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BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Update Distribution Level Interconnection Rules and Regulations.	Rulemaking 25-08-004 (Filed August 14, 2025)

REPLY COMMENTS OF THE VEHICLE-GRID INTEGRATION COUNCIL ON THE UTILITIES' RESPONSES TO THE ADMINISTRATIVE LAW JUDGE'S RULING DIRECTING UTILITIES TO PRODUCE RULE 21 INTERCONNECTION APPLICATION DATA

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In accordance with the Rules of Practice and Procedure of the California Public Utilities Commission ("Commission"), the Vehicle-Grid Integration Council ("VGIC") hereby submits these reply comments on the responses of Pacific Gas and Electric Company ("PG&E"), Southern California Edison Company ("SCE"), and San Diego Gas & Electric Company ("SDG&E") (collectively, the "IOUs") to the *Administrative Law Judge's Ruling Directing Utilities to Produce Rule 21 Interconnection Application Data* ("Ruling"), issued July 14, 2026, as modified by the *Email Ruling Granting Investor-Owned Utilities' Request for Deadline Extension* issued July 27, 2026.[1]

I. INTRODUCTION.

VGIC appreciates the Commission's attention to the important issue of interconnection application fees for small non-Net Energy Metering ("NEM")/Net Billing Tariff ("NBT") systems. VGIC has previously recommended in this proceeding that the Commission set the interconnection application fee for small non-NEM systems, including bidirectional charging systems, at the fee

[1] Administrative Law Judge's Ruling Directing Utilities to Produce Rule 21 Interconnection Application Data, R.25-08-004 (July 14, 2026) ("Ruling"); Email Ruling Granting Investor-Owned Utilities' Request for Deadline Extension, R.25-08-004 (July 27, 2026).

that applies to comparably sized NEM and NBT systems.[2] Based on the IOUs' responses to the Ruling, VGIC reiterates its recommendation because the responses do not adequately establish the cost of processing a small non-NEM interconnection application. VGIC appreciates that the IOUs have provided information not previously included in this OIR, including additional narrative explanations of the Rule 21 application review process and estimated costs. However, none of the three IOUs tracks costs at the project level, and neither SCE nor PG&E produced an estimate that varies with project size. **What the responses *do* clearly establish are two facts: (1) these small non-NEM projects require almost no technical review; (2) the costs the IOUs report are driven by administrative practices that differ substantially among them.** In these reply comments, VGIC recommends that the Commission:

- Provide interim direction to apply the NEM/NBT interconnection application fee (as it exists today or scaled for inflation since its last update) to non-NEM projects of 30 kW or less, pending more comprehensive, long-term direction on developing a new fee for both NEM/NBT and small non-NEM projects;

- Direct the IOUs to conduct and report a systematic, task-level evaluation of automation opportunities, including the use of artificial intelligence tools, across the non-NEM review process, and set the permanent fee based on the cost of a reasonably automated process; and

- Require the IOUs to produce actual cost data disaggregated by project size and export status.

II. THE IOU RESPONSES ALONE DO NOT PROVIDE A COST BASIS FOR SETTING A FEE FOR SMALL NON-NEM/NBT PROJECTS.

A. None of the IOUs tracks the cost of processing specific interconnection applications to the extent that a purely cost-based estimate would require.

PG&E states that it "does not have employees charge time based on individual projects, rather employees charge to a group of orders depending on the project type," and acknowledges that it "has identified deficiencies in how it tracks how employees charge their time."[3] SDG&E

[2]VGIC Opening Comments on the Scoping Memo at 9; VGIC Reply Comments on the Scoping Memo, Section II.
[3]PG&E Response to the Ruling at 3, 9.

states that it does not track staff hours or costs at the individual project level and that doing so is not operationally feasible; its figures are based on departmental experience rather than records.[4] SCE describes its figures as "illustrative approximations."[5]

After more than twenty years of collecting an $800 application fee, no IOU can definitively state what any individual application costs to process. Without a clear, unambiguous response to this question based on real data – not estimates or approximations – VGIC questions whether the Commission can reasonably adopt a new fee at this time based solely on the IOUs' response to the Ruling.

