

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE



October 16, 2019

Advice Letter 4141-G

Erik Jacobson
Director, Regulatory Relations
Pacific Gas and Electric Company
77 Beale Street, Mail Code B10C
P.O. Box 770000
San Francisco, CA 94177

SUBJECT: Revision to Gas Rule 21 (Transportation of Natural Gas) to Update in-Kind Shrinkage Allowance Adjustments for Backbone Transmission and Distribution Service

Dear Mr. Jacobson:

Advice Letter 4141-G is effective as of November 1, 2019.

Sincerely,

A handwritten signature in cursive script that reads "Edward Randolph".

Edward Randolph
Deputy Executive Director for Energy and Climate Policy/
Director, Energy Division



September 12, 2019

Advice 4141-G (Pacific Gas and Electric Company ID U 39 G)

Public Utilities Commission of the State of California

Subject: Revision to Gas Rule 21 (Transportation of Natural Gas) to update In-Kind Shrinkage Allowance Adjustments for Backbone Transmission and Distribution Service

Pacific Gas and Electric Company (PG&E) hereby submits revisions to PG&E's Gas Rule 21 — *Transportation of Natural Gas* to update the natural gas in-kind shrinkage allowances for backbone transmission and distribution service pursuant to Decision (D.) 03-12-061. The affected tariff sheets are listed on Attachment 1.

Purpose

In-kind shrinkage allowances collect the lost and unaccounted for gas and the utility fuel use attributable to the volume of natural gas received by PG&E for transmission, distribution and storage service. In D.03-12-061, the California Public Utilities Commission (Commission or CPUC) authorized PG&E to update the in-kind shrinkage allowances annually or as necessary at other times of the year to match the actual shrinkage experienced on PG&E's system. This is reflected in Gas Preliminary Statement Part C — *Gas Accounting Terms and Definitions*, Part C.12.c., and Gas Rule 21, which state that PG&E may adjust distribution, transmission and storage shrinkage allowances annually or as necessary at other times of the year through advice letter submittals.

PG&E proposes revisions to its existing backbone transmission and distribution in-kind shrinkage allowances to be effective November 1, 2019.

Background

In Advice 4015-G, the Commission adopted PG&E's current transmission and distribution shrinkage base allowances effective November 1, 2018, to better match the November 2018 through October 2019 shrinkage forecast. Based on the latest actual shrinkage data and to better match the shrinkage expected on PG&E's system for the next 12 months, PG&E proposes an adjustment to the existing transmission and core seasonal distribution shrinkage allowances to be effective November 1, 2019, as described herein. The proposed shrinkage allowances are designed to recover PG&E's shrinkage forecast for November 2019 through October 2020 and to recover a small cumulative shrinkage

imbalance forecasted to exist at the start of that period (November 1, 2019). PG&E will monitor actual shrinkage to determine if further adjustments are warranted.

Annual Shrinkage Allowance Forecast Update

The proposed shrinkage allowances are calculated using PG&E's latest forecast of shrinkage on its system and PG&E's 2020 customer demand forecast from the 2018 California Gas Report. In addition, the core distribution in-kind shrinkage allowance, with separate seasonal allowances for winter season (November-March) and summer season (April-October), as adopted in D.11-04-031, is adjusted. The proposed total in-kind shrinkage allowances, and the Base and Adjustment components of each allowance, are shown in the following table:

Proposed Total In-kind Shrinkage Allowance

	Current Effective In-Kind Shrinkage Allowance	Proposed In-Kind Shrinkage Base¹ Allowance	Proposed In-Kind Shrinkage Adjustment² Allowance (Adder)	Proposed Total In-Kind Shrinkage Allowance (Base + Adjustment)	Proposed Total Change
Transmission – Redwood to Off-System	0.8%	0.9%	0.0%	0.9%	+0.1%
Transmission – Mission to On/Off-System	0.0%	0.0%	0.0%	0.0%	0.0%
Transmission – All other backbone paths	1.1%	1.2%	0.0%	1.2%	+0.1%
Distribution – Noncore	0.2%	0.2%	0.0%	0.2%	0.0%
Distribution - Core Summer Season (Apr - Oct)	2.2%	1.8%	0.1%	1.9%	-0.3%
Distribution – Core Winter Season (Nov- Mar)	3.6%	3.6%	0.1%	3.7%	+0.1%
Distribution – Core (Annual) ³ (reference only)	3.1%	2.9%	0.1%	3.0%	-0.1%

