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Application: A.18-07-024  
Witness(es): Sharim Chaudhury  
Gary G. Lenart  
Chapter: 18

**JOINT PREPARED REBUTTAL TESTIMONY OF  
SHARIM CHAUDHURY AND GARY G. LENART  
ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY  
AND SAN DIEGO GAS AND ELECTRIC COMPANY**

**(RATE DESIGN / SELF-GENERATION INCENTIVE PROGRAM)**

May 2019

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1 **CHAPTER 18**

2 **JOINT PREPARED REBUTTAL TESTIMONY OF**

3 **SHARIM CHAUDHURY AND GARY G. LENART**

4 **(RATE DESIGN / SELF-GENERATION INCENTIVE PROGRAM)**

5 **I. INTRODUCTION**

6 The purpose of this joint prepared rebuttal testimony on behalf of Southern California  
7 Gas Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E) is to address and  
8 rebut the rate design assertions, arguments, and recommendations contained in the direct  
9 testimonies of The Utility Reform Network (TURN); Public Advocates Office (Cal PA);  
10 Southern California Generation Coalition (SCGC); Southern California Edison Company (SCE);  
11 the City of Long Beach, Energy Resources Department (Long Beach); and the Small Business  
12 Utility Advocates (SBUA).<sup>1</sup> Witness Gary Lenart co-sponsors rebuttal testimony on the Self-  
13 Generation Incentive Program, which was addressed by several intervenors. This testimony is  
14 organized in two main sections: (1) rate design and (2) Self-Generation Incentive Program.  
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<sup>1</sup> 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.

1 **RATE DESIGN**

2 **II. THE COMMISSION SHOULD REJECT TURN'S AND CAL PA'S**  
3 **RECOMMENDATION TO USE NEW CUSTOMER ONLY METHOD FOR**  
4 **CALCULATING MARGINAL CUSTOMER CAPITAL COST**

5 Applicants proposed the Rental method for calculating marginal customer capital cost  
6 (for capital equipment such as meter, regulator and service line).<sup>2</sup> Both Cal PA<sup>3</sup> and TURN<sup>4</sup>  
7 recommend the use of the New Customer Only (NCO) method on several grounds. First, based  
8 on the concept of marginal cost, Cal PA and TURN claim that the NCO method, and not the  
9 Rental method, appropriately calculates marginal customer capital cost. Second, Cal PA and  
10 TURN rely on the history of the Commission decisions that they interpret as the Commission's  
11 preference for the NCO method. Third, Cal PA seems to prefer the NCO method because it  
12 allocates less costs to residential customers. I address each of these arguments below.

13 **A. Based on the Concept of Marginal Cost, the Commission Should Reject**  
14 **the NCO Method and Adopt the Rental Method**

15 As I pointed out in my direct testimony,<sup>5</sup> the Commission in D.17-09-035,<sup>6</sup> consistent  
16 with past decisions, defined marginal customer cost as the cost of providing service to an

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<sup>2</sup> July 2018, Prepared Direct Testimony of Marjorie Schmidt-Pines on Behalf of Southern California Gas Company (SoCalGas), Chapter 9 (Schmidt-Pines) at 4; July 2018, Prepared Direct Testimony of Michael Foster on Behalf of San Diego Gas & Electric Company (SDG&E), Chapter 10 (Foster) at 3.

<sup>3</sup> April 12, 2019, Cal PA Report on the Triennial Cost Allocation Proceeding for SoCalGas and SDG&E for Test Year 2020: Cost Allocation, Exhibit PubAdv-07 (Pearlie Sabino) at 3.

<sup>4</sup> April 12, 2019, Prepared Testimony of William Perea Marcus on Behalf of The Utility Reform Network (TURN), TURN (Marcus) at 3. TURN recommends the NCO method with replacement cost adder.

<sup>5</sup> July 2018, Prepared Direct Testimony of Sharim Chaudhury on Behalf of SoCalGas and SDG&E, Chapter 12 (Chaudhury) at 11.

<sup>6</sup> *Decision Identifying Fixed Cost Categories to be Included in a Fixed Charge*, D.17-09-035 (September 28, 2017) was issued in Pacific Gas and Electric Company's application, A.16-06-013, to revise its electrical marginal costs, allocation, and rate design.

1 additional customer.<sup>7</sup> The Commission also identified that “[n]ew connections costs are  
2 composed of costs associated with the investment required to provide access to a new customer .  
3 . . .”<sup>8</sup>

4 In their testimony, both TURN and Cal PA discuss extensively why they believe that the  
5 NCO method, and not the Rental method, is the appropriate method for calculating marginal  
6 customer capital cost.<sup>9</sup> Detailed theoretical discussions of the merits and demerits of the NCO  
7 and Rental methods in this and prior cost allocation proceedings have diverted attention away  
8 from the fundamental question as to which method satisfies the definition of marginal cost. That  
9 is the reason, in my direct testimony,<sup>10</sup> I algebraically presented the definition of marginal  
10 customer capital costs as:

$$11 \quad \text{Marginal customer capital cost} = \frac{\Delta \text{ in total capital cost}}{\Delta \text{ in one additional customer}}.$$

12 I also stated that this is precisely how the Rental method calculates marginal customer capital  
13 cost. Further, I algebraically represented the NCO method to show that it is fundamentally  
14 inconsistent with the basic definition of marginal cost:

$$15 \quad \text{NCO method customer capital cost} = \frac{\Delta \text{ in total capital cost for all new customers}}{\text{all customers (existing and new)}}.$$

16 As I discussed in my direct testimony, the above equation for the NCO method shows  
17 that the denominator captures all customers, not a change in the number of customers, let alone  
18 change in one additional customer. I have not seen such a definition of marginal cost in any text

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<sup>7</sup> See D.17-09-035 at 18, fn 29; see also D.92-12-058 at 11, 38.

<sup>8</sup> D.17-09-035 at Finding of Fact (FOF) 9.

<sup>9</sup> TURN (Marcus) at 28-33; Ex. PubAdv-07 (Sabino) at 27-30.

<sup>10</sup> Ch. 12 (Chaudhury) at 11.

1 books. It is notable that in their testimony TURN and Cal PA have not claimed that my  
2 algebraic representation of the NCO method is inaccurate. If my algebraic representation of the  
3 NCO method is accurate, then the NCO method must be an average cost method, not a marginal  
4 cost method. Based on the algebraic definition of the NCO method alone, the Commission  
5 should reject the NCO method, as it is inconsistent with the fundamental definition of marginal  
6 cost. If the Commission were to direct the Applicants to derive one-time customer hookup costs  
7 based on embedded cost method, not marginal cost method, the NCO method would be the  
8 appropriate method.

9 While this section has focused on why the NCO method is inconsistent with the  
10 fundamental definition of marginal cost, there are other reasons why the Rental method is  
11 superior. In my rebuttal testimony in A.15-07-014, I discussed in detail as to why the Rental  
12 method, and not the NCO method, is the appropriate method to calculate marginal customer  
13 capital cost. Rather than replicate that discussion here, I am including the relevant pages from  
14 that testimony as Appendix A and adopting it as my testimony in this proceeding.

15 **B. TURN and Cal PA's Argument the Commission Should Adopt the NCO**  
16 **Method in This TCAP Simply Because of the Commission's Past**  
17 **Preference for NCO Method is Inconsistent with the Commission's**  
18 **Recent Decision**

19 TURN and Cal PA contend that the NCO method is the long-standing approach adopted  
20 by the Commission for both electric and natural gas utilities.<sup>11</sup> TURN and Cal PA recommend  
21 that the Commission should adopt the NCO method simply because the Commission had stated a  
22 preference for it in the past.<sup>12</sup> This justification by TURN and Cal PA for the adoption of the  
23 NCO method is not supported because D.17-09-035 suggests that the Commission is  
24 reevaluating whether the Rental or the NCO method is the appropriate method for calculating

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<sup>11</sup> TURN (Marcus) Attachment 6 (Volume 1); Ex. PubAdv-07 (Sabino) at 27-30.

<sup>12</sup> TURN (Marcus) at 33; Ex. PubAdv-07 (Sabino) at 27.

