PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Item #4 (Rev. 1)
Agenda ID# 24036
ENERGY DIVISION RESOLUTION E-5440
April 9, 2026

R E S O L U T I O N

Resolution E-5440 Pacific Gas and Electric, Southern California Edison, and San Diego Gas and Electric Remediation Plans for Integration Capacity Analysis.

PROPOSED OUTCOME:

- Approves, with modification, the proposals of Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas and Electric (SDG&E) concerning Integration Capacity Analysis (ICA) remediation plans pursuant to ordering paragraph (OP) 36 of Decision 24-10-030 filed in Advice Letters (ALs) PG&E AL 7686-E, SCE AL 5614-E, and SDG&E AL 4710-E.

SAFETY CONSIDERATIONS:

- There are no safety considerations associated with this resolution.

ESTIMATED COST:

- There are no costs associated with this resolution. The implementation of this Resolution may impact costs in the future.

By Advice Letters 7686-E, 5614-E, and 4710-E, Filed on August 26, 2025.

SUMMARY

This Resolution adopts, with modifications, the proposals of Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas and Electric (SDG&E), together referred to as the "IOUs," to establish Integration Capacity Analysis (ICA) remediation plans and baseline reporting pursuant to D.24-10-030. Advice Letters PG&E 7686-E, SCE 5614-E, and SDG&E 4710-E contain separate proposals from each IOU on remediation plans and baseline reporting for their respective ICAs.

This Resolution establishes requirements for tracking and reporting issues with ICA that have been identified by the IOUs, parties, and prior orders of the Commission. The progress of the ICA remediation plans and all additional reporting shall be included in the Biannual ICA Reports and Quarterly ICA Workshops also established under D.24-10-030.

The IOUs shall perform the following remediations as proposed in their plans,

- SCE will reactivate circuits that are currently inactive on their ICA maps by September 30, 2026.
- PG&E will address calculation errors due to:
    - Erroneous system setting data as a persistent process
    - Erroneous queued generation data by the end of Q1 2026.

This Resolution modifies PG&E, SCE, and SDG&E's proposed ICA remediation plans to include:

- Tracking and reporting on multiple data fields related to timely updating of ICA results in line with the tracking and reporting proposed by PG&E.
- Tracking and reporting on the frequency and root cause of ICA discordance, where discordance refers to an IOUs ability to properly follow mandated ICA methodology while also producing ICA results that are not appropriate estimates of existing hosting capacity.

Once sufficient investigation has been carried out on the new tracking and reporting, the IOUs will be required to prepare a joint advice letter to suggest improvements to ICA methodology, scope, and considerations.

This Resolution requires:

- SDG&E to cease redacting total generation and queued generation for circuits implicating the 15/15 rule until SDG&E provides sufficient evidence that the specified fields must be redacted.
- PG&E, SCE, and SDG&E to present substations up to the transmission level on their DRP Portals and use the 15/15 rule, as specified in D.24-10-030, for redaction guidance.
- PG&E, SCE, and SDG&E to report on the progress of several ICA improvements ordered in D.24-10-030 in the Biannual ICA Reports.

BACKGROUND

This Resolution disposes of Advice Letters 7686-E, 5614-E, and 4710-E (the ICA Remediation ALs) as ordered by Decision (D.) 24-10-030 (~~the~~ Decision) issued on 10/23/2024. The Decision directed PG&E, SCE, and SDG&E (the IOUs) to each submit a Tier 3 Advice Letter (AL) proposing an adopted remediation plan for their Integration Capacity Analysis (ICA), with a proposed schedule of activities. The remediation plans would also serve as the baseline for reporting in the Biannual ICA Reports and quarterly workshops established in the Decision.[1] These remediation plans were intended to identify *all* known ICA issues and propose a schedule of activities for resolving each known issue, using the Biannual ICA Reports and quarterly workshops to update the public on remediation progress.

The ICA quantifies the maximum amount of power that can be injected into, or drawn from, the distribution system while requiring minimal to no distribution mitigations, upgrades, or operational restrictions.[2] ICA was established in 2014 under Rulemaking (R.) 14-08-013, the rulemaking for Distribution Resource Plans, to specify how much DER hosting capacity may be available on the distribution network down to the line section or node level. ICA was established in-part to improve the efficiency of the grid interconnection process through coordination between this ICA and each Utility's Rule 21 interconnection, Rule 15 main extensions and Rule 16 service connection study processes.[3] Following an ICA working group and report, with D.17-09-026 the Commission adopted two ICA use cases: (1) online maps and interconnection streamlining as well as (2) distribution planning. The decision also directed the Utilities to use an iterative methodology, among other methodological directives, for the online maps and interconnection streamlining use case.[4] The Commission has directed the IOUs to make various improvements to their ICAs through rulings and decisions of the Commission.

D. 24-10-030 was issued on October 23, 2024, in R. 21-06-017, the Rulemaking to Modernize the Electric Grid for a High Distributed Energy Resources Future (the High DER Proceeding), to make improvements to distribution planning and project execution

[1] D.24-10-030 pg.204-205 available at: docs.cpuc.ca.gov/PublishedDocs/Published/G000/M544/K154/544154869.PDF
[2] D.24-10-030 pg.8
[3] ASSIGNED COMMISSIONER'S RULING ON GUIDANCE FOR PUBLIC UTILITIES CODE SECTION 769 – DISTRIBUTION RESOURCE PLANNING, Attachment pg.3. Available at Microsoft Word - R1408013 Picker Ruling 2-4-15
[4] D.17-09-026 pg.27, 28, 32 available at: 196747754.PDF

processes, distribution resource planning data portals, and ICA maps. The Decision ordered improvements to ICA addressing transparency, accessibility, usability, and other miscellaneous fixes. Of particular note, to address concerns on usability and accuracy, the Decision ordered the IOUs to create new consolidated Biannual ICA reports, hold quarterly ICA workshops, and to file tier 3 ALs containing ICA remediation plans. The Biannual reports consolidate all previously mandated ICA reporting as well as all known issues with ICA accuracy and missing or erroneous ICA data.[5] The quarterly workshops were ordered to discuss all known issues with ICA, ICA remediation plan proposals and progress, the consolidated Biannual ICA Report, and any other updates relevant to ICA. The ICA remediation plans were required to be filed as tier 3 ALs within 60 days of the second quarterly ICA workshop, to establish a baseline for reporting for the Biannual ICA Reports and quarterly workshops with a proposed schedule of activities to resolve known issues with ICA. Table 1 below provides a summary of the Ordering Paragraphs (OPs) pertaining to ICA from the Decision, and their status. For the full text of each OP, refer to D. 24-10-030.

Table 1: Ordering Paragraphs Pertaining to ICA in D. 24-10-030 and their statuses

OP	Summary of ICA Ordering Paragraphs	Status	Discussed in this Resolution?
29	IOUs must provide information on limiting criteria in their user guides and explicitly indicate the Limiting Criteria for Generation ICA and Load ICA results.	Each IOU's user guide now contains information on the limiting criteria.[6] [7] [8] PG&E and SCE added limiting criteria information to their respective ICA pop-up results. SDG&E was granted an extension for this work to be implemented by	Yes

[5] D.24-10-030 pg.203

[6] GRIP User Guide, available for download at https://geomartcloud-datastore-prod.s3.amazonaws.com/DRP/Help/PGE_GRIP_UserDocumentation.zip?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIATERFGONKJRCJQ3UJ%2F20251103%2Fus-west-2%2Fs3%2Faws4_request&X-Amz-Date=20251103T050051Z&X-Amz-Expires=604800&X-Amz-SignedHeaders=host&X-Amz-Signature=a0823bc0e0e2cea4d908705fe345b0d0711529b72a45c4f61d2543f2c937b41f

[7] DRPEP User Guide, Lesson 46: IOUs Common Terminology. Available at IOUs Common Terminology - Distributed Resource Plan External Portal (DRPEP) Interactive User Guide

[8] SDG&E Interactive Map and Integration Capacity Analysis (ICA) User Guide, pg. 7 available at NavigationTools_ICA_Rev6.pdf

		January 12, 2026 ~~however, confirmation of completion is still pending.~~[9] [10] [11], and completed the requirement.[12] [13] [14]	
30	PG&E and SDG&E must remove all customer registration requirements for data portal access.	PG&E and SDG&E removed their registration requirements. It did not apply to SCE as they have no registration requirements.	No
31	IOUs must use the 15/15 Rule for Decisions About Data Redaction Protecting Individual Customer Privacy.[15]	PG&E and SCE use the 15/15 rule. SDG&E applies the 15/15 rule but redacts more fields than PG&E and SCE for circuits that implicate the 15/15 rule.	Yes
32	IOUs must modify ICA maps to enable straightforward customer creation of Limited Generation Profiles.	IOUs notified the R.21-06-017 Service list of completion of OP 32 and 33 on the following dates: PG&E July 15, 2025[16] SCE July 17, 2025[17] SDG&E July 23, 2025[18]	Yes
33	IOUs must modify ICA methodologies to make use of Limited Generation Profile application information and shall also incorporate all queued and		