¹ The Base Allowance is designed to recover shrinkage forecasted to occur during the effective period of the shrinkage allowances (November 2019 through October 2020).

² The Adjustment Allowance is designed to recover (or return) any cumulative shrinkage imbalance forecasted to exist at the start of the effective period of the shrinkage allowances (November 1, 2019).

³ Gas Accord V (GAV) (D.11-04-031) adopted a seasonal core distribution shrinkage allowance structure. The annual core distribution in-kind shrinkage allowance percentage is provided here as a reference only.

Based on the 2019 shrinkage forecast, PG&E estimates that the proposed in-kind shrinkage allowances, including Adjustment components, will recover the forecasted shrinkage on PG&E's system plus the uncollected cumulative shrinkage imbalance. PG&E will continue to monitor any cumulative shrinkage imbalance and will adjust the shrinkage allowances through advice letter submittals in the future, as necessary.

This submittal will not affect any other rate or charge, cause the withdrawal of service, or conflict with any other rate schedule or rule. Workpapers supporting the proposed changes are included in Attachment 3 to this submittal.

Tariff Revisions

The revised in-kind shrinkage allowances will be revised in Gas Rule 21, Section B. (Quantities).

- The above revised backbone transmission shrinkage allowance percentages will be reflected in Gas Rule 21, Section B.1.a.
- The above revised distribution shrinkage allowance percentages will be reflected in Gas Rule 21, Section B.1.b.

Protests

Anyone wishing to protest this submittal may do so by letter sent via U.S. mail, by facsimile or electronically, any of which must be received no later than October 2, 2019, which is 20 days from the date of this submittal. Protests should be mailed to:

CPUC Energy Division
ED Tariff Unit
505 Van Ness Avenue, 4th Floor
San Francisco, California 94102

Facsimile: (415) 703-2200
E-mail: EDTariffUnit@cpuc.ca.gov

Copies also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest also should be sent via U.S. Mail (and by facsimile and electronically, if possible) to PG&E at the address shown below on the same date it is mailed or delivered to the Commission:

Erik Jacobson
Director, Regulatory Relations
c/o Megan Lawson
Pacific Gas and Electric Company
77 Beale Street, Mail Code B13U
P.O. Box 770000
San Francisco, California 94177

Facsimile: (415) 973-3582
E-mail: PGETariffs@pge.com

Effective Date

In order to provide gas transportation customers notice of the shrinkage change, PG&E requests that this Tier 2 advice submittal be approved by October 14, 2019, which is 32 calendar days after the date of submittal, with the tariffs effective on November 1, 2019. PG&E will inform gas transportation customers of the new shrinkage allowances on its Pipe Ranger Web site: <http://www.pge.com/pipeline/> once this submittal is approved.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and/or via U.S. mail to parties shown on the attached list and the parties on the service list for A.13-12-012 and A.17-11-009. Address changes to the General Order 96-B service list should be directed to PG&E at e-mail address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter submittals can also be accessed electronically at: <http://www.pge.com/tariffs>.

/s/

Erik Jacobson
Director – Regulatory Relations

Attachments

cc: Service List A.13-12-012 and A.17-11-009



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 G)

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) #: 4141-G

Tier Designation: 2

Subject of AL: Revision to Gas Rule 21 (Transportation of Natural Gas) to update In-Kind Shrinkage Allowance Adjustments for Backbone Transmission and Distribution Service

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.03-12-061

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

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: 11/1/19

No. of tariff sheets: 4

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: Gas Rule 21 — Transportation of Natural Gas

Service affected and changes proposed¹: N/A

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

¹Discuss in AL if more space is needed.

