Public Workshop on the Electric Utilities' Biannual Energization Timelines Data Reports

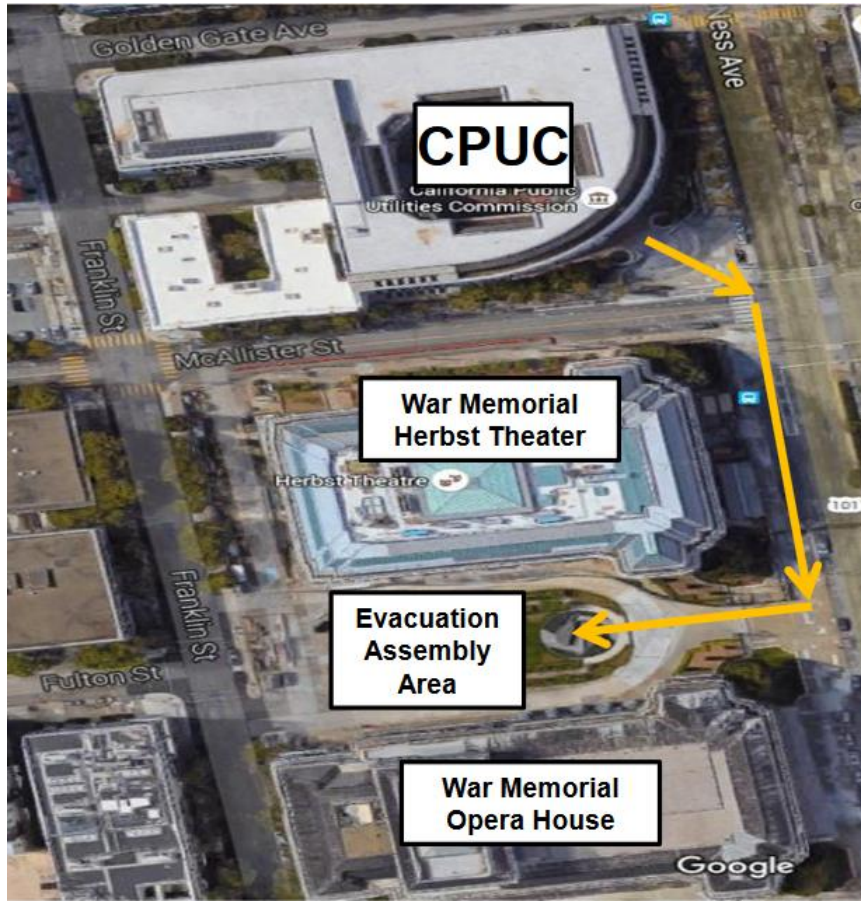
California Public Utilities Commission, Energy Division

June 18, 2026, 9:00 AM – 3:00 PM Pacific Time

California Public Utilities Commission

Safety Instruction

- In case of an Emergency
  - Allison Hoops will call 911
  - To evacuate, proceed out of 1 of 4 exits to Civic Center Plaza
    - Exit toward Van Ness / McAllister
    - Walk past City Hall
- Bathrooms & water fountain across the Lobby.



Ground Rules and Workshop Logistics

- **Ground Rules:**
  - Hold all questions until the end of each panel or until panelists invite questions and discussion
  - Identify yourself and your organization before speaking
  - Avoid repeating what another person has already said
  - Stay on topic
- **Workshop Logistics**:
  - Workshop is being recorded and will be posted on the CPUC's webpage along with presentation slides
  - WebEx and phone participants are reminded to stay muted until called on
  - Webex participants type questions/comments to 'Chat Me!' and they will be read aloud

Purpose & Goals of Today's Workshop

Purpose:

- **Provide a platform for IOUs to discuss their biannual energization report data in accordance with D.24-09-020.**
- **Facilitate a public discussion to identify improvements to the data reporting template and the assumptions and methodology used to evaluate the data.**

Goals:

1. Review the submitted data from PG&E, SCE, and SDG&E and assess whether it enables meaningful oversight of the IOUs' energization performance.
2. Identify **inconsistencies, data gaps, or ambiguities in the IOUs' reporting effort** that limit the CPUC's ability to monitor and enforce adopted energization targets.
3. Gather party feedback on **enhancements to the biannual reporting template**, including metric definitions and step-by-step tracking aligned with start and end dates.
4. Support statewide **data transparency efforts** by encouraging cross-utility alignment and best practice sharing.
5. Gather party feedback on **evaluation assumptions** on data sufficiency and **methodologies to analyze the data**.

Workshop Agenda

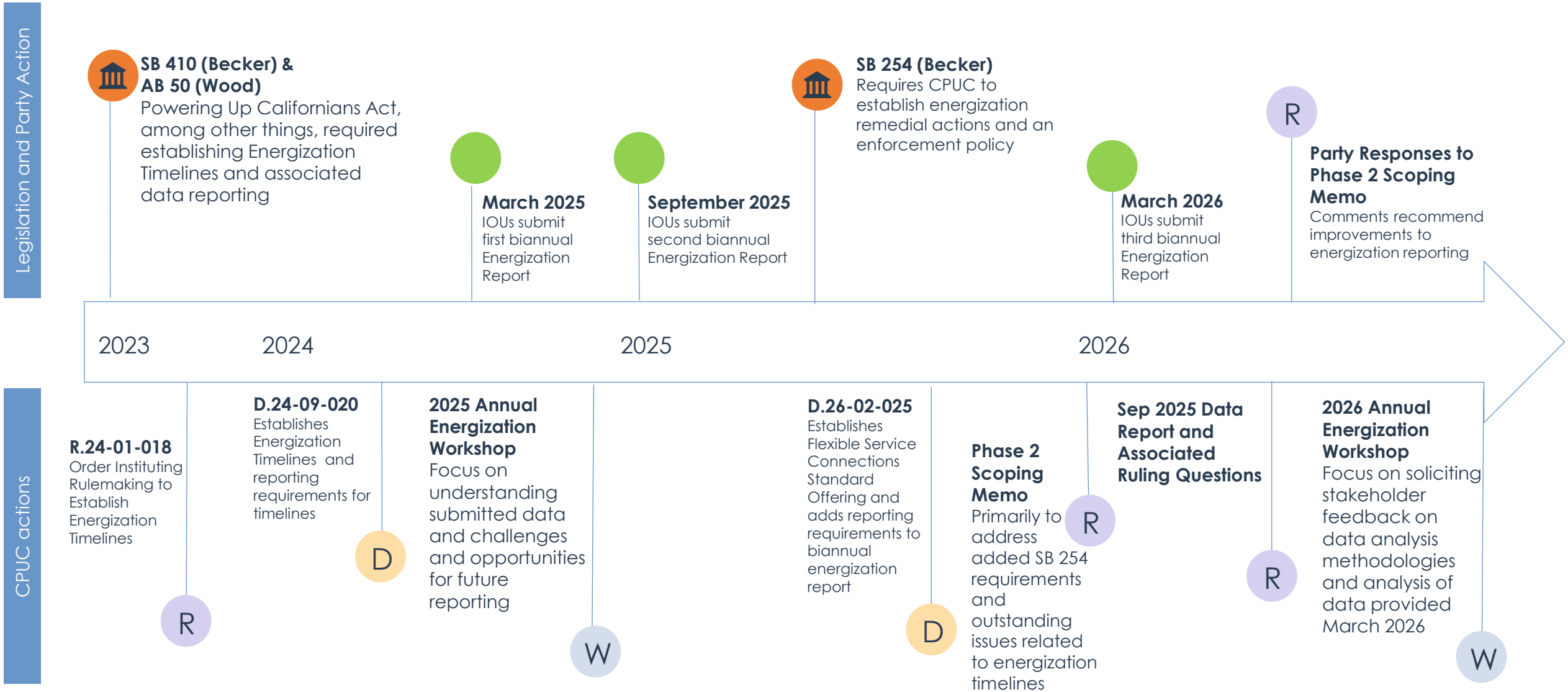
Welcome and Safety	9:00-9:10am
Opening Remarks with President's Office	9:10-9:20am
Introduction to Decision 24-09-020	9:20-9:35am
Panel 1: IOUs Discussion on Energization Data Reports and Suggested Modifications for Future Reports	9:35-10:45am
Break	**10:45- 10:50am**
Guidehouse Presentation: Evaluation Methodology and Results	10:50- 12:00pm
Lunch	**12:00- 1:00pm**
Panel 2: Stakeholder Discussion on IOUs' Data Reports and Suggested Modifications for Future Reporting Efforts	1:00- 2:00pm
Open Forum Discussion	2:00- 2:55pm
Wrap Up and Next Steps	2:55- 3:00pm

Opening Remarks with President Reynolds' Senior Advisor Michael Mullaney

Energization Timelines and Biannual Data Reporting Overview

Katie Pratt
Lead Analyst, Energization OIR

Overview of CPUC Energization OIR



Scope of Today's Workshop

- The focus of today's workshop will be the IOUs' **March 2026 Biannual Energization Report** and Guidehouse's associated data analysis
- Introducing data sufficiency metrics and additional considerations for future evaluations of the energization reports
- Discuss other necessary changes to the reporting template and associated methodology

***If you have concerns about Phase 2 or the Energization OIR, in general, outside of today's workshop scope, please feel free to connect with me at a later point

Energization Timelines Decision

CPUC approved D.24-09-020 in Phase 1 of the Energization Rulemaking (R. 24-01-018)

- The decision implements the Powering Up Californians Act - Senate Bill 410 (Becker, 2023) and Assembly Bill 50 (Wood, 2023), which directed the CPUC to define and establish reasonable energization times for new or upgraded electrical loads and establish a process for reporting energization delays to the Commission.
- The decision is designed to accelerate the process for connecting homes, businesses, electric vehicles, and other loads to the electric grid.
- The Decision adopted an eight-step energization process for tariff-based energization requests; these steps are intended to provide transparency to the energization process for steps that are within and outside of the IOU's direct control.
- The timelines adopted are based on the utilities' historic energization data and party comments.
- The timelines start once the IOUs approve a customer's energization request and apply only to steps within the IOUs' control.
- The Decision adopted maximum timelines for upstream capacity projects.
- Timelines apply to the large IOUs: PG&E, SCE, and SDG&E and are for all types of energization requests.

Adopted Energization Timelines by Tariff

IOUs must meet these timelines

Energization Type	Average Timeline*	Maximum Timeline*
Rule 15	182	357
Rule 16	182	335
Combined Electric Rule 15/16 or Rule 15 and 29/45	182	306
Electric Rule 29/45**	182	335
Application Decision	10	45
Main- Panel Upgrade	30	45

*Days listed as calendar days.
**PG&E and SCE's EV infrastructure tariffs are identified as Electric Rule 29. SDG&E's EV infrastructure tariff is identified as its Electric Rule 45.

Upstream Capacity Upgrade Projects & Preliminary Timelines

Type of Upgrade	Maximum Timelines Target*
New or Upgraded Circuit	684 (~2 years)
Substation Upgrade	1,021 (~3 years)
New Substation	3,242 (~9 years)

*Days listed as calendar days.

Energization Process Steps & Responsibilities

Step #	Step Name	Description	Responsibility
1	Customer Intake	Customer submits energization request; IOU reviews and establishes "Application Final Submittal" (AFS) date; energization clock starts when application is deemed complete and approved.	Shared: Customer initiates, IOU reviews/ approves
2	**Engineering & Design**	**IOU conducts field visits, engineering study, develops project design, determines project cost.**	**IOU**
3	Customer Dependencies	Customer obtains necessary permits, easements, signs contracts, pays fees, completes 3rd party approvals.	Customer
4	**Utility Dependencies**	**IOU obtains its own permits, easements, approvals from authorities having jurisdiction (AHJ).**	**IOU**
5	Customer Site Readiness	For non-Rule 29/45: Customer requests pre-construction meeting/inspection and completes customer-side construction. For Rule 29/45: Customer requests pre-construction meeting.	Customer
6	**IOU Site Readiness**	**For non-Rule 29/45: IOU conducts pre-construction meeting and inspection.** **For Rule 29/45: IOU preforms site readiness work as required by the tariff.**	**IOU**
7	**Construction**	**IOU schedules and completes utility-side construction (including traffic control, outages, equipment install, etc.).**	**IOU**
8	**Service Energization Provided to Customer**	**Final inspections scheduled/completed as required. IOU energizes service-project clock stops.**	**IOU**

Reporting: Biannual Data Reports

- Pursuant to D.24-09-020, the IOUs are directed to submit their energization data reports to the CPUC biannually (March 31 and September 30)
- The IOUs' energization data is required to include the following:
  - Performance vs. targets (avg & max timelines)
  - List of overdue projects, reasons, and remedial actions
  - Dependency impacts and scope changes
  - Customer complaints and delay reports
  - Constraints and obstacles impacting energization
    - Including issues related to funding, staffing, and equipment availability

Template Improvements

- Last year, the workshop revealed multiple points of improvement for the template. Some updates to working definitions and data practices were made informally with collaboration between ED and IOUs.
- The CPUC may implement data collection and reporting template improvements to standardize and improve the IOUs' submitted data
  - May 28 ALJ Ruling seeks party responses on improvements to the template and assumptions around sufficiency for data reliability and availability
  - This workshop will provide additional opportunities for parties to provide feedback on the IOUs' energization data reporting efforts and data collection and reporting template modifications.

Questions for Parties to Respond to

- On June 11, 2026, an ALJ Ruling Extending Comment Deadline and Authorizing Further Comment on June 18, 2026, Workshop was issued.
- Parties are invited to respond to the following questions:
  - Do the utilities' energization reports meet the requirements set by D.24-09-020 and D.26-02-025? If not, what do the IOUs need to change or add to the reports to meet those requirements? By what date should the IOUs implement any necessary process changes or Information Technology changes to provide the complete and accurate information the Commission needs to evaluate their performance?
  - Should the Commission adopt data sufficiency metrics and/or data analysis framework and methodology akin to the Data Sufficiency Thresholds that Guidehouse proposed in their October 2025 report? Both topics will be explored in more depth at the upcoming workshop.
  - Are there any other issues germane to the June 18, 2026 Workshop or the Guidehouse report that the Commission should address?

