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Witness(es): Various

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**PACIFIC GAS AND ELECTRIC COMPANY**

**APPLICATION FOR APPROVAL OF ELECTRIC RULE NO. 30 FOR  
TRANSMISSION-LEVEL RETAIL ELECTRIC SERVICE**

**PREPARED TESTIMONY**

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PACIFIC GAS AND ELECTRIC COMPANY  
 APPLICATION FOR APPROVAL OF ELECTRIC RULE NO. 30 FOR  
 TRANSMISSION-LEVEL RETAIL ELECTRIC SERVICE  
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**PACIFIC GAS AND ELECTRIC COMPANY**  
**CHAPTER 1**  
**OVERVIEW OF PROPOSED**  
**ELECTRIC RULE 30 AND IMPLEMENTATION**

PACIFIC GAS AND ELECTRIC COMPANY  
CHAPTER 1  
OVERVIEW OF PROPOSED  
ELECTRIC RULE 30 AND IMPLEMENTATION

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1                                   **PACIFIC GAS AND ELECTRIC COMPANY**  
2                                                           **CHAPTER 1**  
3                                                           **OVERVIEW OF PROPOSED**  
4                                                           **ELECTRIC RULE 30 AND IMPLEMENTATION**

5   **A. Introduction and Overview**

6           Traditionally, most of Pacific Gas and Electric Company’s (PG&E) service  
7   interconnections for new retail electric customers occurred at distribution  
8   voltages (i.e., below 50 kilovolts (kV)).

9           As a result, PG&E’s existing Electric Rules for new service line extensions  
10   and interconnections (i.e., Electric Rules 15 and 16) are designed for distribution  
11   voltage interconnections.<sup>1</sup>

12           When a new customer applies for retail electric service at transmission  
13   voltages, because Electric Rules 15 and 16 are not applicable to transmission  
14   level customer interconnections, PG&E and the customer are required to  
15   negotiate unique interconnection terms, including cost allocation terms. These  
16   negotiations are time consuming, require substantial resources from both PG&E  
17   and the customer, and often adversely impact project development timelines. In  
18   addition, after the negotiations are complete, since the negotiated agreement  
19   generally differs from the electric distribution rules, PG&E is required to make an  
20   exceptional case filing with the California Public Utilities Commission (CPUC or  
21   Commission). Preparing an exceptional case filing requires additional time and  
22   resources for PG&E and the customer, and the Commission must then spend  
23   the time and resources reviewing and issuing a ruling on the filing. It can take  
24   between 9-12 months after an agreement is negotiated and an exceptional case  
25   filing is prepared and filed to obtain Commission approval.<sup>2</sup>

26           Recently, PG&E has experienced a significant increase in requests from  
27   new retail electric customers with substantial electric demand which require  
28   interconnection at a transmission voltage (i.e., 50 kV and above). PG&E  
29   expects that this trend will accelerate with the rapid growth of data center

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1   For example, PG&E’s existing Electric Rule 15 (Distribution Line Extensions) applies to distribution lines of “PG&E’s standard voltages (less than 50 kV)... .”

2   See e.g., Advice Letter (AL) 6975-E (filed June 29, 2023 and resolved July 11, 2024) and AL 5848-E (filed June 18, 2020 and resolved May 12, 2021).

1 construction and the addition of other new retail electric customers with  
2 substantial electric demand.

3 Given the potentially significant growth in transmission level  
4 interconnections in PG&E's service area, PG&E proactively worked with internal  
5 teams and external stakeholders to develop proposed Electric Rule 30 as a way  
6 to: (1) more efficiently and uniformly address transmission level retail electric  
7 service requests; (2) reduce the administrative burdens on customers and the  
8 Commission of negotiating unique, one-off agreements and preparing  
9 exceptional case filings; (3) provide clear and transparent interconnection and  
10 cost allocation rules and requirements; and (4) enhance our ability to meet  
11 customer in-service date requests.

12 The remainder of this chapter addresses:

- 13 • Section B: Background regarding PG&E's existing distribution-level  
14 interconnection rules (i.e., Electric Rules 15 and 16);
- 15 • Section C: Current and projected growth of transmission level retail electric  
16 customer interconnections;
- 17 • Section D: The process for developing Electric Rule 30 and stakeholder  
18 outreach;
- 19 • Section E: Overview and benefits of Electric Rule 30;
- 20 • Section F: Implementation of Electric Rule 30; and
- 21 • Section G: Conclusion.

## 22 **B. Background Regarding Existing Electric Rules 15 and 16**

23 Electric Rule 15 addresses line extensions for distribution lines (i.e., less  
24 than 50 kV) and includes provisions for design and construction specifications,  
25 extension locations, undergrounding, installation responsibilities, allowances for  
26 installation costs, applicant contributions and advances, refunds, applicant  
27 design and installation options, rules for sub-divisions and developments,  
28 special conditions, and definitions. Under Electric Rule 15.1.3:

29 ...[w]hen the application of [Rule 15] appears impractical or unjust to either  
30 party or the ratepayers, PG&E or Applicant may refer the matter to the  
31 Commission for a special ruling or for special condition(s), which may be  
32 mutually agreed on.

33 These filings with the Commission are typically referred to as "exceptional case  
34 filings."

1 Electric Rule 16 addresses distribution level service extensions, which are  
2 facilities that extend from PG&E’s distribution lines to the customer’s delivery  
3 point. Electric Rule 16 also addresses equipment that the applicant is required  
4 to install to receive electric service. Rule 16 includes provisions for design and  
5 construction, metering, service extensions, service extension responsibilities for  
6 PG&E and the applicant, allowances and payments by the applicant, existing  
7 facilities, and definitions. As with Rule 15, Rule 16.G includes an exceptional  
8 case filing provision that states:

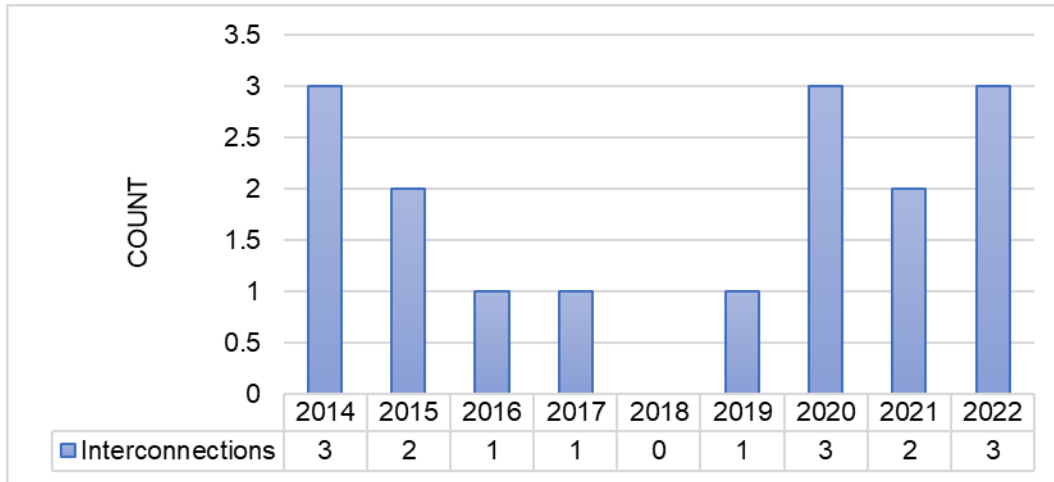
9 ...[w]hen the application of this rule appears impractical or unjust to either  
10 party, or ratepayers, PG&E or Applicant may refer the matter to the  
11 Commission for a special ruling or for approved special conditions which  
12 may be mutually agreed upon.

13 Because transmission level electric retail customer interconnections did not  
14 readily fit into the Electric Rules 15 and 16 framework, PG&E and  
15 transmission level customers have generally been required to submit  
16 exceptional case filings to the Commission to address transmission voltage  
17 interconnections.

18 **C. Current and Projected Growth of Transmission Level Retail Electric**  
19 **Customer Interconnections**

20 Between 2014 and 2022, there were 16 retail electric customers with  
21 4 megawatts (MW) or more of demand that interconnected to PG&E’s electric  
22 transmission grid. The combined total load for these 16 customers is 145 MW.  
23 The historical average was approximately 1.6 projects per year as indicated in  
24 Figure 1-1 below.

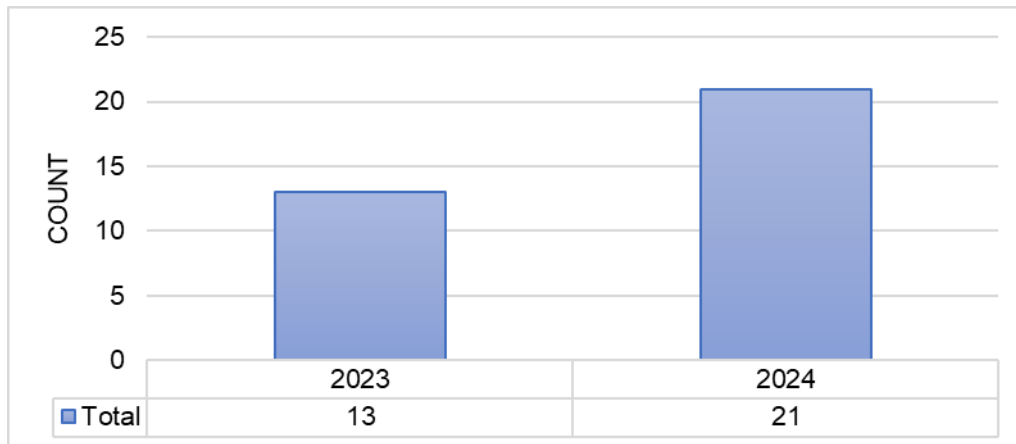
**FIGURE 1-1  
TRANSMISSION LEVEL CUSTOMER INTERCONNECTIONS**



Note: Reflects existing E20T/B20T Transmission Customers Interconnected per Year, 4 MW or more.

1            In the past two years, however, given the substantial growth in data center  
 2 development as well as other transmission level retail customer loads, PG&E  
 3 has seen a significant increase in applications for transmission level  
 4 interconnections for new retail electric customers. Since 2023, PG&E has  
 5 received 34 applications for transmission level service with demand of 4 MW or  
 6 greater, as indicated in Figure 1-2 below. The total combined load of the  
 7 34 applications is 4,440 MW.

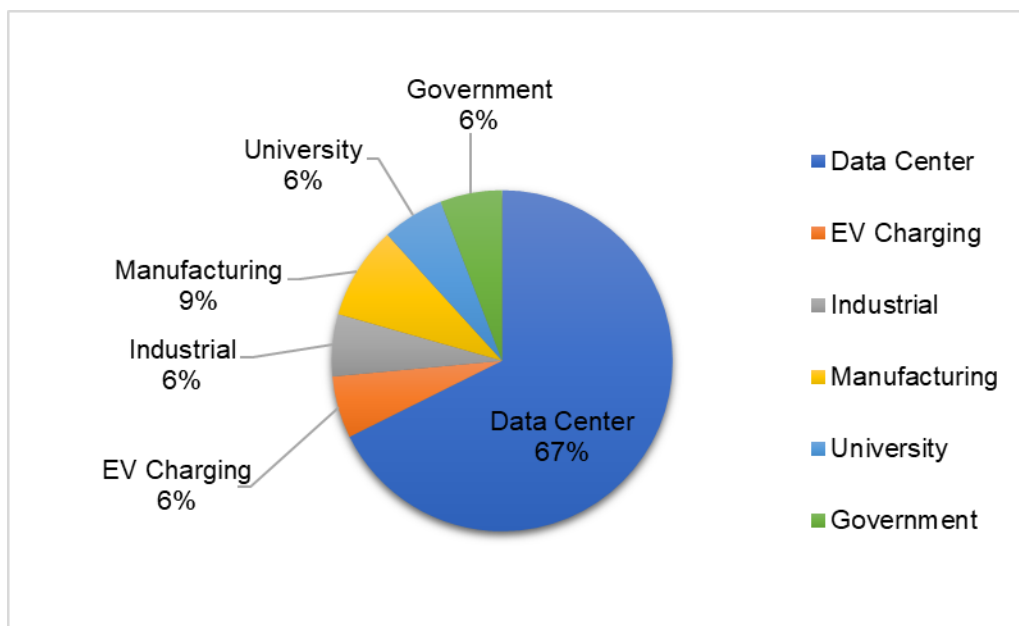
**FIGURE 1-2  
TRANSMISSION LEVEL INTERCONNECTION APPLICATIONS**





1           Should all these transmission level projects proceed to construction and  
2 interconnection, the demand served by transmission level electric retail  
3 customer interconnections will increase by more than 3,000 percent, from  
4 145 MW to 4,545 (i.e., 4,400 MW proposed + 145 MW existing) MW.<sup>3</sup> This  
5 increase in transmission level customer load will require substantial upgrades to  
6 PG&E’s existing electrical grid. Figure 1-3 below provides a breakdown of the  
7 types of customers requesting transmission level electric service.

**FIGURE 1-3  
TYPES OF CUSTOMERS REQUESTING TRANSMISSION LEVEL SERVICE**



8           As indicated in Figure 1-3, more than half of the transmission requests that  
9 PG&E received in 2023-2024 have come from Data Centers. As technology  
10 continues to advance, we are seeing the growth of Data Centers in our service  
11 territory and expect this growth to continue with the large amounts of electrical  
12 demand needed to power such facilities. Other transmission level  
13 interconnection requests come from enterprises such as electric vehicle  
14 charging stations, industrial facilities, government facilities, universities, and  
15 manufacturing.

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**3** PG&E notes that of the requests for transmission level service received in 2023-2024 are preliminary. The requests may be modified or cancelled altogether. Thus, the actual MWs of transmission level service may differ substantially from the current requests of 4,400 MWs.

1 Finally, PG&E is presently conducting a pilot program for a cluster process  
2 for new transmission level retail electric customers located in Alameda and  
3 Santa Clara Counties. The Cluster Process utilizes a streamlined cluster study  
4 approach to identify: (1) upgrades needed to serve potential new transmission  
5 level retail electric customers; and (2) opportunities for these potential new  
6 customers to share costs for new facilities that could be used by multiple  
7 customers. PG&E believes that a cluster group study will help drive meaningful  
8 results that consider system capability and develops solutions to meet customer  
9 timelines and establish shared cost responsibility. This streamlined cluster  
10 approach will also support developing a consolidated engineering and  
11 implementation plan. However, the cluster process is not designed to develop  
12 and implement new tariffs and/or cost allocation rules. Thus, Electric Rule 30 is  
13 essential so that clear, transparent, and uniform rules and requirements can be  
14 applied to the potential transmission level interconnections and projects  
15 emerging from the cluster study process.

#### 16 **D. Process to Develop Electric Rule 30 and Stakeholder Outreach**

17 Given the substantial increase in transmission level retail electric service  
18 requests, PG&E determined that there was a need to develop a new Electric  
19 Rule focused solely on transmission level (i.e., between 50 kV and 230 kV) retail  
20 customer interconnection requests.<sup>4</sup> To develop this new rule, PG&E started  
21 with Electric Rules 15 and 16, as well as related rules such as Electric Rule 2  
22 which addresses special facilities. PG&E worked extensively with internal teams  
23 to identify the provisions that needed to be included in Electric Rule 30 and to  
24 develop new approaches to certain issues such as cost allocation. Because  
25 customers interconnecting at transmission voltage have different needs and  
26 costs than a residential or small commercial customer interconnecting at  
27 distribution level, PG&E's team developing Electric Rule 30 worked to identify  
28 and address some of the unique issues facing transmission level customers.

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<sup>4</sup> Retail electric customer interconnections above 230 kV are typically connected into the 500 kV bulk electric system. Voltage levels above 230 kV can pose unique engineering and interconnection challenges. While Electric Rule 30 is applicable to electric retail service request between 50 kV and 230 kV, it also includes a provision allow PG&E and the customer to utilize an exceptional case filing for interconnections above 230 kV. See Electric Rule 30.F.6.

1 In addition to internal discussions, PG&E conducted broad stakeholder  
2 outreach to get feedback and input from affected stakeholders. Over a period of  
3 several months, PG&E met with representatives of: Southern California Edison  
4 Company; San Diego Gas & Electric Company; Energy Division; Public  
5 Advocates Office at the California Public Utilities Commission; The Utility Reform  
6 Network; and representatives of current and potential transmission level retail  
7 electric customers.

8 In these stakeholder meetings, PG&E presented its proposal on Electric  
9 Rule 30 and asked for input and feedback. In follow-up meetings, PG&E  
10 provided updates on changes to Electric Rule 30 based on feedback and  
11 answered stakeholder questions.

12 The insights gathered from both internal and external stakeholders have  
13 contributed to the formulation of Electric Rule 30.

## 14 **E. Overview and Benefits of Electric Rule 30**

15 In this section, I provide an overview of Electric Rule 30 and describe the  
16 customer and regulatory benefits associated with Electric Rule 30.

### 17 **1. Overview of Electric Rule 30**

18 This section of my testimony provides a brief overview of Electric  
19 Rule 30. Chapter 2 of Exhibit (PG&E-001) provides a much more detailed  
20 discussion of each provision in Electric Rule 30.

21 Electric Rule 30 is applicable to non-residential customers requesting  
22 retail electric service at transmission voltages between 50 kV and 230 kV.  
23 The rule specifies that a determination of the appropriate voltage to  
24 interconnect a new customer is at PG&E's sole discretion.

25 Section A of Electric Rule 30 addresses design and construction  
26 specifications, ownership of facilities, the location of facilities including route  
27 and rights-of-way, land rights on the customer's Premises<sup>5</sup>, Special  
28 Facilities, contracts required to receive retail electric service under Electric  
29 Rule 30, access to the customer's Premises, personnel who can perform

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5 Capitalized terms used in this chapter refer to the defined term in Electric Rule 30.G, unless otherwise indicated.

1 work on PG&E facilities, and prevention of tampering with PG&E's meters  
2 and equipment.<sup>6</sup>

3 Section B describes facility installation, including installation of overhead  
4 and underground facilities, metering, and a customer's responsibilities and  
5 reasonable care for PG&E facilities.<sup>7</sup>

6 Section C describes required Advances and Contributions provided by  
7 the customer.<sup>8</sup> This section also describes the invoicing of Actual Costs  
8 incurred by PG&E during the design, engineering, procurement,  
9 construction, and installation process, as well as requirements related to the  
10 Income Tax Component of Contribution (ITCC).<sup>9</sup>

11 Section C also provides an illustrative schematic to highlight the  
12 four electrical facility types to interconnect customers at transmission level:

- 13 • Facility Type 1: Transmission Service Facilities;
- 14 • Facility Type 2: Transmission Interconnection Upgrades;
- 15 • Facility Type 3: Transmission Interconnection Network Upgrades; and
- 16 • Facility Type 4: Transmission Network Upgrades.