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

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, CA 94102
Email: EDTariffUnit@cpuc.ca.gov

Name: Erik Jacobson, c/o Megan Lawson
Title: Director, Regulatory Relations
Utility Name: Pacific Gas and Electric Company
Address: 77 Beale Street, Mail Code B13U
City: San Francisco, CA 94177
State: California Zip: 94177
Telephone (xxx) xxx-xxxx: (415)973-2093
Facsimile (xxx) xxx-xxxx: (415)973-3582
Email: PGETariffs@pge.com

Name:
Title:
Utility Name:
Address:
City:
State: District of Columbia Zip:
Telephone (xxx) xxx-xxxx:
Facsimile (xxx) xxx-xxxx:
Email:

Clear Form

Cal P.U.C. Sheet No.	Title of Sheet	Cancelling Cal P.U.C. Sheet No.
35234-G	GAS RULE NO. 21 TRANSPORTATION OF NATURAL GAS Sheet 2	34529-G
35235-G	GAS RULE NO. 21 TRANSPORTATION OF NATURAL GAS Sheet 3	34530-G
35236-G	GAS TABLE OF CONTENTS Sheet 1	35232-G
35237-G	GAS TABLE OF CONTENTS Sheet 7	35195-G



GAS RULE NO. 21
TRANSPORTATION OF NATURAL GAS

Sheet 2

B. QUANTITIES OF GAS (Cont'd.)

1. IN-KIND SHRINKAGE ALLOWANCE (Cont'd.)

a. Backbone Transmission Shrinkage

A Customer transporting gas over PG&E's Backbone Transmission System shall deliver each day at the Receipt Point to PG&E an additional in-kind quantity of natural gas supply equal to a percent of total volume of natural gas to be delivered at the Receipt Point. Thus, the quantity to be nominated at the Receipt Point equals the quantity desired at the Delivery Point divided by (1 - x) where x is the decimal equivalent of the Backbone Transmission System In-Kind Shrinkage Allowance percentage, based on the transmission path utilized as follows:

Path	Percentage of In-Kind Shrinkage Base Allowance	Percentage of In-Kind Shrinkage Adjustment	Percentage of Effective In-Kind Shrinkage Allowance
Redwood to Off-System	0.9 (l)	–	0.9 (l)
Mission to On-System	0	–	0
Mission to Off-System	0	–	0
All other transmission	1.2 (l)	–	1.2 (l)

Provided, however, that PG&E and the Customer shall not be prohibited under this Rule, where shrinkage requirements support a different shrinkage allowance, from mutually agreeing to a different shrinkage allowance for transportation over PG&E's Backbone Transmission System.

(Continued)



GAS RULE NO. 21
TRANSPORTATION OF NATURAL GAS

Sheet 3

B. QUANTITIES OF GAS (Cont'd.)

1. IN-KIND SHRINKAGE ALLOWANCE (Cont'd.)

b. Distribution Shrinkage

For transportation on PG&E's Distribution System, an additional In-Kind Shrinkage Allowance shall apply, which is separate from backbone transmission and storage shrinkage. The Customer shall deliver each day to PG&E at the Citygate an additional in-kind quantity of natural gas supply equal to a percent of the total volume of natural gas flowing through the End-Use Customer's meter. Thus, the quantity to be nominated at the Citygate equals the quantity to be flowed through the meter multiplied by (1 + y) where y is the decimal equivalent of the Distribution System In-Kind Shrinkage Allowance percentage, as follows:

End-Use Customer	Percentage of In-Kind Shrinkage Base Allowance	Percentage of In-Kind Shrinkage Adjustment	Percentage of Effective In-Kind Shrinkage Allowance
Core – Summer Season (April - October)	1.8 (R)	0.1 (I)	1.9 (I)
Core – Winter Season (November – March)	3.6	0.1 (I)	3.7 (I)
Noncore Distribution	0.2	–	0.2
Noncore Transmission*	–	–	–

As an example, for a Core End-Use Customer being served via the Redwood Path, the amount to be nominated at Malin is calculated as:

$$\text{Receipt Point Quantity} = \frac{\text{Est. Metered Usage} \times (1 + y)}{(1 - x)}$$

Where: x = decimal equivalent of the Backbone Shrinkage percentage, and

y = decimal equivalent of the Distribution Shrinkage percentage

* Noncore Transmission Level End-Use Customers or Agents require no Distribution System In-Kind Shrinkage Allowance.