Panel 1: IOU Narrative Presentation of Biannual Energization Reports

Introductions

Katie Pratt

Regulatory Analyst with CPUC

Facilitator

Narbir Hothi

Senior Manager, Regulatory Proceedings Forecasting and Modeling

PG&E

Katie Parsell

Principal Manager of Transmission and Distribution Work Management, Resource Planning and Visualization

SCE

Marty Bell

Principal Policy Advisor

SDG&E

PG&E's Bi-Annual Energization Update

June 18, 2026

Together, Building a Better California

Key Takeaways – March 2026 Submission

PG&E is Meeting Tariff Energization Targets and Improving on MPU Targets

Tariff Projects

- *97% of projects are below Statewide maximum Energization Targets (varies by tariff)*
- *89% of projects are below the Statewide average Energization Target of 125-business days (182-calendar days)*

MPU Projects

- *86% of projects are below the Statewide maximum Energization Target of 45-business days (65-calendar days)*
- *74% of projects are below the Statewide average Energization Target of 30-business days (43-calendar days)*

Process and Reporting Enhancements Highlights

- New System Enhancements
- Improved Data Quality and Reporting Accuracy
- Better Tracking of Capacity and Project Dependencies
- Operational and Customer Process Improvements

Energization Performance Through End of 2025

	PG&E Average Energization Calendar Days	% Projects Energized Under Avg Target	% Projects Energized Under Max Target	Average End-to-End Energization Calendar Days
Rule 15	PG&E has no Rule 15-only jobs to report for this filing period as such jobs are uncommon for PG&E applicant requested energization work.			
Rule 16	123 ✅	85%	98% ✅	314
Rule 29	111 ✅	90%	97% ✅	560
Combined Rules 15/16	129 ✅	83%	96% ✅	427
Combined Rules 15/29	PG&E has no Combined Electric Rules 15 & 29 jobs to report for this filing period as such jobs are uncommon for PG&E applicant requested energization work.			
Main Panel Upgrades (Bus. Days)	30 ✅	74%	86% ⭕	42

The timelines are inclusive of applications submitted between 1/31/23-12/31/25 and which were fully energized through 12/31/25.
Figures exclude outlier projects.

Distribution Upstream Capacity Performance

	Average Energization PG&E Calendar Days*	Statewide Maximum Timeline Target Calendar Days	Completed Projects
New Circuit/Circuit Upgrades	**950** ⭕	684	56
Substation Upgrade Calendar Days	**1,285** ⭕	1,021	25
New Substation Calendar Days	PG&E has no new Substations completed within this filing period.		

Average Energization days provided here are not a measure of how long customers are waiting for energization. The 23 customer projects that were identified as requiring upstream upgrades averaged **492 days from upgrade identification to customer energization.**

**Some projects triggering capacity upgrades were identified prior to Decision 24-09-020 Energization Timelines being established.*

PG&E Methodology Principles

Time Accounting Methodology

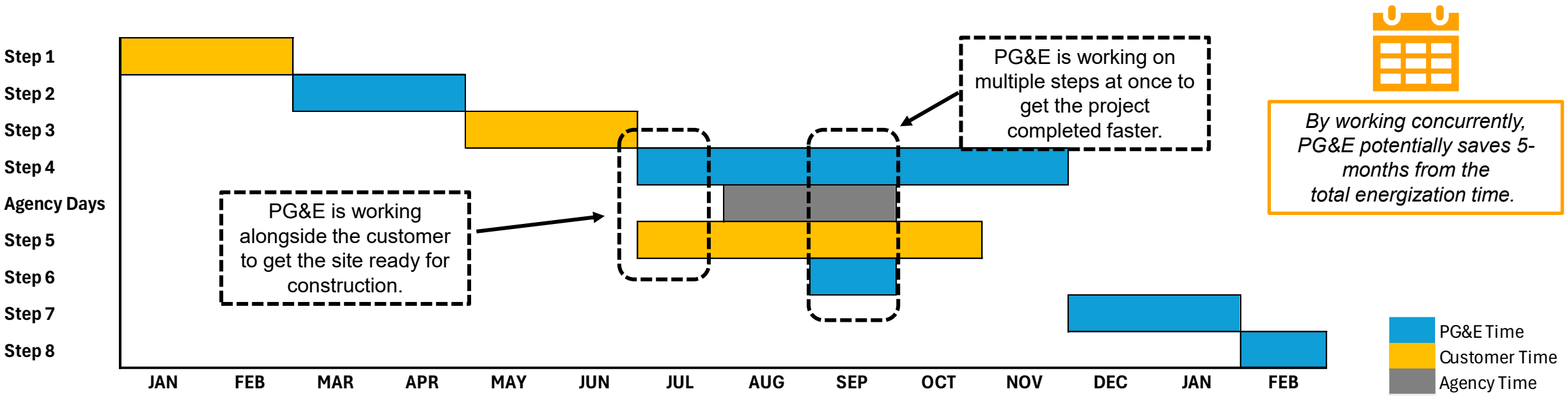
- **Concurrent Work** — Overlapping PG&E steps are counted once, not duplicated.
- **Agency Time** — Permitting/agency time overlapping with PG&E work is excluded from PG&E's timeline.
- **Customer Overlap** — When customer and PG&E activities run in parallel, overlap is attributed to customer time.

Customer Benefits

- **Faster Energization** — PG&E is working in parallel with customers and permitting agencies, instead of waiting for customers and agencies to complete their work, this enables customers to be safely energized sooner.
- **Transparent Tracking** — Clear separation of Customer and Agency time from PG&E time ensures accurate IOU accountability.
- **Fair Measurement** — By attributing time to the Agency, Customer, and PG&E, each party's performance is measured in a fair and consistent manner.

Concurrent Phase Work Example

Mock Timeline Example w/ Concurrent and Overlapping Steps



Customer Time: Periods during which a customer-related activity overlaps with a PG&E process that time is designated as customer time. This approach enables PG&E to work concurrently with the customer, helping to accelerate cycle times and ensure consistent tracking through shared steps.

Agency Time: When an agency/permitting time coincides with a PG&E phase(s), overlapping time is excluded from total PG&E Time because agency activities are outside the utility's sole control.

IOU Time: In cases where PG&E undertakes multiple overlapping steps concurrently those days are aggregated as a single day within the total PG&E time. This prevents inflating time metrics and maintains the integrity of the report..

System & Process Improvements

2024

- Launched a New Business Project Management Office (PMO)

2025

- Deployed Lean operating system for enhanced visual management and an improved application process for the customer
- Upgraded systems to give customers real-time visibility into their application status and energization timeline
- Automated email system deployed across customer portal and systems of record
- Automated workflows, customer-facing comment boxes, and added a centralized communication log
- Released multilingual Customer Journey Maps (English, Spanish, Chinese)
- Job Owner training refresher covering OIR timelines, customer tools, and timeline information
- Conduct weekly readiness calls by division focused on energization performance tracking

Future Potential Enhancements

- Data-driven project management with improved forecasting and tracking capabilities
- Improved pre-application customer self-service tools and pre-application checklist
- Identification and enhanced customer communications for upstream capacity projects

Data Quality, Tracking, & Reporting Improvements

Strengthened Data Completeness

- **Increased number of tariff reported fields from 80 to 89 out of 96 Tariff Template fields, examples include:**
  - This includes Distribution Upstream Capacity, Site Capacity, and Flexible Service Option fields
  - Remaining fields require additional clarification and will be addressed in "Reporting Recommendations" portion of this workshop.

Data Improvements

- **Step 6 (IOU Site Readiness):** As of March 2026, PG&E improved step 6 reporting from <1% to 99%*.
- **Step 8 Reporting(Energization):** As of March 2026**,** PG&E improved Step 8 reporting from 47% to 83%.
- **Data Validation Enhancements:** Updated outlier logic and added outlier dentification field to reporting.
- **Mapping of Upstream Capacity Projects**: Improved identification of upstream projects impacting new business customers.

* This percentage includes not applicable fields and data made available post deployed tracking enhancements as of April 1, 2025.

Joint IOU Reporting Template Recommendations

Together, Building
a Better California

Aggregate Summary Reportable Fields

#	Field	Requested Action	Note

1	*% of energization projects completed annually*	Clarification on "annually"	• Please clarify how the start and end points should be defined, including whether the measurement should be anchored to the application date or the energization date.
			• Preferred: report to be published annually.
			• If report remains biannual:
			  • March Report, to use preceding calendar year (Jan 1–Dec 31) when reporting "annually".
			  • September Report, to use the first six months of current calendar year (Jan 1–Jun 30).

2	*Energization requests received annually, by end-use*		
3	*Energization requests approved to start annually, by end-use*		
4	*Energization requests completed annually, by end-use*		
5	*% of energization projects meeting adopted average timeline*	Clarification on reporting window	• Define time parameters (earliest reportable date, post-decision, YTD window, or last closed full reporting year cycle). • Limit projects to those with an application submitted after issuance of the Phase 1 Decision.
6	*% of energization projects meeting adopted maximum timeline*		

Project-Level Reportable Fields (1 of 2)

#	Field	Requested Action	Note
7	*R15/R16/R29 Energization Reasoning as to why exceeded average/maximum Energization Target (Reasoning)*	Revision/Removal	We recommend eliminating the use of "exceeded average," as it is not an easily defined metric and not informative.
8	*Amount of load (kW) provided to applicant using flexible service options (kW)*	Clarification	Please clarify the definition of "remaining." Flexible service is not a fixed single value and can have temporal and seasonal limits.
9	*Project Costs ($$$) for all IOU equipment for upstream capacity projects: Electric Rule15, Electric Rule 16, and Electric Rule 29/45*	Clarification	The current phrasing, specifically the use of a colon preceding the list of Electric Rules, suggests that the referenced rules apply exclusively to upstream capacity projects.
10	*Customer cancelled/delayed project (as needed) (Yes or No)*	Removal	Customers are not required to self-report delay reasons, and cancelation reasons are already captured in another field.
11	*Total upstream capacity project cost ($$$)*	Removal	Upstream projects do not have a direct one-to-one correlation between an individual upstream project and a specific new business project.

Project-Level Reportable Fields (2 of 2)

#	Field	Requested Action	Note
12	*Total Cost to Complete All Energization Requests*	Removal	Duplicative of the field: "Actual Costs ($$$) at Time of Energization"
13	*Additional capacity installed for future load (kW)*	Removal	IOUs do not collect customers projected future load growth on the standard customer application. Customers are expected to include any foreseeable expansion in their initial load request.
14	*Customer installed extra capacity for future load growth? (Yes/No)*		
15	*Customer elected extra capacity for future load on application (Yes/No)*		
16	*Estimated date customer needs extra capacity (per application)*		
17	*Additional capacity needed for future upgrade (kW)*		

Main Panel Upgrade (MPU) Reportable Fields

#	Field	Requested Action	Note
18	AHJ (Authority Having Jurisdiction) for permitting based off Project's location (AHJ)	Removal	MPU-only projects do not require permitting by, or on behalf of, the IOU.
19	*Total Staffing, Labor, and Material Cost ($$$ - Capital and Expense)*	Removal	MPU costs cannot be reconciled on a per-project basis with the existing underlying accounting structure across IOUs
20	*Site/Project Costs ($$$) for anything else IOU covers)*		
21	*Total Construction/Overhead Costs ($$$)*		
22	*Customer Allowance ($$$)*		

CPUC 2026 Energization Workshop

June 18, 2026

Overview

Presentation will cover SCE's progress in implementing Phase 1 Decision (D.)24-09-020, Guidehouse May 19, 2026 Report Findings, and illustrative examples of ongoing focus areas

01

PROGRESS SINCE SEPT 2025

How SCE has strengthened energization timelines

- More data available from BRP3 customer portal (launched July 24, 2025) to improve start/stop tracking of IOU-controlled activities
- MPU completions rose from 27,197 to 49,266; in-flight projects dropped from 62% to 18%
- Refined Tariff query process drove a significant increase in completed projects reported
- Unavailable reporting template data points reduced from 25 to 13; now reporting on roughly 75 of 115 points

02

GUIDEHOUSE REPORT FINDINGS

Concerns with Guidehouse Report's Methodology

- Combining pre- and post-Phase 1 Decision time periods blends incompatible data
- End-to-end time attributed to SCE despite customer, AHJ, and upstream pauses
- Sept 2025 snapshot is now outdated across MPU and tariff metrics (March 2026 energization report is more up-to-date)
- Asserts SCE’s outlier methodology is undocumented

03

ILLUSTRATIVE FOCUS AREAS

Two illustrative examples follow this overview

- Rule 15/16 project start and stops — customer-caused disruptions to interconnection timelines
- MPU cost tracking — separating direct field execution from indirect planning and design overhead

SCE Improvements as of March 2026 Relative to September 2025 Report

Key improvements documented in SCE's March 2026 Report but **not reflected** in Guidehouse's May 2026 Report

~97%

of 2,138 post-Phase 1 Decision tariff projects completed in 2025 finished under the maximum target

vs. Guidehouse's 86% overall / 29.1% R15 figures using a pre+ post-Decision blend

–15%

Combo R15/R16 timeline reduction once customer preliminary design review is excluded

vs. Guidehouse's aggregated end-to-end time attributed to SCE

49,266

MPU projects completed (51% of 95,814) as of March 2026; in-flight backlog cut from 62% to 18%

vs. Guidehouse's 27,197 (33%) snapshot from Sept 2025

34 days

faster: underserved-community tariff projects vs. non-DAC peers (DAC are 16 days faster)

vs. Guidehouse's framing of ESJ communities as systemically disadvantaged

6,480

outliers (5% of 134,483 records) removed based on documented criteria across tariff and MPU data

vs. Guidehouse's finding that SCE's outlier methodology criteria were not specified

13

unavailable data points, reduced from 25 (75 of 115 required points now reported in the data template)

vs. Guidehouse's tally of 30 tariff + 12 MPU data gaps from the Sept 2025 dataset

Improvements Relative to Guidehouse's May 2026 Report

Three areas of improvement in SCE's March 2026 Biannual Energization Report

Area	Guidehouse Review of SCE September 2025 Report	SCE March 2026 Report
1) Improved tariff performance	Reported that 86% of all-tariff projects met the maximum target and only 29.1% of R15 below maximum (using a window that mixed pre- and post-Phase 1 Decision projects).	Of 2,138 **post-Phase 1 Decision** tariff projects completed in 2025, only ~3% exceeded the maximum target.
2) Decrease in utility-controlled time	Aggregated end-to-end project time and attributed it to SCE, despite acknowledging utility vs. customer time could not be isolated.	• Excluding customer preliminary design review alone reduces R15 project timeline by 9% and Combo R15/R16 by 15% • IOU-controlled time is inflated due to non-utility-controlled activities (e.g., AHJ permitting) and upstream-capacity pauses
3) Increased data maturity & processes	• Relies on legacy data (pre-Phase 1 Decision), which predates CPUC adopted 8-step process • Flagged outlier criteria as unspecified	• Utilizes data from Jan 31 to Dec 31, 2025 • Applies documented outlier criteria (6,480 records, ~5% of 134,483) • Reduces unavailable data points from 25 to 13, now reporting roughly 75 of 115 required points.

