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PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



April 26, 2022

Sidney Bob Dietz II  
Director, Regulatory Relations  
Pacific Gas and Electric Company  
77 Beale St., Mail Code B13U  
P.O. Box 770000  
San Francisco, CA 94177

**Subject:** Pacific Gas and Electric Company's Advice Letter 6495-E to D.21-12-015 Agricultural Pumping Dynamic Rate Pilot

Dear Mr. Dietz:

Pacific Gas and Electric Company's (PG&E) Advice Letter (AL) 6495-E and PG&E AL 6495-E-A, which provide information regarding Valley Clean Energy's (VCE) forthcoming Agricultural Pumping Dynamic Rate Pilot (Pilot) pursuant to Decision 21-12-015, are approved as filed, effective March 6, 2022.

The appendix of this letter provides a summary of AL 6596-E, protests of Valley Clean Energy Alliance and Public Advocates Office, PG&E's response and Supplemental AL 6596-E-A, as well as Energy Division's disposition of the issues.

Please contact Achintya Madduri at [achintya.madduri@cpuc.ca.gov](mailto:achintya.madduri@cpuc.ca.gov) or (415) 696-7350 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Pete Skala", followed by the word "FOR" in a simple, blocky font.

Pete Skala  
Interim Deputy Executive Director for Energy and Climate Policy/  
Interim Director, Energy Division

cc: ED Tariff Unit  
Achintya Madduri (ED)  
Paul Phillips (ED)  
Aloke Gupta (ED)  
Daniel Buch (ED)  
Rebecca Boyles (VCE)  
Michael Campbell (Cal Advocates)

## Appendix: Energy Division Technical Review and Analysis

### ***Background:***

On November 19, 2020, the California Public Utilities Commission (CPUC) initiated Rulemaking (R.) 20-11-003 to establish policies, processes, and rules to ensure reliable electric service in California in the event of an extreme weather event in 2021.

In its testimony for Phase 2 of R.20-11-003, Valley Clean Energy (VCE) proposed the Agricultural Pumping Dynamic Rate Pilot (Pilot) to be made available to customers taking electric service on irrigation pumping tariffs. More than 85% of VCE's service territory is designated for agricultural use, and the agricultural sector represents approximately 18% of VCE's total annual load and 16% of its peak demand. The Pilot will include automation of agricultural pumping loads to respond to dynamic prices and implementation of an experimental rate that incorporates energy and delivery costs into hourly prices.

In Decision (D.) 21-12-015 (Decision), the CPUC approved the Pilot for three years (2022-2024) and for up to 5 MW of peak load, starting on May 1, 2022, and required Pacific Gas and Electric Company (PG&E) to work with VCE on implementation.<sup>1</sup> The Decision required VCE and PG&E to implement a "shadow bill", wherein PG&E will bill participating customers on existing tariffs, show customer savings under the pilot dynamic rate, and pay customers the difference between the shadow bill and the existing tariff.<sup>2</sup> VCE, in consultation with PG&E, was authorized to engage service providers for providing a technology platform to automate dynamic hourly prices and make them accessible to customers and automated agricultural water pumps.

In Ordering Paragraph (OP) 53 of the Decision, the CPUC directed VCE and PG&E to design a pilot dynamic rate with the following characteristics for the generation components of the service by VCE: (1) energy costs shall be based on the California Independent System Operator (CAISO) wholesale market prices, and (2) generation capacity and flexible capacity costs shall be recovered on an hourly basis using the concept of scarcity pricing: more fixed costs are recovered when system utilization is higher relative to the system capacity limit. For the delivery component of the service by PG&E: (1) line losses will be recovered through volumetric rates, which could be time dependent, and (2) distribution capacity costs will also be recovered on an hourly basis using the scarcity pricing concept in lieu of monthly or annual demand charges. PG&E was directed to utilize hourly circuit load data from the distribution circuits that service participating customers to calibrate and calculate the distribution capacity cost recovery price function. Moreover, PG&E was directed to integrate the circuit load data as inputs into the Pilot's price platform to generate the delivery component of the dynamic prices.<sup>3</sup>

The Decision required PG&E, in coordination with VCE, to address the following Pilot elements in an advice letter (AL): (1) details of how circuit utilization data from the distribution circuits that serve VCE customers will be used to calibrate and calculate the delivery component of the dynamic prices, (2) details of how the circuit utilization data will be integrated with the pilot IT platform, and (3) the administration and evaluation budgets for this pilot<sup>4</sup>

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<sup>1</sup> OPs 50, 51, and 53 of D.21-12-015.

