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 Michael Foster
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**JOINT PREPARED REBUTTAL TESTIMONY OF
MARJORIE SCHMIDT-PINES AND MICHAEL FOSTER
ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY
AND SAN DIEGO GAS AND ELECTRIC COMPANY**

(COST ALLOCATION AND LONG RUN MARGINAL COST STUDY)

May 2019

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CHAPTER 17

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I. INTRODUCTION

This joint rebuttal testimony addresses the direct testimonies of California Public Advocates (Cal PA), The Utility Reform Network (TURN), and the Indicated Shippers, which were served on April 12, 2019.¹ These intervenors addressed Applicants' proposals contained in Chapter 9 (Schmidt-Pines) and Chapter 10 (Foster) related to the cost allocation for SoCalGas' and SDG&E's (i) Customer-related and (ii) Medium Pressure Distribution-related, and High Pressure Distribution-related costs. Because intervenors' treatment of issues is largely consistent between the two utilities, Applicants are providing rebuttal as a joint chapter.

II. SUMMARY OF APPLICANTS' REBUTTAL TO INTERVENORS

The following summarizes Applicants' rebuttal positions to the various proposals and recommendations contained in intervenors' testimonies:

- reject TURN's proposed estimate of capital service line costs for SoCalGas in the area of Customer-related cost allocation;
 - reject TURN's proposed estimate of capital service line costs for SDG&E in the area of Customer-related cost allocation;

¹ Given the volume of the various arguments, positions, and proposals raised by intervenors, Applicants have prioritized which issues to address in rebuttal testimony. Silence on any issue should not be construed as agreement with, or non-opposition to, that issue, as Applicants reserve the right to address additional issues not specifically mentioned in this rebuttal testimony at a later opportunity, such as evidentiary hearings and briefs.

- reject TURN’s proposed replacement rates for both SoCalGas and SDG&Es service lines and meters, in the area of marginal capital costs;
- reject TURN’s proposed elimination of line item billing costs for in SoCalGas’ Long Run Marginal Cost study;
- accept TURN’s recommendation to allocate SoCalGas’ large commercial and industrial and economic development costs only to large tariff Schedule G-10 customers;
- accept TURN’s recommendation to modify the High Pressure Distribution allocation rate for SDG&E’s measurement and regulating station O&M;
- accept TURN’s recommendation to include approximately \$3 million in service line O&M costs (that were erroneously omitted);
- reject TURN’s recommendation regarding the handling of cathodic protection cost for SoCalGas, as inapplicable;
- accept TURN’s recommendation regarding the handling of cathodic protection costs for SDG&E;
- reject Indicated Shippers’ proposal to use Peak Day gas Demand to allocate High Pressure Distribution, local transmission and backbone costs;
- reject TURN’s and Cal PA’s proposed updated to Real Economic Carrying Charge factors; and
- reject TURN’s proposed changes to the allocation of SDG&E’s gas storage costs.

1 **III. CUSTOMER-RELATED MARGINAL UNIT COST**

2 **A. Marginal Capital Costs**

3 **1. TURN Proposal for Service Line Costs**

4 Service line costs are addressed in Chapter 9 (Schmidt-Pines), pages 6-7 and Chapter 10
5 (Foster), pages 4-5. Both SoCalGas and SDG&E estimate new service line costs in this TCAP.
6 SoCalGas' estimates are based on historic unit costs and average job length of service, while
7 SDG&E estimates costs by estimating typical job with 1-inch plastic pipe and an average pipe
8 length of 71 feet. Both companies then cap service line cost at the line extension allowance
9 amount.

10 TURN proposes lower average service line costs to account for those customers with
11 costs less than the service allowance.² New customers are given a service allowance, which is
12 covered by ratepayers, and these new customers pay the cost over the service allowance. TURN
13 asserts that Applicants' method is wrong, because while most jobs cost more than the line
14 extension allowance, a significant number of jobs cost less than the line extension allowance.
15 TURN calculates the average cost by looking at only Multifamily 1" Plastic Service jobs. Then,
16 applies this reduction in costs to all single family and multi-family jobs for both SoCalGas and
17 SDG&E. TURN states "Multiplying out the percentage of customers under the allowance by the
18 \$886 and the percentage of customers over the allowance by \$1567, we obtain initial investments
19 (for both the Rental and New Customer Only method) of \$1376 for single-family units and
20 \$1177 for multi-family units."³

² See Prepared testimony of William Perea Marcus (TURN/Marcus), pp. 33-34 (SoCalGas) and 49-50 (SDG&E).

³ Id. at 34-35.

