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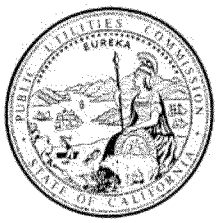
Exhibit Number	:	ORA-17
Commissioner	:	C. Peterman
ALJ	:	J. Wong
Witness	:	P. Sabino



OFFICE OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION

Report on the Results of Operations for Pacific Gas and Electric Company Test Year 2015 Gas Transmission and Storage Rate Case

Chapter 17
Cost Allocation and Rate Design

San Francisco, California
August 11, 2014

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Cost Allocation and Rate Design

I. INTRODUCTION

This exhibit presents the analyses and recommendations of the Office of Ratepayer Advocates (ORA) regarding Pacific Gas and Electric Company's (PG&E) Cost Allocation and Rate Design proposals associated with its Test Year (TY) 2015 and Post Test Years 2016 and 2017 in the Gas Transmission and Storage (GT&S) rate case. ORA proposes an allocation of ORA's recommended revenue requirements shown in ORA Exhibit 16 for Backbone Transmission, Local Transmission, Gas Storage, and the Transmission-Level Customer Access Charges (CAC) to the customers causing the incurrence of these costs on PG&E's gas transmission and storage system and to calculate the corresponding amounts to be collected in rates. PG&E is not proposing to change the current cost allocation methodologies for its Backbone Transmission facilities, which were adopted in the Gas Accord V Settlement.[1] PG&E clarified that its proposal to equalize core and noncore rates on the Redwood and Baja paths for its Backbone Transmission is a rate design proposal, not a cost allocation methodology proposal.[2] The Silverado/Mission Paths and the G-XF service on Backbone Transmission will remain based on traditional cost-based rates.[3]

With respect to Local Transmission facilities, PG&E proposes to continue the existing cost allocation and single average local transmission rate design for core and a single average local transmission rate for noncore and wholesale customers.[4] In addition, PG&E does not propose any changes to the existing cost allocation and rate design methodology for its Gas Storage facilities which provide three storage services.[5] Further, in Chapter 10 of PG&E's Prepared Testimony, PG&E presented

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[1] PG&E Response to ORA-DR-15-Q3a.

[2] Id.

[3] Table 17-1 at lines 20 and 21, PG&E Prepared Testimony, Volume 2 (Niemi), p. 17-5 and as shown in PG&E's Backbone Transmission Rate Model in the 2015 GT&S.

[4] PG&E Prepared Testimony, Volume 2 (Niemi), p. 17-6.

[5] PG&E Prepared Testimony, Volume 2 (Niemi), p. 17-7.

other proposals, including a proposal pertaining to Core's gas storage winter withdrawal rights and a proposal to reallocate additional injection capacity and withdrawal capacity to load balancing. The impact of these other proposals on Core's revenue requirements and rates are discussed in this exhibit.

Finally, with respect to the Transmission-level Customer Access Charges (CACs), PG&E proposes to continue to scale the currently adopted customer access charges multiplied by the forecast of customers by tier such that the resulting revenues match the customer access charge revenue requirement.[6]

ORA's recommendations on PG&E revenue requirements for Test Year 2015 and Post Test Years 2016 and 2017 are shown in ORA Exhibits 16 and 18, respectively. On the basis of ORA's recommended revenue requirements in these exhibits and the existing cost allocation methodologies adopted in Gas Accord V, ORA presents in this Exhibit the recommended basic rate schedules that provide PG&E the opportunity to recover the allocated costs from customers within each customer class as applicable.

The detailed discussion in Section IV pertains to the Backbone Transmission and the Gas Storage. The detailed discussion excludes matters pertaining to Local Transmission and the Transmission Level CACs and Schedule G-XF because ORA did not identify any cost allocation issues relating to them.

II. SUMMARY OF RECOMMENDATIONS

ORA cost allocation and rate design proposals differ from PG&E in the following:

1. ORA recommends to continue the existing path-based rate differences for the Redwood and Baja backbone transmission paths, and
2. ORA recommends lower revenue requirement in 2015, 2016, and 2017 in contrast to PG&E's proposed revenues in those years.

[6] PG&E Prepared Testimony, Volume 2 (Niemi), p. 17-9.

ORA recommends the Commission reject the PG&E proposal on equalized rates, and instead adopt, the traditional cost-based rate differential for the Redwood and Baja backbone transmission paths.

ORA recommends the Commission find that PG&E has failed to demonstrate the need to reallocate additional storage capacity for load balancing and reject the PG&E proposal.

Table 17-1 below summarizes the ORA recommendation on PG&E's various gas transmission and storage rates in Test Year 2015 and Post-Test Years 2016 and 2017.

Table 17-1
Summary of Transportation and Storage Rates[1]
$/Dth, G-AFT @ Full Contract

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		GA V & PSEP Update	GA V & PSEP Update	ORA Recommended Rates[7]		
Line No.	**Description**	**2013[1]**	**2014[1]**	**2015**	**2016**	**2017**
1	Core Redwood	0.232	0.257	0.294	0.300	0.333
2	Core Baja	0.267	0.297	0.478	0.538	0.700
3	Noncore Redwood	0.281	0.298	0.362	0.376	0.398
4	Noncore Baja	0.316	0.338	0.478	0.538	0.700
5	Silverado/Mission	0.167	0.188	0.249	0.271	0.314
6	G-XF	0.191	0.186	0.187	0.188	0.189
7	Local Transmission Core	0.629	0.680	1.9718	2.1176	2.4150
8	Local Transmission Noncore	0.295	0.332	0.8719	0.9279	1.0594
9	Core Firm Storage ($/Dth/Mo)	0.123	0.126	0.150	0.147	0.152

[1]Backbone and Local Transmission rates in 2013 and 2014 include rates proposed in the Pipeline Safety Enhancement Plan (PSEP) Update Application, A.13-10-017. The 2013 and 2014 PSEP Update volumetric rates are not included for Storage Services as they are for Backbone Transmission and Local Transmission because storage rates are capacity based and a volumetric equivalent does not exist.