SCE customer (Rule 15/16 combo project)

John is building a residential home on a vacant lot requiring a Rule 15 distribution line extension and a Rule 16 service extension to feed the new house. He has never built a house before and found a local contractor to manage his project.

John's Energization Journey

01 Project Intake	02 Engineering & Design	03 Customer Dependencies	04 Utility Dependencies	05 Site Readiness Customer	06 Site Readiness SCE	07 Construction	08 Energization
John's Delays							
N/A, customer time. CAD files were incorrect version. *3rd party authorization form not submitted.*	John changed the location of the panel. Job on hold for updated approved city plans.	*N/A, customer time*	City has 8-week response time for engineered traffic control plan reviews.	*N/A, customer time. John may see city inspector delays based on work schedule*	John's contractor called for SCE final inspection; however, the panel did not meet requirements.	John's contractor requested re-schedule due to delay with concrete finish work.	City inspection of panel took 3 days after transformer and service cable were installed.

Common Customer Delay Drivers

- Step 1: Incomplete or inaccurate application submissions (missing documents, incorrect details)
- Steps 2 & 4: Outstanding customer obligations, final document approvals, upstream capacity upgrade pauses, customer-driven design change, easement dependencies, applicant design plan checks, etc.
- Step 8: Common final inspection failure reasons include panel labeling errors, clearance violations, improper panel installation, etc.

How are Costs Tracked? Main Panel Upgrade – Labor Costs Overview

An MPU service request involves two primary utility work categories: 1) Field Crews and 2) Planning & Design throughout the energization process. These two work categories create implications for tracking labor costs on a project-by-project basis.

	Field Crews (Direct)	Planning & Design (Indirect)
Nature of task	Specific job execution	Program-level support
Cost Tracking	Charged to a specific capital accounting for all MPUs	Charged as division overhead
Timing	After the scope is approved and defined	Before scope is finalized

SCE's current cost structures are not designed to capture MPU labor at a granular, project-by-project level, and enabling that level of tracking would require significant system and process changes. Additional accounting will not deliver faster customer energization.

Closing Remarks

Meaningful progress. SCE's March 2026 Report demonstrates meaningful progress on energization timelines, data maturity, and reporting transparency since September 2025 Report.

Methodology refinement. SCE continues to refine its data tracking methodology to improve tracking of IOU-controlled time.

Continued commitment. SCE is committed to achieving compliance with CPUC requirements and improving energization processes; stringent data sufficiency thresholds are premature until data gaps are resolved.

Additional References

Requests for New or Upgraded Permanent Service

	Step 1 Project Intake (Contingent on receipt of customer information)	Step 2 Engineering & Design	Step 3 Customer Dependencies	Step 4 Utility Dependencies (Requires partnership with external agencies)	Step 5 Site Readiness Customer	Step 6 Site Readiness SCE	Step 7 Construction	Step 8 Energization
CUSTOMER	❑ Contact SCE at https://www.sce.com/projectportal with request for new or upgraded service. ❑ Receive a Service Request number from SCE. Please reference this number on all correspondence. ❑ Once contacted by assigned SCE representative, provide all required submittal documents.	❑ Work with assigned SCE representative to ensure understanding of project requirements and timeline. ❑ Provide any additional information required for project.	❑ Submit payment for project, sign contract (if applicable), and return any required documents to SCE. ❑ Obtains necessary permits, secures easements, and receives and documents any other third-party approvals.	❑ Receive notification from SCE regarding acceptance of documents and proposed project construction date.	❑ Contact SCE before construction, as needed. ❑ Ensure required construction is complete. ❑ Contact SCE for inspection, as required. ❑ Meter application to 1-800-655-4555. ❑ Schedule with city, county, as applicable, to inspect meter panel.	❑ Await SCE notification of site readiness activity completion.	❑ Await completion of SCE construction.	❑ Await confirmation from SCE that site is energized and ready for use.
SCE	❑ Assign SCE representative. ❑ Contact customer, request documents for project submittal. ❑ Conduct preliminary review of documents; request changes or additional documents as needed. ❑ Conduct final review of documents; send acceptance email once complete.	❑ Conduct site visit to assess conditions and identify potential need for permits, engineering calculations, etc. ❑ Notify customer of any additional site readiness requirements. ❑ Create and approve project design. ❑ Provide customer with final project design, contracts, invoices, etc.	❑ Await completion of customer dependencies.	❑ All bills and contracts received and verified for accuracy. ❑ Prepare for project construction. ❑ Submit documentation for SCE-required permits and other construction requirements.	❑ Await customer notification of site readiness activity completion.	❑ Complete pre-construction meetings and inspections. ❑ Receive confirmation of city, county, as applicable, meter panel inspection. ❑ Notify customer of site readiness activity completion.	❑ Schedule project for construction and notify customer. ❑ Complete activities including traffic control, outages, and other activities. ❑ Complete electrical construction.	❑ Receive city, county, as applicable, inspection. ❑ Install meter in panel, if applicable. ❑ Energize site and notify customer.

Notes:

- Steps 1, 3, and 5 are controlled primarily by the customer, while steps 2, 4, 6, 7, and 8 are controlled primarily by SCE.
- Average SCE energization timelines for Rules 15, 16, 29 projects, combined Rules 15/16 or 15/29 projects are 125 business days.
- Maximum SCE energization timelines are:
  - Rule 15: 245 business days
  - Rule 16: 230 business days
- Average and maximum SCE timelines apply to **SCE-controlled activities only** and exclude time necessary for activities controlled by customer or third parties such as permitting authorities.
- Service upgrade timelines will differ according to site conditions. Consult your assigned SCE representative for more information.
- SCE, customer, and third-party activities may be performed in parallel.
- Weather and other unforeseen emergencies may affect SCE's ability to meet previously referenced timelines. Refer to Preliminary Statement A-F Section e. General Exceptions for details.

March 2026 Energization Report: Findings and Recommendations

Marty Bell – Principal Policy Advisor

Customer Project Management

Agenda

1. Timeline & Customer Experience Improvements
2. Data and Measurement Framework
3. Performance Trends
4. Remaining Gaps and Next Steps
5. Conclusion

What D.24-09-020 Required: A Genuine Transformation

D.24-09-020 established:

- Eight statewide energization steps with defined IOU and customer responsibilities
- Average and maximum energization timeline targets
- Granular step-level tracking and biannual data reporting
- Single Point of Contact (SPOC) coverage for every qualifying job
- Enhanced customer communications

SDG&E's starting point:

- SDG&E's "Stage Gates" project management framework was not aligned to the eight steps
- Existing IT systems could not disaggregate IOU time from customer time, and was not designed for the granular tracking the Decision requires under the eight step framework

Process Improvements: Workstream Transformation

SDG&E implemented parallel workstreams across operations, technology, and customer experience to meet requirements

Operational Redesign

- Realigned internal workflows to the eight statewide energization steps
- Transitioned from tariff-based to work-type-based workflows (underground, overhead, Rule 45, applicant design)
- Single Point of Contact (SPOC) deployed for qualifying jobs per Advice Letters 4547-E and 4547-E-A
- Dedicated Project Managers and Project Planners assigned to each Tribal Nation served by SDG&E

Data Tracking Enhancements

- Improved Data Entry through roll out of Nexus Platform
- Ability to more granularly track customer related project milestones

Customer-Facing Improvements

- Redesigned Customer Energization Portal and Customer Project Resources with step-by-step guidance and timeline expectations
- SDG&E virtual assistant deployed for intake navigation and customer education
- Transitioned to cloud-based contact center with intelligent routing and real-time insights

Next Up

- Continuing to enhance the Customer Energization Portal through 2026 to allow two-way messaging capabilities
- NEXUS internal workflow platform expansion underway to connect all 8 steps across business units

Reading Our Data

The Commission, Guidehouse, and Stakeholders should evaluate SDG&E's data with appropriate context

What the Data Clearly Shows

- Projects initiated Post-Decision are completing faster across all tracked tariff types
- Improvement is consistent and not isolated to a single project category
- SDG&E's dataset covers 9,708 completed energization requests
- No documented pattern of customer harm though the Commission's formal Energization complaint process

Current Limitations (Acknowledged and Being Addressed)

- SDG&E cannot yet disaggregate IOU-controlled time from customer-controlled time – both are embedded in current end-to-end timeline metrics
- Legacy system constraints prevent accurate identification and reasoning for projects exceeding energization targets
- There is an inherent lag for new system data to appear in reports

Progress Since Decision 24-09-020

Post-Decision End-to-End Timelines vs. Pre-Decision End-to-End Timelines (Business Days)

Tariff/Work Type	Average Cumulative Timeline	Average Timeline (Pre-Decision)	Average Timeline (Post-Decision)	Timeline Reduction (Pre-Decision vs Post-Decision)	% Reduction
Rule 15	239	261	147	114	44%
Rule 15/16	275	300	176	124	41%
Rule 15/45	349	349	N/A	N/A	N/A
Rule 16	101	119	76	43	36%
Rule 45	370	370	N/A	N/A	N/A
MPU	81	112	52	60	54%

Why cumulative averages look different

- Cumulative metrics include projects beginning January 31, 2023
- Completion of legacy projects may increase averages despite current performance improvements

Zero formal customer complaints or reported energization delays have been received through the Commission's Energization Delay Process.

Note: End-to-End timelines presented are inclusive of both IOU and Customer time

Estimated IT System Enhancement Implementation

Near-Term (by the end of 2026)

Data Point	Data Sheet	Est. Completion Date
Estimated timing for when customer anticipates additional capacity necessary as indicated on customer's application	Tariff Data	11/30/2026
Total additional kW capacity for the necessary future upgrade as listed on customer's application	Tariff Data	10/30/2026
Date of IOU rejection of application	Tariff Data	10/30/2026
IOU reason for rejection of application	Tariff Data	11/30/2026
Size of Installed Main Panel Upgrade	MPU Data	11/30/2026
Main Panel Upgrade - Rescheduled Date (as needed)	MPU Data	11/30/2026

Medium-Term (by end of Q1 2027)

Data Point	Data Sheet	Est. Completion Date
Project triggered for upstream capacity project	Tariff Data	03/28/2027
Date IOU completes the upstream capacity project	Tariff Data	03/28/2027
Step 3 - Data Point Start 3) Customer Dependencies Start	Tariff Data	03/28/2027
Step 3 - Data Point End 4) Customer Dependencies End	Tariff Data	03/28/2027
Step 4 - Data Point Start 4) Utility Dependencies' Start	Tariff Data	03/28/2027
Step 4 - Data Point End 5) Utility Dependencies End	Tariff Data	03/28/2027

IT Modernization and Funding Gaps

Full Compliance Reporting Requires Tools That Have Not Yet Been Authorized

Data Point	Data Sheet	Est. Completion Date
Location of project exceeding the maximum energization target:	Tariff Data	TBD
R15/R16/R29/R45 Energization Average meeting/exceeding Average Energization Target	Tariff Data	TBD
R15/R16/R29/R45 Energization Maximum meeting/exceeding Maximum Energization Target	Tariff Data	TBD
R15/R16/R29/R45 Energization Reasoning as to why exceeded average/maximum Energization Target	Tariff Data	TBD
Reason why upgrade was cancelled and/or rescheduled	MPU Data	TBD
Additional Time from Initial Scheduled Date to Rescheduled Date	MPU Data	TBD
Additional Time from Initial Scheduled Date to Rescheduled Date (Business Days)	MPU Data	TBD

Conclusion

SDG&E is committed to meeting and reporting the necessary data to demonstrate compliance with the applicable energization timeline targets

SDG&E is working to implement enhancements to track and produce the required data fields including the ability to isolate and track IOU-time within the overall project lifecycle

Customer experience improvements remain a priority

Post-Decision data indicates improved end-to-end timelines across all tariff types

Thank you!

Break: 10:45- 10:50AM

Guidehouse Evaluation and Findings of Biannual Energization Reports

Gavin Aiello
Managing Consultant, Guidehouse

Guidehouse

March 2026

Biannual Energization Review

June 18, 2026 Workshop

outwit complexity™

Workshop Agenda

March 2026 Biannual Energization Review

Introduction

Data Analysis Methodology

- Step 1: Prime Data
- Step 2: Analyze Data
- Step 3: Evaluate Data (Preliminary Analysis Results)

Close

Opening Disclaimers

Overarching Disclaimer: The purpose of this disclaimer is to highlight the overarching consideration that this preliminary analysis is descriptive in nature due to insufficient data reported by IOU's and analyzed by Guidehouse. This disclaimer is included in the footer of each slide.

