FILED
04/01/26
04:59 PM
R2401018

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Establish Energization Timelines.	Rulemaking 24-01-018 (Filed January 25, 2024)

PACIFIC GAS AND ELECTRIC COMPANY'S (U 93 E) BIANNUAL ENERGIZATION REPORT PURSUANT TO DECISION 24-09-020

PUBLIC VERSION
(ATTACHMENT A TO REPORT CONTAINS CONFIDENTIAL INFORMATION)

JEFFREY K. ASAY

Pacific Gas and Electric Company
Law Department, 19th Floor
300 Lakeside Drive, Suite 210
Oakland, CA 94612
Telephone: (510) 225-8996
Facsimile: (510) 898-9696
E-Mail: Jeffrey.Asay@pge.com

Attorney for
PACIFIC GAS AND ELECTRIC COMPANY

Dated: March 31, 2026

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Establish Energization Timelines.	Rulemaking 24-01-018 (Filed January 25, 2024)

PACIFIC GAS AND ELECTRIC COMPANY'S (U 93 E) BIANNUAL ENERGIZATION REPORT PURSUANT TO DECISION 24-09-020

PUBLIC VERSION
(ATTACHMENT A TO REPORT CONTAINS CONFIDENTIAL INFORMATION)

Pursuant to Ordering Paragraph 18 of Decision ("D.") 24-09-020, issued September 17, 2024, Pacific Gas and Electric Company ("PG&E") hereby files the public version of its third Biannual Energization Report ("Report"), dated March 31, 2026.

PG&E filed a concurrent filing of the confidential version of the Report. Attachment A to the Report (PG&E Biannual Energization Data Spreadsheet) contains confidential information as set forth in PG&E's Motion for Leave to File Under Seal, dated March 31, 2026.

Respectfully Submitted,

PACIFIC GAS AND ELECTRIC COMPANY

By: */s/* Jeffrey K. Asay
JEFFREY K. ASAY

Pacific Gas and Electric Company
Law Department, 19th Floor
300 Lakeside Drive, Suite 210
Oakland, CA 94612
Telephone: (510) 225-8996
Facsimile: (510) 898-9696
E-Mail: Jeffrey.Asay@pge.com

Attorney for
PACIFIC GAS AND ELECTRIC COMPANY

Dated: March 31, 2026

PACIFIC GAS AND ELECTRIC COMPANY

BIANNUAL ENERGIZATION REPORT

PURSUANT TO DECISION 24-09-020

March 31, 2026

Table of Contents

Biannual Energization Report

1. Summary of Energization Report

A. Background and Context

On September 17, 2024, the California Public Utilities Commission (Commission or CPUC) adopted Decision (D.) 24-09-020, *Decision Establishing Target Energization Time Periods and Procedure for Customers to Report Energization Delays* (the Decision). Ordering Paragraph (OP) 18 directs the utilities to each file and serve biannual energization reports to the CPUC every six months to demonstrate compliance with the statewide targets outlined in Section 7 (*Energization Targets*) of the Decision.[1] In accordance with the Decision, this report uses the Energization Data Reporting Template that was developed in consultation with Energy Division and stakeholders and subsequently approved in Joint Investor-Owned Utility (IOU) Advice Letter 7430-E, et al., and Joint IOU Advice Letter 7430-E-A, et al.[2] Pacific Gas and Electric Company (PG&E) appreciates the opportunity to provide data as required by the Decision, which established target energization time periods and procedures for customers to report energization delays. PG&E acknowledges the importance of these measures in improving service delivery and customer satisfaction. Below, PG&E provides comments and data in response to the Decision.

PG&E recognizes the legislative intent behind Senate Bill 410 and Assembly Bill 50 to enhance accountability and transparency in the energization process. PG&E is committed to meeting the established targets and improving its processes to better serve customers.

- **Data Reporting Period:** New Business Orders with Complete Applications from January 31, 2023, to December 31, 2025.
- **Reporting Data Compiled as of:** February 26, 2026.

B. Report Structure

[1] D.24-09-020, OP 18.
[2] https://www.pge.com/tariffs/assets/pdf/adviceletter/ELEC_7430-E.pdf and https://www.pge.com/tariffs/assets/pdf/adviceletter/ELEC_7430-E-A.pdf.

OP 19 of the Decision requires all biannual energization reports to reflect data for all customer energization requests submitted as of January 31, 2023, "to the best of [the IOUs'] abilities."

PG&E's reporting has been divided into three distinct sections, for both the Tariff and Main Panel Upgrade templates, to enhance the readability and comprehension of the report. These sections are defined as:

- **In-Progress Projects*:** New business applications submitted from 01/31/23-12/31/25 and not yet energized.
- **Energized Projects:** New business applications submitted from 01/31/23-12/31/25 and energized through 12/31/25.
- **Cancelled/Rejected Applications:** New business applications submitted from 01/31/23-12/31/25 that were cancelled or rejected.

**Projects energized between 12/31/25 and the reporting refresh date of 02/26/26 are not counted as energized and have been moved back to the 'In-Progress Projects' list to ensure alignment between PG&E's reporting and that of the other IOUs.*

C. Energization Targets

PG&E is dedicated to achieving the average and maximum energization targets set forth in the Decision. The average energization targets include the time the IOU takes to complete the steps of the energization processes that are fully within its control.[3] Below are the average energization timelines PG&E achieved for Energized Projects. The following energization timelines exclude In-Progress Projects and Cancelled/Rejected Applications. Projects used to calculate the energization timelines are based on 48% of applications submitted and energized between 01/31/23-12/31/25.

- **Electric Rule 15**
    - PG&E has no Rule 15-only projects to report for this reporting period, as such projects are uncommon.
- **Electric Rule 16***
    - Total Projects with Applications Submitted from 01/31/23-12/31/25 and Energized Through 12/31/25: 10,326

[3] D.24-09-020, Finding of Fact (FOF) 2.

- Average PG&E Energization Calendar Days: 123
- Average End-to-End Energization Cycle Calendar Days: 313
- Percent of Energized Projects Under Maximum Energization Target from 01/01/25 to 12/31/25: 97.1%

- **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%

D. Upstream Capacity Upgrades

The figures below are based on upstream capacity projects completed from 01/31/23 through 12/31/25. The timelines below reflect all of PG&E's upstream capacity work within the project types listed.

- **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.

There were 23 projects that required upstream capacity upgrades that are now energized. The average time between their upstream capacity upgrades being identified, and their energization dates was 492 days. This is below the targets for circuit (684 days) and substation upgrades (1,021 days).

**Average days and percentage under maximum are based only on projects energized within the designated reporting window.*

Main Panel Upgrade projects are captured under annual blanket orders at PG&E, making it difficult to delineate IOU and customer time at the project level, see* ***Section 3C. Additional Reporting Disclaimers - Main Panel Upgrade (MPU) Projects *for more details.*

****New business projects may have multiple associated upstream capacity projects dependent on scope and project size. Dates referenced in PG&E's project-level data represent the start of the first upstream capacity project and the date of the last completed upstream capacity project. PG&E began maintaining complete historic logs of upstream capacity projects to downstream work as of 2025. Previously, these projects were tracked on a project-by-project basis with records cleared at completion.*

E. Trending and Overall Report Findings

PG&E remains committed to providing comprehensive insights into its performance and progress. Below is a summary of key trends, overall findings, and important data considerations.

Energization Timelines:

Between January 2023 and December 2025, PG&E observed relative stability in the number of days required to energize new business projects. PG&E-controlled steps saw a modest increase in duration early in the reporting window, which then leveled off by June 2025 and slightly decreased, leading up to December 2025. PG&E continues to

prioritize enhanced customer communication, process improvements, and efficient project execution to reduce the overall duration of IOU-controlled energization Steps (as defined in the Decision). To achieve this mission, continued funding is paramount. The additional funding via SB410 has been critical in stabilizing overall energization timelines at PG&E. This SB410 funding expires at the end of 2026. To continue this stabilization and shift toward a decrease in overall end-to-end energization timelines, PG&E will need sufficient funding to meet compliance targets and fulfill the steadily rising demand for energization and electrification in California.

Data Enhancements and Impact:

Since PG&E's first energization report in March 2025, it has made various efforts to continually improve the accuracy of reporting. These updates include increasing the accuracy of data collected, better categorization of new energization projects, and various process improvements.

Notable reporting improvements include the following:

- **Data Not Applicable (N/A) to a Project**: Under Step 6 (IOU Site Readiness) and Step 8 (Energization), a new data classification, **"N/A,"** was introduced. "N/A" means "*not applicable*" and is used when a project does not require a task associated with a particular Step. Examples include: the site did not require a field inspection; the site did not require a meter to be installed.
- **IOU Site Readiness:** IOU Site Readiness is measured from the requested inspection date to the first available inspection date. Total energized project count is 14,032 and of this population, 1,373 have available dates, 8,384 do not require inspection and are therefore reported as "N/A" (not applicable), 4,255 were submitted prior to the launch of inspection tracking enhancements and are reported as "Data Unavailable". Only 20 inspection-eligible projects (< 1%) of the total energized project population have missing inspection dates required to measure IOU Site Readiness. For additional details, please refer to ***Section 3C. Additional Reporting Disclaimers – Customer Site Readiness and IOU Site Readiness Data.***
- **Meter Set Data:** PG&E has made considerable improvements to its meter set data and its ability to identify when a new meter is not required for a project. This

has resulted in an increase in meter set data availability from 47% in the September 2025 report to 83%. Service Energization is measured from construction complete to meter set. This data is available for 83% (11,589 of 14,032) of completed projects in the reporting period. PG&E anticipates providing a more robust Service Energization data set in future biannual reports as it continues to refine its processes. For additional details, please refer to ***Section 3C. Additional Reporting Disclaimers – Meter Set Data.***

- **Addition of Sub-Project Orders:** PG&E expanded the scope of projects to include electric orders that fall under a tariff rule with an applicable energization timeline from the Decision but are structured as sub-projects within a larger parent order. This applies in situations such as mixed-commodity service requests (gas and electric), new residential subdivisions where individual lots have unique orders, mixed Maintenance Activity Type (MAT) code projects, and similar variations. This update produced a roughly 9% increase in the total order population.

Commitment to Continuous Improvement:

PG&E remains focused on innovation and continuous improvement. Future plans will require continued investments in technology, process enhancements, and customer engagement initiatives. This will ensure that PG&E can meet and exceed regulatory expectations.

F. IOU Time & Customer Time Methodology

PG&E employs the following methodology to measure IOU Time and Customer Time. This approach ensures accurate accounting and delineation of time across each of the energization steps.

Step Responsibility:

- PG&E Time is attributed to operational Steps 2*, 4, 6, 7, and 8.
- Customer Time is limited to Steps 1, 3, and 5.

PG&E Methodology Principles:

1. Customer Overlap in Steps: When a customer Step coincides with a PG&E Step (e.g., a customer-related process occurs simultaneously with a PG&E process), this overlapping time is exclusively categorized as Customer Time and does not count as PG&E Time. This ensures that shared time is not double counted. This approach also enables PG&E to work concurrently with the customer, helping to accelerate cycle times and ensure consistent tracking through shared steps.
2. Concurrent PG&E Step Work: In cases where PG&E undertakes multiple overlapping Steps concurrently (e.g., two PG&E processes happen at the same time), those days are not counted multiple times. Instead, they are aggregated as a single day within the total of PG&E Time. This prevents inflating time metrics and maintains the integrity of the report.
3. Agency Time: When an agency/permitting time coincides with a PG&E Step, the overlapping time is excluded from total PG&E Time because agency activities are outside the utility's sole control.

