reasonable and in compliance with Resolution E-5192's requirement that PG&E avoid double compensation for participants that are enrolled in the ELRP.
 - (b) PG&E's alternate methodology assumes that a customer enrolled in ELRP subgroup A5 has received full ELRP compensation, however, the customer's actual compensation may be less.
 - (c) It is reasonable for PG&E to use the alternate methodology outlined above for a customer in ELRP subgroup A5 if it is unable to obtain, from the customer's aggregator, the information necessary to implement the methodology that is proposed in Supplemental AL 6694-E-A.
20. PG&E filed Tier 3 AL 6909-E-A on May 3, 2024, Supplemental: Request for Approval of PG&E's Forecast for VGI Dynamic Rate Implementation to be funded by a \$2.3 million Budget Transfer from the VGI Pilot, Cal Advocates filed a timely protest on May 23, 2024.
21. PG&E has been approved an extension request by the Executive Director on January 12, 2024, which permits Phase II launch to be extended until the VGI Pilots meet the following three factors: (i) A minimum of two technology providers per pilot capable of grid-tied operations; (ii) At least 15 interconnected customers/EVSEs enrolled per pilot, or that PG&E is otherwise convinced that the market is ready for vehicle-to-grid based on agreements with Original Equipment Manufacturers (OEM); and (iii) The readiness of the pilot cloud platform (which is expected in Fall 2024).

THEREFORE IT IS ORDERED THAT:

- 1. Pacific Gas and Electric Company (PG&E) Advice Letter (AL) 6694-E and Supplemental AL 6694-E-A are approved with modifications as specified herein.
- 2. PG&E is not authorized to offer a TOU option for Phase II of the PG&E Residential and Commercial Fleet Vehicle Grid Integration Pilots (VGI Pilots) at this time.
- 3. PG&E is directed to recover costs for customer Shadow Bill credits (savings on a customer's pilot bill relative to a customer's Otherwise Applicable Tariff bill) as follows:
 - (a) PG&E shall not use VGI Pilots funds for Shadow Bill credits for participating customers;

- (b) PG&E shall track any generation and distribution Shadow Bill credits for a bundled customer in its respective generation and distribution revenue and cost balancing accounts (as described in D.24-01-032, COL 31); and
 - (c) PG&E shall track distribution Shadow Bill credits for an unbundled customer in its respective distribution revenue and cost balancing account (as described in D.24-01-032, COL 31).
- 4. Pacific Gas and Electric Company shall offer Vehicle Grid Integration Pilot customers the option to submeter their vehicle load, in compliance with the PEV Submetering policy and directives required by D.22-08-024 and Resolution E-5247.
- 5. Pacific Gas and Electric Company is authorized to apply the methodology it proposed in comments to the draft Resolution for calculating the Dynamic Bill Credits for VGI Pilots customers dual enrolled in ELRP subgroup A5 if it is unable to obtain, from aggregators, the ELRP incentive information necessary to implement the methodology that it proposed in Supplemental AL 6694-E-A.

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 July 11, 2024; the following Commissioners voting favorably thereon:

/s/ RACHEL PETERSON

Rachel Peterson
Executive Director

ALICE REYNOLDS
President

DARCIE HOUCK
JOHN REYNOLDS
KAREN DOUGLAS
Commissioners

Commissioner Matthew Baker recused himself
and did not participate in the vote of this item.