Table 17-2 compares ORA's and PG&E's TY2015 forecasts of Backbone Transmission rates, where those under the PG&E proposed column "c" are based on equalized rates and PG&E's propose revenue requirements and throughput forecast. Those forecasts under the ORA recommended column "b" are based on traditional cost-based rates and ORA's revenue requirements and throughput

[7] Based on ORA's run of PG&E's rate models with ORA's recommendations.

forecast. ORA's recommended backbone transmission rates are generally lower than PG&E's for all backbone transmission paths except for the Baja Path for the Core.

Table 17-2

Comparison of Backbone Transmission Rates for TY2015
$/Dth, G-AFT @ Full Contract
(In $/Dth)

Description (a)	ORA Recommended[8] (b)	PG&E Proposed[9] (c)	Amount PG&E>DRA (d=c-b)	Percentage PG&E>DRA (e=d/b)
Redwood Core	$0.294	$0.460	$0.166	36.1%
Baja Core	$0.478	$0.460	($0.018)	(4.0%)
Redwood Noncore	$0.362	$0.512	$0.150	29.4%
Baja Noncore	$0.478	$0.512	$0.034	6.6%
Silverado/Mission	$0.249	$0.323	$0.074	22.8%
G-XF	$0.187	$0.204	$0.017	8.3%

Table 17-3 compares ORA's and PG&E's TY2015 forecasts of Local Transmission rates, where both the PG&E proposed and ORA recommended rates are based on a single average local transmission rate for Core and a single average local transmission rate for Noncore. Differences shown in column "d" are attributable to differences between ORA and PG&E's local transmission revenue requirements and the forecast throughput in this rate case.

[8] Based on ORA's run of PG&E's rate models with ORA's recommendations.

[9] For the 2013 and 2014 rates, see Tables 17-1, 17-2, and 17-3, PG&E Prepared Testimony, Volume 2 (Niemi), pp. 17-5 to 17-9.

Table 17-3

Comparison of Local Transmission Rates for TY2015
(In $/Dth)

Description (a)	ORA Recommended[10] (b)	PG&E Proposed[11] (c)	Amount PG&E>DRA (d=c-b)	Percentage PG&E>DRA (e=d/b)
Local Transmission Core	$1.9718	$1.959	($0.0128)	(0.6%)
Local Transmission Noncore	$0.8719	$0.875	$0.0031	0.3%

Table 17-4 compares ORA's and PG&E's Test Year 2015 forecasts of Gas Storage rates for the different storage services. Core customers take service from Core Firm Storage. ORA's storage rates in TY 2015 are lower than PG&E's proposed storage rates.

[10] Based on ORA's run of PG&E's rate models with ORA's recommendations.

[11] Table 17-2, PG&E Prepared Testimony, Volume 2 (Niemi), p. 17-7.

Table 17-4

Comparison of Gas Storage Rates for TY2015
(In $/Dth)

Description (a)	ORA Recommended (b)	PG&E Proposed [12] (c)	Amount PG&E>DRA (d=c-b)	Percentage PG&E>DRA (e=d/b)
Core Firm Storage (G-CFS)				
Reservation Charge ($/Dth/Mo)	$0.150	$0.175	$0.025	14.3%
Standard Firm Storage **(G-SFS)** Reservation Charge ($/Dth/Mo)	$0.290	$0.326	$0.036	11%
Negotiated Firm Storage (G-NFS):				
Injection ($/Dth/d)	$5.610	$6.295	$0.685	10.8%
Inventory ($/Dth)	$3.483	$3.909	$0.426	10.9%
Withdrawal ($/Dth/d)	$25.642	$28.777	$3.14	10.8%
Negotiated As-Available Storage (G-NAS) Maximum Rate:				
Injection ($/Dth/d)	$5.610	$6.295	$0.685	10.8%
Withdrawal ($/Dth/d)	$25.642	$28.777	$3.14	10.8%
Market Center Services (Parking & Lending Services)				
Maximum Daily Charge ($/Dth/d)	$1.263	$1.282	$0.019	1.48%
Minimum Rate (Per Transaction)	$57.00	$57.00	$0	0%

Table 17-5 compares ORA's and PG&E's Test Year 2015 forecasts of Transmission Level Customer Access Charge (CAC) rates.

[12] Table 17-3, PG&E Prepared Testimony, Volume 2 (Niemi), p. 17-9.

Table 17-5

Comparison of Transmission-Level CAC Rates for TY2015
(In $/Dth)

Description (a)	ORA Recommended (b)	PG&E Proposed[13] (c)	Amount PG&E>DRA (d=c-b)	Percentage PG&E>DRA (e=d/b)
y y grm s				
EdEEEEEEEEEEcE EhWtccc	Mfkafg	Mfkafg	Mt	cN
EeEEEEEEEhWtccdE EdcWtcc	Mdlddaef	Mdlddaef	Mt	cN
Ef dcWtccdE EhcWtccc	Meckace	Meckace	Mt	cN
EgEEEEEEEhcWtccdE EeccWtccc	Mekdaim	Mekdaim	Mt	cN
EhEEEEEdccWtccdE EdWtccWtccc	Mfmgadm	fmgadm	Mt	cN
Ei EEEdWtccWtccdE E	MfWfgfakk	MfWfgfakk	Mt	cN
grm s				
v	Mdklale	Mdklale	Mt	cN
x	Mkmcali	Mkmcali	Mt	cN
E–	Mhfhalg	Mhfhalg	Mt	cN
Ev	MeWfiamd	MeWfiamd	Mt	cN
Ex E _	Mghmagd	Mghmagd	Mt	cN
Ex E _x	Mgdmalf	Mgdmalf	Mt	cN

Based on the numerous issues ORA has had with running the RO as discussed here and in Exhibit ORA-16, ORA intends to re-run the RO and anticipates the possibility of changes to ORA's recommended revenue requirement and rates.