See section **3C. Additional Reporting Disclaimers - Applicant Based Designs for context around Applicant Based Designs.*

This methodology ensures a clear distinction between PG&E Time and Customer Time, fostering transparency and consistency in the measurement and reporting of time allocation.

2. Required Supplemental Reporting

A. ESJ (Environmental & Social Justice) Barriers and Findings

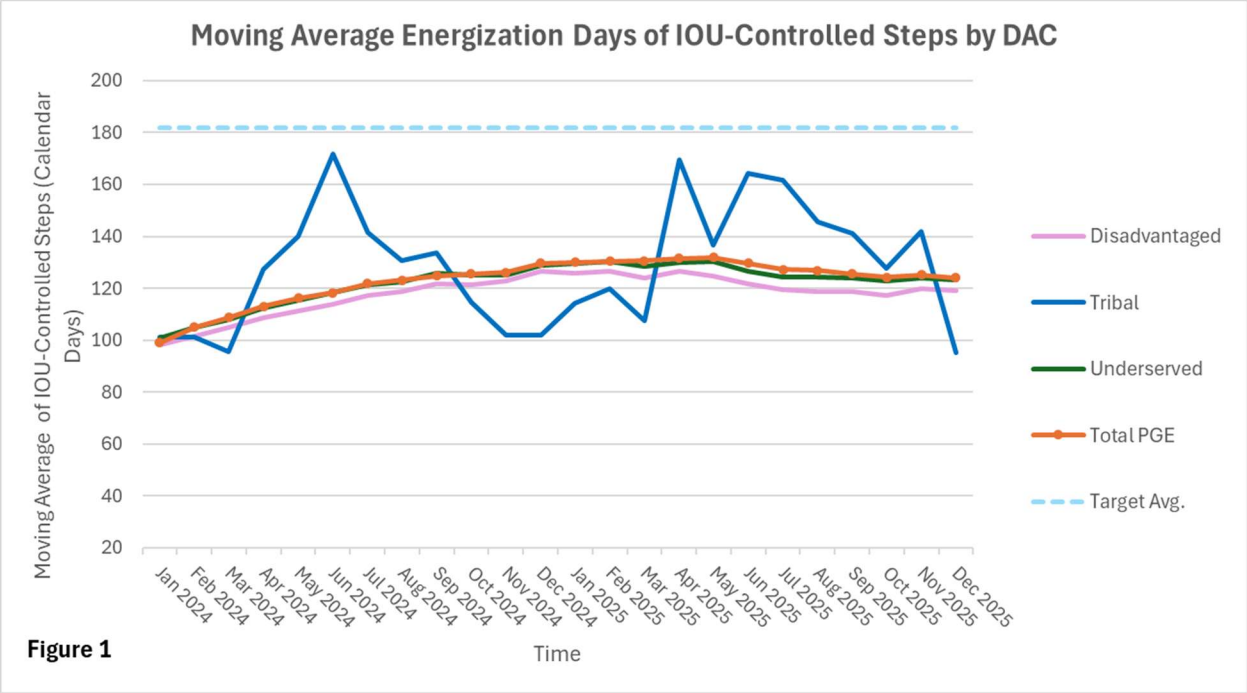


Figure 1: Monthly Energization Days (6-Month Moving Average) with IOU-Controlled Steps for Disadvantaged Community, Tribal Community, Underserved Community, and Total PG&E vs. Target Average (Jan 2024 – Dec 2025)

Figure 1 displays the six-month moving average of the number of days in IOU-Controlled Steps for energization projects in Disadvantaged, Tribal, and Underserved Communities, along with same for all PG&E energization projects, compared to the target average of 182 days. The use of a six-month moving average smooths short-term fluctuations. The last 6 months of 2023 have been removed from figure 1 because the typical energization lifecycle of a job may not be fully accounted for and could skew overall trending results. Large fluctuations in the trend of Tribal energization days are due to the small project population (33 projects).

B. Overall Costs

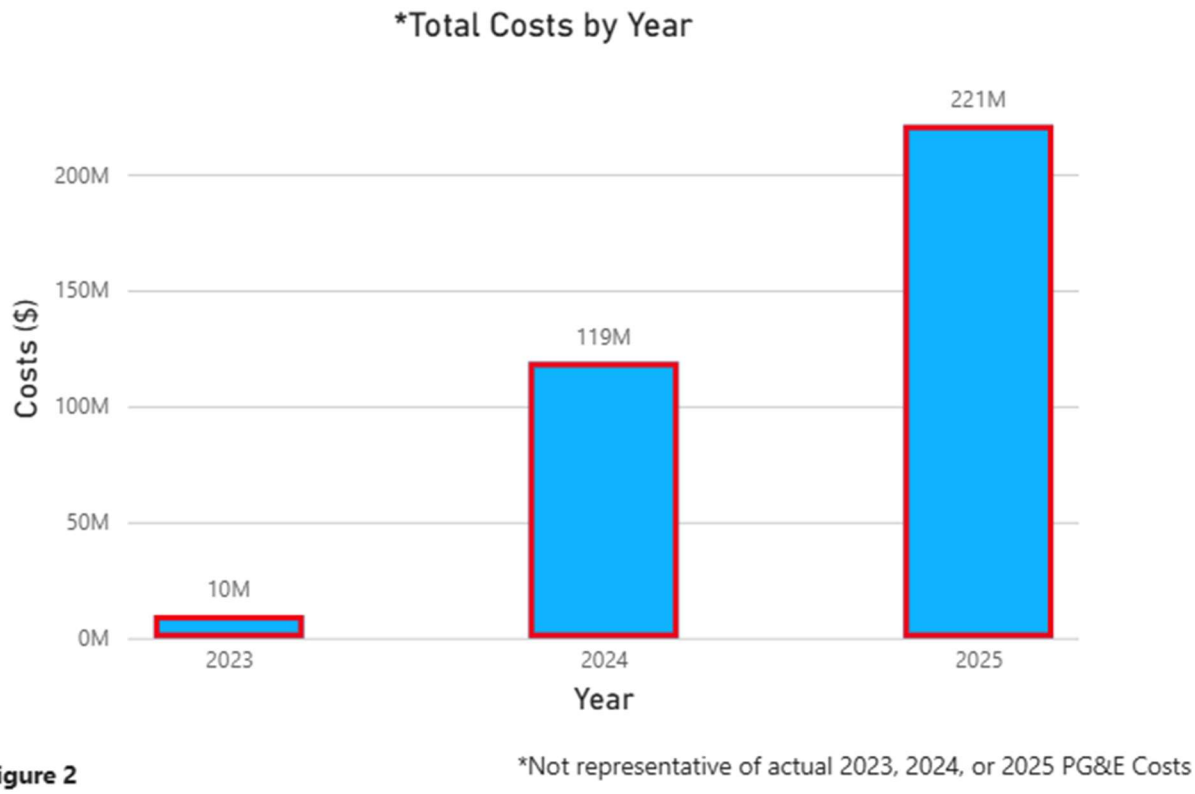


Figure 2

Figure 2: Annual Costs of Projects Energized in 2023, 2024, and 2025

Figure 2** illustrates the total cost of all projects energized in each of 2023, 2024 and 2025, reflecting expenses incurred as of the time of energization. As the reporting window expands, more projects are energized, resulting in increased costs year-over-year. These figures do not correspond to PG&E's actual new business project expenditures for the respective years. Costs are presented as they stood at the time of each project's energization, which often excludes expenditures reconciled during financial closure, which can occur up to one year after energization. Additionally, customer payments made to PG&E at project initiation may result in negative total project costs in our provided datasets. A negative project accounting balance in the form of credit from the customer may not be fully reconciled until financial closure, which rarely occurs at the time of energization. For additional details, please refer to ***Section 3C. Additional Reporting Disclaimers - Costs at Time of Energization.***

*** Disclaimer:** Trending presented in previous submissions represented the total costs incurred over time and did not reflect costs at the time of energization.*

C. End-Use Category Review

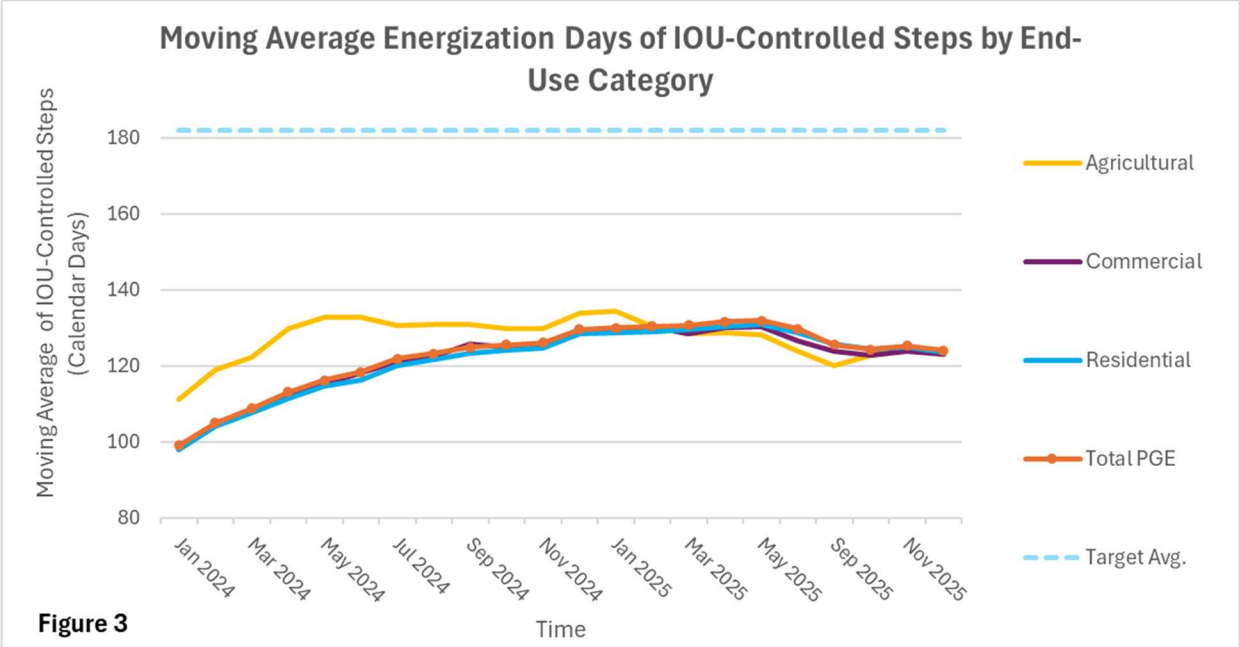


Figure 3: Monthly Energization Days (6-Month Moving Average) for IOU Controlled Steps for Residential, Commercial, and Agricultural, and Total PG&E vs. Target Average (Jan 2024 – Dec 2025)

Figure 3 illustrates the six-month moving average of the number of days in IOU-Controlled Steps for energization projects across the three customer classes (Residential, Commercial, and Agricultural). Relocation/Rearrangement/Upgrade was removed from our reporting to ensure alignment with the other IOUs. For additional details, please refer to ***Section 3C. Additional Reporting Disclaimers - Additional Project Category "Relocation/Rearrangement/Upgrade".*** Customer Classes are benchmarked against the average for all PG&E projects and the 182-day target. The application of a six-month moving average enhances trend visibility by reducing short-term fluctuations. The last 6 months of 2023 have been removed from Figure 3 because the typical energization lifecycle of a project may not be fully accounted for and could skew overall trending results.