~~[9] SCE ICA is available at: drpep~~
~~[10] PG&E ICA is available at: GRIPHubsite~~
~~[11] SDG&E ICA is available at: SDG&E Interconnection Map~~
[12] SCE ICA is available at: drpep
[13] PG&E ICA is available at: GRIPHubsite
[14] SDG&E ICA is available at: SDG&E Interconnection Map
[15] The 15/15 Rule aggregation rule is defined as a data set containing at least 15 customers with no customer receiving no more than 15 percent of the load.
[16] PG&E Email notice to the service lists of the Rule 21 (R.17-07-007) and High DER Future (R.21-06-017) Proceedings on July 15, 2025
[17] SCE Email notice to the service lists of the Rule 21 (R.17-07-007) and High DER Future (R.21-06-017) Proceedings on July 17, 2025
[18] SDG&E Email notice to the service lists of the Rule 21 (R.17-07-007) and High DER Future (R.21-06-017) Proceedings on July 23, 2025

	active distributed energy resources with export limits.		
34	IOUs must create Biannual ICA Reports, consolidating all previous ICA and Data Portal reports.	This is ongoing, reports released January 31 and July 31.	Yes
35	IOUs must hold quarterly public ICA workshops.	This is ongoing.	Yes
36	IOUs must each submit a tier 3 AL containing remediation plan for ICA and creating a baseline for reporting in the consolidated Biannual Reports.	The IOUs submitted their tier 3 AL remediation plans on August 26, 2025.	Yes
37	PG&E must submit a tier 1 AL describing the company's plan to incorporate Load ICA results into internal energization business processes.	PG&E filed this AL on January 21, 2025. The AL was approved on December 9, 2025, with an effective date of January 21, 2025.	No
38	SCE and SDG&E must each submit a tier 1 AL explaining why these companies are not able to incorporate load ICA results into internal energization timelines.	SCE and SDG&E each filed an AL on January 21, 2025 (ALs 5445-E and 4595-E, respectively). The ALs are still pending Energy Division disposition.	No
39	IOUs must Implement a list of miscellaneous improvements, IOUs must maintain an email for reporting ICA issues, IOUs must file a tier 3 AL to sunset or extend reporting requirements.	The IOUs are still implementing miscellaneous improvements, which must be completed by December 15, 2026. The IOUs maintain dedicated ICA emails. The AL to sunset or extend reporting is not filed and is required by December 15, 2030	Yes

The IOUs distributed the first set of Biannual ICA Reports to the High DER proceeding service list on January 31, 2025. The first quarterly ICA workshop was held March 7, 2025, from 9:00am to 2:30pm and the second quarterly workshop was held on

June 27, 2025, from 9:00am to 3:00pm. The second set of Biannual ICA Reports were distributed to the High DER proceeding service list on July 31, 2025. On August 26, 2025, PG&E, SCE, and SDG&E each filed their tier 3 AL containing their respective ICA remediation plans. On September 15, 2025, parties provided timely protest of the ALs. On September 22, 2025, PG&E, SCE and SDG&E provided timely reply to protest. The proposed plans were then discussed at the third quarterly ICA workshop, held on October 1, 2025, from 9:00am to 3:00pm.

PG&E's Remediation Plan included:

- Proposed additional tracking metrics to monitor the ability to perform ICA result updates in a timely manner.[19]
- Ongoing remediation for errors caused by erroneous or missing device setting data when importing from Powerbase into circuit models as an ongoing process.[20]
- Ongoing remediation to resolve errors caused by incorrect mapping of queued generation data, with a goal completion date of the end of Q1 2026.[21]

SCE's Remediation Plan included:

- A schedule to reactivate 1,023 inactive circuits, on SCE's ICA maps SCE has a goal completion date of September 30, 2026. [22] [23]

SDG&E's Remediation Plan included:

- A declaration that due to the lack of outstanding ICA issues, no remediation plan and accompanying implementation schedule are needed.[24]

NOTICE

Notice of AL 7686-E was made by publication in the Commission's Daily Calendar. Pacific Gas & Electric states that a copy of the Advice Letter was mailed and distributed in accordance with Section 4 of General Order 96-B.

[19] PG&E AL 7686-E pg.6-11
[20] PG&E AL 7686-E pg.11-13
[21] PG&E AL 7686-E pg.13-15
[22] SCE AL 5614-E pg.2-3
[23] An inactive circuit is a circuit not currently displayed on SCE's ICA map because no actionable studies can be produced at this time. Circuits are reactivated once they are available on SCE's ICA map with actionable study data,
[24] SDG&E AL 4710-E pg.3

Notice of AL 5614-E was made by publication in the Commission's Daily Calendar. Southern California Edison states that a copy of the Advice Letter was mailed and distributed in accordance with Section 4 of General Order 96-B.

Notice of AL 4710-E was made by publication in the Commission's Daily Calendar. San Diego Gas and Electric ~~states~~state that a copy of the Advice Letter was mailed and distributed in accordance with Section 4 of General Order 96-B.

PROTESTS

The Utilities' ICA Remediation Plan ALs (PG&E AL 7686-E, SCE AL 5614-E, and SDG&E AL 4710-E) were timely protested by the Interstate Renewable Energy Council (IREC) and the California Public Advocates Office (PAO) on September 15, 2025. PG&E, SCE, and SDG&E each provided timely reply to IREC and PAO's protests on September 22, 2025.

THE FOLLOWING PROVIDES A SUMMARY OF THE MAJOR ISSUES RAISED IN THE PROTESTS AND THE REPLY TO EACH.

SCE's Timeline for Reactivation of Currently Inactive Circuits: IREC protests that SCE has both taken too long in its implementation of previously Commission ordered ICA refinements and that SCE proposes unacceptably long timelines to resolve the issue of inactive circuits. Regarding the timeline for load refinements, IREC cites a 2021 Administrative Law Judge (ALJ) Ruling which ~~compels~~compelled SCE to accelerate timelines where possible.[25] [26] Regarding SCE's reactivation of inactive circuits, IREC believes this timeline is unacceptably long and requests that the Commission order SCE to reactivate all inactive circuits by March 2026.[27]

SCE Response: SCE responds to IREC's protest of the proposed timeline of circuit reactivation by noting that the majority of inactive circuits are planned to be reactivated in 2025. SCE further asserts that the remaining inactive circuits are largely driven by issues with looped systems, which require SCE to design and implement new tools and processes, and that the goal of reactivating all circuits affected by this issue by September 2026 is already an aggressive timetable.[28] SCE adds that IREC's proposed

[25] IREC Protest to ICA Remediation ALs pg.2
[26] September 2021 ALJ Ruling pg.10, available at 405069132.PDF
[27] IREC Protest to ICA Remediation ALs pg.6
[28] SCE Reply to Protest pg.7-8

penalties are both outside the Scope of Phase 1 of the High DER Proceeding, and rely upon arbitrary timelines that IREC not the Commission has set.[29]

SCE Reporting of Electric Vehicle Charging Applications
IREC contends that SCE's reporting of Electric Vehicle (EV) charging applications under Rules 29/45 both excludes unfinished projects and lacks analysis, causing IREC to have additional concerns about SCE's ICA accuracy.[30] IREC requests that the Commission obligate SCE to include information on unfinished projects.