17 Figure 1-4 below is a copy of the diagram included in Electric Rule 30  
18 with the delineation of California Independent System Operator (CAISO)  
19 control of facilities added.<sup>10</sup>

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**6** Electric Rule 30.A.1 to A.7.

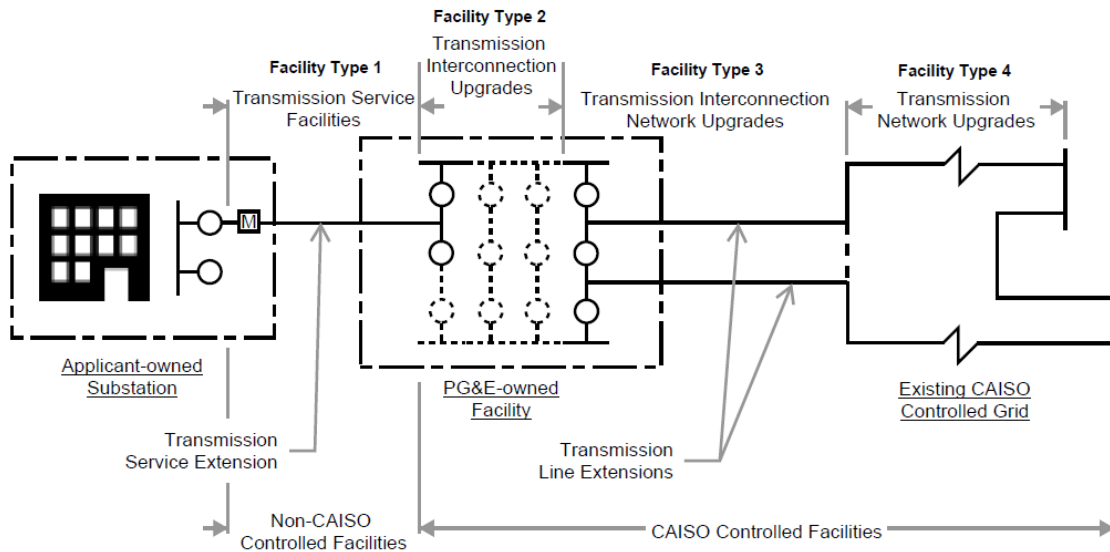
**7** Electric Rule 30.B.1 to B.6.

**8** Electric Rule 30.C.1 to C.3.

**9** Electric Rule 30.C.4 to C.5

**10** PG&E has indicated on Figure 1-4 facilities what it currently understands will be under the CAISO's operational control once the Transmission Facilities are completed and in operation. However, the CAISO is ultimately responsible for making decisions as to which facilities are and are not under the CAISO's operational control and thus CAISO control of actual facilities constructed under Electric Rule 30 may vary.

**FIGURE 1-4  
ILLUSTRATIVE DIAGRAM OF TRANSMISSION FACILITY TYPES  
(DASHED LINES REPRESENT POTENTIAL FUTURE  
TRANSMISSION INTERCONNECTION UPGRADES)**



1 Facility Types 1-3 are facilities needed to interconnect a new customer  
 2 facility at transmission level. Facility Type 4 includes upgrades to the  
 3 existing transmission system needed to accommodate the new transmission  
 4 level customer’s load. Customers are required to provide Advances and  
 5 Actual Cost Payments for Facility Types 1-3, with the possibility of Refunds.  
 6 For Facility Type 4 (i.e., Transmission Network Upgrades), Electric Rule 30  
 7 does require the customer to provide an Advance or make Actual Cost  
 8 Payments because these upgrades generally benefit all transmission  
 9 customers once operational.<sup>11</sup>

<sup>11</sup> While I am not an attorney, my understanding is that both FERC and the courts have determined that upgrades to the existing transmission system benefit all customers. See *Public Service Company*, 62 FERC ¶ 61,013 (1993) at 61,061 (“The Commission has reasoned that, even if a customer can be said to have caused the addition of a grid facility, the addition represents a *system* expansion used by and benefitting *all* users due to the integrated nature of the grid.” (emphasis in original)); *Duke Energy Progress v. FERC*, 106 F.4th 1145, 1155 (D.C. Cir. 2024) (“Moreover, ‘the integrated transmission grid is a cohesive network, and thus completed upgrades generally benefit all transmission customers.’” (quoting *ESI Energy v. FERC*, 892 F.3d 321, 325 (D.C. Cir. 2018))). Thus, PG&E is not seeking an Advance or Actual Cost Payments for Transmission Network Upgrades (Facility Type 4).

1 Finally, Section C addresses situations where there are joint customers  
2 planning to use the Transmission Facilities,<sup>12</sup> termination of service by the  
3 customer before the Transmission Facilities go into service,<sup>13</sup> a customer's  
4 failure to take service,<sup>14</sup> reduction of excess facilities,<sup>15</sup> and Refunds if an  
5 Advance exceeds Actual Costs.<sup>16</sup>

6 Section D describes the Refund process including costs and facilities  
7 that are eligible for refunds, the Refund Period, the calculation and timing of  
8 Refunds, Monthly Ownership Charges during the Refund Period, Refunds  
9 when multiple customers are using a facility, and PG&E's ability to audit  
10 Contribution costs.<sup>17</sup> Section D also includes a preliminary provision  
11 regarding Mixed-Fuel New Construction projects consistent with Decision  
12 (D.) 23-12-037 issued by the Commission.<sup>18</sup> However, this provision is  
13 tentative and the applicability of D.23-12-037 to transmission level  
14 customers is an issue that will be addressed in this proceeding.

15 Refunds described in Section D are calculated using PG&E's Base  
16 Annual Revenue Calculation (BARC) review process.<sup>19</sup> Refunds are  
17 intended to repay a customer for Advances, Contributions, Actual Cost  
18 Payments, and customer build costs<sup>20</sup> if the customer's Usage Forecast  
19 materializes after its Facility is interconnected. The 10-year Refund Period  
20 allows the customer sufficient time to achieve its Usage Forecast and  
21 receive a Refund for the costs it incurred for the construction of the Facility  
22 Types 1-3.

23 Section D address situations where the customer terminates service  
24 during the Refund Period before receiving its entire Refund eligible amount  
25 and where subsequent customers use the Transmission Interconnection

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**12** Electric Rule 30.C.6.

**13** Electric Rule 30.C.7.

**14** Electric Rule 30.C.8.

**15** Electric Rule 30.C.9.

**16** Electric Rule 30.C.10.

**17** Electric Rule 30.D.1 to D.7 and D.9.

**18** Electric Rule 30.D.8.

**19** The BARC process is described in more detail in Chapter 2 of Exhibit (PG&E-001).

**20** The customer build option is described in Section E of Electric Rule 30.

1 Upgrades (Facility Type 2) and/or Transmission Interconnection Network  
2 Upgrades (Facility Type 3) before the initial customer has received its full  
3 Refund.<sup>21</sup> Finally, Section D addresses the circumstance where a  
4 subsequent customer requests electric service that would require use of  
5 facilities initially paid for by an earlier customer and that are still subject to  
6 Refund.<sup>22</sup> In these circumstances, when the subsequent customer has  
7 received its Total Refund Amount, and if there are remaining Refunds  
8 available for the earlier customer, then the earlier customer may be eligible  
9 for a Subsequent Use Refund.

10 Section E describes the option for a customer to build certain facilities,  
11 PG&E’s review of design plans for customer build facilities and access  
12 during construction, indemnity, the transfer of ownership, qualifications for  
13 contractors, and PG&E’s ability to audit customer build costs.<sup>23</sup> Section E  
14 also addresses contracts for customer build facilities, binding cost estimates  
15 from the customer, and ITCC.<sup>24</sup>

16 Section F addresses certain special circumstances such as relocation or  
17 rearrangement of existing facilities, removal of existing facilities, exceptional  
18 cases, termination of service, the option for a customer to provide a loan to  
19 PG&E to pre-fund Transmission Network Upgrades to expedite work when  
20 possible, and the interconnection facilities at voltages above 230 kV.<sup>25</sup>

21 Finally, Section G provides definitions for Electric Rule 30.

## 22 **2. Customer Benefits from Electric Rule 30**

23 Under California law, PG&E is obligated to provide service to potential  
24 customers within its service territory at just and reasonable rates.<sup>26</sup> Electric  
25 Rule 30 is consistent with PG&E’s obligation to provide retail electric service

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21 Electric Rule 30.D.10.

22 Electric Rule 30.D.11.

23 Electric Rule 30.E.1 to E.9.

24 Electric Rule 30.E.10 to E.12.

25 Electric Rule 30.F.1 to F.6.

26 California Public Utilities Code (Pub. Util. Code) § 451 (“Every public utility shall furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities...as are necessary to promote safety, health, comfort, and convenience of its patrons, employees, and the public.”).

1 to new customers interconnecting at transmission level voltages. Electric  
2 Rule 30 is designed to balance cost and development/construction  
3 responsibilities between new transmission level customers and PG&E's  
4 existing customers. In addition, Electric Rule 30 has a number of important  
5 benefits and financial protections for new electric retail customers requesting  
6 transmission level service and for PG&E's existing electric customers. An  
7 overview of these benefits is provided below.

8 **a. Transmission Level Customer Benefits**

9 For new electric retail customers requesting transmission level  
10 service, Electric Rule 30 benefits include, but are not limited to:

- 11 • Transparent and Uniform Treatment: Electric Rule 30 creates a  
12 streamlined, transparent, and clear process for requesting,  
13 financing, and receiving refunds for transmission facilities needed to  
14 provide new retail electric service to the customer. In addition,  
15 Electric Rule 30 eliminates the time and resources required to  
16 negotiate individual agreements and then file an exceptional case  
17 filing at the Commission, thus improving the ability to meet the  
18 customer's requested in-service date.
- 19 • Advances and Actual Costs Payments: Electric Rule 30 provides  
20 clarity regarding Advances based on PG&E's estimate as well as  
21 the invoicing process for Actual Costs. Electric Rule 30 also  
22 provides transmission level customers with the ability to audit  
23 PG&E's Actual Cost Payment invoices to ensure that PG&E is only  
24 recovering its Actual Costs.<sup>27</sup>
- 25 • Interest on Advances and Actual Cost Payments: Refunds on  
26 Advances and/or Actual Cost Payments will include interest at the  
27 Interest Rate for the period of time the Advance and/or Actual Cost  
28 Payment is made until the facilities are operational.
- 29 • Contributions: Electric Rule 30 includes an option, at PG&E's  
30 discretion, for transmission level customers to contribute land,  
31 equipment, or in-kind services which could lower the Advances  
32 and/or Actual Cost Payments they need to provide.

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<sup>27</sup> Electric Rule 30.C.4.c (providing review and audit rights).



- 1 • Customer-Build Option: Electric Rule 30 includes an option, at  
2 PG&E's discretion, for the transmission level customer to build  
3 Transmission Service Facilities (Facility Type 1) and/or  
4 Transmission Interconnection Upgrades (Facility Type 2) which  
5 could lower the Advances and/or Actual Cost Payments they need  
6 to provide and expedite the interconnection process.
- 7 • Refunds: Electric Rule 30 includes a mechanism for refunds of  
8 Advances and Actual Cost Payments and reimbursement for  
9 Contributions and costs associated with Applicant Build Facilities.  
10 Refunds can be received over a 10-year Refund Period so that if a  
11 transmission level customer's load requires several years to reach  
12 its Usage Forecast, the customer can still receive refunds on its  
13 entire Advance and/or Actual Cost Payment when the Usage  
14 Forecast is realized.
- 15 • Subsequent Use Refunds: In addition to the Refund provisions  
16 described above, Electric Rule 30 provides for potential additional  
17 refunds based on use of Transmission Interconnection Upgrades  
18 (Facility Type 2) and/or Transmission Interconnection Network  
19 Upgrades (Facility Type 3) by subsequent customers.
- 20 • Pre-Funding Loans for Transmission Network Upgrades: Electric  
21 Rule 30 includes the option for a customer to provide a loan to  
22 pre-fund Transmission Network Upgrades (Facility Type 4) to  
23 expedite the interconnection process and then be reimbursed.
- 24 • Special Facilities: Electric Rule 30 includes the option for a  
25 customer to request Special Facilities, subject to the customer  
26 paying the Incremental Special Facilities Cost.

27 **b. Existing Electric Service Customers**

28 For PG&E and its existing customers, there are also numerous  
29 benefits to Electric Rule 30 including, but not limited to:

- 30 • Transmission Level Customers Pay the Initial Costs: Under Electric  
31 Rule 30, the transmission level customer provides an Advance  
32 before construction begins and makes Actual Cost Payments for the  
33 work performed by PG&E. PG&E's existing customers will not bear  
34 any costs associated with the interconnection until the new

1 transmission level customer's forecasted load materializes and the  
2 customer is eligible for refunds.

- 3 • Actual Cost Payments: Under Electric Rule 30, the transmission  
4 level customer ultimately pays Actual Costs for Facility Types 1-3  
5 and incremental Special Facilities costs rather than an estimate.  
6 This eliminates the risk that Actual Costs are higher than the  
7 estimate and existing customers initially funding the difference  
8 between the estimate and Actual Costs.
- 9 • Mechanisms to Lower Overall Costs: Electric Rule 30 allows a  
10 transmission level customer to provide Contributions and build  
11 certain facilities which can lower overall costs for Transmission  
12 Facilities that will ultimately be included in rates. Electric Rule 30  
13 includes cost control mechanisms for both Contributions and  
14 Applicant Build Facilities so that these costs are not excessive.<sup>28</sup>  
15 PG&E also has the right to audit the costs incurred by the  
16 transmission level customer to ensure the costs are reasonable.<sup>29</sup>
- 17 • Limitation on Refunds: If the transmission level customer's Usage  
18 Forecast does not materialize within 10 years and the Transmission  
19 Interconnection Upgrades (Facility Type 2) and Transmission  
20 Interconnection Network Upgrade (Facility Type 3) are not used by a  
21 subsequent customer, the customer forfeits some or all of its  
22 potential refunds and thus existing customers are not paying for  
23 stranded or unneeded facilities.
- 24 • Monthly Ownership Charge During the Refund Period: Under  
25 Electric Rule 30, a transmission level customer must pay a Monthly  
26 Ownership Charge during the Refund Period for unrefunded  
27 amounts to keep existing customers whole.<sup>30</sup>
- 28 • Safety and Reliability: Electric Rule 30 includes provisions  
29 regarding construction and design, ownership, access to facilities,  
30 metering, and customer responsibilities for facilities to ensure that

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<sup>28</sup> See e.g., Electric Rule 30.G (definitions of Adjusted Applicant Build Cost and Adjusted Contribution Cost with a "lesser of" requirement).

<sup>29</sup> Electric Rule 30.D.9 and E.9 (providing PG&E audit rights).

<sup>30</sup> Electric Rule 30.D.6.

1 these facilities are operated and maintained in a safe and reliable  
2 manner.<sup>31</sup> In addition, Electric Rule 30 includes provisions that  
3 transmission level customer self-build facilities meet contractor  
4 qualifications and design and build standards to ensure that facilities  
5 built by the customer are safe and reliable.<sup>32</sup>

- 6 • Special Facilities and Relocations: Under Electric Rule 30, a  
7 transmission level customer will be responsible for incremental  
8 Special Facilities costs, rather than existing customers, and to pay  
9 for relocations or rearrangements.<sup>33</sup>

10 In addition to these benefits, existing electric customers also  
11 receive: (1) substantial potential bill reductions from the revenues  
12 received from new transmission level retail electric customers  
13 interconnecting at transmission level voltages; (2) financial protections;  
14 and (3) reliability benefits. Rate and bill reduction benefits and financial  
15 protections are described in more detail in Chapter 3 and reliability  
16 benefits are described in Chapter 4 of Exhibit (PG&E-001).

17 Finally, it is important to note that the benefits for existing electric  
18 customers are not limited to PG&E bundled electric customers. Instead,  
19 Electric Rule 30 will benefit all customers that use the electric  
20 distribution and transmission systems, including Community Choice  
21 Aggregation customers and Direct Access customers.

### 22 **3. Regulatory Benefits**

23 Electric Rule 30 will reduce the number of exceptional case filings that  
24 PG&E needs to make at the CPUC. Since existing Electric Rules 15 and 16  
25 do not address transmission level interconnections, PG&E expects that  
26 without Electric Rule 30, the number of exceptional case filings at the  
27 Commission could increase substantially in the next few years. Recent  
28 exceptional case filings have taken approximately a year to resolve.<sup>34</sup>

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31 Electric Rule 30.A and B.

32 Electric Rule 30.E.1 to E.4 and E.7 to E.8.

33 Electric Rule 30.A.3.

34 See e.g., AL 6975-E (filed June 29, 2023 and resolved July 11, 2024) and AL 5848-E (filed June 18, 2020 and resolved May 12, 2021).

1 Electric Rule 30 will reduce the number of exceptional case filings that  
2 PG&E is required to make, which will reduce the resource and time impacts  
3 of these filings on the Commission, transmission level customers, PG&E,  
4 and other stakeholders who review and are active in addressing these  
5 filings, and will subsequently allow PG&E to more quickly start the execution  
6 of the work to meet customer requested in-service dates.

## 7 **F. Implementation**

### 8 **1. Interim Implementation**

9 In its Application, PG&E has indicated that it intends to file a motion  
10 within 60 days of the Application filing to request authority to implement  
11 Electric Rule 30 on an interim basis. As I indicated above in Section C,  
12 PG&E has seen a substantial increase in applications for transmission level  
13 retail electric service. To facilitate new retail customer interconnections at  
14 transmission level voltages during the period of time the Commission is  
15 reviewing this Application, PG&E intends to request in its motion that the  
16 Commission allow PG&E to utilize Electric Rule 30 on an interim basis.  
17 Agreements executed by customers during this interim period that are  
18 consistent with proposed Electric Rule 30 would be grandfathered so that  
19 these agreements will remain in effect after a final Commission decision,  
20 even if the Commission revises some aspects of Electric Rule 30.

### 21 **2. Tier 1 Advice Letter Filing for Electric Rule 30 and Form Agreements**

22 After the Commission has issued a decision on this Application, PG&E  
23 proposes that within 45 calendar days of the decision PG&E file a Tier 1  
24 advice letter with a conformed version of Electric Rule 30 incorporating  
25 changes, if any, as directed in the Commission decision. In addition, PG&E  
26 would include with a revised version of Electric Rule 30 the form agreements  
27 necessary to implement the final rule. Since the form agreements  
28 necessarily reflect the terms of Electric Rule 30, it is reasonable to wait until  
29 the Commission has issued a final decision before preparing and submitting  
30 the form agreements. Commission Staff could then review the revised  
31 version of Electric Rule 30 and the form agreements to ensure they properly  
32 reflect the Commission's direction in a final decision. Parties would also  
33 have an opportunity to review the revised version of Electric Rule 30 and the

1 form agreements and, if a party deems appropriate, raise any concerns in a  
2 protest or comments.