1 marginal customer capital cost. Instead of directing utilities to develop new customer connection  
2 cost (marginal customer capital cost) using the NCO method to reaffirm the Commission’s past  
3 preference for the NCO method, D.17-09-035 directed the utilities, as I discussed in my direct  
4 testimony,<sup>13</sup> to calculate new customer connection cost using four methods: the NCO method,  
5 the rental method, and the Commission’s Energy Division’s two proposed alternative methods  
6 which involve modifications to the Rental method, referred to as the Adjusted Rental methods.  
7 The Energy Division contended that, relative to the NCO method, some variant of the Rental  
8 method is the appropriate method to calculate marginal customer capital cost.<sup>14</sup> In this regard, I  
9 provided direct testimony why adjustments the Rental method will be inappropriate for deriving  
10 marginal customer capital cost.<sup>15</sup>

11           Regarding the Commission’s history on the appropriate method for calculating marginal  
12 customer capital cost, TURN states, “Given SDG&E’s and SoCalGas’ attempt to revive the oft-  
13 and regularly-rejected Rental Method, despite the Commission’s history of favoring the New  
14 Customer Only method for determining customer LRMC, we believe that a brief review of that  
15 history is appropriate.”<sup>16</sup> Attachment 6 of Marcus’ testimony contains the review of that history.  
16 Applicants find it odd that TURN’s history does not include any reference to D.17-09-035, the  
17 most recent decision containing the Commission’s thinking on the Rental and NCO methods.  
18 The reality is that “SDG&E and SoCalGas’ attempt to revive the oft-and-regularly-rejected

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<sup>13</sup> Ch. 12 (Chaudhury) at 9-10.

<sup>14</sup> See *Adjusted Rental Method for Marginal Customer Cost: An Energy Division Staff Proposal* (PowerPoint), For Presentation at the PG&E GRC Phase 2 (A.16-06-013) Second Fixed Cost Workshop, (November 2, 2016) at 2. [Attached as Appendix B to Ch. 12 (Chaudhury)]

<sup>15</sup> Ch. 12 (Chaudhury) at 12-16.

<sup>16</sup> TURN (Marcus) at 33.

1 Rental Method for determining customer LRMC” is guided by the Commission’s directive in  
2 D.17-09-035.

3 TURN and Cal PA’s contention that the NCO method is the long-standing approach  
4 adopted by the Commission does not capture the long and somewhat complicated history of the  
5 methodology used to develop the marginal unit costs for customer-related facilities. In the  
6 original LRMC decision, the Commission adopted the rental method.<sup>17</sup> In subsequent Biennial  
7 Cost Allocation Proceedings (BCAP), the Commission stated a “preference” for the NCO  
8 methodology. However, for SoCalGas and SDG&E, the use of the Rental or NCO method has  
9 not been fully litigated over the last six times the Commission has heard this issue due to  
10 settlement agreements by parties. Therefore, the Commission should not adopt the NCO method  
11 simply because the Commission had stated a preference for it in the distant past.

12 **C. The Commission Should Reject Cal PA’s Argument to Adopt NCO**  
13 **Method Because It Allocates Less Costs to Core Customers**

14 Cal PA asserts:

15 [w]hile the illustrative rates may be different from the actual 2020 gas transportation  
16 rates, Cal Advocates’ recommendation can be expected to reflect the lowest cost  
17 allocation of the base margin to total core customers if based on the NCO Method for the  
18 calculation of marginal customer costs. This is one of the reasons why the Commission  
19 has historical preference for the NCO Method and why both of the consumer advocate  
20 groups—Cal Advocates and The Utility Reform Network (TURN)—have consistently  
21 recommended the NCO method.<sup>18</sup>

22 The preference for the NCO method or the Rental method should be entirely based on  
23 which method accurately captures the marginal customer capital cost and must not be based on

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<sup>17</sup> D.92-12-058, mimeo., at Conclusion of Law (COL) 5.

<sup>18</sup> April 12, 2019, Report on the Triennial Cost Allocation Proceeding for SoCalGas and SDG&E for Test Year 2020: Rate Design, Exhibit PubAdv-08 (Pearlie Sabino) at 42-43.

1 which method leads to the preferred cost allocation outcome. Applicants are not aware of any  
2 Commission decisions which state that one of the reasons why the Commission has historical  
3 preference for the NCO method is that the NCO method allocates lower costs to core customers.  
4 The Commission should reject this argument by Cal PA as to why the NCO method should be  
5 adopted.

6 **III. THE COMMISSION SHOULD REJECT CAL PA'S RECOMMENDED**  
7 **RESIDENTIAL MINIMUM CONNECTION COSTS THAT ARE ELIGIBLE FOR**  
8 **RESIDENTIAL FIXED CUSTOMER CHARGE ON SEVERAL GROUNDS**

9 I discussed in my direct testimony the guidelines that D.17-09-035 provided to identify  
10 residential minimum connection cost that are eligible for residential fixed customer charge:

11 The Commission identified “categories of fixed costs that could be included in the  
12 calculation of a fixed charge, in the event a fixed charge proposal is brought before the  
13 Commission for approval in future applications.” More specifically, the decision  
14 determined that “a fixed charge should include only revenue cycle services costs (costs  
15 for account set-up, metering services, billing and payment) with certain exclusions, all  
16 meter capital costs, and minimum service drop and final line transformer (FLT) costs  
17 calculated by using the minimum observed cost for residential class.” The decision  
18 suggested that the minimum observed costs for FLT and service drop could be the 10<sup>th</sup> or  
19 20<sup>th</sup> percentile of respective cost distributions, or the average cost for the bottom 10% or  
20 20%. The decision also allowed for other approaches “so long as they are reasonably  
21 consistent with the ‘minimum observed cost’ approach we adopt here.”<sup>19</sup>

22 Cal PA’s proposed adjustments to the Applicants’ residential minimum connection costs  
23 are shown in Table EX 8-24 and Table EX-25 for SoCalGas and SDG&E, respectively.<sup>20</sup> The  
24 Cal PA tables contain adjustments under each competing method of calculating marginal  
25 customer capital cost (Rental, NCO with replacement adder and NCO without replacement  
26 adder).

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<sup>19</sup> Ch. 12 (Chaudhury) at 8 [internal citations omitted].

<sup>20</sup> Ex. PubAdv-08 (Sabino) at 38-39.

1 With Respect to the NCO method, TURN proposes the use of the NCO method with  
2 replacement adder, which adds to the total hookup cost of new residential customers the  
3 replacement cost of service lines, regulators and meters for existing residential customers. Cal  
4 PA, on the other hand, proposes the use of the NCO method without replacement adder, which  
5 leads to lower costs to be recovered from residential customers in the cost allocation process and  
6 lower fixed costs eligible to be recovered in the residential fixed customer charge. TURN is  
7 correct that when the Commission adopted the NCO method in the past, the Commission had  
8 adopted the NCO method with replacement adder. This is evident in the Cal PA's Chapter 7  
9 APPENDICES which summarized the history of the Commission decisions that highlight the  
10 Commission preference for the NCO method.

11 Cal PA Chapter 7 APPENDICES quotes D.95-12-053 with reference to the NCO method  
12 adopted in that decision, "Utilities incur investment-related customer costs based on hooking up  
13 new customers and periodic replacement of the service, regulator, and meter for all customers;  
14 this is the change in total costs that should be measured."<sup>21</sup> In other words, the Commission  
15 adopted the Rental Method with replacement adder. Therefore, even if the Commission decides  
16 that the NCO method is the appropriate method to calculate marginal customer capital cost, it  
17 must reject Cal PA's recommendation to adopt the minimum connection cost using the NCO  
18 method without the replacement cost adder.

19 In their calculations of residential minimum connection costs, Applicants capture revenue  
20 cycle services (RCS) cost as either direct operations and maintenance (O&M) marginal costs or  
21 O&M leaders (indirect marginal cost). SoCalGas captures customer-related direct O&M costs

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<sup>21</sup> Ex. PubAdv-07 (Sabino) Appendices at 46; D.95-12-053 at FOF 16.

1 through five broad O&M cost categories: (i) Customer Services O&M costs, (ii) Customer  
2 Accounts O&M costs, (iii) Meters and Regulators O&M costs, (iv) Service Lines O&M costs,  
3 and (v) Customer Services and Information costs.<sup>22</sup> Customer Services activities and the  
4 associated costs result from responses to customer service requests and company generated work  
5 orders, including investigating reports of potential gas leaks and responding to other  
6 emergencies, establishing/terminating gas service, conducting customer appliance checks,  
7 shutting off and restoring gas service for fumigations, performing meter and regulator changes,  
8 inspecting meter sets for atmospheric corrosion and remediating conditions found during the  
9 inspections, and other related services at customer premises. Customer Accounts O&M costs  
10 include the recorded expenses incurred to receive calls from customers requesting service, obtain  
11 monthly-metered gas consumption data from non-automated meters, calculate and reconcile  
12 billing information, print and mail gas bills and collection notices to customers, respond to  
13 inquiries related to billing and collections, perform collection activities, and process customer  
14 payments. Meters and Regulators O&M costs include repair of MSAs and meter guards.  
15 Service maintenance work is generally corrective in nature and is required to keep the natural gas  
16 system operating safely and reliably. Customer Services and Information costs are for activities  
17 which include account management services to nonresidential and residential customers.

18 SDG&E captures customer-related direct O&M costs through two broad O&M cost  
19 categories: (i) Customer Services O&M costs, and (ii) Customer Accounts O&M costs.<sup>23</sup>

20 Customer Services O&M costs are associated with responding to customer service field orders  
21 and generally operating and maintaining service lines, meters, and house regulators. Customer

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<sup>22</sup> Ch. 9 (Schmidt-Pines) at 7-10.