SCE Response
SCE responds to complaints about reporting Rule 29/45 data by noting that it only provides information on financially complete projects from the year prior, which SCE understands to be the requirement. SCE reached this conclusion based on its interpretation of the order to incorporate additional data fields into the existing Electric Vehicle Cost and Load Report Electric Vehicle Data collection template, and to then incorporate that into the Biannual ICA Reports. SCE notes that EV Cost and Load Report is filed once a year and only reports financially complete projects. [31]

SDG&E Over Redaction: IREC protests SDG&E's claims that there are no outstanding issues with SDG&E's ICA due to SDG&E redacting circuits. IREC argues that previous rulings indicate that only data reasonably revealing customer load data should be redacted for circuits implicating the 15/15 rule~~; to which~~. IREC believes only the load profile and Operational Flexibility Criteria Violation value (Op Flex Gen) are acceptable fields to redact~~.~~ based on this standard. IREC asserts that SDG&E redacts more than the two listed fields when a circuit or feeder implicates the 15/15 rule. IREC further argues that GO-66D establishes that when a party claims that redacting data is in the public interest, they must substantiate that claim with granular specificity~~;~~, and~~, that~~ SDG&E has yet to do so.[32]

SDG&E Response: SDG&E argues first that there are no outstanding and explicit orders to change SDG&E's redaction practices. SDG&E then explains current redaction practices related to the 15/15 rule as, "if the circuit level fails the 15/15 Rule, all ICA results are redacted; if the circuit level passes the 15/15 Rule but the line section does not, ICA results are aggregated for display in the portal"[33] which SDG&E believes is in

[29] SCE Reply to Protest pg.8
[30] IREC Protest to ICA Remediation ALs pg.7-9
[31] SCE Reply to Protest pg.6
[32] IREC Protest to ICA Remediation ALs pg.15
[33] SDG&E Reply to Protest pg.2

line with the guidance in D. 97-10-031 and D. 14-05-016, which SDG&E must follow due to a December 2018 ALJ Ruling.[34]

PG&E and SCE Timely ICA Refresh of Changed Circuits: IREC and PAO protest both PG&E and SCE's ICA remediation plans on the grounds that the proposed plans fail to address IOU ability to update ICA maps in compliance with previous Commission requirements for timely updating of ICA.[35] [36] PAO supports PG&E's proposal for "trigger date" and other timely refresh data tracking but argues that PG&E's suggested tracking does not alter PG&E's ability to update its ICA maps in a manner compliant with past rulings. IREC argues that monthly updating of ICA is a clear requirement from D.17-09-026. IREC requests that SCE and PG&E engage in additional reporting on feeder trigger dates and update dates, with automatic penalties if SCE fails to comply with Commission requirements.[37]

PG&E Response: PG&E responds to these protests by stating its own interpretation of the language from D.17-09-026; PG&E understands the requirement to be a monthly cadence of updating, not the requirement that every circuit be updated within one month of triggering an update.[38] PG&E further states that it updates as many circuits as possible each month but cannot conclusively provide insights into whether its updating is adequate until the proposed tracking of trigger dates and other fields begins.

SCE Response: SCE responds to protests by arguing that monthly updates to ICA are not required. SCE argues that the perceived requirement of monthly refreshes comes from R. 14-08-013, the rulemaking for Distribution Resource Plans which had a narrower scope and did not account for high rates of electrification, and as such should not apply to ICA.[39] Therefore, SCE updates as many circuits as possible each month and strives to update each required circuit but does not believe the requirement stands.

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[34] While SDG&E cites the December 17, 2018 ALJ Ruling, the language cited is in the July 2018 ALJ Ruling: ADMINISTRATIVE LAW JUDGE'S RULING ADDRESSING PACIFIC GAS AND ELECTRIC COMPANY, SOUTHERN CALIFORNIA EDISON COMPANY, AND SAN DIEGO GAS & ELECTRIC COMPANY'S CLAIMS FOR CONFIDENTIAL TREATMENT AND REDACTION OF DISTRIBUTION SYSTEM PLANNING DATA ORDERED BY DECISIONS 17-09-026 AND 18-02-004, attachment C pg.1, July 24, 2018 available at 218401051.PDF

[35] IREC Protest to ICA Remediation ALs pg.11, 13

[36] PAO Protest to ICA Remediation ALs pg.4-5

[37] IREC Protest to ICA Remediation ALs pg.12, 14

[38] PG&E Reply to Protest pg.2

[39] SCE Reply to Protest pg.4

PG&E and SCE ICA Accuracy and Usability: IREC and PAO protest both PG&E and SCE's ICA remediation plans for allegedly failing to address known accuracy issues. Both IREC and PAO argue that SCE and PG&E's ICA are not accurate, based on concerningly high levels of load ICA results displaying zero available capacity.[40] [41] Both IREC and PAO point to SCE's issue with Steady State Voltage (SSV) violations potentially leading to excessively high levels of zero capacity ICA results. IREC provides further analysis noting what it believes to be unexpected and potentially erroneous trends for SCE's load ICA on circuits which returned one or more zero capacity results.[42] IREC requests that the Commission obligate SCE to produce demonstrably accurate ICA results by the end of March 2026 or face penalty.

PG&E Response: PG&E responds to this by arguing that ICA is a current state model and in its current form cannot provide the same insights and system adjustments a distribution engineer can when processing an interconnection application, so ICA results at the time of the run and post-engineering application outcomes will not be perfectly matched.[43] PG&E adds that by the end of Q2 2026, PG&E plans to track ICA results at the time of application to the results of engineering review of the same applications.

SCE Response: SCE responds to concerns on accuracy by asserting that SCE's ICA is accurate and that zeroes, resulting from SSV or any other field, are not inherently incorrect.[44] SCE understands accuracy to mean "using the right input data, performing the right analysis, and calculating the right outputs, all consistent with the CPUC adopted ICA methodology."[45] SCE asserts it is in compliance with the Commission mandated methodology, making its ICA accurate under SCE's understanding. SCE further notes that ICA estimates capacity without system upgrades, and that ICA does not capture any level of system adjustments made by an engineer no matter how minor.

PG&E, SCE, and SDG&E Additional/Baseline Reporting: PAO protests PG&E, SCE, and SDG&E's ICA remediation plans for allegedly failing to establish an appropriate baseline for reporting and failing to demonstrate how the proposed activities will improve ICA accuracy.[46] PAO proposes a baseline reporting metric for ICA accuracy

[40] PAO Protest to ICA Remediation ALs pg.4-6
[41] IREC Protest to ICA Remediation ALs pg.6-7, 10, 14-15
[42] IREC Protest to ICA Remediation ALs Attachment C pg.1
[43] PG&E Reply to Protest pg.2
[44] SCE Reply to Protest pg.5
[45] SCE Reply to Protest pg.2
[46] PAO Protest to ICA Remediation ALs pg.3

and Error Root Cause Identification.[47] PAO's suggested metric is based on the idea of recording the ICA result at time of interconnection and/or energization request and comparing that result to the outcome of the application. When the ICA result and outcome of the application are not aligned the Utility would then document a root cause of the discordance between ICA and application outcome. The IOUs would then be required to use this new metric, and subsequent analyses, as their baseline reporting for ICA accuracy.

PG&E Response: PG&E believes that its proposed plans are the first step to establishing additional reporting which will allow PG&E better insight into any concerns with their ICA. Additionally, PG&E argues that requesting additional reporting is not a valid reason to protest an AL.[48]

SCE Response: SCE responds by stating that SCE already performed a root cause analysis**.** This analysis led to the identification of issues that make up the inactive circuits and also confirmed that SCE's zero capacity results are the appropriate outcome of the approved ICA methodology.[49] SCE will consider voluntary additional reporting.

SDG&E Response: SDG&E responds first by stating that it is illogical to create a remediation plan when no outstanding issues exist and therefore there is nothing to remediate. SDG&E then adds that adequate reporting already exists in the ongoing Consolidated Biannual ICA Reports and previously provided Load ICA Refinement Reports. SDG&E further pushes against PAO's proposed tracking metrics for accuracy/root cause, arguing that PAO misunderstands the use case and capabilities of ICA. SDG&E asserts that ICA provides capacity estimates but is not a project design tool and thus ICA cannot capture the bespoke work performed by distribution engineers.[50]

DISCUSSION

The Commission has reviewed PG&E AL 7686-E, SCE AL 5614-E, and SDG&E AL 4710-E, the protests, and replies, and finds the proposed ICA remediation plans partially acceptable with needed modification. Topics will be addressed below in the

[47] PAO Protest to ICA Remediation ALs pg.8
[48] PG&E Reply to Protest pg.3
[49] SCE Reply to Protest pg.3-4
[50] SDG&E Reply to Protest pg.4

same categories used to outline protests. In addition, we address additional ICA remediation topics from D.24-10-030, and the January 2021 ALJ Ruling.

SCE Timeline for Reactivation of Currently Inactive Circuits: The Commission agrees with SCE that the proposed timeline for reactivating ~~1026~~1,026 inactive circuits by September 30, 2026, is reasonable. SCE proposed reactivation of 780 circuits by the end of 2025, over 75% of the 1,026 inactive circuits. As of the 2025 fourth Quarterly ICA Workshop on December 17, 2025, SCE provided an update that only 311 circuits remained inactive. The remaining circuits, which are looped system circuits, take longer to reactivate because they require more complex modeling solutions. Further, the timeline for resolving the remaining circuits should be considered accelerated as SCE's 2025 January Biannual ICA Report did not anticipate remediations for modeling looped systems until "2028 or beyond", significantly later than the proposed reactivation date of September 30, 2026, provided in SCE's ICA remediation plan.[51] [52] Thus, we do not modify SCE's proposed timeline for reactivating currently inactive circuits. We order SCE to complete reactivation of all inactive circuits by September 30, 2026.