3. Reporting Gaps

A. Data Gaps and Initiatives

PG&E is committed to transparency and accountability in its reporting processes. Below PG&E has provided a reference table and detailed narrative explanation of information collected in its existing systems that does not currently meet the criteria adopted in Decision 24-09-020 and as such has been deemed non-reportable for this submission. To supplement PG&E's September 2025 report, this table has been updated to reflect previously non-reportable fields as "Completed" when applicable.

Non-Reportable Table: *(See table below)*

Description Reference	Data Point	Delay Cause	Est. Date Available	Est. Reporting Date
1	**Total Site Capacity at Time of Customer's Application for Service (kW) -9I-**		Completed	Completed
2	**Additional Capacity (kW) installed for future electric load deployment (as applicable) -11K-**	Data not available; PG&E reviews and generally provides the amount of service request independent of future need.	Unknown	Unknown
3	**Project triggered for upstream capacity project (Yes/No) -13M-**		Completed	Completed
3	**Date IOU identifies the need for an upstream capacity project and alerts customer of need for upstream capacity project (Date) -14N-**		Completed	Completed

3	**Date IOU completes the upstream capacity project (Date) -15O-**		Completed	Completed
3	**Time to complete upstream capacity project (Calendar Days) -16P-**		Completed	Completed
4a	**Did customer install additional capacity to support future load growth? (Yes or No) -20T-**	Data not available; PG&E reviews and generally provides the amount of service requested independent of future need.	Unknown	Unknown
4b	**Customer elected to install additional capacity to anticipate associated future load growth as indicated on customer's application (Yes or No) -24X-**	Data not available; PG&E reviews and generally provides the amount of service requested independent of future need.	Unknown	Unknown
5a	**Identify when in the energization process the customer requested a change in design or scope (Energization Step) -22V-**	Tracking enhancements were rolled out in December 2025, training is underway to enable full utilization.	07/30/26	09/30/26
5b	**Customer cancelled/delayed project (as needed) (Yes or No) -23W-**	Customer cancelled projects are reported on a separate tab within the report; customer "delay" requires further exploration.	Unknown	Unknown
6a	**Estimated timing for when customer anticipates additional capacity necessary as indicated on customer's application (Date)**	Data not available; PG&E reviews and generally provides the amount of service requested independent of future need.	Unknown	Unknown

	-25Y-			
6b	**Total additional kW capacity for the necessary future upgrade as listed on customer's application (kW)** **-26z-**	Data not available; PG&E reviews and generally provides the amount of service requested independent of future need.	Unknown	Unknown
7	**If full energization of applicant site not feasible in a timely manner, explanation whether load management/flexible service options were installed/utilized to provide applicant with timely service** **-27AA-**		Completed	Completed
7	**Amount of load (kW) provided to applicant using flexible service options** **(kW)** **-28AB-**		Completed	Completed
7	**At the time energization provided, remaining (or total) unserved load requested by the applicant** **(kW)** **-29AC-**		Completed	Completed
7	**Estimate when full service will be provided to the applicant for customers using flexible service and/or receiving tiered load schedules** **(Date)** **-30AD-**		Completed	Completed

8	**For R15/R16 tariffs, the time the project was delayed due to customer requested change in design or change in project scope (Calendar Days)** **-37AK-**	Pending training and full utilization of processes related to 5a.	07/30/26	09/30/26
9	**Project Costs ($$$) for all IOU equipment for upstream capacity projects: Electric Rule 15, Electric Rule 16, and Electric Rule 29/45** **-41AO-**		Completed	Completed
10	**R15/R16/R29 Energization Reasoning as to why exceeded average/maximum Energization Target (Reasoning)** **-95CQ-**	Currently able to report reason identification for projects exceeding maximum allowable days. Reason is determined based on steps exceeding the internal PG&E suggested average by 1 or more days.	Unknown	Unknown
11	**Location of project exceeding the maximum energization target:** **Location (circuit level)** **-96CR-**		Completed	Completed
12	**IOU reason for rejection of application (Reason)** **-51AY-**		Completed	Completed
13	**Amount of load (kW) provided to applicant using flexible service options (kW)** **-28AB-**		Completed	Completed
14	**Timing for identifying need for R15/16/29/45 upgrade (Calendar Days)** **-31AE-**	Pending development of an upgrade identification tracking system.	12/31/26	03/31/27

B. Description Reference

- **1- Total Site Capacity at Time of Customer's Application for Service:** PG&E now leverages the General Needs Assessment (GNA) to provide available capacity at the feeder level.
- **2- Additional Capacity installed for future electric load deployment:** In adherence with CPUC regulations and programs, PG&E only installs capacity based on projected demand and regulatory guidelines to ensure grid reliability and efficiency. PG&E is focused on ensuring sufficient capacity to meet peak demand plus a reserve margin and does not typically install excess capacity.
- **3- Mapping of New Business Order to Distribution Upstream Capacity (DUC) Project:**
  As of March 2025, PG&E maintains records for all upstream capacity projects and the relevant mapping to the downstream new business projects. PG&E will continue to maintain a relational table which can map upstream projects from the downstream project which it supports for capacity constraint management. This new relationship mapping is reflected in our project-level reporting.
- **4a- Customer installation of additional capacity to support future load growth:** PG&E is focused on ensuring sufficient capacity to meet peak demand plus a reserve margin and does not typically allow customers to install excess capacity.
- **4b- Customer elected to install additional capacity to anticipate associated future load growth as indicated on customer's application:** PG&E does not support additional load requests on closed or ongoing orders; customers are asked to submit a new application if additional future load is needed.
- **5a- Identify when in the energization process the customer requested a change in design or scope:** Tracking systems for a customer requested scope/design change have been built out and were deployed in December 2025 but are not yet fully implemented. Pending training and adoption of processes related to customer requested scope/design change. PG&E expects to have data available in the upcoming September 2026 report.
- **5b**- **Customer cancelled/delayed project (as needed):** Customer cancelled projects are included under the Cancelled projects reporting template separate

from the primary Energized and In-Progress work templates. The majority of projects experience some form of a customer-based delay at some point in the energization process. Although these delays are common, PG&E does not ask customers to provide a cause for their own delay.

- **6a- Estimated timing for when customer anticipates additional capacity necessary as indicated on customer's application:** PG&E's current intake application does not support additional future load requests. It only captures the total load required. For additional future loads, the customer must submit new or additional applications.
- **6b- Total additional kW capacity for the necessary future upgrade as listed on customer's application:** Similar to 6a, PG&E's current application process does not support additional future load requests. It only captures the total load required. For additional future loads, the customer must submit new or additional applications.
- **7- Load management/flexible service options:** The current process for customers who receive a Load Limit Letter from PG&E (in which the customer is informed that their full load cannot be served without grid upgrades) is for PG&E to also provide a brief overview of the Flex Connect Pilot with instructions on how to contact the team to determine eligibility. The load values shown in "Flexible Service and Receiving Tiered Load Schedules" are not final. Load limits are added in phases and removed once the related upstream project is finished. The numbers reported only include projects that currently have active load limits. PG&E is developing a platform to track historic load-limit information.
- **8- For R15/R16 tariffs, the time the project was delayed due to customer requested change in design or change in project scope:** Pending training and adoption of processes related to item 5a above. Tracking systems for a customer requested scope/design change have been built but are not yet fully implemented. We expect to have data available in the upcoming September 2026 report.
- **9- Project Costs ($$$) for all IOU equipment for upstream capacity projects: Electric Rule 15, Electric Rule 16, and Electric Rule 29/45:** Upstream equipment costs for upstream capacity are preliminary and do not represent total project costs. These figures include only a portion of overall expenditures and will

be refined as projects reach fiscal close. Major items such as transformers and pad mounts are captured separately due to specialized procurement processes. These costs reflect only coded materials in the accounting system, while larger one-time items like transformers are not coded.

- **10- R15/R16/R29 Energization Reasoning as to why exceeded average/maximum Energization Target:** PG&E's solution for this field is to identify Steps that exceed our suggested internal average Step timelines. PG&E continues to work with the other IOUs on a practical and systematic approach to energization reasoning that can be implemented at scale. It is not viable at this point to identify reasons for every project exceeding the average recommended number of days on a per-project basis.
- **11- Location of project exceeding the maximum energization target:** PG&E is now providing the circuit-level location information for projects that exceeded the maximum energization target.
- **12- IOU reason for rejection of application:** Application cancellation reason is recordable in PG&E's primary reference system for project management. This field is mandatory when cancelling applications and is currently accessible and used by project representatives during the application closure process.
- **13- Amount of load (kW) provided to applicants using flexible service options:** PG&E has completed an internal data improvement initiative to track flexible service option loads. With this enhancement, PG&E is able to provide related results.
- **14- Time for identifying need for R15/16/29/45 upgrade:** PG&E is actively working to identify a reliable method for tagging projects that experience an upgrade to an R15/16/29/45 project type.

C. Additional Reporting Disclaimers

- **Disadvantage Community (DAC), Tribal Community, and Underserved Communities:** Our DAC reporting represents a statistically valid sample of the overall population of new applications within the required reporting period. Projects were classified using coordinates and addresses when available, and by city and ZIP code as alternative matching criteria, allowing us to categorize 99% of all projects.

- **Underserved Community Definition:** 1) Census tracts with median household incomes at or below 80 percent of the statewide median income; or 2) with a median household income at or below the threshold designated as low income by the Department of Housing and Community Development's list of state income limits adopted under Health and Safety Code Section 50093.

- **Costs at Time of Energization:** As required, PG&E has provided costs incurred at the time of energization. It is important to clarify that these costs do not fully capture the true costs associated with a completed new business project. It is critical to note that additional costs and internal accounting typically occur after the conclusion of the energization process, which is the final meter set. These costs could include worksite restoration, contracted labor expenses, delayed billing for internal labor, equipment expenses, and other costs.

  Because of internal accounting procedures, there are also frequent occurrences where a negative total value for project costs is reported at the time of energization. This occurs because payments by the customer to PG&E in the form of Contributions in Aid of Construction (CIAC) happen at the start of a project. This creates a negative project balance that is reconciled over the entire project lifecycle. Because projects are often not fully reconciled at time of energization, it is common to see negative project costs as of the energization date.

- **Total Staffing, Labor, and Material Cost:** SB 410 addresses the staffing needs of electrical corporations to ensure timely grid connections and energization of new facilities and housing developments. PG&E evaluates qualified staffing levels to ensure we have the necessary workforce to support these initiatives. PG&E has attached its corrected Public Utilities (PU) Code § 935 Report, submitted in PG&E's 2027 GRC (A.25-05-009)[4] as **Appendix 1** to this report. The attached PU Code § 935 Report provides details on the following: PG&E's workforce planning

[4] A.25-05-009, Exhibit PG&E-4, Chapter 2, Attachment B, Public Utilities Code Section 935 Report. During the 2027 GRC discovery process, PG&E discovered an error in the underlying calculation used to scale the workforce commensurate with its GRC forecast as presented in the Section 935 Report. On November 10, 2025, PG&E submitted an errata in the 2027 GRC, including a corrected version of the Section 935 Report. The version of the Section 935 Report provided as Appendix 1 to this 2026 Biannual Energization Report is the updated, clean version that incorporates the changes of the filed errata.

and strategy, current staffing and adequacy to meet demand, and future staffing analysis.

