

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

Agenda ID# 23925
RESOLUTION E-5439
January 15, 2026

R E S O L U T I O N

Resolution E-5439. Pacific Gas and Electric Exceptional Case Submittal for Electric Transmission Upgrades for Microsoft Corporation for its SJC02 Project in San Jose, California

PROPOSED OUTCOME:

- Approves, with modification, four agreements to facilitate the energization of a new 90 megawatt (MW) data center for customer Microsoft.
- Modifies the refund process for energization-related costs in this case, limiting refunds to 75 percent of net revenues received from Microsoft plus an adjustment for the Income Tax Component of Contribution (ITCC).
- Extends the refund period for energization-related costs in this case to fifteen years.

SAFETY CONSIDERATIONS:

- There are no safety considerations associated with this resolution.

ESTIMATED COST:

- This Resolution facilitates the energization of a new Microsoft data center including both the associated costs of energization and the expected future revenues from Microsoft. Microsoft pays the upfront costs to connect to the grid and could then be refunded for these costs after sufficient revenue is generated. This resolution limits refunds to 75 percent of the annual net revenue received by PG&E from Microsoft plus an adjustment for the ITCC, thus reducing risks for ratepayers.

By Advice Letter 7635-E, Filed on July 1, 2025.

SUMMARY

This Resolution approves, with modifications, Pacific Gas and Electric's (PG&E) Advice Letter (AL) 7635-E which requests California Public Utilities Commission (Commission) approval of four agreements to support the energization of a new 90 megawatt (MW) data center load in San Jose, as requested by Microsoft Corporation (Microsoft). These agreements facilitate the construction of new transmission facilities to serve Microsoft's load. The Commission approves the Advice Letter with modifications, finding the agreements necessary and largely appropriate to energize this new load.

Specifically, the Commission requires modifications to the proposed process to refund energization costs advanced by Microsoft to add additional ratepayer protection. As a large load customer, Microsoft requires energization upgrades on a much larger scale than the typical distribution-level customer. These upgrades are costly and should not fall on ratepayers if sufficient load does not materialize to offset costs. As a transmission customer, Microsoft would pay lower rates than distribution customers while at the same time potentially contributing to the need for broader transmission network upgrades in the region. The Base Annual Revenue Calculation (BARC) refund process, on which the AL proposal is based, normally applies to the much lower energization costs for distribution customers under Rule 15. Applying the BARC refund process in this case would result in Microsoft receiving a full refund for its significant energization costs well before PG&E would recover sufficient net revenues to offset those costs (provided the load materializes as forecasted). In order to mitigate ratepayer risks in this exceptional case, the Commission requires PG&E to limit annual refunds to 75 percent of PG&E's annual net revenues received from Microsoft (which in this case are the transmission-related bill revenues), plus an adjustment for the Income Tax Component of Contribution (ITCC), based on a modification to the standard BARC refund process. Additionally, to provide certainty to Microsoft related to the refund of the upfront energization costs, the Commission extends the refund period for this project to fifteen years. This approach increases ratepayer protections while allowing the Microsoft project to energize and receive a full refund over time. While this approach would lead to a slower refund process, it would not affect the total refund amount that could be paid to Microsoft.

BACKGROUND

On July 1, 2025, Pacific Gas and Electric Company (PG&E) filed Advice Letter (AL) 7635-E requesting California Public Utilities Commission (Commission) approval of four agreements – an Agreement to Perform Tariff Schedule Related Work, an

Agreement to Perform Tariff Schedule Related Work for PG&E Review of Applicant Substation Design, an Agreement for Installation or Allocation of Special Facilities, and an Addendum to the Agreement for the Installation or Allocation of Special Facilities for Microsoft Corporation SJC02 Project – executed with Microsoft Corporation, a Washington Corporation (Microsoft). The agreements are intended to support the installation of new electric transmission facilities necessary to serve a proposed 90 megawatt (MW) data center project at 1657 Alviso-Milpitas Road in San Jose, California. Microsoft has proposed a January 2027 operation date for this data center. The Microsoft SJC02 Data Center will hereafter be referred to as “the project” or “the Microsoft project.”

Project Overview

PG&E has agreed to perform the following work to interconnect the Microsoft project at 115 kilovolts (kV):

1. 115 kV transmission upgrades at PG&E’s Los Esteros substation and one new 115 kV transmission line extension from PG&E’s Los Esteros substation to Microsoft’s Kaku substation to provide regular service.
2. Design review for Microsoft’s Kaku 115 kV substation, where the new 115 kV line for regular service will connect.
3. One additional 115 kV transmission line from PG&E’s Los Esteros substation to Microsoft’s Kaku substation for dedicated redundant backup service by request of and at the expense of Microsoft as a Special Facility.

The project is expected to represent a continuous 90 MW load for 24 hours per day, 365 days per year.

Exceptional Case Filing Status

The scope and nature of the infrastructure needs—namely the transmission-level interconnection and energization of a larger load customer—present unique considerations not fully addressed by standard Electric Rules 2,¹ 15,² and 16.³ These

¹ Service delivery voltages are defined in PG&E’s [Electric Rule 2 Tariff](#) at Sheet 2, accessed 9/22/2025.

² From PG&E’s [Electric Rule 15 Tariff](#) at Sheet 1: “APPLICABILITY: This rule is applicable to extension of electric Distribution Lines of PG&E’s standard voltages (less than 50 kV)...”, accessed 9/22/2025.

³ From PG&E’s [Electric Rule 16 Tariff](#) at Sheet 1: “APPLICABILITY: This rule is applicable to both (1) PG&E Service Facilities that extend from PG&E’s Distribution Line facilities to the Service Delivery Point,

rules normally apply to customers seeking energization at the distribution level, which, for PG&E, is below 60 kV.