SCE Reporting of Electric Vehicle Charging Applications

The Commission agrees with IREC that SCE interpreted the requirement to report on electric vehicle charging applications too narrowly. The requirement for reporting Rule 29/45 data comes from D.24-10-030 section 3.25 which built upon the proposal to develop reporting aimed at understanding the frequency of zero-load ICA values and resulted in an expansion to report all annual refinements, thus establishing the Biannual ICA Reports.[53] Accordingly, PG&E, SCE, and SDG&E include in their Biannual ICA Reports reporting on Load ICA data at the time of Rule 29 EV infrastructure applications. PG&E and SDG&E include information on new applications, including those that are not financially completed, while SCE excludes projects which are not financially complete. The purpose of the tracking is to evaluate the efficacy of Load ICA results by comparing Load ICA results to energization applications and their engineering review results. Financial completion is not a useful marker in the intended analysis and should not be used to exclude relevant data. Therefore, regarding SCE's reporting of Load ICA data at the time of Rule 29 EV infrastructure applications, SCE has read the requirement ~~to~~too narrowly. Thus, we order SCE to align its reporting with PG&E and SDG&E such that future reporting on ~~Load~~ ICA data at the time of ~~Rule 29 EV infrastructure~~ applications includes projects which are not financially complete.

[51] SCE January 2025 Biannual ICA Report pg.12
[52] SCE AL 5614-E pg.2
[53] D.24-10-030 pg.167-172

SDG&E Over Redaction: The Commission agrees with IREC that SDG&E has failed to comply with Commission requirements for redaction methods for ICA by inappropriately redacting the "Total Generation" and "Existing Generation" fields, as well as all the ICA values under the "Integration Capacity NO Operation Flexibility" and "Integration Capacity" Fields, and by redacting all downloadable data for circuits that implicate the 15/15 rule. D. 24-10-030 requires the IOUs to use the 15/15 rule, as established in D. 97-10-031 and D. 14-05-016, for decisions about data aggregation and redaction.[54] The specific fields that SDG&E is redacting do not reasonably reveal customer information. As such, redacting those fields is in excess of what is required. GO 66-D adds that to redact fields not explicitly permitted, SDG&E must provide clear technical and granular justification for redacting ~~fields~~. Beyond load profile and Op Gen Flex for circuits and feeders that implicate the 15/15 rule~~, which~~ SDG&E has not ~~done~~provided clear technical and granular justification.[55] The Commission also notes that a January 2021 ALJ Ruling previously found SDG&E noncompliant with the burden of proof required by GO-66D.[56] At this time PG&E and SCE do not redact "Total Generation" and "Existing Generation" fields of ICA results for circuits that implicate the 15/15 rule, do not eliminate the downloadable information, and have not raised concerns that the publication of those fields for nodes or circuits implicate the 15/15 rule. Thus, we require SDG&E to align its redaction practices with PG&E and SCE ~~and~~; such that, within ~~15~~30 calendar days of this ~~Resolution~~Resolution's issuance SDG&E shall publish ~~its currently excessively redacted~~ the fields "Total Generation~~" and~~," "Existing Generation~~"~~," "Integration Capacity NO Operation Flexibility," and "Integration Capacity" in the popup boxes for circuits that implicate the 15/15 rule. SDG&E may only redact two ICA fields from the downloadable files" "ICA_Operation_Flex" and "ICA_Uniform_Gen" where that result relies on a redacted Operational flexibility value. Also, SDG&E is required to allow ICA users to access downloadable .csv files for circuits that implicate the 15/15 rule. We find SDG&E to be out of compliance with D.24-10-030. We direct SDG&E to notify the High DER service list as soon as it complies with this Resolution, D.24-10-030, the 15/15 Rule, and the January 2021 ALJ Ruling.

PG&E and SCE Timely ICA Refresh of Changed Circuits: The Commission agrees with IREC and PAO that D. 17-09-026 states the IOUs "shall update Integration

[54] D.24-10-030 pg.147-152, 202
[55] GO-66 D pg.3 available at 549067294.PDF
[56] January 2021 ALJ Ruling pg.11, available at: 361810169.PDF

Capacity Analysis (ICA) results for changed circuits (i.e., circuits that have been upgraded or have new DER interconnections) on a monthly basis."[57] The Commission holds that the IOUs ~~should strive to~~shall update all triggered circuits every month. The Commission acknowledges that reasonable exceptions exist, due to model run time or model failure, where circuits may not be recalculated and ready for refresh at the time of the nearest monthly ICA batch publication date. In light of these exceptions, the IOUs shall update all circuits triggered three business days or more before the nearest monthly ICA batch publication update. The Commission is supportive of PG&E's proposal to track trigger dates, among other metrics, and publish the trigger date(s) on the ICA maps, while additional metrics are processed and included in the Biannual ICA Reports. Accordingly, the Commission modifies PG&E, SCE and SDG&E's remediation plans to include the tracking equivalent to the fields in Table 2, which is based on the metrics proposed by PG&E, and the IOUs will at minimum present the fields listed in Table 3 in their Biannual ICA Reports.[58] [59] If the reporting included in any future Biannual ICA Report indicates that an IOU fails to update 98% of triggered circuits on a monthly basis in three or more of the six months last reported, that IOU shall submit a Tier 2 Advice Letter within 30 Calendar Days proposing methods to reach that level of compliance.

Table 2: ICA Trigger Data Tracking Fields

Field Name	Description
Trigger Date	A timestamp of when the circuit first met the criteria for a refresh. This will also be published on the IOU ICA Data Portal.
Days Since Trigger	A counter that starts at 0 and increments every 24 hours from the Trigger Date.
Trigger Cycle	The publication cycle during which the trigger occurred.
Priority	Priority level assigned to the trigger.
Reason	The specific reason for the trigger.
Logic for Re-Triggers	Defined logic for handling circuits that are re-triggered while already in the queue or in progress.
Automated Reporting:	Automatically generated report listing all circuits that were triggered during or prior to that cycle. This report will include all core and additional data fields to provide a comprehensive overview of data timelines.

[57] D.17-09-026 pg.59
[58] ~~PG&E AL 7686-E pg. 8~~
[59] PG&E AL 7686-E pg. 8

Table 3: ICA Trigger Date Reporting Fields

Field Name
Monthly number of circuits triggered
Monthly number circuits updated
Monthly number of circuits updated in a later trigger cycle than the trigger date
Average time from trigger to update

The IOU's may use their discretion to add further analysis beyond the required fields in their Biannual ICA Reports as they deem appropriate and productive. At this time the Commission declines to include an automatic penalty for ICA compliance, as the Commission may already penalize non-compliance.

PG&E and SCE ICA Accuracy and Usability: The Commission understands the need to make meaningful distinction between the IOU definition of accuracy and IREC's definition of accuracy. SCE defines ICA Accuracy as using the right input data, performing the right analysis, and calculating the right outputs, all consistent with the CPUC adopted ICA methodology.[60] Whereas IREC uses accuracy to refer to ICA results reflecting actual system constraints (i.e. identifying available hosting capacity).[61] The IOUs have informally referred to IREC's definition of accuracy as being more of a definition of alignment. This is because ICA results identifying available hosting capacity depends on the approved ICA methodology aligning with IOU interconnection and energization processes and outcomes which are not always the same.

The difference in terminology used by IOUs and protesting parties hampers meaningful discussion of the underlying issue: how closely do the grid hosting values generated by the ICA tool and methodology reflect the actual engineering outcomes that result from the interconnection process? A tool that is accurate according to its methodology but misaligned with real-world interconnection results has limited usefulness. At the same time, understanding the reasons for any variance is essential to ongoing efforts to

[60] SCE Reply to Protest pg. 2
[61] IREC Protest to ICA Remediation Plans pg. 6

improve the ICA tool. To clarify the path forward, the Commission adopts the following definitions.

ICA accuracy refers to the IOU's ability to correctly follow the Commission-mandated ICA methodology using the required inputs and analytical steps to produce a reasonable estimation of existing hosting capacity. ICA results are considered accurate when the IOU faithfully applies the Commission-approved methodology and any subsequent Commission-ordered improvements. We refer to these outputs as **ICA value**.

ICA alignment refers to the degree to which ICA results reflect the engineering outcomes of actual interconnection or energization applications, as determined by the distribution engineer processing those applications. Under the current design, some level of discordance between ICA results and engineered application outcomes is expected. This occurs because ICA values represent a conservative estimate of the hosting capacity of the grid *as-is*, without the adjustments that distribution engineers often make when evaluating a specific application. For example, an engineer may review nearby system settings and modify capacitor or other equipment settings to increase local capacity. ~~We refer to these real-world outcomes as **application engineering review value** (or simply **engineered value**). We also~~ We define project **application size** as the amount of capacity requested in a customer application for interconnection or service.