3 PG&E is proposing a Tier 1 advice letter so that this process can be  
4 expedited with Commission Staff approval rather than requiring the  
5 additional time for a Commission Resolution under Tier 3. Since the  
6 Commission will already have addressed substantive issues related to  
7 proposed Electric Rule 30 in its decision on this Application, the advice letter  
8 is simply a compliance filing to implement the Commission’s decision and  
9 thus is appropriate for Tier 1.<sup>35</sup>

### 10 **3. Request for a Memorandum Account**

11 One of the key elements of Electric Rule 30 is that customers provide an  
12 Advance and Actual Cost Payments for electric facilities constructed to  
13 interconnect and provide retail service to their new facilities. This  
14 safeguards existing customers from having to initially bear the cost of these  
15 facilities, and these amounts are only refunded if and when the new  
16 customer’s load materializes and provides revenues sufficient to support  
17 refunds through the BARC process.

18 However, new transmission level retail electric customers will be  
19 required to provide upfront potentially substantial Advances and/or Actual  
20 Cost Payments for the facilities that are constructed to provide service.  
21 Given these potentially substantial outlays and the fact that these customers  
22 will likely be borrowing funds to provide these Advances and/or Actual Cost  
23 Payments, PG&E is proposing to include interest with any Refunds on the  
24 Advances and/or Actual Cost Payments from the date the Advance and/or  
25 Actual Cost Payment is received to the date the new electric facilities are  
26 available for service.

27 In its accounting and Commission ratemaking processes, PG&E has  
28 procedures for recognizing customer advances and adding these amounts  
29 to rate base when the customer is refunded an advance. However, for  
30 Commission jurisdictional rates PG&E does not have a ratemaking process

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<sup>35</sup> General Order 96-B, Energy Industry Rule 5.1(1) (Tier 1 advice letter appropriate in cases involving a “tariff change in compliance with specific requirements of a statute or Commission order where the wording of the change follows directly from the statute or Commission order.”).

1 to recover interest paid on advances. Therefore, as a part of this  
2 Application, PG&E is proposing to establish a new memorandum account in  
3 which it could record any interest paid to a transmission level customer for  
4 refunds on advances and/or actual cost payments associated with facilities  
5 that are included in CPUC-jurisdictional rates. Given that the prudence of  
6 paying interest will be an issue that is resolved in this proceeding, if the  
7 Commission approves establishing a new memorandum account, when  
8 PG&E seeks to recover amounts in that memorandum account it would not  
9 need to demonstrate that the payment of interest is prudent. However,  
10 PG&E would be required to demonstrate that it: (1) paid the appropriate  
11 interest rate; (2) paid interest on amounts refunded to the transmission level  
12 customer for facilities included in CPUC-jurisdictional rates; and  
13 (3) appropriately calculated the interest amount.

14 The effective date for the memorandum account would be: (1) the date  
15 a motion is granted for interim implementation; or (2) if the motion for interim  
16 implementation is denied, the date of a final Commission decision approving  
17 Electric Rule 30.

## 18 **G. Conclusion**

19 As demonstrated above, Electric Rule 30 will provide substantial benefits to  
20 new transmission level retail electric customers and existing electric customers.  
21 In addition, there are reliability benefits and substantial benefits to decrease the  
22 burden on the regulatory process. PG&E respectfully requests that the  
23 Commission approve proposed Electric Rule 30 and, with regard to  
24 implementation: (1) grant PG&E's request for interim implementation;  
25 (2) approve the final implementation process as a part of the decision on Electric  
26 Rule 30; and (3) grant PG&E's request to establish a new memorandum account  
27 to track interest costs.

**PACIFIC GAS AND ELECTRIC COMPANY**  
**CHAPTER 2**  
**DESCRIPTION OF PROPOSED**  
**ELECTRIC RULE 30 AND**  
**BASE ANNUAL REVENUE CALCULATION**

PACIFIC GAS AND ELECTRIC COMPANY  
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1                                   **PACIFIC GAS AND ELECTRIC COMPANY**  
2                                                           **CHAPTER 2**  
3                                   **DESCRIPTION OF PROPOSED**  
4                                                           **ELECTRIC RULE 30 AND**  
5                                   **BASE ANNUAL REVENUE CALCULATION**

6   **A. Introduction**

7           This chapter provides a detailed description and explanation of Pacific Gas  
8   and Electric Company’s (PG&E) proposed Electric Rule No. 30 (Electric  
9   Rule 30).<sup>1</sup> In addition, this chapter provides an overview of the Base Annual  
10   Revenue Calculation (BARC) that is included in the Electric Rule 30 Refund  
11   process. Attachment A to this chapter is the proposed Electric Rule 30.

12   **B. Proposed Electric Rule 30**

13           This section of Chapter 2 describes and explains the sections of proposed  
14   Electric Rule 30 in sequential order and highlights the benefits of proposed  
15   provisions.

16    **1. Applicability**

17           Electric Rule 30 is applicable to non-residential customers requesting  
18   permanent retail electric service at their facilities at transmission voltages  
19   between 50 kilovolts (kV) and 230 kV. For voltages above 230 kV, PG&E  
20   may at its discretion apply the provisions of Electric Rule 30 and/or make an  
21   exceptional case filing at the California Public Utilities Commission (CPUC  
22   or Commission).<sup>2</sup> Electric Rule 30 also specifies that a determination of the  
23   voltage at which a customer receives Retail Service for a Facility is made by  
24   PG&E at its sole discretion.

25    **2. Section A – General Provisions**

26           Section A contains a number of general provisions related to service  
27   under Electric Rule 30 including, but not limited to: (1) the design of

---

1   Capitalized terms used in this chapter refer to the defined terms in Electric Rule 30.G,  
  unless otherwise indicated.

2   Electric Rule 30.F.6.

1 Transmission Facilities;<sup>3</sup> (2) applicability of construction and design  
2 specifications consistent with California Public Utilities Code § 783;<sup>4</sup>  
3 (3) ownership of the Transmission Facilities;<sup>5</sup> (4) a statement that PG&E is  
4 not required to provide service from non-PG&E facilities;<sup>6</sup> (5) rights-of-way  
5 (ROW) and routing;<sup>7</sup> (6) a requirement that the customer provide PG&E with  
6 property rights on the customer's Premises for the provision of Retail  
7 Service;<sup>8</sup> (7) the requirement that the customer enter into form contracts  
8 that have been approved by the CPUC;<sup>9</sup> (8) provisions regarding access to  
9 the customer's Premises;<sup>10</sup> (9) the requirement that only personnel  
10 authorized by PG&E are allowed to connect or disconnect facilities;<sup>11</sup>  
11 and (10) a requirement that the customer provide a suitable means for  
12 PG&E to ensure that there is no tampering with PG&E meters or  
13 equipment.<sup>12</sup>

14 Section A also includes provisions related to Special Facilities.

15 Section A defines Special Facilities<sup>13</sup> and states that PG&E, in its sole  
16 discretion, may decide whether to agree to install Special Facilities or not.<sup>14</sup>  
17 Customers requesting Special Facilities are required to enter into a Special  
18 Facilities Agreement in a form approved by the CPUC and to either pay  
19 monthly cost-of-ownership charges in perpetuity consistent with Electric

---

**3** Electric Rule 30.A.1.a. Transmission facilities are defined in Electric Rule 30 as all facilities including Transmission Service Facilities, Transmission Interconnection Upgrades, Transmission Interconnection Network Upgrades, and/or Transmission Network Upgrades to furnish permanent service to non-residential customers seeking retail electric service. Each of the capitalized terms in the preceding sentence is defined in Electric Rule 30 and identified on an illustrative schematic in Section C.1.

**4** Electric Rule 30.A.1.b.

**5** Electric Rule 30.A.1.c.

**6** Electric Rule 30.A.1.d.

**7** Electric Rule 30.A.2.

**8** Electric Rule 30.A.2.c.

**9** Electric Rule 30.A.4.

**10** Electric Rule 30.A.5.

**11** Electric Rule 30.A.6.

**12** Electric Rule 30.A.7.

**13** Electric Rule 30.A.3.a.

**14** Electric Rule 30.A.3 and A.3.b.

1 Rule 2 or pay an equivalent one-time charge for the cost of ownership in lieu  
2 of the continuing monthly ownership charges.<sup>15</sup> In addition, customers are  
3 required to provide Income Tax Component of Contribution (ITCC) for  
4 Special Facilities.<sup>16</sup> Finally, PG&E provides to the customer a Standard  
5 Facilities Cost Estimate and a Special Facilities cost estimate.<sup>17</sup> These cost  
6 estimates may be used to determine a customer's potential Refund under  
7 Section D.

8 Since Special Facilities are either requested by a customer or required  
9 because of project-specific circumstances, the customer is required to pay  
10 for the incremental cost difference between Special Facilities and the  
11 standard facilities that PG&E would have otherwise installed. This way,  
12 when Special Facilities are installed as an accommodation to a customer,  
13 PG&E's existing retail electric customers are not paying the incremental  
14 costs of these Special Facilities. The cost of ownership charge(s)  
15 compensates PG&E for the ongoing maintenance, ownership and  
16 replacement of these facilities that are not rate based. This approach  
17 balances a transmission level customer's request for Special Facilities, while  
18 ensuring the other existing retail electric customers do not bear the  
19 incremental costs associated with these facilities.

20 Electric Rule 30 also provides transparency and optionality. A customer  
21 can compare cost estimates for standard facilities and Special Facilities and  
22 determine, based on these estimates and its operational needs, whether to  
23 request Special Facilities or not.

### 24 **3. Section B – Installation, Metering Requirements, and Facility** 25 **Responsibilities**

26 Section B addresses installation requirements and specifies that  
27 customers may be eligible for an Applicant Build Option for overhead electric  
28 facilities, but not for underground electric facilities.<sup>18</sup> Given the complex  
29 nature of underground facilities—the fact that these facilities are

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**15** Electric Rule 30.A.3.c and A.3.e to A.3.f.

**16** Electric Rule 30.A.3.

**17** Electric Rule 30.A.3.e.

**18** Electric Rule 30.B.1 and B.2.

1 underground and thus, more difficult to inspect after installation, and the  
2 importance from a safety and reliability standpoint that these facilities meet  
3 the proper specifications—PG&E is solely responsible for the installation of  
4 underground facilities. Underground facilities are not eligible for the  
5 Applicant Build Option.

6 Section B also specifies metering requirements including location, the  
7 number of meters, multiple occupancy buildings, and requirements for  
8 PG&E-owned meters.<sup>19</sup>

9 Finally, Section B describes: (1) the customer’s responsibilities to install  
10 and maintain customer-owned electrical facilities on its Premises; and  
11 (2) requirements for reasonable care of PG&E’s facilities that are located on  
12 the Premises.<sup>20</sup>

#### 13 **4. Section C – Advances, Contributions, and Actual Cost Payments**

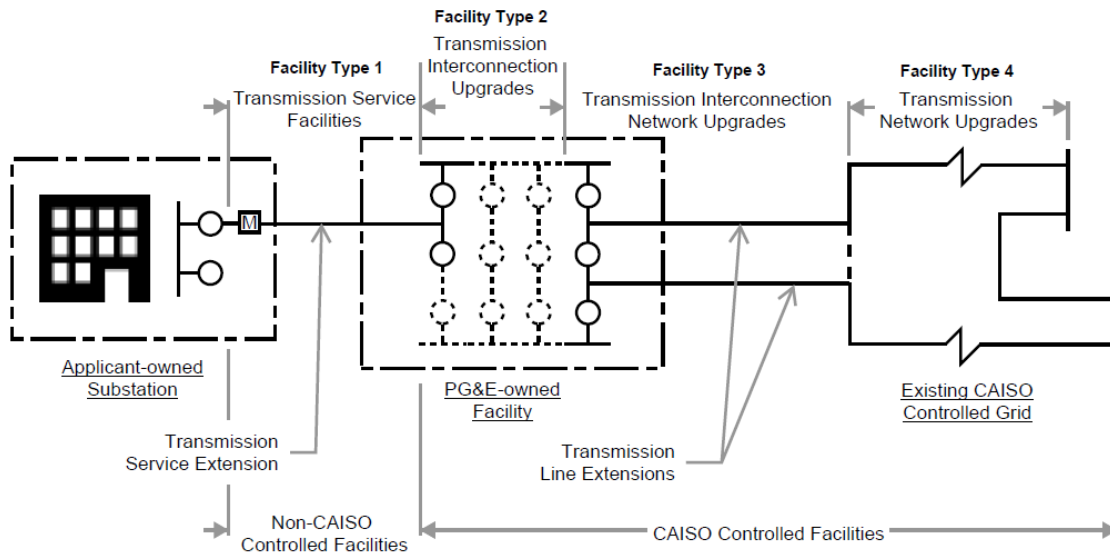
14 Section C addresses a number of topics including Advances,  
15 Contributions, and Actual Cost Payments. Section C includes the following  
16 illustrative figure (Figure 2-1) to highlight potential different Transmission  
17 Facility Types that may be required to interconnect the customer:

---

<sup>19</sup> Electric Rule 30.B.4.

<sup>20</sup> Electric Rule 30.B.5 and B.6.

**FIGURE 2-1  
ILLUSTRATIVE DIAGRAM OF TRANSMISSION FACILITY TYPES  
(DASHED LINES REPRESENT POTENTIAL  
FUTURE TRANSMISSION INTERCONNECTION UPGRADES)**



1 Advances are required to be paid by a customer for Transmission  
 2 Service Facilities, Transmission Interconnection Upgrades, and  
 3 Transmission Interconnection Network Upgrades (referred to as Facility  
 4 Types 1-3).<sup>21</sup> The Advance is based on a project-specific cost estimate  
 5 provided to the customer. For clarity, Section C.2.a also explains that a  
 6 customer may be required to provide separate advances to PG&E for  
 7 preliminary work performed during initial study phases and that these  
 8 advances are not included in the Electric Rule 30 Advance and may not be  
 9 refundable. A customer is eligible for Refunds on an Electric Rule 30  
 10 Advance, up to the full amount of the Advance, as described in Section B.5  
 11 below.

12 A customer may provide Contributions of in-kind services, equipment  
 13 and/or property rights to PG&E for the purpose of installing Transmission  
 14 Facilities.<sup>22</sup> Contributions can benefit both the transmission level retail

<sup>21</sup> Electric Rule 30.C.2. An Advance is not required for Transmission Network Upgrades because these facilities/upgrades are a part of the integrated transmission grid and generally benefit all transmission customers.

<sup>22</sup> Electric Rule 30.C.3. Contributions do not include ROWs and other land rights on the customer's Premises that are provided to PG&E. See Electric Rule 30.C.3.c.

1 electric customer and PG&E's existing electric customers. If the  
2 transmission level customer contributes equipment, in-kind services, or  
3 property rights for less than it would have cost PG&E for these same items,  
4 the customer can lower the amount of its Advance and/or Actual Cost  
5 Payments. In addition, Contributions can lower the total cost of  
6 Transmission Facilities that are eligible for Refund, thus reducing the Refund  
7 amount included in rates paid by existing electric customers.

8 Electric Rule 30 includes financial protections related to Contributions.  
9 A customer must provide a binding cost estimate of the Contribution before  
10 the Contribution is received by PG&E.<sup>23</sup> PG&E can review the binding cost  
11 estimate and may reject a Contribution if it is too expensive or the binding  
12 cost estimate exceeds the cost that PG&E would pay for the same  
13 equipment, property rights, or in-kind services.<sup>24</sup> The binding cost estimate  
14 is also used to determine the amount of eligible Refunds for Contributions.<sup>25</sup>  
15 PG&E also has the right to review and audit the value of a Contribution.<sup>26</sup>

16 A transmission level customer's payment responsibility for Transmission  
17 Service Facilities, Transmission Interconnection Upgrades, and  
18 Transmission Interconnection Network Upgrades is not limited to Advances  
19 and Contributions. Customers must pay the Actual Costs<sup>27</sup> incurred by  
20 PG&E to design and construct these facilities.<sup>28</sup> When PG&E's costs  
21 exceed the amount of the Advance, PG&E can begin invoicing the customer  
22 for the Actual Costs in excess of the Advance on no more than a monthly

---

**23** Electric Rule 30.C.3.a.

**24** Electric Rule 30.C.3.b.

**25** Electric Rule 30.G (definition of Adjusted Contribution Cost).

**26** Electric Rule.D.9.

**27** Actual Cost is defined as PG&E's fully loaded costs, including direct, indirect, and overhead costs billed in accordance with PG&E's systems for allocating charges to customers. Direct, indirect and overhead costs include, without limitation, payroll, payroll taxes, external charges, benefits, Allowance for Funds Used During Construction, Administrative and General Costs, estimating, mapping, surveying, permitting costs, land rights acquisition, transportation, service planning, contract management, sourcing, stores and tool expense, material and supplies, public liability and property damage insurance, as set forth in PG&E's tariffs, estimated state and federal income tax, and other costs charged under such systems, all as in effect from time-to-time. See also Electric Rule 30.G (definition of Actual Cost).

**28** Electric Rule 30.C.4.

1 basis.<sup>29</sup> The customer is required to pay invoices within 45 calendar days  
2 or interest may be applied and/or PG&E may stop work.<sup>30</sup> The customer  
3 has reasonable access to PG&E's accounts and records so that the  
4 customer can audit the Actual Costs incurred by PG&E.<sup>31</sup> These provisions  
5 in Electric Rule 30 benefit the customer by ensuring it only pays Actual  
6 Costs and has the ability to audit PG&E's costs. The provisions also benefit  
7 PG&E's existing electric customers by ensuring that the new  
8 transmission level customer is paying the Actual Cost for facilities.