> *"This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance."*

Topic-Specific Disclaimers: The purpose of these disclaimers is to highlight topic-specific considerations for stakeholders' awareness in the interest of transparency. These disclaimers are included as the pale-yellow box below.

Note: [*Disclaimer text.*]

Guidehouse

Data Analysis Methodology

Introduction

Background & Context:

To comply with CPUC's Decision 24-09-020 ("the Decision"), Pacific Gas & Electric, Southern California Edison, and San Diego Gas & Electric, (*collectively, IOUs*) report on their progress implementing SB 410 and AB 50. The Decision requires IOUs to submit Biannual Energization Reports (BER) every six (6) months using a standardized data submission template. There have been **three** reporting periods:

Sep 2024

CPUC Decision 24-09-020 implements SB 410 and AB 50 and enforces performance reporting.

March 2025

IOUs submitted **first** BER covering projects with complete applications from 01/31/2023-12/31/2024.

Sep 2025

IOUs submitted **second** BER covering projects with complete applications from 01/31/2023-06/30/2025.

March 2026

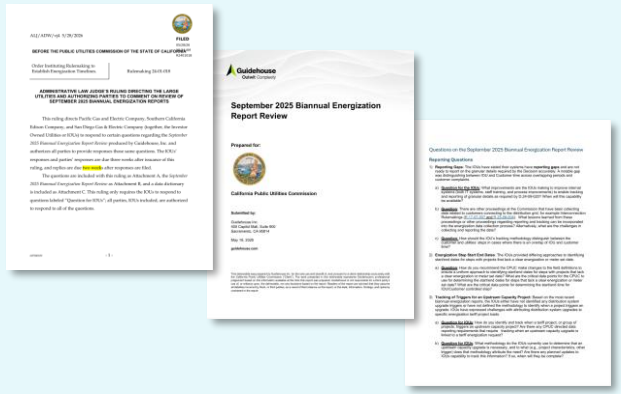
We are here.

IOUs submitted **third** BER covering projects with complete applications from 01/31/2023-12/31/2025.

Not Covered Today:

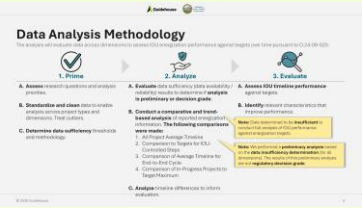
Documents Released on May 29, 2026

- ALJ Ruling on September 2025 Report
- September 2025 Report
- September 2025 Report Questions



Covered Today:

Methodology for March 2026 BER (Most Recent Data)



Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

Data Analysis Methodology

The analysis evaluates data across dimensions to assess IOU energization performance against targets over time pursuant to Decision 24-09-020.

1. Prime

A. **Assess** research questions and analysis priorities.

B. **Standardize and clean** data to enable analysis across project types and dimensions. Treat outliers.

C. **Apply data sufficiency** thresholds and methodology.
   1. Availability
      - Contextual Data Points
      - Compliance Data Points
   2. Reliability

2. Analyze

A. **Evaluate** data sufficiency (data availability / reliability) results to determine if **analysis is preliminary or decision grade**.

B. **Conduct a comparative and trend-based analysis** of reported energization information. **Comparisons were made:**
   1. All Project Average Timeline
   2. Comparison to Targets for IOU-Controlled Steps
   3. Comparison of Average Timeline for End-to-End Cycle
   4. Comparison of In-Progress Projects to Target Maximum

C. **Analyze** timeline differences to inform evaluation.

3. Evaluate

A. **Assess IOU timeline performance** against targets.

B. **Identify** relevant potential opportunities to improve performance.

2A Note: Data determined to be **insufficient** to conduct full analysis of IOU performance against energization targets.

2B Note: We performed a **preliminary analysis** based on the **data insufficiency determination** (for all dimensions). The results of this preliminary analysis are not **regulatory decision grade**.

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

Methodology Changes (Sep 2025 vs. March 2026 BER)

Guidehouse updated the **data availability assessment** for the data sufficiency evaluation and the identification of the **type of community** a project is located in.

Category	September 2025 Methodology	March 2026 Methodology	Goal of Change
Data Availability 	**Four metrics were used to evaluate availability.** 1. Completed projects missing >75% of data fields, 2. Steps missing start and/or end dates for >20% of completed projects, 3. Specific energization step with the most missing data, and 4. Total number of data template fields not reported until September 2026.	**Two new sufficiency metrics replaced the prior four metrics to evaluate availability.** 1. Percentage of compliance data points missing, and 2. Percentage of contextual data points missing.	**Simplify** for tighter alignment with the **definition of available data** (compliance & contextual).
Community Category 	**Projects were categorized as located in one type of community (even if located in multiple types of communities).** Selected one community per project type (one-to-one classification).	**Projects are now categorized as located in multiple types of communities (where applicable).** Used binary indicators (1 or 0) to tag communities to projects.	Represent **multiple communities per project**, as necessary.

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

Guidehouse

Step 1: Prime Data

1A. Assess Research Questions & Analysis Priorities

The preliminary analysis included the following research questions across multiple dimensions.

Focus Area		Dimension Analyzed						
Analysis	**Research Question**	**Tariff**	**Market Sector**	**ESJ**	**Capacity Requested**	**County / Region**	**Cost**	**Party Responsible***
Comparison to Targets for **IOU-Controlled Steps**	How are IOUs performing against regulatory targets?	✓	✓	✓	✓	✓	✓	
Comparison of Avg. Timeline for **End-to-End Cycle**	What types of project characteristics lead to quicker energization?	✓	✓	✓	✓	✓		✓
Comparison of **In-Progress Projects** to **Target Maximum**	Are in-progress projects exceeding the Target Maximum?	✓	✓	✓	✓	✓	✓	

*Refers to whether step design and installation was IOU- or Customer-Controlled.

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

1B. Standardize & Clean Data

The preliminary analysis used IOU approaches to identifying outliers.

		PG&E	SCE	SDG&E
IOU Narrative Report	Outlier Approach	**Included and identified outliers** in their data submission.	**Excluded outliers** in their data submission.	**Included outliers** in their data submission **without identification**.
	Outlier Criteria	• Negative timelines • Steps prior to application start date or after energization date • Complete projects missing construction or energization dates	• Incoherent or invalid data associated with costing component data • Blank and/or erroneous energization step or MPU energization data points	• Explicitly inaccurate energization dates • Negative timelines • Steps after energization date • Complete projects missing construction or energization dates • Exceeding 2 standard deviations above energization job population average by tariff type
Guidehouse Preliminary Analysis	Outlier Approach	**Excluded projects** that PG&E **identified as outliers** in their data submission from the analysis.	**Did not remove any projects** SCE provided in their data submission from the analysis.	• Used SDG&E's outlier criteria (from narrative) to **identify and remove outliers** from preliminary analysis. ▪ **Outlier criteria was applied to Steps 2 through 8 but not Step 1**; inclusion of Step 1 would lead to a significant number of projects being omitted.
CPUC Recommended Approach to Outliers (From Ruling; not used in Preliminary Analysis)		• Exceed two standard deviations above average for that step, tariff type, and IOU • "Start" or "End Dates" occurring after Step 8 "End Date" (w/o explanation) • "Start" or "End Dates" occur outside of the period between 1/31/2023 and the submission date for the current report (w/o explanation) • Have negative data inputs (w/o explanation)		

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

1B. Standardize & Clean Data

IOU-controlled and end-to-end timelines are standardized via step:

Key

- Project Timeline: Shared | End-to-End | IOU-Led | Customer-Led
- Steps: Shared Step | IOU-Led Step | Customer-Lead Step
- Status: Completed Step / Cycle | In-Progress Step / Cycle

Step #	1	2	3	4	5	6	7	8
Step Name	**Customer Intake**	**Engineering & Design**	**Customer Dependencies**	**Utility Dependencies**	**Customer Site Readiness**	**IOU Site Readiness**	**Construction**	**Energization Provided**
Analysis Type	**Depiction of Analysis**							
Comparison of Avg. Project Timeline to Targets (for IOU-Controlled Steps)	Compare average days to complete (for **IOU-controlled** completion timelines) project to total to energization target. *Analyze by dimension.*							
Comparison of Avg. Project Timeline (for End-to-End Cycle)	Compare average **end-to-end** timelines for all completed projects. *Analyze by dimension to identify characteristics that lead to faster energization timelines.*							
Comparison of Avg. Project Timeline to Targets (In-Progress Projects)	Compare average timeline for **in-progress projects** (projects that are not completed / somewhere in between step 1-8) to target max. *Analyze by dimension.*							

Helpful distinctions for why different timelines are used when:

Project completion timelines for IOU-led steps are compared to energization targets. Energization timeline targets differ by project type and align to IOU-led steps.

End-to-end timeline comparisons allow for analysis to be segmented by dimension.

Note: Guidehouse aligned their analysis with IOU-reported timelines, which captures IOU-specific methodology in controlling for overlapping and concurrent steps.

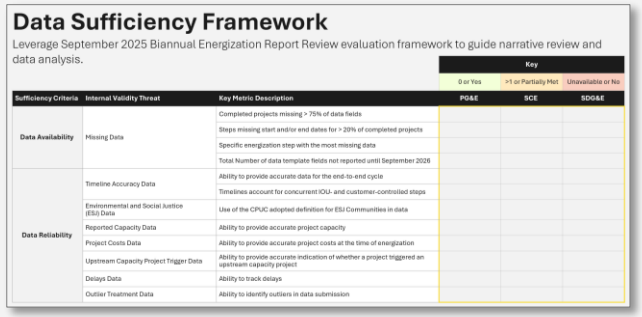
Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

1C. Determine Sufficiency Thresholds & Methodology

Purpose: Assess whether the data are **available** and **reliable** to support analysis.

Step 1: Methodology

Refine September 2025 Biannual Energization Report Review evaluation Methodology to guide narrative review and data analysis.



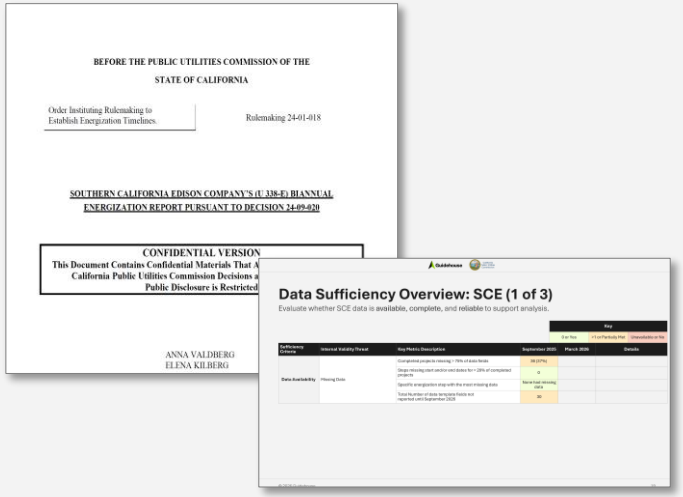
Data Sufficiency Framework

Leverage September 2025 Biannual Energization Report Review evaluation framework to guide narrative review and data analysis.

Sufficiency Criteria	Internal Validity Threat	Key Metric Description	PG&E	SCE	SDG&E
Data Availability	Missing Data	Completed projects missing > 75% of data fields			
		Steps missing start and/or end dates for > 20% of completed projects			
		Specific energization step with the most missing data			
		Total Number of data template fields not reported until September 2026			
Data Reliability	Timeline Accuracy Data	Ability to provide accurate data for the end-to-end cycle			
		Timelines account for concurrent IOU- and customer-controlled steps			
	Environmental and Social Justice (ESJ) Data	Use of the CPUC adopted definition for ESJ Communities in data			
	Reported Capacity Data	Ability to provide accurate project capacity			
	Project Costs Data	Ability to provide accurate project costs at the time of energization			
	Upstream Capacity Project Trigger Data	Ability to provide accurate indication of whether a project triggered an upstream capacity project			
	Delays Data	Ability to track delays			
	Outlier Treatment Data	Ability to identify outliers in data submission			

Step 2: Narrative Review

Review March 2026 IOU Energization Narrative Reports to understand how each utility describes reporting scope, assumptions, limitations, and compliance with CPUC requirements.



BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Establish Energization Timelines.

Rulemaking 24-01-018

SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) BIANNUAL ENERGIZATION REPORT PURSUANT TO DECISION 24-09-020

CONFIDENTIAL VERSION

This Document Contains Confidential Materials That A... California Public Utilities Commission Decisions a... Public Disclosure is Restricted

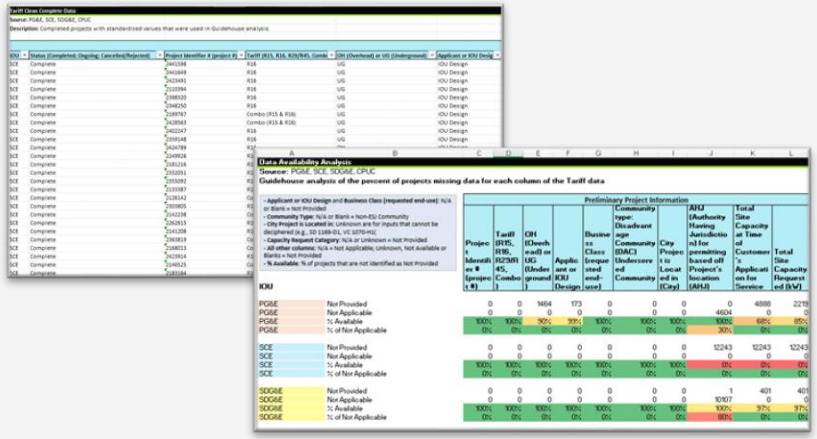
ANNA VALDBERG
ELENA KILBERG

Data Sufficiency Overview: SCE (1 of 3)

Evaluate whether SCE data is available, complete, and reliable to support analysis.