PG&E therefore seeks Commission approval of the submitted agreements under Electric Rules 2, 15, and 16 provisions and exceptions, as discussed below.

Summary of Agreements and Proposed Tariff Deviations

Note that all agreements below were submitted as confidential attachments to the AL filing. PG&E states that this is due to the presence of customer-specific data, which may include demand, loads, names, addresses, and billing data,⁴ as well as proprietary and trade secret information or other intellectual property and protected market sensitive/competitive data.⁵ These agreements are described generally based on summaries of the agreements provided in the public version of the AL filing.

Agreement to Perform Tariff Schedule Work (Electric Form 62-4527)

This agreement specifically covers work to engineer and construct substation upgrades at PG&E's Los Esteros substation and the primary 115 kV transmission line extension from PG&E's Los Esteros substation to Microsoft's Kaku substation. This agreement includes an overview agreement identifying the facility location, the work, and the contract price, a more detailed description of work to be performed, and a cost breakdown based upon PG&E's preliminary estimated installed cost. The agreement notes the following exceptions from PG&E's existing Electric Rules:

- PG&E has accepted a deposit from Microsoft to perform engineering and procurement of long-lead time materials.
- Microsoft is ineligible for the fifty percent discount option described in Electric Rule 15.D.5.c.

and (2) service related equipment required of Applicant on Applicant's Premises to receive electric service...", accessed 9/22/2025.

⁴ PG&E asserts that this information is protected under Public Utilities Code § 8380; Civ. Code §§ 1798 et seq. and Commission Decision (D.) 14-05-016. Applicable declaration filed as a part of the public version of PG&E AL 7635-E.

⁵ PG&E asserts that this information is protected under Civ. Code §§ 3426 et seq.; Gov. Code §§ 7927.300, 7927.705, 7929.420, 7927.605, 7930.205; Evid. Code §1060; CPUC D. 11-01-036. Applicable declaration filed as a part of the public version of PG&E AL 7635-E.

- The cost of the work performed by PG&E as described in Exhibit A shall be considered a "refundable amount" as that term is described in Electric Rule 15.D.5.
- PG&E will design and install the project, notwithstanding the Applicant Design and Applicant Installation options normally offered to applicants.
- In lieu of PG&E performing the work on an estimated cost basis as set forth in Rule 15 and 16, work will be performed on an actual cost basis.

Agreement to Perform Tariff Schedule Related Work (Electric Form 62-4527) for PG&E Review of Applicant Substation Design

This agreement covers work related to PG&E's review of Microsoft's Kaku substation design. The agreement includes an overview agreement identifying the facility location, the work, and the contract price, a more detailed description of the work to be performed, and a cost breakdown based on PG&E's preliminary estimated installed cost. The final exhibit details certain exceptions to PG&E's existing Electric Rules:

- The cost of Work at the Request of Others as described in Exhibits A and B shall be considered non-refundable.
- In lieu of PG&E performing the work on an estimated cost basis as set forth in Electric Rules 15 and 16, work will be performed on an actual cost basis.

Agreement for Installation or Allocation of Special Facilities (Electric Form 79-255)

The Special Facilities Agreement identifies the Special Facilities that will be installed by PG&E, the cost of these facilities, the monthly charge or one-time equivalent payment for Special Facilities, the annual Special Facilities ownership charge, and additional form provisions. PG&E notes the following exception: The Special Facilities Agreement has been modified from the Form 79-255 approved by the Commission in February 2021 to include a requirement that Microsoft pay actual costs.

Addendum to the Agreement for the Installation or Allocation of Special Facilities for Microsoft Corporation SJC02 Project

The Special Facilities Agreement Addendum identifies the location of the Microsoft project and some background information. This agreement contains a detailed description of the work to be performed, a cost breakdown based upon PG&E's preliminary estimated installed cost, and a memorialization of additional terms and conditions including: Commission approval and jurisdiction, applicable tariff

provisions and exceptions, and the definition of actual costs and a requirement for Microsoft to pay actual costs. The agreement notes the following exceptions to Rule 2:

- PG&E will design and install the Special Facilities, notwithstanding the Applicant Design and Applicant Installation options offered to applicants.
- In lieu of performing the work on an estimated cost basis, work will be performed on an actual cost basis.

The deviations from existing tariffs that PG&E has requested in this filing can be summarized as such:

- PG&E accepts a deposit from Microsoft to perform engineering and procurement of long-lead time materials.
- Microsoft is ineligible for the fifty percent discount option described in Electric Rule 15.D.5.c.
- The cost of the work performed by PG&E as described in Exhibit A of Attachment A shall be considered a "refundable amount" as that term is described in Electric Rule 15.D.5.
- PG&E will design and install the project and special facilities, notwithstanding the Applicant Design and Applicant Installation options normally offered to applicants.
- In lieu of PG&E performing the work on an estimated cost basis as set forth in Rule 15 and 16, work will be performed on an actual cost basis.
- The cost of Work at the Request of Others as described in Attachment 2, Exhibits A and B, shall be considered non-refundable.

We discuss these requested deviations in detail in the Discussion section of this resolution.

Principal Provisions and Ratepayer Protections

PG&E states that the agreements contain several important provisions that are collectively intended to benefit and reduce risk to ratepayers: namely, that Microsoft will pay actual costs as opposed to estimated costs, that Microsoft's eligibility for refunds is based on revenues generated after the facility starts receiving service, and that Microsoft is not entitled to refunds for Special Facilities it has requested for this project.

