

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

[Item #14 \(Rev. 1\)](#)

Agenda ID #23994

ENERGY DIVISION

RESOLUTION E-5434

February 26, 2026

R E S O L U T I O N

Resolution E-5434 Approves, with modifications, Pacific Gas and Electric Company Advice Letter 7378-E Request ~~to~~for Extension of Time for Phase I and Advice Letter 7378-E-A Request for Modification to Phase II Scope as a Hybrid Model in PG&E's Vehicle-to-Everything Microgrid Pilot #3.

PROPOSED OUTCOME:

- This Resolution approves Pacific Gas and Electric Company's (PG&E) request, with modifications, in Advice Letters (AL) 7378-E Request to Extension of Time for Phase I and 7378-E-A Modification to Phase II Scope regarding Pilot #3, the Vehicle-to-Everything (V2X) Microgrid Pilot. This Resolution grants PG&E an extension of time for Phase I until June 30, 2026, to complete demonstration activities and data collection. This Resolution also approves PG&E's modification of the Phase II to a Hybrid Support Model. Under this model, PG&E will close new participant enrollment, return customer incentives to ratepayers, and provide technical consulting support for V2X readiness at Microgrid Incentive Program (MIP) sites using non-pilot resources.

SAFETY CONSIDERATIONS:

- There are no safety considerations associated with this resolution.

ESTIMATED COST:

- There are no costs associated with this resolution.

By Advice Letter 7378-E and 7378-E-A, filed on September 24, 2024 and August 6, 2025.

SUMMARY

On September 24, 2024, Pacific Gas and Electric Company (PG&E) filed Advice Letter (AL) 7378-E requesting an extension of time for Pilot #3, the Vehicle-to-Everything (V2X) Microgrid Pilot. AL 7378-E proposed converting the Phase I deadline at the Redwood Coast Airport Microgrid (RCAM) to a milestone-based schedule and extending Phase II through April 2028, or until pilot incentives are exhausted.

On August 6, 2025, PG&E filed supplemental AL 7378-E-A. This supplemental AL replaces the Phase II time extension request portion of AL 7378-E with a Hybrid Support Model; however, does not replace the AL in its ~~entirely~~entirety. Under this proposal, PG&E would close new participant enrollment for Phase II, return remaining customer incentive funds to ratepayers, and provide V2X technical consulting support to the Microgrid Incentive Program (MIP) ¹sites using internal funds. The Phase I extension request made in AL 7378-E remained in place.

This Resolution approves PG&E's requests through Advice Letters, with some modifications as follows:

Approve PG&E's proposed milestone-based implementation timeline and time extension for Phase I of Pilot #3, as requested in AL 7378-E, with modification of an ultimate completion date of June 30, 2026, and find that this approved schedule can still produce useful operational data and lessons learned once the RCAM chargers are repaired, energized, and testing resumes. As another modification, PG&E shall provide a narrative update on its strategy for meeting the five-to-ten bidirectional EV metric requirement, including an explanation of how the current two-vehicle configuration aligns with the pilot's original objectives in a Tier 2 AL.

PG&E's request to modify Phase II, concluding that the Hybrid Support Model reasonably adapts the pilot to new market conditions by using non-pilot funds for technical support, closing enrollment, and returning unused authorized incentive funds to ratepayers, is also approved. These actions can protect ratepayers from undue costs

¹ The Microgrid Incentive Program (MIP) offers technical and financial support for community microgrids and follows a typical two-to-four-year development timeline from study to operation.

while ensuring that lessons learned from Pilot #3 are applied to emerging community microgrids.

BACKGROUND

This Resolution addresses PG&E AL 7378-E and AL 7378-E-A, filed on September 24, 2024, and August 6, 2025, pursuant to Decision (D.) 20-12-029 and Resolution E-5192.

1. Background and Procedural History

Senate Bill (SB) 676 (Stats. 2019, Ch. 484) enacted Public Utilities Code §740.16, directing the California Public Utilities Commission (CPUC) to develop strategies and metrics to maximize feasible and cost-effective electric vehicle (EV) integration into the electrical grid by January 1, 2030. In response, D. 20-12-029 implemented SB 676, which authorized investor-owned utilities (IOUs) to propose pilots via advice letters. Among its policy priorities, the decision emphasized accelerating the adoption of EVs for bi-directional, non-grid-export power and resiliency during Public Safety Power Shutoff (PSPS) events.