<sup>23</sup> Ch. 10 (Foster) at 4-7.

1 Accounts O&M costs are for activities including meter reading, credit collections, and billing  
2 services.

3 Cal PA's calculations of residential minimum connection costs are shown in Table Ex 8-  
4 24 and Table Ex-25 for SoCalGas and SDG&E, respectively. Applicants reviewed the  
5 workpapers underlying Cal PA's revised RCS costs as captured in Table EX 8-24 and Table EX-  
6 25, and found that Cal PA has significantly underestimated the RCS costs for SoCalGas and  
7 SDG&E without providing any explanation as why it excluded certain O&M costs in its  
8 derivation of RCS costs.<sup>24</sup> Cal PA used these revised lower RCS costs in estimating its proposed  
9 minimum connection cost under each of the Rental, NCO with replacement and NCO without  
10 replacement method. It appears from the workpapers that, in its proposed estimate of RCS costs  
11 for both utilities, Cal PA has excluded all supervision and engineering O&M costs from  
12 Applicants' proposed direct marginal O&M costs. Further, Cal PA has excluded all costs  
13 pertaining to O&M loaders (representing costs such as Payroll taxes, and pension and benefits)  
14 from Applicants proposed marginal O&M costs in its proposed estimates of revenue cycle  
15 services costs for both utilities. Since the implementation of the LRMC method pursuant to  
16 D.92-12-058, Applicants have included these marginal O&M costs in the customer-related O&M  
17 costs and the Commission has approved these cost categories as marginal O&M costs. These  
18 costs, excluded by Cal PA, are indeed RCS costs. Notably, TURN does not propose exclusion of  
19 these supervision and engineering costs or the O&M loader costs.

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<sup>24</sup> For SoCalGas, see Cal PA workpaper *Copy of SCG 2020TCAP LRMC Customer Costs for cust charge.xlsx*, at tabs: "cust MUC" and "cust 8 o&m". For SDG&E, see Cal PA workpaper *Copy of SDGE 2020TCAP LRMC Customer Costs Pearlie.xls*, at tabs: "Cust LRMC", "Loader Input", "O&M 870-894" and "O&M 901-910".

1 For example, SoCalGas' 2016 recorded Customer Services marginal O&M cost was  
2 \$119.776 million, which SoCalGas included in its RCS costs; Cal PA essentially excluded all the  
3 Customer Services marginal O&M costs except for only \$0.366 million. This exclusion of the  
4 majority of 2016 recorded Customer Services O&M costs led Cal PA to propose 2020 Customer  
5 Services O&M cost of \$0.07 per residential customer per year as opposed to SoCalGas' estimate  
6 of \$23.84 per residential customer per year.

7 As another example, SoCalGas' 2016 recorded Service Lines marginal O&M cost was  
8 \$29.619 million, which SoCalGas included in its RCS costs; Cal PA included only \$13.103  
9 million. This exclusion of costs led Cal PA to propose 2020 Service Lines O&M cost of \$0.0024  
10 per residential customer per year as opposed to SoCalGas' estimate of \$5.40 per residential  
11 customer per year. Cal PA made a calculation error in its calculation of Service Lines O&M cost  
12 per customer; instead of \$0.0024 per customer per year, Cal PA's estimate should be \$2.39 per  
13 customer per year. Altogether, Cal PA proposed marginal direct O&M cost of \$22.23 per  
14 customer per year as opposed to SoCalGas's proposal of \$57.23 per customer per year.

15 SDG&E's 2016 recorded marginal direct O&M costs was \$35.153 million, which  
16 SDG&E included in its RCS costs; Cal PA included only \$7.018 million. Based on this cost  
17 exclusion by Cal PA, Cal PA's proposed 2020 marginal direct O&M cost of \$8.91 per residential  
18 customer per year as opposed to SDG&E's estimate of \$44.62 per residential customer per year.

19 By excluding relevant RCS costs, Cal PA's proposed NCO-based residential minimum  
20 connection cost estimates of \$3.30 (\$5.69 when corrected for calculation error)<sup>25</sup> per month for  
21 SoCalGas and \$2.46 per month for SD&E significantly understate the minimum connection costs

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<sup>25</sup> As noted in Section III above, Cal PA made a calculation error for Service Lines O&M cost per customer. Correcting this error will make Cal PA's proposed NCO without replacement cost adder minimum connection cost for SoCalGas \$5.69 per month (\$3.30+\$2.39).

1 eligible for residential customer charge. The Commission should therefore reject Cal PA's  
2 proposed RCS cost estimates as they significantly underestimate the RCS costs that Applicants  
3 incur in providing customer-related services to residential customers.

4 **IV. TURN DOES NOT PROVIDE AN ESTIMATE OF RESIDENTIAL MINIMUM**  
5 **CONNECTION COST FOR SDG&E BUT IT CAN BE REASONABLY**  
6 **ESTIMATED BASED ON TURN'S ESTIMATE OF RESIDENTIAL MINIMUM**  
7 **CONNECTION COST FOR SOCALGAS**

8 TURN provided an estimate of SoCalGas' residential minimum annual connection cost  
9 that are eligible for fixed customer charge based on the NCO and Rental methods and its  
10 proposed cost parameters in Table 42. The table shows that the minimum residential connection  
11 cost for SoCalGas under TURN's proposed NCO with replacement cost adder method and cost  
12 parameters is \$116.25 per year or \$9.69 per month. Table 42 also shows SoCalGas' residential  
13 minimum connection cost under the NCO method without replacement cost adder and TURN's  
14 proposed cost parameters to be \$110.32 per year or \$9.19 per month; a considerably higher  
15 number than Cal PA's proposed number of \$3.30 (\$5.69 when corrected for calculation error)  
16 under the same NCO without replacement adder method.

17 With respect to the accuracy of TURN's estimate of SoCalGas' residential minimum  
18 connection cost of \$116.25 per year using its proposed NCO method and cost parameters in  
19 Table 42, TURN states, "[I]n sum, the estimate of the 20th percentile above (using the NCO  
20 method where the capital costs do not have a large component) is likely to be slightly high. For  
21 the rental method, the difference would be considerably larger."<sup>26</sup> This seems to suggest that  
22 TURN thinks its estimate of SoCalGas's residential minimum connection cost under its proposed  
23 NCO with replacement cost adder method of \$116.25 per year is not likely to be far off.

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<sup>26</sup> TURN (Marcus) at 76.

1           TURN does not provide an estimate of SD&E’s residential minimum connection cost in  
2 its testimony, yet an analysis of TURN’s testimony and workpapers gives an indication of what  
3 TURN’s estimate would likely be. In discussing SDG&E’s residential minimum connection cost  
4 without calculating it, TURN states, “With the NCO method as proposed by TURN, the annual  
5 customer-related fixed cost is approximately \$84 for SDG&E, a figure that is high in light of the  
6 further reductions to correct SDG&E’s estimate of service line costs based on the lowest 20% of  
7 meters and services.”<sup>27</sup> For SoCalGas, the difference between TURN’s proposed annual  
8 customer-related fixed cost and minimum connection cost is \$16.75.<sup>28</sup> To get a rough  
9 approximation of what TURN’s residential annual minimum connection cost for SDG&E might  
10 look like, Applicants assumed a similar difference of approximately \$17 would apply between  
11 TURN-proposed SDG&E’ annual customer-related fixed cost and SDG&E’s likely minimum  
12 connection cost (not estimated by TURN). This assumption would lead to the derivation of  
13 SDG&E’s likely residential minimum connection cost of \$67<sup>29</sup> per year, or \$5.58 per month  
14 under the NCO with replacement cost adder.

15 **V. CAL PA’S AND TURN’S PROPOSED NCO METHODS AND OTHER COST**  
16 **ALLOCATION PROPOSALS LEAD TO RESIDENTIAL MINIMUM**  
17 **CONNECTION COST THAT JUSTIFIES SOME LEVEL OF CUSTOMER**  
18 **CHARGE FOR SDG&E**

19           Following D.17-09-035, Cal PA calculated a residential minimum connection cost of  
20 \$3.30 per month (\$5.69 when corrected for calculation error) for SoCalGas and \$2.46 per month  
21 for SDG&E using its preferred NCO without replacement cost method and other cost allocation

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<sup>27</sup> *Id.* at 73.

<sup>28</sup> TURN’s proposed annual customer-related fixed cost is \$133.00, see TURN (Marcus) Table 32 at 64. Minimum connection cost is \$116.25, see TURN (Marcus) Table 42 at 75.

<sup>29</sup> \$84 - \$17 = \$67.