III. GENERAL OVERVIEW

PG&E describes its backbone transmission system in Chapter 17 of its Prepared Testimony.[14] PG&E provides backbone transmission services on four backbone paths, namely: Redwood, Baja, Silverado, and Mission.[15] The Redwood Path includes Lines 400 and 401 while the Baja Path includes Line 300.[16] The

[13] Table 17-4, PG&E Prepared Testimony, Volume 2 (Niemi), p. 17-10.

[14] PG&E Prepared Testimony, Volume 2 (Nieme), pp.17-1 to 17-14, including Chapter 17 Attachment A Detailed Rate Tables, pp.17AtchA-1 to 17AtchA-15.

[15] PG&E Prepared Testimony, Volume 2 (Orr), p. A-1.

[16] Table 10-9, PG&E Prepared Testimony, Volume 2 (Christopher), p.10-47. Also shown in the Backbone Transmission Rate Model for the PG&E 2015 GT&S rate case.

Sacramento Municipal Utility District (SMUD) has equity interest in Line 401 and Line 300 and the cost allocation process excludes those costs and capacities.[17] The relevant pipeline capacities for backbone transmission at receipt and delivery points are shown in Table 10-9 of PG&E's Prepared Testimony.

For the rate case period 2015 through 2017, PG&E's proposed backbone transmission revenue requirements include the revenues necessary to be collected in rates for its different Unbundled Cost Categories (UCCs), comprised of gathering facilities, gas storage facilities, local transmission facilities, Lines 400, 401 and Line 2 in northern path transmission facilities, Line 300 in southern path transmission facilities in North Milpitas to Panoche and South Topock to Panoche, the Bay Area Loop transmission facilities, and Customer Access Charges.[18] PG&E states that monthly load balancing will continue to be allocated to each backbone path and recovered in backbone transmission rates.[19] Gathering facilities, the Bay Area Loop, and monthly load balancing function comprise what is usually referred to as the "Common" facilities.[20] The proposal would allocate to the backbone paths a prorated cost of the common facilities that is added to each transmission path's cost burden.[21] Costs for these common facilities, along with the direct costs on the backbone lines, are recovered through backbone transmission rates.[22]

As a background to the backbone transmission cost allocation and rate design, ORA describes the process from the Results of Operations (R.O.) model. From PG&E's 2015 GT&S RO model, the PG&E gas transmission and storage revenue requirements flow to the various PG&E rate models in the 2015 GT&S rate case through direct links where the annual revenue requirements are organized by

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[17] PG&E Prepared Testimony, Volume 2 (Niemi), p.17-3.

[18] Table 16-4, PG&E Prepared Testimony, Volume 2 (Jones), p. 16-23.

[19] PG&E Prepared Testimony, Volume 2 (Niemi), p. 17-3.

[20] As shown in PG&E Backbone Transmission Rate Model in the 2015 GT&S rate case.

[21] D.97-08-055 Gas Accord decision Appendix B, Section I, pp. 36-37.

[22] PG&E Backbone Transmission Rate Model in the 2015 GT&S rate case.

unbundled cost categories (UCC).[23] The PG&E revenue requirements are generated by the RO model with a breakdown by UCC. For those UCCs pertaining to backbone transmission, the revenue requirements by UCC are first allocated in PG&E's rate model into the correct transmission paths, including the storage monthly balancing revenue requirement, which become part of "common" facilities.[24] The Redwood Path revenue requirements are then allocated to the Redwood Core Vintage, other Redwood, and Line 401 G-XF service.[25] The cost allocations are made using the backbone transmission allocation factors based on the pipeline's firm capacity at delivery point.[26] The direct and common costs are allocated to the backbone categories and the sharing mechanism "seed" credit are removed from the backbone transmission revenue requirements.[27] In this Application, PG&E proposes to discontinue the Revenue Sharing Mechanism.[28] The direct and common costs are then further categorized by PG&E's rate model into five backbone categories, namely: Core Redwood, Noncore Redwood (non-G-XF), Line 401 G-XF, Baja, and Common.[29] Finally, the direct and common costs are classified into reservation and usage charge revenue requirements within the five backbone

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[23] PG&E Workpapers, Chapter 17, p. WP 17-6. Also shown in PG&E Backbone Transmission Rate Model in the 2015 GT&S rate case.

[24] PG&E Workpapers, Chapter 17, p. WP 17-6. Also shown in PG&E Backbone Transmission Rate Model in the 2015 GT&S rate case.

[25] PG&E Workpapers, Chapter 17, p. WP 17-6. Also shown in PG&E Backbone Transmission Rate Model in the 2015 GT&S rate case.

[26] PG&E Workpapers, Chapter 17, p. WP 17-3. As shown in PG&E Backbone Transmission Rate Model in the 2015 GT&S rate case.

[27] PG&E explains in Response to ORA-DR-37-Q4e that PG&E agreed to "seed" the Revenue Sharing Mechanism in GA V by designing transmission rates to recover $30 million less than the adopted transmission revenue requirement. PG&E's expectation was that the higher throughput would make up for the reduced rate design target.

[28] PG&E Prepared Testimony, Volume 2 (Hoglund), p. 18-1.