<sup>2</sup> OP 52 of D.21-12-015.

<sup>3</sup> Attachment 1 of D.21-12-015 at 9.

<sup>4</sup> OP 58 of D.21-12-015

PG&E, as required by the Decision, filed AL 6495-E on February 4, 2022, and included the following details:

1. **Tariff Revisions:** PG&E submitted a modification to Electric Preliminary Statement Part CZ, Distribution Revenue Adjustment Mechanism (DRAM), to add accounting procedures to record the delivery component of the customer bill savings from the Valley Clean Energy Dynamic Rate Pilot.<sup>5</sup> PG&E stated that it will treat shadow bill payments to customers as a reduction to revenue based on guidance under Accounting Standards Codification (ASC) 606-10-32-25 Consideration payable to customers. That guidance applies to a wide variety of situations where payments are made to customers through account credits or cash and results in an adjustment to the transaction price (i.e., revenue reduction), unless the payment represents an exchange for a distinct good or service.

PG&E also stated that it will record the adopted Pilot budget against costs in the Operations Subaccount of the Demand Response Expenditures Balancing Account (DREBA). The adopted revenue requirements would be recorded in the Distribution Revenue Adjustment Mechanism and incorporated into distribution rates annually. Any underspent funds authorized for PG&E's administrative costs at the completion of the Pilot will be returned to customers by transferring the balance in DREBA to the DRAM for true-up in distribution rates through the Annual Electric True-up (AET) AL process and credit to all customer classes in the revenue allocation and rate design.

2. **Distribution Rate Design:** PG&E proposed a distribution rate design for the Real Time Pricing (RTP) pilot that is a volumetric rate (\$/kWh) for electric distribution delivery service that contains hourly rate values that will be known and published the prior day. A forecast will also be published 7 days ahead so Agricultural customers can make advance plans. PG&E's proposed rate consists of:
  - a. A base volumetric rate that applies to all usage and varies by season and time-of-use (TOU) period, plus
  - b. A flat scarcity-based adder that would apply to any hour that is forecasted to be in the top 200 hours for load on the circuit from which customer's load is served.

PG&E provided additional details on the methodology used to determine the top 200 hours and the value of the scarcity adders, indicating that Pilot customers are only provided credits (in response to load shift from periods with high RTP prices to low RPT prices), and that the top price hours occur during summer months. Therefore, it would be inappropriate to issue customer credits on a period of less than 12 months. PG&E noted that for this pilot, customers are only provided with credits.

PG&E also indicated that it proposed to not use the subscription component of its RTP rate design due to the variability of Agricultural customer class usage.

PG&E said that it is willing to discuss eventual revisions to the distribution rate over the course of the pilot so long as such revisions are based on additional analysis of distribution rate design, align with and not complicate the evaluation of the pilot, and support customer experience considerations. However, for the purposes of meeting the

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<sup>5</sup> PG&E AL 6495-E at 2-3.

mutual goal of launching the pilot by May 1, 2022, PG&E recommended the distribution rate design proposed in its AL be adopted without modification.