1 TURN uses only Multifamily 1-inch Plastic Service jobs in its estimate, which produces
2 an unreasonably low estimated cost of service. Even using TURN’s suggested method but
3 applied to all pipe types and diameters (and not just Multifamily 1-inch Plastic Service jobs),
4 investment costs (for both the Rental and New Customer Only method) would be \$1,508 for
5 single-family units and \$1,363 for multi-family units). In other words, SoCalGas’ method
6 produces a result that is much closer to recorded data than TURN’s method (and within 4% of
7 SoCalGas’ estimates). This demonstrates that SoCalGas’ method is reasonable and produces
8 reasonable costs relative to TURN’s method.

9 TURN recommends lowering SDG&E’s service line costs from \$1,863 to \$1,531, a
10 21.7% reduction. Unlike SoCalGas, SDG&E’s accounting systems are unable extract the data
11 required to determine cost by each individual new service job performed. TURN then applies
12 the cost of SoCalGas’ jobs below the allowance of \$886 to 34% of SDG&E’s jobs to account for
13 SDG&E jobs which cost less than the line extension allowance.⁴ TURN’s method is arbitrary
14 and unsubstantiated, since TURN does not explain why SoCalGas 1-inch Multifamily costs
15 should apply to cost of new services for SDG&E for jobs below the line extension allowance.
16 SDG&E’s job cost estimates are materially higher than SoCalGas’ job costs, as is its line
17 extension allowance.

18 Given the data extraction limitations, SDG&E’s method is more reasonable and
19 supportable than TURN’s method, because SDG&E still uses SDG&E data, whereas TURN
20 applies an arbitrary factor based on SoCalGas data as a proxy for SDG&E. Notwithstanding,
21 had TURN used the more appropriate data set to calculate its costs for SoCalGas before applying
22 its arbitrary factor, TURN would have produced materially higher costs for SDG&E. Therefore,

⁴ See Id. at 50.

1 TURN has not demonstrated that its results for SDG&E are more reasonable or appropriate than
2 SDG&E's results.

3 **2. TURN Proposals for Service and Meter Replacement Rates**

4 Both SoCalGas and SDG&E propose the Rental method for cost allocation purposes.⁵
5 TURN (and Cal PA) advocate for the New Customer Only method rather than the Rental
6 method. Therefore, in estimating Customer-related marginal capital cost, TURN applied the
7 New Customer Only method, and further applied an adjustment to reflect replacement costs.⁶
8 Inherently, the choice of method will significantly impact the results of the cost allocation
9 studies. Chapter 12 (Chaudhury) explains in detail why the Rental method is more appropriate
10 than the New Customer Only method. Directionally, TURN's proposal would produce
11 significantly lower costs to core customers than those proposed by Applicants.

12 If the Commission agrees with Applicants that the Rental method is reasonable, then the
13 discussion of service line replacement rate becomes moot, since the Rental method does not
14 require the use of any service line replacement rate. If the Commission, however, supports
15 TURN's use of the New Customer Only method with replacement costs, TURN's service line
16 and meter replacement rates should nonetheless be rejected. Given the Commission's stated
17 preference for the application of marginal cost methodology in the long run,⁷ it is appropriate to
18 consider what equipment replacement rates are consistent with the concept of Long Run
19 Marginal Costs. TURN's rates do not reflect this concept.

20 This concept is fairly technical; however, Applicants believe replacement rates based on
21 the depreciation life of service lines and meters are the reasonable numbers to use in calculating

⁵ See Chapter 9 (Schmidt-Pines) at 4; and Chapter 10 (Foster) at 3.

⁶ See TURN/Marcus at 35.

1 service line and meters replacement cost. The TCAP service line replacement rate is based on
2 what is being proposed in SoCalGas' and SDG&E's 2019 General Rate Case,⁸ which is currently
3 pending before the Commission. The service lines life is 67 years, suggesting a replacement rate
4 of 1/67 or 1.5% for the replacement of service lines. In other words, this asset class has a long
5 service life.

6 TURN's focus is apparently then on the *short run* and may not be consistent with the
7 *long run* replacement rate consistent with Long Run Marginal Cost for both service lines and
8 meters. TURN proposes a replacement rate of 0.11% for SoCalGas by multiplying SoCalGas-
9 proposed service replacement rate of 1.5% by 7.1%.⁹ TURN's proposed service replacement
10 rate, however, would translate to a service life of 909 years, (1/0.11%) for SoCalGas' services.
11 This extremely high (implied) service life is unrealistic. TURN proposes an even lower service
12 replacement rate of 0.08% for SDG&E.¹⁰ This method results in a calculation of an implied
13 service life of 1,250 years, (1/0.08%) for SDG&E's service lines. In other words, TURN's
14 method is producing skewed and unintended results from Applicants' viewpoint.

15 TURN proposes a meter replacement rate of 2.5% for SoCalGas by taking a 5 year
16 average of meter replacement data.¹¹ SoCalGas proposes a meter replacement of 4% which is
17 derived by taking the inverse of the 25 year depreciable life of meters. TURN proposes an even
18 lower meter replacement rate of 1.51% for SDG&E, based on the last four years of historical

⁷ See D.92-12-058, *mimeo*, p. 2.

