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BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

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

PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 E) RESPONSE TO QUESTIONS IN SECTIONS 3.2 THROUGH 3.7 OF ADMINISTRATIVE LAW JUDGE'S RULING DIRECTING UTILITIES TO FILE ADDITIONAL INFORMATION PROVIDING TRANSPARENCY ON CURRENT STATIC FLEXIBLE SERVICE CONNECTION OFFERINGS

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I. INTRODUCTION

Pursuant to the May 22, 2025 *Administrative Law Judge's Ruling Directing Utilities to File Additional Information Providing Transparency on Current Static Flexible Service Connection Offerings* ("FSC Ruling") and the subsequent May 29, 2025 email ruling setting different filing deadlines for responses to different portions of the questions in the FSC Ruling, Pacific Gas and Electric Company ("PG&E") provides the following responses to the questions in Sections 3.2 through 3.7 of the FSC Ruling.

II. PG&E'S RESPONSES TO QUESTIONS IN SECTIONS 3.2 THROUGH 3.7 OF THE FSC RULING

Below, PG&E restates each question posed in Sections 3.2 through 3.7 of the FSC Ruling followed by PG&E's response.

A. Section 3.2: Providing Transparency around the Participant Selection Process for Current Static FSC Offerings

There have been various points of confusion about the process used to implement limits on a customer's load profile based on known grid conditions and forecasted load ("Load Limits") which PG&E wishes to correct with the following information:

1) The purpose of Load Limits is not to avoid system upgrades, but rather to accelerate customer energization while upgrades are under development over longer timeframes.
2) The purpose of Load Limits is to partially energize customers on an interim basis

until system upgrades are complete. Therefore, the Load Limits are only accurate and valid for a limited time period.

3) The Load Limit applies at the customer point of interconnection, and it is at customer discretion as to what processes occur inside their facility to accommodate these limits.
4) PG&E uses Load Limits when distribution substation and/or primary distribution upgrades are necessary for customer energization. Load Limits are not used to mitigate the need for distribution line extensions (Rule 15) or service extensions (Rule 16) which are required to interconnect new sites to the PG&E system.
5) Load Limits are tailored to each customer based on a combination of customer-specific needs and localized grid conditions. These constraints are manually designed by engineers to ensure safe and reliable service.

1. PG&E shall describe each step in the process that it uses to determine whether a customer is a good candidate for service under a LLL. This description shall include any qualitative information […] to determine whether the customer is a good candidate for either the LLL or Flex Connect options.

PG&E begins by evaluating a customer's initial load request through the standard new business energization process. As a part of this process, Distribution Planning reviews the customer's load ramp and expected load profile, which is informed by data from similar customers within PG&E's service territory. The evaluation considers the customer's requested load and the available capacity on the local distribution system.

If the standard process determines that the full requested load cannot be served due to distribution system capacity constraints, PG&E engages the customer in a discussion of potential options. These discussions are tailored to the nature of the constraint and may include the possibility of a Load Limit communicated to the customer ("Load Limit Letter" or "LLL") or Flex Connect.

Load Limit Letters

A customer may be considered for an LLL only if another customer is not already load-limited for the same piece of capacity-constrained equipment. This ensures that PG&E can maintain safe and reliable service without overcommitting constrained infrastructure.

If the customer is willing and able to modify their load profile—such as by adjusting operational schedules or staging equipment installation—PG&E may proceed with a more detailed and manual engineering analysis. This analysis includes:

- A power flow study using a distribution model to simulate the customer's load.
- Incremental increases in modeled load until a violation of system limits is observed.
- Evaluation against equipment's normal and emergency ratings.
- Consideration of protection settings and power quality standards.

The manual study duration can vary from one day to a couple months, depending on the complexity and the need to balance the request with other tasks. As part of this analysis, PG&E engineers examine the distribution system's daily and seasonal load profile to define custom time periods for study. Typically, only two to four time periods are selected to balance analytical rigor with practical implementation. These time periods are chosen based on the load shape of the circuit or constrained equipment. This allows PG&E to tailor the Load Limit schedule to the specific characteristics of the customer's usage and the grid's capacity.