Actual Cost vs. Estimated Cost

PG&E and Microsoft have agreed that Microsoft will pay the actual cost for the transmission facilities and Special Facilities associated with the project, rather than paying based on an estimated cost basis. PG&E states that the work associated with constructing these new facilities entails a substantial scope of work and that performing such a large project on an estimated cost basis creates a risk that the cost estimate may not accurately capture the cost that will be incurred during the project. The Agreements allow for what PG&E terms as progress billing during the course of work to ensure that there is no mismatch between estimates and actual costs, which PG&E states poses a risk to both ratepayers and Microsoft alike in that inaccurate cost estimates could cause one or the other to overpay for the infrastructure. According to PG&E, this solution will also reduce existing customer risks by obtaining up-front and actual cost-participation regardless of load once the project is placed in service.

As noted above, we will discuss the use of actual cost versus estimated cost in Rule 15 and this specific instance in the Discussion section of this Resolution.

Microsoft's Eligibility for Refunds

PG&E states that Microsoft's eligibility for refunds is based on the revenues it generates after the facility starts receiving electrical service and that if Microsoft's load projections are accurate, then electric revenues will help pay for the new facilities and benefit existing customers over time. However, PG&E also states that should Microsoft's load projections turn out to be inaccurate, then actual cost payments would either not be refunded or be reduced based on actual net revenue and the cost-of-service factor. PG&E states that refunds will be based on the Base Annual Revenue Calculation (BARC) process used in Electric Rule 15 and as such, is consistent with Commission precedent. PG&E also states that revenues generated from this project can ultimately reduce customer bills overall.

As noted above, we will discuss the BARC process in more detail in the Discussion section of this Resolution.

Refunds for Special Facilities

PG&E states that Microsoft is not entitled to refunds for Special Facilities it has requested and that Microsoft will be paying a monthly cost of ownership charge on these facilities. Ratepayers will not be charged for this expense. This matter does not

require a tariff deviation, though we discuss it in detail in the Discussion section of this Resolution.

Cost Recovery Venues

While this Advice Letter does not request cost recovery authorization, PG&E provides preliminary information regarding jurisdictional cost allocation. Commission jurisdictional costs will be recovered through the General Rate Case (GRC) process, while Federal Energy Regulatory Commission (FERC) jurisdictional costs are recoverable through PG&E's Transmission Owner (TO) Formula Rate.

Transmission facility costs are generally FERC jurisdictional if: (1) the California Independent System Operator (CAISO) exercises operational control over the facilities; and (2) the facility demonstrates "any degree of integration" into the electric transmission network. PG&E could not determine which facilities CAISO would decide to exercise operational control over for this project. However, PG&E's current assessment is that the costs for the transmission facilities that will be constructed under the Agreements would be recovered in the following venues:

Transmission Facility	Likely Jurisdiction for Cost Recovery
Substation Facilities	FERC
Transmission Service Line Extension	CPUC
Revenue Metering	CPUC
Transmission Service Line Extension - Redundant Service	Not Applicable
Revenue Metering - Redundant Service	Not Applicable

Rule 30 Application – A. 24-11-007

In A. 24-11-007, the Commission is currently considering a standard rule to address this kind of large-load energization at the transmission level for the PG&E territory. On July 28, 2025, Decision 25-07-039 was issued in that proceeding, partly granting and partly denying PG&E's request for interim implementation of the proposed Rule 30.

NOTICE

Notice of Advice Letter (AL) 7635-E was made by publication in the Commission's Daily Calendar. PG&E states that a copy of the Advice Letter was mailed and distributed in accordance with Section 4 of General Order 96-B.

PG&E also served this AL filing on the Service List for A. 24-11-007: Application of Pacific Gas and Electric Company (U39E) for Approval of Electric Rule No. 30 for Transmission-Level Retail Electric Service and Microsoft.

PROTESTS

Advice Letter 7635-E was not protested.

DISCUSSION

The Commission has reviewed Advice Letter (AL) 7635-E and finds that the relief requested by Pacific Gas and Electric (PG&E) is reasonable, with some modifications.

The discussion is divided into four sections: Procedural Matters, Refundable Amount and the Base Annual Revenue Calculation Refund Process, Non-Controversial Requested Tariff Deviations, and Matters not Requiring a Tariff Deviation.

Procedural Matters

PG&E filed AL 7635-E on July 1, 2025, with a request that the submittal be effective pending Commission approval. The Commission suspended the AL starting on July 31st (the 30th day after submission to account for the 20-day comment period and the 10-day reply period). This AL filing was not prepared in response to any Commission Decision or Order.

This AL filing included a submittal of contracts and requested deviations from established Commission-approved Tariffs (namely Electric Rules 2, 15, and 16). Under General Order (GO) 96-B, Energy Industry Rule 5.3(5), both a submittal of a contract and a deviation are matters appropriate to a Tier 3 Advice Letter.⁶ Thus we find that PG&E filing this AL with a Tier 3 designation is reasonable.

⁶ [General Order 96-B](#) Energy Industry Rules at pg. 4, accessed 08/25/2025

Refundable Amount and the Base Annual Revenue Calculation Refund Process

In this Section, we discuss the reasonableness of the amount PG&E proposed should be refundable and reasonable modifications to the Base Annual Revenue Calculation (BARC) refund process for this case.

Base Annual Revenue Calculation Refund Process Overview

PG&E's Electric Rule 15 Tariff outlines the standard process by which a customer is refunded for upfront payments made to cover direct costs of energization (i.e., cabling and structures). This is known as the Base Annual Revenue Calculation (BARC) refund process.⁷ In the standard BARC refund process, the upfront amount payable by the customer is PG&E's total estimated installed cost, plus Income Tax Component of Contribution (ITCC) as described in PG&E's Electric Rule 15 Section D.5.^{8 9} Note that this up-front payment does not cover indirect costs of energization, such as upgrades to the broader transmission network related to other system or customer needs.