(Continued)



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Preliminary Statements.....	35230,35068-G	
Preliminary Statements, Rules	35132-G	
Rules, Maps, Contracts and Deviations.....	35237-G	(T)
Sample Forms	34229,32986,32987,32886,34953,32888-G	

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Advice 4141-G
Decision 03-12-061

Issued by
Robert S. Kenney
Vice President, Regulatory Affairs

Submitted September 12, 2019
Effective November 1, 2019
Resolution



GAS TABLE OF CONTENTS

Sheet 7

RULE	TITLE OF SHEET	CAL P.U.C. SHEET NO.
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Rule 19.2	California Alternate Rates for Energy for Nonprofit Group-Living Facilities.....	32051,34221,17035,31217,34522-G
Rule 19.3	California Alternate Rates for Energy for Qualified Agricultural Employee Housing Facilities	32053,34222,31219,34523-G
Rule 19.4	California Alternate Rates for Energy for Qualified Food Bank Facilities	35059-G
Rule 21	Transportation of Natural Gas	27591, 35234, 35235 , 31872, 32557, 32558, 32559, 32560, 32561, 32562, 32563, 32564, 32565, 31955, 29231, 33640, 31957, 35069, 35070, 35071, 35072, 35073, 35074, 35075, 35076, 35077, 35078, 35079, 35080, 35081, 35082, 35083, 35084-G
Rule 23	Gas Aggregation Service for Core Transport Customers	30871, 29675, 26664, 18265, 30872, 26666, 24825, 24826, 24827, 29677, 29678, 30873, 30874, 30875, 29681, 29682, 30876, 30877, 30878, 30879, 30880, 30881, 30882, 30883, 30884, 30885, 30886, 30887-G
Rule 25	Gas Services-Customer Creditworthiness and Payment Terms	28816, 28817, 28818, 28819, 28820, 28821, 28822, 28823, 28824, 28825, 28826, 28827, 28828-G
Rule 26	Standards of Conduct and Procedures Related to Transactions with Intracompany Departments, Reports of Negotiated Transactions, and Complaint Procedures. 29688, 29689, 29690, 31933-G	
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Rule 28	Mobilehome Park Utility Upgrade Program	34941, 21773, 31774, 31775, 31776-31777, 32133, 32134-G

Maps, Contracts and Deviations

SERVICE AREA MAPS:

Gas Service Area Map	31641-G
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LIST OF CONTRACTS AND DEVIATIONS:

..... 20211, 13247, 13248, 28466, 17112, 22437, 29938, 31542, 13254, 14426, 13808, 35193 ,
..... 20390, 16287, 29333, 29053, 29334, 14428, 13263, 14365, 32879, 33164, 16264, 13267-G

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Attachment 2

Redline Tariffs



GAS RULE NO. 21
TRANSPORTATION OF NATURAL GAS

Sheet 2

B. QUANTITIES OF GAS (Cont'd.)

1. IN-KIND SHRINKAGE ALLOWANCE (Cont'd.)

a. Backbone Transmission Shrinkage

A Customer transporting gas over PG&E's Backbone Transmission System shall deliver each day at the Receipt Point to PG&E an additional in-kind quantity of natural gas supply equal to a percent of total volume of natural gas to be delivered at the Receipt Point. Thus, the quantity to be nominated at the Receipt Point equals the quantity desired at the Delivery Point divided by (1 - x) where x is the decimal equivalent of the Backbone Transmission System In-Kind Shrinkage Allowance percentage, based on the transmission path utilized as follows:

Path	Percentage of In-Kind Shrinkage Base Allowance	Percentage of In-Kind Shrinkage Adjustment	Percentage of Effective In-Kind Shrinkage Allowance
Redwood to Off-System	0.8 (R) <u>0.9 (I)</u>	—	0.8 (R) <u>0.9 (I)</u>
Mission to On-System	0	—	0
Mission to Off-System	0	—	0
All other transmission	1.1 (R) <u>1.2 (I)</u>	—	1.1 (R) <u>1.2 (I)</u>

Provided, however, that PG&E and the Customer shall not be prohibited under this Rule, where shrinkage requirements support a different shrinkage allowance, from mutually agreeing to a different shrinkage allowance for transportation over PG&E's Backbone Transmission System.

(Continued)



GAS RULE NO. 21
TRANSPORTATION OF NATURAL GAS

B. QUANTITIES OF GAS (Cont'd.)

1. IN-KIND SHRINKAGE ALLOWANCE (Cont'd.)

b. Distribution Shrinkage

For transportation on PG&E's Distribution System, an additional In-Kind Shrinkage Allowance shall apply, which is separate from backbone transmission and storage shrinkage. The Customer shall deliver each day to PG&E at the Citygate an additional in-kind quantity of natural gas supply equal to a percent of the total volume of natural gas flowing through the End-Use Customer's meter. Thus, the quantity to be nominated at the Citygate equals the quantity to be flowed through the meter multiplied by (1 + y) where y is the decimal equivalent of the Distribution System In-Kind Shrinkage Allowance percentage, as follows:

End-Use Customer	Percentage of In-Kind Shrinkage Base Allowance	Percentage of In-Kind Shrinkage Adjustment	Percentage of Effective In-Kind Shrinkage Allowance
Core – Summer Season (April - October)	1.82 (R) 2	0.1(I) -	1.92-2 (I)
Core – Winter Season (November – March)	3.6 (I)	0.1(I) -	3. 76 (I)
Noncore Distribution	0.2	-	0.2
Noncore Transmission*	-	-	-

As an example, for a Core End-Use Customer being served via the Redwood Path, the amount to be nominated at Malin is calculated as:

$$\text{Receipt Point Quantity} = \frac{\text{Est. Metered Usage} \times (1 + y)}{(1 - x)}$$

Where: x = decimal equivalent of the Backbone Shrinkage percentage, and
y = decimal equivalent of the Distribution Shrinkage percentage

* Noncore Transmission Level End-Use Customers or Agents require no Distribution System In-Kind Shrinkage Allowance.

(Continued)

Advice 4141-G
September 12, 2019

Attachment 3

Workpaper

PACIFIC GAS AND ELECTRIC COMPANY
Workpaper for In-Kind Shrinkage Allowance Update
Advice 4141-G (effective November 1, 2019)
Shrinkage Base Allowance