Pursuant to D.20-12-029, PG&E submitted AL 6259-E on July 15, 2021, proposing four V2X pilots, including Pilot #3, the Vehicle-to-Microgrid PSPS Microgrid Pilot. On May 5, 2022, the CPUC approved Pilot #3 through Resolution E-5192, authorizing a \$1.5 million budget. Resolution E-5192 established overall objectives and success metrics for Pilot #3, but it did not distinguish between “Phase I” and “Phase II.” Before that, PG&E introduced the two-phase structure on July 15, 2021, in AL 6259-E, Attachment 1, to describe how the pilot’s demonstration would be staged.

PG&E designed Pilot #3 to demonstrate how bidirectional EVs and electric vehicle supply equipment (EVSE) can provide community resiliency² benefits during grid

²In AL 6259-E, PG&E defined “resiliency” as maintaining critical electric service to communities during PSPS or outage conditions by enabling microgrids to operate independently from the grid using local renewable generation, storage, and bidirectional EVs to support essential loads and reduce reliance on fossil backup generation.

outages. The pilot builds on the Electric Program Investment Charge (EPIC) Project 3.11B, which validated behind-the-meter (BTM) real-time resiliency controls for solar and storage, by incorporating EVs as bidirectional resources capable of charging and discharging within a multi-customer microgrid. The objective is to enable operational integration between front-of-the-meter (FTM) generation and BTM vehicle resources to balance generation and load during PSPS events.

Under the approved design, PG&E was to test approximately five to ten BTM bidirectional EVs in coordination with an FTM generator or generator-plus-battery system at Redwood Coast Airport Microgrid (RCAM). The Commission adopted success metrics in Resolution E-5192, including the development of operational processes that allow multi-customer microgrids to use BTM EVs to balance generation and load, demonstrating five to ten bidirectional EVs operating within a microgrid during PSPS or islanded conditions, and launching an incentive program for up to 200 participating vehicles located within PSPS microgrid boundaries.

Funding for the core microgrid functions, such as generator management, supervisory control and data acquisition (SCADA) integration, and switching controls, is provided through EPIC 3.11B. The VGI pilot funds support incremental activities specific to EV integration, including inverter configuration, performance testing, and customer engagement on resiliency and mobility benefits.

On November 14, 2023, PG&E submitted an extension request to the CPUC, citing delays related to the Federal Aviation Administration (FAA) dispersion of funding needed to complete the installation of bi-directional chargers at the RCAM, where the first demonstration site was to be located. On January 12, 2024, the CPUC Executive Director granted PG&E's extension request. On May 21, 2024, PG&E submitted another extension request letter, citing continued FAA delays, which was denied by the Commission on June 2, 2024.

On September 24, 2024, PG&E filed Advice Letter 7378-E requesting the Commission's approval to revise the schedule for the V2X Microgrid Pilot. PG&E proposed to transition Phase I from a fixed, date-based timeline to a milestone-based schedule, under which demonstration activities would begin after the bi-directional chargers were

installed and energized, and continue for four months following deployment of the vendor's EPIC 3.11B³ microgrid control system at the RCAM. PG&E also requested to extend Phase II through April 2028, or until available pilot incentive funds are fully expended, to align with the longer development timelines of the Community Microgrid Enablement Program (CMEP)⁴ and MIP projects. PG&E stated that the requested extensions would not require additional ratepayer funding.

On August 6, 2025, PG&E filed AL 7378-E-A to update and replace the Phase II time extension request contained in AL 7378-E. The supplemental filing retained the previously proposed Phase I time extension but fully replaced the Phase II time extension request with a proposal for a "Hybrid Support Model". Under this approach, PG&E would close customer enrollment, return unspent incentive funds to ratepayers, and continue providing technical and engineering support to MIP sites using internal, non-pilot funds. The Hybrid Support Model was designed to leverage PG&E's V2X expertise to assist MIP communities with integrating bidirectional charging and EV readiness during early design and interconnection stages, while avoiding additional pilot costs and administrative burden. PG&E stated that this modification better reflected current market readiness, given the limited number of operational community microgrids, persistent vendor and equipment challenges, and the nascent state of bidirectional EV technology.