Once the customer is energized, it would be eligible for a refund of these upfront payments based on its current load and expected future revenues. In brief, the BARC methodology takes current annual bill revenues received by PG&E from the customer and assumes those revenues will continue to be received indefinitely. Then, the BARC methodology calculates the amount of upfront capital costs deemed to be justified for refund based upon this hypothetical continuous stream of future revenues. The total

⁷ [PG&E Electric Rule 15](#) Section E at Sheet 13

⁸ As a note, the standard refund process also includes an allowance for each requested distribution line extension that is deducted from the total as calculated in Rule 15 Section D.5. The allowance is based on a revenue supported formula equal to the net revenue (defined as the portion of the total rate revenues that supports PG&E's Distribution Line and Service Extension costs) divided by a cost-of-service factor (defined as the annualized utility-financed Cost of Ownership as stated in Electric Rule 2). This allowance does not apply here, as the requested line extension is at the transmission level and there is no standardized and approved approach to generating this sort of allowance. Microsoft did pay a deposit to PG&E to perform engineering and procurement of long-lead time materials, but this is separate and distinct from the allowance amount specified in Electric Rule 15. We discuss the issue of the deposit further below in the Non-Controversial Requested Tariff Deviations section.

⁹ The Income Tax Component of Contribution (ITCC) is defined in the [PG&E Preliminary Statement Part J](#) at Sheet 1 as "[the] charge to cover PG&E's resulting estimated liability for Federal and State Income Tax." The ITCC is set at 24 percent as of January 1, 2019. In other words, the total upfront energization cost paid by Microsoft equals the estimated installed cost of the work to be performed by PG&E *plus* that cost multiplied by the 24 percent ITCC to cover estimated Federal and State income tax liabilities that PG&E would owe for the work performed. This charge ensures that PG&E ratepayers are protected from having to pay for income tax liabilities caused by a single customer's request for interconnection.

amount of capital costs determined to be refundable through the BARC methodology in a given year is called the BARC Formula amount.¹⁰ That full amount of costs can then be immediately refunded to the customer. Because many of the specific details (including costs) of the Microsoft case are confidential, we use general examples throughout this Resolution to provide clarity without revealing confidential information.

To take a hypothetical example: a transmission customer might provide \$50 million upfront to PG&E to cover the direct costs of energization. Once that customer is energized, over its first year it might pay \$12.4 million in electric bills to PG&E for energy delivery. Of that \$12.4 million, \$6.0 million would be considered the net revenue for PG&E, or the part of the electric bill specifically related to transmission costs and infrastructure. Based on this \$6.0 million in actual net revenue, the standard BARC process would allow for an end-of-year refund to the customer of the entire \$50 million (the amount of capital investment deemed justified, assuming the customer's net revenue continues to be received indefinitely into the future at about the same level).¹¹ In other words, because the BARC formula annualizes expected revenue over a multi-year horizon, the immediate refund could be over eight times larger than the actual net revenues collected from the customer in the first year. Per PG&E's Electric Rule 15 Tariff, the total refund cannot be larger than the \$50 million originally advanced by the customer.¹² If the revenue received by PG&E from the customer in a given year falls below a certain amount, the customer may not receive a full refund and will have to wait to get the refund in subsequent years. Should the customer not be refunded the full upfront energization cost in the first year, the customer could receive any remaining balance as a refund over later years if its electric bills increase, but no more than the total original amount. As the customer is refunded, the related capital costs are added to PG&E's accounts and ultimately recovered from ratepayers.

Net Revenues vs. Total Revenues

¹⁰ For additional detail on the BARC methodology, including an example, see PG&E Supplemental Testimony Work Paper 1 in A. 24-11-007, submitted March 21, 2025.

¹¹ Note that these calculations are based on figures that can be found in [PG&E's B-20T Tariff](#), with an assumption of a 90 MW maximum load, no additional energization costs, and terms and conditions laid out in the standard BARC process. The refund timeline assumes that the hypothetical customer ramps to full load in 2 years (though even if load reaches only half that level and then ceases, the refund schedule would not automatically adjust downward).

¹² [PG&E Electric Rule 15](#) Section E at Sheet 13

The standard BARC process described in the previous section bases customer refunds on net revenue rather than the total revenues received from a customer. As defined above, the net revenue is the part of a customer's electric bill specifically related to transmission costs and infrastructure.

The term net revenue captures that part of a customer's revenue (paid to PG&E through the customer's electric bill) that corresponds to the infrastructure costs in question. For a customer like Microsoft that energizes at the transmission level, the net revenue refers to the transmission component of a customer's electric bill and the daily charge assigned to each electric meter. This structure is in place because it recognizes that the various components of a customer's bill correspond to different costs and responsibilities within the larger electric grid system.

Net revenue does not include generation costs, or the costs of procuring reliable energy for the customer. This revenue would go to the Load Serving Entity (which may be a Community Choice Aggregator (CCA) or PG&E). This energy generation revenue is distinct and separate from the revenue that pays costs for energy delivery (i.e., transmission and distribution infrastructure). The generation component of a customer's bill is not considered when evaluating refunds for the transmission infrastructure needed to energize a customer and is excluded from the BARC process calculations.

Similarly, net revenue does not include revenue from Public Purpose Programs, such as the California Alternate Rates for Energy (CARE) Program. As above, refunds are only predicated on revenue collected to fund transmission infrastructure, and thus the BARC process calculation excludes revenue the customer pays to fund Public Purpose Programs.

The following discussion of refunds relating to the cost of transmission infrastructure needed to energize a customer therefore focuses only on net revenue.

