

Application of SAN DIEGO GAS & ELECTRIC
COMPANY (U 902 E) For Authority To
Update Marginal Costs, Cost Allocation,
And Electric Rate Design.

Application 11-10-002
Exhibit No.: (SDG&E-206)

PREPARED REBUTTAL TESTIMONY OF
WILLIAM G. SAXE
CHAPTER 6
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

JULY 17, 2012



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1 **PREPARED REBUTTAL TESTIMONY OF**

2 **WILLIAM G. SAXE**

3 **(CHAPTER 6)**

4 **I. OVERVIEW AND PURPOSE**

5 The purpose of this rebuttal testimony is to respond to the direct testimony submitted by
6 Division of Ratepayer Advocates (DRA) witness Louis Irwin, San Diego Consumers' Action
7 Network (SDCAN) witness William B. Marcus, California Farm Bureau Federation (Farm
8 Bureau) witness Wendy L. Illingworth, California City-County Street Light Association (CAL-
9 SLA) witness Alison Lechowicz, and Federal Executive Agencies (FEA) witness Maurice
10 Brubaker regarding marginal distribution customer cost issues. Specifically, I will address
11 recommendations raised by these witnesses and reach the following conclusions regarding those
12 recommendations:

- 13 • Rental Method proposed by SDG&E and supported by FEA is the correct
14 methodology to use in calculating marginal distribution customer costs instead of the
15 New Customer Only (NCO) Method, also called the One-Time Hookup Cost (OTHC)
16 Method, proposed by DRA, SDGAN, Farm Bureau, and CAL-SLA;
- 17 • SDG&E's proposed adjustments to the Customer Account and Service costs, based
18 on suggestions from DRA and SDGAN, should be adopted;
- 19 • SDGAN's proposed adjustment to the assignment of Vegetation Management costs
20 between marginal distribution customer-related and demand-related costs should be
21 rejected;
- 22 • DRA's proposed 10% reduction to Transformer, Services, and Meter (TSM) costs to
23 account for customer contributions above Rule 16 service line allowances should be
24 adopted;
- 25 • DRA's proposed 5% reduction to residential TSM costs to account for customer
26 "infill" should be rejected;
- 27 • Three corrections to SDG&E's marginal distribution customer cost model should be
28 adopted; and
- 29 • The California Public Utilities Commission (Commission) should adopt the updated
30 marginal distribution customer costs proposed by SDG&E that reflect the adjustments
31 mentioned above, as presented in Table WGS-4.

1
2 My testimony is organized as follows:

3 **Section II – Rebuttal to DRA:**

- 4 A. Rental Method versus NCO (or OTHC) Method to calculate Marginal Distribution
5 Customer Costs.
6 B. Customer Account and Service Cost Adjustments.
7 C. Adjustment to TSM costs for Customer Contributions above Rule 16 Allowances.
8 D. Adjustment to TSM costs for Residential Infill.

9 **Section III – Rebuttal to SDCAN:**

- 10 A. Rental Method versus OTHC (or NCO) Method to calculate Marginal Distribution
11 Customer Costs.
12 B. Customer Account and Service Cost Adjustments.
13 C. Vegetation Management Adjustment.

14 **Section IV – Rebuttal to Farm Bureau:** Rental Method versus NCO (or OTHC)
15 Method to calculate Marginal Distribution Customer Costs.

16 **Section V – Rebuttal to CAL-SLA:** Rental Method versus NCO (or OTHC) Method to
17 calculate Marginal Distribution Customer Costs.

18 **Section VI – Corrections to Marginal Distribution Customer Cost Model:** presents
19 three corrections to SDG&E’s marginal distribution customer cost model.

20 **Section VII – Updated Marginal Distribution Customer Costs:** presents SDG&E’s
21 updated marginal distribution customer costs that reflect the adjustments proposed by
22 SDG&E in this testimony.

23 **Section VIII – Summary and Conclusion:** the Commission should: (a) adopt SDG&E’s
24 calculation of marginal distribution customer costs based on the Rental Method; (b) adopt
25 the adjustments made to Customer Account and Service costs; (c) reject SDCAN’s
26 proposal to assign Vegetation Management costs differently between marginal
27 distribution customer-related and demand-related costs; (d) adopt DRA’s proposal to
28 reduce TSM costs by 10% to account for customer contributions above Rule 16 service
29 line allowances; (e) reject DRA’s proposal to reduce residential TSM costs by 5% to
30 adjust for residential infill; (f) adopt three corrections to SDG&E’s marginal distribution
31 customer cost calculation; and (g) adopt SDG&E’s updated marginal distribution
32 customer costs, as presented in Table WGS-4.

1 **II. REBUTTAL TO DRA**

2 **A. Rental versus NCO Method**

3 DRA witness Irwin proposes that the Commission adopt marginal distribution customer
4 costs based on the NCO (or OTHC) Method, which he states is the methodology the Commission
5 has generally adopted for this purpose since 1992. Mr. Irwin states that the Commission has
6 consistently rejected the Rental Method because it found that this method overcharges customers
7 for the cost of their TSM equipment. Mr. Irwin argues that the Rental Method overstates
8 marginal distribution customer costs because it disregards economic depreciation of TSM
9 facilities.¹

10 SDG&E disagrees with DRA that the NCO Method should be used to develop marginal
11 distribution customer costs in this proceeding. The main justification DRA provides for adoption
12 of the NCO Method is five prior Commission decisions that adopt the NCO method, with the
13 most recent of those decisions being issued 15 years ago. SDG&E agrees with FEA² witness
14 Brubaker that DRA cannot claim that decisions dating back at least 15 years should set the
15 precedent in the adoption of the marginal distribution customer costs methodology in this
16 proceeding. The methodology to use in developing marginal distribution customer costs has
17 always been a contentious issue in these cases, with many twists and turns along the way. For
18 instance, it is interesting to note that in every decision cited by DRA in support of the NCO
19 method, DRA actually supported the Rental Method over the NCO Method in those prior cases.
20 It would be inappropriate to hold DRA to the position it took on this issue in those previous
21 cases, as it would also be inappropriate to hold the current Commission to the positions adopted
22 by the Commission on this issue at least 15 years ago. It is also important to note that the
23 Commission has never adopted the NCO (or OTHC) Method for SDG&E in any proceeding as
24 the appropriate methodology to be used in its electric marginal cost studies. For these reasons,
25 SDG&E believes that the Commission should base its decision on the appropriate methodology
26 to use in the development of marginal distribution customer costs on the evidence presented in
27 this case and not on decisions made at least 15 years ago based, on the evidence presented in
28 other cases.