To ensure ICA is as useful as possible in real-world siting and planning, ICA values should be aligned with ~~engineered values.~~actual interconnection or energization outcomes. Significant or frequent discordance between these two outputs leads to user frustration and undermines ICA's intended function as both a DER siting tool and a distribution planning tool. An ICA that cannot provide meaningful and usable results is unacceptable, and the tool's usability is directly tied to its ICA alignment.

The Commission therefore requires the IOUs to undertake additional tracking and reporting to evaluate each IOU's ICA alignment and identify and report drivers of misalignment. When the IOUs identify root causes of misalignment, they shall propose corrective actions to improve ICA alignment.

To identify root causes of misalignment, PAO proposes tracking similar to that brought forward in the High DER Track 1 Phase 1 Staff Proposal, in which Energy Division staff proposed 1) comparing generation ICA values to the Rule 21 Interconnection report; and 2) adding additional fields to the EV Cost and Load Report, including Load ICA at

time of application, to provide the necessary data to evaluate concerns on ICA Alignment.[62]

The staff proposal recommendations led to the creation of the consolidated Biannual ICA Report, which do not include comparisons to the Rule 21 interconnection report, but do include the analysis comparing Load ICA results with data from the EV Cost and Load Report.[63]

We find that the prevailing issue of discordance between ICA results and ICA engineered results requires further tracking so that proper corrective action can be taken.

To do so, the Commission first defines **Concordant ICA scenarios** and **Discordant ICA scenarios** based on the language used in PAO's protest and the High DER Proceeding Track 1 Phase 1 Staff Proposal.[64]

- Concordant scenarios are those in which the ICA results and ~~engineered results~~actual interconnection or energization outcomes are aligned, meaning the IOU followed the mandated ICA methodology and the ICA results aligned with the ICA application results after engineering review.
- Discordant scenarios occur when the ICA value and ~~engineered value~~actual interconnection or energization outcomes are not aligned either due to an issue following the required ICA methodology or due to a divergence between ICA value and ~~engineered value~~actual interconnection or energization outcomes.

Concordant and Discordant scenarios are assessed by evaluating application size compared to the ICA value at the time of application and compared to the ~~engineered value.~~actual interconnection or energization outcome. This type of evaluation leads to four potential scenarios explained below and shown in Table 4:

1. The ICA value was greater than the application request and no mitigations or upgrades were required. In this scenario the ICA value appropriately represents grid conditions; grid mitigations and/or upgrades were not expected and not needed. This scenario is considered concordant because ICA value and ~~engineered value~~actual interconnection or energization outcomes are aligned.

[62] High DER Track 1 Phase 1 Staff Proposal pg.118-119, available at 527221491.PDF
[63] D. 24-10-030 pg.164-167
[64] PAO Protest to ICA Remediation ALs pg. 8

This scenario is generally what most users expect from the tool: to be able to cite a project within available hosting capacity limits and not trigger an upgrade expense. (ICA Value > Application Size ~~& Engineered Value > Application Size),~~ Upgrade Not Required))

2. The ICA value was greater than the application size and mitigations or upgrades were required. In this scenario grid mitigations and/or upgrades were not expected but were needed. From a user perspective this scenario is akin to a false positive and can be a source of frustration to users attempting to cite a project without triggering an upgrade. This scenario is considered discordant because ICA value and ~~engineered value~~actual interconnection or energization outcomes are not aligned.
(ICA Value > Application Size ~~& Engineered Value < Application Size~~, Upgrade Required)

3. The ICA value was less than the application size and no mitigations or upgrades were required. Grid mitigations and/or upgrades were expected but not needed, which is a positive outcome from a user perspective. This scenario is akin to a false negative. This scenario is considered discordant because ICA value and ~~engineered value~~actual interconnection or energization outcomes are not aligned.
(ICA Value < Application Size ~~& Engineered Value > Application Size~~, Upgrade Not Required)

4. The ICA value was less than the application size and mitigations or upgrades were required. In this scenario mitigations and/or upgrades were expected and needed. This scenario is considered concordant because ICA value and ~~engineered value~~actual interconnection or energization outcomes are aligned. This scenario is generally what most users expect from the tool: either to avoid citing projects in areas that trigger upgrades; or to have visibility that upgrades are likely when citing a project in an area with limited hosting capacity.
(ICA Value < Application Size ~~& Engineered Value < Application Size~~, Upgrade Required)

Table 4: Concordant and Discordant Scenarios Evaluating Application Request and ICA Value at time of Application Compared to the Application Outcome

Capacity Comparison / Mitigation or Upgrade Requirement	**Mitigation and/or Upgrade NOT Required** ~~Engineered Value (kW) > Application Size (kW)~~	**Mitigation and/or Upgrade Required** ~~(Engineered Value (kW) < Application Size (kW)~~
ICA Map Shows Capacity ICA Value (kW) > Application Size (kW)	Scenario 1: Concordant	Scenario 2: Discordant
ICA Map Shows Constraint ICA Value (kW) < Application Size (kW)	Scenario 3: Discordant	Scenario 4: Concordant

With discordance defined, the IOUs can engage in tracking of ICA discordance and the root causes of any discordance. ~~Thus~~Thus, for each detailed generation study or load application which generates an engineering review, each IOU shall track the data fields provided in Table 5, which includes illustrative example results, for all 1) Load ICA and energization applications with engineering reviews and 2) Generation ICA and detailed study interconnection requests.

Table 5: ICA Concordance Tracking

Application ID	Application Date	Project Application Size (kW)	ICA Value (kW)	Engineered Value (kW)	ICA Limiting Criteria	Mitigation and/or Upgrade Required (Y/N)	Concordance Type (1,2,3,4)	Result Concordance (Y/N)	Root Cause of Discordance Category	Specific Root Cause of Discordance
Project 1	7/15/2025	50	60	75	Steady State Voltage	N	1	Y	NA	NA
Project 2	7/21/2025	30	45	20	Thermal	Y	2	N	*	**
Project 3	8/1/2025	10	5	5	Safety	N	3	N	*	**
Project 4	8/30/2025	100	75	80	Protection	Y	4	Y	NA	NA

Application ID	Application Date	Project Application Size (kW)	ICA Value (kW)	ICA Limiting Criteria	Mitigation and/or Upgrade Required (Y/N)	Concordance Type (1,2,3,4)	Result Concordance (Y/N)	Root Cause of Discordance Category	Specific Root Cause of Discordance
Project 1	7/15/2025	50	60	Steady State Volt	N	1	Y	NA	NA
Project 2	7/21/2025	30	45	Thermal	Y	2	N	*	**
Project 3	8/1/2025	10	5	Safety	N	3	N	*	**
Project 4	8/30/2025	100	75	Protection	Y	4	Y	NA	NA

The Commission provides the additional clarifications for Table 5, including the meaning of the noted "*" and "**". The "ICA Limiting Criteria" fall under the categories required by the IOUs to include in their data portals as described in D.24-10-030.[65]

[65] D.24-10-030 pg. 139

The Concordance Types refer to the four concordant scenario categories in table 4. The "Root Cause of Discordance Category", marked with "*" will consist of ~~three~~five categories:

- ~~Miscalculation of Limiting Criteria~~ICA Calculation Error: Scenarios where ~~erroneous or missing data lead~~a published ICA value was "inaccurate" based on the Resolution's definition.
- ICA Results Unavailable: Scenarios where the approved ICA methodology cannot be performed due to ~~a miscalculation.~~specific circumstances
- Minor System Adjustment: Scenarios where a distribution engineer found low to zero cost solutions through either alteration of system settings or low-price equipment replacement.
- ~~Other~~ ICA ~~Scope Limitations: Scenarios where~~Methodology Unaligned: This category indicates that the ICA ~~cannot reflect other major constraints~~ value was accurate, but due to ~~current scope and~~ the approved methodology, did not identify the constraint
- Beyond Current Scope of ICA: Supplemental to the category above ("ICA methodology unaligned"), in order to provide greater specificity to stakeholders. ICA is designed to evaluate some constraints that drive grid upgrades, but not all. The ICA methodology evaluates four specific types of constraints: thermal, voltage, protection, and operational flexibility. These criteria are evaluated on the line segment from the substation to the project site. These criteria cover some, but not all, of the potential issues that may require upgrades for a new project. For example, ICA does not consider capacity constraints at networked facilities operating at higher distribution and transmission voltages; furthermore, the ICA does not cover short circuit duty related impacts or service transformer/secondary limitations (this analysis is much more in depth than what ICA performs). Addressing discordance in this category is not the same as addressing discordance in the previous category, because it requires new automated engineering analyses that do not currently exist; such as elements that are not part of ICA.