In support of this filing, Appendix I, Q&A From Energy Division Staff, provided detailed responses to outstanding questions regarding the pilot's timeline, budget, lessons learned, and technical performance. The appendix documented implementation challenges in Phase I, including vendor instability, firmware issues, and charger damage during testing at the RCAM. It also summarized PG&E's key lessons learned and

³ EPIC Project 3.11B, titled *Redwood Coast Airport Renewable Energy Microgrid and EV Integration*, was funded under the California Energy Commission's EPIC program and implemented by the Schatz Energy Research Center in partnership with PG&E, the Redwood Coast Energy Authority, and Humboldt County. The project developed and deployed the microgrid control system that enables renewable generation, battery storage, and bidirectional EV charging to operate in both grid-connected and islanded modes at the RCAM.

⁴ The Community Microgrid Enablement Program (CMEP) supports the development of multi-customer community microgrids by providing technical assistance and enabling infrastructure. As noted in PG&E's filings, RCAM is currently the only operational CMEP microgrid in PG&E's service territory, and CMEP projects typically require two to four years from application to operation.

outlined PG&E's proposed cost allocations and evaluation methods for both pilot phases. These responses were submitted to ensure the Energy Division had a complete record of the pilot's progress, findings, and rationale for the proposed shift to the Hybrid Support Model.

The V2X Microgrid Pilot also seeks to demonstrate how frequency-based controls could enable bidirectional EVs to support the balance of generation and load within a community microgrid. As described in AL 6259-E, the pilot builds on the EPIC Project 3.11B, which validated BTM real-time resiliency controls for solar and storage, by extending these functions to include EVs. Under this control scheme, bidirectional chargers respond to small, intentional changes in system frequency to charge or discharge power, allowing distributed energy resources to operate in coordination with front-of-the-meter generation and maintain stability when the microgrid is islanded.

NOTICE

Notice of AL 7378-E and AL 7378-E-A were made by publication in the Commission's Daily Calendar. PG&E states that a copy of the Advice Letter was mailed and distributed in accordance with Section 4 of General Order 96-B.

PROTESTS

On Aug 26, 2025, David Carter, PE, with Schatz Energy Research Center, Cal Poly Humboldt, Schatz Energy Research Center (SERC), filed its response in the form of a protest letter regarding PG&E's AL 7378-E.

On August 26, 2025, the Vehicle Grid Integration Council (VGIC) filed a response to PG&E's AL 7378-E-A.

SERC acknowledged in their response that the V2X Pilot at the RCAM experienced schedule delays largely beyond the project team's control, including FAA approval timelines, seasonal construction constraints, equipment lead times, and technology development challenges. The letter commended PG&E and its partners for prudent use of public funds and successful demonstration of frequency-shift controls consistent with

IEEE 1547-2018, which verified that load flow within an islanded microgrid can be managed through controlled frequency variation. SERC asserts that the damage sustained by three chargers was confirmed to be unrelated to the frequency-control testing and is being addressed. The letter further recognized the contributions of Fermata Energy and Nissan in developing a bidirectional DC fast-charging solution to support grid stability and expressed support for PG&E's proposed modifications to the pilot, given current technology maturity and the limited availability of suitable microgrid sites.

VGIC's response to PG&E's AL 7378-E-A expresses support for PG&E's request to transition away from the originally scoped Phase II of the V2X Microgrid Pilot and move to the hybrid support model. VGIC recommends redirecting resources associated with the microgrid pilot to provide additional funding and staff support for the Residential and Commercial V2X pilots, noting that MIP and community microgrid uptake have been slow. VGIC claims that the microgrid pilot is the most complex of the VGI pilots because community microgrids often rely on nascent equipment and configurations, creating unique implementation challenges.

DISCUSSION

The Commission has reviewed PG&E's ALs 7378-E and 7378-E-A and finds it reasonable to approve both the extension of Phase I and the modification of the Phase II scope for Pilot #3, the V2X Microgrid Pilot.

Phase I Time Extension Request due to Implementation Issues

PG&E's AL 7378-E requests an additional extension for completion of Phase I of the V2X Microgrid Pilot. PG&E's request does not introduce any changes to the approved budget or scope but seeks to extend the completion timeline. In Appendix I of the supplemental AL 7378-E-A and Advice Letter 7878-E, PG&E proposes a milestone-based approach that begins three months after charger installation and energization and extends for four months following the EVSE provider's completion of the 3.11B control system rollout. Although Appendix I does not explicitly identify a specific calendar end date, the Commission approves PG&E's proposed milestone-based implementation

timeline, with an ultimate completion date of June 30, 2026, and directs PG&E to confirm this date through a Tier 2 AL.

