Decision **PROPOSED DECISION OF ALJ KENNEY** (Mailed on 8/26/2016)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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

DECISION ADOPTING GAS DEMAND FORECASTS, COST ALLOCATIONS, AND RATE DESIGNS FOR SOUTHERN CALIFORNIA GAS COMPANY AND SAN DIEGO GAS & ELECTRIC COMPANY

TABLE OF CONTENTS

Title **Page**

DECISION ADOPTING GAS DEMAND FORECASTS, COST ALLOCATIONS, AND RATE DESIGNS FOR SOUTHERN CALIFORNIA GAS COMPANY AND SAN DIEGO GAS & ELECTRIC COMPANY 1
Summary 2
1. Procedural Background 3
2. Application 15-07-014 and the Scope of This Proceeding 7
3. Public Comments 9
4. The Settlement Agreement 9
4.1. Summary of the Settlement Agreement 10
4.1.1. Term of the Settlement Agreement 10
4.1.2. Resolution of Contested Items 10
4.1.2.1. Rates 10
4.1.2.1.1 Natural Gas Vehicles 10
4.1.2.1.2 NGV Compression Rate Adders 11
4.1.2.1.3 Core Brokerage Fee 12
4.1.2.1.4 Submeter Credits 12
4.1.2.2. Cost Allocation 12
4.1.2.3. System Operator Gas Account (SOGA) 14
4.1.2.4. Aliso Canyon Costs 15
4.1.2.5. Refund of Penalty Revenues 16
4.1.2.6. Core Balancing Function 17
4.1.2.7. California Producer Imbalances 17
4.1.3. Uncontested Items 17
4.2. Standard of Review of the Settlement Agreement 20
4.2.1. Reasonable in Light of the Whole Record 21
4.2.2. Consistent with the Law 24
4.2.3. Public Interest 25
4.2.4. Conclusion 25
5. Issues Not Resolved by the Settlement Agreement 26
5.1. Composite Tier Method 26
5.1.1. Background 26
5.1.2. Positions of the Parties 27
5.1.2.1. The Applicants 27
5.1.2.2. ORA 28
5.1.2.3. TURN 29

5.1.3. Discussion 32
5.2. Residential Fixed Customer Charges 33
5.2.1. Background 33
5.2.2. Positions of the Parties 34
5.2.2.1. The Applicants 34
5.2.2.2. ORA 35
5.2.2.3. TURN 40
5.2.3. Discussion 45
5.3. Minimum Bill for SDG&E Residential Gas Customers 48
5.3.1. Background 48
5.3.2. Positions of the Parties 48
5.3.2.1. The Applicants 48
5.3.2.2. ORA 49
5.3.2.3. TURN 50
5.3.3. Discussion 51
5.4. Residential Tier Differentials 53
5.4.1. Background 53
5.4.2. Positions of the Parties 54
5.4.2.1. The Applicants 54
5.4.2.2. ORA 54
5.4.2.3. TURN 54
5.4.3. Discussion 56
5.5. The Aliso Canyon Memorandum Account 56
5.5.1. Background 56
5.5.2. Positions of the Parties 57
5.5.2.1. The Applicants 57
5.5.2.2. ORA 59
5.5.2.3. SCGC 59
5.5.2.4. TURN 59
5.5.3. Discussion 60
6. Implementation of Revised Rates and Charges 61
7. Safety Considerations 62
8. Comments on the Proposed Decision 62
9. Assignment of the Proceeding 64
Findings of Fact 64
Conclusions of Law 66
ORDER 68
Attachment A: Settlement Agreement

DECISION ADOPTING GAS DEMAND FORECASTS, COST ALLOCATIONS, AND RATE DESIGNS FOR SOUTHERN CALIFORNIA GAS COMPANY AND SAN DIEGO GAS & ELECTRIC COMPANY

Summary

This decision approves an uncontested Settlement Agreement that contains gas demand forecasts, utility cost allocations, rate designs, and other information needed to set natural gas transportation rates and charges for Southern California Gas Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E) beginning on January 1, 2017.

The approved Settlement Agreement allocates more costs to Core Residential customers compared to the status quo, and fewer costs to Core Commercial and Industrial (C&I) customers compared to the status quo. The following table shows the impact of the Settlement Agreement on revised cost allocations for the Core Residential and Core C&I customer classes in 2017:

Increase / (Decrease) in Cost Allocations ($000)		
	Core Residential	**Core C&I**
SoCalGas	$47,940	($49,014)
SDG&E	$13,939	($17,003)

Although the approved Settlement Agreement allocates more costs to the Core Residential class, the overall effect of the Settlement is to decrease rates for this class because of a projected refund of balancing account over-collections.

The approved Settlement Agreement does not resolve all issues in this proceeding. Today's decision takes the following actions regarding matters that are not addressed by the Settlement Agreement:

- Determines that residential fixed customer charges should be included in Tier 1 rates for the purpose of determining the tier differentials mandated by Public Utilities Code Sections 739(d)(1) and 739.7.
- Adopts a tier differential ratio of 1.15 to 1.00 between residential Tier 2 rates and Tier 1 rates. The tier differential ratio is to be calculated on a composite basis, with no cap on the nominal difference between Tier 2 rates and Tier 1 rates.
- Adopts a minimum bill of $3 per month for SDG&E's residential customers and $2.40 per month for SDG&E's residential customers who participate in the California Alternative Rate for Energy program.
- Decision 16-03-031 ordered SoCalGas to establish a memorandum account to track its authorized revenue requirement and all revenues that SoCalGas receives for its normal, business-as-usual costs to own and operate the Aliso Canyon gas storage field. If the Commission opens an investigation proceeding regarding the Aliso Canyon gas leak, and the scope of the proceeding does not include the issue of whether the amounts tracked by the memorandum account should be refunded to SoCalGas's customers, then today's decision requires SoCalGas to file an application that addresses this issue.

1. Procedural Background

Southern California Gas Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E) (together, "the Applicants") jointly filed Application (A.) 15-07-014 on July 8, 2015. The Applicants concurrently served written testimony supporting the Application.[1]

Among other things, A.15-07-014 requests authority to revise cost allocations among customer classes, which would have the effect of increasing

[1] The Applicants served amended and corrected written testimony on November 19, 2015.

rates for some customer classes and decreasing rates for other customer classes. Due to the requested rate increase, the Applicants mailed notice of A.15-07-014 to applicable state, county, and city agencies in accordance with Rule 3.2(b) of the Commission's Rules of Practice and Procedure (Rules); published notice of A.15-07-014 in applicable newspapers in accordance with Rule 3.2(c); mailed notice of A.15-07-014 to the Applicants' customers in accordance with Rule 3.2(d); and posted notice of A.15-07-014 in the Applicants' payment offices.

The Commission published notice of A.15-07-014 in the Daily Calendar on July 14, 2015. On July 23, 2015, the Commission issued Resolution ALJ 176-3360, which preliminarily categorized this proceeding as ratesetting and preliminarily determined that hearings were needed in this proceeding.

On August 13, 2015, the following parties filed protests or responses to A.15-07-014:

- The City of Long Beach Gas & Oil Department (Long Beach).
- The Commission's Office of Ratepayer Advocates (ORA).
- Shell Energy North America (US), L.P. (Shell).
- Southern California Edison Company (SCE).
- The Southern California Generation Coalition (SCGC).
- The Utility Reform Network (TURN).

The Applicants filed a reply on August 24, 2015.

A prehearing conference was held on September 9, 2015, and the assigned Commissioner's Scoping Memo was issued on October 2, 2015 (Scoping Memo). The Scoping Memo set forth the scope and schedule of this proceeding and contained a final determination that the category of this proceeding is ratesetting and that hearings were needed.

The Commission held two public participation hearings (PPHs). The first PPH was held on February 9, 2016, in the City of Garden Grove. The second was held on February 10, 2016, in the City of San Diego. Prior to the PPHs, the Applicants mailed notice of the PPHs to all of their customers, published notice of the PPHs in applicable newspapers, and posted notice of the PPHs in their payment offices.

On March 11, 2016, the following parties served written testimony: Clean Energy Fuels Corp. (Clean Energy), Long Beach, ORA, SCGC, and TURN. Rebuttal testimony was served on April 11, 2016, by the Applicants, SCGC, Long Beach, and the Western Manufacturing Housing Association (WMA).

On March 9, 2016, the assigned Administrative Law Judge (ALJ) issued a Ruling that required the Applicants to serve written testimony identifying the normal, previously authorized costs to own and operate the Aliso Canyon gas storage field that the Applicants seek to recover in the rates and charges adopted in this proceeding. The Applicants served testimony in response to this ruling on March 28, 2016. TURN and SCGC served reply testimony on April 12, 2016.

On March 22, 2016, the Commission issued Decision (D.) 16-03-031 that took the following actions with respect to a massive gas leak at SoCalGas's Aliso Canyon gas storage field (Aliso Canyon):

- Ordered SoCalGas to establish a memorandum account to track its authorized revenue requirement and all revenues that SoCalGas receives for its normal, business-as-usual costs to own and operate Aliso Canyon.
- Stated that the Commission will determine at a later time whether, and to what extent, the authorized revenue requirement and revenues tracked by the Aliso Canyon memorandum account should be refunded to SoCalGas's customers with interest.

- Held that the Commission may decide in this proceeding the procedure and timeframe for determining whether, and to what extent, the authorized revenue requirement and revenues tracked by the memorandum account should be refunded to SoCalGas's customers.
- Authorized the parties in A.15-07-014 to recommend in their post-hearing briefs an appropriate procedure and timeframe for addressing the refund issue.

On April 27, 2016, the assigned ALJ issued a ruling that granted the Applicants' motion to postpone the evidentiary hearings that were scheduled to begin on May 2, 2016, in order to provide the parties with more time to reach a settlement agreement on some or all of the issues in this proceeding. The Indicated Shippers filed a motion for party status on May 4, 2016, which was granted by an ALJ ruling issued on May 9, 2016.

On May 11, 2016, the Applicants served a Notice of Settlement Conference pursuant to Rule 12. The Settlement Conference was held telephonically on May 19, 2016.

On May 27, 2016, most active parties jointly filed a motion for the adoption of a settlement agreement (hereafter, "Settlement Agreement" or "Settlement"). A copy of the Settlement Agreement was attached to the motion. The Settlement resolves most issues in this proceeding. There were no opposing comments filed on the Settlement Agreement pursuant to Rule 12.2.

Evidentiary hearings regarding the issues not resolved by the Settlement Agreement were held on June 6–7, 2016. Opening briefs regarding the unresolved issues were filed on July 6, 2016, by the Applicants, ORA, and TURN. Reply briefs were filed on July 27, 2016, by the Applicants, ORA, SCGC, and TURN. In addition to addressing issues not resolved by the Settlement Agreement, the opening and reply briefs also addressed the procedure and

timeframe for determining whether, and to what extent, the authorized revenue requirement and revenues tracked by the Aliso Canyon memorandum account established by D.16-03-031 should be refunded to SoCalGas's customers.

On June 17, 2016, the assigned ALJ issued a ruling that required the parties to the Settlement Agreement (hereafter, "the Settling Parties") to file a document containing a comparison exhibit and other information regarding the Settlement Agreement. The required document was filed on July 5, 2016.

On July 19, 2016, the assigned ALJ issued a ruling that required the Settling Parties to file a document containing additional information regarding the Settlement Agreement. The required document was filed on July 27, 2016.

There were no requests for a final oral argument. Accordingly, this proceeding was submitted upon the receipt of reply briefs on July 27, 2016.

2. Application 15-07-014 and the Scope of This Proceeding

In A.15-07-014, the Applicants request authority to set rates and charges for a three-year period starting January 1, 2017, to recover their non-gas costs. These non-gas costs include depreciation, operations and maintenance (O&M), administrative and general, cost of capital, and taxes. All of these non-gas costs are reviewed and approved by the Commission in other proceedings.

The regulatory process for setting rates and charges to recover approved non-gas costs begins with allocating shared costs between SoCalGas and SDG&E. Next, each utility's non-gas costs are allocated among the utility's customer classes. Finally, rates and changes are set for each customer class to recover the costs allocated to the class. The costs allocated to a customer class may be recovered through a fixed monthly charge, a volumetric rate for each unit of gas delivered to a customer, or both. The derivation of a volumetric rate requires a forecast of the amount of gas the utility will deliver to the customer class over the

three-year period of 2017–2019. The costs that are assigned to recovery through the volumetric rate are then spread over the forecasted gas deliveries.

The Assigned Commissioner's Scoping Memo determined that the scope of this proceeding consists of the following matters:

1. Should the Commission authorize the demand forecasts used for setting transportation rates[2] as proposed in A.15-07-014, effective January 1, 2017?
2. Should the Commission authorize the allocation of costs by customer classes as proposed in A.15-07-014, effective January 1, 2017?
3. Should the Commission authorize SoCalGas's and SDG&E's transportation rates as proposed in A.15-07-014, effective January 1, 2017?
4. Should the Commission authorize the residential customer charges proposed by SoCalGas and SDG&E and the revised tier differential calculation?
5. Should the Commission authorize the continued 100% balancing account treatment for SoCalGas's and SDG&E's non-Core transportation revenue requirement?
6. Should the Commission authorize the proposals related to producer aggregation, California Producer Operational Balancing Agreement (OBA) cashout activity, and pipeline OBA resolution?
7. Should the Commission authorize SoCalGas's and SDG&E's balancing account treatments and curtailment penalty refund plans?
8. Should the Commission authorize the proposed System Operator Gas Account and its allocation methodology?

---

[2] The term "transportation rates" refers to rates that recover costs other than the commodity cost of gas.

9. Should the Commission authorize the proposed advice letter process for the Core Fixed Cost Account true-up?
10. Does the Commission need to provide such other relief as proposed by parties or as deemed necessary or appropriate by the Commission?
11. Are there any additional safety considerations pursuant to Public Utilities Code Section 451 that the Commission should consider in reviewing A.15-07-014?

In addition to the above matters, the scope of this proceeding includes the issues related to the Aliso Canyon memorandum account that are identified in D.16-03-031 and summarized previously in today's decision.

3. Public Comments

The public submitted comments regarding A.15-07-014 at the public participation hearings and in written correspondence. Most commenters expressed opposition to the Applicants' request to (1) establish a fixed monthly charge of $10 for SDG&E's residential customers, and (2) increase the fixed monthly charge for SoCalGas's residential customers from $5 to $10. Several commenters voiced opposition to increasing any rates and charges, particularly for low income customers and disadvantaged communities. A major topic for some commenters was concern about the safety of the Applicants' facilities, particularly the Aliso Canyon gas storage field.

4. The Settlement Agreement

On May 27, 2016, the Settling Parties (SoCalGas, SDG&E, ORA, TURN, California Manufacturers & Technology Association (CMTA), Long Beach, Clean Energy, the Indicated Shippers, SCE, SCGC, SWG, and WMA) filed a joint motion for adoption of a Settlement Agreement pursuant to Rule 12. The Settlement Agreement was attached to the motion. The Settlement Agreement resolves most, but not all, issues in this proceeding.