9 Section C also includes provision that the transmission level customer is  
10 responsible for ITCC on Advances, Actual Cost Payments, and  
11 Contributions. The ITCC may be refundable and included in the Refund.<sup>32</sup>

12 Finally, Section C includes provisions that address: (1) situations where  
13 there are multiple customers that will be using the new facilities;<sup>33</sup>  
14 (2) termination of service by a transmission level customer prior to the  
15 Transmission Facilities going into service;<sup>34</sup> (3) a customer's failure to take  
16 service after paying an Advance, providing a Contribution, and/or paying  
17 Actual Costs;<sup>35</sup> (4) PG&E's right to reduce Excess Facilities if the facilities  
18 requested by a customer are larger than its actual demand;<sup>36</sup>  
19 and (5) refunds if the Advance exceeds Actual Costs.<sup>37</sup>

## 20 **5. Section D – Refunds**

21 Section D addresses Refunds. A customer is eligible to receive  
22 Refunds for: (1) Advances; (2) Actual Cost Payments; (3) Contributions;  
23 and (4) Applicant Build Facilities.<sup>38</sup> Electric Rule 30 includes a number of

---

**29** Electric Rule 30.C.4.a.

**30** Electric Rule 30.C.4.b.

**31** Electric Rule 30.C.4.c.

**32** Electric Rule 30.C.5.

**33** Electric Rule 30.C.6.

**34** Electric Rule 30.C.7.

**35** Electric Rule 30.C.8.

**36** Electric Rule 30.C.9.

**37** Electric Rule 30.C.10.

**38** Electric Rule 30.D.1.

1 safeguards to protect PG&E's existing electric customers with regard to  
2 Refunds to ensure that Refunds provided to a new transmission level  
3 customer are just and reasonable:

- 4 • Special Facilities Costs: Payments made by a new transmission level  
5 customer as either Advances or Actual Cost Payments are reduced by  
6 the incremental costs of Special Facilities.<sup>39</sup> Thus, while new  
7 transmission level customers are eligible for a refund of Advances and  
8 Actual Cost payments, they are not eligible for Refunds for the  
9 incremental costs of Special Facilities.
- 10 • Value of Contributions: For Contributions, customers are eligible for  
11 Refunds of the lesser of: (1) the binding cost estimate provided by the  
12 customer to PG&E prior to the Contribution so that PG&E can ensure  
13 that the Contribution cost is reasonable; or (2) the actual cost paid for  
14 the Contribution by the customer.<sup>40</sup> This ensures that Refunds for  
15 Contributions are limited to reasonable costs based either on a binding  
16 estimate or actual costs if they are lower than the binding estimate.  
17 Electric Rule 30 also provides PG&E with audit rights regarding the  
18 actual costs for a Contribution.<sup>41</sup>
- 19 • Value of Applicant Build Facilities: For Applicant Build Facilities where  
20 the ownership is transferred to PG&E, the new transmission level  
21 customer is eligible for a Refund that is the lesser of: (1) the binding  
22 estimated cost for the Applicant Build Facility provided by the customer  
23 to PG&E so that PG&E can ensure that the customer building costs are  
24 reasonable; and (2) the actual cost paid by the customer to build the  
25 facilities.<sup>42</sup> This ensures that Refunds for customer-built facilities are  
26 limited to reasonable costs based either on a binding estimate or actual  
27 costs if they are lower than the binding estimate. Electric Rule 30 also

---

**39** Electric Rule 30.G (definition of Adjusted Applicant Payment).

**40** Electric Rule 30.G (definition of Adjusted Contribution Cost).

**41** Electric Rule 30.D.8.

**42** Electric Rule 30.G (definition of Adjusted Applicant Build Cost).



1 provides PG&E with audit rights regarding the actual costs for Applicant  
2 Build Facilities.<sup>43</sup>

- 3 • Refund Contingent on BARC Review: A new transmission level  
4 customer's eligibility for Refunds is contingent on the customer's actual  
5 electric demand and the associated revenues from the customer.  
6 Specifically, a customer's eligibility for a Refund is based on PG&E's  
7 BARC, which is described in more detail below in Section C.<sup>44</sup>
- 8 • Refund Time Period: Refunds are limited to a 10-year period. If the  
9 customer's Usage Forecast does not materialize in 10 years, the  
10 customer is not entitled to any additional Refunds after the 10-year  
11 Refund Period.<sup>45</sup>
- 12 • Monthly Cost of Ownership Charges: While Refunds are pending,  
13 customers are responsible for monthly cost-of-ownership charges to  
14 compensate PG&E and its other retail customers for the costs of  
15 operating and maintaining the Transmission Service Facilities,  
16 Transmission Interconnection Upgrades, and Transmission  
17 Interconnection Network Upgrades.<sup>46</sup>

18 In addition to these safeguards to protect existing electric customers,  
19 Electric Rule 30 also includes provisions that benefit new transmission level  
20 customers. If subsequent transmission level customers make use of  
21 facilities paid for by an initial customer, and the initial customer has not yet  
22 received its full Refund, Subsequent Use Refunds may be provided to the  
23 initial customer based on the BARC for the subsequent customers.<sup>47</sup>  
24 Subsequent Use Refunds are only available after a subsequent customer  
25 receives its Total Refund Amount. The Subsequent Use Refunds benefit an  
26 initial customer by providing additional, potential Refunds up to the initial  
27 customer's Total Refund Amount.

---

**43** Electric Rule 30.D.8.

**44** Electric Rule 30.E.9.

**45** Electric Rule 30.D.3.

**46** Electric Rule 30.D.6.

**47** Electric Rule 30.D.11.

1 Finally, in addition to these provisions to ensure that Refunds are  
2 reasonable, Section D addresses: (1) the timing of Refunds;<sup>48</sup> (2) Refunds  
3 when there are multiple customers;<sup>49</sup> (3) Refunds for Mixed-Fuel New  
4 Construction facilities as required by the Commission in Decision  
5 (D.) 23-12-037;<sup>50</sup> and (4) precluding a customer from receiving any  
6 additional Refunds other than what it has already received if the customer  
7 terminates service.<sup>51</sup> With regard to mixed-fuel new construction,  
8 I understand that as a part of this Application, PG&E will be requesting that  
9 the Commission determine whether the requirements of D.23-12-037 should  
10 apply to Electric Rule 30. Depending on the Commission’s decision, this  
11 provision may be removed from Electric Rule 30.

## 12 **6. Section E – Applicant-Build Option**

13 Section E addresses situations where a customer builds, at PG&E’s sole  
14 discretion, a portion of the Transmission Facilities. The facilities that are  
15 eligible for the Applicant Build Option are the Transmission Service Facilities  
16 (Facility Type 1) and/or Transmission Interconnection Upgrades (Facility  
17 Type 2).<sup>52</sup> Since Transmission Interconnection Network Upgrades and  
18 Transmission Network Upgrades are a part of PG&E’s transmission  
19 system—and upgrades to these facilities may impact multiple customers, in  
20 some cases, potentially hundreds or thousands of customers—PG&E is  
21 solely responsible for performing work on these facilities. Facilities built by a  
22 customer are referred to as “Applicant Build Facilities.”

23 Section E describes the customer’s responsibilities for Applicant Build  
24 Facilities, including: the use of PG&E standards and specifications, Good  
25 Utility Practice, and compliance with laws and regulations.<sup>53</sup> In order to  
26 ensure that Applicant Build Facilities will provide safe and reliable service,

---

**48** Electric Rule 30.D.5.

**49** Electric Rule 30.D.7.

**50** Electric Rule 30.D.8.

**51** Electric Rule 30.D.10.

**52** Electric Rule 30.G (definition of Applicant Build Facilities). However, Transmission Interconnection Upgrades (Facility Type 2) are not eligible for the Applicant Build Option if they are located in existing PG&E electrical facilities. See Electric Rule 30.E.1.f.

**53** Electric Rule 30.E.1, E.7, and E.8.

1 PG&E has the right to review the customer’s engineering, design, equipment  
2 tests and construction;<sup>54</sup> (2) access to the construction site;<sup>55</sup> and (3) can  
3 require the customer to correct any deficiencies.<sup>56</sup> The customer is  
4 required to indemnify PG&E for potential claims and to transfer ownership to  
5 PG&E after the completion of construction, subject to PG&E’s review before  
6 the transfer occurs.<sup>57</sup> The customer must enter into a CPUC-approved form  
7 contract for Applicant Build Facilities and provide a binding cost estimate to  
8 PG&E so that PG&E can ensure that the costs of the Applicant Build  
9 Facilities are reasonable.<sup>58</sup> A customer is also required to pay ITCC on  
10 Applicant Build Facilities.<sup>59</sup>

11 Finally, in order to ensure that Applicant Build Facilities are safely  
12 constructed and provide safe and reliable service, Electric Rule 30 includes  
13 requirements for contractors retained by the customer including licensing,  
14 use of an approved list of contractors, and possess necessary  
15 qualifications.<sup>60</sup>

## 16 **7. Section F – Special Conditions**

17 Section F addresses certain special circumstances related to service  
18 under Electric Rule 30. First, if the customer requests that PG&E rearrange  
19 or relocate existing facilities for the customer’s convenience, the  
20 rearrangement or relocation costs are paid by the customer and are not  
21 eligible for Refund.<sup>61</sup>

22 Second, if PG&E is required to remove existing facilities so that it can  
23 interconnect a customer, the cost of removal is included in the PG&E  
24 estimate for purposes of an Advance and/or for Actual Cost Payments.<sup>62</sup>

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**54** Electric Rule 30.E.2.

**55** Electric Rule 30.E.3.

**56** Electric Rule 30.E.4.

**57** Electric Rule 30.E.5 and E.6.

**58** Electric Rule 30.E.10 and E.11.

**59** Electric Rule 30.E.12.

**60** Electric Rule 30.E.7 and E.8.

**61** Electric Rule 30.F.1.

**62** Electric Rule 30.F.2.

1 Third, when the application of Electric Rule 30 “appears impractical or  
2 unreasonable to either party or ratepayers,” PG&E may submit an  
3 exceptional case filing to the CPUC to seek approval for special  
4 conditions.<sup>63</sup>

5 Fourth, the customer is responsible for the cost of removal of any PG&E  
6 facilities located on the customer’s Premises if the customer terminates  
7 service.<sup>64</sup>

8 Fifth, although customers are not required to make an Advance or pay  
9 Actual Costs for Transmission Network Upgrades (Facility Type 4), Electric  
10 Rule 30 provides an option for a customer to make a loan to PG&E to be  
11 used to pre-fund these upgrades to accelerate work. PG&E is providing this  
12 option to customers who may be interested in pre-funding Transmission  
13 Network Upgrade work if doing so will expedite the customer’s  
14 interconnection. The pre-funding loan amounts would be refunded, without  
15 interest, to the customer when the Transmission Network Upgrades are in  
16 operation and the customer would be required to provide ITCC with the loan,  
17 but the ITCC will be refunded when the loan is repaid.<sup>65</sup>

18 Finally, although Electric Rule 30 is for voltages from 50 kV to 230 kV,  
19 if a customer requests to interconnect at voltages above 230 kV, PG&E  
20 may, at its sole discretion, apply the provisions of Electric Rule 30 and may  
21 submit an exceptional case filing for Commission review.<sup>66</sup>

## 22 **8. Section G – Definitions**

23 Section G includes the defined terms that are used throughout Electric  
24 Rule 30.

### 25 **C. BARC Overview**

26 Under Electric Rule 30, transmission level customers are eligible for  
27 Refunds based on PG&E’s BARC process.<sup>67</sup> Similar to the BARC process  
28 applied to Gas and Electric Rules 15 and 16, under Rule 30 transmission level

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**63** Electric Rule 30.F.3.

**64** Electric Rule 30.F.4.

**65** Electric Rule 30.F.5.

**66** Electric Rule 30.F.6.

**67** Electric Rule 30.D.4.

1 customers are eligible to receive Refunds for Facility Types 1-3 based on the  
2 expected 10-year revenue stream generated from the customer's Facility.  
3 These revenues support the capital investment associated with the electric  
4 facilities installed by PG&E to provide service to the transmission level  
5 customer.<sup>68</sup>

6 Inputs to the BARC formula include: (1) the Cost of Service Factor (CoSF)  
7 which is the annualized utility-financed Cost of Ownership and includes taxes,  
8 return, depreciation, and is applied to the Net Revenue to determine PG&E's  
9 investment in respective facilities;<sup>69</sup> (2) Net Revenue which is the portion of the  
10 total rate revenues from the transmission level customer that supports PG&E's  
11 facility costs; and (3) the appropriate ITCC which taxes refundable and  
12 non-refundable contributions in aid of construction. The BARC formula is  
13 calculated by dividing the CoSF into the Net Revenue and multiplying by the  
14 ITCC as indicated in the formula below, which is included in Electric Rule 30:

$$\text{BARC FORMULA} = \frac{\text{Net Revenue}}{\text{CoSF}} \times (1 + \text{ITCC})$$

15 To calculate Net Revenue, PG&E uses the unbundled rate components from  
16 Electric Schedule B-20 rate for transmission level customers that support  
17 Transmission Facility interconnection costs. Rate revenue from the unbundled  
18 transmission components support Transmission Facility interconnection costs  
19 and thus are appropriate to include in the calculation of Net Revenues. The Net  
20 Revenue formula also incorporates the Customer Charge to ensure the Net  
21 Revenue includes Marginal Customer costs. Below is an expanded version of  
22 the BARC formula that includes the planned Net Revenue calculation:

$$\text{BARC Formula} = \frac{\text{Demand (kW)} \times \text{Tx Demand Rate} + \text{Usage (kWh)} \times \text{Tx Usage Rate} + \text{Customer Charge} - \text{RCS Credit}}{\text{CoSF}} \times (1 + \text{ITCC})$$

23 Since the components of the B-20 rate may change over time, PG&E is not  
24 including in Electric Rule 30 the detailed formula above. Instead, PG&E is using

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**68** Under Electric Rule 30, the BARC process applies to Facility Types 1-3 (i.e., Transmission Service Facilities, Transmission Interconnection Upgrades, and Transmission Network Interconnection Upgrades). The BARC process does not apply to Transmission Network Upgrades (Facility Type 4) because the customer is not required to provide an Advance or Actual Cost payments for these upgrades.

**69** The CoSF is stated in a monthly format in Electric Rule 2. See Electric Rule 2.1.3.b.

1 the term Net Revenues to capture the types of revenues that will be considered  
2 in the BARC process. The term Net Revenues is defined in Electric Rule 30.

3 The BARC process will start the first full calendar year after the  
4 Transmission Facilities go into service and shall continue for up to 10-years.<sup>70</sup>  
5 The customer will not receive any additional refunds after the 10-year period and  
6 the Refund amount during this period will not exceed the total amount of the  
7 refund eligible applicant Advances.<sup>71</sup> Any unrefunded amounts at the end of  
8 the 10-year period will be forfeited by the customer.<sup>72</sup> Since the BARC process  
9 reflects expected revenues for a 10-year period of time, it is reasonable to limit  
10 the Refund Period to 10 years.

11 PG&E will calculate Refunds, if any, during the first three years of the  
12 Refund Period.<sup>73</sup> If a customer's electric load increases from one year to the  
13 next, the customer will be eligible for an additional Refund amount. PG&E  
14 expects that within three years of a facility being on-line, a customer's facility will  
15 be at its full electric load (i.e., Usage Forecast). Thus, the electric load in Year 3  
16 is expected to be the total electric demand for the BARC process. However,  
17 after Year 3, if a customer's permanent electric load increases, the customer  
18 may notify PG&E of any permanent load increase in Years 4 through 10 of the  
19 10-year Refund Period.<sup>74</sup> Notifications of increased load and the request to  
20 perform the BARC refund calculation must be submitted to PG&E no later than  
21 December 31, and be accompanied with supporting documentation of the  
22 permanent load increase. This provides the customer the opportunity to receive  
23 a Refund if, at any point in time during the 10-year Refund Period, the  
24 customer's permanent load increases. PG&E will issue Refunds annually, if  
25 any, within 120 days after the end of the previous calendar year.<sup>75</sup>

26 Below, are two illustrative examples of how the BARC process works in two  
27 different scenarios. It is important to note, however, that each actual new

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**70** Electric Rule 30.D.3.

**71** Electric Rule 30.D.4.c and D.4.d.

**72** Electric Rule 30.D.4.d.

**73** Electric Rule 30.D.4.a.

**74** Electric Rule 30.D.4.b.

**75** Electric Rule 30.D.5.

1 transmission level customer interconnection is unique. Each customer will have  
 2 unique costs for Transmission Facilities, a unique Usage Forecast, and unique  
 3 ramp up once the facility is operational. Thus, there is no single example which  
 4 can capture every possible scenario.

5 Table 2-1 provides an illustrative example of Refunds provided under the  
 6 BARC process over the Refund Period. In this example, it is assumed that the:

- 7 • Facility Types 1-3 constructed by PG&E were based on the customer’s
- 8 Usage Forecast of 75 megawatts (MW);
- 9 • Advance and/or Actual Cost Payments from the customer are \$50 million;<sup>76</sup>
- 10 • CoSF is 0.1368;<sup>77</sup>
- 11 • ITCC is 24 percent; and,
- 12 • Total Refund Amount is \$50 million.

13 The illustrative example also assumes that the customer’s facility ramps up  
 14 its load so that in Year 1 the load is 19 MW and by Year 5 the load has reached  
 15 the customer’s Usage Forecast of 75 MW. However, the customer received the  
 16 full Refund amount in Year 3 as the revenue generated supports the investment.

**TABLE 2-1  
 ILLUSTRATIVE REFUNDS EXAMPLE: 75 MW**

Line No.	Year	MW	Net Revenue	Refund	BARC Formula
1	1	19	\$2,713,293	\$24,594,173	\$24,594,173
2	2	25	\$3,512,805	\$6,484,863	\$31,841,211
3	3	56	\$7,643,616	\$18,920,964	\$69,284,242
4	4	63	\$8,576,380	–	–
5	5	75	\$10,175,404	–	–
6	6	75	\$10,175,404	–	–
7	7	75	\$10,175,404	–	–
8	8	75	\$10,175,404	–	–
9	9	75	\$10,175,404	–	–
10	10	75	\$10,175,404	–	–
11		Total	\$83,498,519	\$50,000,000	

17 Table 2-2 provides another example of Refunds provided under the BARC  
 18 process over the Refund Period. In this example, all assumptions remain the  
 19 same in the previous example, however the customer never ramps up its load

<sup>76</sup> Electric Rule 30.D.1.

<sup>77</sup>  $1.14\% \times 12 = 0.1368$  (the annualized CoSF).

1 beyond 30 MW. Due to this, the BARC review limits the customer's Refund to  
 2 \$33,678,391, which means that while PG&E's customers received \$50 million  
 3 worth of facilities that were paid for by the transmission level customer, the  
 4 Refund to the transmission level customer will only be \$33.7 million.

**TABLE 2-2  
 ILLUSTRATIVE REFUNDS EXAMPLE: 30 MW**

Line No.	Year	MW	Net Revenue	Refund	BARC Formula
1	1	19	\$847,765	\$7,684,417	\$7,684,417
2	2	25	\$1,514,025	\$4,769,731	\$13,723,615
3	3	56	\$2,180,285	\$4,912,823	\$19,762,814
4	4	63	\$2,846,545	\$5,060,208	\$25,802,012
5	5	75	\$4,179,065	\$11,251,212	\$37,880,410
6	6	75	\$4,179,065	-	-
7	7	75	\$4,179,065	-	-
8	8	75	\$4,179,065	-	-
9	9	75	\$4,179,065	-	-
10	10	75	\$4,179,065	-	-
11		Total	\$32,463,006	\$33,678,391	

5 **D. Conclusion**

6 This chapter demonstrates that: (1) the provisions in proposed Electric  
 7 Rule 30 are just and reasonable and appropriately allocate benefits and  
 8 responsibilities to the transmission level customers; and (2) the BARC review  
 9 process is just and reasonable for refunding to transmission level customers  
 10 costs associated with Adjusted Applicant Payments, Adjusted Contribution  
 11 Costs, and/or Adjusted Applicant Build Costs.