3. **Integration of Circuit Utilization Data with the Pilot IT Platform:** PG&E stated that it has identified 39 circuits that have agricultural customers in VCE's territory and that it will generate a 7-day forecast for the circuits. The forecast model will be evaluated at least each year to be updated, if necessary. PG&E specified the format of the data that will be provided to VCE via Application Programming Interface (API).
4. **PG&E Administration Budget Line Items for the Pilot:** PG&E provided an estimate of its administrative costs for the Pilot, which totaled to \$750,000.<sup>6</sup> This proposed budget included an estimate of \$400,000 for the measurement and evaluation (M&E) studies for the Pilot as well as \$20,000 for an outside contractor to perform a customer insight study that supplements the M&E study required by the Decision.<sup>7</sup>
5. **Customer Eligibility:** In addition to the elements that PG&E was required to include in its AL per the Decision, PG&E also included details about customer eligibility for the pilot as follows:<sup>8</sup>
  - a. Only agricultural pumping loads for customers who take energy service from VCE and are on a PG&E agricultural electric schedule shall qualify.
  - b. Customers must enroll in one of the following rates to participate in this pilot: AG-A1, AG-A2, AG-B, AG-C. Legacy AG rates will not be supported because they have distribution on-peak hours that are not consistent with peak CAISO hours. Customers on NEM 1 or NEM 2 tariffs are also eligible.
  - c. Customers on Virtual NEM (VNEM), NEM aggregation (NEMA), NEM Paired Storage and NEM Multiple Tariff should not be eligible for the Pilot due to the complexity of those rates.
  - d. Dual Participation should be prohibited in load management or demand response programs that are based on day ahead price signals.
  - e. Prohibited resources (such as fossil fueled backup generation) should not be used.
  - f. PG&E proposed to use the customers' aggregated maximum annual peak load as the methodology for calculation the Pilot scale (5 MW) and requested that VCE provide monthly reporting to Energy Division and PG&E capturing the enrolled demand and methodology for calculating the aggregated load to track Pilot progress.
  - g. PG&E said that it expects that customers enrollment into the pilot rate will be governed by Electric Rule 12.
  - h. PG&E assumes VCE will be responsible for administering the customer pump integration and automation incentive and ensuring adherence to the Pilot's three-year customer participation requirement.

OP 57 of the Decision required VCE to file a Tier 2 AL that included details on the following elements of the Pilot: (1) pilot scope, (2) pilot partners, (3) shadow bill implementation, (4) pilot dates, (5) pilot tariff design, and (6) details of how circuit and system data will be used to calibrate and calculate tariff price curves. The VCE AL was required to contain the majority of the Pilot details as the Decision specified that VCE shall be primarily responsible for the

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<sup>6</sup> PG&E AL 6495-E at 6.

<sup>7</sup> *Id.* at 8.

<sup>8</sup> PG&E AL 6495-E at 8

majority of the Pilot implementation tasks. This PG&E AL was required to specify how it will coordinate on the Pilot elements where it has a direct role in the Pilot, namely the distribution circuit utilization data and the administration and evaluation budget for the Pilot. Accordingly, VCE filed AL 11-E on January 5, 2022, that included the Pilot details required by the Decision as well as a discussion of additional issues beyond what was required by the Decision, which were protested by PG&E. Energy Division rejected PG&E's protest under General Rule 7.6.1 of CPUC General Order 96-B, as the protest did not identify any "material errors or omissions" in AL 11-E and approved it.

### ***VCE, TeMix Inc., and Polaris Energy Services (Pilot Partners) Protest***

On February 24, 2022, VCE, TeMix Inc., and Polaris Energy Services (collectively the "Pilot Partners") submitted a protest of AL 6495-E on the following grounds:

1. **Pricing Methodology.** The Pilot Partners stated that PG&E's pricing methodology, which proposes a flat distribution capacity adder to the top 200 hours of each circuit, is inconsistent with the Decision<sup>9</sup>, which directs PG&E to create continuous (smooth) scarcity pricing fixed cost recovery price functions for recovery of distribution capacity costs.<sup>10</sup> The Pilot Partners stated that PG&E's approach has sharp steps/pricing discontinuities that would complicate the response by customers and their devices and potentially destabilize grid operations.<sup>11</sup>
2. **Pricing Differentials.** The Pilot Partners also stated that the resulting pricing differentials for PG&E's proposed pricing methodology are too small to effectively test the impacts of dynamic pricing. The Pilot Partners state that by averaging across the year, PG&E's approach converts a dynamic, granular load shift pilot into a binary load shed program, which is not the Pilot's goal as set forth in the Decision.<sup>12</sup>
3. **Subscription Component.** The Pilot Partners state that PG&E's proposal to not use the subscription component to the distribution rate design would place customers at risk for bill volatility and recommends that Energy Division's disposition of the AL should enable VCE to have the option for a subscription component to the rate design.<sup>13</sup>
4. **NEM Eligibility.** The Pilot Partners state that PG&E's proposal to set participation rules for the Pilot is inappropriate and inconsistent with the Decision, as the VCE should have the primary responsibility to establish participation rules for the pilot.<sup>14</sup>
5. **Electric Rule 12.** The Pilot Partners state that the applicability of Rule 12 to the Pilot is inconsistent since participating customers will continue to take service on their Otherwise Applicable Tariff (OAT) and Rule 12 applies to such rates. The Pilot Partners state their concern that Rule 12 provides that PG&E will inform agricultural customers about which