- **Customer Allowances:** PG&E customers may be eligible for allowances related to new electrical utility construction as set forth by CPUC regulations. Eligible customers may select one of two options: a 10-year fully refundable option or a 50% upfront discount option.
- **Customer Site Readiness and IOU Site Readiness Data:** PG&E's internal systems initially did not track all required fields necessary for energization timeline compliance. Because of this identified gap, PG&E has invested in a new system to comply with CPUC reporting requirements. PG&E launched a new Salesforce tool in March 2025 to address several previously missing data elements. Inspection dates prior to the launch of this tool in March 2025 will not be available and cannot be recovered and are therefore listed as "Data Unavailable". PG&E can now measure the time between an initial inspection request and the first available inspection date. Salesforce inspection data is only available for a subset of eligible projects, and this dataset will continue to expand over time.
- **Meter Set Data:** The current dataset captures Service Energization dates for 9,473 projects from a total of 14,032 energized projects or 68% of energized projects. 2,116 or 15% of projects will not require a meter set as an energized meter was already present. Energization dates and day count fields for these projects will be reported as "N/A" (not applicable). Due to limitations in current tracking mechanisms, we do not have existing meter data for 2,443 projects or 17% of energized work. We anticipate some revisions to meter set dates based on meter data availability. As we continue to review and refine our available internal meter set data, we plan to be able to provide more robust tracking of the Service Energization phase. For projects where a meter set date was not retrievable, we have substituted the construction complete date to signal project completion.
- **Additional Project Category "Relocation/Rearrangement/Upgrade":** This is no longer treated as a unique project category/customer class. We recategorized projects previously identified as "Relocation/Rearrangement/Upgrade" to the

standard IOU customer class groupings of Agricultural, Residential, and Commercial to align with the joint IOUs.

- **Main Panel Upgrade (MPU) Projects:** MPU projects are reported separately from the standard tariff projects because they do not follow the standard 8-Step energization process. Currently PG&E captures these projects under annual blanket orders. PG&E is working on increasing the number of MPU reportable fields for the September 2026 report. Reportable fields "Timing to Complete Main Panel Upgrade (Calendar Days)" and "Timing to Complete Main Panel Upgrade (Business Days)" have been updated to capture the period from when the customer confirms the project is ready to proceed and be scheduled, through to the project's final completion. This update allows us to track IOU specific time to complete a Main Panel Upgrade project. "Timing to Complete Main Panel Upgrade" (calendar and business days) have now been updated to represent only the days within PG&E's control i.e., post customer intake. This change was made to better align[5] with the Decision to track IOU energization timelines.

  As described above, PG&E captures MPU projects under annual blanket orders. Annual blanket orders for the purposes of OIR reporting are used only in association with Main Panel Upgrade projects. Annual PM (Plant Maintenance) orders are composed of simple work; these orders are created for work that does not have to be designed or require a PG&E construction crew.

- **Applicant Based Designs:** Step 2: Design and Engineering is considered IOU-responsible time except for instances where the applicant elects to design their own project, in those instances all Design and Engineering time is associated with the customer. PG&E only accounts for IOU time where the utility must conduct activities to move the project forward. In lieu of tracking time to design the project, PG&E tracks the time to validate and approve the applicant designs. PG&E continues to refine our Applicant Based Design logic to get the most accurate representation of utility and customer time when an applicant completes the design process independently.

[5] D.24-09-020 FOF 11, ORDER 2, and 7.4 Average and Maximum Targets for Other Energization Requests.

- **Upstream Capacity and Load limiting:** Prior to March 2025, PG&E did not maintain historic mapping of upstream capacity projects to the downstream new business projects impacted. As referenced above in ***Section 3A. Data Gaps and Initiatives*** under item **3a**, PG&E now maintains a historical record of past completed upstream capacity projects that are mapped to a downstream project. A downstream project may be dependent on multiple upstream projects to provide the full requested load. In addition, projects can be broken down based on the project type as the geographic location (multiple circuits or regions). Upstream capacity projects are also frequently tied to multiple downstream projects, making the maintenance of project mapping challenging and constantly evolving.

    - At this time, we report on all active upstream projects that were triggered by a new business order post March 2025. Please note that:
        - Days reported in ***Section 1D. Upstream Capacity Upgrades*** are based on time from initiation to completion of upstream capacity upgrade projects completed in 2023-2025.
        - Upstream capacity upgrade costs for completed projects cannot be accurately associated with downstream work. PG&E does provide separate and robust reporting on capacity projects with aggregate project costs in separate capacity specific CPUC filings.

    PG&E will make all efforts to effectively energize all customer requests as quickly as possible. If full capacity is not available on the customer requested date, PG&E will notify customers via a Load Limit Letter that their request is subject to temporary static load limits as a condition of initial energization until capacity upgrades are completed.

    PG&E does not utilize a formal contract or bilateral agreement specific to customers taking service under a static or time-based load limit. Instead, PG&E issues a non-contractual notification letter, referred to as a Load Limit Letter, which outlines the interim service conditions under which a customer may receive limited electric service prior to the completion of necessary capacity upgrades. For this reason, the capacity listed under, “Amount of load (kW) provided to applicant using flexible service options (kW)” and "At the time energization

provided, remaining (or total), unserved load requested by the applicant (kW)", are a reflection of the lowest capacity allotted to the customer. Additionally, "Estimate when full service will be provided to the applicant for customers using flexible service and/or receiving tiered load schedules (Date)" refers to the year the upstream capacity project is estimated to be completed.

D. Outlier Data

PG&E is committed to providing transparent reporting on the removal of any outlier data and the reasoning for their exclusion. This ensures the integrity and accuracy of our data analysis and reporting processes. PG&E identifies and excludes specific project types and data anomalies from energization aggregate reporting to ensure accuracy and consistency. All outliers are included in the project level reporting but are excluded from aggregate reporting, these outlier definitions only apply to general tariff projects.

- **Date Sequence Errors:**
    - Any project Step where the end date of that Step precedes the start date of that Step.
    - Where any date occurs after the energization date or before the application start date.
- **Incomplete Status Verification:** Projects marked as "complete" but missing construction or energization dates, preventing confirmation of closure. Without these dates, PG&E cannot confirm whether the projects are genuinely closed.

In the 'Tariff – Energized' tab of the Biannual Energization Data Spreadsheet (**Attachment A**), PG&E has included 1025 energized projects with date sequence errors and 51 energization projects with incomplete status verification. These projects have been excluded from the statistics reported in the 'Aggregate Summary' tab. To identify outliers included in the Energization Data Reporting Spreadsheet, please refer to the "Outlier" column in each tariff reporting tab.

E. Exclusions

Streetlights: Streetlights are categorized under Maintenance Activity Type 16O at PG&E. Per agreement with the joint IOU's in California, work involving streetlights has been excluded from this report.

WRO: Work Requested by Others (WRO) is only included in our reporting when it is in direct support of new business energization projects, and all other WRO work that does not directly contribute to customer energization is excluded.

4. Data & Reporting Insights

A. Launched and Future Enhancements Overview

PG&E is committed to continuous improvement and transparency in our energization processes. Below is an update on launched and planned future enhancements:

Launched Enhancements:

- **Customer Communication Automation**:
  Automated emails now deployed across *Your Projects Customer Portal* and *Salesforce*, including welcome letters, cancellation notices, approval/rejection notifications, and CPUC escalation links.
- **Application Intake Improvements**:
  Enhancements include automated cancellation workflows, Pass/Fail buttons with customer-facing comment boxes, and a centralized communication log.
- **Customer Experience Tools**:
  Delivered multilingual Customer Journey Maps (English, Spanish, Chinese) for New Building and Applicant Design projects, along with enhanced order/project status logic to improve transparency and accessibility.
- **Salesforce Enhancements**:
  Added fields and logic for customer readiness dates, sub-task checklists, phase timeline data points, and improved display/calculation functionality.
- **Training & Job Aids**:
  Updated internal reference guides to support data accuracy and staff adoption including:

    - **In-Person Communications & OIR Training** for all Job Owners (completed September 2025)
    - **Refreshed Introductory Boot Camp** (completed December 2025) covering OIR timelines, Project Resources Page, customer-facing tools and FAQs, Greenbook links, Energization Delay Reporting form, and SB1210 cost/timeline information
- **Stakeholder Engagement & Reporting**:
  Ongoing weekly readiness calls by PG&E division (including EV), leveraging new tools to strengthen collaboration and performance tracking.
- **Data & Process Automation**:
  Continued investment in analytics and automation to streamline energization workflows and reduce manual effort.

Future Enhancements:

- Improved Customer Communication will be supported through the continued expansion of additional customer journey maps. Additionally, communication will be enhanced by implementing more automated and personalized email updates to keep stakeholders informed throughout the project lifecycle. Customer-facing and internal AI chatbots will offer application resources, technical guidance, reference materials, Greenbook access, Intake Matrix information, and general FAQs to improve support and reduce manual effort.
- Data-Driven Project Management will be strengthened by introducing enhanced dashboards which will improve forecasting and tracking capabilities.
- Customer Portal Evolution and Building and Renovation Service Center (BRSC) will focus on providing more in-person self-service tools, including features for escalation handling and contact management. New features such as a Portal Pre-Application Checklist, identification of upstream capacity projects and quarterly updates, and clearer user roles will streamline the customer experience and increase transparency.
- Pre-Project Planning Tools such as the AI customer project cost calculator and readiness indicators (forecast dates and readiness checklists) will offer greater

visibility and support during the early stages of project development, helping teams prepare more effectively before formal application submission.

Constraints:

PG&E has identified several constraints that impact the deployment of infrastructure, which we are actively working to address:

- Materials Availability: Supply chain disruptions have affected the availability of some critical materials, leading to delays in project timelines.
- Permitting Delays: Obtaining necessary permits from local, state, and federal authorities can be time-consuming, impacting project schedules.
- Upstream Distribution Capacity Upgrades (DCU): The need for upstream DCU to support new connections can introduce additional complexity and could potentially cause delays in the energization process.
- IT and Systems: Current tracking and reporting systems will require additional investment and upgrades. Our primary systems of record (SAP and Salesforce) are still pending some enhancements to ensure accurate tracking of each energization Step.

5. Conclusion

PG&E is committed to complying with the biannual reporting requirements of D.24-09-020 and providing detailed data to the Commission. As highlighted in ***Section 3A. Data Gaps and Initiatives***, PG&E has made significant progress in closing outstanding data gaps and continues to work toward providing all required reportable fields. As we approach Phase 2 of the OIR, we look forward to working with the Commission to further refine those reporting requirements and ensure our processes and tools align with OIR standards. We will continue to track and report all necessary information to demonstrate our progress and identify areas for improvement. PG&E is dedicated to working collaboratively with the CPUC to achieve the goals outlined in D.24-09-020, and we are confident that our ongoing efforts will lead to improved energization timelines and enhanced customer satisfaction.