Cost of Energization and Future Revenue

Microsoft's projected new load is expected to be 90 megawatts (MW) continuously. This represents a significant new amount of load and will require a new dedicated 115 kilovolt (kV) transmission line extension to serve the expected load, along with associated transmission substation upgrades. Microsoft has also requested a second

115 kV line to provide redundant service, though this work is being performed under a Special Facilities Agreement and *will not* be paid by PG&E ratepayers at any point.¹³ The cost of energization, once refunded by PG&E, would then be considered a capital expenditure and would be recovered from PG&E ratepayers on an amortized basis. The scale of the required construction and upgrades is much larger than is typical for energizing an average distribution-level customer, which typically costs closer to 120,000.¹⁴ The load factor for Microsoft's data center will likely also be much higher than that of a typical distribution customer, with a typical residential subdivision on the distribution system estimated to operate at a load factor of approximately 30 percent. A customer with a high load factor and large load could generate significant revenue on an annual basis, though this impact would be reduced if a significant portion of revenue comes from demand rates rather than energy rates.¹⁵ Overall, energizing the Microsoft project requires significant costs, but comes with the opportunity for significant revenue received by PG&E. If these revenues are large and consistent enough, other customers may then have to pay less of PG&E's overall revenue requirement, which could lower rates for PG&E customers. If these revenues are small or are not received consistently (e.g., the forecasted load does not materialize or runs at a significantly lower capacity factor than expected), the shortfall could result in higher rates for PG&E customers.

PG&E proposes refunding the costs of new transmission facilities through the BARC refund process, which is the standard tariff mechanism under Electric Rule 15 for the refund of up-front energization costs paid by a customer. These rules are intended to guide cost responsibility and refunds for distribution-level energization, and they provide a Commission-approved framework for refunds related to typical distribution-level loads. However, in this exceptional case filing, considering the size of Microsoft's project and the scope of transmission-level work required to energize the project, we find that additional ratepayer protections are necessary. Specifically, we find a need for additional measures to prevent any potential shift in cost responsibility to ratepayers if the anticipated customer load, and thus revenue for the project, does not materialize.

¹³ The Special Facilities Agreement is discussed in detail below.

¹⁴ This approximation was calculated based on PG&E's forecast for New Business costs (MWC 16), which includes installing electric infrastructure to connect new customers to the distribution system or expand service for existing customers. PG&E estimated about \$4.8 billion in costs to cover 38,212 units, (i.e. energizations or service expansions), amounting to about \$120,000 typical cost for each unit. Note that this average would include both residential customers and larger commercial and industrial customers, and individual costs may vary significantly. See PG&E's Motion to Revise 2025 and 2026 Energization Cost Caps, filed October 4, 2024 in R. 24-01-018.

¹⁵ For large load customers like Microsoft under the B-20 tariff, most net revenues would come from demand rates rather than energy rates. See Electric Schedule B-20, Sheets 5-6.

As noted above, the BARC refund process provides refunds based on expected future revenues received from the customer, meaning PG&E could refund Microsoft for the costs of energization well before net revenue collected from Microsoft would cover the upfront costs of energizing the project, or the longer-term costs of funding the capital project through amortization. For a typical distribution-level line extension, this assumption of cost recovery is generally considered sufficient because: (1) projects are much smaller in scale, (2) statistically, with thousands of similarly sized energizations per year, any single customer disconnecting from the grid does not present a large risk to ratepayers, and (3) the expectation of future revenue received from these customers is based on many years of experience and thousands of interconnections for similar customers.

In Microsoft's case, however, the assumption of cost recovery is complicated by the following factors: (1) the refundable amount is much larger than that for a typical distribution-level line extension, (2) Microsoft as a customer is large enough that if PG&E receives insufficient revenue from the project, there is a greater risk to ratepayers (in other words, there are not thousands of other similar customers utilizing and paying for the same infrastructure required by the Microsoft project, which would otherwise help to offset any revenue deficit should the revenue from Microsoft not materialize), and (3) expectations of future revenue are uncertain and based on limited historical precedent. Taken together, these factors indicate that energization of the Microsoft project presents a higher risk of stranded costs should revenue not materialize.

Transmission Rates vs. Distribution Rates

PG&E submits an annual summary table of revenues and average rates that provides the average rates paid by large load customers connected both at the distribution and the transmission level.¹⁶ Excluding the generation component of rates, large load customers in PG&E's territory on average paid 13.4 cents per kilowatt-hour (c/kWh) if connected at the primary distribution level and 6.0 c/kWh if connected at the transmission level.¹⁷ An estimated 2.1 c/kWh specifically covers transmission facilities,

¹⁶ See the tables submitted in PG&E Advice Letter 7516-E – specifically Appendix 1a, Page 4, column labeled “Revenue At Present.” Note that these tables reflect average revenues divided over total kWh sold, not actual customer rates. See: https://www.pge.com/tariffs/assets/pdf/adviceletter/ELEC_7516-E.pdf

¹⁷ A residential customer, for reference, pays about 26.6 c/kWh according to the same table. However, residential and large load rates are not directly comparable as these customer types have significantly different utilization rates and tariffs, with residential customers having lower load factors.

which effectively makes up the net revenue received from the customer as described above. Large loads and high load factors mean that electricity bills paid by these customers can still be very large, but this revenue is not realized if the transmission-level customer's load does not materialize over the long term. Energizing transmission-level customers can require significant new transmission infrastructure and can depend on larger upgrades to the broader transmission network.

Like any customer load, the Microsoft project will rely on the broader transmission grid outside of the direct infrastructure needed for its energization. In addition, large loads like the Microsoft project often depend on and sometimes directly trigger new upgrades to the broader transmission network beyond the direct costs to connect the customer to that network.¹⁸

Operation and Maintenance Costs

New infrastructure requires additional yearly expenses for operations, maintenance, administration, and other general costs. Based on a conservative estimate of ongoing Operations and Maintenance (O&M) costs set at 2.5 percent annually, a \$50 million infrastructure investment would incur around \$1.3 million in O&M costs each year. Upgrades to the broader transmission network, though only indirectly related to the Microsoft project's energization, would also create additional yearly expenses.