The Settling Parties state that the various outcomes in the Settlement Agreement reflect compromises among the parties. In some instances, a Settlement outcome reflects a party's concession on one issue in consideration for the outcome on another issue. Thus, the Settling Parties state that modification of any one part of the Settlement Agreement could upset the balancing of interests achieved in the Settlement. Accordingly, the Settling Parties ask the Commission to consider and approve the Settlement Agreement as a whole, with no modification.

Below, we first summarize the major provisions of the Settlement Agreement. We then assess whether to approve the Settlement Agreement.

4.1. Summary of the Settlement Agreement

4.1.1. Term of the Settlement Agreement

The term of the Settlement Agreement starts the later of January 1, 2017, or the date that the Commission approves the Settlement. The rates and charges impacted by the Settlement will go into effect upon the date(s) established by the Commission. The term of the Settlement extends to the Commission-authorized implementation date of the next SoCalGas and SDG&E Triennial Cost Allocation Proceeding (TCAP) application that is filed after A.15-07-014.

4.1.2. Resolution of Contested Items

The bulk of the Settlement Agreement is devoted to describing the agreed-upon outcomes for Contested Items and Uncontested Items. The Settlement Agreement's resolution of Contested Items is summarized below.

4.1.2.1. Rates

4.1.2.1.1 Natural Gas Vehicles

Natural gas vehicle (NGV) customers are currently limited to Core service. In its testimony, Clean Energy proposed to (1) allow NGV customers to elect

non-Core service, and (2) shield NGV rates from amortization of weather-related under- or over-collections in the Core Fixed Cost Account (CFCA.) The Applicants responded in rebuttal testimony that it may be possible to create a subaccount in the CFCA at each utility to record the cost and revenue activity related to the NGV customer class. A separate subaccount in the CFCA would record the cost and revenue activity related to all other Core classes. However, the Applicants opposed Clean Energy's proposal to allow NGV customers to elect non-Core service.

The Settlement Agreement provides that NGV customers will remain on the G-NGV Core rate schedule (*i.e.,* not be given the option to elect non-Core service), but that SoCalGas and SDG&E will establish two subaccounts in the CFCA as described above. The NGV subaccount of the CFCA will be allocated only to the NGV customer class, while the non-NGV Core subaccount of the CFCA will be allocated to all non-NGV Core customer classes using the current methodology of Equal Cents Per Therm (ECPT).

4.1.2.1.2 NGV Compression Rate Adders

The Applicants' direct testimony included a cost study to update their NGV Compression Rate Adders. In intervenor testimony, ORA stated that it was unclear from the data presented by the Applicants whether the NGV stations that primarily serve SoCalGas' and SDG&E's NGV fleets were properly excluded from the cost study. In rebuttal testimony, the Applicants noted that the compression rate adders were derived by separating capital cost and O&M costs for stations that include public access. The Settlement Agreement provides that NGV Compression Rate Adders will be set at the levels proposed by the Applicants, which will exclude subsidies from ratepayers.

4.1.2.1.3 Core Brokerage Fee

The Applicants' direct testimony included a cost study to update the Core Brokerage Fee. TURN proposed in its testimony that the Core Brokerage Fee study include cash working capital for gas commodity, which would slightly increase the Core Brokerage Fee and decrease end-use transportation rates. The Applicants opposed TURN's proposal in rebuttal testimony. The Settlement Agreement provides that the Core Brokerage Fee will include cash working capital associated with the gas commodity and will be set at the level proposed by TURN, or $0.00204 per therm (excluding franchise fees and uncollectibles).

4.1.2.1.4 Submeter Credits

The Applicants' direct testimony included a cost study to update submeter credits. In intervenor testimony, ORA proposed that, to the extent the update to submeter credits is impacted by the Applicants' proposal to calculate marginal customer capital-related costs using the Rental method rather than the New Customer Only (NCO) method, the update to the submeter credits should instead be based on the NCO method. In rebuttal testimony, WMA disagreed with ORA's position and recommended that submeter credits remain as calculated by the Applicants. The Settlement Agreement provides that SoCalGas's submeter credit will be $0.27386/meter/day, and that SDG&E's submeter credits be $0.38268/meter/day for multi-family (GS) customers and $0.40932/meter/day for mobile home (GT) customers.

4.1.2.2. Cost Allocation

A.15-07-014 and supporting testimony contained several proposals regarding cost allocation. Among other things, the Applicants presented a long-run marginal cost (LRMC) study based on the Rental method to determine customer-related marginal unit costs and to allocate base margin costs among

SDG&E and SoCalGas customers. SCGC's testimony supported the Applicants' use of the Rental method to determine customer-related LRMCs.

ORA, TURN, and Long Beach each proposed using a version of the NCO method to determine customer-related marginal unit costs. ORA recommended that the Commission rely on the NCO method absent a replacement cost adder. TURN recommended use of the NCO method with a replacement cost adder. TURN also proposed several modifications to the calculation of marginal unit costs. Long Beach stated that the Commission has historically used the NCO method and should require that the NCO method be used in this instance as well. In rebuttal testimony, the Applicants provided additional support for the Rental method and responded to TURN's LRMC-related proposals.

With respect to transmission costs, the Applicants provided an embedded cost study and proposals for functionalizing embedded costs as either backbone transmission costs or local transmission costs. ORA agreed with the Applicants' embedded transmission costs and the allocation of embedded transmission costs between local and backbone transmission. TURN provided testimony proposing modifications to the embedded cost of transmission that would generally increase embedded costs. In rebuttal testimony, the Applicants opposed all of TURN's proposals. Additionally, SCGC and Long Beach responded in opposition to several of TURN's proposed modifications to the transmission embedded cost study.

The Settling Parties were able to identify certain outcomes pertaining to the LRMC and embedded costs that, if adopted as a package, would be acceptable to each party involved in the settlement discussions. Accordingly, the Settling Parties have taken a "black box" approach to reaching a settlement on cost-allocation issues. Specifically, the Settling Parties agree to a set of Marginal

Unit Costs and intra-class adjustments in Appendix A and B to the Settlement Agreement, respectively. The Settling Parties agree that SoCalGas's embedded cost of transmission is $245.933 million, which is functionalized as $171.727 million for backbone transmission and $74.206 million for local transmission. Further, the Settling Parties agree that SDG&E's embedded cost of transmission is $46.266 million, which is functionalized entirely as backbone transmission. Illustrative rates based upon these cost allocation are shown in Appendix C to the Settlement Agreement.[3]

4.1.2.3. System Operator Gas Account (SOGA)

The Applicants made a series of proposals related to buying and selling gas to resolve California Producer Operational Balancing Agreements (CPOBA) cashout activity and pipeline OBA imbalances. The Applicants proposed that the System Operator be granted authority in Tariff Rule No. 41 to buy and sell gas at the SoCalGas City Gate in support of this activity; proposed the establishment of a new balancing account to record the costs and revenues from this activity; and proposed a cost allocation methodology for the balancing account. SCGC did not oppose the requested authority but sought limits on the costs that could be recorded in the SOGA. The Applicants' rebuttal testimony clarified the types of costs that would be included in, or excluded from, the SOGA.

---

[3] SoCalGas's and SDG&E's proposal for a $10/month residential fixed customer charge at each utility and the calculation of the differential between Tier 1 and Tier 2 rate are contested items not covered by the Settlement. The illustrative residential rates shown in Appendix C of the Settlement Agreement assume maintaining the current $0.16438 per meter per day (approximately $5 per month) customer charge at SoCalGas and the current $0 per month customer charge at SDG&E, as well as the current calculation of the differential between baseline and non-baseline rate tiers. Actual residential rates will be updated to reflect the Commission's decision regarding these contested issues.

The Settlement Agreement revises SoCalGas Tariff Rule No. 41 to allow the System Operator to buy and sell gas at the SoCalGas City Gate to resolve CPOBA cashout activity and pipeline OBA imbalances. The Settlement Agreement also provides that SoCalGas may establish the SOGA to record the costs and revenues related to this activity and that the SOGA preliminary statement will be clarified to limit the costs and revenues recorded in the SOGA to those directly associated with buying and selling gas in support of cashing out California producer imbalances or pipeline operating imbalances. The Settlement Agreement further provides that the SOGA will be allocated to SoCalGas's transportation rates using the ECPT methodology.

4.1.2.4. Aliso Canyon Costs

Pursuant to a ruling issued by the assigned ALJ on March 9, 2016, the Applicants served supplemental written testimony that identified the normal, previously authorized costs to own and operate Aliso Canyon that the Applicants seek to recover in the rates and charges adopted in this proceeding. The Applicants' testimony identified the portion of General Rate Case (GRC) authorized base margin associated with the normal, previously authorized costs to own and operate Aliso Canyon, the costs related to the Aliso Canyon Turbine Replacement (ACTR) project, and the corresponding rate impacts. TURN served reply testimony containing suggestions for additional information that could be submitted by the Applicants regarding the costs of Aliso Canyon. SCGC served reply testimony suggesting modifications to the normal, previously authorized costs to own and operate Aliso Canyon identified by the Applicants.

The Settlement Agreement stipulates that $70.8 million represents a capacity-based and embedded cost-based approximation of the normal, previously approved costs to own and operate Aliso Canyon that would be

included in the rates and charges adopted in this proceeding for the years 2017, 2018, and 2019. The $70.8 million total includes $43.8 million for Aliso Canyon operations based on 2013 embedded storage costs and $27 million for the ACTR project that is anticipated to go into service and become eligible for rate recovery by January 1, 2017.

4.1.2.5. Refund of Penalty Revenues

The Applicants proposed refund methodologies for the revenues received from the assessment of penalties for violation of curtailment events. While it is typical to refund curtailment penalty revenues as a bill credit to those customers that complied with the curtailment order, one recent curtailment event at SoCalGas resulted in curtailment penalties totaling $24. SCGC recommended that a policy be adopted where the revenues generated in a particular curtailment event by customers who violated the curtailment order be credited directly to customers who complied with the curtailment order unless the bill credit refunding those revenues is *de minimis*. The Applicants offered in rebuttal testimony that until the policy and operational changes proposed in A.15-06-020 are approved and implemented, if the curtailment penalties collected are $100 or less, or the refund amount per customer based on a simple average of dividing the curtailment penalties by the number of customers who complied with the curtailment order is $10 or less, then the curtailment penalties will be transferred to the Non-Core Fixed Cost Account (NFCA) for amortization in transportation rates. The Settlement Agreement adopts this policy.

4.1.2.6. Core Balancing Function

SCGC's testimony proposed that, as of 2017, the SoCalGas Gas Acquisition department be required to utilize whatever daily Core usage data is available from the Advanced Metering Infrastructure system in its balancing of Core deliveries against Core usage. The Applicants opposed this proposal in rebuttal testimony. The Settlement Agreement defers this issue to A.15-06-020 (re: SoCalGas and SDG&E curtailment rules update) in which a 26-party settlement submitted to the Commission on April 29, 2016, proposes, among other things, an upcoming phase to deal with winter reliability issues.

4.1.2.7. California Producer Imbalances

The Applicants submitted testimony proposing to design and build a system to allow the aggregation of producer interconnect meters to calculate operational imbalances according to CPOBA requirements. The Indicated Shippers recommended that the issue of producer meter aggregation be deferred to a later proceeding.

The Settlement Agreement provides that, during the settlement term, SoCalGas will not implement a system to allow the aggregation of producer interconnect meters to calculate operational imbalances.

4.1.3. Uncontested Items

Several of the Applicants' proposals in A.15-07-014 were not contested by the intervenors. For the reasons provided in A.15-07-014 and the Applicants' supporting testimony, the Settlement Agreement adopts the following uncontested proposals:

1. SoCalGas's and SDG&E's non-Core transportation revenue requirements will continue to be subject to 100% balancing account treatment.

2. SoCalGas' and SDG&E's forecasts of Core and non-Core demand as presented in direct testimony and included as Appendix D to the Settlement Agreement will be used to set transportation rates during the term of the Settlement Agreement.
3. The Unaccounted-For (UAF) gas percentages are updated to 0.835% for SoCalGas and 0.532% for SDG&E. The percentage allocations for SoCalGas are 71.1% Core and 28.9% non-Core. The percentage allocations for SDG&E are 76.71% Core and 23.29% non-Core. The resulting UAF factors for SoCalGas are 0.594% for Core and 0.241% for non-Core. For SDG&E, the resulting factors are 0.408% for Core and 0.124% for non-Core.
4. Backbone Transportation Service (BTS).
   a. Discounts to interruptible and firm BTS contracts (with and without alternate receipt point rights) will be included in the Backbone Transmission Balancing Account and amortized in BTS rates the following year.
   b. The BTS denominator will be represented as an estimated average BTS subscription/utilization based on BTS firm straight fixed-variable contracts, scheduled modified fixed-variable, and interruptible throughput.
   c. All references to long-term intrastate transportation agreements in the Schedule No. G-BTS are eliminated.
   d. Schedule No. G-BTS is modified to assign BTS open season Step 2 bidding rights directly to balancing agents based on their respective customer balancing responsibilities.
5. Regulatory Accounts.
   a. A true-up mechanism to amortize in rates the additional unamortized over- or under-collection that remains in the CFCA at the end of each year is adopted. If the unamortized portion of the CFCA balance is greater than 10% of the total amount of the authorized margin recorded in the CFCA for the last four months of the year at SoCalGas, or 15% of the total amount of the authorized margin recorded in the CFCA for the last

four months of the year at SDG&E, then SoCalGas and/or SDG&E will file an advice letter proposing to update rates for the unamortized portion(s) of the CFCA balance(s). SoCalGas and/or SDG&E will file a Tier 2 advice letter by February 28th in the following year requesting the rate update to be effective April 1. Rates will be updated to reflect recovery or refund of the unamortized portion of the CFCA balance over the remaining nine months of the year.

b. The residual balance of the 2008-2011 program cycle of the Research Development & Demonstration Expense Account is transferred to the CFCA and NFCA based on the allocation methodology consistent with this account.

6. Curtailment Penalty Refunds.

a. SoCalGas will refund $1.4 million, including interest, of curtailment charges from a December 27, 2012, localized curtailment of interruptible non-Core customers in the northern San Joaquin Valley (SJV) system as a bill credit to those non-Core customers who curtailed. Each customer's refund amount will be a pro-rata share of the balance based on its usage in a comparable non-curtailment period.

b. SoCalGas will refund approximately $0.2 million of curtailment penalties for two curtailment events of Standby Procurement Service (one beginning December 7, 2013, the other beginning February 6, 2014) by transferring the amount, including interest, to the CFCA and NFCA and amortize these regulatory account balances in transportation rates over a 12-month period beginning on January 1, 2017 (or, the first January 1 following Commission approval of the Settlement Agreement). The allocation between the CFCA and NFCA will be based on customer usage that occurred in December 2012 and February 2013 for those Core Aggregation Transportation customers and non-Core customers who complied with the curtailment order.

c. SoCalGas will refund $24 in curtailment penalties related to a November 3, 2014, localized partial curtailment on interruptible non-Core customers in order to facilitate Pipeline Safety Enhancement Plan work by transferring the amount to the NFCA and amortizing the balance in transportation rates over a 12-month period beginning January 1, 2017 (or, the first January 1 following Commission approval of the Settlement Agreement).

d. SDG&E will refund $0.1 million in curtailment penalties related to all of the curtailment violations during the prior TCAP period by transferring the amount to the NFCA and amortizing the balance in transportation rates over a 12-month period beginning January 1, 2017 (or, the first January 1 following Commission approval of the Settlement Agreement).