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<sup>9</sup> Pilot Partners Protest at 2.

<sup>10</sup> *Id.* at 3.

<sup>11</sup> *Id.*

<sup>12</sup> *Id.* at 4.

<sup>13</sup> *Id.*

<sup>14</sup> *Id.*

rate schedule if best for them and such outreach could be confusing for customers and interfere with the Pilot. The Pilot Partners recommend that Energy Division reject PG&E's proposed application of Rule 12 to the Pilot.<sup>15</sup>

6. **One Year Minimum.** The Pilot Partners state that it is inappropriate for PG&E to set participation rules for the Pilot.<sup>16</sup>
7. **Customer Insight Study.** The Pilot Partners state that PG&E's proposed customer insight study was not ordered by the Decision and should be rejected by Energy Division in the disposition of the AL.
8. **Tracking of Customer Participation and Load Cap.** The Pilot Partners state that PG&E's approach to propose a methodology for calculating aggregated peak load cap is inconsistent with the Decision as: (a) this authority was not granted to PG&E by the Decision; and (b) the Decision did not require VCE to report any form of compliance to PG&E. The Pilot Partners recommend that Energy Division should reject this element of the AL.

### ***Public Advocates Office Protest***

On February 24, 2022, the Public Advocates Office (Cal Advocates) submitted a protest of AL 6495-E and recommended that the CPUC require PG&E submit supplemental information for the following details to comply with the Decision:

1. **Funds for integration and automation of pumping loads.** Cal Advocates states that the AL does not clearly address how PG&E plans to coordinate with VCE with regards to reimbursement of these funds. Cal Advocates states that the CPUC should require PG&E to explicitly explain in a supplemental the reimbursement process and should also require PG&E to include documentation from VCE regarding customer participation and costs.<sup>17</sup>
2. **Vendor fees, systems and technology.** Cal Advocates states that the CPUC should also require PG&E to explicitly explain in a supplemental how these costs will be reimbursed and whether there will be any overlap in costs between VCE and PG&E for implementation of shadow billing.<sup>18</sup>
3. **Program Administration.** Cal Advocates states that the CPUC should require PG&E to provide an explanation in a supplemental how it will implement its coordination with VCE regarding setup and maintenance of data transfers, measurement and evaluation (M&E) studies, and customer insight studies.<sup>19</sup>
4. **How customers will be credited.** Cal Advocates states that the CPUC should require PG&E to provide supplemental information to explain how customer participants will receive bill credits for their response to dynamic prices, and that this information should

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<sup>15</sup> *Id.* at 4-5.

<sup>16</sup> *Id.* at 5

<sup>17</sup> Cal Advocates Protest at 2-3.

<sup>18</sup> *Id.* at 3.

<sup>19</sup> *Id.*

reflect PG&E's response to Cal Advocates' data request where PG&E stated that it will issue funds directly to VCE for this purpose.<sup>20</sup>

### ***PG&E's Reply to Protests from Pilot Partners and Cal Advocates***

On March 3, 2022, PG&E submitted a reply to protests from Cal Advocates and the Pilot Partners as follows:

1. **Cal Advocates' request for additional details pertaining to the Pilot's Budget.** PG&E stated that without additional direction from the CPUC regarding the roles of VCE and PG&E and Energy Division's role in oversight for the Pilot, it will not issue any authorized funds.<sup>21</sup>

Regarding Program Administration, PG&E stated that it has engaged in project requirements and planning discussions with TeMix for setup and maintenance of the data required to support the Pilot. PG&E stated that data provided by TeMix, and customers' interval data will answer the majority of the required M&E elements. Any other information required by the third-party M&E evaluator will be gathered with VCE and its project partners.