	(A)	(B)	(C)	(D)	(E)	(F)	
<i>Forecast Customer Demand is based on data in the 2018 California Gas Report filed July 1, 2018. Forecast Off-system Demand is based on the three-year actual off-system deliveries through July 2019. LUAF and GDU forecasts are based on the three-year average monthly percentage profile of actual LUAF and GDU (through May 2019 -- latest data available as of August 28, 2019.)</i>							
Line No.		12 Month Forecast Throughput	% Served from Distr.	% Served from Trans.	Throughput Served from Trans.	Throughput Served from Distr.	Line No.
1	Noncore Transmission/Distribution Split	Mdth	Survey Results		Mdth	Mdth	1
2	Industrial	214,784	11.6494%	88.3506%	189,763	25,021	2
3	EG	85	0.0000%	100.0000%	85	0	3
4	Cogeneration	199,360	30.0917%	69.9083%	139,369	59,991	4
5	Wholesale	3,512	0.0000%	100.0000%	3,512	0	5
6	NGV4	985	0.0000%	100.0000%	985	0	6
7	Total Noncore (excludes EOR and SEGDA)	418,724			333,713	85,012	7
8	% of Noncore served from Trans. and Distr.				79.70%	20.30%	8
LUAF per Study (from the Gas Accord I Workpapers, 17-2 & 17-3)							
Splits LUAF noncore volumes between distribution and transmission based on LUAF Study							
9		NCTotal			NC Trans.	NC Distr.	9
10	LUAF (Mcf) - volumes from 1995 BCAP	3,054,276			2,268,089	786,187	10
11	LUAF % (NC Distr Vol/NC Total)				74.26%	25.74%	11
12	Throughput Vol. % - Data from Rate Dept Survey				79.00%	21.00%	12
13	Ratios set for Accord period:						13
14	Calculated as Line 11/Line 12				0.94	1.23	14
15	Calculated as (F) line 14/(E) line 14					1.30	15
16	Noncore % of System LUAF (adopted in 95 BCAP)	22.00%					16
LUAF & GDU Allocations to Transmission and Distribution							
		System Forecast	Core	Noncore	Off-system	NC Trans.	NC Distr.
17	LUAF allocated volumes (less off-sys LUAF; core/noncore 78%/22%)	12,576	9,594	2,706	276		
18	Throughput per forecast (Mdth)	773,318	270,872	418,724	83,722		
19	Less: SEGDA	0		0			
20	Totals for Calculation of allocation	773,318	270,872	418,724	83,722		
21	LUAF as % of throughput (Lines 17/20)	1.626%	3.542%	0.646%	0.330%		
22	Noncore Trans. LUAF% ((D) line 21 - wtd. per surveys above)					0.609%	
23	Noncore Distr. LUAF% (D) line 21 - wtd. per surveys above)						0.794%
24	Off-System LUAF (per D.94-02-042)	0.33%					
GDU Calculations:							
25	GDU per forecast(Mdth) - Pipeline (Total Plus balancing service storage GDU)	4,229					
26	GDU % = (B) line 24/(B) line 20	0.547%					
Shrinkage (LUAF+GDU)							
27	Noncore Transmission = (B) line 26 + (E) line 22	1.156%					
28	Noncore Distribution = (B) line 26 + (F) line 23	1.341%					
29	Core Total = (B) line 26 + (C) line 21	4.089%					
30	Core Distribution = (B) line 29 - (B) line 27	2.933%					
31	Off-System Transmission = (B) line 26 + (B) line 24	0.877%					
32	Proposed Pipeline Shrinkage Allowances - Base Allowance Update		Core	NC Trans.	NC Dist.	Off-Sys.	
33	Transmission (assumes same % for core and noncore)		1.2%	1.2%	1.2%	0.9%	
34	Distribution		2.9%	N/A	0.2%	N/A	
35	Total		4.1%	1.2%	1.3%	0.9%	

PACIFIC GAS AND ELECTRIC COMPANY
Workpaper for In-Kind Shrinkage Allowance Update
Advice 4141-G (effective November 1, 2019)
Shrinkage Adjustment Allowance