4.2. Standard of Review of the Settlement Agreement

The Commission has long favored the settlement of disputes.[4] This policy supports many worthwhile goals, including reducing the expense of litigation, conserving scarce Commission resources, and allowing parties to reduce the risk that litigation will produce unacceptable results.[5]

The Commission's standard for the approval of settlements is set forth in Rule 12.1(d), which states that the Commission will not approve a settlement "unless the settlement is reasonable in light of the whole record, consistent with law, and in the public interest." In assessing whether a settlement agreement satisfies this standard, the Commission evaluates the entire agreement as a package, not just its individual parts:

---

[4] D.11-05-018 at 16, and D.88-12-083 at 54.

[5] D.05-03-022 at 7-8, and D.92-12-019 at 7-8.

> In assessing settlements we consider individual settlement provisions but, in light of strong public policy favoring settlements, we do not base our conclusion on whether any single provision is the optimal result. Rather, we determine whether the settlement as a whole produces a just and reasonable outcome. (D.10-04-033 at 9.)

As discussed below, we conclude that the Settlement Agreement, taken in its entirety, satisfies Rule 12.1(d).

4.2.1. Reasonable in Light of the Whole Record

We conclude pursuant to Rule 12.1(d) that the Settlement Agreement is reasonable in light of the whole record of this proceeding. As described in the preceding summary of the Settlement Agreement, the specific outcomes on the issues resolved by the Settlement are within the range of the parties' positions defined by A.15-07-014 and the Settling Parties' written testimony. None of the Settlement outcomes is inconsistent with the law or the public interest.

Although we find the Settlement Agreement reasonable in light of the whole record, we note that the Settlement Agreement allocates a larger share of costs to Core Residential customers compared to the status quo and allocates a smaller share of costs to Core Commercial and Industrial (Core C&I) customers compared to the status quo. Table 1, below, shows the effect of the Settlement Agreement's cost allocations on SoCalGas's Core Residential customers and Core C&I customers:

Table 1

SoCalGas Cost Allocation - Current vs. Settlement

Excluding Storage and Backbone Transmission

	A	B	C	D	E	F	G	H	I	J	K
	Volume 1/1/2015	% Total Volume	Transport. Revenue 1/1/2015	% Total Revenue	Settlmt. Volume 1/1/2017	% Total Volume	Settlmt. Transport. Revenue 1/1/2017	% Total Revenue	Volume % Percent Difference F - B	Revenue % Percent Difference H - D	Revenue Increase or Decrease J * Revenue
Core											
Residential	2,337,534	24.49%	$1,672,983	76.92%	2,435,160	25.86%	$1,540,361	79.40%	1.37%	2.47%	$47,940
C&I	984,102	10.31%	$334,392	15.38%	1,023,186	10.87%	$249,288	12.85%	0.55%	-2.53%	-$49,014
Other Core	134,819	1.41%	$18,837	0.87%	178,566	1.90%	$17,969	0.93%	0.48%	0.06%	$1,165
Total Core	**3,456,455**	**36.21%**	**$2,026,212**	**93.17%**	**3,636,912**	**38.62%**	**$1,807,618**	**93.17%**	2.41%	0.00%	$91
Noncore											
Total Noncore C&I	1,547,620	16.21%	$74,045	3.40%	1,525,340	16.20%	$64,185	3.31%	-0.02%	-0.10%	$0
Total Electric Generation	2,975,049	31.17%	$54,273	2.50%	2,677,795	28.44%	$46,899	2.42%	-2.73%	-0.08%	$0
Total Wholesale	1,565,548	16.40%	$20,314	0.93%	1,576,959	16.75%	$21,415	1.10%	0.34%	0.17%	$0
Total Noncore	**6,088,217**	**63.79%**	**$148,632**	**6.83%**	**5,780,094**	**61.38%**	**$132,499**	**6.83%**	**-2.41%**	**0.00%**	**$0**
Total Core and Noncore	**9,544,672**	**100.00%**	**$2,174,844**	**100.00%**	**9,417,006**	**100.00%**	**$1,940,117**	**100.00%**	**0.00%**	**0.00%**	**$91**

Table 1, above, shows that on January 1, 2015, the total costs (excluding commodity costs, storage, and backbone transmission) allocated among all of SoCalGas's Core and Non-Core customers was $2,174,844,000 of which 76.92% was allocated to Core Residential customers, 15.38% was allocated to Core C&I customers, and the remainder was allocated to other customer classes. Under the Settlement Agreement, on January 1, 2017, the total costs (excluding commodity costs, storage, and backbone transmission) allocated among all of SoCalGas's Core and Non-Core customers is $1,940,117,000 of which 79.40% is allocated to Core Residential customers, 12.85% is allocated to Core C&I customers, and the remainder to other customer classes. The share of total costs allocated to Core Residential customers increases by 2.47% (*i.e.*, 79.40% less 76.92%), and the share of total costs allocated to Core C&I customers decreases by 2.53% (*i.e.*, 12.85% less 15.38%). The effect of the Settlement Agreement is to increase the costs allocated to SoCalGas's Core Residential customers by $47.940 million and to decrease the costs allocated to Core C&I customers by $49.014 million.

Table 2, below, shows the effect of the Settlement Agreement's cost allocations on SDG&E's Core Residential customers and Core C&I customers:

Table 2
SDG&E Cost Allocation - Current vs. Settlement

	A	B	C	D	E	F	G	H	I	J	K
	Volume 1/1/2015	% Total Volume	Transport. Revenue 1/1/2015	% Total Revenue	Settlmt. Volume 1/1/2017	% Total Volume	Settlmt. Transport. Revenue 1/1/2017	% Total Transport. Revenue	Volume % Percent Difference	Revenue % Percent Difference	Revenue Increase or Decrease
									F - B	H - D	J * Revenue:
Core											
Residential	321,869	26.16%	$296,319	79.03%	319,982	25.89%	$231,235	84.10%	-0.27%	5.07%	$13,939
C&I	177,578	14.43%	$61,962	16.53%	182,660	14.78%	$28,435	10.34%	0.35%	-6.18%	-$17,003
NGV	11,417	0.93%	$1,747	0.47%	18,501	1.50%	$2,308	0.84%	0.57%	0.37%	$1,027
Total Core	**510,864**	**41.52%**	**$360,028**	**96.02%**	**521,143**	**42.16%**	**$261,978**	**95.28%**	**0.65%**	**-0.74%**	**-$2,037**
Noncore											
C&I	**38,743**	**3.15%**	**$1,622**	**0.43%**	**44,975**	**3.64%**	**$923**	**0.34%**	**0.49%**	**-0.10%**	**-$266**
Electric Generation	**680,879**	**55.33%**	**$13,283**	**3.54%**	**669,882**	**54.20%**	**$12,044**	**4.38%**	**-1.14%**	**0.84%**	**$2,303**
Total Noncore	**719,622**	**58.48%**	**$14,905**	**3.98%**	**714,857**	**57.84%**	**$12,967**	**4.72%**	**-0.65%**	**0.74%**	**$2,037**
Total System	**1,230,486**	**100.00%**	**$374,933**	**100.00%**	**1,236,000**	**100.00%**	**$274,945**	**100.00%**	**0.00%**	**0.00%**	**0.00%**

Table 2, above, shows that on January 1, 2015, the total costs (excluding commodity costs) allocated among all of SDG&E's Core and Non-Core customers was $374.933 million, of which 79.03% was allocated to Core Residential customers, 16.53% was allocated to Core C&I customers, and the remainder was allocated to other customer classes. Under the Settlement Agreement, on January 1, 2017, the total costs (excluding commodity costs) allocated among all of SDG&E's Core and Non-Core customers is $274.945 million, of which 84.10% is allocated to Core Residential customers, 10.34% is allocated to Core C&I customers, and the remainder to other customer classes. The share of total costs allocated to Core Residential customers increases by 5.07% (*i.e.*, 84.10% less 79.03%), and the share of total costs allocated to Core C&I customers decreases by 6.18% (*i.e.*, 10.34% less 16.53%). The effect of the Settlement Agreement is to increase the costs allocated to SDG&E's Core Residential customers by $13.939 million and to decrease the costs allocated to Core C&I customers by $17.003 million. The increased costs allocated to SDG&E's Core Residential customers occurs alongside lower relative volumes

for this customer class, and the decreased costs allocated to Core C&I customers occurs alongside higher relative volumes for this customer class.

The Comparison Exhibit filed by the Settling Parties on July 5, 2016, shows that the Settlement Agreement outcomes regarding the increase in the percentage of total costs allocated to Core Residential customers, and the decrease in the percentage of total costs allocated to Core C&I customers, is much closer to the Applicants' litigation position than to ORA's and TURN's litigation positions. Nonetheless, we accept the representation from the Settling Parties, including ORA and TURN, that the Settlement Agreement outcomes with respect to cost allocations to the Core Residential and Core C&I customer classes are reasonable in light of the record because both ORA and TURN are experienced advocates representing the interests of Core Residential customers and because of the considerations discussed in the next paragraph.

Finally, we note that although the approved Settlement Agreement allocates a larger share of costs to the Core Residential class, the overall effect of the Settlement is to decrease rates for this class because of a projected refund of balancing account over-collections.

4.2.2. Consistent with the Law

We conclude pursuant to Rule 12.1(d) that the Settlement Agreement is consistent with the law. The Settling Parties are represented by experienced counsel. In agreeing to the terms of the Settlement, the Settling Parties considered relevant statutes and Commission decisions, and they represent that the Settlement Agreement is fully consistent with those statutes and prior Commission decisions. We do not detect, and it has not been alleged, that any part of the Settlement Agreement is inconsistent with the Public Utilities Code, Commission decisions, or the law in general.

4.2.3. Public Interest

We conclude pursuant to Rule 12.1(d) that the Settlement is in the public interest. The Commission has determined that a settlement that "commands broad support among participants fairly reflective of the affected interests" and "does not contain terms which contravene statutory provisions or prior Commission decisions" meets the "public interest" criterion.[6] With one exception, all of the active parties who took positions on the issues covered by the Settlement have signed the Settlement Agreement. The one exception is Shell, which did not file any comments or other pleadings opposing the Settlement. The Settling Parties reflect the range of affected interests, including those of the applicant utilities and the impacted customer groups. The fact that multiple parties, reflecting the affected interests, reached a compromise that is acceptable from their respective viewpoints indicates that the overall result is in the public interest.

4.2.4. Conclusion

The Settlement Agreement satisfies the requirement in Rule 12.1(d) that it be reasonable in light of the whole record, consistent with the law, and in the public interest. Therefore, we approve the Settlement Agreement without modification. Pursuant to Rule 12.5, our approval of the Settlement Agreement is binding on all parties in this proceeding, and our approval does not constitute approval of, or precedent regarding, any principle or issue in this proceeding or in any future proceeding.

---

[6] D.10-06-015 at 11-12, citing D.92-12-019 at 7.

5. Issues Not Resolved by the Settlement Agreement

The Settlement Agreement approved by today's decision resolves most, but not all, issues in this proceeding. We address the unresolved issues below.

5.1. Composite Tier Method

5.1.1. Background

SoCalGas and SDG&E have a two-tier rate structure for residential gas customers. Tier 1 applies to the baseline quantity of gas,[7] and Tier 2 applies to usage in excess of the baseline quantity. Both Tier 1 and Tier 2 rates are volumetric rates that recover both the commodity cost of gas and the utility's non-gas (*i.e.*, "transportation") costs.

Public Util. Code §§ 739(d) and 739.7 require an "inverted" rate structure for residential customers, with the lowest rate applying to the baseline quantity. These statues state in relevant part:

> **§ 739(d)(1)**: The commission shall require that every electrical and gas corporation file a schedule of rates and charges providing baseline rates. The baseline rates shall apply to the first or lowest block of an increasing block rate structure which shall be the baseline quantity. In establishing these rates, the commission shall avoid excessive rate increases for residential customers, and shall establish an appropriate gradual differential between the rates for the respective blocks of usage.

---

[7] Pub. Util. Code § 739(a)(1) defines "baseline quantity" as "a quantity of electricity or gas allocated by the commission for residential customers based on from 50 to 60 percent of average residential consumption of these commodities, except that, for residential gas customers and for all-electric residential customers, the baseline quantity shall be established at from 60 to 70 percent of average residential consumption during the winter heating season. In establishing the baseline quantities, the commission shall take into account climatic and seasonal variations in consumption and the availability of gas service."

> **§ 739(d)(2)**: In establishing residential electric and gas rates, including baseline rates, the commission shall ensure that the rates are sufficient to enable the electrical corporation or gas corporation to recover a just and reasonable amount of revenue from residential customers as a class, while observing the principle that electricity and gas services are necessities, for which a low affordable rate is desirable and while observing the principle that conservation is desirable in order to maintain an affordable bill.
>
> **§ 739.7**: In establishing residential rates, the commission shall retain an appropriate inverted rate structure. If the commission increases baseline rates pursuant to Section 739, revenues resulting from those increases shall be used exclusively to reduce non-baseline residential rates.

The previously cited statutes require baseline Tier 1 rates to be lower than non-baseline Tier 2 rates. The issue before us here is how to treat residential fixed customer charges when calculating the statutorily mandated difference between baseline Tier 1 rates and non-baseline Tier 2 rates. A baseline rate that includes fixed charges when calculating the tier differential is referred to as a "composite baseline rate." Including fixed charges in the tier differential calculation is referred to as the "composite tier method."

The Applicants recommend that residential fixed customer charges be excluded from the tier differential calculation. SoCalGas currently has a fixed charge of $5 per month for residential customers. SDG&E does not currently have a fixed monthly charge for residential gas customers.

5.1.2. Positions of the Parties

5.1.2.1. The Applicants

The Applicants recommend that the tier differential calculation exclude fixed customer charges. This is an appropriate approach, according the Applicants, because it is easier to implement and understand.

The Applicants state that Pub. Util. Code §§ 739(d)(1) and 739.7 do not expressly require the composite tier method. Rather, according to Applicants, the intent of these statutes is to promote conservation with volumetric rates that increase with usage. This purpose is not furthered by including fixed charges – which by their nature do not vary with customer usage – in the tier differential calculation.

The Applicants state that the purpose of fixed charges is to send accurate price signals regarding the utility's fixed costs so that customers can make economically efficient decisions regarding energy usage and investments.[8] The Applicants also cite the Commission's determination in D.15-07-001 that any negative impact on conservation associated with a fixed charge is likely to be small.[9] The Applicants state that because fixed charges are not meant to provide a price signal regarding conservation and have only a small potential effect on conservation, there is no policy reason to include fixed charges in the tier differential calculation.