PG&E explains that the requested extension is necessary to allow sufficient time to install replacement chargers at the RCAM and complete the data collection and testing. According to Appendix I, AL 7378-E-A, they estimated that Phase I will conclude approximately four to six months after the new chargers begin data collection and transfer, acknowledging that ongoing technical, operational, or regulatory challenges could still influence this timeline.

The request builds on the prior extension in AL 7378-E, which was prompted by delays in FAA funding and downstream impacts on contracting and site readiness. As detailed in that filing, the late release of FAA funding caused schedule delays, specifically in equipment procurement and in finalizing three major stakeholder contracts: the EV charger provider, the RCAM project manager, and the construction contractor. PG&E asserts that these delays postponed the deployment of the control system to the chargers, which PG&E reported had proven more complex than initially anticipated. In AL 7378-E-A, PG&E claims that although Phase I design milestones were achieved, field implementation encountered additional complications that have prevented completion of the final demonstration period.

In AL 7378-E-A, Appendix I, PG&E further explains that the primary barriers have been technical and vendor-related. Vendor staffing shortages and limited firmware support constrained PG&E's operational readiness. The first attempt at the frequency-droop islanded test in May 2025 failed due to improper charger responses to frequency signals, requiring additional firmware modifications. While these issues were eventually resolved, allowing the control scheme to function as intended and marking the transition into continuous data collection, the pilot experienced another significant issue on June 28, 2025, when an outage event damaged three of the four bidirectional chargers. PG&E has since initiated root-cause analysis and begun coordinating the repair and replacement process, after which a three-month operational testing window will resume to continue and finalize Phase I.

Both SERC and VGIC expressed support in their response letters to AL 7378-E-A for extending the Phase I timeline, recognizing the continued value of the demonstration at the RCAM. SERC noted that PG&E successfully resolved earlier firmware and communication issues and demonstrated proper frequency-droop response, confirming the technical viability of bidirectional charging within a multi-customer microgrid. Both parties agreed that completing the remaining data collection period is reasonable and necessary to obtain results and lessons learned. VGIC further emphasized that the Phase I findings will provide critical empirical data on interoperability and control processes that should inform future pilot design.

Energy Division finds the extension request reasonable. The challenges that PG&E describes are well documented, largely external to PG&E's control, and consistent with the project's scope of risk. We believe completing Phase I testing is essential for validating the interoperability of bidirectional charging equipment, the stability of control communications, and the practical feasibility of vehicle-to-microgrid operations. Allowing time extension through June 30, 2026, ensures that PG&E can restore the damaged chargers, complete the planned data collection period, and deliver the comprehensive evaluation necessary to close out the pilot.

To ensure clarity and maintain an accurate project record, the Commission directs PG&E to file a Tier 2 Advice Letter within 30 days of approval of this Resolution to provide an updated Phase I completion schedule through June 30, 2026, including revised milestones for charger replacement, data collection, and reporting activities.

Phase I – Analysis of Alignment with Success Metrics (Resolution E-5192)

Resolution E-5192 approved PG&E's operational processes for multi-customer microgrids utilizing EVs to balance generation and load as a key success measure. In AL 7378-E-A, PG&E asserts that Phase I progress demonstrates achievement toward this objective through a series of technical and operational milestones at RCAM. These milestones include firmware updates that enable bidirectional charging and frequency-droop response, completion of detailed system and control-engineering design, interconnection studies, and successful island testing, which confirm that frequency variation can directly control the EV charger's charging and discharge behavior. SERC expressed support for PG&E's frequency-droop testing, noting that the control system

functioned as intended and represented meaningful technical progress in coordinating bidirectional chargers within the microgrid.