APPENDIX 1

PG&E's Public Utilities Code Section 935 Staffing Analysis Report

(Includes markings as Exhibit PG&E-4 in PG&E's 2027 GRC Proceeding, A.25-05-009, where it is Attachment B to Chapter 2 of PG&E's Prepared Testimony)

This appendix is provided electronically in the form of a PDF attachment:

PACIFIC GAS AND ELECTRIC COMPANY

CHAPTER 2

ATTACHMENT B

PUBLIC UTILITIES CODE SECTION 935 REPORT

PACIFIC GAS AND ELECTRIC COMPANY
CHAPTER 2
ATTACHMENT B
PUBLIC UTILITIES CODE SECTION 935 REPORT

TABLE OF CONTENTS

PACIFIC GAS AND ELECTRIC COMPANY
CHAPTER 2
ATTACHMENT B
PUBLIC UTILITIES CODE SECTION 935 REPORT

A. Executive Summary and Overview

Pacific Gas and Electric Company (PG&E) presents the following report on its current and potential future Electric Distribution staffing needs for work forecast in Exhibit (PG&E-4). PG&E submits this report in compliance with Public Utilities Code (Pub. Util. Code) Section 935.

PG&E's Electric Distribution organization currently employs over 10,700 coworkers, which includes approximately 5,100 International Brotherhood of Electrical Workers (IBEW) union-represented coworkers, and over 3,000 Engineers and Scientists of California (ESC) union-represented coworkers. Based on the 2027 General Rate Case (GRC) forecast for Electric Distribution presented in Exhibit (PG&E-4), PG&E's projects a potential need to increase the headcount for its internal workforce by approximately 1,300 employees by 2030 in order to match the forecasted volume of work. Lineworkers, engineers, apprentices (across several apprentice types), crew leads, estimators, and electricians account for the majority of the headcount increase. PG&E anticipates growing its linework, cable splicer, electrician, and distribution system operator apprentice pipelines to scale with the forecasted volume of work.

To the extent that work volumes changes, PG&E's headcount projections would similarly change. PG&E projects hiring plans multi-year and adjusts hiring plans on an annual basis based on workplan needs. Further, the hiring plans can be adjusted in-year as business needs arise or change.

The remainder of this report is divided into five sections:

- Section B – Framework for the Report: This section provides an overview of the Powering Up Californians Act, which requires this Pub. Util. Code Section 935 Report. This section further explains how PG&E has implemented Section 935 for this report.

- Section C – Overview of PG&E's Workforce Planning and Strategy: This describes PG&E's current workforce planning process, strategy, and deployment.
- Section D – Current Staffing and Adequacy to Meet Demand: This discussion discusses existing staffing levels and how these levels are generally adequate to meet overall electric distribution needs.
- Section E – Future Staffing Analysis: This section describes the methodology for forecasting potential future staffing needs by job groupings, based upon PG&E's Electric Distribution forecasts in this GRC. The analysis takes into consideration the type of electric distribution work forecasted compared to the work PG&E's workforce complete today.
- Section F – Apprentice Pipeline Analysis: This section describes PG&Es key apprentice programs that develop a pipeline for maintaining a sufficiently-sized qualified workforce to carryout electric distribution work. This section also discusses how PG&E plans to scale these apprenticeship programs to meet future potential staffing needs.

B. Framework for this Report

1. Basis for Pub. Util. Code 935 Report: The Powering Up Californians Act

In 2023, the California legislature enacted the Powering Up Californians Act (Act) setting forth state policy that upgrades to the electrical corporations' distribution systems are critical to meet the state's decarbonization goals, comply with their obligation to serve customers, and ensure that housing, businesses, and electric transportation vehicles can be used without delays.[1] Part of the impetus for the Act was a rising concern over electrical corporations' ability to timely energize customer requests.[2] As part of this policy, the legislature determined that electrical corporations must recruit, train, and retain an adequately-sized qualified workforce to complete the energization work to upgrade electrical distribution systems and promptly connect customers without sacrificing other necessary

---

1 Pub. Util. Code § 933(a-d).

2 Pub. Util. Code § 932(a)(3-4).

activities to maintain the safety and reliability, such as wildfire mitigation, inspection and maintenance activities, and other critical work.[3] The Act also finds that the California Public Utilities Commission shall require the electrical corporation to have adequate qualified staffing and maintain a pipeline of apprentices to achieve these policies.[4]

To ensure that electrical corporations meet this workforce policy, the Powering Up Californians Act, Section 935, requires electrical corporations to include in each GRC application a detailed analysis of its current qualified staffing level and future required staffing level for each job classification needed to carry out the advanced planning, engineering, and construction of electrical distribution systems needed to promptly energize customers, while still completing other required work.[5]

2. PG&E's Approach to the Pub. Util. Code 935 Report

While most provisions in the Powering Up California Act focus on the funding and timely completion of *energization* work (customer connections and capacity projects), Section 935 addresses staffing needs for both *energization* work and other electric work for maintaining safety and reliability. PG&E therefore assessed staffing needs not by a specific type of electric distribution work, but instead assessed those needs holistically across its full portfolio of electric distribution work. This is because labor resources work across electric distribution programs and PG&E must constantly evaluate the need to adjust its use of resources (internal and external) for that work. For instance, a lineworker may work on New Business capital projects (energization), distribution maintenance, or system operations. As a result, the staffing-level analysis presented in this Report includes the labor that supports energization work, as well as other electric distribution work. PG&E believes that this captures the intent of the statute to ensure that electrical corporations retains a sufficiently-sized qualified workforce to timely energize customers without sacrificing the other activities completed by the workforce.

---

3 Pub. Util. Code § 933(e).

4 Pub. Util. Code § 935(b-c).

5 Pub. Util. Code § 935(a).

In addition, while PG&E's advanced planning, engineering, and construction activities are generally performed by its asset management, estimating, and construction groups, respectively, numerous other job groups that may not fit squarely in these three categories are critical parts of planning, building, and maintaining PG&E's electric distribution system. To provide a detailed analysis, this report includes 32 different job groupings that perform the planning, engineering, construction, and more. These groupings are consistent with how PG&E categorizes job titles (and associated job identification codes) at the enterprise level. The specific job titles in the Electric Distribution organization associated with each job grouping is provided in Appendix 1.

This Report provides an overview of PG&E's workforce planning approach to illustrate key considerations for meeting total workforce needs. The potential staffing needs identified in this Report could be met through a combination of strategies, such as training labor, recruiting trained labor, or taking actions to retain existing trained labor that is at risk of departing. The appropriate strategy for a specific job position varies, depending on the geographic location and urgency of staffing needs. However, PG&E provides additional information on how it would scale its apprenticeship pipeline to maintain a sufficiently-sized qualified workforce to meet future increased demand for electric distribution work.

In summary, PG&E's approach to this Pub. Util. Code Section 935 report is intended to be fully-inclusive of all electric distribution staffing needs to complete forecasted electric investments for our distribution grid through 2030. PG&E is mindful of the volume of its GRC showing, including this Section 935 Report, and the capacity and resource limitations the Commission and parties may have in reviewing the materials. Accordingly, PG&E has streamlined its showing to make this report more accessible to the Commission and parties rather than present the possible volume of information that could be considered relevant to its requests and proposals. PG&E expects parties to seek additional information of interest through discovery and PG&E is prepared to respond to data requests, hold workshops, as well as submit additional testimony and add other information

to add to the evidentiary record as may be of interest to parties, consistent with Commission Rule 13.

C. PG&E's Current Workforce Planning and Staffing

1. Overview of Workforce Planning and Strategy

PG&E examines its hiring needs annually based on the company's workplan needs. Investment planning teams select workplans (scope and timing) and establish financial targets based on the company's risk prioritization, regulatory requirements, and other strategic goals (such as maintaining affordability). Once the work and budget are determined, the specific departments assigned the work determine whether any headcount adjustments are necessary. Requests for additional headcount are analyzed by workforce planning and strategy teams to determine whether the additional headcount request satisfies various criteria, including: (1) long-term hiring needs; (2) collective bargaining agreements with IBEW and ESC, (3) regional staffing needs, and (4) other budget considerations. These factors are discussed in greater detail below.

PG&E's staffing-level analyses generally are only completed for departments that complete programmatic, planned work.[6] The analyses must be completed to ensure that the work can be executed by internal resources in alignment with the scope, timing and budget established for the work. PG&E utilizes its existing workforce to meet forecasted and priority needs; any residual, larger, or complex/specialized work is assigned to qualified contractors.

PG&E has enhanced its work-planning process in recent years to consider multi-year investment needs and opportunities to bundle work activities to drive cost efficiencies. This multi-year workplan view has presented the added benefit of visibility for longer-term hiring needs. PG&E is in the process of developing a more centralized and longer-term labor resource planning approach. This will enhance PG&E's ability to leverage its apprenticeship programs, which are multi-year training programs to meet

---

[6] Certain work is generally excluded from staffing-level analyses if the staffing levels necessary to complete the work are subject to annual fluctuations due to the emergent nature of the work. Examples of these type of programs include emergency response and emergent maintenance work.

future needs for a trained workforce. Lastly, the visibility into longer-term workforce needs enables PG&E to stage its hiring and recruitment efforts over time. In other words, when PG&E anticipates a need to hire 1,000 employees (for example), not all hiring would necessarily occur in one year, but would be staged over multiple years. The timing of hiring for each job category would be based on the urgency and recruitment needs of that position.

a. Long-Term Staffing Needs

When there is an increase in a particular work activity in the near-term, PG&E first considers whether the level of work activity will remain long-term before hiring additional staff. This ensures that any additional headcount will not sit idle or be subject to layoffs if the level of work activity is likely to decrease in the future. Instead, PG&E will use contract labor to meet short-term staffing needs to complete the work.

When work levels indicate that additional staff is warranted in the long-term, PG&E scales the workforce linearly from its existing 60 percent internal/external ratio. On average, PG&E utilizes contract labor to supplement approximately 40 percent of planned work, typically larger or complex/specialized work.

The rationale for using external labor for a portion of the work is because the volume of staff needed throughout the year varies by season and emergent events. As a result, PG&E plans for internal staffing that is sufficient to address work needs in the lowest demand periods, and not the highest demand periods. PG&E does not hire internal staff above what is needed to execute work during the lowest demand periods, otherwise PG&E staff would sit idle in the low demand periods, which is not in the interest of affordability. As a result, contract labor is core aspect of PG&E's workforce strategy. Contract labor enables PG&E to quickly scale the workforce as needed.

b. Collective Bargaining Agreement Requirements

PG&E has three collective bargaining agreements (CBA). The IBEW-Clerical CBA governs the terms of employment for customer service, clerks, and job positions that are more administrative in nature.

The IBEW-Physical CBA governs the terms of employment for field employees such as lineworkers and electricians. The ESC CBA governs the terms of employment for engineers, project managers, contract administrators, and other technical specialists. Each CBA (including modifications to the CBA through letter agreements) determines the skills and qualifications necessary for each union-represented position, as well as the line of progression for employees.[7] Certain high-skill or safety-critical positions require completion of multi-year training programs or apprenticeships, which include on-the-job training. The IBEW-Physical CBA also establishes standards for on-the-job training, including how many trained employees (journey workers) are on a worksite relative to trainees (apprentices) to ensure adequate oversight and teaching opportunities (i.e., Training Labor Ratio).