5.1.2.2. ORA

ORA recommends that the Commission use the composite tier method to calculate tier differentials. ORA disputes the Applicants' claim that D.15-07-001 supports the Applicants' position that "fixed charge revenues should not be part of the tier differential calculation."[10] ORA asserts that D.15-07-001 states the opposite of the Applicants' contention:

---

[8] D.15-07-001 at 323 (Findings of Fact 175 and 176).

[9] D.15-07-001 at 61, 101, and 225.

[10] Exhibit SCG-03 at 8, lines 11-12.

> Based on the Commission's interpretation of the statute [Pub. Util. Code § 739.9(c)], we have consistently required the [investor-owned electric utilities] to use the composite tier methodology. Indeed, in D.89-01-055 we concluded that "revenues from any customer charge must, as a matter of law, be included in the baseline rate for purposes of Section 739(c).":…It is clear that, if the utilities are not required to use the composite tier differential [with a fixed customer charge], the rates will essentially be flat, with no differential between the tiers. (D.15-07-001 at 97.)

5.1.2.3. TURN

TURN asserts that Pub. Util. Code §§ 739(d) and 739.7 require the use of the composite tier method if a fixed customer charge is present. According to TURN, this requirement has been confirmed by Commission decisions dating back to 1979.[11] In a recent decision on Pacific Gas and Electric Company's (PG&E) electric rate design, the Commission held that residential fixed customers charges must be included in baseline Tier 1 rates when calculating tier differentials:

> [The] Commission has previously recognized fixed customer charges as being inseparable from the Tier 1 usage-based rate for purposes of calculating and measuring bill impacts of tier differentials. In this context, although a fixed customer charge is not applied on a per-unit volumetric usage basis for billing purposes, the Commission has still recognized fixed customer charges in calculating customer-related bill impacts for usage within baseline quantities. Accordingly, even though the customer charge is not a volume-based billing determinant, the customer charge is still relevant in calculating the "rate for usage" in the context of identifying impacts on customers usage in Tier 1 (*i.e.*, baseline quantities)

[11] Exhibit TURN-01 at 47-48, citing D.91107, D.92497, D.85-04-110, and D.89-01-055.

> or Tier 2 (up to 130 percent of baseline usage). Irrespective of whether rate design is configured to recover customer-related costs as a fixed amount or through a per-unit consumption rate, the customer impact is the same. (D.11-05-047 at 29-30.)

In D.15-07-001, the Commission affirmed that it has consistently required use of the composite tier method, both as a matter of law and because of the sound policy reasons for doing so:

> Because the law requires a baseline tier, we agree with long-standing Commission legal interpretation that the calculation should be made with the composite tier. Otherwise, we allow the utilities to effectively avoid the law. (D.15-07-001 at 97-98.)

TURN argues that the Applicants have failed to provide the Commission with sufficient reason to abandon its long-standing and recently affirmed requirement to use the composite tier method. Instead, TURN states that the Applicants make several claims that are out of context or incorrect.

- According to the Applicants, "It is an accepted understanding that the inverted rate structure for residential rates is designed to promote conservation by having the non-baseline tier higher than a baseline tier." TURN responds that the primary purpose of baseline rates since their inception has been to ensure customers had access to a reasonable amount of gas and electricity at relatively lower rates. While promoting conservation is an important by-product of the inverted rate structure, its roots are in the desire "to provide California's residential customers with necessary amounts of gas and electricity at a fair cost while also encouraging conservation of energy." (D.15-07-001 at 9.)
- The Applicants' assertion that "the Commission recently determined [in D.15-07-001] that fixed charges do not

> impact conservation or energy efficiency programs"[12] misinterprets that decision. The Commission recognized in D.15-07-001 that a fixed charge affects conservation by failing to encourage additional conservation.[13] And it confirmed that the decision to not adopt a customer charge for residential customers of the electric utilities would "continue to keep volumetric rates higher, and therefore more likely to incent conservation."[14] TURN argues that the Commission left no doubt that it recognizes that the higher volumetric rates encourage conservation and that this effect can be a reason for rejecting proposals for new or increased customer charges.

TURN disputes the Applicants' claim that residential customers will more readily understand rates that are the product of a simple tier calculation than rates under the composite tier method.[15] TURN asserts that the Applicants' claim is not based on any survey of customers' understanding of their rates.[16] TURN states that if a customer charge is adopted, the customer's bill is going to show a customer charge, a baseline rate, a non-baseline rate, and a total charge, whether or not the tier differential calculation is performed on a "simplified" or "composite" basis. TURN asserts that the Applicants have provided no evidence that a simple tier differential would achieve a greater customer understanding of the resulting rate structure than using the composite tier method.

---

[12] Bonnett, 4 RT 222.

[13] D.15-07-001 at 214.

[14] D.15-07-001 at 269.

[15] Bonnett, 4 RT 227, and Exhibit SCG-05 at 8.

[16] Bonnett, 4 RT 227 – 230.

5.1.3. Discussion

Public Util. Code §§ 739(d) and 739.7 require an inverted rate structure for residential gas customers, with the lowest rate applying to the baseline quantity. The effect of these statutes is that SoCalGas's and SDG&E's residential Tier 1 rates, which apply to the baseline quantity, must be lower than Tier 2 rates.

The issue before us is whether residential fixed customer charges should be included in Tier 1 rates when calculating the difference between baseline Tier 1 rates and non-baseline Tier 2 rates. Including fixed customer charges in baseline Tier 1 rates is known as the "composite tier method." SoCalGas has a fixed customer charge of $5 per month for its residential customers. SDG&E does not have a fixed customer charge for its residential customers.

There is a long line of Commission precedent that requires the use of the composite tier method, including D.15-07-001, D.04-01-027, D.00-04-060, and D.97-04-082.[17] We disagree with the Applicants' position that D.15-07-001 does not require the composite tier method. The following provisions in D.15-07-001 demonstrate conclusively that the composite tier method must be used to calculate tier differentials:

> Section 739(d)(1) requires the Commission to "require that every electrical and gas corporation file a schedule of rates and charges providing baseline rates. The baseline rates shall apply to the first or lowest block of an increasing block rate structure which shall be the baseline quantity. In establishing these rates, the commission shall avoid excessive rate increases of residential customers, and shall establish an appropriate gradual differential between the rates for the respective blocks of usage."

[17] D.15-07-001 at 96 – 98 and Conclusion of Law 11; D.04-01-027 at 18-19 and Finding of Fact 4; D.00-04-060 at 104-106; and D.97-04-082 at 118 and Finding of Fact 83.

> Parties raised several questions in connection with this requirement for a baseline tier…
>
> [If] if a baseline tier is required by law, should the differential between tiers be set to take into account the amount of the fixed charge? ... Based on the Commission's interpretation of the statute, we have consistently required the [electric investor-owned utilities] to use the composite tier methodology… Because the law requires a baseline tier, we agree with long-standing Commission legal interpretation that the calculation should be made with the composite tier. Otherwise, we allow the utilities to effectively avoid the law. (D.15-07-001, at 96 - 98.)
>
> * * * * * * * * * * *
>
> A composite tier differential is required to comply with the Section 739(d)(1) requirement that the Commission "establish an appropriate gradual differential between rates for the respective blocks of usage." (D.15-07-001 at 327, Conclusion of Law 11.)

In light of the Commission's long-standing and recently reaffirmed precedent requiring the use of the composite tier method, we conclude that the composite tier method must be used in this proceeding to set an appropriate and lawful differential between baseline Tier 1 rates and non-baseline Tier 2 rates for SoCalGas's and SDG&E's residential customers.

5.2. Residential Fixed Customer Charges

5.2.1. Background

The Applicants propose to increase the fixed monthly charge for SoCalGas's residential customers from $5 per month to $10 per month and to institute a fixed monthly charge of $10 per month for SDG&E's residential customers. SDG&E does not currently have a residential customer charge.

5.2.2. Positions of the Parties

5.2.2.1. The Applicants

The Applicants offer two main reasons for adopting their residential fixed customer charge proposal. First, they state that fixed costs should be recovered through fixed charges, which is a principle that the Commission has recognized since at least 1993.[18]

Second, the Applicants state that low-volume users are subsidized by high-volume users when there is no fixed customer charge for fixed costs or when a fixed customer charge is below fixed costs. This occurs because the fixed costs that are not recovered in the customer charge must be recovered in the volumetric rate. With an inverted rate design for the residential class, a large portion of fixed costs are recovered in the higher Tier 2 rate. Because high-volume users have a larger portion of their consumption at the higher Tier-2 rate, the high-volume users incur a disproportionate amount of the fixed costs. In practical terms, this mean that customers who live in older homes subsidize the fixed costs of providing gas service to customers in newer energy-efficient homes and customers who live in cooler inland areas (during the winter) subsidize customers who live in warmer (during the winter) coastal areas.

The Applicants submit that residential fixed charges are common in the United States. They cite a report from the American Gas Association (AGA), titled "Natural Gas Utility Rate Structure: The Customer Charge Component," which summarizes natural gas utility tariffs in all 50 states. The report states that residential fixed charges range from a high of $45.06/month to a low of $0 for

[18] D.93-06-087 at 27.

SDG&E, with the median fixed charge in the United States being $11.25/month.[19] Currently, SDG&E is the only gas utility in California and, based on the AGA report, perhaps in the United States, that does not have a fixed charge for residential customers.[20] The Applicants submit that it does not make sense for SDG&E to be the only major natural gas utility in the United States without a fixed cost recovery mechanism or for SoCalGas to maintain the same $5/month fixed customer charge that the Commission adopted more than two decades ago.

The Applicants suggest that their proposed residential fixed customer charges could be phased in over three years, with 33% of the customer charge increase implemented each year, *i.e.*, 33% of the proposed increase in 2017; 66% of the proposed increase in 2018; and full implementation of the proposed increase in 2019.[21] For SoCalGas this would translate to a customer charge of $6.65 per month in 2017, $8.30 per month in 2018, and $10 per month in 2019. For SDG&E this would translate to a customer charge of $3.33 per month in 2017, $6.67 per month in 2018, and $10 per month in 2019.

5.2.2.2. ORA

ORA opposes the Applicants' proposed residential fixed customer charges. ORA states that the Applicants' primary justification for their proposal is that fixed charges should be used to recover fixed costs. ORA submits that the Commission has previously held that cost causation, on its own, is not a sufficient basis to adopt fixed customer charges for residential customers. For

---

[19] Exhibit SCG-01 at 7. Appendix B of Exhibit SCG-01 provides the referenced AGA report.

[20] The Applicants acknowledge that PG&E has a $3 minimum bill that was adopted by the Commission in D.05-06-029.

[21] Exhibit SCG-05 at 7.

example, in D.11-05-047 the Commission acknowledged that PG&E's proposal for a $5.00 charge for its residential electric customers "would more closely reflect cost causation and would more align PG&E's retail rates with costs…."[22] Yet the Commission declined to adopt PG&E's proposal "on both legal and policy grounds."[23] Subsequently, the Commission in D.14-07-007 denied SDG&E's request to adopt a fixed customer charge for its residential gas customers.[24] Recently, in D.15-07-001 the Commission deferred consideration of fixed charges for residential electric customers, including those of SDG&E.[25]

ORA disagrees with the Applicants' position that a fixed customer charge is an appropriate mechanism to recover a utility's fixed costs. ORA states that the premise of setting rates and charges based on costs is to provide customers with appropriate price signals to influence their behavior. ORA opines that a fixed customer charge does not provide a price signal because there is no way for the customer to avoid the charge or have any control over it.

ORA states that the parties in this proceeding have not agreed on a method for determining fixed costs or the amount of fixed costs. Instead, as part of the Settlement Agreement, parties merely agreed to certain outcomes for allocating costs and setting rates, stating specifically:

> Through the Settlement process, Settling Parties were able to identify certain outcomes pertaining to the LRMC and embedded cost studies that, if adopted as a package, would represent an acceptable resolution for each party involved in the settlement discussions. Accordingly, the Settling Parties

---

[22] D.11-05-047 (issued in A.10-03-014), at 32.

[23] D.11-05-047 at 24.

[24] D.14-06-007 at 62, Ordering Paragraph 11.

[25] D.15-07-001 at 215.

> have taken a "black box" approach to reaching settlement and have agreed to certain modifications to their original cost allocation proposals that are expressly intended to achieve these preferred outcomes. (Joint Motion for Adoption of TCAP Phase 2 Settlement Agreement, May 27, 2016, at 11.)

ORA states that because the underlying premise for establishing fixed customer costs is absent in this proceeding, there is no basis for adopting the Applicants' proposed fixed customer charges.

ORA disagrees with the Applicants' claim that a fixed customer charge reduces intra-class subsidies. ORA responds that the Applicants' assumption that intra-class subsidies exist is not supported by the record. Specifically, when asked to support the assumption that intra-class subsidies exist, the Applicants responded:

> As an example, the two tables below show the 5-year history comparing annual heating degree days (HDDs) for the "Inland" vs "Coastal" service areas. HDDs drive the gas heating demand during cold days in winter months. Specifically, an HDD is the number of degrees that a day's average temperature is below 65 (degrees) Fahrenheit. Thus, the higher number of HDD the lower the average daily temperature… As the tables above clearly show, customers in the "Inland" area require more natural gas to heat their homes, and therefore, with all other things being equal, pay more to heat their home during the winter season than a similar home located in a "Coastal" area. Thus, geographic location of a home does impact how much natural gas is used for space heating. A customer living inland would use more gas and subsidize the usage of an identical home located in the coastal environment. (Exhibit ORA-05 at 13 – 14.)

ORA represents that the tables referenced in the above response do not break down the information into therms used by customers, do not compare how many or what percentage of coastal versus inland customers use the baseline tier,

and do not show how many or what percentage of coastal versus inland customers use both the baseline and non-baseline tiers.[26] ORA states that without the missing information, the Applicants cannot show that inland customers subsidize coastal customers because of inverted tiers.

Another flaw with the Applicants' proposed fixed customer charges, according to ORA, is that the proposal will cause bills to go up for lower usage customers and down for higher usage customers. ORA explains there is a level of consumption, which the Applicants call a "break-even point,"[27] at which a residential gas customer would be indifferent between the status quo and the proposed customer charge. Any customer who uses less than the break-even point would pay a higher bill under the Applicants' proposal compared to the status quo. Conversely, any customer who consumes more than the break-even point would pay a lower monthly bill under the Applicants' proposal compared to the status quo. The less gas a consumer uses relative to the break-even point, the higher the bill increase with the fixed customer charge. Conversely, the more gas a consumer uses relative to the break-even point, the greater the bill decrease with the fixed customer charge.[28]

In light of this principle, ORA is concerned that the Applicants' proposed fixed customer charges would cause some residential customers to bear a disproportionate increase in their bills. The Table below shows that with the Applicants' proposed fixed customer charges, SoCalGas's multi-family customers would see an average monthly bill increase of 11.15% and SDG&E's

---

[26] Bonnett, 3 RT 125, 126, and 172.