2. **Cal Advocates' request for additional details regarding customer credits.** PG&E stated that VCE has not provided an explanation of whether VCE will be conducting a monthly or annual shadow billing process. PG&E stated its disagreement with VCE's viewpoint that VCE should be solely responsible for validating and approving the TeMix billing system, and views the billing of the distribution rate as its responsibility. PG&E said that it views the billing of the distribution rate as its responsibility since it will be responsible for tracking the funds against the balancing account approved for this pilot. PG&E stated that it requires that it have the authority to review and approve all distribution bill calculations prior to VCE invoicing for customer bill credits.<sup>22</sup>
3. **Pricing methodology, pricing differentials and subscription component.** PG&E stated that it will file a supplemental AL with a revised rate design to address the concerns raised by the Pilot Partners regarding its distribution prices.<sup>23</sup>
4. **NEM Eligibility.** PG&E says that it agrees to eliminate the eligibility requirement for certain NEM customers if Energy Division will ensure that the shadow bill calculation is consistent with the applicable NEM tariffs, and approve the shadow bill distribution credit calculation (and subsequent customer credit).<sup>24</sup>
5. **Electric Rule 12.** PG&E stated that it had not planned to provide a rate comparison of the Pilot to either Pilot participants or other Agricultural customers. The only Electric Rule 12 requirement that PG&E said it discussed in its AL was the requirement that customers should be able to drop out of the pilot rate mid-year to take advantage of low winter season bills while avoiding high summer season prices. PG&E stated that it

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<sup>20</sup> *Id.* at 4

<sup>21</sup> PG&E Reply to Protests at 1-3.

<sup>22</sup> *Id.* at 3.

<sup>23</sup> *Id.*

<sup>24</sup> *Id.* at 4.

intended to use Rule 12 to prevent customers from creating cost shifts through seasonal arbitrage.<sup>25</sup>

6. **Customer Insight Study.** PG&E said that it agrees with VCE's protest and will hire an independent evaluator for the customer insights evaluation, which will not duplicate this task at ratepayer expense.<sup>26</sup>
7. **Tracking of Customer Participation and Load Cap.** PG&E recommended that all parties participating in the Pilot have a common understanding of how to define the load cap and how to track progress towards that cap. Because the Decision did not provide this definition, and VCE did not define this cap in its AL, PG&E requested that Energy Division define this parameter so that customers and participating parties (VCE, Polaris, TeMix and PG&E) know how to address customers wishing to enroll once the cap is exceeded. PG&E stated that VCE can track this cap and report it to Energy Division, which can oversee eligibility enforcement based on whether the customer is within the 5 MW limit or not.<sup>27</sup>

### ***PG&E's Supplemental Advice Letter 6495-E-A***

PG&E submitted a supplemental AL on April 7, 2022, to revise its proposed distribution rate design for the Pilot.

PG&E revised proposal is to use TeMix's rate design so that the price response and implementation of the distribution rate is parallel to VCE's generation rate. PG&E will use the same subscription load pattern as VCE, which represents a customer's typical energy needs in each hour. The bulk of the customer's dynamic pricing shadow bill will be based on the subscription amount, which will be the customer's subscription usage applied to the customer's OAT.

PG&E said that it is currently working with TeMix to determine the distribution rate curves for each of the 39 circuits in VCE territory using its methodology. Each circuit's curve will be scaled to collect PG&E's marginal distribution capacity costs determined in PG&E's 2020 General Rate Case, Phase II and approved in D.21-11-016, multiplied by the Equal Percent of Marginal Cost multiplier determined in that case. Fixed costs and other non-capacity marginal costs are not collected in the RTP rate, but rather through the subscription amount.<sup>28</sup>

PG&E highlighted some of its concerns regarding this approach, including that the subscription method only covers capacity costs in the RTP portion of rates and therefore relies on an accurate subscription forecast to collect other costs.<sup>29</sup>

### ***Discussion***

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<sup>25</sup> *Id.*

<sup>26</sup> *Id.* at 5.