Reasonableness of the Use of the Base Annual Revenue Calculation Process and Limiting Refunds to 75 Percent of Annual Revenue

It is not reasonable to apply the standard Rule 15 refund process and the BARC methodology as written to this project without modification.

First, as a large load customer connecting at the transmission level and as a new customer type, the Microsoft project's energization will involve significantly higher costs and uncertainty than the energization of a smaller, distribution-level customer for whom the tariff was originally designed.

Second, as a transmission-level customer, the Microsoft project would pay a significantly lower rate per kWh than a distribution-level customer normally covered by the Rule 15 process, and thus it may generate lower infrastructure-related revenue

¹⁸ In the Rule 30 proceeding, A. 24-11-007, this type of broader transmission network upgrade is referred to as a 'Type 4' Facility.

depending on actual load over time. At the same time, the Microsoft project could potentially contribute to the need for broader transmission network upgrades in the region.

Third, while all the infrastructure costs related to energizing the Microsoft project are capital expenses, energization of this project will also lead to additional annual expenses for transmission system operations and maintenance, and the Microsoft project as a customer will rely on the broader operations and maintenance of the transmission grid.

Given the factors described above, there should be additional protections to safeguard PG&E ratepayers from assuming the risk of energizing the Microsoft project and potentially being left with the costs if the project's anticipated load and resulting revenue does not materialize. Refunds should be provided only to the extent that actual net revenues (as defined above) cover both the costs of energization and other costs of providing electric service normally covered by those net revenues (i.e., broader grid upgrades and operations and maintenance, which are normally covered by those portions of the customer bill). In other words, rather than being fully refunded after one year as a customer, based on *expected future* revenues, the refund for the Microsoft project should be annually provided in parts based on a percentage of the actual net revenues and taking into consideration other costs normally covered through those transmission rates.

Specifically, we find it reasonable to limit annual refunds of the customer advance, which covers the direct costs of energizing the Microsoft project, to 75 percent of the net revenues PG&E collects from Microsoft annually. Not including a portion (25 percent) of the annual net revenues in the annual refund will mean that Microsoft is refunded only to the extent that actual net revenues collected from the project cover the direct energization costs and contribute, in part, to the ongoing costs of operation, maintenance, and upgrades of the broader transmission grid—costs that would typically be recovered through the transmission component of customer rates.

In short, we find it is reasonable for 25 percent of net revenue generated by the Microsoft project to be withheld to account for the transmission network costs that are not part of the Microsoft project's direct energization, such as ongoing maintenance and broader grid upgrades. This will lead to a slower refund process but will not affect the total refund amount Microsoft is eligible to receive.

Additionally, we find it reasonable to include an ITCC adjustment when calculating the annual refunds based on annual net revenues. We note that even without this modification, the ITCC is already included in the refund calculation as part of the total refund amount that would be due to Microsoft. However, because the ITCC does not reflect direct infrastructure costs required to energize the Microsoft project, it is reasonable to provide a refund related to the ITCC as an additional adjustment to the 75 percent limit in line with findings adopted in Resolution E-5420.¹⁹ This would multiply the annual refund limit adopted above by $(1 + \text{ITCC})$, effectively raising the annual refund limit and reducing the time until Microsoft receives a full refund. The ITCC is set at 24 percent as of January 1, 2019.

It is also reasonable to extend the refund period to fifteen years. The standard BARC process and the terms originally agreed to by PG&E and Microsoft already include a risk that Microsoft or any customer might not receive a full refund of upfront energization costs if load fails to materialize or ramp up within the standard ten-year refund period. While we expect the terms laid out above will result in a full refund within ten years, there is still a risk of factors outside of PG&E and Microsoft's control impacting the refund timeline negatively in a way that Microsoft would not receive a full refund in the standard ten years of the BARC process. Thus, we find it reasonable to mitigate this risk by extending the refund period to fifteen years in line with findings adopted in Resolution E-5420.²⁰ This extension of the refund period does not change the refund amount Microsoft is eligible to receive.

Based on the modified methodology authorized here, Microsoft will still be eligible to receive a full refund. PG&E should refund Microsoft 75 percent of its net annual revenues plus the aforementioned ITCC adjustment each year until the full refund amount is reached or until fifteen years have passed, at which point the remaining refund shall be forfeited. PG&E should still use other components from the standard Electric Rule 15 process and BARC methodology to calculate the refund due to Microsoft. For example, if the Microsoft project's load decreases such that the standard BARC Formula amount falls below the amount already refunded, no further refund should be provided that year. As noted above, based on expected operations, Microsoft should receive a full refund if the project's load materializes as expected.

We make one additional modification to the standard BARC process for use in this exceptional case. Under the standard process, if a customer's expected future net

¹⁹ [Resolution E-5420](#) at 18

²⁰ [Resolution E-5420](#) at 18

revenues are insufficient to justify the costs of its energization, it is charged an additional fee to cover PG&E's cost of ownership. Considering the modifications we adopt here that intentionally limit the annual refund amounts, it is not necessary to impose an additional customer-financed cost of ownership on the unrefunded amount.

Finally, we order PG&E to submit a modified agreement with the changes specified herein for approval through a Tier 1 Advice Letter.

The findings and conclusions in this Resolution should in no way prejudice the ongoing deliberation in the Rule 30 proceeding, A. 24-11-007. This Resolution is a response to an exceptional case filing and should not be considered a binding precedent moving forward.