1 proposals as I discussed in Section III. Similarly, TURN calculated residential minimum  
2 connection cost of \$9.69 per month for SoCalGas using its preferred NCO with replacement cost  
3 method and other cost allocation proposals. However, as I discussed in Section IV, TURN did  
4 not provide an estimate of SDG&E's residential minimum connection cost. In Section IV, I  
5 provided a rough estimate of SDG&E's residential minimum connection cost of \$5.58 per month  
6 that is likely to be consistent with TURN's approach.

7 Here, I focus on SDG&E's residential minimum connection cost that is eligible for fixed  
8 customer charge. I also set aside, for purposes of discussion, SDG&E's proposed residential  
9 minimum connection cost. Cal PA's recommendation of \$2.46 minimum connection cost per  
10 month for SDG&E (ignoring the significant underestimation I pointed out in Section III)  
11 suggests that SDG&E is eligible to have a \$2.46 per month customer charge before considering  
12 bill impacts associated with this customer charge and compensating volumetric rate changes.  
13 Similarly, my estimate of SDG&E's minimum connection costs consistent with TURN's  
14 recommendations would suggest that SDG&E is eligible to have about a \$5.50 per month  
15 customer charge before considering bill impacts associated with this customer charge and  
16 volumetric rate changes. Yet, both Cal PA and TURN recommend that the Commission reject  
17 SDG&E's proposed \$10 per month customer charge and retain the existing \$3 per month  
18 minimum bill.<sup>30</sup> As an alternative, Cal PA is amenable with the Commission authorizing a \$4  
19 per month minimum bill for SDG&E, but no customer charge.<sup>31</sup> Both Cal PA and TURN  
20 oppose Applicants' proposed \$10 per month customer charge on two concerns: (i) proper

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<sup>30</sup> TURN (Marcus) at 4; Ex. PubAdv-08 (Sabino) at 7.

<sup>31</sup> Ex. PubAdv-08 (Sabino) at 39.

1 estimation of SDG&E’s residential minimum connection cost does not justify a \$10 per month  
2 residential customer charge;<sup>32</sup> and (ii) a \$10 per month residential customer charge would lead to  
3 adverse bill impacts for a large number of residential customers.<sup>33</sup> The Commission can  
4 alleviate Cal PA and TURN’s first concern by adopting a minimum connection cost for now at a  
5 level below SDG&E’s proposed minimum connection cost.

6 With respect to Cal PA and TURN’s second concern about the adverse bill impacts for a  
7 large number of residential customers, Cal PA and TURN are addressing SDG&E’s proposed  
8 \$10 per month customer charge as an “all or nothing” proposition. Yet it is not an “all or  
9 nothing” choice. There are alternatives to Cal PA and TURN’s recommendation to reject  
10 SDG&E’s proposed \$10 per month customer charge and retain the current \$3 per month  
11 minimum bill. For example, one alternative the Commission could consider is to adopt a  
12 residential customer charge of \$5 per month for SDGE, a number close to SDG&E’s attempt at  
13 what TURN’s estimate of SDG&E’s minimum connection cost might look like.<sup>34</sup>

14 A \$5 per month residential customer charge instead of \$3 per month minimum bill for  
15 SDG&E will moderate the level bill impact from a \$10 per month customer charge while moving  
16 SDG&E’s residential rate structure in the direction where at least part of residential minimum  
17 connection cost is recovered in a fixed customer charge. In response to Cal PA Data Request 23,  
18 Question 1 (d), SDG&E provided monthly bill impacts for SDG&E CARE and non-CARE  
19 customer under a \$5 per month customer charge scenario, instead of SDG&E’s proposed \$10 per

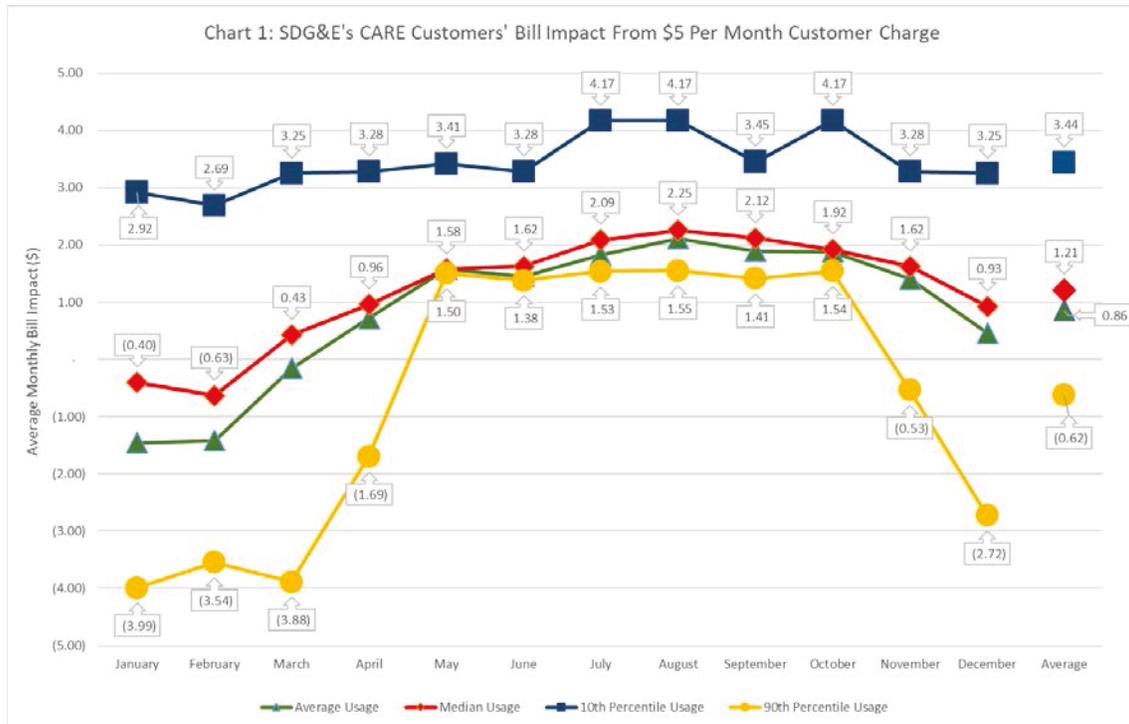
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<sup>32</sup> TURN (Marcus) at 73; Ex. PubAdv-08 (Sabino) at 39.

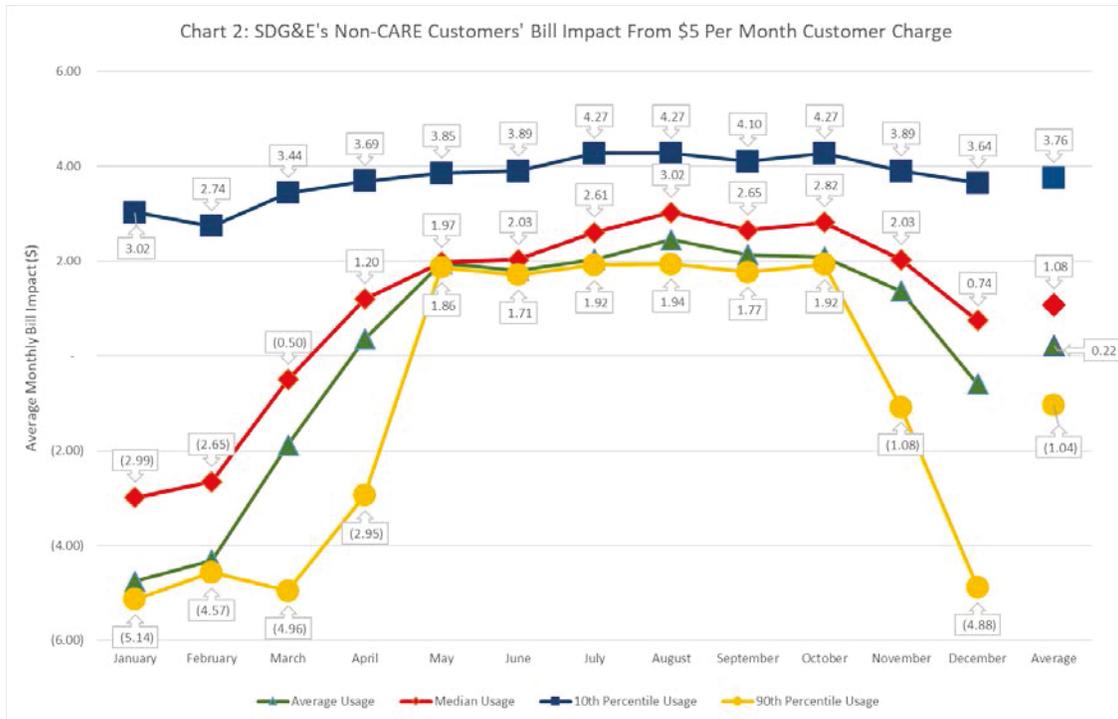
<sup>33</sup> TURN (Marcus) at 76; Ex. PubAdv-08 (Sabino) at 36.