B. SCE and PG&E did not adequately differentiate cost by project size for non-NEM sites.

Appendix A of the Ruling asked each IOU to report application count, staff hours, and cost by project size tier, project tariff (e.g., NEM vs. non-NEM), and project technology (e.g., solar, battery, solar-plus-battery, etc.). SCE populated every tier with the same two figures, showing 14 staff hours and approximately $1,247 for exporting non-NEM/NBT projects, and 9.25 staff hours and approximately $835 for non-exporting projects, **regardless of project size.**[6] SCE states it "does not currently provide estimated application-processing costs by project size, technology type, or customer class."[7] PG&E, meanwhile, states that it "cannot complete the entire table as requested, because PG&E does not track the data in a manner that would translate to the layout of the template."[8]

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4 SDG&E Response to the Ruling at 2.
5 SCE Response to the Ruling at 5.
6 SCE Response to the Ruling, Appendix A.
7 SCE Response to the Ruling at 17.
8 PG&E Response to the Ruling at 10.

Notably, both PG&E and SDG&E suggest, albeit to a limited extent, that larger projects often tend to require more review time. PG&E states that "some non-NBT/NEM projects may still be relatively straightforward if they are small, certified inverter-based systems."[9] Meanwhile, SDG&E cites relay schemes and telemetry for projects above 1 MW.[10]

C. SDG&E differentiated by size, and its data indicate that small projects cost less.

Although SDG&E did not report staff hours in Appendix A, it did report an aggregate processing cost for each combination of project size tier and technology.[11] Dividing each figure by the number of approved applications in the same row yields SDG&E's implied cost per application for non-NBT/NEM projects:

Project category	Approved applications	Aggregate cost	Implied cost per application
Under 30 kW — battery	134	$239,494.40	$1,787
Under 30 kW — solar	501	$908,766.80	$1,814
Under 30 kW — co-located solar + battery	367	$724,794.40	$1,975
30–500 kW — battery	4	$9,624.80	$2,406
30–500 kW — co-located solar + battery	2	$8,443.20	$4,222

SDG&E's template shows processing cost per application rising with project size. A battery project of 30 kW or less appears to cost roughly 26% less to process than a battery project between 30 and 500 kW, and a co-located solar-and-storage project of 30 kW or less roughly 53% less than its counterpart in the larger tier.

[9] PG&E Response to the Ruling at 9.
[10] SDG&E Response to the Ruling at 25-26.
[11] SDG&E Response to the Ruling, Appendix A. SDG&E marks the staff hours column with an asterisk referring to its narrative methodology, and reports an aggregate dollar figure in the "Actual Cost to Review Applications" column for each combination of project size tier and technology.

Although this trend is notable, VGIC does not believe these figures alone should serve as the basis for a long-term fee framework for two reasons. **First, critically, as detailed in Section II.A above, SDG&E states that it does not track specific per-project processing costs, so these figures remain an estimate rather than an actual record of costs.** Second, the data reflects the current process rather than any improvements (such as eliminating the requirement for a duplicate hard-copy application). VGIC discusses such improvements in Section VI below.

As the Commission considers adopting either an interim or long-term fee for non-NEM/NBT systems <30 kW, it must consider that the only evidence in the record thus far delineating estimated costs across project size indicates a significant cost reduction for systems <30 kW compared to larger projects.

D. The IOUs' estimates of both staff cost and time diverge widely.

The three IOUs report the following costs to process a non-NEM application:[12]

Utility	Reported cost per non-NEM application	Basis
PG&E	$740 (2025); $1,075 (2024)	Program hours divided by applications; uniform across all project types
SCE	$834.79 non-exporting; $1,247.07 exporting	9.25 and 14.0 estimated hours at team hourly rates, plus overhead
SDG&E	$1,887 average	Single 13-hour estimate; Appendix A costs vary by size tier.