**PACIFIC GAS AND ELECTRIC COMPANY**  
**CHAPTER 2**  
**ATTACHMENT A**  
**PROPOSED ELECTRIC RULE NO. 30: RETAIL SERVICE**  
**TRANSMISSION FACILITIES**



**ELECTRIC RULE NO. 30**  
**RETAIL SERVICE TRANSMISSION FACILITIES**

**APPLICABILITY:** This Rule is applicable to Transmission Facilities to furnish Retail Service to non-residential Applicants for a Facility at transmission voltages from 50 kV up to and including 230 kV. A determination of the voltage at which an Applicant shall receive Retail Service for a Facility shall be made by PG&E in its sole discretion. If PG&E determines, in its sole discretion, that an Applicant shall receive Retail Service at a Facility at less than 50 kV, Applicant shall not be eligible to receive service under this Rule.

In this Rule, capitalized terms are defined in Section G.

**A. GENERAL**

**1. TRANSMISSION FACILITIES**

- a. **DESIGN.** PG&E will be responsible for planning, designing, and engineering Transmission Facilities using PG&E's standards for material, design, and construction. At PG&E's sole discretion, Applicants may be eligible for the Applicant Build Option in Section E.
- b. **CONSTRUCTION AND DESIGN SPECIFICATIONS, STANDARDS, TERMS, AND CONDITIONS**
  - 1) In compliance with California Public Utilities Code Section 783(g)(1), PG&E will apply only those construction and design specifications, standards, terms, and conditions that are applicable to a new project under this Rule for the 18 months following the date an Applicant's application is approved.
  - 2) Consistent with California Public Utilities Code Section 783(g)(2), PG&E may adopt modifications to those construction and design specifications, standards, terms, and conditions applicable to a new project under this Rule only in accordance with any of the following:
    - a) An order or decision of the CPUC or any other state or federal agency with jurisdiction.
    - b) A work order issued by PG&E to implement construction or design changes necessitated by an Applicant-driven scope of work modification.
    - c) A material-related design change identified by PG&E to remedy a construction material defect that could pose a risk to public safety.
  - 3) Consistent with California Public Utilities Code Section 783(h)(1), the Applicant's application approval date refers to the earlier of either: (1) the effective date of the contract for electric service; or (2) the date when PG&E first invoices the Applicant for the extension of electric service.
- c. **OWNERSHIP.** The Transmission Facilities installed under the provisions of this Rule shall be owned, operated, and maintained by PG&E, except for Substructures and



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enclosures that are on, under, within, or a part of a building or structure owned by Applicant.

- d. **SERVICE FROM NON-PG&E FACILITIES.** PG&E shall not be required to serve any Applicant from Transmission Facilities that are not owned, operated, and maintained by PG&E.

**2. TRANSMISSION FACILITIES LOCATION AND PREMISE LAND RIGHTS**

- a. **RIGHTS OF WAY.** PG&E will own, operate, and maintain Transmission Facilities only:

- 1) Along public streets, alleys, roads, highways and other publicly dedicated ways and places which PG&E has the legal right to occupy; and
- 2) On public lands and private property across which rights of way and permits satisfactory to PG&E may be obtained.

- b. **NORMAL ROUTE OF TRANSMISSION LINE.** The length and normal route of a Transmission Line will be determined by PG&E, and considered as the distance along the shortest, most practical, available, and acceptable route, which is clear of obstructions from the service connection to PG&E's nearest permanent and available transmission facility with both sufficient existing or otherwise planned capacity and adequate existing or otherwise planned protection to completely interconnect and adequately serve the Applicant's Facility.

- c. **LAND RIGHTS ON APPLICANT'S PREMISES.** Applicant shall provide without cost to PG&E all land and/or permanent rights of way or easements, satisfactory to PG&E on Applicant's Premises that PG&E deems necessary, in PG&E's sole discretion, in order to provide Retail Service to the Facility. Land and/or property rights on the Premises provided by the Applicant to PG&E shall not be considered a Contribution.

**3. SPECIAL FACILITIES.** PG&E normally installs only those standard facilities which PG&E deems, in its sole discretion, are necessary to provide Retail Service. Applicant may request Special Facilities and/or Special Facilities may be required in order to provide Retail Service to Applicant's Facility. PG&E may, in its sole discretion, decide not to install Special Facilities. If PG&E agrees to install Special Facilities, then Applicant shall bear Incremental Special Facilities Costs, ITCC if applicable, and the Special Facilities Monthly Cost of Ownership Charge.

- a. Special Facilities include: (1) facilities requested by the Applicant beyond those required for standard service to bona-fide load, where bona-fide load is determined by PG&E using actual and historic load(s) for customer(s) of similar type and size; (2) facilities and/or portions of facilities constructed for the sole use of the Applicant at the Applicant's request which would normally be constructed to allow for potential use by other customers; and/or (3) facilities required by project-specific



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- circumstances, such as but not limited to space constraints, which results in additional costs.
- b. Special Facilities shall be installed, owned, and maintained by PG&E as an accommodation to the Applicant only if: (1) PG&E in its sole discretion agrees to the installation of Special Facilities; and (2) the reliability of service to PG&E's other customers is not impaired by the Special Facilities.
  - c. Special Facilities will be installed under the terms and conditions of a Special Facilities Agreement in the form on file with the CPUC.
  - d. When Special Facilities are requested by the Applicant and/or required by project-specific circumstances, PG&E shall provide to the Applicant a Standard Facilities Cost Estimate and a Special Facilities Cost Estimate.
  - e. A Special Facilities Monthly Cost of Ownership Charge shall be paid by the Applicant consistent with the percentage in Electric Rule No. 2.1.3.b, as may be amended from time to time.
  - f. In accordance with Electric Rule No. 2.1.3.d, as may be amended from time to time, where PG&E determines the collection of continuing Special Facilities Monthly Cost of Ownership Charges is not practicable, the Applicant shall be required to make an equivalent one-time payment in lieu of the Special Facilities Monthly Cost of Ownership Charge.
4. **CONTRACTS.** To receive Retail Service under this Rule, Applicant shall execute all necessary written contract(s). Such contracts shall be in the form on file with the CPUC.
  5. **ACCESS TO APPLICANT'S PREMISES.** PG&E shall at all times have the right to enter and leave Applicant's Premises for any purpose connected with the furnishing of Retail Service (meter reading, inspection, testing, routine repairs, replacement, maintenance, vegetation management, emergency work, etc.) and the exercise of any and all rights secured to it by law or under PG&E's applicable tariff schedules. These rights may include but are not limited to: (1) the installation and use of a PG&E-approved locking device; (2) safe and ready access for PG&E personnel free from unrestrained animals; (3) unobstructed ready access for PG&E's vehicles and equipment to install, remove, repair, or maintain its facilities; and (4) removal of any and all of PG&E's property installed on Applicant's Premises after the termination of service.
  6. **WORK PERFORMED ON TRANSMISSION FACILITIES.** Only personnel duly authorized by PG&E are allowed to connect or disconnect service conductors to or from PG&E-owned electrical facilities, remove PG&E-owned electrical facilities and equipment, or perform any work upon PG&E-owned electrical facilities.
  7. **FACILITY TAMPERING.** Applicant shall provide a suitable means acceptable to PG&E for placing PG&E's seals on meter rings and covers of service enclosures and instrument transformer enclosures which protect unmetere energized conductors



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installed by Applicant. All PG&E-owned meters and enclosure covers will be sealed only by PG&E's authorized employees and such seals shall be broken only by PG&E's authorized employees. However, in an emergency, PG&E may allow a public authority or other appropriate party to break the seal. Any unauthorized tampering with PG&E-owned seals or connection of Applicant-owned facilities to unmetered conductors at any time is prohibited and is subject to the provisions of Electric Rule No. 11, as may be amended or modified.

**B. INSTALLATION AND METERING REQUIREMENTS AND FACILITY RESPONSIBILITIES**

1. **UNDERGROUND TRANSMISSION FACILITIES.** PG&E is responsible for furnishing and installing cables, switches, and other electrical facilities required for any underground Transmission Facilities. Underground facilities are not eligible to be a part of the Applicant Build Option in Section E.
2. **OVERHEAD TRANSMISSION FACILITIES.** PG&E is responsible for furnishing and installing all overhead and above-ground facilities required for the Transmission Facilities, subject to the Applicant Build Option in Section E.
3. **APPLICANT BUILD OPTION.** Subject to PG&E's sole discretion, Applicant may be eligible to design, procure, construct, and install, in accordance with PG&E's standards and specifications and using qualified contractors, Applicant Build Facilities. See Section E for further details.
4. **METERING FACILITIES**
  - a. **METER USAGE AND LOCATION.** Delivery of all electric power and energy will be metered, unless otherwise provided for by PG&E's tariff schedules or by other applicable laws. All meters and associated metering equipment shall be located at some protected location on Applicant's Premises as approved by PG&E.
  - b. **NUMBER OF METERS.** Normally only one meter will be installed for a single non-residential enterprise on a single Premises, except: (1) when otherwise required or allowed under PG&E's tariff schedules; (2) at the option of and as determined by PG&E, for its operating convenience, consistent with its engineering design; (3) when required by law or local ordinance; (4) when additional services are granted by PG&E; or (5) when otherwise approved by PG&E.
  - c. **MULTIPLE OCCUPANCY.** In a building with two or more tenants, or where more than one meter is used on the same Premises, the meters normally shall be grouped at one central location, or as otherwise specified by PG&E, and each meter position or socket shall be clearly and permanently marked by Applicant and/or the owner of the Premises to indicate the particular unit, occupancy, or load supplied by it. For revenue billing electric service shall be individually metered to each tenant in a non-residential building or group of buildings or other development on a single Premises with multiple tenants or enterprises (such as, but not limited to, an office building or shopping center complex). Alternative metering arrangements as determined by



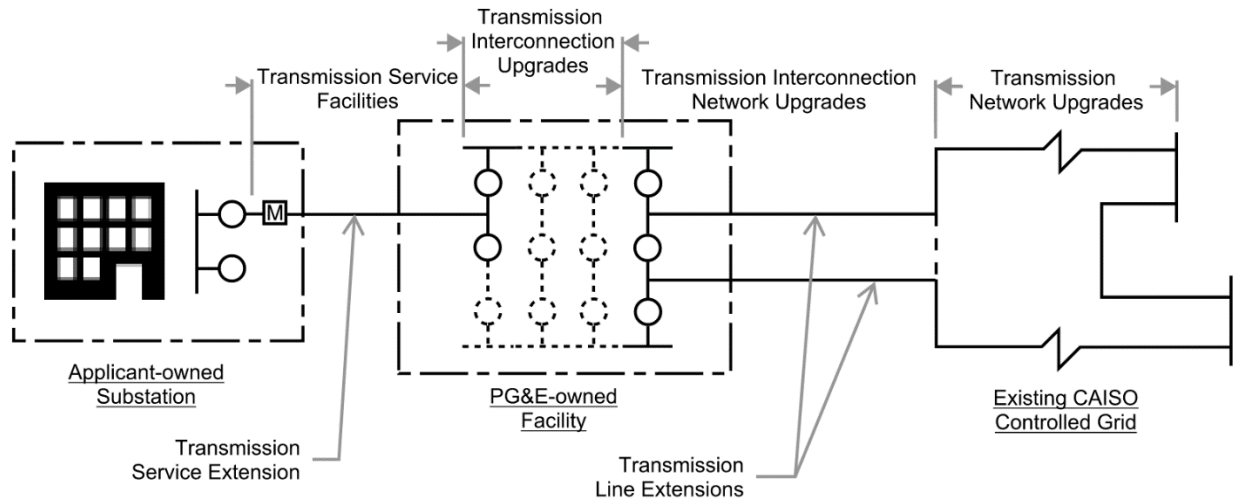
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PG&E may be allowed only as specified in Electric Rule No. 18 and applicable rate schedules.

- d. **PG&E-OWNED METERS.** When a meter is owned by PG&E, PG&E will be responsible for the necessary instrument transformers where required, test facilities, meters, associated metering equipment, and the metering enclosures when PG&E elects to locate metering equipment at a point that is not accessible to Applicant.
  5. **APPLICANT FACILITY RESPONSIBILITIES.** Applicant shall, at its sole liability, risk, and expense, be responsible to furnish, install, own, maintain, inspect, and keep in good and safe condition, all facilities of any kind or character on Applicant's Premises that are not the responsibility of PG&E but are required by PG&E for Applicant to receive Retail Service. Such facilities shall include but are not limited to the overhead or underground termination equipment, conduits, service entrance conductors, connectors, meter sockets, meter and instrument transformer housing, service switches, circuit breakers, fuses, relays, wireways, metered conductors, machinery and apparatus of any kind or character. Detailed information on PG&E's service equipment requirements will be furnished to the Applicant by PG&E.
  6. **APPLICANT REASONABLE CARE OF PG&E FACILITIES.** Applicant shall exercise reasonable care to prevent PG&E's Transmission Facilities and/or meters on the Applicant's Premises from being damaged or destroyed and shall refrain from interfering with PG&E's operation of the facilities and shall notify PG&E of any obvious defect.
- C. **ADVANCES, CONTRIBUTIONS, AND ACTUAL COST PAYMENTS**
1. **GENERAL.** Figure 1 below provides an illustrative diagram of the potential different components of Transmission Facilities that may be required in response to an Applicant's request for Retail Service at its Facilities and/or Premises.

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**Figure 1: Illustrative Diagram of Transmission Facility Types**  
 (Dashed lines represent potential future Transmission Interconnection Upgrades)



2. **REQUIRED ADVANCE.** An Advance is required from the Applicant for the design, procurement, construction, and/or installation work that has been or will be performed by PG&E for Transmission Service Facilities, Transmission Interconnection Upgrades, and Transmission Interconnection Network Upgrades. The Advance is based on the Project Specific Cost Estimate provided to the Applicant by PG&E. An Advance is not required for Transmission Network Upgrades because Transmission Network Upgrades are paid for by PG&E.
  - a. An Applicant may be required to provide separate advances for preliminary work performed by PG&E. To the extent that these preliminary advances are not included within the scope of the Advance required in this Rule, they will be addressed through agreements and/or form contracts between PG&E and the Applicant. These advances, which are outside of the scope of the Rule 30 Advance, may not be refundable.
  - b. The amount and timing of payment for Advances under this Rule shall be specified in a CPUC-approved form contract between the Applicant and PG&E. If the Applicant fails to pay the Advance in the time specified, PG&E reserves the right to stop performance of its work. If PG&E stops performance, and Applicant subsequently pays the Advance, the timing of PG&E re-commencing work shall be at PG&E's discretion based on availability of resources.
3. **OPTIONAL CONTRIBUTIONS.** Applicant may, at PG&E's sole discretion, provide in-kind services, equipment, and/or land and property rights to PG&E for purposes of installing the Transmission Facilities.





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- a. Before providing any Contribution to PG&E, Applicant shall provide to PG&E a binding estimated cost of each service, piece of equipment, and/or land and property rights included in the Applicant's proposed Contribution.
  - b. After receiving the binding estimated cost, PG&E may, in its sole discretion, decide whether or not to accept some or all of the Applicant's proposed Contribution.
  - c. Consistent with Section A.2.c, land and/or property rights provided on the Applicant's Premises shall not be considered a Contribution.
4. **ACTUAL COST PAYMENTS.** PG&E is entitled to receive from Applicant PG&E's Actual Costs for work performed on the Transmission Service Facilities, Transmission Interconnection Upgrades, and/or Transmission Interconnection Network Upgrades.
- a. When PG&E's Actual Costs for work on the Transmission Service Facilities, Transmission Interconnection Upgrades, and/or Transmission Interconnection Network Upgrades exceed the Advance, PG&E may submit an invoice to Applicant, in accordance with PG&E invoicing standards, not more than once each month for Actual Costs incurred by PG&E to date that exceed the Advance. PG&E may, in its sole discretion, determine the timing for providing invoices but not more than once each month.
  - b. Applicant shall pay all invoiced amounts within forty-five (45) calendar days after receipt of PG&E's invoice ("Actual Cost Payments"). If the Applicant does not pay PG&E within forty-five (45) calendar days after receipt of an invoice, the Applicant shall pay PG&E interest on the unpaid amount at the Interest Rate. PG&E shall also be entitled to stop performance of its work until an overdue payment is received. If PG&E stops performance, and Applicant subsequently pays outstanding invoiced amounts, the timing of PG&E re-commencing work shall be at PG&E's discretion based on availability of resources.
  - c. The Applicant shall have reasonable access to PG&E's accounts and records for the purposes of reviewing PG&E's invoices for payment and auditing PG&E's Actual Costs. Audit request(s) and support will be at the expense of the Applicant. Audit requests shall be made in writing to PG&E and shall specify the material(s) and information requested.
5. **TAX.** All taxable Advances, Contributions, and/or Actual Cost Payments by Applicant shall include an Income Tax Component of Contribution (ITCC) at the rate provided in PG&E's Preliminary Statement J. ITCC will be either refundable or non-refundable in accordance with the corresponding Advances, Contributions, and/or Actual Cost Payments.
6. **JOINT APPLICANTS.** In circumstances where several Applicants are seeking Retail Service and the same Transmission Interconnection Upgrades and/or Transmission Interconnection Network Upgrades are required to furnish Retail Service to each of these Applicants (Joint Applicants), the Joint Applicants shall mutually agree on





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apportioning among themselves the Advances, Contributions, and/or Actual Cost Payments for the Transmission Interconnection Upgrades and/or Transmission Interconnection Network Upgrades (Apportionment Agreement) and shall provide the written Apportionment Agreement to PG&E in a form acceptable by PG&E before any of the Joint Applicants executes a contract(s) for electric service. Where necessary, PG&E will work with the Joint Applicants to facilitate an Apportionment Agreement. If the Joint Applicants are unable to agree on the terms of an Apportionment Agreement, PG&E shall prepare an Apportionment Agreement that each Joint Applicant will be required to execute in order to receive Retail Service. The Apportionment Agreement shall be incorporated into each Joint Applicant's contract(s) for Retail Service.

7. **TERMINATION OF SERVICE REQUEST PRIOR TO TRANSMISSION FACILITIES BEING PUT INTO SERVICE.** If at any point in time prior to the Transmission Facilities going into service, the Applicant terminates its request for Retail Service as a result of bankruptcy or for any other reason, PG&E reserves the right to retain the portion of any Advance and/or Actual Cost Payments that it has earned based on the work performed for the Applicant prior to termination. PG&E shall return to Applicant any portion of the Advance and/or Actual Cost Payments that exceed the cost of the work performed by PG&E prior to the Applicant's termination. Termination of a request for retail Service from the Applicant must be provided in writing to PG&E.
8. **FAILURE TO TAKE SERVICE.** If the Applicant does not take any electrical service from PG&E for any reason by the end of the first calendar year after the Transmission Facilities are in service, the Applicant forfeits the right to receive any Refund under Section D.
9. **EXCESS FACILITIES.** If the Applicant's Load is significantly lower than the Applicant's Usage Forecast, PG&E reserves the right to remove, abandon, or replace Excess Facilities and Applicant shall pay PG&E its Actual Costs to remove, abandon, or replace the Excess Facilities, less the estimated salvage of any removed facilities.
10. **REFUND OF ADVANCE IN EXCESS OF ACTUAL COSTS.** If PG&E's Actual Costs for the Transmission Service Facilities, Transmission Interconnection Upgrades, and/or Transmission Interconnection Network Upgrades are less than the Advance, PG&E shall refund to the Applicant the amount of the Advance that exceeds the Actual Costs. The refund shall include interest at the Interest Rate. The Applicant is not entitled to interest on any ITCC amount included in the Advance.