The Commission provides the above root causes of discordance based on the proposal by PAO, but with the separation of minor system adjustments from other out of scope limitations. While minor system adjustments could be considered ICA scope limitations, the purpose of this reporting is to investigate root cause of discordance so that the issue can be meaningfully addressed, and separating financially intensive system corrections from minor corrections may help identify areas for further investigation to focus on. The distinction of minor system adjustments is similar to PG&E's second Biannual ICA Report for 2025, in which PG&E's review of EV

applications and ICA results used "No*" in response to mitigation tracking if a mitigation was required but the mitigation was a minor adjustment.[66]

Specific Root Cause of Discordance, marked with "**" will be additional explanation to the origin of the Root Cause. Each IOU shall provide a list of their tracked Specific Root Cause of Discordances in their Biannual ICA Report. Tracking Specific Root causes within each discordance group will pinpoint further issues driving discordance.

Understanding both the type and degree of ICA discordance and identifying the drivers of that discordance, are essential prerequisites to determining whether corrective action is warranted and what type of remediation is needed. Moreover, not all instances of discordance have the same practical implications. For example, a Scenario 3 discordance -- while technically discordant -- results in a project that does not require mitigation or upgrades, whereas a Scenario 2 discordance results in a project that does require mitigation or upgrades. Because these outcomes differ materially, it is necessary to track the frequency of each concordance and discordance scenario, rather than simply whether an outcome is classified as concordant or discordant. Thus, the Commission modifies each IOU remediation plan to ~~now~~ include the tracking outlined in Table 5 which tracks discordance and concordance ~~in aggregate and by~~for each ~~type~~application, beginning with the January 2027 Biannual ICA Report.

PG&E, SCE, and SDG&E Additional/Baseline Reporting: The Commission agrees with PAO that the IOUs' remediation plans did not meet the requirement of proposing a sufficient baseline metric, one which can be studied across IOUs.

To establish an appropriate baseline reporting to investigate the issue of ICA misalignment, the Commission orders that each IOU shall include in their Biannual ICA Reports at a minimum the fields listed in Table 6, based on the data tracking outlined in the ICA Accuracy and Usability Section and in Table 5, maintaining distinction between Generation ICA and Load ICA analyses. ~~As mentioned above~~ It is important to track ~~alinement~~alignment in aggregate, but also by type of concordance/discordance.

[66] PG&E July 2025 Biannual ICA Report pg. 26

Table 6: ICA Concordance Reporting with example Results

Total Number of Applications	Total Number Type 1 Concordance	Total Number Type 2 Discordance	Total Number Type 3 Discordance	Total Number Type 4 Concordance	Total Percent of Circuits Discordant	Percent of Discordant Results caused by Miscalculation	Percent of Discordance Results caused by Minor System Adjustments	Percent of Discordant Results due to other current ICA scope limitations
4	1	1	1	1	50%	50%	50%	0%

This new reporting will be followed to determine any further appropriate and necessary action. This new ~~reporting~~analysis shall be implemented within 6 months of the issuance of this Resolution. The IOUs shall ~~also~~ report, ~~in~~ beginning with the January 2027 Biannual ICA Report, the analysis contained in Table 6 and on any efforts or progress to address ICA alignment and concordance. Additionally, no earlier than ~~18 months, and no later than~~ 30 ~~months~~days after the ~~issuance~~release of ~~this Resolution,~~the 2027 July ICA Biannual Report the IOUs shall file a joint tier 2 AL recommending improvements to the mandated ICA methodology and the scope of inputs and considerations for ICA to address discordance.

Additional ICA Remediation Issues Not Surfaced in Protests:
Beyond the protests raised by IREC and PAO, the Commission finds ~~the IOUs noncompliant with a requirement from the January 2021 ALJ Ruling, and we find~~ several compliance items from D.24-10-030 that logically should be reported on in the Biannual ICA reports and remediation plans. Further, the Commission clarifies the requirement from a January 2021 ALJ Ruling, which required IOUs to publish substations on the DRP maps includes substations up to the transmission level.

The January 2021 ALJ Ruling "Orders the IOUs to display the location of substations on the DRP maps."[67] Further, the same ruling orders that "all IOUs shall publish transmission lines on the DRP Portal."[68] ~~Yet, the PG&E is not currently displaying publicly available information on the location of transmission level substations, and are inappropriately not displaying distribution system substation locations on the DRP maps when ICA data about the substation implicates the 15/15 rule.~~Here we clarify that the requirement to display substations includes subtransmission and transmission level substations. Both transmission lines and transmission substations should be displayed and are valuable information for ICA users. Substations of all levels should be presented similarly; therefore, the 15/15 rule is the most appropriate redaction guidance

[67] January 2021 ALJ Ruling pg. 9
[68] January 2021 ALJ Ruling pg. 11

for all levels of substation. This includes the requirement to only redact approved fields unless a comprehensive burden of proof justifying additional redaction is satisfied by the IOUs. Thus, the Commission orders that the IOUs publish substation locations up to and inclusive of the transmission level on the DRP Portals and shall use the 15/15 rule as clarified in D. 24-10-030 for redaction guidance.

The remediation plans were intended to identify *all* known ICA issues and propose a schedule of activities for resolving each known issue, using the Biannual ICA reports and quarterly workshops to update the public on remediation progress. We find that the Biannual ICA Report created under D.24-10-030 OP 34 is intended to consolidate and track *all* ICA known issues and improvements, making it the most appropriate venue to track and report ICA issues including several ICA-related orders from D.24-10-030. We therefore direct the IOUs to include several ICA improvement issues in their biannual ICA reports that were omitted from prior reports and the remediation plans or were included but lacked sufficient explanation.

OP 29 requires the IOUs to provide information on limiting criteria, the fields which ICA calculates as limiting hosting capacity, and must be implemented by December 15, 2025. The IOUs did not report on OP 29 work in their Biannual ICA Reports or remediation plans. Completion of this work, and clarity on how it is being implemented, is essential for ensuring transparent and usable ICA results. Accordingly, the Commission orders the IOUs to include information on the implementation of the limiting-criteria presentation in the July 2026 Biannual ICA Report and in all subsequent Biannual ICA Reports.

OP 33 requires the IOUs to incorporate Limited Generation Profiles (LGPs) into ICA. The IOUs notified the service lists of R.21-06-017 and R.16-07-007 that they had completed the OP 33 work and included related reporting in the Biannual ICA Reports, but the explanation was not sufficiently detailed. Accordingly, the Commission orders the IOUs to include additional information in their ~~January~~July 2026 Biannual ICA Report describing how the ICA methodologies were modified to incorporate LGPs.

OP 39 requires the IOUs to implement various miscellaneous improvements to ICA usability and requires all changes to be completed by December 15, 2026. None of the IOUs reported on the status of these improvements in their Biannual ICA Reports. Accordingly, we order the IOUs to include in their ~~January~~July 2026 Biannual ICA Reports the completion status of the miscellaneous fixes required under OP 39 of D.24-10-030.

IREC believes that PG&E has altered its ICA to include a new technical criterion, referred to as "safety bank," that is not envisioned by the Commission's orders and is impacting ICA users in a negative manner.[69] According to PG&E's GRIP User Guide, PG&E is using ICA_Safety_Bank_kW as part of its safety calculation and in its ICA Static Grid calculation. PG&E calculates ICA_Safety by using the more limiting value of IC_Safety_Bank_kW for substation reverse power flow and IC_Safety_Opflex_kW for feeder reverse power flow.[70] Due to the nature of calculating reverse flow through a system, PG&E's inclusion of safety bank in calculations for ICA Static Grid results in scenarios where the ICA Static Grid, a critical result for interconnection customers, is redacted to protect potentially sensitive customer load data when the circuit is implicated by the 15/15 rule. Discussion at the 2026 First Quarter ICA Workshop indicates that each utility is applying reverse flow through substations differently in its ICA. In light of these findings and different practices for use of safety bank and resulting redaction the Commission requires additional information from the Utilities to determine what steps are needed.

To determine an appropriate approach to calculation of reverse power flow through the substation, application of the field to limiting criteria, and subsequent use for redactions, we order the Utilities at the next ICA quarterly workshop following the issuance of this resolution to each provide detailed information on 1) how it refers to reverse power flow through the substation in ICA; 2) how it calculates reverse power flow through the substation in ICA; 3) how the reverse power flow through the substation calculation result is applied in ICA and its limiting categories; and 4) how any redactions related to the resulting calculation are handled, including what specific fields are redacted when the reverse power flow through the substation is the most limiting criteria. Additionally, 60 days following the workshop where these materials are presented the Utilities shall file a joint tier 2 Advice Letter either establishing or modifying their approaches to the calculation, application, and redaction of reverse power flow through the substation.