29 In addition, DRA claims that the Rental Method overstates marginal distribution
30 customer costs; however, just the opposite is true. The NCO Method understates the marginal

¹ DRA Ch. 3 (Irwin), pp. 3-7 – 3-9.

² FEA (Brubaker), pp. 7-8.

1 distribution customer costs because this method takes the full cost per customer to hook up a new
2 customer (not the annualized cost), multiplies that value only by the number of new customers
3 estimated to be added in that class, and then divides this amount by the total number of
4 customers in the class to get the unit cost per customer. This results in inefficient price signals to
5 customers considering new hookups because the approach assures that new customers will never
6 pay the full costs incurred to hook up to the utility's electric system.

7 "Marginal Customer Cost" is defined as the cost to provide service for the next customer
8 or "...the change in costs when the utility adds a single customer", as DRA correctly states.³

9 The Rental Method using the real economic carrying charge (RECC) correctly reflects the
10 marginal cost of providing service to the next customer. Through the use of the RECC factors
11 for annualizing the TSM costs, the Rental Method contains depreciation charges that account for
12 the plant investment that is "used up", causing the need for eventual replacement. Conversely,
13 the NCO Method does not calculate the marginal customer costs to provide service to the next
14 customer but rather calculates the incremental change in total customer costs due to the expected
15 customer growth in each customer class. By applying TSM costs to only new customers and
16 then dividing these incremental costs by all customers, the NCO Method is economically
17 inefficient because it understates marginal distribution customer costs. For this reason, the NCO
18 Method is not the correct method to use to develop the marginal distribution customer costs in
19 this proceeding.

20 DRA appears to recognize the inefficiency in the NCO Method by proposing an
21 adjustment to customer growth rates used in the NCO Method to correct for a situation where
22 they state that "...the NCO Method arguably does not produce useful results."⁴ The issue that
23 DRA refers to exists in a situation when the growth rate for a customer class is negative. When a
24 customer class' growth rate is negative, the NCO Method will calculate negative marginal costs
25 for this class for the TSM portion of the costs. This result is nonsensical. In fact, under the NCO
26 method, any change in customer growth forecasts will result in a change to the TSM cost per
27 customer, even though the TSM costs themselves have not changed. Thus, the NCO Method's
28 flaw is not limited to just a negative growth situation. While DRA proposes an adjustment to the
29 NCO Method calculation to try to correct for this flaw when customer class growth rates are
30 negative, DRA's proposal would not correct the inherent flaw in the methodology. In

³ DRA Ch. 3 (Irwin), p. 3-6, lines 18-19.

⁴ DRA Ch. 3 (Irwin), p. 3-13, lines 22-29.

1 comparison, the Rental Method correctly applies the TSM costs to all customers. For this
2 reason, the Rental Method is a better measure of marginal distribution customer costs.

3 For the reasons stated above, the Commission should reject DRA's proposal to use the
4 NCO (or OTHC) Method and adopt SDG&E's proposal to use the Rental Method to develop
5 marginal distribution customer costs in this proceeding.

6 **B. Customer Account and Service Cost Adjustment**

7 DRA witness Irwin states that SDG&E's Customer Service costs are too high because
8 SDG&E failed to eliminate costs that are truly not marginal and also failed to differentiate costs
9 by customer class. In addition, DRA states that SDG&E did not capture benefits related to
10 Advanced Metering Infrastructure (AMI) as offsets to Customer Service costs. Because DRA
11 believes SDG&E did not provide the necessary information for an accurate estimate of SDG&E-
12 specific Customer Service costs, DRA proposes that an average of PG&E and SCE Customer
13 Service costs be used as a proxy for SDG&E's costs for the purpose of calculating marginal
14 distribution customer costs in this proceeding.⁵

15 SDG&E disagrees with DRA's proposal to use an average of PG&E and SCE Customer
16 Service Costs as a proxy for SDG&E's Customer Service costs in this proceeding. DRA's
17 proposal assumes that SDG&E, PG&E, and SCE system costs and customer classes are similar
18 without actually checking to see if this assumption is correct. Comparing Customer Service
19 costs presented in Table 3-3 of Mr. Irwin's direct testimony, it is apparent that there are
20 significant differences in these costs for non-residential customers of PG&E and SCE.⁶ For this
21 reason, SDG&E recommends that the Commission reject DRA's proposal to use an average of
22 PG&E and SCE Customer Service costs as a proxy for SDG&E's costs to develop marginal
23 distribution customer costs in this proceeding.

24 However, SDG&E does agree with DRA that various adjustments are needed to the
25 Customer Account and Service costs presented by SDG&E in this proceeding in order for these
26 costs to be useable in the development of the marginal distribution customer costs.⁷ First, a
27 significant portion of the Federal Energy Regulatory Commission (FERC) Account 908 costs
28 need to be removed because these costs represent refundable costs, which should not be included
29 in the calculation of marginal distribution customer costs. This change results in a reduction of

⁵ DRA Ch. 3 (Irwin), pp. 3-9 – 3-13.

⁶ DRA Ch. 3 (Irwin), p. 3-11, Table 3-3.

⁷ Customer Services costs are 2009 recorded costs which are escalated to 2012 dollars for the purpose of developing the marginal distribution customer costs.