[29] As shown in PG&E Backbone Transmission Rate Model in the 2015 GT&S rate case.

categories.[30] PG&E's existing backbone transmission service has a two-part tariff that consists of a reservation charge and a volumetric usage charge.[31]

PG&E core and noncore customers have an option on how they choose to pay the two-part tariff. They can avail themselves of either a straight fixed variable rate (SFV) or a modified fixed variable rate (MFV). These options can be generally described as a choice between paying more fixed costs upfront and less usage charges as a proportion of the total rate charges or in the alternative, less fixed costs upfront and greater usage as a proportion of the total rate charges. Either way, under PG&E's system, the theoretical total revenue collected under an SFV or MFV is identical for customers at 100 percent contract utilization.[32]. The only benefit from the SFV rate option for on-system service is for customers who wish to fix most of their costs. In the SFV rate, the reservation rate is estimated at approximately 99.5 percent of the total rate charged. In the MFV rate, the reservation rate is estimated at 74.65 percent of the total rate charged for Core and 71.56 percent for Noncore while the remaining portion is volumetric or usage-based.[33] According to PG&E, virtually all of its backbone capacity is sold under the MFV option.[34] PG&E's core customers pay on the basis of the MFV rate.[35]

A. PG&E Backbone Transmission

In this rate case, the system average load factor (SALF) is used to derive the rates or the revenue responsibility of both core and non-core on each backbone path

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[30] PG&E Workpapers, Chapter 17, p. WP 17-9. Also shown in PG&E Backbone Transmission Rate Model in the 2015 GT&S rate case.

[31] Table 17-E and Table 17-F, PG&E Prepared Testimony, Volume 2 (Niemi), pp. 17AtchA-5 to 17AtchA-6.

[32] As shown in PG&E Backbone Transmission Rate Model in the 2015 GT&S rate case.

[33] As shown in the PG&E Backbone Transmission Rate Model in the 2015 GT&S rate case.

[34] Based on a previous PG&E Data Response in the 2011 GTS-RateCase to the then DRA in DRA-DR-50-Q3 dated April 14, 2010.

[35] Id.

to the extent these are used in the calculation of the billing determinants.[36] The system average load factor is calculated as total backbone throughput (on all paths) divided by the total backbone capacity (on all paths), plus certain adjustments, where the SALF calculation excludes the incremental Line 401 service under Schedule G-XF contracts.[37] PG&E's rates for G-XF contracts will continue to be based on the methodology adopted in Decision 94-02-042.[38]

ORA's recommended SALFs for the years 2015 through 2017 are only slightly different in each year from PG&E's SALFs shown in Table 17A-1.[39] ORA's recommended SALFs are 70.63% in 2015, 69.10% in 2016, and 67.84% in 2017.[40] PG&E's proposed SALFs are 70.32% in 2015, 69.11% in 2016, and 68.18% in 2017.[41]

With respect to the backbone transmission rate design, PG&E proposes to change to the backbone rate design where the rate for core customers on the Redwood and Baja paths will be equalized.[42] Currently, the backbone rate for Core on the Redwood path is different from the rate on Baja path. PG&E justifies its proposal for equalized backbone rates based on its belief that equalized rates will apply downward pressure on the price of gas at the PG&E Citygate.[43] PG&E's rate equalization proposal is addressed in ORA's Exhibit 10. In Exhibit 10, ORA

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[36] PG&E Workpapers, Chapter 17, pp. WP 17-1 to 17-20. Also shown in the PG&E Backbone Transmission Rate Model in the 2015 GT&S rate case.

[37] PG&E Prepared Testimony, Volume 2 (Niemi), p. 17-3 and Table 17A-2 shown in PG&E's Testimony.

[38] Id.

[39] PG&E Prepared Testimony, Volume 2 (Orr), p.17A-4.

[40] As recommended by ORA's Witness Thomas Renaghan on the PG&E Throughput Forecast based on PG&E's SALF methodology for Table 17A-1. The Backbone Load Factor calculation is explained in detail in Chapter 17A of PG&E Prepared Testimony, Volume 2 (Orr), pp. 17A-1 to 17A-13.

[41] Table 17A-1, PG&E Prepared Testimony, Volume 2 (Orr), p. 17A-4.

[42] PG&E Prepared Testimony, Volume 2 (Christopher), p. 10-20.

[43] PG&E Prepared Testimony, Volume 2 (Christopher), p. 10-21.

recommends the Commission reject the PG&E proposal, and instead adopt, the traditional cost-based rate differential for the Redwood and Baja backbone transmission paths.

ORA's recommended backbone transmission rates shown in Table 17-2 are based on (1) the adoption of ORA throughput forecasts and SALFs; (2) the adoption of ORA's recommendations on Backbone Transmission revenue requirements; and (3) the continuation of the existing Gas Accord cost allocation and rate design methodologies previously approved by the Commission.

B. PG&E Local Transmission

PG&E proposes to continue the existing cost allocation and single average local transmission rate design for core and a single average local transmission rate for noncore and wholesale customers.[44] PG&E's local transmission costs are allocated to core and noncore customer classes based on cold year forecast coincident peak month demands.[45] In PG&E's cold year throughput forecast presented in Chapter 14, "Throughput Forecast," the coincident peak month is December.[46] ORA's recommended throughput forecasts in this rate case are presented in ORA Exhibit 14. In calculating the Local Transmission rates, the costs allocated to each class are divided by the adopted throughput forecast.[47] PG&E's local transmission rates are non-bypassable for all customers not qualifying for backbone level end-user service and PG&E proposes to continue this rate treatment.[48] Customers qualifying for backbone level end-use service are exempt from paying the local transmission rate component in their end-use tariff. However, these customers continue to be responsible for all other rate components in their

[44] PG&E Prepared Testimony, Volume 2 (Niemi), p.17-6.

[45] PG&E Prepared Testimony, Volume 2 (Niemi), p.17-6. This cost allocation methodology was established in the Long Run Marginal Cost Decision 92-12-058.

[46] Table 14-2, PG&E Prepared Testimony, Volume 2 (Swanson), p.14-3.

[47] PG&E Prepared Testimony, Volume 2 (Niemi), p.17-6.

[48] PG&E Prepared Testimony, Volume 2 (Niemi), p.17-6.

end-use tariffs.[49] PG&E further explains backbone level end-use service and what rules apply to the customers who qualify for this service.[50] In addition, PG&E notes that the local transmission cost allocation and rate calculations continue to be adjusted for forecast local transmission rate discounts.[51] Past Gas Accords also included adjustments for forecast local transmission rate discounts. ORA is in agreement with PG&E's proposal to continue the existing cost allocation and rate design for local transmission.