Non-Controversial Requested Tariff Deviations

As noted above, we discuss each of the requested tariff deviations in detail below. Each of these specific deviation requests are reasonable; however, this determination only applies to AL 7635-E and sets no precedent for future filings or proceedings.

Microsoft Deposit Paid to PG&E

PG&E accepted a deposit from Microsoft to perform engineering and procurement of long-lead time materials related to the 115 kV transmission upgrades at PG&E's Los Esteros substation and the new 115 kV transmission line extension from PG&E's Los Esteros substation to Microsoft's Kaku substation to provide regular service. PG&E's Electric Rule 15 does not describe a process by which a deposit of this sort would normally be accepted. Under normal tariff provisions in Electric Rule 15, a cash advance is only required if costs of providing service exceed an allowance determined by a formula provided in Section C.2.c.²¹ This cash advance protects ratepayers from having to cover costs of engineering work and materials with long procurement lead times that might otherwise require PG&E to fund this work internally and places the burden of covering this on Microsoft. Thus, we find that this payment of a cash advance from Microsoft to PG&E is reasonable in this case.

Removal of the Fifty Percent Discount Option

²¹ [PG&E Electric Rule 15](#) at Sheet 8

In this filing, PG&E asks to deviate from existing refund provisions in the Electric Rule 15 Tariff by not offering the usual Non-Refundable Discount Option detailed in Section D.5.c.²² PG&E's Electric Rule 15 Tariff normally requires a customer to pay a refundable cash advance if costs of providing service exceed an allowance determined by a formula provided in Section C.2.c.^{23 24} Customers also have the option to pay the Non-Refundable Discount Option, which is a one-time, non-refundable payment of 50 percent of the refundable amount described in Section C.2.c.²⁵ Because Section D of Electric Rule 15 applies to distribution line extensions, there is no established allowance for the transmission facilities requested by Microsoft to interconnect. If this provision were available and taken by Microsoft, Microsoft would only have to pay a one-time fee equal to half of the cost of interconnection and the other half would be borne by electric ratepayers. Additionally, if Microsoft were to abandon the project and the infrastructure were stranded without PG&E collecting revenue for services provided to Microsoft, this cost would be borne by ratepayers without reimbursement. While Microsoft would not be eligible for a refund if it chose the Non-Refundable Discount Option, the cost to ratepayers would be of concern considering the cost of transmission infrastructure construction. Thus, we find that elimination of this option is reasonable to protect ratepayers from undue risk of the costs of interconnection.

PG&E Design and Construction of Project and Special Facilities

In this filing, PG&E asks to deviate from existing provisions in its Electric Rule 15 Tariff, specifically Section F: Applicant Design Option²⁶ and Section G: Applicant Installation Option.²⁷ These provisions provide that the applicant (in this case Microsoft) would normally be able to hold a competitive bidding process to have a qualified contractor or sub-contractor design and install new facilities that adhere to PG&E's design and construction standards.^{28, 29} Because the Electric Rule 15 Tariff normally only applies to line extensions for distribution customers, these provisions are generally reasonable as PG&E publishes design and construction standards for distribution customers in their "Greenbook Manual" (formally known as Electric & Gas Service Requirements).³⁰

²² [PG&E Electric Rule 15](#) Section D.5.c at Sheet 11

²³ [PG&E Electric Rule 15](#) at Sheet 8

²⁴ [PG&E Electric Rule 15](#) Section D.5.b at Sheet 11

²⁵ [PG&E Electric Rule 15](#) Section D.5.c at Sheet 11

²⁶ [PG&E Electric Rule 15](#) Section F at Sheet 15

²⁷ [PG&E Electric Rule 15](#) Section G at Sheet 16

²⁸ [PG&E Electric Rule 15](#) Section F and G at Sheet 15 through 16

²⁹ Note that this option is only available to applicants for new service and is normally not available for replacement, reinforcement, or relocation of existing systems.

³⁰ [PG&E Electric & Gas Service Requirements](#)

However, transmission system design and construction is much more complex due to the higher voltages and associated safety hazards. Thus, it is reasonable that PG&E should be the entity to both design and construct these facilities and that PG&E should not offer the Applicant Design and Installation Options normally offered under Electric Rule 15.

Estimated Cost vs. Actual Cost

In this filing, PG&E asks to deviate from existing provisions in Electric Rules 15 and 16 by performing work on an actual cost basis as opposed to an estimated cost basis. Per PG&E's Electric Rule 15 Tariff, the cost that PG&E will refund to a customer for a requested overhead line extension is PG&E's total estimated installed cost.³¹ PG&E's Electric Rule 16 Tariff details the same approach.³² These rules were written for distribution line extensions, for which PG&E has much experience reasonably estimating costs. A transmission line extension is another matter, as transmission system design and construction is much more complex due to the higher voltages and associated safety hazards, which can lead to more uncertain costs. Allowing PG&E to perform this work on an actual cost basis will protect electric ratepayers from any unforeseen costs that may be incurred during construction above what was estimated, while also providing protection from overpayment for Microsoft. Thus, it is reasonable to allow this work to be performed on an actual cost basis as requested by PG&E.

Attachment 2 Cost of Work at the Request of Others

In this filing, PG&E asks to deviate from existing provisions in Electric Rules 15 and 16 by deeming the work performed for the Review of Applicant Substation Design to be non-refundable. This situation is not described in either Rule 15 or 16. Having Microsoft as the customer pay for this work is reasonable as it protects ratepayers from undue costs stemming from this single customer's request to interconnect a large load. Thus, it is reasonable for this work to be deemed non-refundable.