Resolution E-5192 also established a success metric for PG&E to achieve that includes the demonstration of five to ten bidirectional EVs operating within a multi-customer microgrid environment to support load and generation balance. In AL 7378-E-A, PG&E reports that two EVs are currently participating in the Phase I demonstration at RCAM. While this provides valuable technical and operational data on charger interoperability, firmware performance, and frequency-based control, it does not yet fulfill the requirements of Resolution E-5192. The Commission directs PG&E to clarify whether additional vehicle participation is planned for the remainder of Phase I, or if the reduced scope reflects limitations in available equipment, customer participation, or technology readiness in the form of a Tier 2 AL. In the previously mentioned Tier 2 AL filing, PG&E shall provide a narrative update on its strategy for meeting the five to ten bidirectional EV metric requirement, including an explanation of how the current two-vehicle configuration aligns with the pilot's original objectives.

Request for Phase II Scope Modification

PG&E's Supplemental AL 7378-E-A requests to modify the scope of Phase II of the V2X Microgrid Pilot, shifting from a customer-enrollment and demonstration model to a Hybrid Support Model that provides technical consultation to the MIP and CMEP. The proposal fully replaces the Phase II extension request originally made in AL 7378-E and does not affect the previously approved Phase I extension or pilot budget. Under this approach, PG&E would stop enrollment of new applicants, return remaining customer incentives funds to ratepayers, and provide V2X technical consulting support at MIP sites.

PG&E explains that, despite substantial efforts to implement Phase II as authorized in Resolution E-5192, multiple interrelated barriers have prevented progress. PG&E reports that the scale and persistence of these obstacles exceed available mitigation options, leading to a determination that Phase II, as originally scoped, cannot be reasonably completed within the pilot's timeframe.

First, PG&E claims the pool of eligible participants remains too small to sustain a meaningful demonstration. PG&E cites the V2G equipment market as still being nascent, and deployments depend on the readiness of partner microgrids. PG&E states that the alignment of viable microgrid hosts, available bidirectional hardware, and customer willingness to participate has not yet materialized.

Second, PG&E further asserts that microgrid readiness has proven to be a limiting factor. RCAM is the only operational CMEP microgrid, and there are no operational MIP microgrids within PG&E's territory. Community microgrids generally require two to four years from application to operation, and MIP itself is experiencing delays. Extending Phase II under these conditions would likely require additional timeline modifications and continued uncertainty in meeting regulatory milestones.

Finally, PG&E cites ongoing vendor and contractor challenges that have constrained deployment capacity. PG&E states that the primary EV charger supplier experienced staff shortages and reduced production capability. PG&E also claims the bidirectional EV original equipment manufacturer (OEM) and charger manufacturer required more than two years to meet Phase II eligibility requirements, preventing participant enrollment even after the pilot design milestones had been met.

In AL 7378-E-A Section B, PG&E explains that aligning the pilot with MIP provides a practical avenue for applying Phase I learnings while broader microgrid infrastructure matures. As MIP projects typically require two to four years from award to operation, PG&E proposes to integrate its V2X technical support throughout that process, from feasibility studies and interconnection design to equipment selection and eventual islanded operation testing. The Hybrid Support Model would assist up to ten community microgrids, many located in disadvantaged and vulnerable communities, and would advance state goals for resilience and clean transportation by helping MIP sites incorporate bidirectional EV technology early in their design cycle. Neither VGIC nor SERC expressed opposition to PG&E's proposed modification of the Phase II scope.

The Commission approves PG&E's proposal to replace the original scope of Phase II with a Hybrid Support Model that provides technical consulting support to community microgrids developed under the Commission's MIP. The Commission finds that the

Hybrid Support Model reasonably builds on Phase I achievements and continues to advance the policy objectives established in Resolution E-5192.

Pilot Budget and Expenditures

Resolution E-5192 approved a total pilot budget of \$1.5 million, approximately \$750,000 for project activities, including engineering, project management, site selection, interconnection, and the installation of bidirectional chargers. The remaining \$750,000 funds were designated for customer incentives under Phase II. PG&E reported that Phase I funds are fully allocated and that no additional ratepayer funds are requested.

According to AL 7378-E-A, Appendix I, PG&E claims that nearly all pilot expenditures occurred under Phase I. These expenditures include internal labor, vendor payments, data collection and evaluation, and site commissioning activities. PG&E further details that \$579,277 was allocated to RCAM vendor payments, labor, and evaluation. PG&E also noted that certain technical work and equipment validation were supported by the EPIC 3.11B project, which funded related activities such as control system testing and operational process development. These EPIC-funded tasks were separately accounted for and not charged to the pilot's authorized budget.