[27] Bonnett, 34 RT 172.

[28] Bonnett, 3 RT 172 - 174.

multi-family customers would see an average monthly bill increase of 21.85%. The nearly 22% increase in the average SDG&E multi-family customer's bill is more than eight times the increase for the residential class's monthly average bill.

Bill Impact of Proposed Residential Customer Charge ($/month)					
	1/1/2015	TCAP Proposal w/o cust. chg.	TCAP Proposal with cust. chg.	$ Change	% Change
	A	**B**	**C**	**D**	**E**
SoCalGas Residential Bill					
Residential Class Monthly Average (Jan-Dec)	$41.54	$39.89	$39.78	($0.12)	-0.29%
Single Family Monthly Average (Jan-Dec)	$43.97	$42.23	$41.82	($0.41)	-0.96%
Multi Family Monthly Average (Jan-Dec)	$22.52	$21.69	$24.11	$2.42	11.15%
Calif. Alternate Rate for Energy (CARE) Monthly Average (Jan-Dec)	$26.77	$25.70	$26.38	$0.68	2.66%
Baseline only Monthly Average (Jan-Dec)	$33.02	$31.69	$32.56	0.87	2.74%
SDG&E Gas Residential Bill					
Residential Class Monthly Average (Jan-Dec)	$34.28	$29.87	$30.34	0.47	1.57%
Single Family Monthly Average (Jan-Dec)	$38.05	$33.15	$32.79	($0.37)	-1.10%
Multi Family Monthly Average (Jan-Dec)	$21.38	$18.63	$22.70	$4.07	21.85%
CARE Monthly Average (Jan-Dec)	$23.88	$20.74	$21.93	$1.19	5.72%
Baseline only Monthly Average (Jan-Dec)	$32.45	$28.11	$28.96	$0.85	3.04%
Source: Exhibit ORA-06, page 1.					

ORA states that the adverse bill impact associated with the Applicants' proposed fixed customer charges is exacerbated by the fact that the majority of SoCalGas's and SDG&E's multi-family customers are billed for amounts less than the average bill.[29] For the reasons explained previously, fixed customer charges cause bills to increase for small users. It thus follows that, with the increased fixed customer charges proposed by the Applicants, most of SDG&E's

[29] Exhibit TURN-04 at 9c and 11c.

and SoCalGas's multi-family customers would experience a monthly bill increase higher than the average residential customer.

ORA disputes the Applicants' claim that their proposed fixed customer charges would cause the average residential bill to decrease by 12 cents for SoCalGas and increase by 47 cents for SDG&E.[30] ORA responds that the majority or residential customers are billed for amounts less than the "average bill." For the reasons explained previously, a fixed customer charge causes bills to increase for small users. It thus follows that, with a fixed customer charge, most of SoCalGas's and SDG&E's residential customers would experience a monthly bill increase higher than the residential class average bill.

5.2.2.3. TURN

TURN urges the Commission to reject the Applicants' proposed fixed charges for residential customers. TURN argues that Commission precedent is firmly against the Applicants' proposed fixed charges. In D.97-04-082, the Commission rejected SoCalGas's request to increase its $5/month fixed customer charge to $13.57 for single-family customers and $10.35 for multi-family customers, to be phased in over a five-year period. The Commission found unpersuasive the utility's claim that customers in older, energy-inefficient homes who use more gas are subsiding customers in newer, energy-efficient homes who use less gas.[31]

In D.00-04-060, the Commission rejected SoCalGas's request to increase its residential fixed customer charge from $5.00 to $7.00 because of (1) significant bill impacts for a large number of customers; (2) inadequate substantiation of

---

[30] Exhibit SCG-01 at 12, Table 5.

[31] D.97-04-082, 1997 Cal. PUC LEXIS 241, at *172-173 and *176-177.

alleged intra-class cross-subsidization; and (3) equity considerations that warranted rejection of a 40% increase to the customer charge, particularly in light of the limited opportunities that low usage customers have to control their bill.[32]

More recently, in D.14-06-007 the Commission rejected SDG&E's proposal for a $5.00 customer charge. The Commission found, "SDG&E's argument that a $5 per month charge sends a significant 'cost causation' signal for fixed costs is not persuasive when weighed against the dilution of conservation and energy efficiency price signals.[33]"

TURN submits that bill impacts should be a primary factor in assessing the Applicants' residential fixed customer charge proposal. TURN states that bill impacts depend on a customer's gas usage. There is a "break-even" point representing customer indifference; at that level of consumption, residential customers would pay the same whether their bill includes the status quo customer charge or the higher customer charge proposed by the utility. All residential customers consuming less than the "break-even" number of therms would see bill increases under the Applicants' proposal, and the less their consumption is relative to the break-even point, the greater the bill increase. Conversely, customers who consume more than the break-even number of therms would see decreased bills, and the greater their consumption above the break-even point, the greater the decrease to the customer's bill.

TURN notes that the Applicants' bill analysis defined a "typical" residential customer as one who uses the average number of therms. The Applicants' analysis shows their proposed customer charges would decrease

---

[32] D.00-04-060 at 93-94.

[33] D.14-06-007 at 41. *See also* Finding of Fact 22.

monthly customer bills by 0.29% for the "average" SoCalGas residential customer and increase monthly bills by 1.57% for the average SDG&E residential customer.[34] TURN posits that a customer using the "average" number of therms is not a "typical" customer for the purpose of gauging the impact of the Applicants' proposed customer charges. This is because for the residential class as a whole, as well as for each subset within the Residential Class, the vast majority of customers consume less than the average number of therms.

TURN believes that it is better to analyze bill impacts based on the median level of consumption[35] rather than average consumption. TURN represents that the median consumption amount is significantly lower than the average consumption amount, whether one looks at the residential class as a whole, the single-family or multi-family subsets, or California Alternate Rates for Energy (CARE) customers.[36]

TURN states that for SDG&E, those customers at the median level of consumption for the residential class as a whole would see a bill that is 9.1% higher under the Applicants' proposed customer charge of $10/month. For SDG&E's CARE customers and multi-family customers, the median bill would increase by 12.3% and 40.8%, respectively.[37] For SoCalGas, the bill impacts are lower (commensurate with the proposed increase of $5 to the customer charge rather than the $10 increase sought by SDG&E). The residential class as a whole

---

[34] Exhibit SCG-01 at 12, Table 5.

[35] The median level of consumption is the middle point for usage. Fifty percent of customers have consumption that is equal to or greater than the median, and 50% of customers have consumption that is equal to or less than the median.

[36] Exhibit TURN-04 at 12 and 12a-12h.

[37] Exhibit TURN-07 at 3.

would see a median bill that is 4.9% higher, CARE customers would see an increase of 5.7%, and multi-family customers would see an increase of 16.9%.[38]

TURN maintains that for those residential customers who use less than the median amount of gas—half of each utility's residential customers—bill increases of these amounts are the best they can hope for. The more a customer's consumption is below the median, the greater the bill increase.

TURN analysis of bill impacts shows 46-59% of SDG&E customers living in multi-family housing would pay at least $90 more per year under the Applicants' proposal.[39] For SoCalGas, the impacts are less pronounced because the utility is seeking a $5 increase to an existing customer charge rather than adoption of a new $10 customer charge. Still, the adverse impacts are concentrated in small, multi-family dwellings where 90% of such customers would see bill increases under the Applicants' proposal.[40]

TURN disputes the Applicants' claim that their fixed customer charge proposal is necessary to reduce purported subsidization of low-usage residential customers by high-usage customers. TURN responds that the Applicants did not present any meaningful analysis to establish the presence of the purported subsidies or the extent of any such subsidies. TURN submits that it is incumbent upon the Applicants to establish the extent of the purported subsidy and to demonstrate that the harm caused by the subsidy is so great that it justifies the adverse impacts that lower-usage customers would experience from introduction of a $10 per month fixed customer charge.

---

[38] Exhibit TURN-07 at 6.

[39] Exhibit TURN-01 at 55.

[40] Exhibit TURN-01 at 56-57.

TURN is also concerned that the Applicants' proposed fixed customer charges would reduce the incentives for customers to conserve energy. All else being equal, an increased fixed charge will decrease the cost-effectiveness of measures that save natural gas, as it lowers the incremental savings associated with each therm of reduced consumption. This has several negative consequences, according to TURN. First, it will decrease the effectiveness of ratepayer-funded energy efficiency programs. Second, the reduced incentive to conserve gas will likely result in higher consumption, resulting in higher gas prices and increased greenhouse gas emissions. Finally, the recent gas leak at the Aliso Canyon storage facility has led to calls for greater conservation from Southern California residents.[41] TURN states that until it is known if and when the Aliso Canyon facility will return to service, the Commission should avoid taking steps that might undermine Aliso Canyon-related conservation efforts.

TURN notes that in D.15-07-001, the Commission recognized "the importance of providing adequate marketing, education and outreach to customers so that they can understand and respond appropriately to their electricity rates."[42] The Commission concluded:

> Although a fixed monthly fee is used in the rate structure of many utilities, implementing a fixed charge for these IOUs at this time would be confusing to customers, and would not be acceptable without significant education and the ability to show customers that the fixed charge is not causing their electricity rates to increase.[43]

---

[41] D.16-04-039, Finding of Fact 5.

[42] D.15-07-001 at 255.

[43] D.15-07-001 at 269.

TURN represents that the Applicants did not assess the likelihood of customer acceptance of their proposed residential customer charges.

5.2.3. Discussion

The issue before us is whether to adopt the residential fixed customer charges proposed by the Applicants. They ask the Commission to:

- Adopt a fixed charge of $0.32876 per-meter-per-day (approximately $10 per month) for SoCalGas residential customers. SoCalGas currently has a residential fixed charge of $0.16438 per-meter-per-day (approximately $5 per month).
- Adopt a fixed charge of $0.32876 per-meter-per-day (approximately $10 per month) for SDG&E residential customers. SDG&E does not currently have a fixed charge for residential customers.

In D.15-07-001, we recognized the need to calculate fixed customer charges in a manner that accurately reflects customer-specific fixed costs and minimizes the regressive impacts of fixed charges.[44] Therefore, to decide whether to adopt the Applicants' proposed residential fixed customer charges, we will perform a two-step analysis. The first step is to assess whether the record demonstrates that the proposed residential fixed customer charge of $10/month is commensurate with SoCalGas's and SDG&E's fixed customer costs. The second step is to assess the regressive bill impacts that the proposed fixed customer charge of $10/month would have on residential customers.

In the first step of our analysis, the parties presented widely differing estimates of SoCalGas's and SDG&E's fixed costs to serve residential customers. On the low end, ORA estimates that SoCalGas's fixed costs to serve its residential

[44] D.15-07-001 at 214.

customers are approximately $5/month and that SDG&E's are approximately $6.50/month.[45] On the high end, the Applicants estimate that SoCalGas's marginal costs to serve its residential customers are $18.67/month and that SDG&E's are $20.00/month.[46] However, as noted by TURN, the Applicants claim that all of their estimated marginal costs are fixed costs.[47] We agree with ORA that at least some of the Applicants' estimated marginal costs are probably variable costs.[48] Based on this record, we cannot reach the finding that the Applicants' proposed fixed customer charge of $10/month for SoCalGas's and SDG&E's residential customers is commensurate with the fixed costs that these utilities incur to serve their residential gas customers.

The second step of our analysis is to assess the regressive bill impacts of the Applicants' proposed fixed customer charges. The record shows that adopting the Applicants' proposed fixed customer charge of $10/month would cause the following adverse and regressive bill impacts for many of SoCalGas's and SDG&E's residential customers:

- The proposed fixed customer charge would increase bills for residential customers who use the least amount of natural gas, and decrease bills for residential customers who use the most natural gas.[49]

---

[45] Exhibit ORA-03 at 63-64.

[46] Exhibits SCG-16 at 14; SCG-17 at 10-11; and SCG-18 at 5.

[47] TURN Opening Brief at 15-16, citing Exhibit SCG-01 at 4-5.

[48] Exhibit ORA-03 at 62-64.

[49] Bonnett, 3 RT 173, 12 - 174, 18.

- For SoCalGas's residential customers, doubling the monthly fixed charge from $5/month to $10/month would result in half of all residential customers receiving a bill that is at least 4.9% higher compared to the status quo. Half of SoCalGas's CARE customers would face an increase of at least 5.7%. And half of SoCalGas's customers living in multi-family dwellings would experience bills that are at least 16.9% higher.[50]
- For SDG&E's residential customers, adopting a new fixed charge of $10/month would result in half of all residential customers receiving a bill that is at least 9.1% higher compared to the status quo of no customer charge. Half of SDG&E's CARE customers would face an increase of at least 12.3%. And half of SDG&E residential customers living in multi-family dwellings would experience bills that are at least 40.8% higher.[51]

These adverse impacts would be in addition to the increased costs that are allocated to Core Residential customers under the Settlement Agreement approved by today's decision, as described in Section 5.2.1 of today's decision.

Based on the record of this proceeding, we conclude that it is not in the public interest to adopt the Applicants' proposed fixed customer charge of $10/month for SoCalGas's and SDG&E's residential gas customers. The Applicants have not adequately established the cost basis for their proposed customer charge, and at least half of SoCalGas's and SDG&E's residential customers would experience adverse and regressive bill impacts from the proposed customer charge.

---

[50] Exhibit TURN-07 at 6.

[51] Exhibit TURN-07 at 3.

5.3. Minimum Bill for SDG&E Residential Gas Customers

5.3.1. Background

ORA recommends that the Commission adopt a minimum bill of $3 per month for SDG&E's residential gas customers. ORA's proposed minimum bill of $3/month would replace the volumetric rate for the first $3 of gas usage per month. As a result, a residential customer would always pay a minimum bill of $3/month, regardless of usage. When a customer's volumetric rate for gas usage exceeds $3 per month, the minimum bill of $3 would no longer apply. The following table illustrates this principle:

Minimum Bill	Volumetric Rate for Gas Usage	Customer Bill
$3	$1	$3
$3	$2	$3
$3	$3	$3
$3	$4	$4
$3	$5	$5

The above table shows that the adverse customer bill impacts of ORA's proposed $3/month minimum bill are limited to customers whose gas usage is less than $3 per month.

5.3.2. Positions of the Parties

5.3.2.1. The Applicants

The Applicants applaud ORA's effort to bridge the gap between the current 100% volumetric rate structure for residential gas customers at SDG&E and the Applicants' proposed residential fixed customer charge of $10/month. If the only two options were the current 100% volumetric rate structure and a

$3/month minimum bill for SDG&E's residential gas customers, the Applicants would support the minimum bill.

That said, the Applicants contend that a fixed customer charge is superior to a minimum bill. In fact, in D.15-07-001 the Commission explained that the end goal for electric residential rate design is fixed charges, not minimum bills:

> [T]oday's decision adopts a minimum bill provision as part of a gradual transition to a rate structure that includes [time-of-use] rates, flatter tiers, and fixed charges.
>
> . . . . . .
>
> The minimum bill provision will allow customers to become familiar with the new tier structure first, followed by a fixed charge once tier flattening is complete and default [time-of-use] is adopted such that a fixed charge to collect marginal-cost based customer costs is necessary and appropriate. (D.15-07-001 at 225 and 226.)