⁸ See A.17-10-007/008, SCG-36-R Revised Direct Testimony of Flora Ngai - Depreciation, page FN-19 and SDG&E-34; Revised Direct Testimony of Matthew Vanderbilt-Depreciation, page MCV-31.

⁹ See TURN/Marcus at 40.

¹⁰ See Id. at 52.

¹¹ See Id. at 40.

1 meter replacement data.¹² SDG&E uses the inverse book life and develops a replacement rate
2 of 2.5 to 2.6% because SDG&E's book life for meters is longer than that of SoCalGas. If the
3 Commission, supports TURN's use of the New Customer Only method with replacement costs,
4 TURN's service line and meter replacement rates should nonetheless be rejected.

5 **B. Marginal Direct O&M Costs**

6 **1. TURN Proposal for SoCalGas Line Item Billing**

7 SoCalGas includes line item billing costs as part of the TCAP studies. TURN proposes
8 to remove line item billing costs: \$501,000 from customer accounting costs and \$189,000 from
9 customer service and information costs (residential program). TURN states that, “[l]ine item
10 billing for third parties is a money-maker for SoCal, which spent about \$700,000 in 2016 to
11 receive \$5 million revenue.”¹³

12 Miscellaneous revenues, including the revenues associated with line item billing, are
13 comprised of fees and revenues collected by the utility from non-rate sources. They are
14 incorporated into rates as a reduction to gas base margin, which lowers rates benefiting
15 ratepayers. Since ratepayers benefit from revenues from third parties, it is appropriate to include
16 the line item billing costs in the Long Run Marginal Cost study.

17 **2. Customer Service and Information Costs**

18 SoCalGas proposed that the large commercial and industrial and economic development
19 programs costs be allocated to all customers being served as tariff Schedule G-10 customers.
20 TURN proposes the large commercial and industrial and economic development programs costs

¹² See Id. at 52.

¹³ See Id. at 45.

1 be allocated to only to large and very large G-10 customers.¹⁴ SoCalGas does not oppose
2 TURN's recommendation.

3 **3. TURN Proposals for SDG&E Other O&M Costs**

4 In regard to measurement and regulating station O&M, TURN points at that 10% of
5 SDG&E regulating stations are related to the interface between transmission and high pressure,
6 and therefore the should use 10% as the allocation for High Pressure Distribution for
7 measurement and regulating station O&M (vs. 4.4%).¹⁵ Applicants accept this adjustment.

8 **III. MEDIUM AND HIGH PRESSURE DISTRIBUTION RELATED MARGINAL
9 UNIT COSTS**

10 **A. Distribution O&M**

11 **1. Omitted SoCalGas Other O&M Costs**

12 TURN proposes that SoCalGas includes a correction in the estimate of service line O&M
13 costs.¹⁶ This correction increases the service line costs by approximately \$3 million. SoCalGas
14 agrees with this recommendation.

15 **2. SoCalGas and SDG&E Cathodic Protection**

16 TURN also proposes that SoCalGas includes cathodic protection costs as part of
17 SoCalGas' marginal cost.¹⁷ TURN's recommendation is based on SoCalGas' response to a
18 TURN data request, where Applicants inadvertently and erroneously stated that the cathodic
19 protection costs were not included in SoCalGas' marginal costs. Upon further review, SoCalGas
20 had found out that cathodic protection cost of \$11.38 million were indeed included in its Long

¹⁴ See Id. at 33.

¹⁵ See Id. at 55.

¹⁶ See Id. at 43.

1 Run Marginal Cost study. These cathodic protection costs were allocated between service
2 mains and distribution mains by footage. Therefore, TURN's recommendation for the recovery
3 of cathodic protection costs is no longer needed.

4 TURN points out that SDG&E's methodology for calculating cathodic protection costs
5 results in SDG&E allocating more cathodic protection costs for services than the total amount
6 spent on cathodic protection. TURN recommends using an updated methodology using direct
7 cathodic protection costs and allocation based on only cathodically protected miles as opposed to
8 all miles. Applicants do not oppose this proposal.

9 **B. Indicated Shippers' Proposal for Peak Day Allocation**

10 In this TCAP, consistent with how it did in prior cost allocation proceedings, SoCalGas
11 proposes to allocate High Pressure Distribution and local transmission costs across customer
12 classes using Cold Year Peak Month gas demand and allocate backbone transmission costs
13 across customer classes using Cold Year gas demand. The Indicated Shippers proposes instead
14 to allocate all High Pressure Distribution, local transmission and backbone costs among
15 customer classes using Peak Day gas demand. SoCalGas does not agree with the Indicated
16 Shippers' recommendation because it is not consistent with the Commission-adopted
17 methodology to allocate these functional costs across customer classes. The Commission's Long
18 Run Marginal Cost decision (D.92-12-058), which was a litigated outcome, clearly stated that
19 SoCalGas' high pressure distribution and local transmission costs are to be allocated using Cold
20 Year Peak Month gas demand as the decision found that Cold Year Peak Month gas demand is
21 the appropriate cost driver or marginal demand measure for these two functions.¹⁸ Similarly,

¹⁷ See Id. at 3.