<sup>34</sup> As discussed in Section III, Cal PA’s estimate of \$2.46 significantly underestimate’s SDG&E’s RCS costs. Therefore, the Commission should not consider setting SDG&E’s monthly customer charge at or around \$2.46.

1 month customer charge scenario. I have reproduced below two bill impact charts for SDG&E's  
 2 CARE and non-CARE residential customers associated with a \$5 per month non-CARE  
 3 customer charge (\$4 per month CARE customer charge) which show considerably less average  
 4 and monthly bill impacts relative to a \$10 per month non-CARE customer charge.



5



1

2 As summarized in Table EX 8-10 through Table EX 8-21, Cal PA conducted multiple bill

3 impact analyses under alternative customer charge scenarios for SoCalGas and SDG&E and also

4 under alternative minimum bill scenarios for SDG&E. TURN did not provide any analyses of

5 alternative customer charge or minimum bill. Some of Cal PA's bill impact results do not make

6 sense and appear to be incorrect. For example, according to Cal PA, the only difference between

7 Table EX 8-10 and Table EX 8-11 is that Table EX 8-10 assumes \$10 per month customer charge

8 for SDG&E while Table EX 8-11 assumes \$10 per month minimum bill for SDG&E. Cal PA

9 states that "The Applicants' proposed Residential Customer Charges were kept at \$10/month for

10 SoCalGas but in this run of the model inputs, the customer charge was changed to a \$10

11 Residential Minimum Bill for SDG&E. No other changes to Applicants' input were included in

12 Table Ex 8-11. These changes resulted in huge bill increases for this scenario."<sup>35</sup> This huge bill

<sup>35</sup> Ex. PubAdv-08 (Sabino) at 28.

1 increase estimated by Cal PA does not make sense and appears incorrect. Table EX 8-10 shows  
2 SDG&E's residential class monthly average bill of \$30.85 per month whereas Table EX 8-11  
3 shows SDG&E's residential class monthly average bill of \$39.43 per month. This is a mistake;  
4 the average residential class bills in these two tables should be close to each other. Moreover,  
5 the bill impact from a \$10 per month minimum bill should be smaller than the bill impact from a  
6 \$10 per month customer charge, all else being equal. However, Table EX 8-11 shows that a \$10  
7 minimum bill results in higher bill increases for SDG&E's residential customers relative to a \$10  
8 customer charge in Table EX 8-11, which does not make sense. Applicants have observed the  
9 same counter-intuitive results when comparing Cal PA's bill impacts between Table EX 8-13 (\$5  
10 customer charge for SDG&E) and Table EX 8-14 (\$5 minimum bill for SDG&E), and between  
11 Table EX 8-15 (\$5 customer charge for SDG&E) and Table EX 8-16 (\$5 minimum bill for  
12 SDG&E). Applicants did not verify the accuracy of Cal PA's other bill impact tables.

13 Both Cal PA and TURN identify that the adverse bill impact from Applicants' proposed  
14 customer charge is much higher for residential customers living in multi-family dwellings  
15 relative to single-family dwellings.<sup>36</sup> In fact, D.17-09-035 introduced the concept of minimum  
16 connection cost for calculating fixed customer charge for electric utilities to address concerns  
17 raised by some parties in that proceeding that customer-specific capital costs for residential  
18 customers in multi-family dwellings are lower than those for residential customers in single-  
19 family dwellings. D.17-090-037 states:

20 Regarding service drops and final line transformer costs, as the Joint Parties note, these  
21 costs vary significantly among different groups of residential customers. For example,  
22 costs vary by customer density, by usage of capacity for final line transformers, and by  
23 housing type (single- vs. multi-family housing). While the Commission has previously  
24 stated that a fixed charge based on customer-related costs could be an appropriate part of

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<sup>36</sup> Ex. PubAdv-08 (Sabino), see Table Ex 8-10 to Table Ex 8-21 at 27-36; see also TURN (Marcus) at 76.

1 residential rate design, it is clear that service drops and final line transformers have a dual  
2 function; they are both necessary to serve new customers (customer-related) but also  
3 contain demand-related components that vary significantly in costs. Including these  
4 demand-related cost components not only raises equity concerns, but also introduces a  
5 different set of distortions between small and large customers. As argued by the Joint  
6 Parties, one potential option to differentiate these costs is to separate them by single-  
7 family and multi-family customers; however, as argued by the Joint Utilities, this  
8 differentiation proposal is likely a poor representation of the actual demands that small  
9 and large customers impose on the system. However, an alternative approach proposed  
10 by CFC is to calculate the fixed costs for these assets by using their minimum observed  
11 costs within residential class with the remaining to be treated as demand-related, and  
12 recovered volumetrically. While we note the Joint Parties' general opposition to  
13 including any FLT and or service drop capital costs as fixed costs, we believe that any  
14 cross-subsidy issues would effectively be avoided by using the minimum observed cost  
15 values.<sup>37</sup> [footnote omitted]

16 Therefore, larger bill impacts from customer charge based on minimum connection cost  
17 for residential customers in multi-family dwellings would be due to their low gas usage, and not  
18 due to cross-subsidy by residential customers in multi-family dwellings to residential customer in  
19 single-family dwellings. Residential customers in single-family dwellings with similar usage  
20 will experience similar bill impacts.

21 In this vein, it bears repeating the discussion in my direct testimony with regard to the  
22 magnitude of bill impacts from Applicant's proposed \$10 per month non-CARE residential  
23 customer charge, particularly for SDG&E's residential customers:

24 In the last TCAP decision, D.16-10-004, the Commission correctly noted that the  
25 proposed \$10 customer charge leads to much higher bill impacts for SDG&E's residential  
26 customers compared to those for SoCalGas. Comparing the monthly bill impacts in  
27 Chart 1 and Chart 2 above, the Applicants also noticed that the bill impacts are higher  
28 (both positive and negative) for SDG&E's CARE customers relative to those for  
29 SoCalGas' CARE customers. This is because SDG&E never had a customer charge and  
30 the \$10 customer charge (a movement from \$0 to \$10) leads to higher bill impacts for  
31 SDG&E's residential customers relative to SoCalGas' residential customers (a movement  
32 from \$5 to \$10). This is precisely the reason that the Commission should introduce a  
33 customer charge now for SDG&E. The longer the Commission waits to introduce a

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<sup>37</sup> D.15-07-001 at 22-23.

1 specific customer charge for SDG&E, the more difficult it will get because the bill  
2 impacts attributable to the introduction of a customer charge are likely get larger over  
3 time. A large bill impact should not dissuade the Commission from introducing a  
4 customer charge or increasing a customer charge. In D.17-09-035, the Commission  
5 noted that “Joint Utilities suggest that any bill impacts that are deemed excessive could  
6 be resolved through a reasonable phase-in process. We find merit in exploring this option  
7 in the relevant rate design proceedings.”<sup>38</sup>

8 Therefore, the Commission should adopt a customer charge for SDG&E in this TCAP  
9 proceeding, and any bill impacts that are deemed excessive should be resolved through a  
10 reasonable phase-in process.

11 D.17-09-035 noted that the Office of Ratepayer Advocates and The Utility Reform  
12 Network recommended postponing the implementation of fixed charges for electric utilities until  
13 2020.<sup>39</sup> Cal PA and TURN should state why they are against implementing any level of  
14 customer charge for SDG&E’s natural gas service when their own analyses of residential  
15 minimum connection cost justify some level of fixed customer charge.

16 **VI. THE COMMISSION SHOULD REJECT SBUA’S PROPOSED MODIFICATION**  
17 **TO THE CORE COMMERCIAL & INDUSTRIAL (C&I) DECLINING BLOCK**  
18 **RATES**

19 SBUA claims that, contrary to assertions in my direct testimony that “neither SoCalGas  
20 nor SDG&E proposes any changes to the current methodology,” that SoCalGas and SDG&E are  
21 “in fact proposing to change the rate design.”<sup>40</sup> This assertion is incorrect. While the underlying  
22 allocation of costs is necessarily changing in this cost allocation proceeding, the rate design for

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<sup>38</sup> Ch. 12 (Chaudhury) at 22.

<sup>39</sup> D.17-09-035 at 48.

<sup>40</sup> April 12, 2019, Direct Testimony of Paul Chernick on Behalf of Small Business Utility Advocates (SBUA), Exhibit SBUA (Chernick) at 3.

1 C&I – i.e., the process by which the core C&I declining-block rates are calculated to fully  
2 recover allocated costs – is not changing.