Distribution equipment has normal and emergency ratings. Normal ratings are always active. Emergency ratings in excess of the normal ratings can only be leveraged for a limited time during emergencies. Using emergency ratings beyond the set time period could result in equipment damage. Load Limits are typically set to avoid exceeding normal equipment ratings. Most Load Limits are set such that a failure to comply might result in exceeding normal ratings but not emergency ratings. In some cases, protective devices are configured to trip before emergency ratings are exceeded. This ensures that any violation of the Load Limit would not exceed emergency ratings.

Importantly, PG&E does not require customers to use specific technologies to qualify for

an LLL. Load management may be achieved through operational changes, such as shift scheduling[1/] or delayed equipment installation, or through automated control systems. This approach is flexible and based on the customer's capabilities and willingness to manage their load within the agreed-upon limits. Ultimately, it is at customer discretion as to what processes occur inside their facility to accommodate these limits

This process is designed to provide customers with an interim path to energization while PG&E completes the necessary capacity upgrades to serve the full requested load.

Flex Connect

For customers that can manage their loads more flexibly than the static limits provided by the Load Limit Letters, PG&E offers the Flex Connect program ("Flex Connect") that provides dynamic hourly limits based on near-term grid load forecasts. Flex Connect is currently supported as a bridging solution to customers where PG&E is not currently able to serve their full load AND where the distribution constraint is at a point in the network with an available SCADA device to send real-time telemetry (e.g., substation bank, feeder head, or other available SCADA device). While all customers who receive a Load Limit Letter are eligible to participate in Flex Connect, certain customers and conditions will be a better fit based on the cost of installation, and the particular grid conditions and constraints in the area. Customers that are likely good fits for Flex Connect, are those that can autonomously manage dynamic limits on their site without negatively impacting operations and customer experiences. These customers are generally larger (e.g., load > 750 kW), where the benefits of the added capacity outweigh the costs of the equipment installation.

The Flex Connect team provides interested customers with an analysis of potential benefits of participating in the program by using historical and planned loading conditions at the grid constraint to look at potential worst-case scenarios and average capacity available for the

1/ See, e.g., a customer who moved employee shifts to accommodate a temporary Load Limit for their plant expansion (available at: https://www.pge.com/en/newsroom/currents/customer-service/articles-3981-sweet-outcome-pge-teams-persevere-accommodate-citrus-company-expansion.html).

customer over the course of a year. Certain grid conditions are more favorable to Flex Connect – specifically, if (1) the high grid loading only occurs for a limited time each year, (2) the capacity constraint is at a location monitored by a SCADA device, and (3) the planned PG&E infrastructure projects are farther out in time. The analysis provided by PG&E does not provide any guarantees of available capacity but is a good faith estimate. Similarly, participating in Flex Connect does not provide any guarantees of having additional capacity available, although participation in the program will never provide limits lower than what was specified in the Load Limit Letter. The customer will confer with potential vendors regarding the costs of installing the communications and control systems necessary to implement Flex Connect since all the Flex Connect equipment at the customer site is customer-owned. The customer will then make a decision to participate in Flex Connect based on whether their expected benefit from participating in Flex Connect outweighs the costs of installing the necessary equipment. If the customer would like to proceed, they will then sign a Flex Connect agreement with PG&E.

2. SCE shall describe each step in the process that it uses to determine whether a customer is a good candidate for service under the LCMS pilot, and the criteria that are used in conjunction with that information to make the determination

This question does not apply to PG&E.

B. <u>Section 3.3: Providing Application and Participation Requirements</u>

1. PG&E and SCE shall each clarify whether there are any opportunities for a participating customer to change their LLP after entering into a Static FSC agreement and, as applicable, what steps must be taken to effectuate that change.

At any time, a customer may discuss their established Load Limit criteria with PG&E. This has, however, been rare and has only occurred on an ad-hoc basis. In such cases, the customer may request a temporary increase in load for a limited amount of time—such as for a special operational need, a scheduled event, or a holiday peak.

For these temporary load increases, PG&E will analyze whether the increase is possible. The results of this analysis depend on local forecasted temperatures, forecasted loads, and any

other operational needs, which may include circuit reconfigurations and equipment that is temporarily out of service. For this reason, these special accommodations can only be addressed a couple of weeks in advance, within a typical weather forecasting window.