1 approximately (\$133.3) million to FERC Account 908 costs from approximately \$151.6 million
2 to \$18.3 million.⁸ Second, DRA is correct that an adjustment is needed to Customer Account
3 and Service costs to capture benefits related to AMI. The Customer Account and Service costs
4 used in SDG&E's filed marginal distribution customer cost calculation are 2009 costs escalated
5 to 2012 dollars. Thus, these costs do not fully capture the AMI benefits expected today. The
6 deployment of AMI is projected to result in O&M cost savings, with a significant part of those
7 savings coming from the reduction in FERC Account 902 meter reading costs. As addressed
8 further in response to SDCAN witness Marcus' testimony, SDG&E proposes an adjustment to
9 reduce meter reading cost by (\$5.8) million as a proxy for AMI benefits, which will result in the
10 elimination of the meter reading costs. Eliminating meter reading costs will likely overstate
11 AMI benefits because the deployment of AMI also results in increases to other O&M costs that
12 are not captured in the 2009 costs. However, due to the need to reflect AMI benefits in this
13 proceeding SDG&E proposes this adjustment as a proxy for the purpose of calculating marginal
14 distribution customer costs. This adjustment will result in 2009 FERC Account 902 costs being
15 reduced from approximately \$10.3 million to approximately \$4.5 million.

16 For the reasons stated above, SDG&E proposes the adoption of the following adjustments
17 to Customer Account and Service costs used in the development of marginal distribution
18 customer costs: (a) reduction of (\$5.8) million to FERC Account 902 costs as a proxy for AMI
19 benefits; and (b) reduction of approximately (\$133.3) million to FERC Account 908 costs to
20 eliminate refundable costs. These adjustments are described in more detail in response to
21 SDCAN witness Marcus' testimony.

22 **C. Adjustment to TSM costs for Customer Contributions above Rule 16 Allowances**

23 DRA witness Irwin recommends a 10% reduction to TSM costs to reflect the customer
24 contribution to those costs. Specifically, DRA states that when the cost of a new installation
25 exceeds the line extension allowances under Rule 15 and Rule 16, customers pay a portion of
26 such TSM costs and thus, the utility TSM cost responsibility should be less.⁹

27 SDG&E agrees with DRA that customer contributions to TSM costs that are not
28 refundable such as under Rule 16 should be subtracted out of the TSM costs used in the
29 development of the marginal distribution customer costs in this proceeding. For this reason,

⁸ The FERC Account 908 adjustment that is needed was brought to SDG&E's attention by SDCAN witness Marcus through data requests served while representing the Utility Consumers Action Network (UCAN) and prepared testimony submitted with SDCAN.

⁹ DRA Ch. 3 (Irwin), p. 3-15.

1 SDG&E supports the adoption of the 10% reduction to TSM costs proposed by DRA for use in
2 developing the marginal distribution customer costs in this proceeding as a proxy for the
3 customer contributions above Rule 16 service line allowances.

4 **D. Adjustment to TSM costs for Residential Infill**

5 DRA witness Irwin proposes a 5% reduction to residential TSM costs to account for the
6 fact that the cost of residential customers moving into an existing neighborhood described as
7 “infill” could be less because these customers might not require a transformer if they can be
8 served by a pre-existing transformer.¹⁰

9 SDG&E disagrees with DRA’s proposed 5% reduction of TSM cost for residential
10 customers to account for customer “infill.” An “infill” customer is described as a new customer
11 who would not require the installation of a new transformer if the customer can be served by a
12 pre-existing transformer. SDG&E agrees that there are situations where new customers can
13 connect to existing infrastructure. However, SDG&E has properly addressed “infill” customers
14 by basing the cost per customer on the transformers’ assumed maximum capacity. SDG&E
15 estimated the number of customers (by maximum demand level) which could be supported by a
16 single transformer. The cost of a transformer is then divided by the number of estimated
17 customers it can serve. By assuming transformers are utilized at their maximum capacity, the
18 per customer cost of transformers reflected in SDG&E’s marginal distribution customer costs are
19 accurate whether the customer receives service at the time the transformer is initially installed or
20 if the customer connects as an “infill” customer after initial installation. For this reason, the
21 Commission should reject DRA’s proposal to reduce residential TSM costs by 5% to account for
22 “infill” customers.

23 **III. REBUTTAL TO SDCAN**

24 **A. Rental versus OTHC Method**

25 SDCAN witness Marcus proposes that the Commission adopt marginal distribution
26 customer costs based on the OTHC (or NCO) Method for various reasons. Like DRA, Mr.
27 Marcus suggests that the Commission should continue its practice of adopting the OTHC
28 Method and cites various decisions in support of this practice. Also, Mr. Marcus argues that
29 Rental Method provides customers with an incorrect price signal while the OTHC Method
30 provides customers with the correct price signal for distribution customer-related equipment
31 because it charges an upfront cost for the customer equipment and thus, correctly signals to the

¹⁰ DRA Ch. 3 (Irwin), pp. 3-15 and 3-16.

1 customer the cost of installing the equipment. Finally, Mr. Marcus states that the OTHC Method
2 achieves the Commission goal of using marginal cost pricing to achieve economic efficiency.¹¹

3 SDG&E disagrees with all of the reasons SDCAN provides in support of the OTHC
4 Method to calculate marginal distribution customer costs in this proceeding. First, just like
5 DRA, SDCAN cites dated Commission decisions that adopted the OTHC Method, and implies
6 that these decisions should set the precedent for adoption of the marginal distribution customer
7 cost methodology by the Commission in this proceeding. The Commission should base its
8 decision in this proceeding on the evidence presented by parties in this case, and not on previous
9 Commission decisions based on the evidence presented in those cases. In addition, as stated
10 before in response to DRA's testimony, the Commission has never adopted the OTHC (or NCO)
11 method for SDG&E in any proceeding as the appropriate methodology to be used in its electric
12 marginal cost studies. This is especially important to mention since SDCAN mistakenly states
13 that "[t]he OTHC Method has been adopted in...the 1996 rate design for SDGE...".¹² SDCAN
14 cites SDG&E GRC D.96-04-050 as support for this claim. However, D.96-04-050 is the
15 decision for Southern California Edison's 1995 GRC Phase 2 and not SDG&E's GRC.