C. PG&E's Gas Storage

No changes are proposed by PG&E to the existing cost allocation and rate design methodology for the three storage services: core firm storage, monthly balancing and market storage services.[52] The storage cost of service will continue to be allocated to the storage services (core firm, standard firm and monthly balancing) based on the *pro rata* share of current annual injection, inventory and withdrawal cycling capacity assigned to each service for the 2015-2017 rate case period.[53] Storage shrinkage is applied to firm injection for the core firm and standard firm storage services. Shrinkage for the storage balancing function is bundled with backbone shrinkage.[54] PG&E's monthly core procurement rates include core gas storage rates.[55] ORA is in agreement with PG&E's proposal to continue the existing cost allocation and rate design methodology for the three storage services.

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[49] PG&E Prepared Testimony, Volume 2 (Niemi), p.17-5.

[50] PG&E Prepared Testimony, Volume 2 (Niemi), p.17-5 and fn. 3.

[51] PG&E Prepared Testimony, Volume 2 (Niemi), p.17-6 and fn. 4, and PG&E Workpapers, Chapter 17, p. WP17-23 to 17-24.

[52] PG&E Prepared Testimony, Volume 2 (Niemi), p.17-7.

[53] PG&E Prepared Testimony, Volume 2 (Niemi), p.17-7.

[54] PG&E Prepared Testimony, Volume 2 (Niemi), p.17-7.

[55] PG&E Prepared Testimony, Volume 2 (Niemi), p.17-7.

D. Transmission Level Customer Access Charges

There are no changes proposed by PG&E for transmission level customer access charges. PG&E proposes to continue scaling the currently adopted customer access charges multiplied by the forecast of customers by tier such that the resulting revenues match the customer access charge revenue requirement.[56] ORA is in agreement with PG&E's proposal to continue the existing methodology for transmission-level customer access charges.

IV. DISCUSSION / ANALYSIS Of PG&E's Cost Allocation and Rate Design Proposals

This section discusses PG&E's cost allocation and rate design proposals.

In Tables 17-1 through 17-5 shown in ORA's Summary of Recommendations, the last two columns on the right show the amount in dollars and in percentage by which the PG&E proposal exceeds ORA's recommendations. PG&E's proposed rates for its 2015 GT&S are substantially higher than ORA's recommendations for backbone transmission, local transmission, gas storage, and transmission-level CACs. The substantial differences in the GT&S rates between PG&E and ORA are primarily due to differences in revenue requirements in the Test year 2015 and the post-test years 2016 and 2017 and to a lesser degree the forecast throughput. In addition, in the case of backbone transmission, the difference in rate design for Redwood and Baja paths also results in significant differences in the backbone transmission rates for these two paths.

To illustrate this last point, Table 17-6 is a side by side comparison showing the TY 2015 rates under PG&E's proposed equalized rates and under the traditional cost-based rates. Note that Table 17-6 uses PG&E's proposed backbone transmission revenue requirements for test year 2015 presented below.

[56] PG&E Prepared Testimony, Volume 2 (Niemi), p.17-9.

Table 17-6

Comparison of Backbone Transmission Rates for TY2015
Equalized Rates and Traditional Cost-based Rates
(In $/Dth)

Description (a)	Traditional Rates[57] (b)	Equalized Rates[58] (c)	Amount Equalized>Traditional (d=c-b)	Percentage Equalized>Traditional (e=d/b)
Redwood Core	$0.386	$0.460	$0.074	19.2%
Baja Core	$0.642	$0.460	($0.182)	(28.3%)
Redwood Noncore	$0.437	$0.512	$0.075	17.2%
Baja Noncore	$0.642	$0.512	($0.130)	(20.2%)
Silverado/Mission	$0.323	$0.323	$0.0	0%
G-XF	$0.204	$0.204	$0.0	0%

Table 17-6 shows that for the Test Year 2015, the traditional cost-based rates in column "b" are lower for the Redwood Paths for both Core and Noncore customers by up to 19.2% while the Baja Path rate is higher by up to 28.3% for both Core and Noncore under traditional cost-based rates. For the Core, the Baja Path rates have historically been more expensive than the Core Redwood Path rates, with a 35 percent rate differential in 1998 which has widened through the first part of 2011, and then started narrowing down to an 18 percent rate differential in 2014.[59] For the Noncore, the Baja Path rates have historically been less expensive than the Noncore Redwood Path rates since 1998 until 2007.[60] Starting in 2008 under Gas Accord IV, the Noncore Baja Path rates became more expensive than the Noncore Redwood Path rates by approximately an 8 percent rate differential which has increased to a 15 percent rate differential in 2014.[61] The results shown in Table 17-6 at column "b" should be compared against ORA's recommended Backbone Transmission rates shown in Table 17-2 at column "b". The rates shown in column

[57] As shown in PG&E's Backbone Transmission Rate Model.

[58] Table 17-1, PG&E Prepared Testimony, Volume 2 (Niemi), p. 17-5.

[59] PG&E Response to ORA-DR-15-Q5Atch1.

[60] Id.

[61] Id.

"b" for both tables use the traditional rates and are different only with respect to the revenue requirements and throughput forecast.