When a change is approved, PG&E updates the existing Load Limit Letter to reflect the revised Load Limit and applicable time period. This ensures that the customer and PG&E have a shared understanding of the temporary conditions under which the increased load may be served.

2. PG&E and SCE shall each clarify if there are any differences in the Static FSC application process or agreement due to the customer site having existing generation. If differences exist, PG&E and SCE shall describe these differences.

There is no difference in the Load Limit discussion between PG&E and the customer if existing customer generation is involved. Customers with load increases and existing behind-the-meter generation may, if they wish to, use their generation to off-set their added load. The static Load Limit applies at the customer point of interconnection, and it is at customer discretion as to what processes occur inside their facility to accommodate these limits.

3. PG&E and SCE shall each clarify if there are any differences in the Static FSC application process or agreement if the customer site is concurrently applying for both a Static FSC and permission to operate new generation. If differences exist, PG&E and SCE shall describe these differences.

PG&E does not consider applications for new generation when considering or setting Load Limits. See response to 3.3.2.

C. <u>Section 3.4: Providing Transparency on Methodology for Computing Static FSC Profiles</u>

1. PG&E and SCE shall clarify whether the steps in the process used to calculate a customer's connected load vary between the conventional energization process and the energization process used to generate a Static FSC agreement and detail any differences between these steps, as applicable.

The steps in the process used to calculate a customer's metered demand,[2/] are part of the

2/ Metered demand is not the same as "connected load." "Connected load" represents the load of all connected customer equipment, whether it runs simultaneously or not. Both heating and cooling

typical energization process, not a separate or different process when Load Limits are involved. The determination of bona fide load is one of the many critical steps in the energization process. bona fide load is defined as the maximum metered demand that can reasonably be expected for the customer based on occupancy type and size. The amount is determined using historical demand of similar customers. If similar customers cannot be found, an established load density (watts per square foot) for similar occupancy type(s) will be applied.

2. PG&E and SCE shall clarify whether the steps in the process used to determine the capacity rating required for distribution infrastructure varies between the conventional energization process and the energization process used to generate a Static FSC agreement and detail any differences between these steps, as applicable.

The steps in the process used to calculate facility capacity ratings are the same for all customer energization, whether or not Load Limits are involved. Equipment ratings are established for every piece of distribution substation and line equipment including, but not limited to substation transformers, circuit breakers, relays, underground and overhead conductors, switches, voltage regulators, and protective devices. These ratings are based on PG&E's internal engineering standards, which are applied consistently across all energization processes. The standards ensure that equipment is operated within safe thermal, voltage, and protection limits, regardless of whether the customer is being served under a conventional energization or a Static Flexible Service Connection ("FSC") arrangement.

The established ratings are used in load flow models where loading and voltage are studied across the entire circuit. These models help determine whether the system can accommodate the customer's load without exceeding equipment ratings or violating power quality and protection criteria.

3. PG&E and SCE shall detail:

a. the load buffer level they currently use for each different type of distribution infrastructure (e.g.,

(con'd fn. 2) systems are included in a site's "connected load" though only one system will run at a time. Metered demand represents a reasonable expectation of site load from equipment that will run simultaneously.

service conductor, service transformer, primary conductor, etc.) in their FSCs;

b. the reason(s) why the load buffer level is set to this limit (i.e., the risks the utility is seeking to minimize);

c. any internal (e.g., Greenbook) or external (e.g., IEEE C.57.91) standard(s) utilized in setting this buffer;

d. to what extent each IOU is comfortable with reducing the buffer level to allow FSCs to maximize the utilization of existing infrastructure.

a. Load Buffer Levels Used

The approach to load buffers and equipment ratings is consistent across all customer energization processes, including Static FSCs. Equipment ratings are established for all relevant distribution substation and line equipment and are maintained in accordance with PG&E's internal engineering standards. The equipment evaluated includes, but is not limited to:

- Substation transformers
- Circuit breakers
- Relays
- Underground and overhead conductors
- Switches
- Voltage regulators
- Protective devices

For Static FSCs, Load Limits are typically set up to 100% of the equipment's normal rating—effectively applying a 0% buffer. This means that under normal conditions, the infrastructure is expected to operate at its full rated capacity.

b. Rationale for Buffer Levels

Normal ratings represent the continuous operating limits of equipment. Emergency ratings, which typically exceed normal ratings, may only be used for short durations during actual emergency conditions. Exceeding emergency ratings beyond the allowable time frame could result in equipment damage or failure. Therefore, most Load Limits are set such that a

failure to comply might result in exceeding normal ratings but not emergency ratings. In some cases, protective equipment is configured to trip and drop load before emergency ratings are exceeded.