These are estimates of the same activity, performed under the same Rule 21 tariff, using the same technical screens, yet reflect significantly different results. In response to the Ruling's question about the standard hourly rate, including overhead, charged for utility engineering staff executing custom or actual-cost interconnection studies, the three IOUs gave answers spanning

[12] PG&E Response to the Ruling at 2-3; SCE Response to the Ruling at 5; SDG&E Response to the Ruling at 6. SDG&E reports a range of approximately $1,490 to $6,357 per application.

more than a factor of three. SCE disclosed its 2026 mid-point wages by position (Engineer 1 at $49.93, Engineer 2 at $64.26, and Engineer 3 at $75.63) and applied a blended engineering rate of $63.27 per hour with 21% overhead, or roughly $77 fully loaded. SDG&E reported a fully loaded engineering rate of approximately $237 per hour, without identifying the positions, wages, or overhead components behind it. PG&E reported $131 per hour but stated this "does not include applicable overhead." Elsewhere in PG&E's response to the Ruling, the rate used to calculate costs appears to be $114 per hour.[13] SCE did report rates broken out by internal organization, which is helpful for parties considering whether a cost estimate is reasonable. **Hourly rates this far apart, for the same work under the same tariff, demand greater inquiry from the Commission before serving as the sole basis for an updated small non-NEM/NBT application fee.**

Lastly, it is worth noting that PG&E's reported cost per application also fell from $1,075 in 2024 to $740 in 2025, while its application volume rose by 39%, a significant increase.[14] The per-application costs decline as volume and process maturity increase, which is critical for the Commission to take note of as it considers adopting an interim and/or long-term fee framework paired with required process improvements, including the no-regrets improvements recommended below in Section VI.

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[13]SCE Response to the Ruling at 6, 16; SDG&E Response to the Ruling at 20; PG&E Response to the Ruling at 3, 9. PG&E states that the $150 per hour engineer's fee in its tariff was set in 2012 in D.12-09-018 and applies to additional pre-parallel inspections.

[14]PG&E Response to the Ruling at 2-3. PG&E reports 1,646 non-NEM applications in 2025 at a total cost of $1,217,873 against $1,316,800 in application fee revenue, and 1,188 applications in 2024 at a total cost of $1,277,396 against $950,400 in revenue.

III. THE RESPONSES SUGGEST THAT SMALL NON-NEM PROJECTS REQUIRE LITTLE TECHNICAL REVIEW.

A. Nearly all of SCE and PG&E's non-NEM projects clear Initial Review.

SCE reports that 98.4% of non-NEM/NBT projects during the 2024–2025 period passed Initial Review without requiring Supplemental Review or Detailed Study.[15] PG&E reports approximately 98%.[16] It appears that small non-NEM projects typically do not receive individualized engineering analysis; rather, staff time devoted to these applications seems to be occurring somewhere other than technical review. Additional detail may be needed from the IOUs, either through additional ALJ Rulings, workshops, or other measures, to better understand precisely how this staff time is being consumed. VGIC provides recommendations below in Section VI related to recommended next steps that Commission should take to continue making progress toward resolution of this critical issue.

