



**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Modernize
the Electric Grid for a High Distributed
Energy Resources Future.

Rulemaking 21-06-017

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**PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 E) OPENING COMMENTS
ON THE PUBLIC ADVOCATES OFFICES' 2025 DISTRIBUTION GRID
ELECTRIFICATION MODEL 2025 STUDY AND REPORT**

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Dated: February 5, 2026

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Pursuant to the *Administrative Law Judge’s Ruling Soliciting Comments on the Public Advocates Office’s 2025 Distribution Grid Electrification Model 2025 Study and Report* (Ruling), filed on January 8, 2026, Pacific Gas and Electric Company (PG&E) respectfully provides these opening comments on the Public Advocates Office of the California Public Utilities Commission’s (Cal Advocates) Distribution Grid Electrification Model (DGEM) 2025 Study and Report (2025 DGEM Study).

I. INTRODUCTION

PG&E commends Cal Advocates for undertaking the 2025 DGEM Study. Overall, PG&E generally agrees with the findings within the 2025 DGEM Study and sees various parallels with its own Electrification Impact Study (EIS) Part 2 Report. PG&E understands that because of the inherent uncertainty of long-term forecasting, a variety of approaches is beneficial for the record and to further stakeholder understanding.

PG&E supports the inclusion of the 2025 DGEM Study in this proceeding, but provides the following comments on four discrete issues for the Commission’s consideration.

II. PG&E’S OPENING COMMENTS

A. The 2025 DGEM Study Should Include Stand-Alone Costs for Distribution Line Section Upgrades

Presently, the 2025 DGEM Study states it “only recognizes two kinds of overload and can mitigate in only one way. The two recognized overloads are on feeder heads (where the

“trunk” of the primary feeder connects to the substation transformer bank) and on the total capacity of a substation.”¹ PG&E suggests that future iterations of the Study be updated to include costs to mitigate distribution line section overloads. As currently calculated, the 2025 DGEM Study distribution “feeder head” mitigations are only 50 percent of expected totals due to this missing work.

Additionally, PG&E respectfully disagrees with the statement that “overloads at distant feeder segments...[are] rare and comparatively cheap to solve.”² PG&E’s experience has been that the total annual cost to mitigate distribution line overloads on existing circuits via line upgrades is roughly equal to the total annual cost to install new circuits to mitigate “feeder head” deficiencies at the substation. It is also important to note that PG&E’s experience of electric vehicle (EV) charging stations is that sites may be quite far from existing substation locations. Even in cases where the “feeder head” has capacity for the new EV load, it is likely that the primary line sections that run from the substation to the customer do not.

One solution in future iterations of the DGEM study would be to apply a multiplier to all primary distribution “feeder head upgrades” to estimate the cost of stand-alone distribution line section upgrades not associated with new feeders. These missing stand-alone line section upgrades represent a considerable portion of total distribution upgrades required to serve new load.

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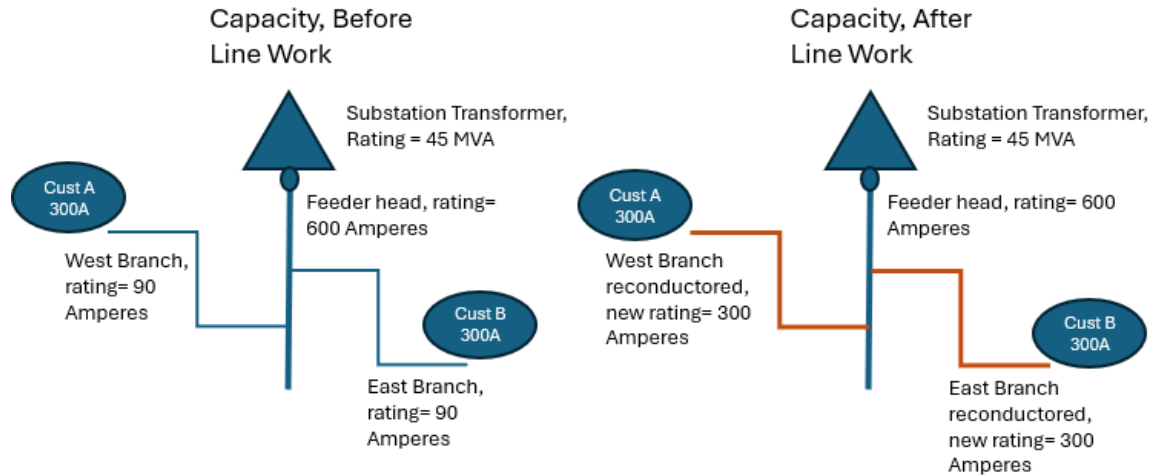
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¹ *Motion of the Public Advocates Office to Admit Its Distribution Grid Electrification Model 2025 Study and Report into the Record* (Motion), Attachment, p. 48 (Dec. 22, 2025).

² *Id.* at p. 81.

The reason why stand-alone line section upgrades are critical to customer energization can be seen below. These line section overloads are not seen when overloads are only assessed at the substation and feeder head. Mitigating these overloads does not add feeder head nor substation capacity.



Two line section reconductoring projects (East Branch and West Branch) are required to allow Customer A and Customer B to be energized, but neither project adds feeder head or bank capacity at the substation. Nor is the added capacity on one feeder branch additive to the capacity on the other feeder branch.

B. Cost Estimates for Secondary Infrastructure Investments are Not an Independent Estimate of Secondary Costs

In sections 4.8 and 6.4 of the 2025 DGEM Study, it assumes that “secondary distribution infrastructure has a cost proportionate to primary distribution infrastructure”³ and uses an estimate from the EIS Part 1 to estimate secondary distribution costs.”⁴ The 2025 DGEM Study acknowledges that this estimate “has a high degree of uncertainty.”⁵ The 2025 DGEM Study cost estimates for the secondary infrastructure investments are not an independent estimate of

³ *Id.* at p. 79.

⁴ *Id.* at p. 87.

⁵ *Id.*

secondary costs, and thus should be given no weight as an independent finding. The secondary costs should be their own calculation and not assumed based on a ratio.

C. The Data Provided in Table 3-12 Appears Low and Requires Additional Evaluation

In Table 3-12, the 2025 DGEM Study provides percentages of utilization of new infrastructure.⁶ These percentages appear low and would necessitate additional evaluation from the Commission and stakeholders to determine their accuracy.

D. Electric Vehicle Load May Not be Accurately Tracked by Looking at Only at Registration Addresses

In section 4.3 of the 2025 DGEM Study, it states “DGEM 2023 assumed that all vehicles charge at their registration addresses, and DGEM 2025 continues to use that assumption.”⁷ The Study goes on to state that “DGEM 2025 assumes “vehicle charges on the closest feeder to its registration address.”⁸ Given the inherent nature that EVs are modes of transportation that move around and can be charged in multiple locations, it is important to note that EV load growth may be difficult to track by looking at the electric load at a singular feeder. PG&E acknowledges that the determination of this assumption is complex; however, it must be pointed out that when charging, a customer has multiple options, and grid infrastructure costs need to capture all places where a customer may charge their EV, which could be on an assortment of different feeders and substation banks.

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⁶ *Id.* at p. 71.

⁷ *Id.* at p. 74.

⁸ *Id.*

III. CONCLUSION

PG&E appreciates the opportunity to provide these comments on the 2025 DGEM Study. PG&E looks forward to any further discussions of this Study and its future iterations with the Commission and stakeholders.

Respectfully submitted,

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