PG&E sets Load Limits to allow up to 100% of normal ratings in Static FSC scenarios, consistent with all energization requests. This approach allows PG&E to serve as much customer load as possible, even in areas with capacity constraints, while still maintaining asset health and safety.

c. Standards Utilized

PG&E's internal engineering standards inform the application of equipment ratings and load buffers. These standards are applied uniformly across all energization processes. Where applicable, PG&E also references external standards and other industry guidelines to ensure safe and reliable operation.

d. Comfort with Reducing Buffer Levels

For Static FSCs, Load Limits are typically set at 100% of the equipment's normal rating—effectively applying a 0% buffer. This means the infrastructure is expected to operate at its full rated capacity under normal conditions. PG&E is not comfortable reducing the buffer below this level, as doing so would result in equipment overloads and could compromise safety, reliability, and asset health.

In fact, as use of grid assets evolve in a high electrification future, it may be necessary for PG&E to consider *increasing* buffer levels to ensure the safety, reliability, and asset health of its equipment. The expanded use of Load Limits can impact actual equipment loading, reducing PG&E's operational flexibility which can limit the ability to perform planned maintenance, execute switching operations, or respond effectively to unplanned outages and emergencies. The expanded use of Load Limits can similarly impact reliability, with the potential unexpected loss of equipment with longer term de-energization of customers on the circuit. Therefore, careful consideration of buffer levels will need to be considered if the use of Load Limits is scaled in the future.

D. Section 3.5: Providing Transparency Around Learnings from Current FSCs

1. PG&E shall describe how the current system of automated LLL compliance tracking is structured and administered, including but not limited to a discussion of whether this system requires the use of commercial meters or reprogramming of any equipment or billing systems.

PG&E currently uses a hybrid approach to LLL compliance tracking that combines automated detection with manual engineering review. PG&E has piloted an automated compliance tracking system that leverages the existing Advanced Metering Infrastructure ("AMI"). This system uses interval meter reads to validate whether customers are operating within their assigned Load Limits. The system flags potential violations and sends automated email alerts to PG&E engineering teams on a weekly basis.

Once a potential violation is identified, a detailed review is manually performed by an engineer. This review includes evaluating the customer's load profile, the timing and magnitude of the violation, and any relevant operational conditions on the circuit. This ensures that any enforcement or follow-up is based on a thorough understanding of the context.

It is important to note that while this pilot system introduces automation in the detection and notification process, the final compliance assessment remains a manual task. PG&E does not currently require the use of Static FSC-specific meters, nor does it reprogram customer equipment or billing systems for LLL compliance purposes.

PG&E's current manual approach has been sufficient given the limited scale of the LLL program. However, PG&E acknowledges that this approach would not be scalable for broader adoption.

2. PG&E shall elaborate on:

a. its lessons learned from utilizing LLLs within existing rules, regulations, and tariffs, and any modifications that were made to LLL implementation as a result of these lessons learned;

b. the advantages and disadvantages PG&E considered when deciding to implement the LLL framework in a way that avoids modifications to existing rules, regulations, and tariffs;

c. the specific steps taken to re-educate customers that have exceeded their load limit, including an assessment of how effective different efforts have been;

d. what happens when customers violate the agreed upon load limit one or more times;

e. any significant consequence to grid operations or equipment conditions that could occur due to agreement violations;

f. what, if any, safeguards beyond customer education are put in place to prevent a noncompliant customer from further violating the load limit during periods the grid is constrained.

a. Lessons Learned and Modifications to Implementation

PG&E has learned that LLLs can be a valuable tool to enable early energization for customers in areas with capacity constraints. One key lesson is that the flexibility and customer-specific application of the LLL framework allows PG&E to serve customers sooner while infrastructure upgrades are performed. However, PG&E also recognized that the lack of enforcement mechanisms and tracking systems could result in compliance violations going unnoticed.