The Applicants opine that natural gas rates are not subject to the same complex issues that the Commission was dealing with on the electric side in D.15-07-001. SoCalGas has had a fixed customer charge for years, and it has not created any issues that would require a minimum bill.

5.3.2.2. ORA

ORA recommends that the Commission adopt a minimum bill of $3/month for SDG&E residential gas customers. ORA submits that its proposed minimum bill is authorized by Pub. Util. Code § 739.9(h), which states:

> The commission may consider whether minimum bills are appropriate as a substitute for any fixed charges.

ORA asserts that its proposed minimum bill is consistent with the Commission's rate design policy for the recovery of fixed costs. Specifically, in

D.05-06-029 the Commission adopted a $3 minimum bill for PG&E.[52] Subsequently, in D.15-07-001 the Commission rejected a request by electric IOUs for a fixed monthly charge and directed the electric IOUs to implement a minimum bill of $10/month.[53]

ORA disagrees with the Applicants' position that D.15-07-001 demonstrates that the Commission adopted a minimum bill as an interim step to fixed customer charges. What D.15-07-001 actually states is that the Commission will consider fixed customer charges in the future but only after certain conditions are met.[54] ORA asserts that several of these conditions have not been met with respect to the Applicants' proposed fixed customer charges in the instant proceeding.[55]

5.3.2.3. TURN

TURN recommends that the Commission not adopt ORA's proposed minimum bill of $3/month for SDG&E residential gas customers. TURN believes that ORA's proposal assumes that the Commission has only two options: Adopt either a fixed customer charge or a minimum bill. TURN opines that there is a third option: Adopt neither at this time.

---

[52] D.05-06-029 at 5. See also D.05-06-029 at 24, Finding of Fact 2. ("A $3 minimum monthly transportation bill for residential customers would not create hardship for customers and recognizes that PG&E incurs costs even when a customer does not use any gas commodity.")

[53] D.15-07-001 at 5.

[54] D.15-07-001 at 191-192 and 227.

[55] One condition requires: "Ensuring that any fixed charge amount treats small and large customers fairly." That is not the case here, according to ORA. The Applicants' proposed fixed charge would result in an increase of almost 22% of SDG&E's multi-family customers' average bill, more than eight times higher than the increase to the monthly average bill of SDG&E's entire residential class.

TURN states that although the Commission in D.15-07-001 approved a minimum bill for electric utility residential customers, it did so based on the extensive record developed in that proceeding. In TURN's opinion, the instant proceeding lacks an adequate record to adopt a $3/month minimum bill for SDG&E's residential gas customers.

That said, TURN agrees with ORA that a minimum bill is superior to the Applicants' proposed fixed customer charge. A minimum bill would not have the unacceptable bill impacts and other adverse outcomes associated with fixed customer charges. And it would not require any change to the composite tier method used to calculate tier differential. Therefore, while TURN believes the best outcome is to not adopt either a fixed customer charge or a minimum bill for SDG&E's residential gas customers, if the Commission decides to adopt one or the other, it should adopt ORA's minimum bill proposal.

5.3.3. Discussion

Previously in today's decision, we rejected the Applicants' proposal to adopt a fixed customer charge of $10/month for SDG&E's residential gas customers. Here, we address ORA's proposal to adopt a minimum bill of $3/month for SDG&E's residential gas customers. We have explicit statutory authority to adopt ORA's proposed minimum bill pursuant to Pub. Util. Code § 739.9(h), which states as follow:

> The commission may consider whether minimum bills are appropriate as a substitute for any fixed charges.

ORA's proposed minimum bill is consistent with the precedent established by D.15-07-001 wherein the Commission adopted a minimum bill for the residential customers of California's three largest electric utilities. The purpose of the minimum bill adopted by D.15-07-001 is to enable an electric utility to

recover some of the fixed costs that the utility incurs to provide service to its customers, including customers with little or no usage.[56]

We will use a two-step analysis to decide whether to adopt ORA's proposed minimum bill. The first step is to assess whether the record demonstrates that the proposed minimum bill of $3/month is commensurate with the fixed costs that SDG&E incurs to serve residential gas customer. The parties presented differing estimates of SDG&E's fixed costs. ORA presented the lowest estimate of approximately $6.50/month.[57] Based on this record, we find that ORA has adequately established a cost basis for its proposed minimum bill of $3/month for SDG&E's residential gas customers.

The second step of our analysis is to assess the bill impacts of ORA's proposed minimum. We agree with TURN's assessment that ORA's proposed minimum bill of $3/month would not have the unacceptable bill impacts and other adverse outcomes associated with the Applicants' proposed fixed customer charge of $10/month for SDG&E's residential gas customers described previously in today's decision.[58]

For the preceding reasons, we find that ORA's proposed minimum bill is reasonable. Therefore, we conclude that the precedent established by D.15-07-001 regarding minimum bills is applicable here. In that decision, the Commission adopted a minimum bill of $10/month for the residential electric customers of PG&E, SCE, and SDG&E and $5/month for their CARE electric

---

[56] D.15-07-001 at 217.

[57] Exhibit ORA-03 at 63-64.

[58] TURN Opening Brief at 30. See also TURN's Reply Brief at 14. ("If good policy is sometimes achieved by finding the outcome that is least objectionable to competing interests, ORA's minimum bill proposal seems to meet that criterion.")

customers.[59] Consistent with D.15-07-001 and ORA's proposal, we will adopt a minimum bill of $3/month for SDG&E's residential gas customers and $2.40/month for SDG&E's CARE residential gas customers.[60] The low minimum bill adopted by today's decision will ensure that all of SDG&E's residential gas customers contribute a modest amount towards the fixed costs that SDG&E incurs to serve all of its residential customers, including customers with little or no usage. The low minimum bill also avoids potential negative impacts on energy conservation associated with a fixed charge, and it protects lower-usage customers whose fixed costs might be lower than average.[61] Consistent with D.15-07-001, the revenues from the minimum bill adopted by today's decision shall be applied to reduce volumetric Tier 1 transportation rates.[62]

5.4. Residential Tier Differentials

5.4.1. Background

Pub. Util. Code §§ 739(d)(1) and 739.7 require an inverted rate structure for residential gas customers, with the lowest rate applying to the baseline allowance. To implement this statutory requirement, the Commission has adopted a two-tier rate structure for SoCalGas and SDG&E residential gas

---

[59] D.15-07-001 at 227.

[60] The CARE discount for SDG&E residential gas service is 20%. Additional information regarding the CARE program and SDG&E's CARE rates and charges is available on the Commission's website at http://www.cpuc.ca.gov/General.aspx?id=976 and in SDG&E Tariff Schedule G-CARE.

[61] The Commission used the same reasoning to adopt a minimum bill for electric utility residential customers in D.15-07-001 at 225.

[62] D.15-07-001 at 328, Conclusion of Law 22.

customers.[63] Tier 1 rates apply to the baseline allowance, and Tier 2 rates apply to usage in excess of the baseline allowance. The difference between Tier 1 rates and Tier 2 rates is called the "tier differential." The tier differential applies to bundled rates (transportation plus commodity). In calculating the tier differential, the Commission uses a composite Tier 1 rate (volumetric rates plus fixed customer charges).

5.4.2. Positions of the Parties

5.4.2.1. The Applicants

The Applicants recommend that Tier 2 rates be set 15% higher than Tier 1 rates (*i.e.*, a tier differential ratio of 1.15 to 1.00), subject to the condition that the tier differential should be capped at $0.26 per therm.

5.4.2.2. ORA

ORA recommends a "target" tier differential ratio of 1.15 to 1.00.

5.4.2.3. TURN

TURN recommends that the Commission adopt a tier differential ratio of 1.15 to 1.00, calculated on a composite basis, with no cap on the nominal difference between baseline and non-baseline tier levels. TURN states that the Commission has long recognized that a 15% tier differential ratio "strikes a reasonable balance between our ratemaking goals and the legislative mandate for an inverted residential rate structure."[64]

---

[63] In addition to volumetric rates, SoCalGas has a residential fixed customer charge of $5/month, and SDG&E has a residential minimum bill of $3/month adopted by today's decision.

[64] Exhibit ORA-01 (Direct Testimony of Pearlie Sabino), p. 71, ll. 22-24, quoting D.93-06-087.

TURN urges the Commission to reject the Applicants' proposed 26-cent differential cap as a valid rate-design goal. TURN states that the current 26-cent differential cap is the product of a settlement adopted in D.09-11-006.[65] When the Applicants proposed its continuation in the 2011 TCAP, no party contested that proposal and it was adopted by the Commission.[66] TURN submits that the Commission should treat the current 26-cent differential cap as the vestige of a past settlement that has no particular significance.

TURN states that the Applicants describe their proposal as seeking to continue with a target tier differential ratio of 1.15 to 1.00, but only to the extent it can be achieved within the confines of the 26-cent differential cap.[67] The Applicants also acknowledge that it would be impossible to achieve the 1.15 to 1.00 tier ratio on a composite basis with the 26-cent differential cap.[68] TURN believes that something has to give between the 1.15 to 1.00 tier ratio, the composite tier differential calculation, and maintaining the 26-cent cap.

TURN asserts that the Applicants would make maintaining the 26-cent cap the highest priority, even if it means abandonment of the composite tier method in order to achieve the 26-cent cap. TURN submits that the Applicants' attempt to have rate design outcomes based foremost on maintaining the 26-cent differential cap must be rejected in favor of retaining the composite tier method and achieving a reasonable tier differential.

---

[65] D.09-11-006., Appendix A at 11.

[66] D.14-06-007, Attachment IV, Item 9 at 3.

[67] Exhibit ORA-1 at 69, lines 12-21 (describing SoCalGas responses to ORA's data requests).

[68] Bonnett, 4 RT 218, lines 2-13.

5.4.3. Discussion

In order to maintain the inverted rate structure required by Pub. Util. Code §§ 739(d)(1) and 739.7, we agree with ORA and TURN that it is a reasonable to adopt a tier differential ratio of 1.15 to 1.00 (i.e., Tier 2 rates exceed Tier 1 rates by 15%). The adopted tier differential ratio applies to bundled rates (transportation plus commodity). We also agree with TURN that the adopted tier differential ratio should be calculated using the composite tier method, with no "cap" on the nominal difference between Tier 2 rates and Tier 1 rates.

5.5. The Aliso Canyon Memorandum Account

5.5.1. Background

SoCalGas owns and operates the Aliso Canyon gas storage field. On October 23, 2015, a massive gas leak was discovered at one of the gas wells at Aliso Canyon. On February 18, 2016, California state officials announced that the gas leak was permanently sealed. However, due to the gas leak, natural gas has not been injected into Aliso Canyon since October 25, 2015, and injections will remain suspended until a comprehensive safety review of gas wells at Aliso Canyon is completed by independent experts.[69] As of the date of today's decision, it is uncertain if or when Aliso Canyon will resume normal operations.

On March 17, 2016, the Commission issued D.16-03-031 in this proceeding. That decision ordered SoCalGas to establish a memorandum account to track SoCalGas's authorized revenue requirement and actual revenues that SoCalGas receives for its normal, business-as-usual costs to own and operate Aliso Canyon. As explained in the summary section of D.16-03-031:

---

[69] D.16-03-031 at 1-2 and Findings of Fact 1 and 2.

> This order requires [SoCalGas] to establish a memorandum account, effective immediately, to track its authorized revenue requirement and all revenues that SoCalGas receives for its normal, business-as-usual costs to own and operate the Aliso Canyon gas storage field. SoCalGas shall establish the memorandum account by submitting a Tier 2 advice letter within five business days from the effective date of this order. The Commission will determine at a later time whether, and to what extent, the authorized revenue requirement and revenues tracked by the memorandum account should be refunded to SoCalGas's customers with interest. (D.16-03-031 at 1.)

D.16-03-031 authorized parties to recommend in their briefs an appropriate procedure and timeframe for determining whether, and to what extent, the authorized revenue requirement and revenues tracked by the Aliso Canyon memorandum account should be refunded to SoCalGas's customers.[70]

5.5.2. Positions of the Parties

5.5.2.1. The Applicants

The Applicants recommend that the Commission direct SoCalGas to file an application seeking a Commission order relating to the treatment of the amounts tracked in the Aliso Canyon memorandum account by the later of:
(1) August 31, 2019, or (2) six months after a final Commission decision in the anticipated Commission proceeding regarding the Aliso Canyon leak and any related application(s) for rehearing. The Applicants believe this approach will enable the Commission to consider the appropriate treatment of the amounts tracked by the memorandum account with a full record regarding all of the facts and issues that could impact a decision regarding the costs.

---

[70] D.16-03-031 at Ordering Paragraph No. 4.

The Applicants aver that their proposal is consistent with the Commission's treatment of Aliso Canyon costs in D.16-06-054, which approved SoCalGas's and SDG&E's 2016 GRC applications. In that decision, the Commission stated that the Commission's Safety and Enforcement Division (SED) is currently conducting a root cause analysis of the well leak at Aliso Canyon and that the Commission will likely commence a proceeding regarding the leak once the root cause analysis is completed. The Commission further stated that the Aliso Canyon memorandum account established by D.16-03-031 will enable the Commission to deal with authorized but unspent amounts that are targeted for underground storage activities if all or some portion of Aliso Canyon is shut down during the Test Year 2016 GRC cycle.[71]

The Applicants believe the Aliso Canyon-related discussion in D.16-06-054 should guide the Commission's procedure and timeframe for determining whether, and to what extent, the authorized revenue requirement and revenues tracked by the Aliso Canyon memorandum account should be refunded to SoCalGas's customers. The Commission will not begin a future proceeding relating to the Aliso Canyon leak until after SED completes its root cause analysis. Any decision regarding a possible refund of Aliso Canyon revenue requirements should likewise be delayed until both the root cause analysis and the Commission's future proceeding relating to the Aliso Canyon leak are completed.[72] Only then will the Commission have the information it needs to

---

[71] D.16-06-054 at 251. See also D.16-06-054 at 310 (Finding of Fact 192).

[72] Or, if the Commission should decide not to institute a formal proceeding relating to the leak, then the conclusion of the root cause analysis.

determine whether a disallowance of previously authorized Aliso Canyon-related revenue requirements would be appropriate.

The Applicants further believe that until the current 2016-2018 GRC cycle is completed, it will be impossible to fully determine to what extent Aliso Canyon wells were shut down during that time period and whether SoCalGas has unspent amounts originally targeted for storage activities.

5.5.2.2. ORA

ORA recommends postponing a Commission decision on customer refunds from the Aliso Canyon memorandum account for one year to see whether the Commission holds any proceedings that affect the operating costs of Aliso Canyon and SoCalGas's ultimate revenue requirement for Aliso Canyon. If the Commission chooses to hold such proceedings, then ORA recommends postponing customer refunds from the Aliso Canyon memorandum account until those proceedings have been completed.