With respect to Gas Storage, PG&E proposes to increase core's winter withdrawal rights in the months of December and January and to decrease them in the months of February and March. When asked to explain the cost allocation and rate impact of PG&E's proposal regarding core's winter withdrawal rights as described in Table 10-12, PG&E explains:[62]

> The core storage revenue requirement and rate impact for 2015 is affected by two proposals: a reduction in the core's storage withdrawal rights over the entire withdrawal season, and a shift of the calendar day used to allocate withdrawal capacity from March 31 to January 15.
>
> …CGS's proposed changes result in a net unit decrease of 2,638 million decatherms (MDth) for 2015 storage withdrawal units. Using the 2011 GT&S unit cost for storage of $208/MDth, this yields an estimated cost reduction of $549,000. Second, CGS's proposed alteration to core's firm storage withdrawal rights profile includes (among other changes) the addition of 122 MDth/d for the period of December 1 through January 15 on top of its current adopted firm withdrawal rights, and a decrease in March withdrawal rights of 250 MDth/d.
>
> Firm withdrawal capacity rights are constrained by the physical capability of the system. Firm daily withdrawal capacity is determined in part by the amount of working gas in PG&E's storage fields because a certain amount of gas inventory is required to provide sufficient pressure to support firm withdrawals. However, there is only a certain amount of working gas in storage that PG&E can control—working gas it owns, and customer gas mandated by PG&E's tariffs to be in storage.
>
> The remaining working gas is controlled by customers. PG&E cannot rely on customer-controlled gas to be in storage to provide pressure support for firm withdrawals. Therefore, when allocating firm daily withdrawal capacity to PG&E's three firm storage services, PG&E determines the day in the withdrawal season on which firm daily withdrawal capacity is constrained; that is, when firm physical daily withdrawal capacity is equal to the daily withdrawal rights under PG&E control.
>
> Under PG&E's proposal to add 122 MDth/d of core withdrawal capacity from December 1 through January 15, the last day on which PG&E can satisfy the firm rights of both core and balancing with the working gas it controls moves

[62] PG&E Response to ORA-DR-24-Q12a.

forward to January 15. This is because core's additional firm withdrawal rights of 122 MDth through January 15 allow it to deplete inventory at a faster rate.

After PG&E determines how much withdrawal capacity must be reserved for the core and for system balancing, the residual withdrawal capacity is allocated to market storage.

Adding 122 MDth of withdrawal capacity from December 1 through January 15 and the resultant shift of the capacity allocation point to January 15 increased CGS's proportion of total withdrawal capacity. This increases the allocated cost to core by $2,400,000. The increase is offset by the $549,000 attributable to the reduction in total storage units across the winter, discussed above. The net estimated increase in core storage revenue requirement is $1,851,000.

PG&E's Response shows that the end-use class average rates could increase by $0.007/dth if PG&E's proposal on core winter withdrawal changes were approved.[63] In terms of the average residential monthly bill impact, the proposed core winter withdrawal changes could increase the residential monthly bill by approximately $0.02/month. As stated in ORA's Exhibit 10 under "other PG&E Proposals", ORA does not oppose PG&E's proposed core winter withdrawal changes.

As discussed in ORA Exhibit 10, PG&E proposes to reallocate more injection capacity and withdrawal capacity of storage assets for load balancing. PG&E states that approximately 14% of storage revenue requirement is allocated to balancing at this time. [64] PG&E states that approximately 32% of storage revenue requirement is allocated to balancing under the PG&E proposal in the 2015 GT&S rate case.[65] In both responses, PG&E states: "[t]he balancing revenue requirement is recovered through backbone transmission rates." In Table 17-3 of PG&E's 2015 GT&S Testimony, PG&E provides the proposed storage service rates for 2015 through 2017. When asked to explain whether the PG&E request to allocate the requested additional storage capacity to load balancing will have any expected rate impact to

[63] PG&E Response to ORA-DR-24-Q12Atch1.

[64] PG&E Response to ORA-DR-24-Q11c.

[65] PG&E Response to ORA-DR-24-Q11d.

end-user rates, PG&E responds to confirm that its proposal to allocate additional storage capacity to load balancing has an impact on end-user rates.[66] PG&E confirmed that its proposal has an impact on backbone transmission rates.[67] Finally, PG&E also explains that its proposal has an impact on gas storage rates.[68] According to PG&E, the rate impacts on Residential (NonCARE) class average end-use rates are estimated increases of $0.005/Dth in Test Year 2015 and $0.006/Dth in Post Test Years 2016 and 2017.[69]. PG&E shows that the rate impacts on Backbone Transmission rates on the Core Redwood, Core Baja, Noncore Redwood, and Noncore Baja Paths under either the equalized rate design or the traditional rate design are estimated increases of $0.023/Dth in Test Year 2015, $0.022/Dth in Post Test Year 2016, and $0.023/Dth in Post Test Year 2017.[70] According to PG&E, the rate impacts of its proposal on Gas Storage rates show estimated decreases of $0.014/Dth to core firm storage rates in test year 2015, $0.018/Dth to standard firm storage rates in test year 2015, and negotiated firm and as-available storage rates for injection and withdrawal of $1.009/Dth/d and $1.556/Dth/d, for injection and withdrawal, respectively, in 2015. The latter rate impacts on Gas Storage rates seem counter-intuitive to ORA given the proposed increase in storage revenue requirement for load balancing. PG&E explains the reasons for the expected decrease on gas storage rates associated with its proposal to reallocate more injection capacity and withdrawal capacity of storage assets for load balancing. PG&E states:[71]

> 1) Under PG&E's proposal, some capacities currently allocated to Market Storage would be reallocated to Pipeline Balancing. This would decrease

[66] PG&E Response to ORA-DR-62-Q2.

[67] PG&E Response to ORA-DR-62-Q2.

[68] PG&E Response to ORA-DR-62-Q2.

[69] PG&E Response to ORA-DR-62-Q2Atch1.

[70] PG&E Response to ORA-DR-62-Q2Atch1.

[71] PG&E Response to ORA-Oral16-Q1.

the share of capacity, and therefore storage units, that go to Market Storage and increase the share of capacities and storage units that go to Pipeline Balancing. This decrease in the share of storage units for Market Storage decreases the rates for Market Storage and likewise increases the backbone rates because that is where the Pipeline Balancing costs are recovered.