As a result, PG&E has piloted an automated compliance tracking system that uses interval meter reads to flag potential violations. This pilot represents a refinement of the original manual-only approach and reflects PG&E's effort to improve oversight while maintaining the flexibility of the LLL framework.

b. Advantages and Disadvantages of Avoiding Tariff Modifications

PG&E chose to implement the LLL framework without modifying existing rules, regulations, or tariffs to expedite deployment and maintain flexibility. The primary advantage of this approach is that it allows PG&E to respond quickly to customer needs and capacity constraints, and adapt and evolve the framework directly without requiring regulatory changes. However, a key disadvantage is that the absence of formal tariff provisions limits PG&E's ability to enforce compliance or recover costs associated with violations.

c. Customer Re-education Following Exceedances

PG&E has been focused on enabling early energization for customers, rather than enforcement. Given the small scale of the application of LLs so far, PG&E manually reviews potential violations. In very limited cases, there have been a few customer/Service Planning miscommunications that were remedied by identifying ways to allow full load. PG&E has not found evidence of significant customer non-compliance; however, PG&E's current manual review approach would not be scalable to a broad adoption.

If a customer were to exceed their Load Limit, PG&E would engage in direct communication to clarify the terms of the LLL and the importance of compliance. These efforts would be handled on a case-by-case basis and may include verbal discussions or written follow-up.

d. Response to Load Limit Violations

To date, PG&E has not observed any cases of significant customer non-compliance. Violations would first be addressed by clarifying expectations with the customer. If continued non-compliance became an issue, PG&E would consider taking more direct corrective actions, such as de-energization.

e. Consequences to Grid Operations or Equipment Conditions Due to Agreement Violations

As previously noted, PG&E sets Load Limits for Static FSCs up to 100% of the equipment's normal rating, applying a 0% buffer. Normal ratings represent the continuous operating limits of equipment and are not intended to be exceeded except during emergency conditions. Load Limit violations could result in the use of emergency ratings, which are higher thresholds that may only be used for short durations and under specific circumstances. Violations of Load Limits can thus have consequences for grid operations and asset health. If protective equipment has been configured to trip before emergency ratings are exceeded, a violation could result in de-energizing customer load, which may also impact other customers on the same circuit.

f. Safeguards Beyond Customer Education to Prevent Noncompliance During Grid Constraints

PG&E employs a layered approach to safeguard against customer noncompliance with LLLs, particularly during periods when the grid is constrained. Safeguards used include:

1. **Customer Education:**

   PG&E's primary safeguard is proactive customer education. Customers are informed of their Load Limits and the importance of compliance during the energization process. In the event of a potential violation, PG&E engages with the customer to clarify expectations and reinforce the operational and safety implications of exceeding the agreed-upon limits.

2. **Automated Monitoring and Manual Review:**

   As previously stated, PG&E has piloted an automated compliance tracking system that uses AMI to monitor interval load data. This system flags potential violations and sends weekly alerts to engineering teams. Violations are manually reviewed by an engineer to determine whether further action is needed.

3. **Customer-Specific Protection Equipment:**

   In some cases and where possible, PG&E may require customer-specific protection equipment—such as relays and breakers—to automatically disconnect the customer's load if it exceeds the defined limit. This approach isolates the impact to the noncompliant customer.

4. **System-Level Protection Equipment:**

   Where customer-specific protection is not feasible, PG&E may rely on system-level protective devices that are configured to trip before emergency ratings are exceeded. This method would result in the de-energization of multiple customers on the same circuit, which is not preferred due to its broader reliability impact.

5. **Manual De-energization:**

   If a customer repeatedly violates their Load Limit and protective measures are

insufficient, PG&E may consider manually de-energizing the customer. This would be done after other mitigation efforts have been exhausted.

Together, these safeguards help PG&E manage risk while accommodating as much load as is safely possible.

3. SCE shall describe the limitation and any associated grid safety concerns that led to the change in LLP. SCE shall explain any learnings from this situation that may help to improve load study processes and prevent similar situations in the future.