Step 3: Data Review

Collect, clean, and analyze IOU data submissions to evaluate availability (compliance and contextual data) and reliability.



Data Availability Analysis

Source: PG&E, SCE, SDG&E, CPUC

Guidehouse analysis of the percent of projects missing data for each column of the Tariff data

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

Note: Examples of these data points are on the following slide.

1C. Determine Sufficiency Thresholds & Methodology

Data sufficiency is a measure of **available and reliable data**, which can be categorized as **contextual or compliance**.

Data is sufficient when it is **available and reliable,** meeting the following criteria:

Available Data:

- At least 95%* of data points are reported for compliance data points**, and**
- At least 75% of data points are reported for contextual data points

Reliable Data:

- The data contains minimal threats to internal validity†

Available and reliable data are categorized into **contextual or compliance data points**:

Compliance Data Point:

- A data element that is required to assess performance against the decision's targets.

Contextual Data Point:

- A data element that provided project-specific information about an energization project.

- *This is a **commonly accepted operational benchmark** (i.e., Data availability threshold for Compliance Data Points based on Section 40 CFR §127.23 under the Environmental Protection Agency's National Pollutant Discharge Elimination System.)
- †Data validity refers to the extent to which data accurately represent the real-world entities, events, or measurements they are intended to describe, per "Experimental and Quasi-Experimental Designs for Research," Campbell, Donald T., Stanley, Julian. (1963).

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

1C. Determine Sufficiency Thresholds & Methodology

List of example data points categorized by available, reliable, compliance, and contextual:

Example Data Points			
Available or Reliable	**Type of Data**	**Description**	**Compliance or Contextual**
Available Data	Preliminary Project Information	• Tariff type (R15, R16, R29/R45, Combo [R15 & R16], Combo [R15 & R29/R45])	Compliance
		• Market Class (Residential, Commercial, Agricultural) • Community Type (Non-ESJ, Disadvantaged, Underserved, Tribal)	Contextual
	Timeline Data	• Days for each step to be completed (IOU-Controlled Steps 2, 4, 6, 7, 8)	Compliance
	Costing Component	• Total cost ($) to complete all energization requests • Total cost ($) for staffing, labor, and material	Contextual
Reliable Data	Timeline Accuracy Data	• Ability to provide accurate data for the end-to-end cycle • Ability for timelines to account for concurrent IOU- and customer-controlled steps	Compliance
	Outlier Treatment Data	• Ability to identify outliers in data submission	Compliance
	Delay Data	• Ability to track delays	Contextual

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

Discussion – Step 1: Prime Data

Questions for Discussion

- Is Guidehouse's **treatment of outliers** reasonable?
- Is Guidehouse's methodology for the **data sufficiency evaluation** reasonable?
- Is the distinction between **contextual and compliance** data points appropriate for this data set?
  - For compliance data points, is 95% the **appropriate threshold**?
  - For contextual data points, is 75% the **appropriate threshold**?
- Are there **other helpful considerations** for evaluating data availability / reliability?
- Is the way Guidehouse **calculates timelines** appropriate?
  - Are there **alternative ways** to calculate the IOU-controlled steps?

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

Guidehouse

Step 2: Analyze Data

2A. Evaluate Data Sufficiency Results

Data availability and reliability are insufficient to support a full analysis of IOU performance to energization targets.

Sufficient Insufficient

IOU	PG&E		SCE		SDG&E	
Overall	All IOUs are Insufficient					
Tariff or MPU	Tariff	MPU	Tariff	MPU	Tariff	MPU
Availability of Compliance Data	Insufficient	Sufficient	Sufficient	Sufficient	Insufficient	Sufficient
Availability of Contextual Data	Sufficient	Insufficient	Insufficient	Insufficient	Sufficient	Sufficient
Reliability of Data	Insufficient	Insufficient	Insufficient	Insufficient	Insufficient	Insufficient

Note: Tariff and MPU are defined in the Decision as:
- Tariff Definition: R15, R16, R29/45, and Combo projects (p. 30)
- MPU Definition: upgrades that do not require that the IOU perform in front of the meter upgrades such as an upgrade to the service line (p. 85)

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

2A. Evaluate Data Sufficiency Results

Data availability and reliability are insufficient to support a full analysis of IOU performance to energization targets.

Sufficient Insufficient

IOU	PG&E		SCE		SDG&E	
Overall	All IOUs are Insufficient					
Tariff or MPU	Tariff	MPU	Tariff	MPU	Tariff	MPU
Availability of Compliance Data	Insufficient: 7%	Sufficient: 0%	Sufficient: 0%	Sufficient: 0%	Insufficient: 31%	Sufficient: 0%
Availability of Contextual Data	Sufficient: 16%	Insufficient: 67%	Insufficient: 50%	Insufficient: 61%	Sufficient: 13%	Sufficient: 18%
Reliability of Data	**Insufficient:** •Misaligned ESJ definitions; •Inaccurate project cost data •Lack of ability to track delays	**Insufficient:** •Challenges separating IOU- and Customer-Controlled timelines •Inability to track and report project costs and delays	**Insufficient:** •Challenges separating IOU- and Customer-Controlled timelines; •Inability to track and report project capacity, costs, and delays	**Insufficient:** •Misaligned ESJ definitions; •Inability to track and report project capacity, costs, and delays	**Insufficient:** •Challenges separating IOU- and Customer-Controlled timelines; •Inaccurate project cost data •Challenges with project capacity	**Insufficient:** •Challenges reporting end-to-end data •Inaccurate project cost data •Inability to track and report project delays

Metric Displayed
% of data points missing

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

2A. Evaluate Data Sufficiency Results

Comparison from 2025 September BER data to 2026 March BER data show **slight improvements.**

Note: Data gaps were **highlighted by IOUs** (via narratives) and **confirmed by Guidehouse & CPUC** when reviewing the data submissions.

PG&E

PG&E addressed their previously reported **overstated data gaps** and **under-reported projects** by clarifying applicability, strengthening data capture, and **expanding project coverage**.

Notable Improvement: PG&E increased Step 6 and Step 8 start and end dates data, and filled gaps associated with existing site capacity and location of projects exceeding targets.

SCE

SCE strengthened reporting by **standardizing customer intake**, **refining completion tracking**, and improving Main Panel Upgrade (MPU) project status classification.

Notable Declines: SCE began to show gaps in their cost data.

SDG&E

SDG&E **aligned internal workflows** to CPUC Methodology and **enhanced transparency** around delays, rejections, and performance metrics.

Notable Improvement: SDG&E increased Step 2 and Step 7 start and end date data, and filled gaps associated with upstream capacity, scope changes, and customer delays.

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

2B. Comparison to Targets for IOU-Controlled Steps

Methodology: Compared average days to complete (for IOU-controlled completion timelines) project to total to energization target.

Focus Area		Dimension Analyzed						
Analysis	**Research Question**	**Tariff**	**Market Sector**	**ESJ**	**Capacity Requested**	**County / Region**	**Cost**	**Party Responsible***
Comparison to Targets for **IOU-Controlled Steps**	How are IOUs performing against regulatory targets?	✓	✓	✓	✓	✓	✓	

Methodology

- Identified **average IOU-controlled timeline** (completed Tariff & MPU projects)
- Identified **percentage of projects meeting target average** and **maximum timelines** by **dimension**
- Assessed **IOU performance against targets** (target average and maximum) by **dimension** (e.g., R15 vs. R16, Residential vs. Commercial, DAC)

*Refers to whether step design and installation was IOU- or Customer-Controlled.

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

2B. Comparison of Avg. Timeline for End-to-End Cycle

Methodology: Compared average end-to-end timelines for all completed projects. Analyzed by dimension to identify characteristics that lead to faster energization timelines.

Focus Area		Dimension Analyzed						
Analysis	Research Question	Tariff	Market Sector	ESJ	Capacity Requested	County / Region	Cost	Party Responsible*
Comparison of Avg. Timeline for **End-to-End Cycle**	What types of project characteristics lead to quicker energization?	✓	✓	✓	✓	✓		✓

Methodology

- Compare **average end-to-end timeline for all completed projects** (Tarriff and MPUs) by **dimension** (e.g., R15, Residential, DAC)
- Identify characteristics that lead to **faster energization timelines**

*Refers to whether step design and installation was IOU- or Customer-Controlled.

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

2B. Comparison of In-Progress Projects

Methodology: Compared average timeline for in-progress projects (projects that are not completed / somewhere in between step 1-8) to target max.

Focus Area		Dimension Analyzed						
Analysis	**Research Question**	**Tariff**	**Market Sector**	**ESJ**	**Capacity Requested**	**County / Region**	**Cost**	**Party Responsible***
Comparison of **In-Progress Projects** to **Target Maximum**	Are in-progress projects exceeding the Target Maximum?	✓	✓	✓	✓	✓	✓	

Methodology

- Identify **percentage of in-progress projects exceeding Target Maximum timelines** by **dimension** (Tariff and MPUs)
- Identified **average days in-progress projects exceeded Target Maximum** for those projects exceeding Target Maximum (Tariff and MPUs)

*Refers to whether step design and installation was IOU- or Customer-Controlled.

2C. Analyze Timeline Differences To Inform Evaluation

- The reported timelines are **increasing**, which is aligned to IOU and Energy Division expectations.
  - As more BERs occur, **timelines will increase as long-standing projects are completed** and are **accounted for in the data analysis** (IOUs report cumulatively and as projects with longer timelines end, they increase the average).
  - IOU-provided timeline summaries from the March 2026 BER show **slightly longer timelines** for End-to-End, IOU-Controlled and Customer-Controlled and **declines in** the rate projects are meeting the Target Avg. and Target Max.
- **Post-Decision,** IOU's have **reported meaningful improvements** in energization timelines.

Increase (more days) **No Change (Same Days)** **Decrease (Less Days)**

Metric	PG&E		SCE		SDG&E	
	September 2025†	March 2026†	September 2025†	March 2026*	September 2025†	March 2026†
Average End-to-End Timeline (Calendar Days)	328	345	225	296	147	155
Average IOU-Controlled Timeline (Calendar Days)	118	125	156	204	13	42
Avg. Customer-Controlled Timeline (Calendar Days)	130	135	69	92	58	61
% of Projects Meeting Target Average	91%	89%	65%	48%	64%	62%
% of Projects Meeting Target Maximum	98%	97%	84%	85%	85%	82%

Note: The data in this table were included in the public version of the IOU's September 2025 report and currently confidential March 2026 data. The March 2026 data will be provided by the CPUC in forthcoming redacted versions of the IOU's reports.

*Reported through the previous calendar year (1/1/2025 -12/31/2025).
†Reported through the associated reporting period (1/31/2023-06/30/2025 for September 2025 & 01/31/2023 - 12/31/2025 for March 2026).

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

Discussion – Step 2: Analyze Data

Questions for Discussion

- Is the Guidehouse **methodology** in the preliminary analysis **reasonable**?
  - Are there reasonable alternative approaches to consider?
  - Does this methodology account for the IOU's approaches in a manner that's consistent with the Decision?
- Overall, is the Guidehouse **data insufficiency finding** surprising?
- What are **opportunities for improvements** in data availability or data reliability for IOUs?
- Will the IOU's planned improvements achieve sufficiency?
- Are there any **additional considerations** or feedback to discuss?

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

Guidehouse

Step 3: Evaluate Data (Preliminary Analysis Results)

Note: The preliminary data analyses are performed by Guidehouse and reported here (based on the methodology Guidehouse discussed today). Any future modifications to the methodology will impact how Guidehouse analyzes and presents data.

3A. Assess IOU Timeline Performance Against Targets

This table represents the comprehensive preliminary findings from the analysis.

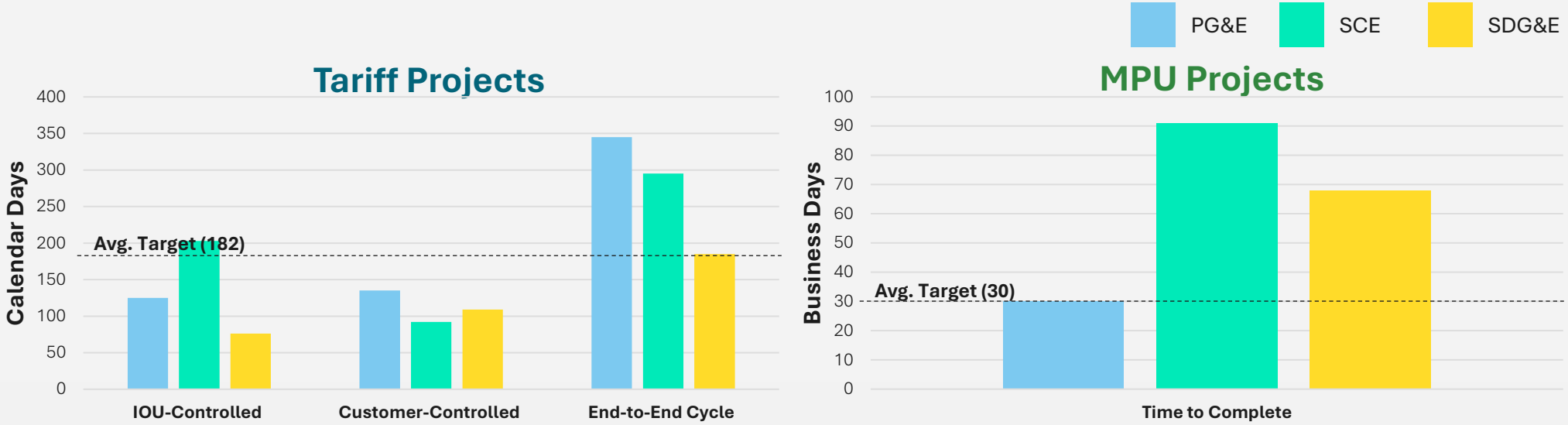
Analysis	Project Type	Project Dimensions	PG&E	SCE	SDG&E
1. All-Project Avg. Timeline (Calendar Days)	Tariff (Calendar Days)	IOU-Controlled	125	204	76
		Customer-Controlled	135	92	109
		End-to-End Cycle	345	296	185
	MPU (Business Days)	Time to Complete	30	91	68
2. Comparison to Targets for IOU-Controlled Steps	Tariff (Calendar Days)	Meeting Target Avg.	84%	57%	90%
		Less than Target Max.	97%	77%	95%
	MPU (Business Days)	Meeting Target Avg.	75%	20%	30%
		Less than Target Max.	86%	36%	45%
3. Comparison of Avg. Timeline for End-to-End Cycle (percentage longer or faster than the all-project average)	Tariff (Calendar Days)	Customer Design / Install	31 to 72% longer	72 to 139% longer	60 to 270% longer
		Residential	6% faster	14% faster	4% faster
		Commercial	33% longer	63% longer	21% longer
		Project in ESJ Community	4 to 3% faster	8% faster to 19% longer	0 to 59% longer
	MPU (Business Days)	Project in ESJ Community	10% faster to 30% longer	3 to 14% longer	13% faster to 6% longer
4. Comparison of in-progress projects to Target Max.	Tariff (Calendar Days)	Exceeding Target Max.	3%	14%	7%
	MPU (Business Days)	Exceeding Target Max.	3%	63%	0%*

* SDG&E only provided timeline data for 1 MPU project preventing analysis of target maximum exceedance and average days delayed.