	(A)	(B)	(C)	(D)	(E)	(F)	
<p><i>Forecast Customer Demand is based on data in the 2018 California Gas Report filed July 1, 2018. Current under-collection shrinkage imbalance forecast of 615 MDth (as of May 2019--most current data available) is amortized over 12 months; resulting in forecast annual recovery quantity of approximately 615 MDth. The under collection is allocated in the same methodology as LUAF.</i></p>							
Line No.		12 Month Forecast Throughput	% Served from Distr.	% Served from Trans.	Throughput Served from Trans.	Throughput Served from Distr.	Line No.
		Mdth	Survey Results	Survey Results	Mdth	Mdth	
1	Noncore Transmission/Distribution Split						1
2	Industrial	214,784	11.6494%	88.3506%	189,763	25,021	2
3	EG	85	0.0000%	100.0000%	85	0	3
4	Cogeneration	199,360	30.0917%	69.9083%	139,369	59,991	4
5	Wholesale	3,512	0.0000%	100.0000%	3,512	0	5
6	NGV4	985	0.0000%	100.0000%	985	0	6
7	Total Noncore (excludes EOR and SEGDA)	418,724			333,713	85,012	7
8	% of Noncore served from Trans. and Distr.				79.70%	20.30%	8
<p>LUAF per Study (from the Gas Accord I Workpapers, 17-2 & 17-3) Splits LUAF noncore volumes between distribution and transmission based on LUAF Study</p>							
9		NCTotal			NC Trans.	NC Distr.	9
10	LUAF (Mcf) - volumes from 1995 BCAP	3,054,276			2,268,089	786,187	10
11	LUAF % (NC Distr Vol/NC Total)				74.26%	25.74%	11
12	Throughput Vol. % - Data from Rate Dept Survey				79.00%	21.00%	12
13	Ratios set for Accord period:						13
14	Calculated as Line 11/Line 12				0.94	1.23	14
15	Calculated as (F) line 14/(E) line 14					1.30	15
16	Noncore % of System LUAF (adopted in 95 BCAP)	22.00%					16
<p>LUAF & GDU Allocations to Transmission and Distribution</p>							
		System Forecast	Core	Noncore	Off-system	NC Trans.	NC Distr.
17	LUAF allocated volumes (less off-sys LUAF; core/noncore 78%/22%)	615	480	135	-		
18	Throughput per forecast (Mdth)	773,318	270,872	418,724	83,722		
19	Less: SEGDA	0		0			
20	Totals for Calculation of allocation	773,318	270,872	418,724	83,722		
21	LUAF as % of throughput (Lines 17/20)	0.079%	0.177%	0.032%	0.000%		
22	Noncore Trans. LUAF% ((D) line 21 - wtd. per surveys above)					0.030%	
23	Noncore Distr. LUAF% (D) line 21 - wtd. per surveys above)						0.040%
24	Off-System LUAF (per D.94-02-042)	0.00%					
<p>GDU Calculations:</p>							
25	GDU per forecast(Mdth) - Pipeline (Total Plus balancing service storage GDU)	-					
26	GDU % = (B) line 24/(B) line 20	0.000%					
<p>Shrinkage (LUAF+GDU)</p>							
27	Noncore Transmission = (B) line 26 + (E) line 22	0.030%					
28	Noncore Distribution = (B) line 26 + (F) line 23	0.040%					
29	Core Total = (B) line 26 + (C) line 21	0.177%					
30	Core Distribution = (B) line 29 - (B) line 27	0.147%					
31	Off-System Transmission = (B) line 26 + (B) line 24	0.000%					
32	Proposed Pipeline Shrinkage Allowances - Shrinkage Adjustment (Adder)		Core	NC Trans.	NC Dist.	Off-Sys.	32
33	Transmission (assumes same % for core and noncore)		0.0%	0.0%	0.0%	0.0%	33
34	Distribution		0.1%	N/A	0.0%	N/A	34
35	Total		0.1%	0.0%	0.0%	0.0%	35

PACIFIC GAS AND ELECTRIC COMPANY
 Workpaper for Seasonal Core Distribution Shrinkage Allowance
 Advice 4141-G (effective November 1, 2019)
 Seasonal Core Distribution Shrinkage Allowance