This question does not apply to PG&E.

E. <u>Section 3.6: Providing Scalable Solutions</u>

1. PG&E and SCE shall confirm whether the description given for power check process in CalStart's PD Comments is an accurate description of its methods, and estimate the average time required for each of these steps.

While CalStart's Opening Comments discuss SCE's power check process, the elements of this process are very similar to PG&E's preliminary capacity assessment. CalStart's Opening Comments appear to be less a description of this process and more a set of recommendations that establish an alternative process. While PG&E appreciates CalStart's analysis and proposals, PG&E's position on the proposals is as follows:

CALSTART PROPOSAL	PG&E POSITION
1. Provide customers with a snapshot of available power in two time blocks (restricted/unrestricted) by season/month.	PG&E's EV pre-assessment and Load Limit Letters provide interconnection customers with a simple set of Load Limits. These are site-specific and all time periods may contain some restriction. There may not be an unconstrained time block, merely different constraints in different blocks. PG&E does not recommend prescribing a specific time block at this time (e.g., season/month).
2. Develop pre-defined LLP	It would be misleading to automate publication

schedules integrated into Load ICA maps	of these limits via the Integration Capacity Analysis ("ICA") map. Current Load Limits are determined via careful engineering review, including forecasted load, and are meant to be short-term. Furthermore, these Load Limits are set iteratively upon interaction with the capabilities of the customer. Therefore, PG&E does not recommend pre-defining Load Limit Profiles ("LLP") schedules at this time, nor does it recommend leveraging Load ICA for this purpose at this time.
3. Update Load ICA maps monthly with a 10% buffer	PG&E does not currently use Load ICA in its energization process, but is in the process of incorporating it for load energizations. PG&E does not recommend introducing a buffer at this time, since Load Limits are not widespread. The incorporation of Load ICA into the energization process should be completed prior to considering its use in Load Limits.
4. Use a checkbox in intake forms to indicate interest in FSCs	PG&E is open to this idea as a potential improvement to streamline customer engagement
5. Provide limited load profiles for circuits that are not capacity-constrained	Limited load profiles cannot be generated for an unconstrained location because there are no hours or months under which constraints apply. In other words, all hours are unconstrained.
6. Provide compensation for FSC participation	Financial incentives are unnecessary as the primary benefit is to the customer already. Load Limit and Flexible Service programs

	provide their own incentive – partial energization for participating customers earlier than would otherwise occur customer.
7. Complete the power check in 30 days	PG&E current practice is 30 days
8. Allow customers to reserve power for 30 days	The EV preassessment process currently requires the customer to respond in 90 days. A $3,500 advance is required.
9. Provide unit cost information for Rule 15/16 projects	The projects here are capacity projects, not Rule 15/16 projects and costs are not borne by the load interconnection customer. Capacity project unit costs are provided here, as Attachment 1.

2. If the description given requires expansion or correction to provide an accurate description, PG&E and SCE shall provide these corrections and expansions such that each step of this process is fully described and average times are provided.

PG&E describes the process for determining available capacity for load interconnection customers in Q.3.2.1.

PG&E's use of Load Limits, through both Load Limit Letters and Flex Connect, is based on the comparison of customer load against existing primary distribution line and substation capacity. This comparison is performed as part of the standard new business energization process. As a part of this process, Distribution Planning reviews the customer's load ramp and expected load profile, which is informed by data from similar customers within PG&E's service territory. The evaluation considers the customer's requested load and the available capacity on the local distribution system. If the standard process determines that the full requested load cannot be served due to distribution system capacity constraints, PG&E engages the customer in a discussion of potential options. These discussions are tailored to the nature of the constraint and may include the possibility of a Load Limit Letter or Flex Connect.

3. PG&E and SCE shall each clarify whether there is any difference between how long the power check process takes for Static FSC and how long it takes for conventional energization.

The steps in determining what distribution capacity work is required to energize a customer load is the same for every customer. After it is determined that the new customer's full load will exceed equipment ratings and that system upgrades are required prior to full energization, then Load Limits are discussed with the customer. The iterative review and determination of Load Limits can add up to 30 days of additional review time to the process, not inclusive of customer conversations.