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

3A (1). All-Project Average Timeline

Project timelines vary across IOU and Customer- Controlled steps and End-to-End Cycles (Tariff Projects).



Completed Tariff Projects	14,032	12,243	9,529

Completed MPU Projects	35,839	49,266	6,366

Takeaways - Tariff Projects:

- End-to-End Cycle timelines vary substantially by IOU, with PG&E reporting the longest timelines
- SCE reports longest timelines for IOU controlled-steps but shortest for customer-controlled steps
- Customer-controlled steps show more consistency across IOUs

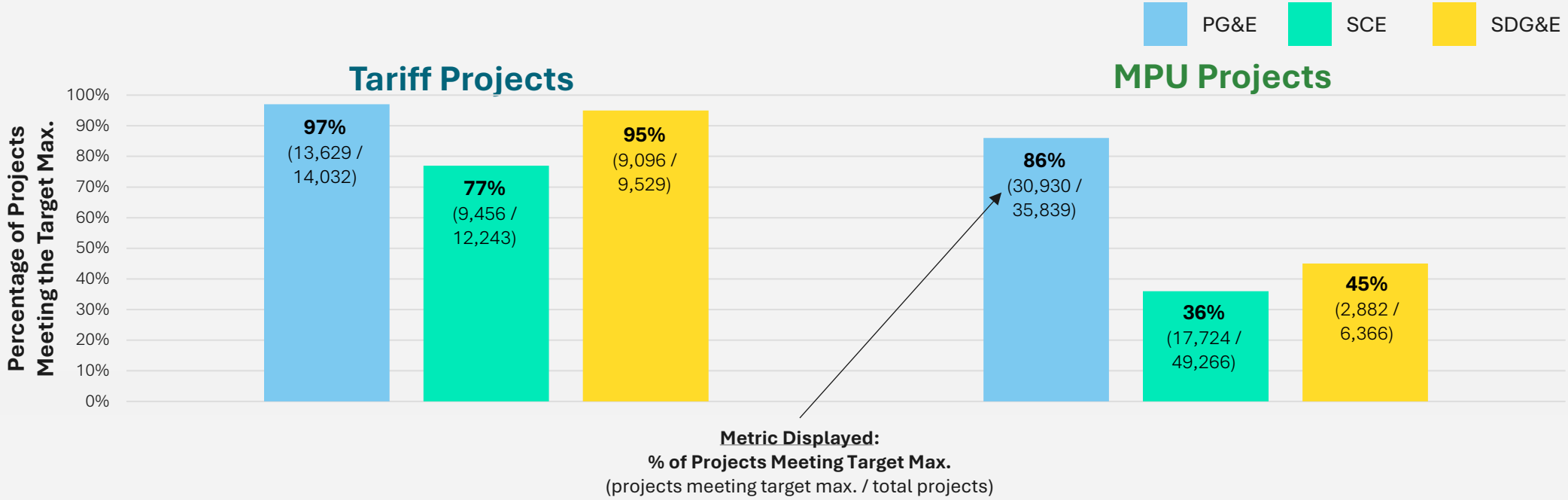
Takeaways - MPU Projects:

- MPU timelines range from 30-91 with SCE reporting the longest timelines and PG&E reporting the shortest timelines

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

3A (2). Comparison to Target Maximum

SCE has lowest percentage of projects (tariff / MPU) meeting the target maximum for IOU-controlled steps.



Takeaways - Tariff Projects:

- PG&E and SDG&E report similar percentage of completed projects that meet the target maximum
- SCE reports lower percentage of completed projects that meet the target max than PG&E and SDG&E

Takeaways - MPU Projects:

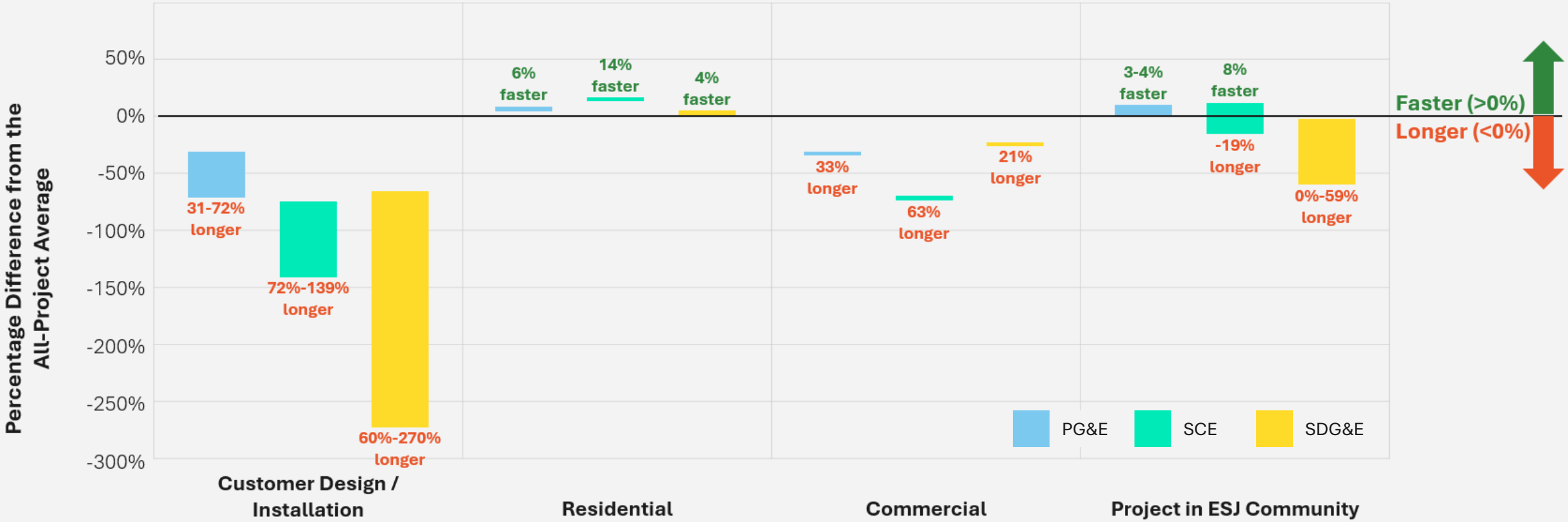
- PG&E reports higher percentage of projects meeting the target maximum than SCE and SDG&E

*Tariff projects are calculated via calendar days while MPU projects are calculated via business days.

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

3A (3). Average End-to-End Timelines

The percentage difference from the all-project average for tariff projects by project type varied.



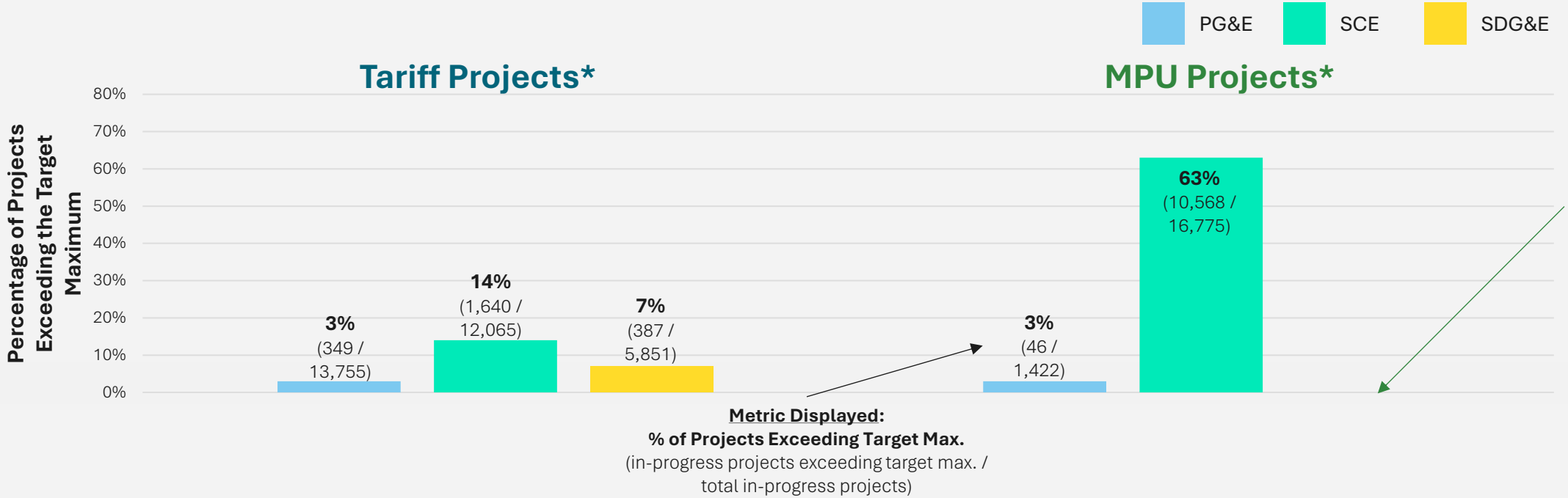
Takeaways:

- The percentage difference of **customer design** and/or **installation tariff projects** have the widest range: 31-270% longer
- The percentage difference of **residential projects have the smallest range**: 4-14% faster

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

3A (4). In-Progress Projects Exceeding Target Max.

For Tariff and MPU projects, the percentage of projects that exceed the target maximum is variable.



Note: SDG&E had only 1 in-progress MPU with data (out of 2,687 total in-progress projects) for either Timing to Complete MPU (Business Days) or Initial Schedule Date.

Takeaways - Tariff Projects:

- Low percentage of in-progress projects exceeding the target maximum (3-14%)

Takeaways - MPU Projects:

- 63% of SCE's in-progress projects exceeding target maximum while only 3% of PG&E's in-progress projects exceed the target max.

Note: The total capacity for in progress projects includes **30,157 MW** for **PG&E**, **110,809** for **SDG&E**, and no data provided for SCE. PG&E has 13,755 in progress projects while SDG&E has 5,851 in progress projects. **PG&E's capacity is 27% of SDG&E's but has more than double the amount of projects.**

*Tariff projects are calculated via calendar days while MPU projects are calculated via business days.

3B. Identify Relevant Potential Opportunities To Improve Performance

PG&E showed strong progress towards targets; lower cost and lower capacity projects have the strongest IOU-controlled timelines.

How are IOUs performing against regulatory targets?

- **PG&E and SDG&E report high amount** of projects meeting target avg. and maximums (compared to SCE) for **tariff projects**. Other project types vary.
- **PG&E reports highest amount** of projects meeting target avgs. and maximums (compared to SDG&E and SCE) for **MPU projects**.

What types of project characteristics lead to quicker energization?

- **Lower cost & lower capacity projects** (specifically R16 service line extension projects) have shorter IOU-controlled timelines:
  - Example: R16 service line extensions that are <$4,500 and <1 MW with only IOU-led steps
- Customer-led design/install **increases end-to-end timelines.**

Are in-progress projects exceeding the Target Maximum?

- All three IOUs report **in-progress projects exceeding target maximums.**
- SCE reporting the **largest volume and longest timelines** of projects exceeding target maximums.
- *Note, SDG&E had only 1 in-progress MPU with data for either Timing to Complete MPU (Business Days) or Initial Schedule Date.*

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

Discussion – Step 3: Evaluate Data

Questions for Discussion

- Did the methodologies presented produce **reasonable results?**
  - How would **alternative approaches** change those results?
- Are there any **additional considerations** to discuss?