The terms of each CBA are an important factor in the strategy and rate at which PG&E can adjust its overall headcount. For example, PG&E can only hire apprentice workers to the extent there are journey workers available to train the apprentices in accordance with the Training Labor Ratio. While PG&E prefers to develop its workforce through its apprentice programs, when trained labor is needed immediately, PG&E may opt for hiring trained labor or seek to retain existing trained personnel (if they are seeking alternate positions).

c. Regional Labor Needs

PG&E's workforce resides in communities throughout our service territory, which expands across central and northern California. Employees are assigned to regional offices, service centers, or service yards. When assessing workforce needs, PG&E takes into consideration where the work demand is regionally. If work demand is growing in a region, the ability to hire apprentices to meet that demand is limited by the number of journey workers assigned to that service yard to remain compliant with the Training Labor Ratio. However, if work

---

[7] A line of progression is the sequence of trainings and job levels to advance responsibilities and, often, pay.

demand is flat or decreasing in a region but is fully staffed with trained labor, PG&E may not offer apprentice positions because there is not local workforce need.

d. Other Budget Considerations

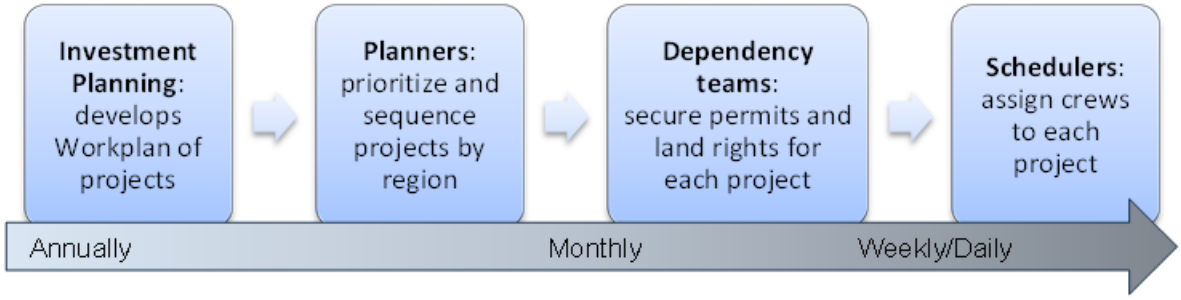
When a department requests additional headcount, a portion of the costs to accommodate additional headcount impacts the budgets of other organizations. For instance, additional headcount for lineworkers requires additional trucks, equipment, and IT support. Additional headcount also impacts medical and other benefits budgets. Thus, the timing and rate of headcount increases must be coordinated with the budget and ability of other functional areas and departments to support the additional headcount.

On a related note, when an organization has persistent charges to overtime orders (thus increasing costs), PG&E prioritizes hiring in these areas. For example, if we plan for overtime hours in the annual budget but the overtime hours exceeds the planned amount at year-end, and this continues for two or three years, we focus on increasing headcount in those areas. For example, recorded data for distribution system operator positions indicates overtime spending above PG&E's budget goals, and therefore we have a goal of adding 80 distribution system operator roles. Adding internal labor in these scenarios is less costly for our customers compared to paying overtime.

2. Deploying the Workforce

PG&E's workplans identify by region and order number all planned work to be completed in an upcoming year. The workplans provide visibility on the amount of work that will be performed in the region, and whether contract resources will be necessary to supplement any regional work. To the extent that additional external labor resources are needed, PG&E's sourcing department will utilize existing agreements with labor contractors to procure bids for short-term labor needs.

FIGURE 2B-1
WORKFORCE DEPLOYMENT

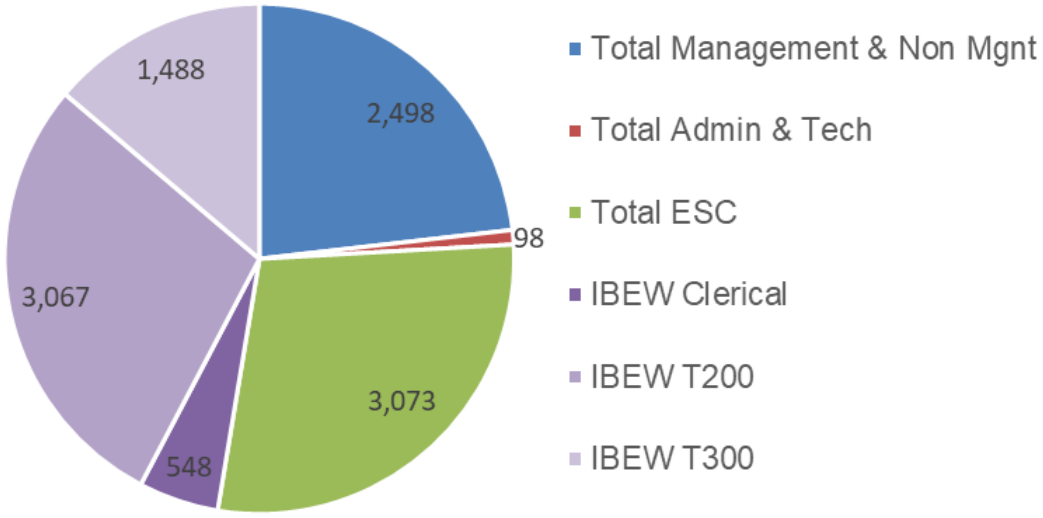


The orders associated with a project are then sequenced and scheduled. Estimating planners view workplans to determine the timeline and sequence for estimators to complete their work. The construction planners sequence the orders in each region to align with priorities and regional needs for completing work. A dependencies team uses the workplan along with the estimating and construction's sequencing plans to develop a plan for securing permits and acquiring land rights (if needed). Schedulers then assign crews (either internal or external) to complete the work per the CBA. Schedulers must take into consideration the crew size needed for a project, and that all labor ratios meet the CBAs and letter agreements. Figure 2B-1 shows this workforce deployment process at a high-level, including the general frequency of the activity.

D. Current Staffing and Adequacy to Meet Demand

PG&E's workforce supporting Electric Distribution activities includes over 10,700 employees, including approximately 5,100 IBEW-represented employees and over 3,000 ESC-represented employees.

FIGURE 2B-2
2025 YEAR-TO-DATE ELECTRIC DISTRIBUTION WORKFORCE



Note: Year-to-Date is as of April 20, 2025.

PG&E's overall workforce supporting Electric Distribution has steadily grown since 2020 to keep pace with the level of work required. Table 2B-1 shows the change in staffing by job grouping between 2020-2025 (year to date).[8] Lineworkers, Utility Workers, Coordinators, Engineers, and Analyst/Specialists have all grown more than 30 percent since 2020 and have seen the greatest amount of net growth within the electric organization. Other job groupings, such as cable splicers, clerical workers, field technicians, and technicians, have remained steady or decreased despite overall electric distribution work level increasing over the 2020-2025 period.

8 Table 2B-1 includes job groupings that appear to have no or few employees. This is because that job grouping primarily serves other functional areas within the company, and not electric distribution.

TABLE 2B-1
ELECTRIC DISTRIBUTION WORKFORCE
(NUMBER OF EMPLOYEES)

Line No.	Job Grouping	2020	2021	2022	2023	2024	TYD 2025	Change Since 2020	Percent Change Since 2020
1	Associate Distribution Engineer	234	227	236	268	257	248	14	6%
2	Analysts/Specialists	1,056	1,201	947	1,337	1,289	1,386	330	31%
3	Apprentice	589	618	621	597	621	649	60	10%
4	Cable Splicer	52	47	47	44	50	52	0	0%
5	Clerical	788	786	731	736	748	725	(63)	(8)%
6	Coordinators	145	167	176	184	203	205	60	41%
7	Craft Worker	132	171	179	160	164	166	34	26%
8	Crew Leader	551	561	569	578	594	596	45	8%
9	Dispatcher	53	56	53	59	62	64	11	21%
10	Electric Line Assistant	19	37	39	69	78	66	47	247%
11	Electricians	269	257	260	265	269	270	1	0%
12	Engineer	746	839	871	949	980	986	240	32%
13	Equipment Operator	111	122	121	123	139	138	27	24%
14	Estimator	532	539	567	654	634	624	92	17%
15	Field Service Representative	–	–	–	–	–	–	N/A	N/A
16	Field Technician	391	424	331	408	380	371	(20)	(5)%
17	Inspectors	196	186	184	232	254	250	54	28%
18	Land and Environment	376	404	395	408	403	408	32	9%
19	Leadership	296	315	305	361	398	462	166	56%
20	Line Worker	572	558	666	737	794	797	225	39%
21	Materials Worker	1	1	1	2	1	1	0	0%
22	Mechanic	3	2	3	4	4	5	2	67%
23	New Business Representative	278	344	340	335	332	322	44	16%
24	Project Manager	227	265	219	210	221	265	38	17%
25	Safety and Security	18	19	14	15	19	21	3	17%
26	Scientists	61	63	61	61	65	67	6	10%
27	Service Representative	3	4	1	1	1	1	(2)	(67)%
28	Supervisor – Back Office	132	147	140	165	150	162	30	23%
29	Supervisor – Frontline	492	510	525	566	550	578	86	17%
30	System Operator	168	175	192	192	198	197	29	17%
31	Technician	130	140	136	131	127	121	(9)	(7)%
32	Troubleshooter	402	400	402	414	425	424	22	5%
33	Utility Worker	117	128	92	138	145	152	35	30%
34	Grand Total	9,140	9,713	9,424	10,403	10,555	10,799	1,639	18%

As described above, PG&E constructs, operates, and maintains the electric distribution system using a combination of internal and external labor—typically at a 60/40 splits. This ratio ensures PG&E's internal workforce is not idle during low-demand periods during a year. PG&E can scale contract resources as needed to meet seasonal or emergent demand.

While PG&E was not able to keep pace with customer energization requests beginning in 2022 (thus prompting the Powering Up Californians Act), the backlog of work is being primarily driven by funding constraints. For example, in 2022, the imputed adopted GRC funding for new business energization work (MWC 16) was $480 million, but PG&E incurred $817 million to keep up with demand as much as possible within the overall financial constraints of the

company. Contract labor resources can scale to complete the backlog of projects—a short-term surge in resources—however, the ability to finance and pay for these resources is limited.

For this reason, pursuant to Section 937 of the Powering Up Californians Act, PG&E requested additional funding for energization-related work, above the initial funding levels authorized in the 2023 GRC.[9] PG&E's request was adopted in Decision (D.) 24-07-008, which established a memorandum account with interim rate relief subject to an annual cap. Even this additional funding was insufficient to meet customer connection demand. Therefore, PG&E filed a subsequent motion requesting an increase to the annual caps based on forecasts that the energization demand and costs substantially exceed the annual caps.[10] As of May 1, 2025, this motion is still pending.

While insufficient funding is the primary reason PG&E has not been able to keep-up with demand, PG&E recognizes that additional qualified labor is needed to meet increased energization work, and set an internal goal to hire 100 lineworkers each year for the next 5 years to meet this demand. As PG&E works to meet all demand related to energization, continued focus on work related to wildfire, reliability, and other programs continue to be monitored and executed to ensure PG&E is meeting all requirements utilizing internal and external resources.

E. Future Staffing Analysis

The 2027 GRC presents PG&E's proposed risk-informed, multi-year Electric Distribution forecasts for work necessary to safely and reliably construct, operate, and maintain the electric distribution system. For purposes of analyzing future potential staffing needs, PG&E uses these forecasts as the basis for level of Electric Distribution work that will be required through 2030. Thus, the following analysis identifies the potential long-term staffing needs during this period. To the extent that authorized funding differs from PG&E's forecasts, the level of work required and the associated staffing needs will change.