<sup>27</sup> *Id.*

<sup>28</sup> PG&E Supplemental AL 6495-E-A at 2.

<sup>29</sup> *Id.* at 3.

Energy Division has reviewed ALs 6495-E and 6495-E-A and finds that they are compliant with the requirements of the Decision and provide the necessary details about: (1) how circuit utilization data from the distribution circuits that serve VCE customers will be used to calibrate and calculate the delivery component of the dynamic prices, (2) how the circuit utilization data will be integrated with the pilot IT platform, and (3) the administration and evaluation budgets for this pilot.

Energy Division finds the Cal Advocates' requests to require PG&E to clarify details outside of the Pilot elements required pursuant to OP 53 of the Decision are outside the scope of this advice letter disposition. The issues raised by Cal Advocates, namely (1) funds for integration and automation of pumping loads, (2) vendor fees, systems and technology, (3) program administration details, and (4) how customers will be credited, were not issues that CPUC required PG&E to address in its advice letter pursuant to the Decision, and are therefore not proper grounds for protest under General Order (GO) 96-B, General Rule (Rule) 7.4.2. More specifically, GO 96-B, Rule 7.4.2 provides that a protest to an AL may rest on the following grounds:

- (1) The utility did not properly serve or give notice of the advice letter;
- (2) the relief requested would violate, or is not authorized by, statute or Commission order;
- (3) the analysis, calculations, or data in the advice letter contain material errors or omissions;
- (4) the relief requested is pending before the Commission in a formal proceeding;
- (5) the relief requested is inappropriate for the advice letter process; and/or
- (6) the relief requested is unjust, unreasonable, or discriminatory.

Cal Advocates has not identified any "material errors or omissions" in the AL that would warrant its rejection, nor did it sustain any contention that the AL fails to comply with the Decision. As such, Energy Division rejects Cal Advocates' protest pursuant to Rule 7.6.1 of Commission GO 96-B.

Energy Division finds that Pilot Partners' protest does not provide a basis for rejecting PG&E AL 6495-E under Rule 7.4.2 as the advice letter and supplemental advice letter discusses each of the elements that the Decision directed PG&E to address. Given the additional details included by PG&E in its supplemental advice letter regarding (1) the delivery component of the dynamic prices and (2) the customer insight study, the Pilot Partners' protest identifies no "material errors or omissions" in the advice letter and supplemental advice letter, and therefore there are no grounds that warrant its rejection.

PG&E included in AL 6495-E a discussion of issues beyond what was required by the Decision including: (1) NEM Eligibility, (2) Electric Rule 12, and (3) tracking of customer participation and load cap, and the Pilot Partners' protest also addressed these issues, as did PG&E's reply to the Pilot Partners' protest. Since the additional issues raised by VCE and PG&E are beyond the scope of the advice letter directed by the Decision, those issues are outside the scope of the advice letter approval granted here.

### ***Disposition***

In accordance with the discussion above, Energy Division hereby approves Advice Letter 6495-E and Supplemental Advice Letter 6495-E-A, submitted by Pacific Gas & Electric Company.



April 7, 2022

**Advice 6495-E-A**

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

**Subject: Supplemental: Pacific Gas and Electric Company's Advice Letter to D.21-12-015 Agricultural Pumping Dynamic Rate Pilot**

**Purpose**

Pursuant to Pacific Gas and Electric Company's (PG&E) response to protests of PG&E's February 4, 2022 Advice Letter (AL) 6495-E submitted in compliance with Decision (D.) 21-12-015, which was issued on December 6, 2021 (D.21-12-015 or the "Decision"), PG&E hereby submits this Tier 2 Supplemental Advice Letter to revise its proposed distribution rate design for the forthcoming Valley Clean Energy (VCE) Agricultural Pumping Dynamic Rate Pilot (Pilot).