Matters not Requiring a Tariff Deviation

Special Facilities

³¹ [PG&E Electric Rule 15](#) Section D.5 at Sheet 10 through 11

³² [PG&E Electric Rule 16](#) Section E.5 at Sheet 19 through 20

Special Facilities are defined in PG&E's Electric Rule 2 as "facilities requested by an Applicant which are in addition to or in substitution for standard facilities which PG&E would normally provide for delivery of service at one point, through one meter, at one voltage class under its tariff schedules." Such facilities are to be "installed, owned and maintained or allocated by PG&E as an accommodation to the Applicant only if acceptable for operation by PG&E and the reliability of service to PG&E's other [c]ustomers is not impaired."³³ In this case, the Special Facility that PG&E is referring to is the redundant 115 kV line that Microsoft has requested be installed, which PG&E has deemed to be in addition to the 115 kV line that is being constructed as part of the interconnection process. Thus, Microsoft will bear cost of ownership charges in accordance with PG&E Electric Rule 2 and the Agreement for Installation or Allocation of Special Facilities detailed above. This treatment does not represent a deviation from the existing Tariff, and PG&E presents it as a reduction in risk to ratepayers. We find that no action needs to be taken on this matter and that treatment of the redundant 115 kV line as a Special Facility is reasonable.

COMMENTS

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

The 30-day review and 20-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments, and will be placed on the Commission's agenda no earlier than 30 days from today.

FINDINGS AND CONCLUSIONS

1. PG&E filing this AL with a Tier 3 designation is reasonable.
2. The Base Annual Revenue Calculation (BARC) refund process is the standard process by which customers requesting energization at the distribution level are

³³ [PG&E Electric Rule 2](#) at Sheet 22

refunded for up-front payments made to the utility to perform the work to interconnect said customer, as enumerated in PG&E's Electric Rule 15 Tariff.

3. The standard BARC process bases the annual refund amount to a customer on "net revenue," or the revenue received from the customer that directly pays for the infrastructure needed to interconnect that customer.
4. The scale of required upgrades for large load customers seeking transmission-level energization is much larger than a typical distribution-level customer, and these customers present novel risks of substantial stranded costs.

Because the Microsoft project will be interconnected at the transmission-level, Microsoft will pay lower electric rates than an equivalent large load customer that is connected at the distribution-level and normally covered by the Rule 15 process, while at the same time potentially contributing to the need for broader transmission network upgrades in the region.

5. Like all customers, the Microsoft project will rely on the continued operation and maintenance of the existing transmission grid.
6. It is not reasonable to apply the standard Rule 15 refund process and the BARC methodology as written to the Microsoft project without modification.
7. It is reasonable to base the annual refundable amount for infrastructure needed to energize the Microsoft project on the net revenue that will be received from Microsoft when the project is energized.
8. The BARC process as written in the Electric Rule 15 Tariff could result in the actual cost of energization being refunded to Microsoft before the net revenue received by PG&E would equal to those costs.
9. In this case, differences in electric rates and the Microsoft project's scale and type of energization costs justify additional safeguards to protect ratepayers from assuming the risk of energizing these types of customers.
10. In this case, given differences in electric rates and the scale and type of energization costs large load transmission-level customers, it is reasonable to limit

Microsoft's annual refunds for energization costs to 75 percent of the annual, actual net revenues received.

11. In this case, it is reasonable to provide a refund related to the ITCC as an additional adjustment to the 75 percent annual refund limit stated above.
12. In this case, it is reasonable to extend the refund period to fifteen years.
13. Given these modifications to the standard BARC process, it is also reasonable to disregard the customer financed cost of ownership in this case.
14. It is reasonable for PG&E to submit a modified agreement with the changes specified herein for approval through a Tier 1 Advice Letter.
15. The findings and conclusions in this Resolution should in no way prejudice the ongoing deliberation in the Rule 30 proceeding, A. 24-11-007.
16. The payment of a cash advance from Microsoft to PG&E is reasonable.
17. The elimination of the Non-Refundable Discount Option is reasonable to protect ratepayers from undue risk of the costs of interconnection.
18. It is reasonable that PG&E should be the entity to both design and construct the necessary transmission facilities and that PG&E should not offer the Applicant Design and Installation Options normally offered under the Electric Rule 15 Tariff.
19. It is reasonable to allow this work to be performed on an actual cost basis as requested by PG&E.
20. It is reasonable for the work performed by PG&E described in Attachment 2: Review of Applicant Substation Design to be deemed non-refundable.

THEREFORE IT IS ORDERED THAT:

1. The request of Pacific Gas & Electric (PG&E) to approve the following agreements as requested in Advice Letter 7635-E are approved with the modifications set forth above and otherwise specified herein:

- A. Agreement to Perform Tariff Schedule Work (Electric Form 62-4527)
 - B. Agreement to Perform Tariff Schedule Related Work (Electric Form 62-4527) for PG&E Review of Applicant Substation Design
 - C. Agreement for Installation or Allocation of Special Facilities (Electric Form 79-255)
 - D. Addendum to the Agreement for the Installation or Allocation of Special Facilities for Microsoft Corporation SJC02 Project
- 2. PG&E shall modify the refund process in the Agreement to Perform Tariff Schedule Related Work to limit annual refunds to the Microsoft project to 75 percent of the annual net revenues PG&E collected from Microsoft in that year, adjusting for the Income Tax Component of Contribution (ITCC) as set forth above. In this case, the term 'net revenues' refers to the transmission component of Microsoft's electric rates and the per meter customer charge.
 - 3. PG&E shall extend the period in which Microsoft is eligible to receive a refund for upfront energization costs from 10 years to 15 years.
 - 4. PG&E may seek approval for the modified Agreement to Perform Tariff Schedule Related Work through a Tier 1 Advice Letter.

This Resolution is effective today.

The foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on January 15, 2026; the following Commissioners voting favorably thereon:

Commissioner Signature blocks to be added
upon adoption of the resolution

Dated January 15, 2026, at San Francisco, California