---

9 See D.24-07-008, p. 4.

10 PG&E Motion to Increase 2025 and 2026 Energization Cost Caps, (October 4, 2024). Rulemaking 24-01-018.

In this analysis, PG&E first determined the annual percentage change of expenditures by MWC Groupings (Distribution Projects, Distribution Maintenance, Distribution Support Services, New Business, System Operations, Transmission & Substation, and Vegetation Management) (See Table 2B-2). The MWCs assigned to each MWC Grouping are provided in Appendix 2. This methodology provides granularity regarding the annual percentage changes in labor hours expected by job type based on the type and level of work forecast in the GRC. For example, total labor hours for Electric Distribution, year over year, will increase in 2025, 2027, and 2030 and decrease in 2026, 2028, and 2029 based upon PG&E's 2025-2030 Electric Distribution forecast. MWC Groupings align to the organizations accountable for managing budgets and headcount within Electric Distribution.

TABLE 2B-2
YEAR OVER YEAR FORECASTED SPEND CHANGE BY MWC GROUPING

Line No.		2025 FCST %	2026 FCST %	2027 FCST %	2028 FCST %	2029 FCST %	2030 FCST %
1	Distribution Projects & Hardening	33%	1%	(20)%	(28)%	(3)%	9%
2	Electric Dist Maintenance	(9)%	(5)%	112%	6%	6%	13%
3	Distribution Support Services	13%	(2)%	(29)%	(10)%	0%	21%
4	New Business*	(3)%	(20)%	117%	28%	(39)%	25%
5	System Operations & Inspections	(22)%	(3)%	14%	2%	2%	3%
6	Transmission & Substation	19%	20%	29%	8%	15%	7%
7	Veg Management	(14)%	(1)%	(15)%	(1)%	(1)%	(1)%
8	Grand Total	**1%**	**(3)%**	**27%**	**3%**	**(8)%**	**12%**

Note: New Business forecast uses the Alternative Forecast amounts presented in Exhibit (PG&E-4), Chapter 10, Section G.1, to capture the high-case scenario of potential work.

Next, PG&E identified recorded data for labor hours (standard and overtime) by job identification code charged to each MWC in the Electric Distribution portfolio in 2024. There are over 370 job identification codes relevant to Electric Distribution, so the codes were consolidated into 32 job groupings used at the enterprise-level for workforce planning. PG&E then scaled the labor hours for each job grouping corresponding to the annual forecast changes by the MWC groupings shown above in Table 2B-2.

The change in labor hours for each job grouping is then multiplied by 60 percent to maintain the internal/external labor ratio. Labor hours were then converted to available hours to be charged to electric distribution work by

applying a Productive Capacity Factor to assumed annual hours of 2,080 per employee. This accounts for the time not spent working directly on energization or other electric distribution work such as training, safety meetings, travel time, etc.. Table 2B-3 shows the results from this analysis: the annual incremental change in headcount by job grouping from 2025-2030 based on PG&E's Electric Distribution forecasts. Table 2B-4 shows the total incremental headcount for each job category by MWC Grouping.

TABLE 2B-3
CHANGE IN HEADCOUNT BY JOB GROUPING BASED ON 2027 GRC REQUEST

Line No.	Job Grouping	2025	2026	2027	2028	2029	2030	Net Total
1	Associate Distribution Engineer	2	(1)	21	(2)	0	9	29
2	Analysts/Specialists	(2)	(1)	23	(7)	(1)	23	35
3	Apprentice	(5)	(8)	116	21	(23)	42	142
4	Cable Splicer	0	(1)	9	2	(4)	3	9
5	Clerical	0	0	0	0	0	0	0
6	Coordinators	0	(3)	17	7	(14)	6	13
7	Craft Worker	0	1	5	1	1	2	10
8	Crew Leader	(5)	(1)	101	21	(12)	36	140
9	Dispatcher	(5)	0	2	0	0	1	(2)
10	Electric Line Assistant	(3)	(2)	21	5	(5)	7	23
11	Electricians	13	15	35	12	15	14	104
12	Engineer	31	15	54	4	16	41	161
13	Equipment Operator	2	(3)	22	2	(8)	9	24
14	Estimator	9	(5)	84	(5)	3	33	118
5	Field Technician	(14)	0	21	3	1	9	20
16	Inspectors	(12)	0	23	0	4	9	24
17	Land and Environment	13	(3)	11	(2)	(14)	14	19
18	Leadership	2	0	(2)	(2)	0	1	(1)
19	Line Worker	(20)	(23)	199	37	(52)	69	210
0	Materials Worker	0	0	0	0	0	0	0
21	Mechanic	0	0	1	0	0	0	1
22	New Business Representative	0	(3)	15	7	(15)	6	11
23	Project Manager	22	6	(1)	(13)	7	9	30
24	Safety and Security	0	0	0	0	0	0	0
25	Scientists	1	0	0	(1)	0	1	1
26	Service Representative	0	0	0	0	0	0	0
27	Supervisor- Back Office	1	0	(2)	(2)	0	1	(2)
28	Supervisor- Frontline	1	1	0	(1)	1	2	4
29	System Operator	(3)	0	18	3	(1)	6	23
30	Technician	3	(1)	0	0	(3)	7	6
31	Troubleshooter	(18)	(3)	21	4	(3)	7	8
32	Utility Worker	6	3	25	5	(1)	10	48
33	Grand Total	19	(17)	839	99	(108)	377	1,208

TABLE 2B-4
NET CHANGE IN HEADCOUNT BETWEEN 2026-2030
BY MWC GROUPING BASED ON 2027 GRC REQUEST

Line No.	Job Grouping	Distribution Projects & Hardening	Maintenance	Support Services	New Business	System Ops & Inspections	Transm & Subs.	Veg Mangt
1	Associate Distribution Engineers	(3)	31	0	2	(1)	1	0
2	Analysts/Specialists	(9)	32	(4)	8	(7)	29	(12)
3	Apprentice	(7)	95	0	30	(5)	31	0
4	Cable Splicer	(1)	5	0	4	0	2	0
5	Clerical	0	0	0	0	0	0	0
6	Coordinators	0	3	0	11	0	0	0
7	Craft Worker	0	3	0	1	0	7	0
8	Crew Leader	(5)	74	0	23	(5)	53	0
9	Dispatcher	0	0	0	0	(2)	0	0
10	Electric Line Assistant	(1)	17	0	6	(1)	0	0
11	Electricians	0	2	(1)	4	0	98	0
12	Engineer	(9)	45	(9)	10	(2)	126	0
13	Equipment Operator	(3)	21	0	7	(1)	1	0
14	Estimator	(12)	124	0	6	(2)	3	0
15	Field Technician	(1)	10	(1)	4	(6)	16	0
16	Inspectors	(3)	16	0	2	(7)	16	0
17	Land and Environment	(7)	9	(2)	12	0	8	(2)
18	Leadership	(1)	0	0	0	0	0	0
19	Line Worker	(10)	176	0	53	(9)	1	(1)
20	Materials Worker	0	0	0	0	0	0	0
21	Mechanic	0	0	0	0	0	2	0
22	New Business Representative	(1)	0	0	11	0	0	0
23	Project Manager	(10)	6	(1)	0	0	35	0
24	Safety and Security	0	0	0	0	0	0	0
25	Scientists	(1)	1	0	0	0	0	0
26	Service Representative	0	0	0	0	0	0	0
27	Supervisor- Back Office	(1)	0	0	0	0	0	0
28	Supervisor- Frontline	(1)	0	(1)	0	0	5	0
29	System Operator	(1)	13	0	3	(2)	9	0
30	Technician	(1)	6	(4)	3	0	2	0
31	Troubleshooter	(1)	10	0	4	(7)	2	0
32	Utility Worker	(2)	15	0	6	0	29	0
33	Grand Total	(89)	715	(25)	210	(58)	476	(17)

In years where the analysis shows a decrease in need for a particular job category, PG&E plans to hold headcount flat (i.e., PG&E does not plan to reduce the internal workforce for this reason). Instead, in these instances, PG&E reduces the amount of contract labor (i.e., PG&E would use fewer external workers). These annual variations in workforce needs illustrates one of the benefits of utilizing external contractors as part of the overall workforce strategy: contract labor allows PG&E to maintain a steady internal workforce. The net total headcount (2025-2030) represents the long-term incremental headcount need based on this 2027 GRC request.

Lastly, while this analysis is based on scaling labor based on the 2027 GRC cost forecasts, PG&E existing staffing plans warrant adjustments to the analysis

provided above. We plan to keep headcount steady for several job categories (analysts/specialists, leadership, safety/security, scientists, and supervisor-back office). With these adjustments, PG&E's future potential labor needs decrease, indicating an internal headcount increase of 1,282 employees compared to 2024 headcount levels. See Table 2B-5 below for details.

TABLE 2B-5
ADJUSTMENTS TO 2027 GRC REQUEST-BASED HEADCOUNT FORECAST

Line No.		2025	2026	2027	2028	2029	2030	Net Total
1	2027 GRC Forecast Headcount	19	(17)	839	99	(109)	377	1,208
2	Job Groupings that will not be Scaled	2	(1)	19	(12)	(1)	26	33
3	Adjusted Headcount	17	(16)	820	111	(108)	351	1,175

As described above, PG&E will use an "all of the above approach" (recruit, train, and retain) to increase its workforce to meet the level of work, tailored to the specific job position and region.

F. Apprentice Pipeline Analysis

A critical component of PG&E's staffing strategy is establishing an adequate pipeline of qualified labor to meet future staffing needs. Qualified labor, in this instance, refers to job positions that require completion of an apprenticeship or other formal training program, as required by CBAs. Formal apprenticeship programs have been created between PG&E and the IBEW for specific job positions that the Joint Apprenticeship Training Committee (JATC)[11] designated as warranting formal, multi-year training programs, including classroom and on-the-job training, given the safety risks and public impacts inherent in the work. The JATC seeks California state approval of the apprenticeship programs to certify that the programs meet the curriculum criteria established by the state. There are six job positions in PG&E's electric distribution portfolio requiring completion of a JATC-approved and state-approved apprenticeship: (1) lineworkers, (2) cable splicers, (3) electricians, (4) electric technicians, (5) distribution system operators, and (6) metering system technicians. PG&E

[11] The Joint Apprentice Training Committee (JATC) is an eight-person committee with four members from IBEW and four members from PG&E. The terms of a specific apprenticeship are set forth in the Apprenticeship Administrative Manual.

continuously works with IBEW to ensure the apprentice pipeline remains full and in compliance with the CBAs (and letter agreements) to accommodate future staffing needs.

PG&E and ESC also developed formal multi-year training programs for certain job positions. These training programs are designed by the Joint Training Committee (JTC).[12] To date, there are three job categories with formal training programs: (1) estimators, (2) new business representatives, and (3) mapping technicians. These training programs do not have Job Training Ratios that restrict the volume of potential trainees, and therefore a pipeline analysis was not completed.