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

Guidehouse

Thank you

outwit complexity™

Lunch: 12:00- 1:00

Panel 2: Stakeholder Discussion on IOUs' Data Reports and Suggested Modifications for Future Reporting Efforts

Panelists

Katie Pratt

Regulatory Analyst with CPUC

Facilitator

Juliet Walsh

Distribution Planning & Policy

Public Advocates Office

Matthew McKerley

Associate Attorney
Shute, Mihaly & Weinberger LLP, on behalf of **Interstate Renewable Energy Counsil**

Cole Jeremy

Sr. Attorney, Clean Affordable Power

Environmental Defense Fund

Juliet Walsh
Public Advocates Office

2026 Energization Timelines Workshop

IREC's Use of the Biannual Energization Data and Recommendations for Future Reporting

Matthew McKerley, *on behalf of IREC*

SHUTE, MIHALY & WEINBERGER LLP

Agenda

1. Timelines as a means to an end: tracking the pace of energization
2. IREC's deep dive on the data: cross-IOU methodology differences and data anomalies
3. Findings regarding the energization pipeline
4. Recommendations

SHUTE, MIHALY & WEINBERGER LLP

Timelines are a means, not an end

- SB 410 and AB 50 directed the Commission to establish energization timelines to ensure the grid supports California's climate goals
- The biannual reports are an important accountability tool, but they answer only whether IOUs are meeting the adopted targets
- A utility could meet every adopted timeline target, and the Commission would not know whether infrastructure is being deployed at the pace and in the locations the state needs
- To answer whether the state is on pace, the Commission needs additional data, particularly on what's in the energization pipeline

The Pipeline Data Gap

- The biannual reports already include project-level pipeline data, but lack fields that would connect it to climate goals
- IREC recommends four supplemental fields to begin to bridge this gap:
  - **End-use identification** — Is this an EV charging project?
  - **Charger details** — Ports, power level, public/shared-private/fleet
  - **Geographic location** — Zip code or census tract
  - **Upstream capacity status & forecast** — For in-progress projects, where does the associated upgrade stand and when is it expected to finish?
- Not a prioritization of EV projects over others
- Not covered by TE docket (R.23-12-008) reporting

Data Deep Dive

- Reliable, comparable data from the three IOUs is needed to support both a robust enforcement framework and a pace analysis
- When IREC attempted to verify the IOUs' reported aggregate metrics against the underlying raw data, it found material, systematic inconsistencies
- Some differences reflect divergent methodological choices that the Phase 1 Decision left unresolved — not simple data-entry errors
- **The headline aggregate numbers in the three IOUs' reports are not comparable on an apples-to-apples basis**

Three IOUs, Three Methodologies

	PG&E	SCE	SDG&E
E2E calculation	Direct date (S1 start → S8 end)	Sum of step durations	Direct date in Agg. Summary (S2 start → S8 end); sum of steps in raw data
Population cutoff	None	None	Energized ≤ 6/30/2025 only (excludes 23% of projects)
Outlier filter	None	None	Per-tariff upper 2σ exclusion
IC/CC calculation	Sub-step adjusted	Sum of step durations	Sum of steps durations in raw data; Agg. Summary tab appears inconsistent

SCE is the only IOU whose aggregates can be independently verified at 100% from the underlying raw data.

PG&E Excludes Step 1 from Customer-Controlled Time

- PG&E states that Customer-Controlled time includes Steps 1, 3, and 5
- Testing the data: Customer-Controlled time appears to be S3 + S5 only
- Step 1 (Intake) has a median duration of ~57–59 days — excluding it removes roughly two months per project
- Step 1 time does appear in PG&E's End-to-End aggregate time
- SCE and SDG&E both include Step 1 in their Customer-Controlled aggregate time

PG&E's Treatment of Concurrent Time

- PG&E's reported IOU-Controlled time is consistently lower than the sum of IOU step durations — median shortfall of ~40 days across 15,108 projects
- The main driver appears to be a "concurrent adjustment" that can only be reproduced from published data for around 2/3 of projects
- Some additional time attributable to the AHJ may be shifted out of IOU-Controlled time
- Unclear how PG&E treats step 2 for applicant-designed projects.

SDG&E's Aggregate Calculation Anomalies

- SDG&E's reported IOU-Controlled median (14 days) and Customer-Controlled median (16 days) are lower than what the raw data shows
  - Actual IC median: ~37 days (nearly 3×)
  - Actual CC median: ~57 days (more than 3×)
- The reported medians appear to match individual step values (Step 7) rather than the corresponding aggregate columns in the raw data, but exact reason is unknown
- SDG&E also appears to have excluded:
  - All projects energized after June 30, 2025 (23% of all projects)
  - All projects with a completion date > 2σ above the mean

What (PG&E's) Pipeline Data Reveals

Compliance metrics measure only **completed** projects — thousands more are still in the queue

IREC analyzed PG&E's 4,444 in-progress commercial projects:

- 28.4% already exceed the maximum IOU-Controlled step target (vs. the 5% compliance ceiling)
- More than a third are "severely delayed" — stuck at their current step longer than 95% of historical completions
- Biggest bottlenecks: Step 7 (Construction) and Step 1 (Intake)

The completed-project statistics present an incomplete picture of how the system is actually performing for customers in the queue today

Recommendations

1. **Make reports auditable** by requiring disclosure of underlying formulas used in computed columns
2. **Address the methodological inconsistencies** in the biannual energization reports
3. **Add four supplemental data fields** to the reporting template to support forward-looking pace-of-energization analysis
4. **Require pipeline reporting** on severely delayed in-progress projects with plans for triage

Questions

SHUTE, MIHALY & WEINBERGER LLP

Contact

Matthew McKerley, Attorney
Shute, Mihaly & Weinberger LLP

550 California Street, Suite 1200
San Francisco, CA 94104
415-552-7272

Mari Hernandez, Interim VP – Regulatory Program
Interstate Renewable Energy Council, Inc.

Salem, MA
512-775-9899

SHUTE, MIHALY & WEINBERGER LLP

EDF Recommendations on Energization Timeline Reporting

CPUC Energy Division Workshop – June 18, 2026

Cole Jermyn
Senior Attorney, Clean Affordable Power

Environmental Defense Fund

EDF’s Interests in Energization Reporting

- Ensuring target compliance
- Tracking progress over time
- Identifying priority area for improvement

Recommendation 1 – Standard Graphs and Tables

- **Electric Rule 29***
  - Total Projects with Applications Submitted from 01/31/23-12/31/25 and Energized Through 12/31/25: 161
  - Average PG&E Energization Calendar Days: 111
  - Average End-to-End Energization Cycle Calendar Days: 560
  - Percent of Energized Projects Under Maximum Energization Target from 01/01/25 to 12/31/25: 96.5%
- **Combined Electric Rules 15 & 16***
  - Total Projects with Applications Submitted from 01/31/23-12/31/25 and Energized Through 12/31/25: 3,545
  - Average PG&E Energization Calendar Days: 129
  - Average End-to-End Energization Cycle Calendar Days: 427
  - Percent of Energized Projects Under Maximum Energization Target from 01/01/25 to 12/31/25: 95.0%
- **Combined Electric Rules 15 & 29***
  - PG&E has no Combined Electric Rules 15 & 29 projects to report for this reporting period, as such projects are uncommon.
- **Main Panel Upgrades****
  - Total Projects with Applications Submitted from 01/31/23-12/31/25 and Energized Through 12/31/25: 35,839
  - Average PG&E Energization Business Days: 30
  - Average End-to-End Energization Cycle Business Days: 42
  - Percent of Completed Projects Under Maximum Energization Target from 01/01/25 to 12/31/25: 90.0%

Table 6 – Comparison of SCE Project Timelines to CPUC Average Targets

Project Type	Average Energization Target (Business Days)	Average Completed Project Utility Timeline (Business Days)	Count of Projects Completed in 2025
R15	125	235	25
R16	125	76	1877
Combo (R15 & R16)	125	132	233
R29/45	125	150	2
Combo (R29/45 & R15)	125	129	1

Table 3 – Average Energization Timelines Per Tariff

	Rule 15	Rule 15/16	Rule 15/45	Rule 16	Rule 45	
Average Applicant Final Submittal ("AFS") to Energized (Business Days)	240	275	348	100	370	
Count of Completed Energization Requests	495	109	14	9062	28	9708 (total)

Recommendation 1 – Standard Graphs and Tables

- Report data in a standardized table format
- Report moving averages for each utility category

Table 12. Calendar Day Targets by Utility and Tariff

Utility	Tariff	Completed Projects	Target Average (Days)	Average Days of Completed Projects	Target Average (% of Projects)	Target Maximum (Days)	Target Maximum (% of Projects)
PG&E	R15[21]	0	182	No Data Provided	No Data Provided	357	No Data Provided
PG&E	R16	6,718	182	118	86.5%	335	98.1%
PG&E	R29/45	86	182	113	89.5%	335	97.7%
PG&E	Combo (R15 & R16)	2,119	182	117	87.2%	306	97.8%
PG&E	Combo (R15 & R29/45)[22]	0	182	No Data Provided	No Data Provided	306	No Data Provided

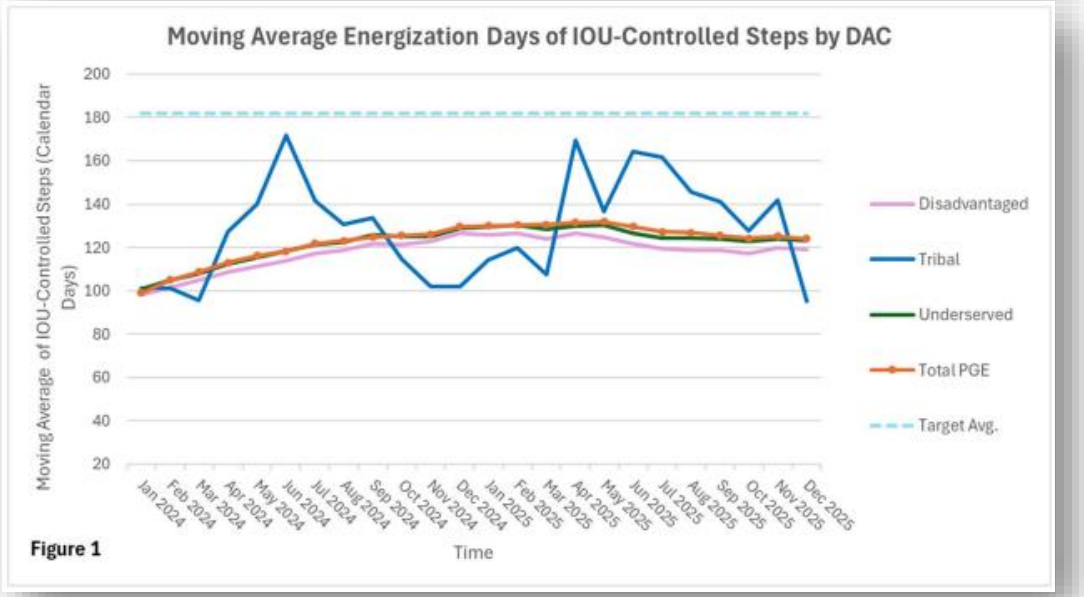


Figure 1

Recommendation 2 – Upstream Upgrades

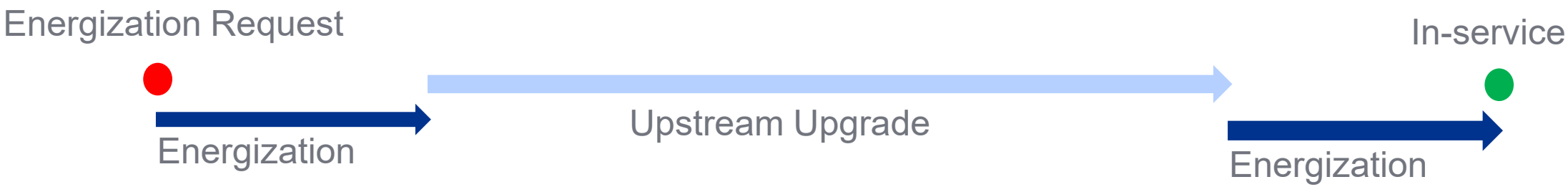
- **New Circuit/Circuit Upgrade Calendar Days***:** 950 calendar days
- **Substation Upgrade Calendar Days***:** 1,285 calendar days
- **New Substation Calendar Days:** PG&E had no new Substations completed within this reporting period.

Upstream Capacity			
Project triggered for upstream capacity project (Yes/No)	Date IOU identifies the need for an upstream capacity project and alerts customer of need for upstream capacity project (Date)	Date IOU completes the upstream capacity project (Date)	Time to complete upstream capacity project (Calendar Days)
Yes	2021-12-06	2024-11-14	1074
Yes	2023-05-19	N/A	N/A
No	N/A	N/A	N/A
No	N/A	N/A	N/A
No	N/A	N/A	N/A
No	N/A	N/A	N/A
No	N/A	N/A	N/A

- Consistent in-report reporting on upstream upgrades
- Track delays attributable to upstream upgrades, not just the upgrade timeline itself
- Include all projects that wait for upgrades, not just those triggering them

Recommendation 2 – Upstream Upgrades

Scenario 1:



Scenario 2:

Recommendation 3 – All-in Timelines

Table 11. Performance Summary Based on Guidehouse Analysis

Analysis	Parameter	PG&E	SCE	SDG&E
All-Project Average Timeline (Calendar Days)	IOU-Controlled	118	156	58
	Customer-Controlled	130	69	96
	End-to-End Cycle	328	224	154

- Consistent end-to-end reporting in calendar days
- Broken out by tariff
- Report moving averages

Recommendation 4 – Align with Remedial Actions

- EDF recommended remedial action triggers if a utility exceeds a target:
  - in two consecutive reporting periods;
  - three or more times in six consecutive reporting periods;
  - by more than 50% in a single reporting period.
- If the Commission adopts remedial action triggers, reporting should consistently track a utility's compliance with those triggers

Thank you!

cjermyn@edf.org

Environmental Defense Fund

Open Discussion

Guiding Questions

- *Do the IOUs' reports meet the requirements of D.24-09-020 related decisions? If not, why? And if not, by what date should the IOUs implement any necessary process changes or IT changes?*

- *Should the CPUC adopt data sufficiency metrics and/or a data analysis framework? If so, how should the CPUC develop these metrics or a framework?*

- *Are there any other changes to the data template that the CPUC should consider? What changes are the most important for the near term? What opportunity for data template improvements should be considered in the future?*

Closing Remarks

Next Steps: R.24-01-018

- Party responses to May 28 ALJ Ruling seeking input on IOUs' energization data collection efforts and the energization data and reporting template extended to July 9, reply comments due July 23
  - Party responses to June 9 ALJ Ruling authorizing, but not requiring, party responses to June 18 workshop due July 23
- IOUs' submit second 2026 biannual energization data on September 30, 2026
- CPUC to issue a proposed decision adopting energization remedial actions and enforcement policy and other Phase 2 issues by Q4 2026.