3 SBUA observes that SoCalGas and SDG&E are “proposing to increase the first block  
4 more than the second block, and the second block more than the third, both in \$/therm and in  
5 terms of the percentage change.”<sup>41</sup> While true in terms of Applicants’ proposed rates, this does  
6 not prove that SoCalGas and SDG&E are proposing to change rate design. Rather, the  
7 Applicants’ proposed C&I rates are the mathematical result from applying the unchanged rate  
8 design methodology to an increased allocation of base margin costs to the core C&I rate class.<sup>42</sup>

9 SoCalGas’ and SDG&E’s core C&I rate tiers are generally calculated in a four-step  
10 process. First, base margin and non-base margin costs are separately allocated to the core C&I  
11 rate class. This combined base margin and non-margin cost sets the target revenue the core C&I  
12 rates are designed to collect. Second, Applicants estimate the revenue to be recovered from  
13 monthly fixed customer charges. Third, base margin-related costs less the revenue collected  
14 from monthly customer charges are allocated to the three core C&I tiers to maintain target rate  
15 differentials. Finally, non-base margin costs are added to the resulting base margin-related rates,  
16 using an equal-cents per therm allocation factor. Therefore, when base margin costs increase (or  
17 decrease), the Tier 1 rate increases (or decreases) at a larger magnitude than Tier 2 or Tier 3  
18 rates. When non-base margin costs increase (or decrease), the Tier 3 rate increases (or  
19 decreases) at a larger percentage than Tier 1 rates (though the magnitude of increase is the same).

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<sup>41</sup> Ex. SBUA (Chernick) at 4.

<sup>42</sup> See Ch. 9 (Schmidt-Pines) and Ch.10 (Foster) for SoCalGas’ and SDG&E’s respective cost allocation proposals.

1 This unchanged core C&I rate design methodology that the Applicants proposed in this TCAP  
2 was uncontested in the 2013 and 2017 TCAPs.

3 SBUA’s proposed remediation to their perceived shortcomings of Applicants proposed  
4 rates is to “...increase the price for the first block by the \$/therm increase that Sempra proposed  
5 for the last block, adjusted for the actual increase in the transportation commodity rate eventually  
6 granted by the CPUC...increasing the third block by the \$/therm increase proposed for the first  
7 block (again adjusted for the allowed total increase) and setting the second block to achieve the  
8 targeted revenue level.”<sup>43</sup> This proposal presents several problems for SoCalGas and SDG&E.  
9 First, it cannot be consistently replicated going forward to account for changes in base margin-  
10 related or non-base margin related costs. In order to effectuate the swap proposed by SBUA,  
11 there must first be a known tier rate outcome of some methodology. If that methodology is  
12 Applicant’s current methodology, then due to the different impacts on the rate tiers which result  
13 from changes in either base-margin related or non-base margin related costs as described  
14 previously, the results of the swap may not be in SBUA’s interest in all situations. Second, this  
15 swap process cannot mathematically guarantee that the Tier 2 rate will fall between the Tier 1  
16 and Tier 3 rates, since the Tier 2 rate would be a residual calculation that ensures the rates are  
17 designed to only collect allocated costs. Third, the process is arbitrary, and does not explain how  
18 it adheres to cost-causation principles. Finally, the increases resulting from SBUAs proposed  
19 C&I tier rates are unreasonable in proportion. For example, SoCalGas’ Tier 1 rate increases  
20 about 4% (from \$0.54 to \$0.56), while its Tier 3 rate increases about 85% (from \$0.13 to \$0.24).

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<sup>43</sup> Ex. SBUA (Chernick) at 5.

1 For these reasons, the Commission should reject the proposed modification to the core  
2 C&I rate proposed by SBUA.

3 **VII. THE COMMISSION SHOULD REJECT SBUA’S CONTENTION THAT**  
4 **MARGINAL COST ALLOCATION APPROACH NO LONGER MAKES SENSE**  
5 **FOR CALIFORNIA GAS UTILITIES BECAUSE OF DECLINING LOAD**

6 Since the LRMC decision, D.92-12-058, Applicants have applied an LRMC method to  
7 calculate Medium and High Pressure Distribution costs and their allocation across customer  
8 classes. SBUA states, “Given the lack of growth (and even decline) in load, Sempra cannot  
9 compute marginal distribution investments (High Pressure Distribution Mains and Medium  
10 Pressure Distribution Mains) in the normal fashion, dividing additions by load growth over  
11 corresponding periods. To get around this problem, Sempra creates a proxy load growth,  
12 consisting of the increase in customer number by class (for years when that number increases)  
13 times the average usage per customer in the class.”<sup>44</sup> As stated in Applicants’ direct testimony,  
14 Medium and High Pressure marginal capital cost is derived through regression analysis where  
15 the dependent variable is the cumulative load growth-related capital investment and the  
16 independent variable is the cumulative load growth over a 15 year period.<sup>45</sup> This is the  
17 Commission-approved method per D.92-12-058 and, since the method uses cumulative data, it  
18 can be used even when there is a lack of load growth or even a decline in load. The Commission  
19 should reject SBUA’s contention that a marginal cost allocation approach no longer makes sense  
20 for California gas utilities because of declining load.

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22 ///

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<sup>44</sup> Ex. SBUA (Chernick) at 12.

<sup>45</sup> Ch. 9 (Schmidt-Pines) at 12-13; Ch. 10 (Foster) at 8-9.

1 **SELF-GENERATION INCENTIVE PROGRAM**

2 **VIII. THE COMMISSION SHOULD ADOPT APPLICANTS PROPOSED**  
3 **ALLOCATION OF SELF-GENERATION INCENTIVE PROGRAM COSTS**

4 **A. Response to SCGC and SCE**

5 With respect to the Self-Generation Incentive Program (SGIP), SCGC alleges that “the  
6 Applicants’ recommended allocation clearly violates the Commission’s directive to base the  
7 allocation methodology on actual program participation” because “electric generators are  
8 explicitly excluded from participating in the SGIP.”<sup>46</sup> Similarly, SCE proposes that the  
9 Commission “deny or modify the Application’s proposed SGIP revenue allocation so that SGIP  
10 revenue is only allocated to eligible customer classes,” which would exclude TLS customers.<sup>47</sup>

11 On this issue, the governing documents are D.16-06-055 and Resolution E-4926. D.16-  
12 06-055 required the utilities to “file cost allocation proposals to implement the statutory  
13 requirement of equitable distribution of the costs and benefits of the Self Generation Incentive  
14 Program.”<sup>48</sup> Further context is provided within D.16-06-055, observing that “costs are currently  
15 allocated across all customer classes, with residential customers absorbing roughly half the cost  
16 of the program even though just one percent of rebates go to projects with residential host  
17 customers” and finding that “staff proposes that future general rate cases (GRCs) adjust this

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<sup>46</sup> April 12, 2019, Direct Testimony of Catherine E. Yap on Behalf of Southern California Generation Coalition (SCGC), SCGC (Catherine Yap) at 27.

<sup>47</sup> April 12, 2019, Prepared Intervenor Testimony of Southern California Edison Company (SCE), Exhibit SCE-01 (Robert A. Thomas) at 12.

<sup>48</sup> D.10-06-055 at Ordering Paragraph (OP) 4.

1 allocation, so that costs are borne by customer classes more in proportion to their  
2 participation.”<sup>49</sup>

3 In Resolution E-4926, the Commission provided further clarification and guidance to the  
4 utilities, stating that utilities should “allocate costs on the basis of the actual benefits resulting  
5 from the disbursement of program incentives over the previous three years in its service  
6 territory.”<sup>50</sup> Finally, Resolution E-4927 finds that “SGIP cost allocation should be consistent  
7 with the Legislative intent to provide an equitable allocation of the costs and benefits” and that  
8 “the allocation methodology should be based on actual incentives paid out and should take into  
9 account the impact of program changes as they occur.”<sup>51</sup>

10 Applicants reviewed these governing documents when preparing testimony on this issue,  
11 and surmised that an “equitable distribution” should follow two criteria:

- 12 i) The allocation should be based on the benefits received over the last 3 years; and,
- 13 ii) The allocation should be to the relevant customer classes.

14 When considering the second criteria, Applicants identified the following customer classes:

- 15 1) Core Residential (tariff schedule GR)
- 16 2) Core Commercial & Industrial (tariff schedule G-10)
- 17 3) Core Gas Engine<sup>52</sup> (tariff schedule G-ENG)
- 18 4) Core Natural Gas Vehicle (tariff Schedule G-NGV)

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<sup>49</sup> D.16-06-055 at 14.

<sup>50</sup> Resolution E-4926 at OP 3.

<sup>51</sup> Resolution E-4926 at FOF 4.

<sup>52</sup> SoCalGas only.

- 1           5)     Core Gas Air Conditioning<sup>53</sup> (tariff schedule G-AC)
- 2           6)     Noncore Commercial & Industrial (tariff schedules GT-NC3 & GT-TLS3)
- 3           7)     Noncore Electric Generation (tariff schedules GT-NC5 & GT-TLS5)
- 4           8)     Noncore Enhance Oil Recovery<sup>54</sup> (tariff schedules GT-NC4 & GT-TLS4)
- 5           9)     Noncore Wholesale<sup>55</sup> (tariff schedule GT-TLS)

6 Applicants' SGIP proposal allocates costs based on benefits received over the last three years to  
7 the benefitting customer classes. Therefore, Applicants believe their allocation proposal  
8 complies with the CPUC's direction.