	(A)	(B)	(C)	
	Seasonal Core Distribution Shrinkage Rate Derivation			
	The Core distribution forecast is based on the customer demand forecast agreed-upon in the 2018 California Gas Report filed July 1, 2018. The Core Distribution Shrinkage Quantity is calculated by multiplying the Annual Core Distribution Demand Forecast by the Annual Core Distribution Shrinkage Percentage. The Core Distribution Shrinkage Quantity is allocated between the summer and winter seasons in the same percentage as the Total LUAF Forecast with the Distribution Shrinkage Seasonal Adjustment (line 17c).			
Line No.				Line No.
	Core Customer Demand Forecast			
		Quantity (MDth)	Percentage	
1				1
2	Annual core distribution demand	270,872		2
3	Summer Season (April -- October) Core Distribution Demand	101,703	37.55%	3
4	Winter season (November -- March) Core Distribution Demand	169,169	62.45%	4
	Total LUAF Forecast			
5	Annual LUAF Forecast	12,576		5
6	Summer Season (April -- October) LUAF Forecast	3,486	22.72%	6
7	Winter Season (November -- March) LUAF Forecast	9,089	77.28%	7
	Core Distribution Shrinkage Quantity			
8	Annual Core Distribution Demand (MDth)	270,872		8
9	Annual Base Core Distribution Shrinkage Percentage	2.933%		9
10	Calculated Base Core Distribution Shrinkage Quantity (MDth)	7,945		10
11	Summer Season Core Distribution Shrinkage Quantity (MDth)	1,805		11
12	Winter Season Core Distribution Shrinkage Quantity (MDth)	6,140		12
	Seasonal Core Distribution Shrinkage Percentages			
13	Summer Season (April -- October)	1.775%		13
14	Winter Season (November -- March)	3.629%		14
	Seasonal Core Distribution Shrinkage -- Tariff Percentages			
15	Summer Season (April -- October)	1.8%		15
16	Winter Season (November -- March)	3.6%		16
17	Distribution Shrinkage Seasonal Adjustment (based on historical seasonal split of the difference between calculated core at CityGate & Burnertip demands)		5.00%	17

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

AT&T	Downey & Brand	Pioneer Community Energy
Albion Power Company	East Bay Community Energy	Praxair
Alcantar & Kahl LLP	Ellison Schneider & Harris LLP	
	Energy Management Service	
Alta Power Group, LLC	Engineers and Scientists of California	Redwood Coast Energy Authority
Anderson & Poole	Evaluation + Strategy for Social Innovation	Regulatory & Cogeneration Service, Inc.
	GenOn Energy, Inc.	SCD Energy Solutions
Atlas ReFuel	Goodin, MacBride, Squeri, Schlotz & Ritchie	
BART	Green Charge Networks	SCE
	Green Power Institute	SDG&E and SoCalGas
Barkovich & Yap, Inc.	Hanna & Morton	
P.C. CalCom Solar	ICF	SPURR
California Cotton Ginners & Growers Assn	International Power Technology	San Francisco Water Power and Sewer
California Energy Commission	Intestate Gas Services, Inc.	Seattle City Light
California Public Utilities Commission	Kelly Group	Sempra Utilities
California State Association of Counties	Ken Bohn Consulting	Southern California Edison Company
Calpine	Keyes & Fox LLP	Southern California Gas Company
	Leviton Manufacturing Co., Inc. Linde	Spark Energy
Cameron-Daniel, P.C.	Los Angeles County Integrated Waste Management Task Force	Sun Light & Power
Casner, Steve	Los Angeles Dept of Water & Power	Sunshine Design
Cenergy Power	MRW & Associates	Tecogen, Inc.
Center for Biological Diversity	Manatt Phelps Phillips	TerraVerde Renewable Partners
City of Palo Alto	Marin Energy Authority	Tiger Natural Gas, Inc.
	McKenzie & Associates	
City of San Jose	Modesto Irrigation District	TransCanada
Clean Power Research	Morgan Stanley	Troutman Sanders LLP
Coast Economic Consulting	NLine Energy, Inc.	Utility Cost Management
Commercial Energy	NRG Solar	Utility Power Solutions
County of Tehama - Department of Public Works		Utility Specialists
Crossborder Energy	Office of Ratepayer Advocates	
Crown Road Energy, LLC	OnGrid Solar	Verizon
Davis Wright Tremaine LLP	Pacific Gas and Electric Company	Water and Energy Consulting Wellhead Electric Company
Day Carter Murphy	Peninsula Clean Energy	Western Manufactured Housing Communities Association (WMA)
		Yep Energy
Dept of General Services		
Don Pickett & Associates, Inc.		
Douglass & Liddell		