**D. REFUNDS**

1. **GENERAL.** Refunds may be provided by PG&E to the Applicant during the Refund Period. Applicant may be eligible for Refunds of the following amounts:
  - a. Adjusted Applicant Payment
  - b. Adjusted Contribution Cost



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c. Adjusted Applicant Build Cost

These three amounts are referred to as the Total Refund Amount.

2. REFUND AVAILABILITY. Refunds are available for Transmission Service Facilities, Transmission Interconnection Upgrades, and/or Transmission Interconnection Network Upgrades. Refunds are not available for Transmission Network Upgrades because an Applicant is not required to provide an Advance and/or Actual Cost Payments for a Transmission Network Upgrade.
3. REFUND PERIOD. The Refund Period shall start in the first full calendar year after the Transmission Facilities go into service and shall last for ten (10) years. After the Refund Period ends, the Applicant shall not be entitled to any further Refunds. The total Refunds received by Applicant during the Refund Period may be less than the Total Refund Amount but shall never exceed the Total Refund Amount.
4. REFUND CALCULATION:
  - a. PG&E will calculate Refunds, if any, for the first three calendar years of the Refund Period using the Base Annual Revenue Calculation. The Refund Amount for the calendar year shall be the Base Annual Revenue Calculation less any Refunds paid to the Applicant in prior calendar years during the Refund Period.
  - b. The Applicant is responsible for notifying PG&E if new, permanent load is added during the fourth through tenth year of the Refund Period no later than December 31<sup>st</sup> of the calendar year and providing documentation of the new, permanent load. If the Applicant does not provide PG&E notice by December 31<sup>st</sup>, PG&E will not calculate or provide a Refund for that calendar year.
  - c. The total Refunds provided during the Refund Period shall not exceed the Total Refund Amount.
  - d. At the end of the Refund Period, if the total Refunds are less than the Total Refund Amount, Applicant forfeits its right to receive any additional Refunds.
  - e. As a part of a Refund, the Applicant is entitled to interest at the Interest Rate on any Advance and/or Actual Cost Payment from the date the Advance and/or Actual Cost Payment is received by PG&E to the date Transmission Facilities go into service. The Applicant is not entitled to interest on: (1) any Advance and/or Actual Cost Payment for the period of time after the Transmission Facilities go into service; (2) any ITCC payments or amounts provided to PG&E; and (3) any Adjusted Contribution Cost and/or Adjusted Applicant Build Cost.
  - f. Applicant may also receive refundable ITCC.
5. REFUND TIMING. Refunds for a calendar year during the Refund Period will be made by PG&E within one hundred and twenty (120) days after the end of the calendar year.



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6. **MONTHLY OWNERSHIP CHARGE.** When any portion of the Total Refund Amount has not been provided as a Refund after the first calendar year of the Refund Period, for each calendar year during the Refund Period following the first calendar year the financed Cost of Ownership percentage from Electric Rule No. 2.1.3.b, as may be amended from time to time, shall be applied to the difference between the Total Refund Amount and the Refunds paid to date and paid by the Applicant as a Monthly Ownership Charge. The Monthly Ownership Charge serves to recover the cost of operating and maintaining Transmission Facilities that are not fully utilized.
  - a. The Monthly Ownership Charge shall be calculated annually and may at PG&E's discretion: (1) be deducted from subsequent Refunds due to the Applicant; or (2) collected via invoice as provided in Section D.6.b.
  - b. If no Refunds are due for a calendar year, PG&E may submit an invoice to Applicant, in accordance with PG&E invoicing standards, within one hundred and twenty (120) days of the end of the calendar year. Applicant shall pay all invoiced amounts within forty-five (45) calendar days after receipt of PG&E's invoice. If the Applicant does not pay PG&E within forty-five (45) calendar days after receipt of an invoice, interest on the unpaid amount at the Interest Rate shall accrue until the unpaid amount is paid.
  - c. The Monthly Ownership Charge shall only be collected for the Refund Period. However, if there are unpaid Monthly Ownership Charges owed by the Applicant incurred during the Refund Period, PG&E shall be entitled to recover these unpaid amounts from Applicant after the end of the Refund Period.
7. **JOINT APPLICANTS.** In the circumstance of Joint Applicants as provided in Section C.6, Refunds will be distributed to the Joint Applicants in the proportion specified in their Apportionment Agreement.
8. **[MIXED-FUEL NEW CONSTRUCTION PROJECT ELIGIBILITY.** Pursuant to CPUC Decision 23-12-037, Mixed-Fuel New Construction projects are not eligible for Refunds.]<sup>1</sup>
9. **AUDIT OF ACTUAL CONTRIBUTION COSTS FOR PURPOSES OF REFUND.** To the extent that Applicant seeks a Refund of costs for Contributions, PG&E shall have reasonable access to Applicant's accounts and records for the purposes of reviewing and/or auditing the actual cost incurred by the Applicant for the Contribution. Audit request(s) and support will be at the expense of PG&E. Audit requests shall be made in writing to Applicant and shall specify the material(s) and information requested.
10. **TERMINATION OF SERVICE.** If the Applicant terminates Retail Service during the Refund Period, and the Total Refund Amount has not been provided as a Refund, the Applicant automatically forfeits any remaining Refund amount.

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<sup>1</sup> [Note: The applicability of this provision will be addressed in the Electric Rule 30 Application and determined by the Commission.]



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11. SUBSEQUENT USE OF TRANSMISSION INTERCONNECTION UPGRADES AND/OR TRANSMISSION INTERCONNECTION NETWORK UPGRADES. If prior to or during the Refund Period, a Subsequent Applicant requests Retail Service under this Rule and the Subsequent Applicant's retail Service will utilize the Transmission Interconnection Upgrades and/or Transmission Interconnection Network Upgrades paid for by Applicant and there is an outstanding Refund amount for which the Applicant is eligible, PG&E will implement the following:

- a. To the extent PG&E has paid the Subsequent Applicant its Total Refund Amount and the Base Annual Revenue Calculation for the Subsequent Applicant indicates an amount above the Total Refund Amount, PG&E will provide a Subsequent Use Refund to the Applicant that is the difference between a Subsequent Applicant's Base Annual Refund Calculation and the Subsequent Applicant's Total Refund Amount if the amount is greater than zero.
- b. PG&E will only perform the Subsequent Use Refund calculation after the Subsequent Applicant has received its Total Refund Amount. The Subsequent Use Refund will be calculated once and applied one-time to the Applicant's outstanding Refund amounts.
- c. The total of the Subsequent Use Refund and Refund paid to Applicant shall not exceed the Total Refund Amount.
- d. Applicant is not eligible for Subsequent Use Refunds after the Refund Period ends.

**E. APPLICANT BUILD OPTION**

1. GENERAL. In PG&E's sole discretion, Applicant may be eligible to assume responsibility for the design, procurement, construction, and installation of Applicant Build Facilities. Under this option, Applicant shall be responsible for:
  - a. Engineering, procuring equipment for, constructing and/or installing the Applicant Build Facilities using: (1) Good Utility Practice; and (2) standards and specifications provided by PG&E;
  - b. Ensuring that the Applicant Build Facilities comply with all requirements of law and regulations that PG&E would be subject to for engineering, procurement, and construction of the Applicant Build Facilities;
  - c. Ensuring that materials and equipment used in Applicant Build Facilities meet PG&E's standards and specifications for materials and/or equipment;
  - d. PG&E's review and oversight costs related to the Applicant Build Facilities, except as specified in Section E.9. The Applicant will be separately invoiced for PG&E's costs and is not eligible for a Refund of these review and oversight costs;



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- e. Applicant may not design, procure, construct and/or install any underground facilities as a part of the Applicant Build Facilities. All underground facilities that are a part of the Transmission Facilities will be designed, procured, constructed and installed by PG&E; and,
  - f. Applicant may not construct and/or install Transmission Interconnection Upgrades to existing PG&E electrical facilities.
2. **PG&E REVIEW.** PG&E shall review and approve the engineering design, equipment acceptance tests, and the construction of the Applicant Build Facilities. Applicant shall promptly provide PG&E with a construction schedule when requested by PG&E and shall promptly reply to all information requests from PG&E.
  3. **PG&E ACCESS.** PG&E shall have the right to gain unrestricted access to Applicant's work on the Applicant Build Facilities and to conduct inspections of the same.
  4. **REMEDYING DEFICIENCIES.** Should any phase of the engineering, equipment procurement, or construction not meet the standards and specifications provided by PG&E, the Applicant shall be obliged to remedy the deficiencies at Applicant's expense. PG&E has the right to direct Applicant to stop all work should any phase of the engineering, equipment procurement, or construction not meet the standards and specifications provided by PG&E unless and until the Applicant remedies the deficiencies.
  5. **INDEMNITY.** The Applicant shall indemnify PG&E for any claims arising from the Applicant's design, procurement, installation, and/or construction of Applicant Build Facilities.
  6. **TRANSFER OF OWNERSHIP.** Upon completion of construction and acceptance by PG&E, at PG&E's sole discretion, Applicant shall transfer ownership and control of the Applicant Build Facilities to PG&E. Before the transfer of ownership, Applicant shall deliver to PG&E "as-built" drawings, information, and any other documents that are reasonably required by PG&E to assure that the Applicant Build Facilities are built to the standards and specifications required by PG&E.
  7. **MINIMUM CONTRACTOR QUALIFICATIONS.** Applicant's contractor or subcontractor shall:
    - a. Be licensed in California for the appropriate type of work (electrical and general, etc.);
    - b. Employ workmen properly qualified for specific skills required (Qualified Electrical Worker, Qualified Person, etc.) as defined in State of California High Voltage Safety Orders (Title 8, Chapter 4, Subchapter 5, Group 2);
    - c. Comply with applicable laws (Equal Opportunity Regulations, OSHA, EPA, etc.);



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- d. Be from an approved list of contractors furnished by PG&E; and,
  - e. Have adequate insurance coverage (worker's compensation, liability, property damage)
8. OTHER CONTRACTOR QUALIFICATIONS. An Applicant shall consider the following qualifications in retaining a contractor or subcontractor:
- a. Is technically competent;
  - b. Has access to proper equipment;
  - c. Demonstrates financial responsibility commensurate with the scope of the contract; and,
  - d. Is able to furnish a surety bond for performance of the contract, if required.
9. AUDIT OF APPLICANT BUILD FACILITY COSTS FOR PURPOSES OF REFUND. To the extent that Applicant seeks a Refund of Adjusted Applicant Build Costs, PG&E shall have reasonable access to Applicant's accounts and records for the purposes of reviewing and auditing the reasonableness of the costs claimed by Applicant for Applicant Build Facilities. Audit request(s) and support will be at the expense of PG&E. Audit requests shall be made in writing to Applicant and shall specify the material(s) and information requested. PG&E may use the results of audit to determine the amount of the Refund owed to Applicant for Applicant Build Facilities.
10. CONTRACTS. Each Applicant electing the Applicant Build Option, subject to PG&E's sole discretion, shall be required to execute a written contract(s) prior to performing work on the Applicant Build Facilities. Such contracts shall be in the form on file with the CPUC.
11. APPLICANT BUILD COSTS.
- a. Applicant shall provide PG&E a binding estimated cost of Applicant Build Facilities prior to construction.
  - b. After receiving the binding estimated cost for the Applicant Build Facilities, PG&E may, in its sole discretion, decide whether or not Applicant is eligible for the Applicant Build Option.
12. TAX. Applicant shall include an ITCC payment to PG&E when it transfers ownership of any Applicant Build Facilities at the rate provided in PG&E's Preliminary Statement J based on the binding cost estimate described in Section E.11. ITCC will be either refundable or non-refundable as described in Section D.

F. SPECIAL CONDITIONS





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1. **APPLICANT REQUESTED FACILITY RELOCATION OR REARRANGEMENT.** Any relocation or rearrangement of PG&E's existing electrical facilities solely at the request of the Applicant and agreed to by PG&E in its sole discretion, shall be performed by PG&E at Applicant's sole expense. Applicant is not entitled to Refunds for Applicant requested relocations or rearrangements.
2. **EXISTING FACILITY REMOVAL.** PG&E can at its discretion abandon or remove existing electrical facilities as a part of the construction of Transmission Facilities. Costs for removal of existing facilities shall be included in the Project Specific Cost Estimates and/or Actual Costs and may be included in Refunds.
3. **EXCEPTIONAL CASES.** When the application of this Rule appears impractical or unreasonable to either party or to ratepayers, PG&E may refer the matter to the CPUC for a special ruling or for special conditions.
4. **TERMINATION OF SERVICE.** Applicant shall be responsible for the cost of removal of any and all PG&E electric facilities installed on Applicant's Premises if electrical service to Applicant's Premises is terminated.
5. **TRANSMISSION NETWORK UPGRADE PRE-FUNDING LOAN.** If Applicant requests to accelerate the timing of the work needed to receive Retail Service for its Facility, and a pre-funding loan from Applicant for the Transmission Network Upgrades would allow PG&E to perform work on the Transmission Network Upgrades in a more expedited manner than it would otherwise be able to perform the work, PG&E and Applicant may enter into a loan agreement to allow Applicant to pre-fund Transmission Network Upgrades and to receive a refund of the loan amount after the Facility begins receiving Retail Service. The terms and conditions of the pre-funding loan and the refund of pre-funds shall be addressed in a separate agreement between Applicant and PG&E. The decision as to whether to agree to pre-funding for Transmission Network Upgrades is at PG&E's sole discretion. PG&E shall not pay interest on pre-funding loans. In addition to the principal loan amount, the Applicant shall be responsible for any ITCC on any portion of the pre-funding loan amount which is deemed taxable at the rate provided in PG&E's Preliminary Statement J.
6. **INTERCONNECTION AT VOLTAGE ABOVE 230 kV:** For Applicants requesting Retail Service at voltages above 230 kV, PG&E may, at its sole discretion, apply the provisions of this Rule. However, PG&E reserves the right to modify provisions in the Rule to accommodate such requests. PG&E may submit an exceptional case request under Section F.3 for Retail Service above 230 kV voltages.

**G. DEFINITIONS FOR RULE 30**

**ACTUAL COST:** PG&E's fully loaded costs, including direct, indirect, and overhead costs billed in accordance with PG&E's systems for allocating charges to customers. Direct, indirect and overhead costs include, without limitation, payroll, payroll taxes, external charges, benefits, Allowance for Funds Used During Construction, Administrative and General Costs, estimating, mapping, surveying, permitting costs, land rights acquisition,



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transportation, service planning, contract management, sourcing, stores and tool expense, material and supplies, public liability and property damage insurance, estimated and actual state and federal income tax, and close out costs.

**ACTUAL COST PAYMENTS:** As that term is defined in Section C.4.

**ADJUSTED APPLICANT BUILD COST:** The lesser of: (1) the binding estimated cost for the Applicant Build Facilities as described in Section E.11; or (2) the actual cost paid for the Applicant Build Facilities by the Applicant, which shall be subject to audit by PG&E as provided in Section E.9.

**ADJUSTED CONTRIBUTION COST:** The lesser of: (1) the binding estimated cost for the Contribution as described in Section C.3; or (2) the actual cost paid for the Contribution by the Applicant, which shall be subject to audit by PG&E as provided in Section D.9.

**ADJUSTED APPLICANT PAYMENT:** Includes any Advance and/or Actual Cost Payments made or provided by Applicant to PG&E less the Incremental Special Facilities Cost.

**ADVANCE:** Cash payments made to PG&E for work that has been or will be performed by PG&E on the Transmission Facilities. An Advance may not include preliminary work performed by PG&E as described in Section C.2.a.

**APPLICANT:** A person, entity, or agency requesting PG&E to provide Retail Service at transmission voltages from 50 kV up to and including 230 kV. An Applicant may also be referred to as Interconnection Customer.

**APPLICANT BUILD FACILITIES:** Transmission Service Facilities and/or Transmission Interconnection Upgrades designed, procured, constructed, and/or installed by an Applicant consistent with the requirements in Section E. However, Applicant Build Facilities do not include, and an Applicant may not design, procure, construct, and install: (1) Transmission Interconnection Upgrades if they are located in existing PG&E electrical facilities as provided in Section E.1.f; and (2) any underground facilities as provided in Section E.1.e.

**APPLICANT BUILD OPTION:** The option for an Applicant to build facilities as described in Section E of this Rule.

**APPORTIONMENT AGREEMENT:** As that term is defined in Section C.6.

**BASE ANNUAL REVENUE CALCULATION or BARC:** The amount calculated using the retail electric components of the Applicant's energy bill for the one-year period following the commencement of the Refund Period using the following formula:

$$\text{BARC FORMULA} = \frac{\text{Net Revenue}}{\text{CoSF}} \times (1 + \text{ITCC})$$

**CAISO.** The California Independent System Operator Corporation, or successor entity.





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**CONTRIBUTION:** In-kind services, equipment, and/or property and land rights conveyed or provided to PG&E, at PG&E's sole discretion, excluding property and/or land rights on the Premises provided by the Applicant to PG&E under Section A.2.c.

**COST-OF-SERVICE FACTOR (CoSF):** The annualized utility-financed Cost of Ownership as stated in monthly format in Electric Rule No. 2 that includes taxes, return and depreciation.

**CPUC:** California Public Utilities Commission or a successor regulatory entity.

**EXCESS FACILITIES:** Facilities that are constructed based on Applicant's Usage Forecast that are not needed to provide electrical service to Applicant's Load. Excess Facilities may occur when Applicant's Load is significantly lower than the Usage Forecast.

**FACILITY:** Applicant's building(s) or other structure(s) to which PG&E will provide Retail Service using the Transmission Facilities.

**GOOD UTILITY PRACTICE:** Any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**INCOME TAX COMPONENT OF CONTRIBUTION or ITCC:** The charge to cover PG&E's resulting estimated liability for Federal and State income tax on the taxable component of Advances, Actual Cost Payments, Contributions, or other payments made or provided by the Applicant.

**INCREMENTAL SPECIAL FACILITIES COST:** The Incremental Special Facilities Cost is: (1) the Actual Cost of Special Facilities minus the Standard Facilities Cost Estimate; and (2) the cost of any Special Facilities constructed for the sole use of the Applicant at the Applicant's request which would normally be constructed to allow for potential use by other customers. If for Item (1) the Actual Cost of Special Facilities minus the Standard Facilities Cost Estimate is a negative number, the amount for Item (1) shall be set to zero.