COMMENTS

Public Utilities Code section 311(g)(1) provides that this Resolution must be served on all parties and subject to at least 30 days public review. Any comments are due within 20 days of the date of its mailing and publication on the Commission's website and in accordance with any instructions accompanying the notice. Section 311(g)(2) provides

[69] IREC Opening Comment on Draft Resolution E-5440 pg.17
[70] PG&E GRIP User guide pg.12-13

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~~, and will be placed on the Commission's agenda no earlier than 30 days from today~~ on February 11, 2025.

On March 3, 2026, Pacific Gas and Electric (PG&E), Southern California Edison (SCE), San Diego Gas and Electric (SDG&E), California Public Advocates Office (PAO), Interstate Renewable Energy Council (IREC), California Community Choice Association (CalCCA), Clean Coalition, and Joint Parties, filed timely comments on this resolution.[71]

On March 9, 2026, PG&E, SCE, SDG&E, and IREC filed timely reply comments on this resolution.

Over Redaction

On the issue of redaction, CalCCA, Joint Parties, and IREC believe that the resolution is currently too narrow, and that SDG&E is also inappropriately redacting "Integration Capacity NO Operation Flexibility" and "Integration Capacity" when circuits implicate the 15/15 rule.[72] [73] [74] SDG&E requests additional time to resolve redacting "Total Generation" and "Existing Generation" but requests the Commission not require them to publish additional fields called out by parties because of potential security concerns surrounding the military infrastructure in SDG&E's territory.[75] We are not moved by SDG&E's request to redact fields beyond "ICA_Operation_Flex" and "ICA_Uniform_Gen" for circuits implicating the 15/15 rule. Accordingly, we adopt modifications proposed by parties to clarifying that only "ICA_Operation_Flex" and "ICA_Uniform_Gen" may be redacted for circuits implicating the 15/15 rule.

[71] Joint Parties represents a joint comment submission from Advanced Energy United, The California Energy Storage Alliance, The California Solar & Storage Association (CALSSA), CALSTART, The Center for Biological Diversity, Coalition for Community Solar Access, Environmental Defense Fund (EDF), Powering America's Commercial Transportation (PACT), The Solar Energy Industries Association (SEIA), Terawatt Infrastructure, Vehicle-Grid Integration Council (VGIC)
[72] CalCCA Opening Comment on Draft Resolution E-5440 pg.4
[73] Joint Parties Opening Comment on Draft Resolution E-5440 pg.5
[74] IREC Opening Comment on Draft Resolution E-5440 pg.13-16
[75] SDG&E Reply Comment on Draft Resolution E-5440 pg.2-3

Timely ICA Refresh of Changed Circuits

In their opening comments on the draft resolution CalCCA, Clean Coalition, Joint Parties, and IREC request that the language in this resolution be modified to reaffirm the existing requirement for monthly refresh of changed circuits.[76] [77] [78] IREC further recommended additional tracking points and a new automatic measure which would require an IOU to file a Tier 2 Advice Letter for failing to meet a minimum acceptable threshold for timely refresh.[79] PG&E, SCE, and SDG&E oppose IREC's minimum threshold and automatic trigger, claiming it is arbitrary and lacks understanding of operational realities. [80] [81] [82] We agree that it is important to reaffirm existing requirements for timely refresh and make modifications establishing a clearer requirement for monthly refresh of circuits and a minimum level of satisfactory refresh rates.

Accuracy and Usability, Additional/Baseline Reporting

PG&E, SCE, SDG&E, and IREC request modifications to the proposed concordance tracking and reporting metrics.[83] [84] [85] [86] PG&E, SCE, SDG&E, and IREC point out that not all project applications require engineering review, and accordingly parties request that the language clarify which projects the proposed tracking may apply, as requiring this tracking for projects not normally undergoing engineering reviews would be potentially overly burdensome. PG&E, SCE, and SDG&E also add that the proposed metric "engineered" value is either not generated or not generated in the manner the draft resolution detailed and as such the field should be removed. SDG&E would like to further remove tracking of concordant projects. IREC also requests the Resolution clarify how concordance tracking is reported, including that the tracking data be included with the Biannual Reports in the form of a machine readable sortable format. SCE requests the discordance tracking root causes should be modified to increase clarity and provide more useful information.[87] SCE proposes five categories of discordance root causes, maintaining "minor system adjustment", replacing "miscalculation of

[76] Clean Coalition Opening Comment on Draft Resolution E-5440 pg.1-2
[77] CalCCA Opening Comment on Draft Resolution E-5440 pg.4
[78] Joint Parties Opening Comment on Draft Resolution E-5440 pg.3
[79] IREC Opening Comment on Draft Resolution E-5440 pg.10-13
[80] PG&E Reply Comment on Draft Resolution E-5440 pg.2-3
[81] SCE Reply Comment on Draft Resolution E-5440 pg.6-7
[82] SDG&E Reply Comment on Draft Resolution E-5440 pg.3-4
[83] PG&E Opening Comment on Draft Resolution E-5440 pg.2-3
[84] SCE Opening Comment on Draft Resolution E-5440 pg.4-6
[85] IREC Opening Comment on Draft Resolution E-5440 pg.6-8
[86] SDG&E Opening Comment on Draft Resolution E-5440 pg.10-11
[87] SCE Opening Comment on Draft Resolution E-5440 pg.2-3

limiting criteria" and "other ICA scope limitation" with alternative categories, and adding two new categories.

We are persuaded by the requests to clarify and streamline the proposed tracking and accordingly adopt modifications to the Resolution discussion sections which clarify that the new tracking shall only apply to projects already generating engineering review, adopt modifications to the root causes, and adopt modifications clarifying how the data shall be reported. We adopt modifications removing the engineered value field. We reject SDG&E's request to track only discordant scenarios.

PG&E and SCE request the timeline for tracking concordance and the associated Tier 2 Advice Letter be delayed due to the time needed to implement the necessary improvements, while CalCCA, PAO, and IREC request the timeline be accelerated.[88] [89] [90] [91] [92] We determine that the concordance tracking shall begin no later than 6 months after this resolution is voted upon, the January 2027 Biannual ICA report shall include the first data set and analysis of concordance tracking, and the deadline for the associated Tier 2 AL shall be moved forward to no later than 30 days after the July 2027 Biannual Report.

SCE requests a reduction in reporting requirements, most notably the EV Eule 29 tracking in the Biannual ICA Reports, as it is burdensome and duplicative of the existing EV Rule 29 tracking. We find that due to the new reporting being implemented through this resolution, the continuation of the EV Rule 29 data in the Biannual ICA Report is unnecessary and burdensome, accordingly we adopt modifications to sunset the requirement.

Additional ICA Remediation Issues

PG&E, SCE, and SDG&E contend that this resolution incorrectly asserts that, pursuant to a 2021 ALJ Ruling, the IOUs are required to display transmission substations on the DRP Maps. They request that the resolution revise its language indicating that the IOUs are currently out of compliance with any such requirement to display transmission

[88] PG&E Opening Comment on Draft Resolution E-5440 pg.1-2
[89] SCE Opening Comment on Draft Resolution E-5440 pg.3-4
[90] CalCCA Opening Comment on Draft Resolution E-5440 pg.3
[91] PAO Opening Comment on Draft Resolution E-5440 pg.1-2
[92] IREC Opening Comment on Draft Resolution E-5440 pg.8-9

substations.[93] [94] [95] SCE states they are open to this requirement, but request a longer timeline for implementation. IREC's reply comment requests that the requirement to publish transmission substations on the DRP maps be maintained.[96] We have removed language indicating IOUs are out of compliance with the 2021 ALJ ruling and instead we affirm that the 2021 ALJ ruling did in fact order the IOUs to display all substations on their maps including distribution, sub transmission, and transmission substations and order the IOUs to immediately comply.

IREC believes that PG&E has altered its ICA to include a new technical criterion, referred to as "safety bank," that is not envisioned by the Commission's orders and is impacting ICA users in a negative manner.[97] We find that each utility is applying reverse flow through substations differently in its ICA and thus we require further information before taking action on this topic. Accordingly, we adopt modifications to the discussion section of this resolution at page 24, requiring the Utilities to present on this issue at the next ICA workshop and file a joint Advice Letter either establishing or modifying their approaches to the calculation and use of reverse power flow through substations in ICA.

FINDINGS AND CONCLUSIONS

1. Decision (D). 24-10-030 Ordering Paragraph (OP) 36 directed Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas and Electric (SDG&E), to each file a tier 3 Advice Letter containing an ICA remediation plan and establishing a baseline for reporting in the Biannual ICA Reports.
2. On August 26, 2025, PG&E, SCE, and SDG&E filed their ICA remediation plans.
3. On September 15, 2025, PG&E AL 7686-E, SCE AL 5614-E, and SDG&E AL 4710-E were timely protested and responded to by the Public Advocates Office (PAO) and the Interstate Renewable Energy Council (IREC).
4. On September 22, 2025, PG&E, SCE, and SDG&E each provided timely replies to the protests submitted by PAO and IREC.
5. It is reasonable to accept SCE's proposed timeline for reactivating currently inactive circuits.