Thank you for your participation and attendance!

For more information, please contact:

Katie Pratt
katherine.pratt@cpuc.ca.gov

California Public Utilities Commission

Appendix

Definitions of Dimensions Analyzed

Dimension	Definition
Tariff	Non-MPU projects (R15, R16, R29/45, Combo)
Market Sector	Industries, including residential, commercial, and agricultural
Environmental, Social, and Justice (ESJ)	Communities, including disadvantaged, underserved, and tribal
Capacity Requested	Amount of capacity requested by the customer (> 1MW, 1-2MW, >2MW)
Country / Region	Regions in California
Cost	Reported total site / project costs at the time of energization
Party Responsible for Design and / or Installation	Which party leads design / installation of a project
Availability (Data Sufficiency)	Reported data for compliance and contextual data
Reliability (Data Sufficiency)	Reported data that is valid

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

PG&E Sufficiency Details

Overall Sufficiency Rating: Insufficient

Availability: Does not meet availability criteria for compliance **and** contextual data

Reliability: Does not meet reliability criteria

Metric Displayed
% of data points missing

Sufficiency Criteria & Determination		Missing Data Fields / Challenges	Suggestions for Improvement
Availability (Compliance Data)	**Tariff:** Insufficient (7%)	**7 (out of 27) fields have data points for fewer than 95% of projects, which include:** **Tariff Data Points:** 1. Step 6 – Project Site Readiness (IOU) Start Date 2. Step 6 – Project Site Readiness (IOU) End Date 3. Step 6 – Project Site Readiness (IOU) Calendar Days 4. Step 6 – Project Site Readiness (IOU) Business Days 5. Step 8 – Service Energization End Date 6. Step 8 – Service Energization End Date 7. Step 8 – Service Energization Calendar Days **MPU Data Points:** n/a **Other:** Inspection dates prior to Salesforce launch in March 2025 cannot be recovered, impacting availability of Step 6 data	• Review and refine available internal meter set data to provide more robust tracking
	MPU: Sufficient (0%)		
Availability (Contextual Data)	**Tariff:** Sufficient (16%)	**24 (out of 90) fields have data points for fewer than 75% of projects, which include:** **Tariff Data Points:** 1. Total Site Capacity at Time of Customer's Application (kW) 2. Add'l Capacity installed for Load Deployment (kW) 3. Customer Installed Add'l Capacity to Support Load Growth (Y / N) 4. When Customer Req. Design / Scope Change (Step) 5. Customer Cancelled/Delayed Project (As Needed) (Date) 6. Customer Elected to Install Add'l Capacity (Load Growth) 7. When Customer Anticipates Add'l Capacity Necessary (Date) 8. Total Add'l Capacity for Necessary Upgrade as Listed on App (kW) 9. Timing for IDing Need for R15/16/29/45 Upgrade (Cal. Days) 10. Total Upstream Capacity Project Cost ($) 11. Costs for IOU Equipment for Upstream Capacity Projects ($) 12. Customer Allowance ($) **MPU Data Points:** 13. Reason Upgrade Cancelled and/or Rescheduled (Reason) 14. MPU - Initial Schedule Date (Date) 15. MPU - Rescheduled Date (As Needed) (Date) 16. Add'l Time - Scheduled to Rescheduled Date (Cal Days) 17. Add'l Time - Scheduled to Rescheduled Date (Biz Days) 18. Total Staffing, Labor, and Material Cost ($) 19. Project Costs for Anything Else IOU Covers ($) 20. Total Construction / Overhead Costs ($) 21. Customer Allowance ($) 22. Estimated Costs at Time of Design ($) 23. Actual Costs at Time of Energization ($) 24. Difference of Estimated / Actual Costs at Energization ($$$)	• Identify fields that are not applicable and mark as "N/A" as opposed to "Pending Data Process Improvement Initiative" • Ensure in data points requiring "Y / N" that "No" is used instead of blank cells • Ensure in data points requiring a numeric value that "0" is used instead of blank cells • Continue to refine approach for reporting on MPU data
	MPU: Insufficient (67%)		
Reliability of Data	**Tariff / MPU:** Insufficient	• Misaligned ESJ definitions • Inaccurate project cost data • Lack of ability to track delays	• Use CPUC ESJ definition • Provide accurate project cost data • Track delays adequately

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

SDG&E Sufficiency Details

Overall Sufficiency Rating: Insufficient

Availability: **Does not** meet availability criteria for compliance **and** contextual data

Reliability: **Does not** meet reliability criteria

Metric Displayed
% of data points missing

Sufficiency Criteria & Determination		Missing Data Fields / Challenges	Suggestions for Improvement
Availability (Compliance Data)	**Tariff:** Insufficient (31%) **MPU:** Sufficient (0%)	**14 (out of 27) fields have data points for fewer than 95% of projects, which include:** 1. Step 2 – Engineering & Design End Date 2. Step 2 – Engineering & Design Calendar Days 3. Step 2 – Engineering & Design Business Days 4. Step 4 – Utility Dependencies Start Date 5. Step 4 – Utility Dependencies End Date 6. Step 4 – Utility Dependencies Calendar Days 7. Step 4 – Utility Dependencies Business Days 8. Step 6 – Project Site Readiness (IOU) Start Date 9. Step 6 – Project Site Readiness (IOU) End Date 10. Step 6 – Project Site Readiness (IOU) Calendar Days 11. Step 6 – Project Site Readiness (IOU) Business Days 12. Step 7 – Construction Start Date 13. Step 7 – Construction Calendar Days 14. Step 7 – Construction Business Days	• Refine systems for tracking of IOU-Controlled energization steps
Availability (Contextual Data)	**Tariff:** Sufficient (13%) **MPU:** Sufficient (18%)	**16 (out of 90) fields have data points for fewer than 75% of projects, which include:** 1. Add'l Capacity Installed for Load Deployment Timing for IDing Need for R15/16/29/45 Upgrade (kW) 2. Total Upstream Capacity Project Cost ($) 3. Step 1 – Intake Calendar Days 4. Step 1 – Intake Business Days 5. Step 3 – Customer Dependencies Start Date 6. Step 3 – Customer Dependencies End Date 7. Step 3 – Customer Dependencies Calendar Days 8. Step 3 – Customer Dependencies Business Days 9. Step 5 – Customer Site Readiness End Date 10. Step 5 – Customer Site Readiness Calendar Days 11. Step 5 – Customer Site Readiness Business Days 12. R15/R16/R29/R45 Energization Reasoning for Exceeding Average / Maximum Energization Target 13. Location of Project Exceeding Maximum Energization Target **MPU Data Points:** 14. Main Panel Upgrade - Rescheduled Date (as needed) (Date) 15. Add'l Time from Initial Scheduled Date to Rescheduled Date (Cal. Days) 16. Add'l Time from Initial Scheduled Date to Rescheduled Date (Biz. Days)	• Refine systems for tracking Customer-Controlled steps • Refine systems for tracking MPU delays
Reliability of Data	**Tariff / MPU:** Insufficient	• Challenges reporting accurate end-to-end cycle timeline • Challenges separating IOU- and Customer-Controlled timelines • Challenges with project capacity • Inaccurate project cost data • Misaligned ESJ definitions • Lack of ability to accurately indication of whether a project triggered an upstream capacity project • Lack of ability to track delays • Lack of ability to ID outliers	• Improve tracking of Step 1 timelines • Improve tracking of IOU vs. Customer-Controlled timelines • Improve ability to identify capacity • Use CPUC ESJ definition • Provide accurate project cost data • Track delays adequately • Provide detail on outlier tracking

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

SCE Sufficiency Details (1 of 2)

Overall Sufficiency Rating: Insufficient

Availability: **Does not** meet availability criteria for compliance **and** contextual data

Reliability: **Does not** meet reliability criteria

Sufficiency Criteria & Determination		Missing Data Fields / Challenges	Suggestions for Improvement
Availability (Compliance Data)	**Tariff:** Sufficient (0%)	**0 (out of 27) fields have data points for fewer than 95% of projects**	N/A
	MPU: Sufficient (0%)		
Availability (Contextual Data)	**Tariff:** Insufficient (50%)	**50 (out of 90) fields have data points for fewer than 75% of projects, which include:** **Tariff Data Points:** 1. Authority Having Jurisdiction (AHJ) for Permitting (Location) 2. Site Capacity at Time of Customer's Service Application (kW) 3. Total Site Capacity Requested (kW) 4. Add'l Capacity Installed for Load Deployment (As Applicable) (kW) 5. Capacity Request Category (<1MW; 1MW to 2MW>2MW) 6. Project Triggered for Upstream Capacity Project (Y / N) 7. When IOU IDs Need for Upstream Capacity Project and Alerts Customer of Need for Upstream Capacity Project (Date) 8. When IOU Completes Upstream Capacity Project (Date) 9. Time to Complete Upstream Capacity Project (Cal. Days) 10. Customer Desired Energization Date (Date) 11. Diff. from Customer Desired to Final Energization Date (Cal. Days) 12. Diff. from Customer Desired to Final Energization Date (Biz. Days) 13. Customer Install Add'l Capacity to Support Load Growth (Y / N) 14. When Customer Req. Design / Scope Change (Date) 15. When Customer Req. Design / Scope Change (Step) 16. Customer Cancelled/Delayed Project (As Needed) (Y / N) 17. Customer Installed Add'l Capacity for Associated Load Growth (Y / N) 18. Estimated Timing for When Customer Anticipates Add'l Capacity Necessary as Indicated on Customer's App. (Date) 19. Total Add'l Capacity for Necessary Upgrade as Listed on Customer's Application (kW) 20. If Full Energization of Applicant Site Not Feasible in Timely Manner, Explanation Whether Load Management / Flexible Service Options Were Installed / Utilized to Provide Applicant with Timely Service (Y / N) 21. Amount of Load Provided to Applicant Using Flexible Service Options (kW) 22. At Time Energization Provided, Remaining (or Total) Unserved Load Requested by Applicant (kW) 23. Estimate When Full Service Will be Provided to Applicant for Customers Using Flexible Service and/or Receiving Tiered Load Schedules (Date) 24. Total Cost to Complete All Energization Requests ($) 25. Total Staffing, Labor, and Material Cost ($) 26. Total Upstream Capacity Project Cost ($) 27. Project Costs for All IOU Equipment for Upstream Capacity Projects: R15, R16, R29/45 ($) 28. Project Costs for Anything Else IOU Covers (S) 29. Total Construction and Overhead Costs ($) 30. Customer Allowance ($)	• Identify fields that are not applicable and mark as "N/A" as opposed to blank or "Not Available" • Ensure in data points requiring "Y / N" that "No" is used instead of blank cells • Ensure in data points requiring a numeric value that "0" is used instead of blank cells • Continue to implement new and refine existing tracking systems like the BRP3
	MPU: Insufficient (61%)		

Metric Displayed % of data points missing

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.

SCE Sufficiency Details (2 of 2)

Overall Sufficiency Rating: Insufficient

Availability: Does not meet availability criteria for compliance **and** contextual data

Reliability: Does not meet reliability criteria

Metric Displayed % of data points missing →

Sufficiency Criteria & Determination		Missing Data Fields / Challenges		Suggestions for Improvement
Availability (Contextual Data)	**Tariff:** Insufficient (50%)	**50 (out of 90) fields have data points for fewer than 75% of projects, which include:** **Tariff Data Points (continued)** 31. Estimated Costs at Time of Design ($) 32. Actual Costs at Time of Energization ($) 33. Diff. of Estimated and Actual Costs at Time of Energization ($) 34. IOU Assigned Account / Project Manager for Initial Application (Within 10 Days) (Y / N) 35. Date of IOU Rejection of Application (Date) 36. IOU Reason for Rejection of Application (Reason) 37. Energization Steps Completed Concurrently (Step #(s)) 38. Time for Energization Steps Completed Concurrently (Cal. Days) 39. Time for Energization Steps Completed Concurrently (Biz. Days) 40. R15/R16/R29/R45 Energization Reasoning for Exceeding Average / Maximum Energization Target (Reasoning)	**MPU Data Points:** 41. Size of Installed MPU (Amps) 42. Reason Why Upgrade Was Cancelled and/or Rescheduled (Reason) 43. MPU - Rescheduled Date (As Needed) (Date) 44. Add'l Time from Initial Scheduled Date to Rescheduled Date (Cal. Days) 45. Add'l Time from Initial Scheduled Date to Rescheduled Date (Biz. Days) 46. Total Staffing, Labor, and Materials Cost ($) 47. Project Costs for Anything Else IOU Covers ($) 48. Total Construction / Overhead Costs ($) 49. Actual Costs at Time of Energization ($) 50. Dif. of Estimated and Actual Costs at Time of Energization ($)	• Identify fields that are not applicable and mark as "N/A" as opposed to blank or "Not Available" • Ensure in data points requiring "Y / N" that "No" is used instead of blank cells • Ensure in data points requiring a numeric value that "0" is used instead of blank cells • Continue to implement new and refine existing tracking systems like the BRP3
	MPU: Insufficient (61%)			
Reliability of Data	**Tariff / MPU:** Insufficient	• Challenges separating IOU- and Customer-Controlled timelines • Challenges with project capacity • Misaligned ESJ definitions	• Lack of ability to accurately indicate whether project triggered an upstream capacity project • Lack of ability to track delays • Lack of ability to identify outliers	• Improve tracking of IOU vs. Customer-Controlled timelines • Track outliers • Use CPUC ESJ definition • Improve ability to identify capacity • Track delays adequately

Disclaimer: This preliminary analysis is descriptive in nature and summarizes patterns observed in the available data. It does not employ regression analysis, confidence intervals, hypothesis testing, or other inferential statistical methods. Accordingly, the results should be interpreted as descriptive observations and not as evidence of causation or statistical significance.