B. The reported costs are administrative rather than technical.

SDG&E's 13-hour estimate consists of approximately one hour of technical engineering review, approximately one hour of administrative and compliance work, approximately five hours of records and contract administration, approximately five hours of post-agreement and permission-to-operate processing, and approximately one hour of field activities.[17] Roughly ten of the thirteen hours are document handling, agreement administration, insurance review, and billing. SCE reports 60 minutes for the corresponding work on a non-exporting project: drafting,

[15]SCE Response to the Ruling at 10 (1,282 of 1,303 non-NEM/NBT projects received during the 2024–2025 period).
[16]PG&E Response to the Ruling at 4.
[17]SDG&E Response to the Ruling at 2–4, 22.

finalizing, and approving the Interconnection Agreement and reviewing final documents including insurance.[18]

Notably, while SDG&E assumes approximately one hour of field inspection time for every application, neither PG&E nor SCE builds a site visit into its standard estimate (although SCE reports site visit hours separately as a non-standard project activity).[19] Given there is a single statewide $800 non-NEM application fee, it is unclear how such a fee can remain justifiable given the disparities not just in utility costs – a certain degree of which is to be expected – but also in the basic cost categories attributable to the $800 non-NEM fee.

C. SDG&E's extraordinarily high application deficiency rate should be addressed immediately.

Of the 1,012 approved non-NEM/NBT projects SDG&E reviewed in 2024 and 2025, 8.6 percent had no deficiencies, 27.0 percent had one, and 64.4 percent had two or more, averaging approximately 2.28 deficiencies per project.[20] A deficiency rate at that level strongly indicates that applicants are not being told clearly what to submit or otherwise being set up for success by their utility. VGIC posits the staff time consumed by successive deficiency cycles is avoidable through better applicant guidance and automated completeness checks at intake. As the Commission considers updating the $800 fee, it must ensure that SDG&E's inability to sufficiently educate its customers does not become an added financial burden on the very customers on the receiving end of this defect.

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[18]SCE Response to the Ruling at 4. Post Fast Track Initial Review Activities: 60 minutes for non-exporting projects.

[19]SDG&E Response to the Ruling at 4; SCE Response to the Ruling at 2 (site visit hours reported separately, as a non-standard project activity).

[20]SDG&E Response to the Ruling at 13. Of 1,012 approved non-NEM/NBT projects, 87 had no deficiencies, 273 had one deficiency, and 652 had two or more.

IV. PROVIDE INTERIM DIRECTION TO APPLY THE NEM/NBT INTERCONNECTION APPLICATION FEE (AS IT EXISTS OR ADJUSTED FOR INFLATION) TO NON-NEM/NBT PROJECTS <30 KW.

VGIC recommends that the Commission issue interim direction to the utilities providing that, pending a final framework developed in this proceeding based on real cost data, the interconnection application fee applicable to a non-NEM/NBT project <30 kW be the fee applicable to a NEM/NBT project of the same size. VGIC believes this is reasonable for three reasons:

i. The record supports no other interim figure. As set out above, neither SCE nor PG&E produced a cost estimate that varies with the size of non-NEM/NBT projects. The Commission cannot set a size-differentiated fee on this record, and it should not carry forward a fee that the IOUs have not been able to cost-justify while it develops one that is cost-based.

ii. No party has demonstrated that a small non-NEM/NBT project is more complex, or more likely to affect the distribution system, than a NEM/NBT project of the same size. Tesla, CALSSA, and SEIA have each made this point in this proceeding.[21]

iii. The cost of inaction is high. Phase 1 comment cycles have run from October 2025 through August 2026. As VGIC recommends in Section VI below, additional data requests and/or workshops may be needed to sufficiently develop the record in pursuit of a long-term, cost-based framework. A final framework is unlikely within six months. In the meantime, a continued $800 fee is a material barrier to customers installing small non-NEM systems, including bidirectional EV charging systems,

[21] Tesla Opening Comments at 15; CALSSA Opening Comments at 19; SEIA Opening Comments at 65.

for whom the application fee is a significant share of total project cost and, as VGIC has previously noted, the highest such fee in the country, exceeding the typical fee in most markets by approximately an order of magnitude.[22]

Interim relief also relieves the schedule pressure that shaped the IOUs' responses to the Ruling. With a reasonable interim fee in place for small projects, the Commission and the IOUs can take the time needed to develop size-differentiated cost data properly, rather than on a compressed record. Notably, the IOUs requested an extension of time to respond to the Ruling. Critically, since the IOUs have not provided sufficient data to show that the true costs for processing small non-NEM applications are $800, they would not be definitely prejudiced by this sort of interim relief. In stark contrast, small non-NEM customers, including bidirectional EV charging customers, are prejudiced every month that the fee remains at $800.