9           One of the benefits of the SGIP is that it facilitates end-use customers purchasing electric  
10 generation equipment. Once their new electric generating equipment is installed, this natural gas  
11 customer of SoCalGas or SDGE receives a separate meter for the electric generation and the  
12 separate meter will be placed on its own billing account under the appropriate electric generation  
13 rate.<sup>56</sup> While SCGC is correct that "electric generation customers are not included in the list of  
14 the customers eligible to be Host Customers,"<sup>57</sup> the initial commercial/industrial host potentially  
15 has two accounts following their utilization of the SGIP incentive: a commercial/industrial  
16 account and an electric generation account. If non-gas fired equipment is installed, such as  
17 battery storage, then the host does not add a second electric generating account and they remain  
18 solely on the commercial/industrial service rate. However, when electric generating equipment

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<sup>53</sup> SoCalGas only.

<sup>54</sup> SoCalGas only.

<sup>55</sup> SoCalGas only.

<sup>56</sup> Some smaller core commercial/industrial customers may choose to voluntarily keep all of their load on their core rate schedule, thus negating the need for a separate meter.

<sup>57</sup> SCGC (Yap) at 28.

1 is installed, the electric generating customer class benefits by having incremental, high load  
2 factor gas demand customers being added to their customer class.

3 SCGC proposes instead for the Commission to direct the Applicants to allocate SGIP  
4 costs to the core and noncore commercial/industrial classes because these are the customer  
5 classes that included the Host Customers prior to receiving the SGIP incentive payments and  
6 beginning to generate electricity.<sup>58</sup> SCGC notes that PG&E has proposed in its pending gas cost  
7 allocation proceeding<sup>59</sup> an allocation of SGIP costs based on incentive payments to projects  
8 using the gas customer class that the customer was in prior to installing its gas consuming SGIP  
9 technology.<sup>60</sup> SCGC further offers that the Commission should direct the Applicants to  
10 determine whether it would be more administratively feasible for the Applicants to create a  
11 surcharge for each of the electric generation customers who have received SGIP payments or,  
12 alternatively, to place these customers on a separate schedule so they can receive an allocation of  
13 SGIP costs.<sup>61</sup>

14 Regarding SCGC's invocation of PG&E's proposal to allocate costs to the host customer  
15 class, Applicants' take no position as to whether this allocation is appropriate for PG&E's  
16 customer base. However, the existence of PG&E's proposal cannot be taken as precedent for the  
17 purposes of this proceeding. At most, this difference in approach suggests likely ambiguity over  
18 the Commission's intent in ordering costs to be allocated to customer classes "on the basis of the  
19 actual benefits resulting from the disbursement of program incentives."

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<sup>58</sup> *Id.* at 34.

<sup>59</sup> A.17-09-006

<sup>60</sup> SCGC (Yap) at 33.

<sup>61</sup> *Id.* at 36.

1 SCGC's recommendation to surcharge or design separate rates for electric generation  
2 customers who have received SGIP payments highlights a significant shortfall in the  
3 interpretation that the host customer class is the group that should be allocated SGIP funding  
4 costs. SCGC makes this recommendation because, as noted earlier, the customer receiving SGIP  
5 incentives often has an additional service installed on a different rate after installing the  
6 equipment that qualified it to receive the incentive in the first place, and absent the surcharge or  
7 separate rate structure, the new service would not be participating in the funding of SGIP costs.  
8 However, if a rate adder or separate rate schedule can be created among electric generation  
9 customers in order to recover SGIP costs only from those electric generation customers that  
10 receive SGIP payments, another class of customers will certainly request a similar treatment, to  
11 the point that only customers receiving SGIP payments are funding the SGIP program.<sup>62</sup> This  
12 would be akin to asking California Alternative Rate for Energy (CARE) customers to fund the  
13 CARE rate discount, and logically this cannot work. An incentive program funded only by those  
14 individual customers receiving the incentive is no incentive program at all.

15 SCGC's proposal to design a surcharge or separate rate for the purpose of allocating  
16 SGIP costs only to those electric generation customers receiving SGIP payments should not be  
17 adopted by the Commission. Further, Applicants recommend the Commission not allocate SGIP  
18 program cost to the host customer class due to the aforementioned concern that electric  
19 generation customer receiving SGIP payments would not even participate in SGIP program  
20 funding obligations, a logical inconsistency in its own right. At the end of the day, incentive

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<sup>62</sup> This segmentation is already happening. As will be discussed later in this testimony the Small Business Utility Advocates are making a similar proposal to shield smaller core commercial customers from funding incentive payments they characterize as being made to larger core commercial customers. Applicants do not support SBUA's proposal.

1 programs by their definition must be at least partially financially supported by other customers  
2 not taking the incentive.

3 As a point of emphasis, the specific allocation factors proposed in this TCAP are not  
4 permanent, as Resolution E-3926 requires the effective SGIP cost allocation factors to be  
5 updated each year based on the actual benefits resulting from the disbursement of program  
6 incentives over the previous three years. As incentive recipients change, and more  
7 battery/storage equipment is installed, the process proposed by the Applicants will adjust the  
8 allocation to reflect an increased allocation of SGIP program costs to non-electric generation  
9 customer classes. However, if the Commission is sympathetic to the concerns raised by SCGC  
10 and SCE and is not willing to adopt Applicant’s proposal in its entirety, a hybrid solution would  
11 be to allocate SGIP costs 50% (half) to the host customer class, and 50% (half) to the receiving  
12 customer class. This solution would spread the costs among a larger body of ratepayers (thus  
13 decreasing the rate impact for any single ratepayer group), allow for customers receiving SGIP  
14 benefits to also continue participating in the funding of SGIP, and address the previously  
15 identified ambiguity in the SGIP decision and resolution.

## 16 **B. Response to Long Beach**

17 Long Beach alleges that recovering SGIP costs in their rates “runs in direct opposition to  
18 the direction from the Commission and the Legislature that SGIP costs and benefits be  
19 distributed equitably and the Commission direction that SoCalGas allocate the costs on the basis

1 of actual program benefits.”<sup>63</sup> Long Beach accurately summarizes the rate-design circumstances  
2 that lead to their rates including SGIP costs:

3           Despite not being allocated costs directly, some SGIP costs allocated to  
4           other transmission-level service customer classes will inherently be  
5           collected by the City of Long Beach through the system-wide transmission-  
6           level service rate. Because transmission-level service includes noncore  
7           electric generation served at the transmission level, which is allocated  
8           85.9% of the SGIP costs, Long Beach will pay for SGIP costs.<sup>64</sup>

9           As described previously, SoCalGas’ proposal follows the Commission’s and the  
10          Legislature’s direction because the proposal allocates costs “equitably” to customer classes based  
11          on benefits received. SoCalGas does not allocate any SGIP costs to wholesale customers as a  
12          customer class, but because the rate design process combines costs from several transmission  
13          level service (TLS) rate classes to generate a Sempra-wide TLS rate, SoCalGas did not consider  
14          making any further changes to its rate design. Nonetheless, SoCalGas believes Long Beach’s  
15          proposal has merit. Since the wholesale customer class (which, in addition to Long Beach,  
16          includes Southwest Gas, Vernon, and Mexicali) received no SGIP incentives, SoCalGas agrees  
17          to modify its rate design to exclude SGIP costs from wholesale customer rates.

### 18           **C. Response to SBUA**

19           SBUA partially agrees that SoCalGas’ and SDG&E allocation proposal for SGIP costs is  
20          reasonable and fair to ratepayers, stating that “(i)t is more equitable for customers to pay the  
21          costs of the SGIP based on the benefits they (or customers like them) receive.”<sup>65</sup> However,

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<sup>63</sup> April 12, 2019, Testimony on Behalf of The City of Long Beach, Energy Resources Department, Long Beach (Dennis Burke), Chapter 3 “Transmission-Level Service Rates” at 22:13-16.

<sup>64</sup> *Id.* at 22:5-9.

<sup>65</sup> Ex. SBUA (Chernick) at 15.