[93] PG&E Opening Comment on Draft Resolution E-5440 pg.3-4
[94] SDG&E Opening Comment on Draft Resolution E-5440 pg.4-5
[95] SCE Opening Comment on Draft Resolution E-5440 pg.9
[96] IREC Reply Comment on Draft Resolution E-5440 Comment on Draft Resolution E-5440 pg.10
[97] IREC Opening Comment on Draft Resolution E-5440 pg.17

6. SCE ~~interpreted the requirement to report on~~reported electric vehicle charging applications ~~too narrowly.~~in alignment with the Decision (D.) 24-10-030; however, it needs to further align with PG&E and SDG&E.
7. SDG&E has not provided adequate reasoning as to why it redacts "Total Generation" and "Existing Generation" when a circuit implicates the 15/15 rule.
8. The IOUs must update their ICA maps on at least a monthly cadence and make a good faith effort to update all triggered ICA circuits within a month of trigger date.
9. It is necessary for the IOUs to track ICA trigger date and other related data to investigate compliance with updating requirements.
10. The IOUs are required to report on ICA issues such as circuit updating in the Biannual ICA Reports.
11. It is necessary for the IOUs to publish circuit trigger date to the ICA maps for user transparency and usability.
12. It is appropriate to define ICA Accuracy as the IOU's ability to correctly follow the Commission-mandated ICA methodology using the required inputs and analytical steps to produce a reasonable estimation of existing hosting capacity.
13. It is appropriate to define the output of the ICA as the ICA Value.
14. It is appropriate to define ICA Alignment as the degree to which ICA results reflect the engineering outcomes of actual interconnection or energization applications, as determined by the engineer processing those applications.
15. ~~It is appropriate to define **application engineering review value** (or simply **engineered value**) as the existing hosting capacity as determined by an engineer's review of a project application.~~
16.15. It is appropriate to define Project Application Size as the amount of capacity requested in a customer application for interconnection or service.
17.16. It is important to the usability of ICA to investigate the differences between ICA values and ~~engineered values~~actual interconnection or energization outcomes for each IOU.
18.17. It is appropriate to define concordant scenarios as scenarios in which the ICA results and ~~engineered results~~actual interconnection or energization outcomes are aligned.
19.18. It is appropriate to define discordant scenarios as those in which the ICA value and ~~engineered value~~actual interconnection or energization outcomes are not aligned either due to an issue following the required ICA methodology or due to a divergence between ICA value and ~~engineered value~~actual interconnection or energization outcomes.
20.19. The IOUs do not propose an adequate baseline reporting appropriate for use across all IOUs and indicative of adequate ICA remediation or tracking.

~~21.~~20. It is appropriate to require the IOUs to track the fields listed in Table 5 to investigate the severity and drivers of discordance between ICA Alignment and ICA Accuracy for each IOU.

~~22.~~21. It is appropriate to require the IOUs to report the fields listed in Table 6 to investigate the severity and drivers of discordance between ICA Alignment and ICA Accuracy for each IOU.

~~23.~~22. It is necessary to revisit the concerns of ICA discordance once sufficient information is gathered.

~~24.~~23. The January 2021 ALJ Ruling requires the IOUs to present ~~transmission lines~~ substations and transmission ~~substations~~lines on the DRP maps.

~~25.~~24. ~~The IOUs are not displaying all~~It is beneficial to the usability of the DRP Maps to display transmission substations ~~on the DRP maps~~.

~~26.~~25. OP 29 from D.24-10-030 did not include adequate direction for tracking or public notice.

~~27.~~26. OP 33 from D.24-10-030 did not include adequate direction for tracking or public notice.

~~28.~~27. OP 39 from D.24-10-030 did not include adequate direction for tracking or public notice.

28. PG&E's use of IC_Safety_Bank_kW leads to occasional redaction of their ICA Static Grid results.

THEREFORE, IT IS ORDERED THAT:

1. The proposals of Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas and Electric (SDG&E) for Integration Capacity Analysis (ICA) remediation plans as proposed in PG&E AL 7686-E, SCE AL 5614-E, and SDG&E AL 4710-E respectively are approved with modifications set forth below and otherwise specified herein. PG&E AL 7686-E, SCE AL 5614-E, and SDG&E AL 4710-E are approved with modifications.

~~1.~~ PG&E shall follow the proposed remediation for "Default Equipment Settings" ~~proposed in AL 7686-E.~~

~~1.~~2. ~~PG&E shall follow the proposed remediation for~~and "Incorrect Mapping of Queued Generation Data" proposed in AL 7686-E.

~~2.~~3. SCE shall follow the schedule proposed in AL 4710-E for reactivating currently inactive circuits.

~~3.~~4. SCE shall align its ~~Electric Vehicle Charging Application~~ reporting with PG&E and SDG&E~~, including~~ such that future reporting on ICA data at the time of applications includes projects includes non-financially complete projects.

4.5. Effective immediately, SDG&E ~~will~~shall align its redaction practices with PG&E and SCE and stop excessively redacting "Total Generation~~" and~~," "Existing Generation~~"~~," "Integration Capacity NO Operation Flexibility," and "Integration Capacity" from the popup boxes for circuits implicating the 15/15 rule. SDG&E shall allow ICA users to access downloadable .csv files for their circuits implicating the 15/15 rule.

5.6. Within six months of this Resolution becoming effective, PG&E, SCE and SDG&E ~~will~~shall adopt equivalent ICA trigger date tracking to that outlined in Table 2. PG&E, SCE, and SDG&E shall also track the number of generation interconnection projects where the ICA was sufficiently updated to be used in Screens M and N and the number of generation interconnection projects where the ICA was not sufficiently updated to be used in Screens M and N.

6.7. Once implemented, PG&E, SCE, and SDG&E ~~will~~must report at minimum the fields listed in Table 3 in their Biannual Reports. PG&E, SCE, and SDG&E must also report on the number of generation interconnections projects where the ICA was sufficiently updated to be used in Screens M and N and the number of generation interconnection projects where the ICA was not sufficiently updated to be used in Screens M and N. If the reporting included in any future Biannual ICA Report indicates that an IOU fails to update at least 98% of triggered circuits on a monthly basis in three or more of the six months last reported, that IOU shall submit a Tier 2 Advice Letter within 30 Calendar Days proposing methods to reach that level of compliance.

7.8. Within six months of this Resolution becoming effective, PG&E, SCE, and SDG&E ~~will~~must begin tracking both load and generation ICA concordance data points, for projects that undergo engineering review, as outlined in Table 5. Table 5 shall be included with the Biannual ICA Reports in a machine readable, sortable format.

8.9. ~~Once implemented~~Upon implementation of the tracking in ordering paragraph 8, PG&E, SCE, and SDG&E will report for both load and generation ICA at minimum the fields in Table 6 in their Biannual ICA Reports. Table 6 shall include one column for generation ICA results and another column for the Load ICA results.

9.10. ~~No sooner than 18 Months, and~~ No later than 30 ~~Months,~~days after the 2027 July Biannual ICA Report is filed the IOUs shall file a joint tier 2 AL recommending improvements to the mandated ICA methodology and the scope of inputs and considerations for ICA.

10.11. Within ~~three~~twelve months of this Resolution becoming effective, PG&E, SCE, and ~~SD~~SDG&E must present substations up to and inclusive of the

transmission level on their DRP Portals and use the 15/15 rule as clarified in D.24-10-030 for redaction guidance on all substations.

~~11.~~12. Beginning with the July 2026 Biannual ICA reports PG&E, SCE, and SDG&E shall include ~~tracking and~~ thorough explanations for D.24-10-030 OP 29~~,~~ and OP 33, and tracking for OP 39. Beginning with the January 2027 Biannual ICA reports PG&E, SCE, and SDG&E and shall stop tracking reporting of the Rule 29 EV Report within the Biannual ICA Reports.

13. PG&E, SCE, and SDG&E at the next ICA workshop following the issuance of this resolution shall each provide detailed information on 1) how it refers to reverse power flow through the substation in ICA; 2) how it calculates reverse power flow through the substation in ICA; 3) how the reverse power flow through the substation calculation result is applied in ICA and its limiting categories; and 4) how any redactions related to the resulting calculation are handled, including what specific fields are redacted when the reverse power flow through the substation is the most limiting criteria. 60 days following the workshop where these materials are presented, PG&E, SCE, and SDG&E shall file a joint tier 2 Advice Letter either establishing or modifying their approaches to the calculation, application, and redaction of reverse power flow through the substation.

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 April 9, 2026; the following Commissioners voting favorably thereon:

Commissioner Signature blocks to be added upon adoption of the resolution

Dated April 9, 2026, at San Francisco, California