**INTEREST RATE:** When interest is payable under this Rule, the interest rate shall be 1/12 of the most recent month's interest rate on commercial paper (prime, three months), published in the Federal Reserve Statistical Release, H.15. Should publication of the interest rate on commercial paper (prime, three months) be discontinued, interest will accrue at the rate of 1/12 of the most recent month's interest rate on commercial paper which most closely approximates the rate that was discontinued and which is published in the Federal Reserve Statistical Release, H.15, or successor publication.

**JOINT APPLICANTS:** As that term is defined in Section C.6.



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**kV:** Kilovolts.

**LOAD:** The actual electrical usage of the Facility.

**MIXED-FUEL NEW CONSTRUCTION:** An end-use load, or consistent with the definition of New Construction in the California Energy Commission 2022 Building Energy Efficiency Standards, a building that has never been used or occupied for any purpose, or any renovation where 50 percent or more of the exterior weight-bearing walls are removed, that uses gas and/or propane in addition to electricity.

**MONTHLY OWNERSHIP CHARGE:** As defined in Section D.6.

**NET REVENUE:** That portion the total rate revenues that supports the Transmission Facilities. The term Net Revenues excludes items such as energy, public purpose programs, non-bypassable charges, revenue cycle services, and other revenues that do not support the Transmission Facilities costs.

**PREMISES:** All of the real property and apparatus employed in a single enterprise on an integral parcel of land undivided, excepting in the case of industrial, agricultural, oil field, resort enterprises, and public or quasi-public institutions, by a dedicated street, highway or public thoroughfare or a railway. Automobile parking lots constituting a part of and adjacent to a single enterprise may be separated by an alley from the remainder of the Premises served.

**PROJECT SPECIFIC COST ESTIMATES.** PG&E's total estimated project-specific cost based on: (1) PG&E's best estimate of the costs to install Transmission Service Facilities, Transmission Interconnection Upgrades, and/or Transmission Interconnection Network Upgrades; and (2) the Special Facilities Cost Estimate.

**REFUND:** A portion or all of the Total Refund Amount that may be refunded to the Applicant after the Transmission Facilities go into service.

**REFUND PERIOD:** The first full calendar year after the Transmission Facilities go into service and shall last for ten (10) years.

**RETAIL SERVICE:** Electric service to PG&E's end-use or retail customers which is of a permanent and established character and may be continuous, intermittent, or seasonal in nature.

**RULE:** This Electric Rule No. 30.

**SPECIAL FACILITIES:** As that term is defined in Section A.3.a.

**SPECIAL FACILITIES AGREEMENT:** A form agreement on file with the CPUC for the design, procurement, construction and installation of Special Facilities.



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**SPECIAL FACILITIES COST ESTIMATE.** A cost estimate provided by PG&E to an Applicant estimating the cost of Special Facilities requested by the Applicant and/or that are necessary for project-specific circumstances.

**SPECIAL FACILITIES MONTHLY COST OF OWNERSHIP CHARGE.** The monthly charge for the cost of ownership for Special Facilities as defined in Section A.3.

**STANDARD FACILITIES COST ESTIMATE.** A cost estimate provided by PG&E to an Applicant requesting Special Facilities. The cost estimate shall estimate the cost of facilities that PG&E would normally install which PG&E, in its sole discretion, deems are necessary to provide Retail Service.

**SUBSEQUENT APPLICANT:** An applicant who requests Retail Service under this Rule and utilizes the Transmission Interconnection Upgrades and/or Transmission Interconnection Network Upgrades paid for by Applicant and still subject to an outstanding Refund amount.

**SUBSEQUENT USE REFUND:** The difference between a Subsequent Applicant's Base Annual Refund Calculation and the Supplicant Applicant's Total Refund Amount if the amount is greater than zero.

**SUBSTRUCTURES:** The surface and subsurface structures which are necessary to contain or support PG&E's electric facilities. This includes, but is not limited to, such things as splice boxes, pull boxes, equipment vaults and enclosures, foundations or pads for surface-mounted equipment.

**TOTAL REFUND AMOUNT.** The sum of the Adjusted Applicant Payment, Adjusted Applicant Build Cost, and/or the Adjusted Contribution Cost, plus interest as described in Section D.4.

**TRANSMISSION FACILITIES:** All facilities including Transmission Service Facilities, Transmission Interconnection Upgrades, Transmission Interconnection Network Upgrades, and/or Transmission Network Upgrades to furnish Retail Service to non-residential Applicants seeking Retail Service.

**TRANSMISSION INTERCONNECTION UPGRADES:** Electric transmission facilities required in a new or existing PG&E-owned substation, switching station, or similar facility to accomplish the physical interconnection of the Applicant's Facility and/or mitigate any adverse impacts. See Section C.1 for an example of these facilities.

**TRANSMISSION INTERCONNECTION NETWORK UPGRADES:** New electric transmission facilities which are necessary for the interconnection to a PG&E-owned substation, switching station, or similar facility to PG&E's electric transmission system to provide electric service to the Applicant's Facility and/or mitigate any adverse impacts. These upgrades may include but are not limited to protection, permitting, and relocation upgrades needed to connect the applicant. See Section C.1 for an example of these facilities.



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**TRANSMISSION LINE:** An electric line used for electric power transmission service. Electric lines rated 50 kV and greater are transmission lines.

**TRANSMISSION NETWORK UPGRADES:** Upgrades to PG&E's existing transmission facilities ( $\geq 50$  kV) to mitigate any adverse impact and provide Applicant with adequate electric service to the CAISO controlled grid. See Section C.1 for an example of these facilities.

**TRANSMISSION SERVICE FACILITIES:** Transmission Service Facilities shall consist of: (a) transmission underground or overhead service conductors, (b) poles, towers, and structures to support overhead service conductors, (c) PG&E-owned metering equipment, and (d) other PG&E-owned equipment necessary to provide electric service to the Applicant's Facility from a PG&E-owned substation, switching station, or similar facility. See Section C.1 for an example of these facilities.

**USAGE FORECAST:** Applicant shall provide to PG&E in its application for service a forecast of expected load for the first ten (10) years that the Transmission Facilities are in service.

**PACIFIC GAS AND ELECTRIC COMPANY**  
**CHAPTER 3**  
**OVERVIEW AND ANALYSIS OF**  
**ELECTRIC RULE NO. 30**  
**CUSTOMER RATE BENEFITS AND PROTECTIONS**

PACIFIC GAS AND ELECTRIC COMPANY  
CHAPTER 3  
OVERVIEW AND ANALYSIS OF  
ELECTRIC RULE NO. 30  
CUSTOMER RATE BENEFITS AND PROTECTIONS

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1                                   **PACIFIC GAS AND ELECTRIC COMPANY**  
2                                                           **CHAPTER 3**  
3                                                           **OVERVIEW AND ANALYSIS OF**  
4                                                           **ELECTRIC RULE NO. 30**  
5                                   **CUSTOMER RATE BENEFITS AND PROTECTIONS**

6   **A. Introduction**

7           Pacific Gas and Electric Company’s (PG&E) proposed Electric Rule No. 30  
8   (Electric Rule 30) provides that new retail electric customers requiring  
9   transmission-level interconnections (i.e., 50 kilovolts (kV) to 230 kV) provide  
10   Advances, Actual Cost Payments, Contributions, and/or Applicant Build Facilities  
11   to receive electric service at the customer’s Facility.<sup>1</sup> After a customer’s Facility  
12   is interconnected and begins receiving Retail Service, the customer is eligible for  
13   Refunds associated with Advances and Actual Cost Payments, as well as  
14   Refunds reflecting the value of Contributions and Applicant Build Facilities.  
15   Chapter 2 provides an overview and analysis of the Refund-related provisions in  
16   Electric Rule 30, and this chapter explains why these provisions provide financial  
17   protections and rate benefits for existing retail electric customers. The  
18   remainder of this chapter includes the following sections:

- 19   • Section B: Electric Rule 30 provides financial protections and rate benefits  
20   for existing retail electric customers; and
- 21   • Section C: Conclusion.

22   **B. Electric Rule 30 Provides Financial Protections and Rate Benefits for**  
23   **Existing Retail Customers**

24           This section: (1) provides an overview of the Electric Rule 30 provisions  
25   related to Advances, Actual Cost Payments, Contributions, and Applicant Build  
26   Facilities; (2) describes the financial protections for existing electric customers in  
27   Electric Rule 30; and (3) demonstrates the rate benefits for existing electric  
28   customers resulting from Electric Rule 30.

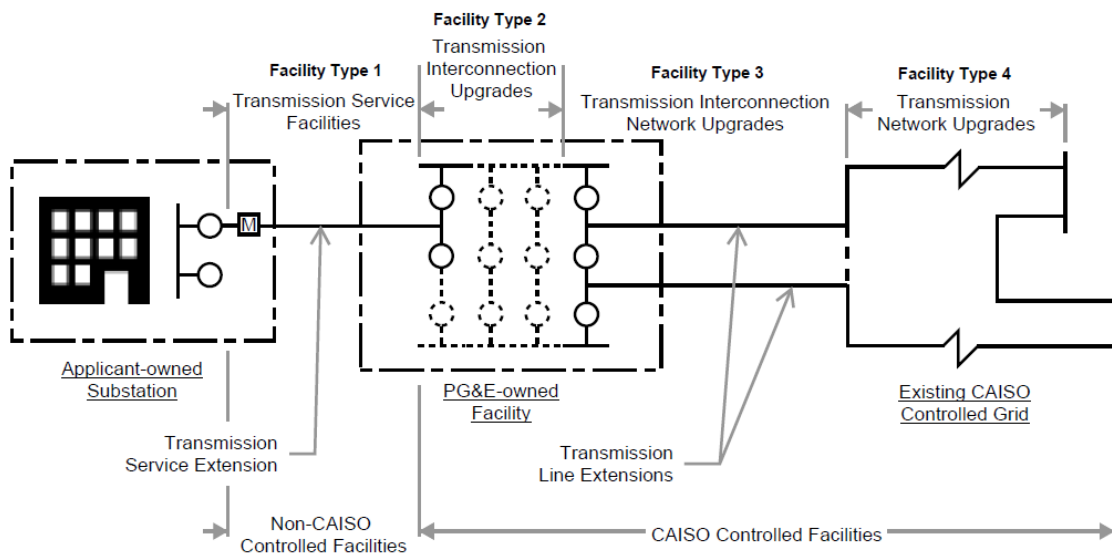
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<sup>1</sup> Capitalized terms used in this chapter are defined in Electric Rule 30.G unless otherwise noted.

1 **1. Overview of Electric Rule 30 Funding Provisions**

2 Under Electric Rule 30, the facilities needed to interconnect a new  
3 transmission-level retail electric customer are separated into four Facility  
4 Types: (1) Transmission Service Facilities (Facility Type 1);  
5 (2) Transmission Interconnection Network Upgrades (Facility Type 2);  
6 (3) Transmission Interconnection Network Upgrades (Facility Type 3);  
7 and (4) Transmission Network Upgrades (Facility Type 4).<sup>2</sup> Each of these  
8 facility types is defined in Electric Rule 30. An illustrative example of each of  
9 these facility types is included in Electric Rule 30 and copied below for ease  
10 of reference:

**FIGURE 3-1  
ILLUSTRATIVE DIAGRAM OF TRANSMISSION FACILITY TYPES  
(DASHED LINES REPRESENT POTENTIAL FUTURE  
TRANSMISSION INTERCONNECTION UPGRADES)**



11 Under Electric Rule 30, transmission-level new retail electric customers  
12 bear the initial financial responsibility for critical infrastructure facility types,  
13 such as transmission lines and substations, which are essential to  
14 supporting their high-load operations. Specifically, a new transmission-level  
15 customer will be responsible for the costs associated with Facility Types 1-3.  
16 As PG&E explains in Chapter 1, Electric Rule 30 does not require Advances

<sup>2</sup> Electric Rule 30.C.1, Figure 1.



1 or Actual Cost Payments for Transmission Network Upgrades (Facility  
2 Type 4) because these upgrades to the existing transmission system  
3 immediately benefit all transmission customers.<sup>3</sup>

4 Under Electric Rule 30, an initial Advance based on PG&E's  
5 project-specific estimate is required for Facility Types 1-3.<sup>4</sup> In addition, as  
6 work progresses and costs are incurred by PG&E in excess of the Advance,  
7 PG&E can invoice the customer for Actual Cost Payments.<sup>5</sup> The goal of the  
8 Advance and Actual Cost Payments is that by the time the facility is  
9 available for operation, the customer will have paid the entire Actual Cost for  
10 the work performed to construct Facility Types 1-3. As PG&E explains in  
11 Chapter 2, Advances, Actual Cost Payments, and the value of Contributions  
12 and/or Applicant Build Facilities will be refunded subject to PG&E's Base  
13 Annual Revenue Calculation (BARC) review process. These Refunds  
14 include interest on the Advances or Actual Cost Payments to compensate  
15 transmission-level customers for their initial upfront investment.

## 16 **2. Financial Protections for Existing Electric Customers in Electric** 17 **Rule 30**

18 As explained above, under Electric Rule 30, a transmission-level  
19 customer provides an initial Advance and may also be required to provide  
20 subsequent Actual Cost Payments to fund the design, engineering, and  
21 construction of the electric facilities necessary to interconnect this  
22 customer.<sup>6</sup> This protects existing customers against having to pay for new  
23 interconnection facilities if the new transmission-level customers' Load:  
24 (1) never materializes; or (2) the actual Load is significantly less than the

---

<sup>3</sup> See Chapter 1.E.1 (describing the basis for not requiring advances or actual cost payments for Transmission Network Upgrades).

<sup>4</sup> Electric Rule 30.C.2.

<sup>5</sup> Electric Rule 30.C.4.

<sup>6</sup> A transmission-level customer can also provide Contributions or Applicant Build Facilities to reduce the costs of PG&E engineering, designing, and constructing these facilities. See Electric Rule 30.D.3 (Contributions) and 30.E (Applicant Build Facilities).

1 Usage Forecast.<sup>7</sup> Under Electric Rule 30, a transmission-level customer  
2 receives Refunds based on the revenue generated from its facilities. Thus,  
3 if the transmission-level customer's facility does not provide sufficient  
4 (or any) revenue, existing customers will not have to incur stranded costs or  
5 costs associated with under-utilized electrical facilities as the  
6 transmission-level customer will only be entitled to a Refund if it is providing  
7 sufficient revenues in return. In addition, Electric Rule 30 provides:

- 8 • Termination Prior to Transmission Facilities Being Put in Service: If the  
9 customer terminates service prior to the Transmission Facilities being  
10 put into service, PG&E retains the Advance and/or Actual Cost  
11 Payments for all work performed to date so that these costs are not born  
12 by other customers;<sup>8</sup>
- 13 • Failure to Take Service: If the transmission-level customer fails to take  
14 service, the customer forfeits any Refund amounts;<sup>9</sup>
- 15 • Excess Facilities: If a customer's actual Load is substantially lower than  
16 its Usage Forecast, PG&E reserves the right to remove facilities that are  
17 not needed for the transmission-level customers' actual Load at the  
18 transmission-level customer's expense, avoiding stranded assets;<sup>10</sup>
- 19 • Termination During the Refund Period: If the customer terminates  
20 service during the Refund Period, it forfeits any outstanding Refund  
21 amounts;<sup>11</sup> and
- 22 • Termination Removal Costs: The transmission-level customer is  
23 responsible for any removal costs if it terminates Retail Service.<sup>12</sup>

24 In addition, Electric Rule 30 requires a new transmission-level customer  
25 to pay PG&E's Actual Costs. Under existing electric rules, such as Electric

---

<sup>7</sup> A Usage Forecast is provided by the customer when PG&E is initially designing and engineering the facilities to determine the customer's needs and appropriate equipment to be installed to provide Retail Service. See Rule 30.G (definition of "Usage Forecast").

<sup>8</sup> Electric Rule 30.C.7.

<sup>9</sup> Electric Rule 30.C.8.

<sup>10</sup> Electric Rule 30.C.9.

<sup>11</sup> Electric Rule 30.D.10.

<sup>12</sup> Electric Rule 30.F.4.

1 Rules 15 and 16, customers are only required to pay estimated costs.<sup>13</sup>  
2 However, an estimate, which is often provided well before construction  
3 begins, may not capture all of the actual costs incurred by PG&E especially  
4 if there are unexpected issues or delays in a project. In that case, existing  
5 electric customers would effectively be required to make up the difference  
6 between the estimated and actual costs. By requiring transmission-level  
7 customers to pay Actual Costs, Electric Rule 30 effectively eliminates the  
8 risk that there is a difference between the estimate and the Actual Costs to  
9 interconnect a transmission-level customer and protects existing electric  
10 customers from having to pay the difference between the estimate and  
11 Actual Costs if the estimate underestimates the Actual Costs.

12 Finally, Electric Rule 30 provides that costs to accommodate a  
13 transmission-level customer are borne by that customer, rather than existing  
14 electric customers, including:

- 15 • Special Facilities: The transmission-level customer is responsible for  
16 the incremental costs associated with Special Facilities and for monthly  
17 ownership charges;<sup>14</sup> and
- 18 • Relocation: If PG&E rearranges or relocates existing facilities at the  
19 transmission-level customer's request, the customer is responsible for  
20 the relocation costs.<sup>15</sup>

### 21 **3. Electric Rule 30 Rate Benefits for Existing Electric Customers**

22 To demonstrate the potential rate benefits under Electric Rule 30 for  
23 existing electric customers, I am providing the following illustrative example  
24 using two potential transmission-level customers.<sup>16</sup>

---

<sup>13</sup> The California Public Utilities Commission (CPUC or Commission) recently revised the estimated cost requirement for mixed-fuel new construction. In Decision (D.) 23-12-037, the Commission directed PG&E and the other investor-owned utilities to revise Rules 15 and 16 so that mixed-fuel new construction pays actual, final costs rather than estimated costs. See D.23-12-037, Ordering Paragraphs 3 and 7.

<sup>14</sup> Electric Rule 30.A.3. and A.3.e.

<sup>15</sup> Electric Rule 30.F.1.

<sup>16</sup> These examples are provided for illustrative purposes only. Each customer will have a unique Usage Forecast, ramp up of actual Load, and costs for the Transmission Facilities. These variables will impact the rate benefits associated with a specific customer. Thus, there is no single example that will represent all potential Electric Rule 30 customers.

1 • Customer A is a transmission-level customer that provides:  
2 (1) a \$50 million Advance and/or Actual Cost Payments for Facility  
3 Types 1-3;<sup>17</sup> and (2) a Usage Forecast of 75 megawatts (MW). For  
4 purposes of this illustrative example, I am also assuming that the  
5 Transmission Network Upgrades (Facility Type 4) cost \$50 million<sup>18</sup> and  
6 that Customer A comes online in Year 1 and reaches its Usage Forecast  
7 by Year 5 of the Refund Period and receives a full Refund of its  
8 Advance and/or Actual Cost Payments.