Notably, in some cases, the inverter models in bidirectional EV charging systems are the very same inverter models used in NEM/NBT- systems. VGIC believes that continued inaction, even in the interim while additional data is collected and a longer term fee framework is developed, constitutes discriminatory treatment against a customer group using a different type of energy storage configuration that is not currently deemed NEM/NBT-eligible.

Lastly, if deemed necessary by the Commission, VGIC would not oppose adjusting the fee for inflation since its initial implementation and using the inflation-adjusted value as the interim fee for small non-NEM/NBT systems.

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[22]VGIC Opening Comments on the Order Instituting Rulemaking at Attachment A. See, for example: $50 for AES Ohio. https://www.aes-ohio.com/interconnection; $28 for National Grid Massachusetts. https://gridforce.my.site.com/s/article/Interconnection-Documents; $130 LA Department of Water and Power https://www.ladwp.com/sites/default/files/documents/LADWP_Interconnection_Expenditure_Recovery_Charges_Web_Version_Final_5_1_21_.pdf; $100 Georgia Power https://www.georgiapower.com/residential/solutions/solar/rooftop-installations/faqs.html#fees; $100 Xcel Energy Minnesota https://mn.gov/puc/activities/economic-analysis/distributed-energy/interconnections/.

V. DIRECT THE IOUS TO REPORT A SYSTEMATIC, TASK-LEVEL EVALUATION OF AUTOMATION OPPORTUNITIES, INCLUDING THE USE OF ARTIFICIAL INTELLIGENCE TOOLS, ACROSS THE NON-NEM REVIEW PROCESS, AND SET THE PERMANENT FEE BASED ON THE COST OF A REASONABLY AUTOMATED PROCESS.

A. Automation implemented for small NEM/NBT projects should be extended to small non-NEM/NBT projects.

SCE states that it has implemented automated functionality for NEM/NBT projects, supporting automated review for most Fast Track screens and resulting in most <30 kW NEM/NBT projects completing Initial Review without sending the application for separate engineering review. However, SCE states that "[c]urrently SCE has not automated steps in the interconnection process to expedite the review of residential non-NEM/NBT applications."[23] SCE states it "expects to develop similar functionality for a subset of non-NEM/NBT standard projects, but that work remains under development."[24] SCE does not provide a timeline for when this work is slated to be completed.

VGIC posits that the cost differential the IOUs ask non-NEM customers to fund is at least partially a function of where automation investment has been directed to date, rather than of anything about the projects themselves. This is understandable, given NEM systems have, historically, been the overwhelming majority of applications. However, non-NEM customers should not continue to be penalized for the delay in extending existing automation practices to their projects. Similar to the dynamic with SDG&E's apparent insufficient customer education, non-NEM customers are forced to "pay" twice for the same operational gap: they do not benefit from the shorter timelines that automation can bring, and they have to pay more for the application.

[23] SCE Response to the Ruling at 15.
[24] SCE Response to the Ruling at 8–9 (Response to Question 1.d).

PG&E reports that the only substantially automated portion of its review is Initial Review, performed by the Distribution Generation Screening Tool.[25] SDG&E reports that substantial portions of its workflow are automated, but is unable to quantify the administrative costs that remain after automation.[26] What was not explored in the IOUs' responses to the Ruling was the opportunity to identify what could be automated moving forward.