5.5.2.3. SCGC

SCGC recommends that the Commission (1) affirm that only Aliso Canyon-related revenues and not Aliso Canyon "actual costs" may be recorded in the Aliso Canyon memorandum account; and (2) determine that the issue of refunding the revenues tracked by memorandum account will be considered in an investigatory proceeding that it is expected to commence after SED issues its report on the root causes of the Aliso Canyon leak.

5.5.2.4. TURN

TURN believes that the best course of action is to continue the Aliso Canyon memorandum account while deferring the disposition of the amounts recorded therein until the Commission and all interested parties have a fuller sense of the total costs at issue for ratemaking purposes (both "business-as-

usual" and any post-leak cost the utility may try to recover in rates) and a fuller understanding of the circumstances leading to the leak. TURN expects that the disposition of the memorandum account's balance will likely be part of the range of Aliso Canyon-related ratemaking issues addressed in a later proceeding.

5.5.3. Discussion

In D.16-03-031, the Commission ordered SoCalGas "to establish a memorandum account, effective immediately, to track its authorized revenue requirement and all revenues that SoCalGas receives for its normal, business-as-usual costs to own and operate Aliso Canyon."[73] Those business-as-usual costs "include depreciation, rate-of-return, taxes, operations and maintenance, administrative and general, and all other direct and indirect costs that SoCalGas incurs to own and operate Aliso Canyon in the normal course of business."[74] The Commission emphasized: "Such costs exclude expenses associated with the recent gas leak at Aliso Canyon."[75] The Commission elaborated that the memorandum account should include revenues from SDG&E customers: "The revenues tracked by the memorandum account shall include actual and imputed revenues for Aliso Canyon-related costs allocated to San Diego Gas & Electric Company (SDG&E) and its customers."[76]

D.16-03-031 states at Ordering Paragraph 4 that the Commission may decide in this proceeding the procedure and timeframe for determining whether, and to what extent, the authorized revenue requirement and revenues tracked by

---

[73] D.16-03-031 at 8, Ordering Paragraph 1.

[74] D.16-03-031 at 8, Ordering Paragraph 1.

[75] D.16-03-031 at 8, Ordering Paragraph 1.

[76] D.16-03-031 at 3, Footnote 6.

the Aliso Canyon memorandum account should be refunded to SoCalGas's customers with interest.

SED is currently conducting a root cause analysis of the Aliso Canyon gas leak. After SED completes its analysis, we anticipate that a formal investigation Order Instituting Investigation (OII) will be opened to consider SED's analysis and potential remedial actions. It is possible that the scope of the OII may include the issue of whether, and to what extent, the amounts tracked by the Aliso Canyon memorandum account should be refunded to SoCalGas's ratepayers.

In the event that the scope of the OII does not include the refund issue, then SoCalGas shall file an application regarding whether, and to what extent, the amounts tracked by the Aliso Canyon memorandum account should be refunded to SoCalGas's customers no later than three months after a final decision in the investigation proceeding. SoCalGas shall not wait to file the required application until after the resolution of any application(s) for rehearing on the Commission's final decision in the OII. If the Commission does not issue an OII regarding the Aliso Canyon leak by September 30, 2017, or open a similar proceeding by September 30, 2017, then SoCalGas shall file the required application by January 1, 2018.

The procedure and timeframe adopted by today's decision for considering the appropriate disposition of the amounts tracked by the Aliso Canyon memorandum account will enable the Commission to address this matter with knowledge of all relevant facts and issues.

6. Implementation of Revised Rates and Charges

SoCalGas and SDG&E shall each file a Tier 2 Advice Letter (AL) within 30 days of the effective date of today's decision that contains revised rates and

charges that implement the demand forecasts, cost allocations, and rate designs adopted by today's decision. The revised tariff sheets contained in these ALs shall be effective on or after the date filed, subject to the Commission's Energy Division determining that the revised tariff sheets are in compliance with today's decision. Each AL shall include documentation sufficient to permit the Energy Division to determine if the AL is in compliance with today's decision.

7. Safety Considerations

Pub. Util. Code § 451 requires every public utility to "furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities… as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public." No party raised any safety-related issues during this proceeding. We have reviewed the record of this proceeding for safety-related issues, and we do not find any safety-related issues that need to be addressed in today's decision.

8. Comments on the Proposed Decision

The proposed decision of the assigned ALJ in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code, and comments were allowed pursuant to Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on September 15, 2016, by the Applicants and Clean Energy. Reply comments were filed on September 20, 2016, by the Applicants, ORA, and TURN.

Today's final decision incorporates the following revisions in response to the comments and reply comments on the proposed decision:

- In response to comments submitted by Clean Energy, today's decision clarifies that the balance that accrues over the term of the Settlement Agreement in the NGV subaccount of the CFCA that is established pursuant to

Section II.B.1.b of the Settlement Agreement[77] shall be amortized exclusively in rates applicable to the NGV customer class, even if the rates needed to effect such amortization are implemented after the term of the Settlement Agreement. For example, if the Settlement Agreement is in place from January 1, 2017, through December 31, 2019, three years of NGV subaccount balances would be amortized exclusively in the rates for the NGV customer class, even if the rates for the NGV customer class that are adjusted to reflect those balances are implemented on January 1, 2020.[78]

- In response to comments submitted by the Applicants, the CARE discount for the minimum bill of $3/month for SDG&E's residential gas customers adopted by today's decision is reduced from a 50% discount to a 20% discount, consistent with the CARE discount applicable to SDG&E's other rates and charges for residential gas customers.[79] The minimum bill with the CARE discount of 20% is $2.40/month
- In response to comments submitted by the Applicants, a typographical error in renumbered Conclusion of Law 10 is

---

[77] Section II.B.1.b of the Settlement Agreement states: "The Core Fixed Cost Accounts (CFCA) at both SoCalGas and SDG&E are modified to establish two subaccounts. One subaccount will record the cost and revenue activity related to the NGV customer class and the other subaccount will record the cost and revenue activity related to all other Core classes. The NGV subaccount is allocated only to the NGV customer class. The non-NGV Core subaccount is allocated to all non-NGV Core customer classes using the current methodology of Equal Cents Per Therm (ECPT)."

[78] Clean Energy comments on the proposed decision at pages 2 – 3. See also Applicants Reply Comments on the proposed decision at 1 – 2.

[79] Applicants comments on the proposed decision at page iii, page 4 at Footnote 4, and page A-1. The CARE discount for SDG&E residential gas service is 20%. Additional information regarding the CARE program and SDG&E's CARE rates and charges is available on the Commission's website at http://www.cpuc.ca.gov/General.aspx?id=976 and in SDG&E Tariff Schedule G-CARE.

corrected.[80] Several other typographical errors are corrected, too.

We decline to adopt the following two revisions to the proposed decision requested by the Applicants: (1) establish a fixed charge of $5/month for SDG&E residential customers instead of a minimum bill of $3/month; and (2) maintain the existing cap of $0.26 per therm on the difference between residential Tier 2 rates and Tier 1 rates. These requested revisions do not identify any factual, legal, or technical errors in the proposed decision.[81]

9. Assignment of the Proceeding

Liane M. Randolph is the assigned Commissioner for this proceeding, and Timothy Kenney is the assigned ALJ.

Findings of Fact

1. In A.15-07-014, SoCalGas and SDG&E request that the Commission adopt specified demand forecasts, cost allocations, and rate designs for the purpose of setting gas transportation rates and charges beginning on January 1, 2017.

2. On May 27, 2016, most active parties filed a motion for the adoption of a Settlement Agreement. The Settlement Agreement is attached to the motion. There is no opposition to the Settlement Agreement.

3. The Settlement Agreement resolves most issues raised in A.15-07-014 and the written testimony served by the parties.

---

[80] Applicants comments on the proposed decision at page A-1.

[81] Rule 14.3(c) states: "Comments shall focus on factual, legal or technical errors in the proposed or alternate decision and in citing such errors shall make specific references to the record or applicable law. Comments which fail to do so shall be accorded no weight."

4. The specific outcomes on the issues covered by the Settlement Agreement are within the range of positions and outcomes defined by A.15-07-014 and the parties' written testimony.

5. The parties to the Settlement Agreement are fairly reflective of the interests affected by the Settlement Agreement.

6. Including fixed customer charges in baseline Tier 1 rates when calculating tier differentials is known as the "composite tier method."

7. SoCalGas's and SDG&E's proposed customer charge of $10/month for residential gas customers is not commensurate with the fixed costs that these utilities incur to serve their residential gas customers.

8. SoCalGas's and SDG&E's proposed customer charge of $10/month for residential gas customers would cause significant adverse bill impacts for at least half of their residential gas customers.

9. The purpose of a minimum monthly bill is to enable a utility to recover at least some of the ongoing fixed costs that the utility incurs to provide service.

10. ORA's proposed minimum bill of $3/month for SDG&E's residential gas customers is less than the fixed costs that SDG&E incurs to provide natural gas service to residential customers.

11. ORA's proposed minimum bill of $3/month for SDG&E's residential gas customers would not have the unacceptable bill impacts and other adverse outcomes associated with the Applicants' proposed fixed charge of $10/month.

12. In D.15-07-001, the Commission adopted a minimum bill of $10/month for the residential electric customers of PG&E, SCE, and SDG&E and $5/month for CARE customers.

13. On October 23, 2015, a massive gas leak was discovered at one of the gas wells at Aliso Canyon. Although the gas leak has been sealed, it is uncertain if or when Aliso Canyon will resume normal operations.

14. D.16-03-031 ordered SoCalGas to establish a memorandum account to track its authorized revenue requirement and all revenues that SoCalGas receives for its normal, business-as-usual costs to own and operate Aliso Canyon. The same decision provides that the Commission may determine in this proceeding the appropriate procedure and timeframe for determining whether, and to what extent, the authorized revenue requirement and revenues tracked by the memorandum account should be refunded to SoCalGas's customers.

Conclusions of Law

1. The Settlement Agreement is reasonable in light of the record, consistent with the law, and in the public interest.

2. The Settlement Agreement should be approved without modification.

3. To give full effect to Section II.B.1.b. of the Settlement Agreement, the balance in the NGV subaccount of the CFCA shall be amortized exclusively in the rates for the NGV customer class, even if the rates adjusted to reflect those balances become effective after the term of the Settlement Agreement.

4. Pursuant to Rule 12.5, the approval of the Settlement Agreement by today's decision is binding on all parties in this proceeding and does not constitute approval of, or precedent regarding, any principle or issue in this proceeding or in any future proceeding.

5. SoCalGas and SDG&E are required by Pub. Util. Code § 739(d)(1) and Commission precedent to use the composite tier method to calculate residential tier differentials.

6. SoCalGas's and SDG&E's proposed fixed customer charge of $10/month for residential gas customers should not be adopted.

7. Pub. Util. Code § 739.9(h) provides the Commission with statutory authority to adopt ORA's proposed minimum bill of $3/month for SDG&E's residential gas customers.

8. The precedent established by D.15-07-001 regarding minimum bills for residential electric customers is applicable to ORA's proposed minimum bill of $3/month for SDG&E's residential gas customers.

9. It is reasonable and in the public interest to adopt a minimum bill of $3 per month for SDG&E's residential gas customers and $2.40 per month for SDG&E's CARE residential gas customers. The revenues from the adopted minimum bill should be used to reduce SDG&E's volumetric Tier 1 transportation rates for residential gas customers.

10. To maintain the inverted rate structure required by Pub. Util. Code §§ 739(d)(1) and 739.7, it is reasonable to adopt a tier differential ratio of 1.15 to 1.00 for SDG&E's and SoCalGas's residential Tier 2 and Tier 1 rates (*i.e.*, Tier 2 residential gas rates exceed Tier 1 residential gas rates by 15%). The adopted tier differential ratio should apply to bundled rates (transportation plus commodity), should be calculated using the composite tier method, and should have no cap on the nominal difference between Tier 2 rates and Tier 1 rates.

11. SoCalGas and SDG&E should each file a Tier 2 AL within 30 days of the effective date of today's decision that contains revised rates and charges that implement the demand forecasts, cost allocations, and rate designs adopted by today's decision. The revised tariff sheets contained in these ALs should be effective on or after the date filed, subject to the Commission's Energy Division determining that the revised tariff sheets are in compliance with today's decision.

12. If the Commission opens an OII regarding the Aliso Canyon gas leak and the scope of the proceeding does not include the issue of whether, and to what extent, the amounts tracked by the Aliso Canyon memorandum account should be refunded to SoCalGas's customers with interest, then SoCalGas should file an application to address this refund issue no later than three months after a final Commission decision in the investigation proceeding. If the Commission does not open an investigation proceeding regarding the Aliso Canyon leak by September 30, 2017, then SoCalGas should file by January 1, 2018, an application to address the issue of whether, and to what extent, the amounts tracked by the Aliso Canyon memorandum should be refunded to SoCalGas's customers with interest.

13. The following order should be effective immediately so that the rates and charges adopted by the order may be implemented by January 1, 2017.

O R D E R

IT IS ORDERED that:

1. The motion filed on May 27, 2016, for adoption of the Settlement Agreement attached to the motion is granted. The Settlement Agreement attached to the motion is approved. A copy of the approved Settlement Agreement is contained in Appendix A of this decision.

2. San Diego Gas & Electric Company and Southern California Gas Company shall amortize the balance in the natural gas vehicles (NGV) subaccount of the Core Fixed Cost Account exclusively in the rates for the NGV customer class, even if the rates adjusted to reflect those balances become effective after the term of the Settlement Agreement adopted by this Order.

3. Southern California Gas Company and San Diego Gas & Electric Company shall use the composite tier method to calculate tier differentials for their residential gas customers.

4. A minimum bill of $3.00 per month is adopted for the residential gas customers of San Diego Gas & Electric Company (SDG&E). A minimum bill of $2.40 per month is adopted for the residential gas customers of SDG&E who participate in the California Alternate Rates for Energy program. The revenues from the adopted minimum bill shall be used to reduce SDG&E's volumetric Tier 1 transportation rates for residential gas customers.

5. Starting January 1, 2017, a tier differential ratio of 1.15 to 1.00 shall be used to determine Tier 2 and Tier 1 rates for the residential gas customers of Southern California Gas Company and San Diego Gas & Electric Company (*i.e.*, Tier 2 residential gas rates exceed Tier 1 residential gas rates by 15%). The adopted tier differential ratio shall apply to bundled rates (transportation plus commodity), shall be calculated using the composite tier method, and shall not have a cap on the nominal difference between Tier 2 rates and Tier 1 rates.

6. Within 30 days from the effective date of this Order, stated below, Southern California Gas Company and San Diego Gas and Electric Company shall each file a Tier 2 advice letter (AL) that contains revised rates and charges that implement the demand forecasts, cost allocations, and rate designs adopted by today's decision. The revised tariff sheets filed in these ALs shall be effective on or after the date filed, subject to the Commission's Energy Division determining that the revised tariff sheets are in compliance with today's decision. Each AL shall include documentation sufficient to permit the Energy Division to determine if the AL is in compliance with this decision.