2) The second reason is that the total number of storage units increases when providing the additional capacity to Pipeline Balancing. While the number of Core's storage units remained the same, the total number of storage units increased. The total storage units would increase because the length of time during the year that balancing would have the capacities reserved is greater than the time during the year that Market Storage had the capacities reserved. This effectively reduced core's overall percentage of the whole even though their number of storage units did not change. Consequently, Market Storage's share of revenue requirements is reduced. When this is combined with reduction in the capacity share, core storage rates would be reduced.

The gas storage monthly balancing requirements are recovered in backbone transmission rates. Even though the gas storage rates show a decrease, the impact of the PG&E proposal is to increase the backbone transmission rates. The projected amount of increase in the backbone transmission rates are greater than the amount of decrease in the gas storage rates using PG&E's proposed revenue requirements.. ORA opposes PG&E's proposal to reallocate the requested additional storage capacity to load balancing. ORA recommends keeping storage capacity for load balancing at current levels until PG&E meets its burden of proof to demonstrate the need for the reallocation of additional storage for load balancing.

ORA's review reveals that PG&E's proposed GT&S rates are expected to ultimately result in higher PG&E rates at the end-use level in 2015-2017. In order to compare the resulting rates at the end-use level, ORA requested PG&E to provide the calculation of the illustrative class average end-use rates so that ORA could compare the resulting end-use rates with ORA's recommendations similar to those presented in Table 17-5 of PG&E's Testimony for PG&E's proposals. On March 31, 2014, PG&E provided ORA with the "Integrated Model" on a CD which will produce

all of the tables in PG&E's testimony and testimony attachments.[72] A walk-through of the model followed on April 8, 2014 attended by both ORA and Energy Division staff.

To put PG&E's end-use class average rates in perspective, the Gas Accord V settled rates resulted in average end-use rates increasing by 0.7% for non-CARE residential customers as shown in Table 17-7 at column "d". Industrial transmission customers saw a 6% increase in their rates. Electric Generation customers on Distribution/Transmission saw an 18.7% increase in their rates.

The proposed GT&S 2015 rates, as proposed by PG&E, are estimated to result in average end-use rates that could pose a major rate shock to PG&E's customers. PG&E's non-CARE residential customers would see 12.6% higher rates in 2015 compared to the present rates as shown in column "h" in Table 17-7. Industrial transmission customers would see 57.9% higher rates in 2015 compared to present rates. Electric Generation customers on Distribution/Transmission would see 102.2% higher rates in 2015 compared to present rates.

The following comparison presented in Table 17-7 summarizes the illustrative end-use class average rates discussed in the foregoing. Table 17-7 shows two comparisons: First, the end-use rates under the Gas Accord V rates when compared to the then present rates on 8/1/2010. Second, the end-user rates under PG&E's 2015 GT&S proposals compared to the present rates on 1/1/2014. More importantly, the percentage difference between the end-use class average rates under the GA V and the PG&E 2015 GT&S Proposals are shown in the rightmost column (i) of Table 17-7. Note that Core Retail bundled rates include the commodity gas cost recovered through core procurement rates. Under the GA V, the illustrative end-use rate calculation uses a weighted average cost of gas of $0.5982 per

[72] PG&E Response to ORA-DR-Oral1-Q1.

therm.[73] Under PG&E's 2015 GT&S proposals, the weighted average cost of gas in the calculation is $0.37184.[74].

ORA's recommendations will result in the illustrative end-use class average rates in Table 17-8 presented in the succeeding comparison table below. Comparing Table 17-7 and Table 17-8, at column "h" of these tables, ORA's recommendations will result in slightly lower en-use rates to customers. Except for the equalized backbone transmission rate design, ORA does not oppose PG&E's proposal to continue the existing cost allocation and rate design methodologies, but would recommend that the cost allocation and rates be based on ORA's recommended revenue requirements shown in ORA Exhibit 16 and ORA's recommended throughput forecasts shown in ORA Exhibit 14.

In terms of the average residential bill and small commercial customer bill, PG&E explains the rate and bill impacts of its proposals below:[75]

> If the application is approved, gas rates and bills will increase effective January 1, 2015. A typical residential customer using 34 therms per month would see an average monthly gas bill increase of $5.23 (or 12.6 percent), from $41.53 to $46.76. A typical small business customer using 284 therms per month would see an average monthly gas bill increase of $42.50 (or 16 percent), from $266.15 to $308.65. Individual customers' bills will differ.

ORA's recommendations will result in the following average residential bill impact and small commercial customer bill: A typical residential customers using 34 therms per month would see an average monthly gas bill increase of $4.73 (or 11.4 percent, from $41.53 to $46.26. A typical small business customer using 282 therms per month would see an average monthly gas bill increase of $38.67 (or 14.6 percent), from $264.28 to $302.95.[76]

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[73] As filed in PG&E Advice Letter 3060-G and 3060-G-A.

[74] As shown in PG&E Integrated Rate Model in the 2015 GT&S.

[75] PG&E Prepared Testimony, Volume 2 (Niemi), p.17-13.

[76] Based on ORA's run of the PG&E rate models based on ORA's recommendations.