**Background**

The Decision adopted two pilots that will test how dynamic rates can incent customers to shift energy usage to off-peak times, which can enhance system reliability in times of emergency. One of the pilots, the Agricultural Pumping Dynamic Rate Pilot, involves PG&E and a Community Choice Aggregation (CCA) provider, Valley Clean Energy Alliance, located in PG&E's service area. The Agricultural Pumping Dynamic Rate Pilot will focus on shifting agricultural water pumping to off-peak times for reliability purposes through the use of dynamic rates and incentives.

On February 4, 2022, PG&E submitted AL 6495-E describing its initial proposal for a dynamic distribution rate for the pilot. After many discussions with VCE, TeMix, Inc., and Energy Division, PG&E is now revising its proposed distribution rate design to be more in line with the rates TeMix is developing for VCE, including a more graduated price function and a subscription component for distribution. All other aspects of the proposal in AL 6495-E remain unchanged.

**Distribution Rate Design**

PG&E's revised distribution rate design for the VCE Ag Dynamic Rate Pilot is still a volumetric rate (\$/kWh) for electric distribution delivery service that contains hourly rate

values that will be known and published the prior day. PG&E's revised proposal is to use the TeMix's rate design so that the price response and implementation of the distribution rate is parallel to VCE's generation rate.

The backbone of TeMix's rate design is the subscription component, which is a predefined hourly load pattern that represents a customer's typical energy needs in each hour. PG&E will use the same subscription load pattern that VCE adopts for each customer as there is no reason for these values to be different for distribution and generation, and so that the customer will have equal exposure to the marginal prices on both rate components. PG&E understands that the subscription will be based on the average of up to the past two years of each customer's interval data, without any adjustment for weather or weekday vs weekend.

The bulk of the customer's real-time pricing (RTP) shadow bill will be based on the subscription amount, which will be the customer's subscription usage applied to current version of the customer's otherwise applicable tariff (OAT). When a customer uses more or less energy in each hour compared to the subscription component, the difference between the actual usage and the subscription usage is charged using the dynamic rate. Subscription demand charges will be calculated based on the peak kilowatt (kW) value up to the hourly subscription limit using applicable OAT distribution demand charges.

PG&E is currently working with TeMix to determine the distribution rate curves for each of the 39 circuits in VCE territory using its methodology. Each circuit's curve will be scaled to collect PG&E's marginal distribution capacity costs determined in PG&E's 2020 General Rate Case, Phase II and approved in D.21-11-016, multiplied by the Equal Percent of Marginal Cost multiplier determined in that case.<sup>1</sup> Fixed costs and other non-capacity marginal costs are not collected in the RTP rate, but rather through the subscription amount. More details on these rate curves can be found in Energy Division's UNIDE presentation at its May 25, 2021 Advance Distributed Energy Resources and Demand Flexibility Management workshop and the RATES report.<sup>2</sup>

PG&E still has concerns regarding TeMix's methods, especially regarding potential cost shifts, and the appropriateness of the subscription approach, but is willing to use this method in this limited scale pilot. At this time, PG&E cannot support using this method in any larger scale applications beyond this pilot until a more rigorous study has been done on the cost-causation of distribution capacity with circuit load and on the effectiveness of subscription forecasting, as well as the completion of all other study elements ordered in D.21-12-015.

AL 6495-E listed many of the concerns PG&E has with the subscription method, including the seasonal and monthly differences between RTP prices and the OAT, as well as how agricultural customers specifically are very difficult to forecast and have significant load

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<sup>1</sup> The Equal Percent of Marginal Cost multiplier with the approved marginal costs is 1.823.