16 Second, SDCAN is incorrect when it states that the Rental Method provides customers
17 with incorrect price signals because distribution customer assets have no value once installed
18 since assets are not "interchangeable across customers."¹³ Actually, just the opposite is true. As
19 explained earlier in response to DRA's testimony, the OTHC (or NCO) Method understates the
20 marginal distribution customer costs because this method takes the full cost per customer to hook
21 up a new customer (not the annualized cost), multiplies that value only by the number of new
22 customers estimated to be added in that class, and then divides this amount by the total number
23 of customers in the class to get the unit cost per customer. This results in inefficient price signals
24 to customers considering new hookups because the approach assures that new customers will
25 never pay the full costs incurred to hook up to the utility's electric system (by ignoring existing
26 TSM assets when calculating its version of marginal costs). SDCAN tries to justify this
27 treatment of ignoring existing TSM assets by arguing that distribution customer assets have no
28 value once installed. However, even this reason for proposing the flawed OTHC Method is
29 incorrect because meters and transformers have salvage value, as SDCAN acknowledges.¹⁴

¹¹ SDCAN (Marcus), pp. 4-11.

¹² SDCAN (Marcus), pp. 4-5, beginning on line 28.

¹³ SDCAN (Marcus), pp. 5-6.

¹⁴ SDCAN (Marcus), p. 6, footnote 3.

1 Also, residential and small commercial customers generally share final line transformers, so any
2 reduction in transformer use by one customer can be used by another customer in the area.
3 Therefore, SDCAN has presented no justification for excluding existing TSM assets from the
4 calculation of marginal distribution customer costs that withstands scrutiny.

5 Third, SDCAN is confused when it claims that the OTHC Method better represents a
6 competitive market compared to the Rental Method. It tries to use the housing market as support
7 for this claim by arguing that the Rental Method assumes that everyone is required to rent a
8 home and no one is allowed to purchase a home.¹⁵ This housing analogy actually provides
9 support for the Rental Method not the OTHC Method. The Rental Method correctly assumes
10 that all customers, whether owners or renters, face the same real costs. The marginal cost to both
11 the owner and renter is the same because there is opportunity cost that an owner would incur by
12 occupying it equal to the rent that could be charged for the home. The same logic applies for
13 renting versus purchasing TSM assets. Even if a customer decides to purchase TSM equipment,
14 the Rental Method is still the appropriate method to use in the development of marginal
15 distribution customer costs because it uses the RECC factor to annualize the cost of TSM assets
16 which correctly accounts for the opportunity cost of the purchase. In contrast, the OTHC
17 Method does not represent a competitive market, because it assumes that everyone purchases the
18 TSM assets. More importantly, it fails to provide the correct price for such assets because it only
19 applies such costs to forecasted new customers.

20 Finally, SDCAN tries to justify the use of the OTHC Method by arguing that this method
21 "...achieves many of the Commission's oft-stated goals for using marginal costs pricing to
22 achieve economic efficiency...because the only time the cost of customer access is in fact
23 marginal is when the customer is making the decision to connect to the system."¹⁶ SDG&E
24 agrees with SDCAN on this point except for its claim that the OTHC Method properly reflects
25 marginal costs. As explained above, excluding existing TSM assets from the calculation of
26 marginal distribution customer costs actually results in inefficient price signals to customers
27 considering new hookups. SDCAN cites previous Commission decisions to try to support its
28 claim that the OTHC Method achieves the Commission's goal for using marginal cost pricing to
29 achieve economic efficiency. What is interesting about the decisions it cites for this support is
30 that two of the decisions actually adopted the Rental Method to calculate marginal distribution

¹⁵ SDCAN (Marcus), pp. 7-8.

¹⁶ SDCAN (Marcus), p. 9, lines 10-11.

1 customer costs. D.90-07-055, establishing guidelines for estimating long-run marginal cost
2 (LRMC) for gas operations, stated that “[t]he utilities should develop customer LRMCs for each
3 of the ACAP rate groups, annualizing the costs with a real economic carrying charge, and add
4 administrative and general and operating and maintenance expenses.”¹⁷ D.92-12-058, adopting
5 rate design for gas operations, stated that “[t]he NCO proposals of TURN and PG&E provide no
6 persuasive reasons for the Commission to deviate from established methodology... We choose
7 instead to adopt the well-developed rental market approach used for the last four years in
8 electric.”¹⁸

9 For the reasons stated above, the Commission should reject SDCAN’s proposal to use the
10 OTHC (or NCO) Method and adopt SDG&E’s proposal to use the Rental Method to develop
11 marginal distribution customer costs in this proceeding.

12 **B. Customer Account and Service Costs**

13 SDCAN witness Marcus states that SDG&E’s Customer Account and Service costs used
14 to calculate SDG&E’s marginal distribution customer costs are too high for three reasons. First,
15 Mr. Marcus states that SDG&E 2009 meter reading costs reflected in the 2009 Customer
16 Account and Service costs are based on the costs of reading old meters that will not exist in the
17 test year because of the implementation of AMI meters. For this reason, SDCAN proposes a
18 reduction in meter reading costs of (\$5,796,000), based on the reduction in metering reading
19 costs of (\$5,318,000) from 2009 to 2012 due to AMI benefits reflected in the direct testimony of
20 SDG&E witness Paul Pruschski in SDG&E’s 2012 GRC Phase 1 (A.10-12-005)¹⁹ and half the
21 (\$956,000) meter cost reduction proposed by DRA²⁰ in SDG&E’s 2012 GRC Phase 1 (A.10-12-
22 005). Second, Mr. Marcus proposes a reduction in O&M costs to offset customer service
23 miscellaneous revenues proposed in the direct testimony of Todd Cahill in SDG&E’s 2012 GRC
24 Phase 1 (A.10-12-005).²¹ Finally, Mr. Marcus proposes an adjustment to eliminate most of
25 FERC Account 908 costs SDG&E included in the Customer Account and Service costs because
26 these costs are associated with energy efficiency, demand response, California Solar Initiative
27 (CSI), and Self-Generation Incentive Program (SGIP) and thus, are not considered marginal
28 costs.²²

¹⁷ D.90-07-055, p. 7.