4. SCE and PG&E shall explain, in their respective filings, how each of their study process(es) can be streamlined to support increasing customer participation in FSCs.

PG&E is open to consideration of adding a checkbox to the application for service form to indicate whether customers are open to considering a flexible service connection. This would aid PG&E in determining which customers to engage in conversation regarding Load Limits.

5. SCE and PG&E shall describe how customers may now or in the future generate and submit a site-specific LLP based on Load ICA data and describe any time savings that may result from this customer submission.

PG&E prefers to start determination of Load Limit applicability with a conversation with the customer. PG&E believes that using Load ICA for this purpose is premature. A multi-year roadmap is underway to validate Load ICA's accuracy and applicability, beginning with its integration into the New Business Application process. Only once this is successful should Load ICA be further evaluated to support LLPs including costs and timeline. Note that even with the ICA refinements currently underway, Load ICA is only using forecasted load for one year. Therefore, it cannot be the basis of any LLP that is longer than one year in duration. The cost of extending Load ICA beyond one year should be considered in comparison with the actual customer demand and use of LLP.

F. Section 3.7: Streamlining SCE's LCMS Study

The question in this section does not apply to PG&E.

III. CONCLUSION

PG&E appreciates the opportunity to provide these responses to the questions posed in Sections 3.2 through 3.7 of the FSC Ruling and looks forward to continued engagement with the Commission and stakeholders in this proceeding.

Respectfully Submitted,

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ATTACHMENT 1

Workpaper Table 9-18
Pacific Gas and Electric Company
Exhibit (PG&E-4), Chapter 9, Electric Distribution Capacity, Engineering and Planning
Unit Cost and Forecast Details by Asset Type

Line No.	Description	Unit Cost[1]	Per
1	New Substation Total	$28,750,000	Substation
2	Construction[2]	$20,350,000	Substation
3	Regulatory	$6,000,000	Substation
4	Land	$2,400,000	5 Acre Parcel
5			
6	Substation Transformers	$14,550,000	Transformer, = < 45 MVA with Switchgear
7		$10,650,000	Transformer, = < 45 MVA Outdoor Bus, Install
8		$7,650,000	Transformer, = < 45 MVA Outdoor Bus, Replace
9		$1,100,000	Cost Adder for Transformer > 45 MVA
10			
11	Transmission Voltage Circuit Switcher or Breaker	$2,650,000	High Side Circuit Switcher or Circuit Breaker
12	Distribution Voltage Circuit Breaker	$1,400,000	Low Side Circuit Breaker
13	Recable SF Circuit outlet in indoor substations	$1,100	Foot
14			
15	Non-Bay		
16	OH New	$160	Foot
17	OH Reconductor	$160	Foot
18			
19	OH Capacitor (Cap)	$46,500	Capacitor
20	OH Switch	$51,000	Switch
21	OH Regulator	$285,000	3 Regulator Bank (includes material costs)
22	OH Recloser	$101,000	Recloser
23	OH Fuse/Disconnect	$12,500	Fuse/Disconnect
24			
25	Autotransformer	$1,700,000	Autotransformer
26	UG New w/trench	$490	Foot
27	UG New no trench	$295	Foot
28	UG Switch	$115,000	Switch
29	UG Interrupter	$155,000	Interrupter
30			
31	Bay		
32	OH New	$505	Foot
33	OH Reconductor	$505	Foot
34			
35	OH Capacitor (Cap)	$46,500	Capacitor
36	OH Switch	$51,000	Switch
37	OH Regulator	$285,000	3 Regulator Bank (includes material costs)
38	OH Recloser	$101,000	Recloser
39	OH Fuse/Disconnect	$12,500	Fuse/Disconnect
40			
41	Autotransformer	$1,700,000	Autotransformer
42	UG New w/trench	$1,055	Foot
43	UG New no trench	$480	Foot
44	UG Switch	$115,000	Switch
45	UG Interrupter	$155,000	Interrupter

Notes:
(1) Unit Costs are an average of recorded costs of similar work.
(2) Substation unit costs include only distribution substation work (MWC 46). Transmission substation and Transmission line upgrades (MWC 60 and 61) are not included.