In AL 7378-E-A, PG&E states that none of the outstanding \$750,000 for Phase II incentive funds will be used under the proposed Hybrid Support Model. PG&E proposed ~~returning~~eliminating the ~~full~~-\$750,000 in unspent customer incentive funds ~~to ratepayers from V2X pilots authorized budget~~, and closing pilot enrollment. PG&E clarifies that the hybrid approach would rely on internal, non-pilot resources for future technical support to MIP sites and would not increase the pilot's total authorized expenditures.

In approving PG&E's proposal to refocus Phase II, the Commission finds ~~that PG&E's proposal to return~~ reducing the authorized budget for Pilot #3 by approximately \$750,000 ~~in~~, representing unspent customer incentive funds, is reasonable.

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 of 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, this draft resolution was mailed to parties for ~~comments~~ a 20-day comment period, and ~~will be~~ the Resolution was placed on the ~~Commission's agenda~~ February 26, 2026, voting meeting.

PG&E filed public comments on February 12, 2026, on the original draft Resolution filed on January 23, 2026. PG&E proposed an alternative view on certain components of the draft Resolution and requests modifications. Specifically, PG&E raises two concerns. First, PG&E requests clarification and modification of Ordering Paragraph 3 regarding the return of \$750,000 in unspent customer incentive funds associated with Pilot #3, the Vehicle-to-Microgrid Pilot. Second, PG&E states that the success metric requiring five to ten participating bidirectional EVs, as established in Resolution E-5192, is not feasible and requests that the Commission acknowledge this limitation. PG&E's comments on these issues are discussed below, along with any revisions made to the Resolution in response.

1. Return of Unspent Incentive Funds for Phase II

PG&E states that Ordering Paragraph 3 directs it to return approximately \$750,000 of the unspent customer-incentive budget for Pilot #3 to ratepayers. PG&E explains that costs for the V2X Microgrid Pilot are tracked in the VGI subaccount within the Transportation Electrification Balancing Account (TEBA). PG&E represents that it has not recorded any of the \$750,000 customer incentive funds in the VGI subaccount and therefore has no ~~earlier than~~ mechanism within TEBA to "return" funds that were not spent or recorded.

PG&E requests that, to effectuate the return of funds to ratepayers, the Commission reduce the authorized budget of the VGI subaccount by \$750,000 and set the new cap at

\$10,950,000. PG&E asserts that reducing the authorized budget of the Vehicle Grid Integration subaccount within TEBA would effectively return the unspent funds to ratepayers by ensuring those funds are neither spent nor recovered through rates.

Based on PG&E's explanation regarding the accounting treatment within the TEBA, we find this approach reasonable. Reducing the authorized budget for Pilot #3 from \$1.5 million to \$750,000 achieves the Commission's intent of ensuring that these unspent funds are no longer available for expenditure or recovery.

Accordingly, we modify this Resolution to reduce the authorized budget for Pilot #3 by \$750,000, resulting in a revised Pilot #3 budget of \$750,000 and a revised total pilot cap of \$10,950,000 for V2X pilots, which was originally \$11,700,000.

2. Five-to-Ten Bidirectional EV Participation Success Metric

PG&E states in its comments that the success metric of five to ten participating bidirectional EVs, as established in Resolution E-5192, is not feasible to achieve due to technical, vendor, and market challenges. While the Commission understands PG&E's explanation of these challenges, the draft Resolution does not modify the previously adopted success metrics.

PG&E has not provided a detailed explanation of how meeting the pilot's original goals and success metrics remains achievable under the current two-vehicle configuration, nor has it explained how sufficient operational and performance data will be generated to evaluate the pilot's effectiveness.

Accordingly, PG&E must file a Tier 2 Advice Letter within 30 days ~~from today~~ of the effective date of this Resolution. Tier 2 AL shall provide:

(1) an updated Phase I completion schedule extending through June 30, 2026, including revised milestones.

(2) a narrative explanation describing how PG&E intends to meet the five-to-ten bidirectional EV participation target, or alternatively, how the current configuration will satisfy the pilot's original objectives and generate sufficient data to assess performance against the adopted success metrics.