¹⁸ D.92-12-058, p. 40.

¹⁹ 2012 GRC Phase 1 (A.10-12-005), Exhibit SDG&E-12R, p. PCP-3, Table PCP-2, Table 15-1.

²⁰ 2012 GRC Phase 1 (A.10-12-005), Exhibit DRA-15, p. 2.

²¹ 2012 GRC Phase 1 (A.10-12-005), Exhibit SDG&E-39, pp. TJC-3 and TJC-4.

²² SDCAN (Marcus), pp. 13-21.

1 As stated earlier in response to the DRA rebuttal testimony, SDG&E agrees that changes
2 need to be made to the Customer Account and Service costs to allow for their use in the
3 development of marginal distribution customer costs in this proceeding. The changes needed to
4 these costs are as follows. First, as a proxy to capture AMI benefits for use in this marginal
5 distribution customer cost model, SDG&E agrees in principle with SDCAN's proposed
6 adjustment to meter reading costs. While SDG&E has concerns with how the SDCAN
7 adjustment amount was calculated, the use of a rounded (\$5.8) million adjustment amount seems
8 reasonable, as explained below. One issue SDG&E has with the (\$5,796,000) adjustment
9 amount proposed by SDCAN is that it reflects AMI cost impacts for both electric and gas
10 operations. For instance, this adjustment is based on a combination of (\$8,901,000) in reduced
11 meter reading costs and \$3,105,000 in higher meter-related costs. However, only 64.8% of the
12 (\$8,901,000) in reduced meter reading costs and \$511,000 in higher meter-related costs are
13 associated with electric operations. If SDG&E removes the gas portion of these costs from the
14 adjustment that SDCAN proposed, the remaining AMI benefit adjustment is approximately
15 (\$2,843,000). Another issue is that the adjustment that SDCAN proposed is calculated based
16 only on the AMI impacts presented in SDG&E witness Paul Pruschski's A.10-12-005 direct
17 testimony, when in fact other areas of the SDG&E's electric system are impacted by AMI
18 implementation. For this reason, SDCAN's proposed adjustment most likely understates the true
19 AMI impact expected to occur in 2012. While not perfect, one simple approach to reflect AMI
20 benefits in the 2009 Customer Account and Service costs used in the development of marginal
21 distribution customer costs is to simply eliminate the electric meter reading costs from the 2009
22 Customer Account and Service costs or 64.8% of (\$8,901,000) for an adjustment of
23 approximately (\$5,768,000). Because this adjustment amount is relatively close to the AMI
24 benefit adjustment proposed by SDCAN, SDG&E agrees with the use of a rounded (\$5.8)
25 million adjustment as a proxy for AMI benefits in this proceeding. For this reason, SDG&E
26 proposes that the 2009 FERC Account 902 meter reading costs be reduced by (\$5.8) million in
27 the Customer Account and Service costs used in the marginal distribution customer cost
28 calculation.

29 Second, SDG&E agrees with SDCAN that an adjustment for customer service related
30 miscellaneous revenues should be made to the Customer Account and Service costs.
31 Miscellaneous revenues are not included in base rate revenues and thus, any costs incurred to
32 generate miscellaneous revenues should be excluded from marginal distribution customer costs.
33 SDG&E agrees with SDCAN's proposal to simply assume that miscellaneous revenues equal

1 costs and thus reduce the Customer Account and Service costs by the amount of the applicable
2 miscellaneous revenues. SDCAN proposes an adjustment of (\$5,504,000) for miscellaneous
3 revenues resulting from Service Establishment Charge, Collection Charges, and Returned Check
4 Fees, as presented in the SDG&E 2012 GRC Phase 1 (A.10-12-005) direct testimony of SDG&E
5 witness Todd Cahill. SDG&E also recommends that this adjustment include additional
6 miscellaneous revenues of \$882,000, which reflect \$481,000 in Late Payment Fees, \$311,000 in
7 Other Service Revenues, and \$90,000 in DA Access Fees, also presented in Mr. Cahill's
8 testimony.²³ For this reason, SDG&E proposes a total miscellaneous revenue adjustment amount
9 of approximately (\$6.4) million to be applied as a reduction to the FERC Account 903 costs in
10 the Customer Account and Service costs used in the marginal distribution customer cost
11 calculation.

12 Third, SDG&E agrees with SDCAN that a significant portion of FERC Account 908
13 costs need to be removed from marginal distribution customer costs because these costs
14 represent refundable costs, costs associated with energy efficiency, demand response, CSI, and
15 SGIP programs that are recovered separately from base rates. Therefore, SDG&E agrees with
16 SDCAN that \$94,614,508 in energy efficiency costs, \$14,639,400 in demand response costs,
17 \$23,845,141 in CSI costs, and \$204,723 in SGIP costs, identified in Table 3 of Mr. Marcus'
18 prepared testimony,²⁴ should be removed from the FERC Account 908 costs used in the
19 development of marginal distribution customer costs.

20 However, SDG&E disagrees with SDCAN's proposal on the removal of a proportion of
21 the additional FERC Account 908 costs (\$18,313,868) that are labeled as "Costs included in base
22 rates", presented in Table 3 of Mr. Marcus' testimony. These costs are labeled base rate costs
23 because these costs will be collected in base rates and will not be recovered as part of refundable
24 budgets such as the energy efficiency budget. SDCAN eliminated the costs associated with
25 Customer Programs, Clean Energy Programs, and Electric Clean Transportation based on a claim
26 that the costs for these programs are not marginal. It appears that SDCAN assumes that, since
27 these costs are related to these programs, these costs would be recovered through a separate
28 mechanism and thus, are not marginal costs. However, these costs are not recovered separately
29 through program budgets such as the energy efficiency refundable budget, which is why these
30 costs were filed for recovery through base rates in SDG&E's 2012 GRC Phase 1 (A.10-12-005).