<sup>2</sup> <https://www.energy.ca.gov/publications/2020/complete-and-low-cost-retail-automated-transactive-energy-system-rates>





# ADVICE LETTER SUMMARY

## ENERGY UTILITY



MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No.: Pacific Gas and Electric Company (ID U39 E)

Utility type:

- ELC       GAS       WATER  
 PLC       HEAT

Contact Person: Annie Ho

Phone #: (415) 973-8794

E-mail: PGETariffs@pge.com

E-mail Disposition Notice to: AMHP@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric      GAS = Gas      WATER = Water  
 PLC = Pipeline      HEAT = Heat

(Date Submitted / Received Stamp by CPUC)

Advice Letter (AL) #: 6495-E-A

Tier Designation: 2

Subject of AL: Supplemental: Pacific Gas and Electric Company's Advice Letter to D.21-12-015 Agricultural Pumping Dynamic Rate Pilot

Keywords (choose from CPUC listing): Compliance

AL Type:  Monthly  Quarterly  Annual  One-Time  Other:

If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #: D.21-12-015

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL:

Summarize differences between the AL and the prior withdrawn or rejected AL:

Confidential treatment requested?  Yes  No

If yes, specification of confidential information:

Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:

Resolution required?  Yes  No

Requested effective date: 3/6/22

No. of tariff sheets: N/A

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected:

Service affected and changes proposed<sup>1</sup>: N/A

Pending advice letters that revise the same tariff sheets: N/A

<sup>1</sup>Discuss in AL if more space is needed.

**Protests and correspondence regarding this AL are to be sent via email and are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:**

California Public Utilities Commission  
Energy Division Tariff Unit Email:  
[EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov)

Contact Name: Sidnev Bob Dietz II. c/o Megan Lawson  
Title: Director, Regulatory Relations  
Utility/Entity Name: Pacific Gas and Electric Company  
  
Telephone (xxx) xxx-xxxx: (415)973-2093  
Facsimile (xxx) xxx-xxxx: (415)973-3582  
Email: PGETariffs@pge.com

Contact Name:  
Title:  
Utility/Entity Name:  
  
Telephone (xxx) xxx-xxxx:  
Facsimile (xxx) xxx-xxxx:  
Email:

CPUC  
Energy Division Tariff Unit  
505 Van Ness Avenue  
San Francisco, CA 94102

Clear Form

**PG&E Gas and Electric  
Advice Submittal List  
General Order 96-B, Section IV**

AT&T Albion Power Company	East Bay Community Energy Ellison Schneider & Harris LLP Engineers and Scientists of California	Pioneer Community Energy
Alta Power Group, LLC Anderson & Poole	GenOn Energy, Inc. Goodin, MacBride, Squeri, Schlotz & Ritchie Green Power Institute Hanna & Morton ICF International Power Technology	Public Advocates Office  Redwood Coast Energy Authority Regulatory & Cogeneration Service, Inc. SCD Energy Solutions San Diego Gas & Electric Company
Atlas ReFuel BART		SPURR San Francisco Water Power and Sewer Sempra Utilities
Barkovich & Yap, Inc. Braun Blasing Smith Wynne, P.C. California Cotton Ginners & Growers Assn California Energy Commission	Intertie	Sierra Telephone Company, Inc. Southern California Edison Company Southern California Gas Company Spark Energy Sun Light & Power Sunshine Design Tecogen, Inc. TerraVerde Renewable Partners Tiger Natural Gas, Inc.
California Hub for Energy Efficiency Financing	Intestate Gas Services, Inc. Kelly Group Ken Bohn Consulting Keyes & Fox LLP Leviton Manufacturing Co., Inc.	TransCanada Utility Cost Management Utility Power Solutions Uplight Water and Energy Consulting Wellhead Electric Company Western Manufactured Housing Communities Association (WMA) Yep Energy
California Alternative Energy and Advanced Transportation Financing Authority California Public Utilities Commission Calpine	Los Angeles County Integrated Waste Management Task Force MRW & Associates Manatt Phelps Phillips Marin Energy Authority McClintock IP McKenzie & Associates	
Cameron-Daniel, P.C. Casner, Steve Center for Biological Diversity	Modesto Irrigation District NLine Energy, Inc. NRG Solar	
Chevron Pipeline and Power City of Palo Alto	OnGrid Solar Pacific Gas and Electric Company Peninsula Clean Energy	
City of San Jose Clean Power Research Coast Economic Consulting Commercial Energy Crossborder Energy Crown Road Energy, LLC Davis Wright Tremaine LLP Day Carter Murphy		
Dept of General Services Don Pickett & Associates, Inc. Douglass & Liddell		