1 SBUA recommends that “(r)ather than recovering the CCI SGIP costs equally from all usage in  
2 the CCI class, the utilities should recover SGIP costs primarily from the higher blocks of the  
3 commodity charge,”<sup>66</sup> which SBUA supports with the assertion that “small commercial  
4 customers...are unlikely to install the gas-fired self-generation systems that make up the bulk of  
5 SoCalGas’s SGIP costs.”<sup>67</sup>

6 At its most fundamental level, the SGIP exists to incent customers to install certain  
7 equipment. To offer an incentive, utilities must collect the funds from a larger pool of customers  
8 than simply those that receive an incentive (otherwise, it is not much of an incentive). Almost by  
9 definition, then, some of the costs of the incentive program are borne by those not participating  
10 in the actual program. As detailed several times in this testimony, the Commission has ordered  
11 SoCalGas and SDG&E to allocate SGIP costs to only those customer classes that received  
12 benefits. SoCalGas’ and SDG&E’s core C&I customer classes fall squarely within that  
13 direction. As discussed in the earlier section regarding SCGC’s proposal for electric generation  
14 customers, one could conceivably parse out the core C&I customer class into smaller and small  
15 subsets of customers, until at some point only those that received incentives paid for them. The  
16 Commission should find that, with respect to the core C&I class, the Applicants’ proposal is  
17 reasonable, and that SBUA’s recommendation should not be adopted.

18  
19 This concludes our prepared rebuttal testimony.  
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<sup>66</sup> *Id.* at 16.

<sup>67</sup> *Id.* at 15.

**APPENDIX A**  
**(2016 TCAP excerpt)**

Application No: A.15-07-014  
Exhibit No.: \_\_\_\_\_  
Witness: Sharim Chaudhury

Application of Southern California Gas Company  
(U 904 G) and San Diego Gas & Electric Company  
(U 902 G) for Authority to Revise their Natural Gas  
Rates Effective January 1, 2017 in this Triennial  
Cost Allocation Proceeding Phase 2

A.15-07-014  
(Filed July 8, 2015)

**PREPARED REBUTTAL TESTIMONY OF**  
**SHARIM CHAUDHURY**  
**SOUTHERN CALIFORNIA GAS COMPANY**  
**SAN DIEGO GAS & ELECTRIC COMPANY**

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

April 11, 2016

1 **I. PURPOSE**

2 The purpose of my prepared rebuttal testimony on behalf of Southern California Gas  
3 Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E) is to address the  
4 testimony of The Utility Reform Network (TURN) and The Office of Ratepayer Advocates  
5 (ORA) as they pertain to the appropriate long run marginal cost (LRMC) method for calculating  
6 customer-related marginal cost; various changes in marginal cost studies and cost allocation  
7 process proposed by TURN; and ORA’s attempt to split customer-related cost into fixed and  
8 variable categories.

9 **II. THE COMMISSION SHOULD REJECT TURN AND ORA’S PROPOSED NCO**  
10 **METHOD FOR CALCULATING CUSTOMER-RELATED MARGINAL**  
11 **CAPITAL COST**

12 SoCalGas and SDG&E proposed the Rental method for calculating customer-related  
13 marginal capital cost (for capital equipment such as meter, regulator and service line). Both  
14 ORA<sup>1</sup> and TURN<sup>2</sup> recommend the use of the New Customer Only (NCO) method. For the  
15 reasons described below, the Commission should reject the NCO method.

16 The Commission adopted the Long Run Marginal Cost (LRMC) methodologies in D.92-  
17 12-058. In defining LRMC, the Decision noted:

18 When a marginal cost is defined, it is often described as the cost of  
19 an additional unit of goods or services. Implicit in the description  
20 is that it is the cost of the next unit in an efficient production  
21 process. There may be a number of feasible ways of expanding a  
22 utility system to meet additional customer load, but marginal cost  
23 pricing reflects efficient expansion of the system.<sup>3</sup>

24 Marginal cost pricing requires that a utility first derive the marginal cost of a service and  
25 then charge all customers, for that service, the same price set at marginal cost. The annual

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<sup>1</sup> Testimony of Pearlie Sabino at 5.

<sup>2</sup> Prepared testimony of William Perea Marcus at 1. TURN recommends the NCO method with Replacement.

<sup>3</sup> D.92-12-058, mimeo., at 11.

1 customer-related marginal capital cost is the annualized capital cost of hooking up an additional  
2 customer to the gas delivery system so that the customer has access to gas service. Marginal cost  
3 pricing dictates that *all* customers should be charged this cost of hooking up an additional  
4 customer. For cost allocation, the Rental method does precisely that by applying the marginal  
5 capital cost to hook up an additional customer to all customers, both existing and new customers.

6 The NCO method multiplies the total capital cost in a new hookup by the number of new  
7 customers added to the gas system. It then spreads the total capital costs in new hookups  
8 attributable to new customers to all customers, both existing and new. The resulting cost is  
9 considered customer-related marginal capital cost according to the NCO method. This cost  
10 reflects the average cost increase to all customers, both existing and new, when the total hookup  
11 costs associated with all new customers are spread across all customers.

12 The NCO method violates the concept of marginal cost pricing. If one were to assume  
13 that the number of new customers added to the gas system is zero, the NCO method would  
14 suggest that the marginal customer-related capital cost is zero dollars. Clearly, this is a  
15 nonsensical result. One should be able to define the customer-related marginal capital cost of  
16 hooking up an additional customer even in a zero customer growth scenario, and it is certainly  
17 not zero dollars. ORA is therefore not correct that under this zero customer growth scenario “the  
18 Rental method goes against the very essence of the LRMC concept because the Rental method is  
19 capable of producing customer-related capital cost when there should be none associated with  
20 zero new demand.”<sup>4</sup> The definition of customer-related LRMC remains the same irrespective of  
21 whether the customer growth is zero or non-zero; namely, the cost of hooking up an additional  
22 customer. The LRMC should never be zero.

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<sup>4</sup> Testimony of Pearlie Sabino at 41.

1           TURN makes the following claims regarding the Rental method:

2           The “rental” method for calculating customer facility costs is based  
3           on a peculiar theoretical framework at variance with conventional  
4           economic theory. The theory is based on an environment where a  
5           competitive rental market for customer access equipment exists but  
6           where purchase or up-front payment for that equipment is  
7           prohibited. Instead of being a competitive market, this is a market  
8           with extreme barriers to entry by relevant participants in that  
9           market (a prohibition against purchasing equipment or paying for it  
10          up front in hookup charges).<sup>5</sup>

11          This conclusion by TURN is not accurate because the market for customer excess  
12          equipment is indeed not competitive. For the safety of the gas customers and the integrity and  
13          reliability of the gas delivery system, the Commission mandates that the gas utilities own and  
14          maintain the customer access equipment. Had the customer access market been competitive,  
15          market forces most likely would have ensured the marginal cost pricing outcome and the  
16          Commission would have had no role to play to ensure a competitive outcome. The Commission  
17          has a role to play in this particular cost allocation area because of the fact that the customer  
18          access equipment market is not competitive, and this role is to adopt methodologies that mimic  
19          what would likely prevail in a competitive market. The Rental method provides the appropriate  
20          marginal cost pricing outcome.

21          Both ORA and TURN support the methodology that SoCalGas and SDG&E used in  
22          estimating Distribution-related marginal capital cost and marginal cost revenue.<sup>6</sup> Distribution-  
23          related marginal capital cost captures additional annualized capital investment required to serve  
24          additional demand (peak day demand for Medium Pressure Distribution system and peak month  
25          demand for High Pressure Distribution system). Distribution-related marginal cost revenue for  
26          capital equipment is then derived by multiplying the distribution-related marginal capital cost by

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<sup>5</sup> Prepared testimony of William Perea Marcus at 21.

<sup>6</sup> Testimony of Pearlie Sabino at 5; Prepared testimony of William Marcus at 33.

1 the total demand, both new and existing demand. The Rental method is consistent with the  
2 methodology used in estimating distribution-related marginal capital cost. The Rental method  
3 first estimates the customer-related marginal capital cost as the cost of hooking up an additional  
4 customer. It then derives customer-related marginal cost revenue for access equipment by  
5 multiplying the customer-related marginal capital cost by the total number of customers, both  
6 new and existing customers. The Commission should maintain the consistency in the application  
7 of the concept of LRMC across customer-related and distribution-related functions and adopt the  
8 Rental method.

9 Finally, TURN and ORA contend that the NCO method is the long-standing approach  
10 adopted by the Commission. This contention does not capture the long and somewhat  
11 complicated history of the methodology used to develop the marginal unit costs for customer-  
12 related facilities. In the original LRMC decision, the Commission adopted the rental method.<sup>7</sup>  
13 In subsequent Biennial Cost Allocation Proceedings (BCAP), the Commission has stated a  
14 “preference” for the NCO methodology. However, for SoCalGas and SDG&E, the use of the  
15 Rental or NCO method has not been fully litigated over the last five times the Commission has  
16 heard this issue due to settlement agreements by parties. SoCalGas and SDG&E entered into  
17 these settlement agreements with the understanding that the acceptance of a particular approach  
18 was not precedential for future proceedings. Therefore, the Commission should not adopt the  
19 NCO method simply because the Commission had stated a “preference” for it. In light of the  
20 arguments made above and in SoCalGas and SDG&E’s direct testimony, the Commission should  
21 adopt the Rental method instead.

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<sup>7</sup> D.92-12-058, mimeo., Conclusions of Law #5.