²³ 2012 GRC Phase 1 (A.10-12-005), Exhibit SDG&E-39, pp. TJC-4 and TJC-6.

²⁴ SDCAN (Marcus), p. 16.

1 Also, based on SDG&E’s response to UCAN DR-08, Question 8, that provided the FERC
2 Mapping for FERC Account 907, 908 and 910 costs, SDCAN proposed an adjustment to the
3 “Commercial, Industrial & Governmental Customer Services” and “Research, Development &
4 Demonstration” costs presented in the direct testimony of SDG&E witness Kathleen Cordova in
5 SDG&E’s 2012 GRC Phase 1 (A.10-12-005). As requested in this data request, SDG&E
6 provided the amounts included in Ms. Cordova’s testimony²⁵ that should be mapped to FERC
7 Accounts 907, 908, and 910 for the seven cost component categories identified in the data
8 request. Based on this response, SDCAN assumed that adjustments were needed to
9 “Commercial, Industrial & Governmental Customer Services” costs and “Research,
10 Development & Demonstration” costs because this response showed that some or all of these
11 costs in Ms. Cordova’s testimony would not actually be assigned to FERC Accounts 907, 908 or
12 910 in the FERC Mapping process. However, this mapping process is simply showing the dollar
13 values from Ms. Cordova’s 2012 GRC Phase 1 testimony (A.10-12-005) that would be mapped
14 to Accounts 907, 908, and 910 for the seven cost categories identified in the data request. For
15 instance, it shows that 90.99% of the “Commercial, Industrial & Governmental Customer
16 Services” costs in Ms. Cordova’s testimony should be mapped to FERC Account 908 and the
17 remaining costs mapped to another account, which happens to be FERC Account 903. Also, it
18 shows that none of the “Research, Development & Demonstration” costs in Ms. Cordova’s
19 testimony should be recorded to FERC Account 907, 908, and 910 because these costs are
20 actually recorded in FERC Account 930. This mapping process is not showing corrections
21 needed to the 2009 recorded costs. For this reason, no adjustment is needed to the FERC
22 Account 908 costs labeled as “Costs included in base rates”.

23 Finally, SDCAN proposes to allocate 100% of the “Customer Assistance” costs to
24 residential customers and 100% of the “Commercial, Industrial & Governmental Customer
25 Services” costs to non-residential customers, with each small non-residential customer (demand
26 < 20 kW) assigned a weighting of 1 and each medium/large non-residential customer (demand
27 >20 kW) assigned a weighting of 5 for these costs. SDG&E has concerns with this proposal.
28 One concern is that, just as with its treatment of Vegetation Management costs, SDCAN’s
29 methodology assigns individual treatment for just two of the Customer Account and Service
30 costs. For the same reasons stated below in opposition to SDCAN’s Vegetation Management
31 cost proposal, SDG&E disagrees with allocating these two costs separately when all Customer

²⁵ 2012 GRC Phase 1 (A.10-12-005), Exhibit SDG&E-15R, p. KHC-9, Table KHC-2.

1 Account and Service costs are being allocated using one allocation factor based on the number of
2 customers. Another issue with SDCAN’s proposal is that it provides no valid support for the
3 weighting factors it proposes to assign the “Commercial, Industrial & Governmental Customer
4 Services” costs to non-residential customers. SDCAN states that the higher weighting of 5 is
5 justified for customer’s with demand > 20 kW because these customers have account
6 executives.²⁶ However, not all customer accounts with demand > 20 kW have account
7 executives. In fact, the majority of customer accounts with demand between 20-200 kW do not
8 have account executives. For this reason, SDCAN’s proposal to separately assign the “Customer
9 Assistance” and “Commercial, Industrial & Governmental Customer” costs to specific customer
10 classes should be rejected.

11 For the reasons stated above, SDG&E supports the adoption of the following
12 adjustments to Customer Account and Service costs used in the development of marginal
13 distribution customer costs: (a) reduction of (\$5.8) million to FERC Account 902 costs as a
14 proxy for AMI benefits; (b) reduction of approximately (\$6.4) million to FERC Account 903 as a
15 proxy for the Customer Account and Service costs associated with miscellaneous revenues; and
16 (c) reduction of approximately (\$133.3) million to FERC Account 908 costs to eliminate
17 refundable costs.

18 **C. Vegetation Management Adjustment**

19 SDCAN witness Marcus proposes a change in the percentage of Vegetation Management
20 O&M costs used in the marginal distribution customer cost and marginal demand-related cost
21 calculations. Mr. Marcus proposes a change in the percentage of Vegetation Management costs
22 assigned to marginal distribution customer-related costs versus marginal distribution demand-
23 related cost. SDG&E currently assigns approximately 12-13% of the Vegetation Management
24 costs to customer-related costs. Mr. Marcus believes that, based on information provided in
25 response to previous and current data requests it is more appropriate to assign only 2% of
26 Vegetation Management costs to customer-related costs.²⁷

27 SDG&E disagrees with SDCAN’s proposal to assign less of the Vegetation Management
28 costs to customer-related costs. While SDG&E does not disagree that a smaller percentage of
29 the Vegetation Management costs is associated with customer-related cost, total O&M costs are
30 assigned between customer- and demand-related costs based on distribution plant assets. For this

²⁶ SDCAN (Marcus), p. 20, lines 2-8.

²⁷ SDCAN (Marcus), pp. 13 and 23.