9 • Customer B is a transmission-level customer that, similar to  
10 Customer A, provides: (1) a \$50 million Advance and/or Actual Cost  
11 Payments for Facility Types 1-3; and (2) a Usage Forecast of 75 MW.  
12 For purposes of this illustrative example, I am also assuming that the  
13 Transmission Network Upgrades (Facility Type 4) costs \$50 million.  
14 However, Customer B's load only reaches 30 MW during the Refund  
15 Period after coming online in Year 1, resulting in Customer B forfeiting  
16 ~\$16 million of its Advance and/or Actual Cost Payments.

17 For each of these customer examples, the impact of the costs and  
18 incremental load was evaluated with the marginal bill impact to non-CARE  
19 residential electric customers. The results are reflected in Tables 3-1 to 3-2  
20 below.

---

**17** Facility Types 1-3 include Transmission Service Facilities (Facility Type 1),  
Transmission Interconnection Network Upgrades (Facility Type 2), and Transmission  
Interconnection Network Upgrades (Facility Type 3).

**18** As explained above in Section B.1, customers do not need to provide Advances or  
Actual Cost Payments for Facility Type 4.

**TABLE 3-1  
CONTRIBUTION TO MARGIN – CUSTOMER A**

Line No.	Item	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1	Total Load (Gigawatt-Hours (GWh)) <sup>(a)</sup>	73,722	74,610	75,452	76,499	77,955	79,774	81,941	84,274	87,199	90,333	94,584
2	Customer A Incremental Load (GWh)	-	141	186	417	469	558	558	558	558	558	558
3	Customer A Estimated Revenue (Millions of Dollars (\$M))	-	\$10	\$14	\$30	\$34	\$41	\$41	\$41	\$41	\$41	\$41
4	Customer A Incremental Large Load Revenue Requirement (\$M) <sup>(b)</sup>	\$(5)	\$10	\$11	\$12	\$12	\$12	\$11	\$11	\$11	\$10	\$7
5	Net Margin (\$M)	\$5	\$1	\$3	\$18	\$22	\$29	\$30	\$30	\$30	\$31	\$34
6	Annual Bill Savings with Customer A for existing customers <sup>(c)</sup>	\$0.58	\$0.09	\$0.32	\$2.17	\$2.67	\$3.50	\$3.54	\$3.58	\$3.61	\$3.66	\$4.08

Total 10-year Bill Savings With Customer A

Customer Bill Savings With All Facility Types

\$27.81

(a) The total load reflects California Energy Commission (CEC) 2023 Integrated Energy Policy Report (IEPR) forecast.

(b) See Exhibit (PG&E-001), Chapter 2 for BARC formula used to calculate revenues.

(c) Savings for average Non-CARE residential electric customer.

**TABLE 3-2  
CONTRIBUTION TO MARGIN – CUSTOMER B**

Line No.	Item	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
1	Total Load (GWh) <sup>(a)</sup>	73,722	74,610	75,452	76,499	77,955	79,774	81,941	84,274	87,199	90,333	94,584
2	Customer B Incremental Load (GWh)	–	37	74	112	149	223	223	223	223	223	223
3	Customer B Estimated Revenue (\$M)	–	\$3	\$5	\$8	\$11	\$16	\$16	\$16	\$16	\$16	\$16
4	Customer B Incremental Revenue Requirement (\$M) <sup>(b)</sup>	\$(5)	\$8	\$9	\$9	\$9	\$10	\$10	\$9	\$9	\$9	\$7
5	Net Margin (\$M)	\$5	\$(5)	\$(4)	\$(1)	\$2	\$6	\$7	\$7	\$7	\$8	\$11
6	Annual Bill Savings with Customer B for existing customers <sup>(c)</sup>	\$0.58	\$(0.63)	\$(0.44)	\$(0.12)	\$0.19	\$0.75	\$0.79	\$0.84	\$0.88	\$0.91	\$1.15

Total 10-year Bill Savings With Customer B	
Customer Bill Savings With All Facility Types	\$4.90

(a) The total load reflects CEC 2023 IEPR forecast.

(b) See Exhibit (PG&E-001), Chapter 2 for BARC formula used to calculate revenues.

(c) Savings for average Non-CARE residential electric customer.

1           There are several observations that can be drawn from the above  
2 illustrative examples. First, because of the substantial electric load of  
3 transmission-level retail electric load customers, such as Customers A  
4 and B, and the corresponding revenues associated with the customer's load,  
5 in both scenarios existing electric customers experience a decrease in their  
6 electric bills over ten years.

7           Second, and more importantly, this analysis only considers the  
8 interconnection of a single transmission-level customer (i.e., Customer A or  
9 Customer B) with a 75 MW Usage Forecast. However, as explained in  
10 Exhibit (PG&E-001), Chapter 1, in 2023-2024 alone, PG&E has received  
11 applications for transmission-level service with a forecasted load of  
12 4,440 MW. Although all of these applications may not result in  
13 transmission-level retail customers actually coming on-line, even if a  
14 majority of these applications materialize, the corresponding bill reductions  
15 could be much more substantial. In a hypothetical scenario where: (1) each  
16 applications requests 75 MW and each project has a total Transmission  
17 Facilities cost of \$100 million, with \$50 million of these costs being provided  
18 by the transmission-level customer as an Advance and/or Actual Cost  
19 Payment; and (2) the transmission-level customers meet their requested  
20 demand in five years and receive full refunds from the BARC review,  
21 existing average Non-CARE residential electric customers could see  
22 approximately \$1,600 in total savings over a 10-year period.<sup>19</sup>

23           Third, the illustration with Customer B highlights additional financial  
24 protections in Electric Rule 30. Customer B originally forecasted usage of  
25 75 MW and PG&E built and sized the Transmission Facilities for this  
26 expected load. However, only a portion of Customer B's forecasted load  
27 materialized. Because the transmission-level customer provided an  
28 Advance and/or Actual Cost Payments for the Facility Types 1-3, existing  
29 customers did not initially pay for these facilities. Since Customer B's Usage  
30 Forecast did not materialize, under the BARC process Customer B forfeits

---

**19** As I indicated above, these calculations are illustrative. Actual savings and rate reductions will depend on the transmission-level customers that utilize Electric Rule 30, their respective Usage Forecasts and actual Load, and the cost of Transmission Facilities to interconnect a specific customer.

1 Refund eligibility of approximately \$16 million of its Advance and/or Actual  
2 Cost Payments. These forfeited amounts for Facility Types 1-3 represent  
3 costs that existing customers will not be required to pay through the Refund  
4 process. Although the monthly and annual bills reduction for Customer B  
5 are lower than Customer A, at the same time existing customers are not  
6 required to reimburse Customer B the full \$50 million of its Advances and/or  
7 Actual Cost Payments.

8 **C. Conclusion**

9 My analysis concludes that there are potentially significant customer  
10 benefits associated with the increased revenues from the transmission-level  
11 customers who utilize Electric Rule 30. In addition, Electric Rule 30 includes  
12 financial protections for existing electric customers. Given these potential rate  
13 benefits and financial protections, it is my opinion that proposed Electric Rule 30  
14 is a just and reasonable approach from the perspective of existing electric  
15 customers.



**PACIFIC GAS AND ELECTRIC COMPANY**

**CHAPTER 4**

**OVERVIEW AND ANALYSIS OF ELECTRIC RULE NO. 30**

**RELIABILITY BENEFITS**

PACIFIC GAS AND ELECTRIC COMPANY  
CHAPTER 4  
OVERVIEW AND ANALYSIS OF ELECTRIC RULE NO. 30  
RELIABILITY BENEFITS

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2                                                           **CHAPTER 4**  
3                                   **OVERVIEW AND ANALYSIS OF ELECTRIC RULE NO. 30**  
4                                                           **RELIABILITY BENEFITS**

5   **A. Introduction**

6                   This chapter of Pacific Gas and Electric Company’s (PG&E) testimony in  
7                   support of proposed Electric Rule No. 30 (Electric Rule 30) provides an overview  
8                   and analysis of the potential reliability benefits associated with electric facilities  
9                   that may be constructed to interconnect new transmission-level retail electric  
10                  customers.

11   **B. Reliability Benefits**

12                 Electric transmission substations and switching stations are foundational to  
13                 a robust and interconnected electric grid. These types of electric facilities play a  
14                 vital role in enhancing reliability, safety, and operational efficiency, particularly as  
15                 the demand for electricity grows and the integration of renewable energy  
16                 sources expands. At a high level:

- 17                 • An electric substation is a facility that modifies the voltage or characteristics  
18                 of bulk electric energy without generating or directly using electricity.
- 19                 • A switching station connects transmission lines without altering their voltage  
20                 levels, facilitating the flow of electricity without the use of power  
21                 transformers.

22                 The traditional substation configuration has changed due to new compliance  
23                 requirements from North American Electric Reliability Council and Federal  
24                 Energy Regulatory Commission Reliability Standards. Enhanced substation  
25                 configurations are being driven by the growing integration of renewable  
26                 generation and increased loads from electrification, such as electric vehicles and  
27                 data centers customers who expect uninterrupted service with minimal sustained  
28                 outages to their facilities. Future expandability is a key component when  
29                 proposing and designing new substations or switching stations or rebuilding  
30                 legacy substations that can be easily expandable without the need for extensive  
31                 reconfiguration, which is crucial for accommodating future growth, maximizing  
32                 reliability while minimizing costs, aligning with good asset management  
33                 practices.

1           New substations and switching stations provide the ability to connect and  
2 disconnect transmission lines, distribution feeders, transformers, and voltage  
3 control equipment. This capability enhances the overall flexibility of the grid  
4 including improved reliability with isolation of failed components with minimal  
5 impact to the rest of the system preventing widespread outages. In addition,  
6 substations and switching stations built with Breaker and a Half (BAAH)  
7 configurations allow the maintenance of individual equipment while keeping the  
8 transmission lines operational. This is crucial for minimizing downtime and  
9 ensuring continuous service. BAAH design allows safe isolation of any  
10 equipment with minimal impact on power flow, enhancing operational flexibility.

11           By offering multiple connection points for load elements, substations and  
12 switching stations can also help ensure that electricity is re-routed effectively in  
13 case of failures, enhancing system resilience and serving as critical nodes for  
14 delivering electricity to customers.

15           Transmission-level customers who are eligible for Electric Rule 30 will  
16 generally require a new substation or switching station to interconnect the  
17 customer's facility into PG&E's electric transmission system, depending on the  
18 customer's location and existing facilities. Similarly, new substations and  
19 switching stations may be needed for connecting generation projects, both from  
20 traditional sources and distributed generation, and renewables which is  
21 necessary for achieving California's goal of 100 percent renewable energy by  
22 2045.

23           The transmission substations and switching stations installed to provide  
24 service to transmission-level customers under Rule 30 can also play a key role  
25 in developing and maintaining a reliable, resilient, and interconnected electric  
26 grid. Their design and operational benefits not only enhance system reliability  
27 and efficiency but also support the integration of renewable energy and the  
28 growing demands of modern electricity consumption. As the grid evolves, these  
29 facilities will continue to be pivotal in ensuring safe and dependable power  
30 delivery. To the extent Electric Rule 30 facilitates the interconnection of new  
31 transmission-level customers, and these customers require a new substation or  
32 switching station for interconnection, building these facilities has broader  
33 reliability benefits for PG&E's electric grid and all of PG&E's electric customers.

**PACIFIC GAS AND ELECTRIC COMPANY**  
**APPENDIX A**  
**STATEMENTS OF QUALIFICATIONS**

1 **PACIFIC GAS AND ELECTRIC COMPANY**  
2 **STATEMENT OF QUALIFICATIONS OF ASHWINI MANI**

3 Q 1 Please state your name and business address.

4 A 1 My name is Ashwini Mani, and my business address is Pacific Gas and  
5 Electric Company (PG&E), 300 Lakeside Drive, Oakland, California.

6 Q 2 Briefly describe your responsibilities at PG&E.

7 A 2 I am Manager of Electric Transmission Planning, overseeing the Generation  
8 and Load Interconnection of Wholesale and Retail load and generation  
9 interconnection customers.

10 Q 3 Please summarize your educational and professional background.

11 A 3 I hold a Master's degree in Electrical Engineering from Mississippi State  
12 University and a Bachelor's degree in Electrical Engineering from V.T.  
13 University, Bangalore, India. With over 18 years of engineering experience  
14 in the utility industry, I have steadily progressed in my career. For 13 of  
15 those years, I have been with PG&E's Transmission Planning department,  
16 leading Generation and Load interconnection studies for both Wholesale  
17 and Retail customers.

18 My expertise includes overseeing complex technical analyses,  
19 developing interconnection designs, and performing Reliability Studies.  
20 Additionally, I have supported several policy initiatives, such as California  
21 Independent System Operator's Interconnection Process Enhancement and  
22 California Public Utilities Commission Rule 21 tariff working groups. I have  
23 also served as the lead Subject Matter Expert for various internal PG&E  
24 initiatives, including updating PG&E's Transmission Interconnection  
25 Handbook and providing training on the generation and load interconnection  
26 process.

27 Q 4 What is the purpose of your testimony?

28 A 4 I am sponsoring the following testimony in PG&E's Application for Approval  
29 of Electric Rule No. 30 for Transmission-Level Retail Electric Service:

- 30 • Chapter 4, "Overview and Analysis of Electric Rule No. 30 Reliability  
31 Benefits."

32 Q 5 Does this conclude your statement of qualifications?

33 A 5 Yes, it does.

1                                   **PACIFIC GAS AND ELECTRIC COMPANY**  
2                                   **STATEMENT OF QUALIFICATIONS OF BEN MOFFAT**

3    Q 1    Please state your name and business address.

4    A 1    My name is Ben Moffat, and my business address is Pacific Gas and  
5            Electric Company (PG&E), 300 Lakeside Drive, Oakland, California.

6    Q 2    Briefly describe your responsibilities at PG&E.

7    A 2    I am Senior Manager of Electric Program Management, which oversees the  
8            interconnection of large load transmission customers.

9    Q 3    Please summarize your educational and professional background.

10   A 3    I have a Bachelor of Arts degree in Economics from California State  
11            University, Sacramento. I have 12 years of utility, project, and program  
12            management experience, with steady progression.

13   Q 4    What is the purpose of your testimony?

14   A 4    I am sponsoring the following testimony and workpapers in PG&E's  
15            Application for Approval of Electric Rule No. 30 for Transmission-Level  
16            Retail Electric Service:

- 17            • Chapter 2, "Description of Proposed Electric Rule 30 and Base Annual  
18            Revenue Calculation";
- 19            • Chapter 2, Attachment A, "Electric Rule No. 30: Retail Service  
20            Transmission Facilities"; and
- 21            • Chapter 2, Workpaper 1, "BARC Review Work Paper."

22   Q 5    Does this conclude your statement of qualifications?

23   A 5    Yes, it does.

1 **PACIFIC GAS AND ELECTRIC COMPANY**  
2 **STATEMENT OF QUALIFICATIONS OF KAREN KHAMOU ORNELAS**

3 Q 1 Please state your name and business address.

4 A 1 My name is Karen Khamou Ornelas, and my business address is Pacific  
5 Gas and Electric Company (PG&E), 300 Lakeside Drive, Oakland,  
6 California.

7 Q 2 Briefly describe your responsibilities at PG&E.

8 A 2 I am the Director of the South Bay Large Load Program Management team.  
9 I lead a team that focuses on customer interconnections that are  
10 complicated, span multiple years, and/or have never been done before.

11 Q 3 Please summarize your educational and professional background.

12 A 3 I received a Bachelor of Science degree in Environmental Science from  
13 University of California, Berkeley in 1998 and a Master of Science degree in  
14 Global Environmental Health from University of California, Berkeley in 2004.  
15 I have led a variety of policy analysis and strategy, and operational functions  
16 at PG&E since 2010. I have contributed to: greenhouse gas cap-and-trade  
17 regulations, renewables portfolio standard, electric grid interconnection,  
18 wildfire, and large load interconnection. I have also previously worked at the  
19 United States Environmental Protection Agency, Region IX, Natural  
20 Resources Defense Council, The San Francisco Foundation, and the  
21 California Air Resources Board. My experiences spanned environmental  
22 justice, oceans and fisheries health, environmental health, economic  
23 development, air quality improvement, and greenhouse gas reduction.

24 Q 4 What is the purpose of your testimony?

25 A 4 I am sponsoring the following testimony in PG&E's Application for Approval  
26 of Electric Rule No. 30 for Transmission-Level Retail Electric Service:

- 27 • Chapter 1, "Overview of Proposed Electric Rule 30 and Implementation."

28 Q 5 Does this conclude your statement of qualifications?

29 A 5 Yes, it does.



1                                   **PACIFIC GAS AND ELECTRIC COMPANY**  
2                                   **STATEMENT OF QUALIFICATIONS OF SIENNA ROGERS**

3    Q 1    Please state your name and business address.

4    A 1    My name is Sienna Rogers, and my business address is Pacific Gas and  
5            Electric Company (PG&E or the Company), 300 Lakeside Drive, Oakland,  
6            California.

7    Q 2    Briefly describe your responsibilities at PG&E.

8    A 2    I am Senior Director of Corporate Development and Economic Analytics for  
9            PG&E Corporation. I oversee evaluation and implementation of transactions  
10           which can improve PG&E's financial health, including asset sales that can  
11           reduce debt and improve the Company's balance sheet. Corporate  
12           Development and Economic Analytics also performs financial modeling to  
13           analyze the strategic and financial questions facing PG&E, providing  
14           economic analysis support to PG&E's Functional Areas when evaluating  
15           large capital projects and new business opportunities.

16   Q 3    Please summarize your educational and professional background.

17   A 3    I joined PG&E in 2006 through its Leadership Development Program and  
18           have held a number of roles across strategy, policy, and finance functions.  
19           I have led the formation of several strategy development teams focused on  
20           the changing energy landscape, including the evolution of the energy supply  
21           portfolio and the changing role of Distributed Energy Resources in the  
22           energy value chain. Some of those roles include: Director of Corporate  
23           Strategy, Director of Energy Policy Initiatives, and Director of Grid  
24           Integration and Innovation. My finance roles at PG&E included Director of  
25           Restructuring Strategy, Manager of Enterprise Forecasting and Analysis,  
26           and Manager of Investor Relations. Prior to PG&E, I worked in the financial  
27           sector—first for Schroder & Co. and then JPMorgan Chase—supporting  
28           origination and structuring of corporate transactions, analyzing investment  
29           and credit risk of companies in a wide range of industries. I have a  
30           Bachelor's degree in Economics and Computer Science from Duke  
31           University, and a Master's degree of Business Administration from  
32           Dartmouth's Tuck School of Business.

1 Q 4 What is the purpose of your testimony?  
2 A 4 I am sponsoring the following testimony and workpapers in PG&E's  
3 Application for Approval of Electric Rule No. 30 for Transmission-Level  
4 Retail Electric Service:  
5 • Chapter 3, "Overview and Analysis of Electric Rule No. 30 Customer  
6 Rate Benefits and Protections"; and  
7 • Chapter 3, Workpaper 1, "Hypothetical Scenarios for Rule 30."  
8 Q 5 Does this conclude your statement of qualifications?  
9 A 5 Yes, it does.