¹⁸ See D.92-12-058 at 72 (Conclusion of Law 2).

1 D.92-12-058 clearly stated that the marginal demand measure for SoCalGas' backbone
2 transmission costs is Cold Year gas demand. SoCalGas' cost allocations following this decision
3 have consistently used the D.92-12-058 marginal demand measures.

4 Indicated Shippers' proposed marginal demand measure of Peak Day gas demand for
5 high pressure distribution, local transmission and backbone transmission functional cost
6 allocation across customer classes will lead to significant cost shifts from noncore customers to
7 core customers. Therefore, the Commission should reject this recommendation.

8 **IV. MARGINAL COST ESTIMATION FACTORS**

9 **A. TURN's and Cal PA's Proposals for Real Economic Carrying Charge
10 Should Be Rejected**

11 TURN¹⁹ and Cal PA²⁰ propose updating Applicants' Real Economic Carrying Charge
12 factors used in the marginal cost studies to reflect the most current available income tax rate and
13 rate of return information. Both propose updating the federal income tax rate from 35% to 21%
14 to reflect revised federal tax law and reduced authorized rate or return components to their 2019
15 authorized level. TURN proposes updated Real Economic Carrying Charge factors that result in
16 a reduction of SoCalGas' Real Economic Carrying Charge for Weighted Average of General
17 Plant 0.77% from 16.461% to 15.686% and a reduction of SDG&E's Real Economic Carrying
18 Charge for Weighted Average General Plant 0.93% from 10.51% to 9.58%.

19 Applicants oppose proposals to update the Long Run Marginal Cost studies to reflect
20 changes related to tax law and authorized rate of return updates. Applicants will use lower
21 revenue requirements reflecting a reduced General Rate Case base margin and most currently

¹⁹ See TURN/Marcus at 21.

²⁰ See Ex. PubAdv-07 (Sabino), pp. 18-24.

1 authorize rate of return components when Applicants implement the 2020 TCAP decision in
2 their advice letters. This will lower costs across all customer classes. Further, Real Economic
3 Carrying Charge factors are used in cost studies to convert capital-related costs into annualized
4 costs. It is not intuitive to the Applicants that the allocation of General Rate Case-authorized
5 revenue requirement across customer classes would be materially impacted due to the calculation
6 of new Long Run Marginal Cost marginal unit costs by applying 2018 tax law to 2016 recorded
7 data. Presumably, Applicants will not simply incorporate 2018 Real Economic Carrying Charge
8 factors to update the cost studies; Applicants would need to update all elements of the cost
9 studies with 2018 data, including 2018 O&M cost data making it infeasible to incorporate the
10 proposed updates to the Real Economic Carrying Charge factors.

11 **V. TURN PROPOSAL FOR SDG&E STORAGE ALLOCATION**

12 While reviewing SDG&E's rate design model TURN indicated that it found an error that
13 SDG&E allocated all of its storage by Medium Pressure core Peak Demand, and that the figures
14 that it used were different from the Medium Pressure Core Peak Demand in this case.²¹ While
15 TURN is correct that there is an error in the way SDG&E's storage costs are allocated, SDG&E
16 disagrees with the remedy TURN proposes. TURN proposes that all storage functions be
17 allocated using High Pressure Core Peak Demand, while SDG&E proposes to correct the
18 withdrawal function only such that it is allocated using Core Peak Demand.

19 Of the three storage functions allocated in SDG&E's Long Run Marginal Cost model,
20 injection and inventory are properly allocated to customer classes using Excess Winter Demand.
21 The third function, withdrawal, was inadvertently mis-labeled and mis-allocated by SDG&E.
22 The withdrawal function is labeled as being allocated using Medium Pressure Peak Day

1 Demand, as TURN observed. Despite the label, the withdrawal function was incorrectly
2 allocated by SDG&E using Excess Winter Demand in SDG&E's Long Run Marginal Cost
3 model. The withdrawal function should have been allocated using Core Peak Demand. Since
4 SDG&E core has no transmission level service, the allocation factors of withdrawal function
5 would be the same as TURN proposed allocation, except that the more appropriate allocator
6 would be Core Peak Demand, and not High Pressure Core Peak Demand.

7 This concludes the joint prepared rebuttal testimony.

²¹ See TURN/Marcus at 69.