1 reason, it would not be appropriate to assign Vegetation Management costs separately because
2 total O&M costs are assigned to customer- and demand-related costs based on a single allocation
3 factor. Accepting SDCAN's Vegetation Management proposal would require all O&M costs to
4 be assigned to customer classes separately, which is not possible because SDG&E does not have
5 class splits for all O&M costs. This is the reason that SDG&E proposed the development of a
6 single allocation factor for total O&M costs between customer- and demand-related functions –
7 because this approach is possible and reasonable.

8 For the reason stated above, SDG&E recommends that the Commission reject SDCAN's
9 proposal to allocate Vegetation Management costs separately. This approach is not workable
10 and inconsistent with the allocation of other O&M costs.

11 **IV. REBUTTAL TO FARM BUREAU**

12 Farm Bureau witness Illingworth argues for the adoption of the NCO Method over the
13 Rental Method to calculate marginal distribution customer costs. She states that “[b]y definition,
14 a marginal customer cost analysis must estimate the increased costs that the utility will incur as
15 the result of an additional customer being added to the system. In proposing the rental method,
16 SDG&E has implicitly decided that such marginal costs are not appropriate for customer
17 charges, and does something else instead.”²⁸ Ms. Illingworth goes on to state that the NCO
18 Method should be adopted in this proceeding because the Rental Method has not been supported
19 in any litigated proceeding and the Commission has not rescinded its adoption of marginal costs
20 based on the NCO Method for the purpose of allocating customer costs.²⁹

21 While SDG&E agrees with Farm Bureau's definition of marginal costs, SDG&E
22 disagrees that the NCO Method properly reflects marginal costs. As stated earlier in response to
23 DRA's and SDCAN's testimony on this issue, calculating the cost to add the next customer is
24 very different than calculating the costs of adding the expected growth in a customer class. For
25 instance, if a customer class is expected to add zero customers, how could the NCO Method
26 correctly measure the cost of adding a new customer in that class, if one is unexpectedly added?
27 Also, assume a customer class is expected to have zero growth, where the addition of one new
28 customer and the loss of an existing customer results in a net growth impact of zero. The NCO
29 Method would not reflect TSM costs for this new customer, even though SDG&E would incur
30 TSM costs to hook-up this new customer. The NCO Method is thus flawed, because it does not

²⁸ Farm Bureau (Illingworth), p. 6, lines 13-17.

²⁹ Farm Bureau (Illingworth), pp. 6-7.

1 truly measure the marginal costs to add the next customer. Rather, it calculates the incremental
2 customer costs based on the expected growth rate in that customer class.

3 SDG&E also disagrees with Farm Bureau's statement that the Rental Method has not
4 been supported in any litigated proceeding and thus should not be adopted in this proceeding. As
5 previously noted, the Commission has adopted the Rental Method for SDG&E and has never
6 adopted the NCO (or OTHC) Method for use in calculating SDG&E's electric marginal
7 distribution customer costs. As also stated earlier, Commission decisions dating back at least 15
8 years should not set the precedent in the marginal distribution customer cost methodology
9 adopted in this proceeding.

10 For the reasons stated above, the Commission should reject Farm Bureau's proposal to
11 use the NCO (OTHC) Method and adopt SDG&E's proposal to use the Rental Method to
12 develop marginal distribution customer costs in this proceeding.

13 **V. REBUTTAL TO CAL-SLA**

14 CAL-SLA witness Lechowicz supports the NCO Method calculated by DRA for several
15 reasons. First, she claims that the Commission already decided that the NCO Method is the
16 preferred method for computing marginal distribution customer costs. Second, she states that the
17 NCO Method more accurately represents marginal customer costs because it captures the costs
18 of adding the next customer. Third, she states that, unlike the NCO Method, the Rental Method
19 fails to produce a competitive price for customer hookups.³⁰

20 SDG&E disagrees with the reasons CAL-SLA provides in support of the NCO Method.
21 First, CAL-SLA is mistaken when it states that the Commission has already decided the
22 preferred method to use in calculating marginal distribution customer costs. As explained earlier
23 in response to DRA's, SDCAN's, and Farm Bureau's direct testimony, the Commission adopted
24 the NCO Method in a few places many years ago. In addition, the Commission has never
25 adopted the NCO (or OTHC) Method for SDG&E in any proceeding as the appropriate
26 methodology for use in calculating SDG&E's electric marginal distribution customer costs. For
27 this reason, SDG&E disagrees that the appropriate marginal distribution customer cost
28 methodology for this proceeding should be based on the evidence presented in old cases of other
29 utilities, instead of the evidence presented in this case.

30 Second, CAL-SLA is incorrect when it states that the NCO Method more accurately
31 represents marginal distribution customer costs because it captures the costs of adding the next

³⁰ CAL-SLA (Lechowicz), pp. 4-7.

1 customer. What the NCO Method does is underestimate marginal distribution customer costs
2 because the NCO Method takes the full cost per customer to hook up a new customer (not the
3 annualized cost), multiplies that value only by the number of new customers estimated to be
4 added in that class, and then divides this amount by the total number of customers in the class to
5 get the unit cost per customer. The NCO Method is not calculating the marginal customer costs
6 of adding the next customer, as CAL-SLA states. Rather, it is calculating the costs per customer
7 (all customers) to serve the expected growth in customers.

8 Third, CAL-SLA is mistaken when it states that the Rental Method will not produce a
9 competitive price for customer hookups. Just the opposite is true. The NCO Method fails to
10 provide efficient price signals to customers considering new hookups because this approach
11 assures that new customers will never pay the full cost incurred to hook up to the utility's electric
12 system by ignoring existing TSM assets when calculating its version of marginal costs.

13 For the reasons stated above, the Commission should reject CAL-SLA's proposal to use
14 the NCO (OTHC) Method and adopt SDG&E's proposal to use the Rental Method to develop
15 marginal distribution customer costs in this proceeding.