1. Lineworker Apprentice Program

The Linework Apprentice Program consists of 8 six-month modules, totaling four years. The CBA includes a multi-prong Training Labor Ratio. In the first two years of on-the-job training, Line Worker Apprentices are not allowed to work on electrified wires (Cold Apprenticeship) given the safety risks associated with live wires. However, once the apprentice has successfully completed the first two years of training, they will have sufficient training to begin working on electrified lines. As a result, in the remaining two years (Years 3 and 4) of on-the-job training, Line Worker Apprentices can work on electrified wires (Hot Apprenticeship). The current CBA requires that for every Cold Apprentice on a crew, there must be at least one journey worker. However, a crew can have two Hot Apprentices per journey worker.

PG&E tracks and monitors Lineworker addition and attrition to ensure there are a sufficient amount of qualified electrical workers able to support work demands related to energization. Consistent with the 2023 GRC and Section 5.6.1 of the 2020 GRC Settlement Agreement, PG&E keeps the Apprentice Lineman Training Program filled to the maximum extent, consistent with safe crew staffing ratios. The program provides a skilled and qualified workforce to maintain electric system reliability and provide safe service to customers. PG&E commits to continue this agreement through

[12] The JTC is an eight-person committee with four members from ESC and four members from PG&E. The terms of each training program are set forth in an Administrative Manual.

the 2027 GRC cycle. For additional information on PG&E's apprenticeship programs, see Exhibit (PG&E-7), Chapter 1.

PG&E's forecast of future staffing needs presented in Section E indicates that to scale PG&E's workforce based on forecasted work, PG&E must increase the number of lineworkers in the apprentice program by 112 positions between 2025-2030. Based on PG&E's existing workforce, there is a sufficient level of journey workers to meet the linework Training Program Ratios for Hot and Cold Apprentices, as there are currently two journey lineworkers per apprentice. Lineman journey workers include all job positions in the line of progression from the lineman apprentice. This means PG&E can continue to scale its apprentice pipeline based on the current percentage of journey worker linemen in the workforce (62 percent). Using these assumptions, PG&E would need 505 apprentice lineworkers in the training pipeline by 2030 to sustain future workforce needs, accounting for 493 current apprentices as of March 2025 and then adding 112 positions by 2030.

TABLE 2B-6
LINEWORKER APPRENTICE PIPELINE ANALYSIS

Line No.	Lineworkers	YTD Actuals	Percent of total FTE's	Increase	2030 Total Fcst
1	Apprentice	493	38%	112	505
2	Journey[(a)]	800	62%	210	1,010
3	Total	1,293	100%	322	1,515
4	Ratio	2:1			2:1

(a) Includes all journey workers in the line of progression that have completed the lineworker apprenticeship.

2. Cable Splicer Apprenticeship

Cable splicers are trained to connect and repair electric wires to other wires, transformers, junction boxes, and other equipment in predominantly PG&E's networked underground systems, but may also perform these activities for overhead systems or stations. This training requires 7 six-month modules, totaling 3.5 years. The CBA requires a 1:1 apprentice cable splicer to journey worker cable splicer Training Labor Ratio.

PG&E's future staffing needs forecast in Section E indicates that to scale PG&E's workforce based on forecasted work, PG&E must increase the number of cable splicers in the apprenticeship program by 2 positions between 2025-2030. Based on PG&E's existing workforce, there is overall sufficient journey workers to meet the cable splicer Training Program Ratio, as there are currently 6 cable splicer journey workers per apprentice. This means PG&E can continue to scale its apprentice pipeline based on the current percentage of journey worker cable splicers in the workforce (85 percent). Using these assumptions, PG&E would need 10 apprentice cable splicers in the training pipeline by 2030 to sustain future workforce needs, accounting for 9 current apprentices as of March 2025 and then adding 2 positions by 2030.

TABLE 2B-7
CABLE SPLICER APPRENTICE PIPELINE ANALYSIS

Line No.	Cable Splicers	YTD Actuals	Percent of total FTE's	Increase	2030 Total Fcst
1	Apprentice	9	15%	2	10
2	Journey[(a)]	52	85%	9	61
3	Total	61	100%	11	71
4	Ratio	6:1			6:1

(a) Includes all journey workers in the line of progression that have completed the cable splicer apprenticeship.

This pipeline analysis focuses solely on staffing needs based on the forecast of future work proposed in the 2027 GRC. PG&E also has a letter agreement with IBEW to commit to fill no less than six Apprentice Cable Splicer positions in 2025, and if specific training curriculums are completed by late 2025, to also fill no less than six positions in 2026 and 2027.

3. Electrician Apprenticeships

Electricians have the skills and training necessary to inspect and maintain electrical equipment including but not limited to, power transformers, instrument and control transformers, circuit breakers, disconnect switches, relays, and ancillary control systems. This training

requires 8 six-month modules, totaling 4 years. The CBA requires a 1:1 apprentice electrician to journey worker Training Labor Ratio.

PG&E's future staffing needs forecast in Section E indicates that to scale PG&E's workforce based on forecasted work, PG&E must increase the number of electricians in the apprenticeship program by 14 positions between 2025-2030. Based on PG&E's existing workforce, there is overall sufficient journey workers to meet the electrician Training Program Ratio, as there are currently 4 electrician journey workers per apprentice. This means PG&E can continue to scale its apprentice pipeline based on the current percentage of journey worker electricians in the workforce (81 percent). Using these assumptions, PG&E would need 87 apprentice electricians in the training pipeline by 2030 to sustain future workforce needs, accounting for 64 current apprentices as of March 2025 and then adding 14 positions by 2030.

TABLE 2B-8
ELECTRICIAN APPRENTICE PIPELINE ANALYSIS

Line No.	Electric	YTD Actuals	Percent of total FTE's	Increase	2030 Total Fcst
1	Apprentice	64	19%	14	87
2	Journey[(a)]	270	81%	78	348
3	Total	334	100%	92	435
4	Ratio	4:1			4:1

(a) Includes all journey workers in the line of progression that have completed the electrician apprenticeship.

4. Electric Technician Apprenticeship

Electric technicians are responsible for performing work involving an extremely high degree of complexity, including troubleshooting, repairing, calibrating, and maintaining components of protective relay systems; substation and electric utility protection systems; station automation and supervisory control and data acquisition (SCADA) systems. Electric Technicians must first complete the Electrician Apprenticeship. Thereafter, the coworker is eligible to complete the Electric Technician Apprenticeship The Electric Technician apprenticeship is 5 six-month modules, totaling

2.5 years. The CBA also requires a 1:1 apprentice electrician tech to journey worker Training Labor Ratio.

PG&E's future staffing needs forecast in Section E indicates that to scale PG&E's workforce based on forecasted work, PG&E must increase the number of Electric Technicians in the apprenticeship program by five positions between 2025-2030. Based on PG&E's existing workforce, there is overall sufficient journey workers to meet the electric technician Training Program Ratio, as there are currently 3 electrician journey workers per apprentice. This means PG&E can continue to scale its apprentice pipeline based on the current percentage of journey worker electric technicians in the workforce (73 percent). Using these assumptions, PG&E would need 28 apprentice electric technicians in the training pipeline by 2030 to sustain future workforce needs, accounting for 22 current apprentices as of March 2025 and then adding 5 positions by 2030.

TABLE 2B-9
ELECTRIC TECHNICIAN APPRENTICE PIPELINE ANALYSIS

Line No.	Electric Technicians	YTD Actuals	Percent of total FTE's	Increase	2030 Total Fcst
1	Apprentice	22	27%	5	28
2	Journey[(a)]	58	73%	26	84
3	Total	80	100%	31	112
4	Ratio	3:1			3:1

(a) Includes all journey workers in the line of progression that have completed the electric technician apprenticeship.

5. Distribution System Operator Apprenticeship

Distribution system operators are responsible for monitoring and controlling the distribution system, including shifting loads to accommodate maintenance work or respond to emergencies, issue clearances, and promptly restore service. This training requires 5 six-month modules, totaling 2.5 years. The CBA requires a 1:1 apprentice distribution system operator to distribution system operator Training Labor Ratio, until an apprentice has the proficiency to perform duties without supervision.

PG&E's future staffing needs forecast in Section E indicates that to scale PG&E's workforce based on forecasted work, PG&E must increase the number of distribution system operators in the apprenticeship program by 9 positions between 2025-2030. Based on PG&E's existing workforce, there is overall sufficient system operators to meet the Training Program Ratio, as there are currently 6 distribution system operator journey workers per apprentice. This means PG&E can continue to scale its apprentice pipeline based on the current percentage of journey workers in the workforce (85 percent). Using these assumptions, PG&E would need 37 apprentice Distribution System Operators in the training pipeline by 2030 to sustain future workforce needs, accounting for 36 current apprentices as of March 2025 and then adding 9 positions by 2030.

TABLE 2B-10
DISTRIBUTION SYSTEM OPERATOR APPRENTICE PIPELINE ANALYSIS

Line No.	System Operators	YTD Actuals	Percent of total FTE's	Increase	2030 Total Fcst
1	Apprentice	36	15%	9	37
2	Journey[(a)]	199	85%	23	222
3	Total	235	100%	32	259
4	Ratio	6:1			6:1

(a) Includes all journey workers in the line of progression that have completed metering system technician apprenticeship.

6. Metering System Technician Apprenticeship

Metering System Technicians install, program, test, calibrate, troubleshoot, and repair all types of electric/electronic circuits, components and devices related to billing measurement. This training includes 6 six-month modules, totaling 3 years. The CBA does not require a specific Training Labor Ratio, as apprentices may work alone or under indirect supervision on jobs for which the employee has been trained and instructed.

PG&E's future staffing needs forecast in Section E indicates that to scale PG&E's workforce based on forecasted work, PG&E must increase the number of Metering System Technicians in the apprenticeship program by 6 positions between 2025-2030. Since there is no Training Program

Ratio for this apprenticeship, PG&E can continue to scale its apprentice pipeline based on the current percentage of journey workers in the workforce (91 percent). Using these assumptions, PG&E would need 28 apprentice Metering System Technicians in the training pipeline by 2030 to sustain future workforce needs, accounting for 25 current apprentices as of March 2025 and then adding 2 positions by 2030.

TABLE 2B-11
METERING SYSTEM TECHNICIAN APPRENTICE PIPELINE ANALYSIS

Line No.	Metering System Tech.	YTD Actuals	Percent of total FTE's	Increase	2030 Total Fcst
1	Apprentice	25	9%	6	28
2	Journey[(a)]	261	91%	20	281
3	Total	286	100%	26	309
4	Ratio	10:1			10:1

(a) Includes all journey workers in the line of progression that have completed metering system technician apprenticeship.

G. Conclusion

Regardless of the ultimate volume and type of work that is approved in the 2027 GRC, PG&E expects continued demand for electric distribution work and a need to increase its staffing levels, including apprenticeships. The order of magnitude for increasing certain job types will be determined at the appropriate time taking into consideration local work demand, local staffing levels, and financial investment plans.

ATTACHMENT A

PG&E BIANNUAL ENERGIZATION DATA SPREADSHEET

Due to the size of this attachment, the public version of this attachment is provided electronically in the form of an Excel spreadsheet, accessible at the location indicated below and will also be filed via mixed media with the Commission's Docket Office.

1. Search Public Case Documents: https://pgera.azurewebsites.net/Regulation/search
2. Select "Establish Energization Timelines OIR [R.24-01-018]" from the case dropdown menu
3. Select "PGE" as the party to narrow the search criteria
4. Select date range "03/31/26 to 03/31/26"
5. Click Search