[This ensures transparency regarding the current status of Phase I and allows the Commission to assess whether the pilot remains consistent with the success metrics adopted in Resolution E-5192.](#)

FINDINGS AND CONCLUSIONS

1. Senate Bill (SB) 676 directed the Commission to establish policies and frameworks to accelerate the use of VGI technologies statewide by 2030.
2. D. 20-12-029 directed PG&E to submit a Tier 3 AL proposing pilot projects to accelerate VGI in alignment with the state's clean energy and decarbonization objectives established under SB 676 and Executive Order N-79-20.
3. Pursuant to D.20-12-029, PG&E filed AL 6259-E, proposing four V2X pilots, including Pilot #3, the Vehicle-to-Microgrid PSPS Microgrid Pilot.
4. The Commission approved Pilot #3 through Resolution E-5192, which authorized PG&E to implement the pilot consistent with the proposal in AL 6259-E and the Resolution's adopted success metrics.
5. On September 24, 2024, PG&E filed AL 7378-E, requesting an extension of time to complete Pilot #3 Phase I and Phase II activities at RCAM due to delays in FAA infrastructure funding, contractor readiness, and equipment procurement.
6. On August 6, 2025, PG&E submitted Supplemental AL 7378-E-A, providing additional information to extend the Phase I under a milestone-based schedule to complete charger replacement and testing at RCAM, and to modify the Phase II scope by transitioning from a customer-enrollment and incentive model to a Hybrid Support Model aligned with the MIP.
7. PG&E reported that the pilot implementation faced multiple barriers, including vendor instability, firmware, and hardware failures. PG&E explained that continuing the pilot in its original customer-enrollment form would be impractical because no additional operational multi-customer microgrids exist in its service territory.
8. In AL 7378-E-A and Appendix I, PG&E stated that under the proposed Hybrid Support Model, its V2X subject-matter experts would provide technical consulting to MIP microgrids using internal (non-pilot) labor resources and would ~~return the remaining \$750,000 unspent customer incentive funds to ratepayers.~~ reduce the cap of authorized budget for V2X pilots by \$750,000.

Accordingly, the new cap of VGI subaccount within the Transportation Electrification Balancing Account (TEBA) is correspondingly reduced to \$10,950,000..

9. The record demonstrates that the Hybrid Support Model advances the intent of Resolution E-5192 by applying pilot learnings to support community microgrids while protecting ratepayers from unnecessary costs.
10. SERC filed a protest to AL 7378-E-A, acknowledging PG&E's technical progress at RCAM and supporting completion of data collection but not opposing the proposed scope modification.
11. VGIC filed a response emphasizing the importance of documenting and sharing pilot findings to inform broader VGI policy and did not oppose PG&E's proposed modification.
12. Energy Division finds that PG&E's Phase I proposed schedule extension through June 30, 2026, and scope modification to a Hybrid Support Model (Phase II) are reasonable, protect ratepayers, and remain consistent with Commission policy objectives under SB 676, D.20-12-029, and Resolution E-5192.

THEREFORE IT IS ORDERED THAT:

1. Pacific Gas and Electric Company AL 7378-E and AL 7378-E-A are approved, with modifications, as discussed above.
2. Pacific Gas and Electric Company (PG&E) must file a Tier 2 Advice Letter within 30 days, providing an updated Phase I completion schedule extending through June 30, 2026, that includes revised milestones for charger replacement, data collection, and reporting activities. PG&E shall also include a narrative update describing its strategy to achieve the five-to-ten bidirectional electric vehicle (EV) participation target ~~and~~ or, alternatively explain how the current two-vehicle configuration aligns with the pilot's original objectives and success metrics.

~~3. Pacific Gas and Electric Company shall return approximately \$750,000 of the unspent customer incentive budget for Pilot #3 to ratepayers, as described in Supplemental AL 7378 E A.~~

3. The authorized budget for Pilot #3, the Vehicle-to-Microgrid Pilot, is reduced by \$750,000. Accordingly, the authorized budget for Pilot #3 is reduced from \$1,500,000 to \$750,000, and the authorized cap of the Vehicle Grid Integration subaccount within the Transportation Electrification Balancing Account (TEBA) is reduced from \$11,700,000 to \$10,950,000.

This Resolution is effective today.

The foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on ~~February 02/26,~~ 2/26/2026; the following Commissioners voting favorably thereon:

Commissioner Signature blocks to be added
upon adoption of the resolution

Dated _____, at <Voting meeting location>, California
(EDTU will fill-out the date and location)