16 **VI. CORRECTIONS TO MARGINAL DISTRIBUTION CUSTOMER COST MODEL**

17 **A. Overhead and Underground Allocators**

18 SDG&E made a correction to the distribution capital plant costs which determine the
19 Overhead and Underground Allocation Factors in the Elec Cust OM 5-Yr Ave Alloc file.
20 SDG&E mistakenly used the 2005 plant costs for the year 2009 values. This mistake was
21 brought to SDG&E's attention by UCAN in data request UCAN DR-09, Question 8.³¹ Table
22 WGS-1 identifies the corrected values made to the Elec Cust OM 5-Yr Ave Alloc – Rebuttal file
23 that SDG&E used in the development of the updated marginal distribution customer costs,
24 presented in Table WGS-4.
25

³¹ The need for this correction was also pointed out in the prepared testimony of SDCAN witness Marcus, pp. 12-13.

Table WGS-1: Electric Distribution Plant		
	Year End 2009 Balance (\$)	
<u>FERC Account Numbers</u>	<u>Incorrect Values</u>	<u>Correct Values</u>
364	\$333,933,076	\$436,429,928
365	\$269,985,319	\$346,271,498
366	\$703,435,138	\$859,452,730
367	\$904,962,014	\$1,134,515,368
Note: Corrections made to Cells H59-H62 in the "2009" tab of the <u>Elec Cust OM 5-Yr Ave Alloc - Rebuttal</u> file.		

B. Residential and Small Commercial TSM Unit Cost for Maximum Annual Demand (kW) 26 - 50

SDG&E made a correction to the Services costs (\$/Customer) shown for residential and small commercial customers with a maximum annual demand (kW) of 26-50. These unit costs presented in Cell C10 of the "Res TSM UC" and "Sm TSM UC" tabs of the Customer MCC Work Papers – Second Revised – Final file were mistakenly linked to the wrong services wire size. Table WGS-2 identifies the corrected Services cost values made to the Customer MCC Work Papers – Rebuttal file used in the development of the updated marginal distribution customer costs, presented in Table WGS-4.

Table WGS-2: Residential and Small Commercial TSM Unit Costs		
	Services (\$/Customer)	
<u>Max Annual Demand (kW)</u>	<u>Incorrect Value</u>	<u>Correct Value</u>
26-50	\$621	\$949
Note: Corrections made to Cell C10 in the "Res TSM UC" and "Sm TSM UC" tabs of the <u>Customer MCC Work Papers - Rebuttal</u> file.		

C. Lighting O&M

SDG&E made corrections to the calculation of distribution O&M allocated to the Lighting Class. In the Elec Cust OM 5-Yr Avg Alloc file, the allocation of Lighting costs associated with FERC Accounts 580 and 590 were omitted from the calculation of the total amount of "Lighting Related O&M" found on Cell R49 of the "5 Yr Avg Dist OM Calc" tab. This oversight was brought to SDG&E's attention by UCAN in data request UCAN DR-09,

Question 7. Table WGS-3 identifies the corrected values made to the Elec Cust OM 5-Yr Ave Alloc - Rebuttal file that SDG&E used to develop the marginal distribution customer costs, presented in Table WGS-4.

Table WGS-3: Lighting O&M		
	Lighting Related O&M (\$)	
	<u>Incorrect Value</u>	<u>Correct Value</u>
Lighting Related O&M	\$738,272	\$991,148
Note: Corrections made to Cell R49 in the "5 Yr Avg Dist OM Calc" tab of the <u>Elec Cust OM 5-Yr Ave Alloc - Rebuttal</u> file.		

VII. UPDATED MARGINAL DISTRIBUTION CUSTOMER COSTS

The calculation of SDG&E’s marginal distribution customer costs based on the Rental Method was updated to reflect: (a) the reductions to the customer account and service costs; (b) 10% reduction to TSM costs as a proxy for customers’ contributions above Rule 16 service line extensions; and (c) three corrections to the marginal distribution customer cost model, as described above. The updated marginal distribution customer costs that reflect these adjustments are presented in Table WGS-4. SDG&E recommends that the Commission adopt these updated marginal distribution customer costs.

Table WGS-4: Updated Marginal Distribution Customer Costs		
	Marginal Distribution Customer Costs (Customer \$/Year)	
<u>Customer Class</u>	<u>Direct Testimony Values¹</u>	<u>Rebuttal Testimony Updated Values²</u>
Residential Average	\$259.05	\$139.75
Small Commercial Average	\$600.15	\$455.98
Medium/Large C&I Average	\$2,187.08	\$1,925.57
Agricultural Average	\$728.19	\$574.07
Lighting Average	\$19.64	\$16.73
Note:		
(1) Direct Testimony Values reflect marginal distribution customer costs filed in SDG&E's Chapter 6 Second Revised Prepared Direct Testimony on March 30, 2012.		
(2) Updated Rebuttal Testimony Values reflect the updated marginal distribution costs submitted in SDG&E's Chapter 6 Rebuttal Testimony based on the various adjustments proposed.		

1 **VIII. SUMMARY AND CONCLUSION**

2 For the reasons stated above, the Commission should: (a) adopt SDG&E’s calculation of
3 marginal distribution customer costs based on the Rental method proposed by SDG&E, and
4 supported by FEA, instead of the NCO method (also called the OTHC Method) proposed by
5 DRA, SDCAN, Farm Bureau, and CAL-SLA; (b) adopt SDG&E’s calculated adjustments to the
6 Customer Account and Service costs used in its marginal distribution customer cost calculations;
7 (c) reject SDCAN’s proposed adjustment in the assignment of Vegetation Management costs
8 between marginal distribution customer-related and demand-related costs; (d) adopt DRA’s
9 proposed 10% reduction to TSM costs to account for customer contributions above Rule 16
10 service line allowances; (e) reject DRA’s proposed 5% reduction to residential TSM costs to
11 account for customer “infill”; and (f) adopt the three corrections to SDG&E’s marginal
12 distribution customer cost model. The adoption of the adjustments described above results in the
13 updated SDG&E marginal distribution customer costs, presented in Table WGS-4. SDG&E
14 recommends that the Commission adopt these updated marginal distribution customer costs.

15 This concludes my prepared rebuttal testimony.