Table 17 – 7 Comparison of Illustrative End-Use Class Average Rates: GA V and PG&E 2015 GT&S Proposed (in $/dth)	g g g					o g o g g y y				y
	lbdbecdc S T	dbdbecdd S T	M x S T	N x S T		dbdbecdg S T	ecdh P S T	M x S T	N x S T	S TErESE5T S T
g g g										
E xv –	dfamgi	dgacgf	cacmk	cakN		deaedh	dfakhe	dahfk	deaiN	ddamN
Ex E xv –	ddakck	ddalcd	cacmg	calN		mafke	dcalil	dagmi	diacN	dhaeN
Ex	mahfe	maidm	caclk	camN		kaemi	lakd	dagdg	dmagN	dlahN
Ex E	lagie	lahgm	caclk	dacN		iagcl	kaldk	dagcm	eeacN	edacN
x Ex E	edaemf	edafl	caclk	cagN		dlamgd	ecafh	dagcm	kagN	kacN
g g g										
E xv –	iaeh	iæmi	cacgi	cakN		iamhd	ladmd	daegc	dkalN	dkadN
Ex E xv –	gaddk	gadif	cacgi	dadN		gafd	hahh	daegc	elalN	ekakN
Ex	eaegl	eaemg	cacgi	eacN		eaiei	falih	daefm	gkaeN	ghadN
Ex E	dafcl	dafhg	cacgi	fahN		dakfd	eamk	daefm	kdaiN	iladN
x Ex E	dgadfm	dgadlh	cacgi	cafN		dgaeig	dhahcf	daefm	lakN	lagN
g g g										
_y	daici	daifm	cacff	eadN		dallm	eafmg	cahch	eiakN	egakN
_	caidg	caihd	cacfk	iacN		calil	dafkd	cahcf	hkamN	hdamN
_w	cag	cafmh	ScacchT	_dafN		cagkk	cagfe	_cacgh	_magN	_laeN
E E _y	daghg	dagli	cacfe	eaeN		dakik	eaekl	cahdd	elamN	eiakN
E E _	caglf	cahdm	cacfi	kahN		cakgk	daeh	cahcf	ikafN	hmamN
– E _y b	caeeh	caeik	cacge	dlakN		cagmi	daccf	cahck	dceaeN	lfaiN
– E _w	cackd	cacih	ScacciT	_lahN		cadie	cadef	_cacfm	_egadN	_dhaiN
g g										
v E E	caeld	caelk	cacci	eadN		caglh	camkf	cagll	dccaiN	mlahN
x	caekf	caemh	cacee	ladN		cagmf	camkk	caglg	mlaeN	mcadN
E–	cagkm	cagk	ScaccmT	_damN		cailh	dacmm	cagdg	icagN	ieafN
v	caech	caegi	cacgd	ecacN		caggg	camgk	cahcf	ddfafN	mfafN
Ex E _x	dacme	camkg	ScaddlT	_dcalN		dahme	eacfi	caggg	ekamN	flakN
Ex E _ Ey	dackd	dadcl	cacfk	fahN		dalid	eafek	cagii	ehacN	edaiN
_x E _ E	caeld	cafdl	cacfk	dfaeN		cahee	camll	cagii	lmafN	kiadN

E E n

EwdE Ev EwE E P–E Ev E E Ev E E Ev _dgEcfdEVEaddE E E E E E vE a

EdkhE E P–E E dEvde_cdeWE E P–EecdhE P Ev E Ey adaWEedEf E E E E vE E E EecdgE E E –

E E Eecdga

Table 17 – 8 Comparison of Illustrative End-Use Class Average Rates:
GA V and ORA Recommended (in $/dth)

g g g									
	l bdbecdc S T	dbdbecdd S T	M x S T	N x S T		dbdbecdg S T	ecdh P S T	M x S T	N x S T	S TErESST S T
g g g										
E xv –	dfamgi	dgacgf	cacmk	cakN		deaedh	dfai ci	dafmd	ddagN	dcakN
Ex E xv –	ddakck	ddal cd	cacmg	cal N		mafke	dcakgf	dafkd	dgai N	dfal N
Ex	mahfe	maidm	cacl k	camN		kaemi	l ai em	dafff	dl afN	dkagN
Ex E	l agi e	l ahgm	cacl k	dacN		i agcl	kakfl	daffc	ecakN	dmakN
x Ex E	edaemf	edafl	cacl k	cagN		dl amgd	ecaekd	daffc	kacN	i ai N
g g g										
E xv –	i aeh	i aemi	cacgi	cakN		i amhd	l aecg	daehe	dl acN	dkafN
Ex E xv –	gaddk	gadi f	cacgi	dadN		gafd	hahi e	daehe	emadN	el N
Ex	eaegl	eaemg	cacgi	eacN		eai ei	fal kl	daehe	gkakN	ghakN
Ex E	dafcl	dafhg	cacgi	fahN		dakfd	eamlf	daehe	keagN	i l amN
x Ex E	dgadfm	dgadl h	cacgi	cafN		dgaei g	dhahdi	daehe	l al N	l ah
g g g										
_y	dai ci	dai fm	cacff	eadN		dal l m	eafmc	cahcl	ekacN	egamN
_	cai dg	cai hd	cacfk	i acN		cal i l	dafi k	cagmm	hkahN	hdahN
_w	cag	cafmh	ScacchT	_dafN		cagkk	cagfd	ScacgiT	SmakNT	SlagNT
E E _y	daghg	dagl i	cacfe	eaeN		daki k	eaekg	cahcl	el akN	ei ahN
E E _	cagl f	cahdm	cacfi	kahN		cakgk	daegk	cagmm	i i al N	hmafN
– E _y b	caeeh	caei k	cacge	dl akN		cagmi	cammm	cahcf	dcdagN	l eakN
– E _w	cackd	caci h	ScacciT	_l ahN		cadi e	cadef	Scacfl T	SefakNT	SdhaeNT
g g										
v E E	cael d	cael k	cacci	eadN		cagl h	camkc	cagl h	dccacN	mkamN
x	caekf	caemh	cacee	l adN		cagmf	camkf	cagl c	mkagN	l mafN
E–	cagkm	cagk	ScaccmT	_damN		cai l h	dacmd	cagch	hmaeN	hkafN
Ev	caech	caegi	cacgd	ecacN		caggg	camgg	cahcc	ddeahN	meahN
Ex E _x	dacme	camkg	ScaddlT	_dcal N		dahme	eacfh	caggf	ekal N	dkN
Ex E _ Ey	dackd	dadcl	cacfk	fahN		dal i d	eafeg	cagi e	egal N	edafN
_x E _ E	cael d	cafdl	cacfk	dfaeN		cahee	caml g	cagi e	l l ai N	khagN

E E n

Ev_dE Ev EwE E P–E Ev E E Ev E E Ev _EyE_fdWadd E E E E E vE a

E E E E E vE EecdgE E E – E E Eecdga