B. The Commission should require a task-level automation evaluation.

The Commission should direct each IOU to conduct and file a systematic, task-level evaluation of automation opportunities, including those leveraging artificial intelligence tools, across the non-NEM review process. For each individual task within each processing stage, the IOU should report in detail:

1. what the task involves and which internal organization performs it;
2. whether the task is currently automated, partially automated, or fully manual;
3. whether the task is a candidate for automation — including rules-based automation, document parsing, machine learning classification, and large language model tools — and, if not, the specific technical or safety basis for that conclusion;
4. the estimated implementation cost, timeline, and expected reduction in staff hours; and
5. whether another California IOU has already automated the same task and, if so, why this IOU has not.

Based on the IOUs' responses to the Ruling, VGIC notes that the following items could be candidates for further automation:

- Matching single-line diagram parameters against application fields
- Verifying certified equipment against the California Energy Commission's lists of UL 1741 SB– and UL 3141–certified products (including the Vehicle-to-Grid Equipment List)
- Drafting and finalizing interconnection agreements, which SCE reports it has largely automated and on which SDG&E reports spending approximately five hours
- Generating deficiency notices and performing completeness checks at intake

[25]PG&E Response to the Ruling at 3, 8.
[26]SDG&E Response to the Ruling at 9-10.

- Records retention and document distribution, which should not be a material cost in a modern, digital process at all.

C. Any permanent fee must reflect the cost of a reasonably run process, not the IOUs' estimates based on existing, inefficient, and dated processes.

Setting the fee to recover the IOUs' current costs would entirely remove the incentive to modernize and would impose the utilities' operational inefficiencies onto customers' project costs. The Commission should direct the IOUs to complete and file the evaluation described above, and should set the permanent fee to reflect – among other factors – the staff-hour reductions that evaluation identifies, whether or not each IOU has implemented them by the time the fee is set.

VI. THE COMMISSION SHOULD REQUIRE DISAGGREGATED COST DATA IN A FOLLOW-UP REQUEST.

VGIC urges the Commission to issue a follow-up data request requiring separate staff-hour estimates for each project category defined by size and export status. We also recommend that PG&E and SDG&E adopt the stage-by-stage, task-level structure SCE used, and that all three IOUs report hourly rates by internal organization. VGIC would also not oppose a stakeholder workshop, and requests that any industry panel include representation from the bidirectional EV charging industry.

VGIC offers two recommendations related to a follow-up data request. First, the Commission should allow a response period of at least 45 days. The IOUs prepared their responses to the Ruling in approximately four weeks,[27] and a request for task-level estimates across each project category will likely require more effort than the single category-wide estimate the Ruling called for. A compressed schedule is likely to produce the same category-wide approximations a

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[27] The Ruling directed responses within two weeks of issuance; the Email Ruling Granting Investor-Owned Utilities' Request for Deadline Extension extended that period to August 11, 2026.

second time, an outcome that the Commission should seek to avoid. Second, where an IOU does not maintain records sufficient to answer, it should be directed to provide an estimate and to state the assumptions and methodology underlying it, rather than reporting only that the data is not tracked.

Finally, VGIC supports certain no-regrets, immediate interconnection application process improvements that the Commission should direct the IOUs to pursue: **requiring the IOUs accept online applications and prohibiting mandatory duplicate paper submittals, requiring clear, public-facing application guides, and requiring advance notice of changes to application forms and portal requirements.** Each can significantly reduce interconnection application review costs. As part of the public-facing application guides, VGIC reiterates its earlier recommendation in this proceeding that the IOUs provide a clearly labeled pathway for backup-only and load-only systems, so that customers and installers do not inadvertently seek (or are not inadvertently routed by the utility through) an unduly burdensome Rule 21 interconnection process.[28]

VII. CONCLUSION.

VGIC appreciates the opportunity to comment on the IOUs' responses to the Ruling. The Commission should grant interim relief to small non-NEM customers now, and build the record it needs to set a durable, long-term fee framework. We look forward to continued collaboration with the Commission and stakeholders on these issues.

Respectfully submitted,

[28]VGIC Reply Comments on the Scoping Memo, Section III.

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