7. If the Commission opens an Order Instituting Investigation, or similar proceeding, proceeding regarding the Aliso Canyon gas leak and the scope of the proceeding does not include the issue of whether, and to what extent, the amounts tracked by the Aliso Canyon memorandum account established pursuant to Decision 16-03-031 should be refunded to the customers of Southern California Gas Company (SoCalGas) with interest, then SoCalGas shall file an application to address this refund issue no later than three months after a final Commission decision in the investigation proceeding. If the Commission does not open an Order Instituting Investigation, or other similar proceeding, regarding the Aliso Canyon leak by September 30, 2017, then SoCalGas shall file by January 1, 2018, an application to address the issue of whether, and to what extent, the amounts tracked by the Aliso Canyon memorandum should be refunded to the customers of SoCalGas with interest.

8. Application 15-07-014 is granted to the extent set forth in the preceding Ordering Paragraphs. The Application is denied in all other respects.

9. Application 15-07-014 is closed.

This order is effective today.

Dated _____, 2016, at San Francisco, California.

Attachment A: Settlement Agreement

Note: The attached Settlement Agreement includes non-substantive formatting changes compared to the document that was filed and served.

SOUTHERN CALIFORNIA GAS COMPANY (U 904 G), SAN DIEGO GAS & ELECTRIC COMPANY (U 902 G), OFFICE OF RATEPAYER ADVOCATES, THE UTILITY REFORM NETWORK, CALIFORNIA MANUFACTURERS & TECHNOLOGY ASSOCIATION, CITY OF LONG BEACH GAS & OIL DEPARTMENT, CLEAN ENERGY FUELS CORP., INDICATED SHIPPERS, SOUTHERN CALIFORNIA EDISON COMPANY (U 338 E), SOUTHERN CALIFORNIA GENERATION COALITION, SOUTHWEST GAS CORPORATION (U 905 G), AND THE WESTERN MANUFACTURED HOUSING COMMUNITIES ASSOCIATION TCAP PHASE 2 SETTLEMENT AGREEMENT

Pursuant to Article 12 of the Commission's Rules of Practice and Procedure , Southern California Gas Company (SoCalGas), San Diego Gas & Electric Company (SDG&E), Office of Ratepayer Advocates (ORA), The Utility Reform Network (TURN), California Manufacturers & Technology Association (CMTA), City of Long Beach Gas & Oil Department (LB), [1] Clean Energy Fuels Corp. (Clean Energy), Indicated Shippers, Southern California Edison Company (SCE), Southern California Generation Coalition (SCGC), Southwest Gas Corporation (SWG), and The Western Manufactured Housing Communities Association (WMA) (collectively the Settling Parties) respectfully submit to the Commission this Settlement Agreement (Settlement). In this Settlement, the Settling Parties provide a recommended resolution of most of the issues in this proceeding.[2] The contested issues in this proceeding not resolved by this Settlement are the following residential rate design issues: SoCalGas and

---

[1] The City of Long Beach Gas & Oil Department's inclusion as a Settling Party is contingent on the approval of the Settlement by the Long Beach City Council.

[2] Phase 1 of this TCAP proceeding is the subject of a separate settlement agreement submitted for the Commission's consideration in A.14-12-017 on August 31, 2015.

SDG&E's proposal for $10 per month residential customer charges at each utility; and the appropriate calculation of the differential between baseline and non-baseline rate tiers.

I. REASONABLENESS OF THE SETTLEMENT

The Settling Parties submit that this Settlement complies with the Commission's requirements that settlements be reasonable, consistent with law, and in the public interest. The Settling Parties have recognized that there is risk involved in litigation, and that a party's filed position might not prevail, in whole or in part, in the Commission's final determination. The Settling Parties have reached compromise positions that they believe are appropriate in light of the litigation risks. This Settlement reflects the Settling Parties' best judgments as to the totality of their positions and risks, and their agreement herein is explicitly based on the overall results achieved.

II. SETTLEMENT TERMS AND CONDITIONS

A. Term

1. The Effective Date of this Settlement is the later of January 1, 2017, or the date upon which the Commission approves the Settlement. The rates impacted by this Settlement shall go into effect upon the date(s) established by the Commission.
2. The term of the Settlement shall extend from the date upon which the Commission approves the Settlement through the Commission-authorized implementation date of the next SoCalGas and SDG&E Triennial Cost Allocation Proceeding (TCAP) Application that is filed after A.15-07-014.

B. Contested Items

1. Rates

a. Natural Gas Vehicle (NGV) customers will continue to be served by Schedule No. G-NGV.

b. The Core Fixed Cost Accounts (CFCA) at both SoCalGas and SDG&E are modified to establish two subaccounts. One subaccount will record the cost and revenue activity related to the NGV customer class and the other subaccount will record the cost and revenue activity related to all other Core classes. The NGV subaccount is allocated only to the NGV customer class. The non-NGV Core subaccount is allocated to all non-NGV Core customer classes using the current methodology of Equal Cents Per Therm (ECPT).

c. The Core brokerage fee is modified to include cash working capital associated with the gas commodity. As such, the brokerage fee will be $0.00204 per therm (excluding franchise fees and uncollectibles).

d. For the term of this Settlement, SoCalGas' submeter credit will be $0.27386/meter/day. For the term of this Settlement, SDG&E's submeter credits will be $0.38268/meter/day for multi-family (GS) customers and $0.40932/meter/day for mobilehome (GT) customers.

e. The NGV Compression Rate Adders will be set for the term of this Settlement at the levels proposed by SoCalGas and SDG&E, which exclude subsidies from ratepayers. SoCalGas' Compression Rate Adder is $1.03134 per therm. SDG&E's Compression Rate Adder is $1.03712 per therm.

2. Cost Allocation

a. The Long Run Marginal Cost (LRMC) Marginal Unit Costs (MUC) shown in Appendix A will be used to set SoCalGas' and SDG&E's transportation rates for the term of this Settlement.

b. The inter-class adjustments to allocated margin shown in Appendix B will be effective for the term of this Settlement.

c. During the term of this Settlement, SoCalGas' embedded cost of transmission is $245.933 million, and is functionalized as $171.727 million backbone transmission and $74.206 million local transmission.

d. During the term of this Settlement, SDG&E's embedded cost of transmission is $46.266 million and is functionalized entirely as backbone transmission.

e. Illustrative rates based upon these cost allocation provisions are shown in Appendix C.[3]

f. Agreement to these LRMC, MUC and embedded transmission cost figures and this Settlement as a whole is not meant by the parties to indicate their approval or acceptance of any of the various cost allocation or embedded cost proposals, principles, or methodologies offered in this proceeding.

3. System Operator Gas Account (SOGA)

a. SoCalGas will establish the SOGA to record costs and revenues from the System Operator's buying and selling of gas at the SoCalGas City Gate to resolve California Producer Operational Balancing Agreements (CPOBA) cashout activity and pipeline Operational Balancing Agreements (OBA) imbalances.

b. The System Operator is provided the ability to buy and sell gas at the SoCalGas City Gate to resolve CPOBA cashout activity and pipeline OBA imbalances. This authority will be included in SoCalGas Rule No. 41.

c. The SOGA preliminary statement will be clarified to limit the costs and revenues recorded in the SOGA to those directly associated with buying and selling gas in support of cashing out of California producer imbalances or pipeline operating imbalances.

d. The SOGA will be allocated to SoCalGas' transportation rates ECPT.

4. Aliso Canyon-Related Cost Identification

a. The ALJ Ruling Directing the Applicants to Serve Written Testimony Regarding Aliso Canyon issued March 9, 2016 (Ruling) requires SoCalGas and SDG&E to identify, "for each of the years 2017, 2018,

---

[3] As noted previously, SoCalGas and SDG&E's proposal for $10 per month residential customer charges at each utility and the calculation of the differential between baseline and non-baseline rate tiers are contested items not covered by the Settlement. The illustrative residential rates shown in Appendix C assume maintaining the current $0.16438 per meter per day (approximately $5 per month) customer charge at SoCalGas and the current $0 per month customer charge at SDG&E, as well as the current calculation of the differential between baseline and non-baseline rate tiers. Actual residential rates will be updated to reflect the Commission's decision regarding these contested residential rate design issues.

and 2019, the total amount of normal, previously approved costs to own and operate Aliso Canyon that SoCalGas seeks to recover through the rates and charges adopted in this proceeding (A.15-07-014), including depreciation, rate-of-return, taxes, operations and maintenance, administrative and general, and all other direct and indirect costs to own and operate Aliso Canyon (excluding costs incurred in response to the recent gas leak)." Ruling at 2.

b. For the purposes of responding to the Ruling, Settling Parties agree that $70.8 million represents a capacity-based and embedded cost-based approximation of the total of the normal, previously approved costs to own and operate Aliso Canyon that would be included in the rates and charges adopted in this proceeding for the years 2017, 2018, and 2019. The $70.8 million total includes $43.8 million for Aliso Canyon operations estimated based on 2013 embedded storage costs, and $27 million for the Aliso Canyon Turbine Replacement project (ACTR) that is anticipated to go into service and become eligible for rate recovery by January 1, 2017.

c. The pending Proposed Decision in A.14-12-017 would adopt a proposed settlement that includes $83.6 million as a total embedded cost of storage for 2017-2019 (excluding costs of the ACTR). The $43.8 million figure for Aliso Canyon current operations is calculated using the same general approach: 1/3 of the total costs are allocated to each of the inventory, injection, and withdrawal function. The amount then allocated to Aliso Canyon is based on its assumed contributions to total firm storage capacities prior to the October 2015 leak discovery.

d. Settling Parties are not precluded from making any arguments with respect to such Aliso Canyon costs in any future proceeding.[4]

---

[4] D.16-03-031 in this proceeding established a memorandum account to track SoCalGas' authorized revenue requirement and all revenues that SoCalGas receives for its normal, business-as-usual costs to own and operate the Aliso Canyon gas storage field. In that decision, the Commission explained that it will determine at a later time whether, and to what extent, the tracked authorized revenue requirement and revenues should be refunded to SoCalGas' customers with interest. D.16-03-031, mimeo., at 9 (Ordering Paragraph 3).

5. Other Provisions

a. Unless and until policy and operational changes proposed in A.15-06-020 are approved and implemented, for each curtailment event, if the curtailment charges collected are $100 or less or the refund amount per customer based on a simple average of dividing the curtailment charges by the number of customers who complied with the curtailment order is $10 or less, then the curtailment charges will be transferred to the NFCA for amortization in transportation rates.

b. The Core balancing issue covered in the Direct Testimony of Catherine E. Yap and the Rebuttal Testimony of Paul Borkovich is deferred to A.15-06-020.

c. During the term of this Settlement, SoCalGas will not implement a system to allow the aggregation of producer interconnect meters to calculate operational imbalances.

C. Uncontested Items

1. SoCalGas' and SDG&E's non-Core transportation revenue requirements shall continue to be subject to 100% balancing account treatment.

2. SoCalGas' and SDG&E's forecasts of Core and non-Core demand as presented in direct testimony and included as Appendix D to this Settlement will be used to set transportation rates during the term of this TCAP.

3. The Unaccounted-For (UAF) gas percentages are updated to be 0.835% for SoCalGas and 0.532% for SDG&E. The percentage allocations for SoCalGas are 71.1% Core and 28.9% non-Core; the percentage allocations for SDG&E are 76.71% Core and 23.29% non-Core. The resulting UAF factors for SoCalGas are 0.594% for the Core and 0.241% for the non-Core. For SDG&E, the resulting factors are 0.408% for the Core and 0.124% for the non-Core.

4. Backbone Transportation Service (BTS)

   a. Discounts to interruptible and firm BTS contracts (with and without alternate receipt point rights) will be included in the Backbone Transmission Balancing Account (BTBA), which will be reflected in BTS rate the following year.

b. The BTS denominator will be represented as an estimated average BTS subscription/utilization based on BTS firm SFV contracts, scheduled MFV, and interruptible throughput.

c. All references to long-term intrastate transportation agreements (LTKs) in the Schedule No. G-BTS are eliminated.

d. Schedule No. G-BTS is modified to assign BTS open season Step 2 bidding rights directly to balancing agents based on their respective customer balancing responsibilities.

5. Regulatory Accounts

a. A true-up mechanism to amortize in rates the additional unamortized over- or undercollection that remains in the Core Fixed Cost Account (CFCA) at the end of each year is adopted. If the unamortized portion of the CFCA balance is greater than 10% of the total amount of the authorized margin recorded in the CFCA for the last four months of the year at SoCalGas, or 15 % of the total amount of the authorized margin recorded in the CFCA for the last four months of the year at SDG&E, then SoCalGas and/or SDG&E will file an advice letter proposing to update rates for the unamortized portion(s) of the CFCA balance(s). SoCalGas and/or SDG&E will file a Tier 2 advice letter by February 28th in the following year requesting the rate update to be effective April 1. Rates will be updated to reflect recovery or refund of the unamortized portion of the CFCA balance over the remaining nine months of the year.

b. The residual balance of the 2008-2011 program cycle of the RDDEA is transferred to the CFCA and NFCA based on the allocation methodology consistent with this account and eliminate the 2008-2011 program cycle.

6. Curtailment Penalty Refunds

a. SoCalGas will refund $1.4 million, including interest, of curtailment charges stemming from a December 27, 2012 localized curtailment of interruptible non-Core customers in the northern San Joaquin Valley (SJV) system as a bill credit to those non-Core customers who curtailed. Each customer's refund amount will be a pro-rata share of the balance based on its usage in a comparable non-curtailment period.

b. SoCalGas will refund approximately $0.2 million of curtailment penalties for two curtailment events of Standby Procurement Service (one beginning December 7, 2013, the other beginning February 6, 2014) by transferring the amount including interest to the CFCA and NFCA and amortize these regulatory account balances in transportation rates over a 12-month period beginning on January 1, 2017 (or, the first January 1 following Commission approval of this Settlement). The allocation between the CFCA and NFCA will be based on customer usage that occurred in December 2012 and February 2013 for those CAT customers and non-Core customers who were asked to curtail and complied with the curtailment order, respectively.

c. SoCalGas will refund $24 in curtailment charges related to a November 3, 2014, localized partial curtailment on interruptible non-Core customers in order to facilitate Pipeline Safety Enhancement Plan work by transferring the amount to the NFCA and amortizing the balance in transportation rates over a 12-month period beginning January 1, 2017 (or, the first January 1 following Commission approval of this Settlement).

d. SDG&E will refund $0.1 million in curtailment charges related to all of the curtailment violations during the prior TCAP period by transferring the amount to the NFCA and amortizing the balance in transportation rates over a 12-month period beginning January 1, 2017 (or, the first January 1 following Commission approval of this Settlement).

III. ADDITIONAL TERMS AND CONDITIONS

A. The Public Interest

The Settling Parties agree jointly by executing and submitting this Settlement that the relief requested herein is just, fair and reasonable, and in the public interest.

B. Non-Precedential Effect

This Settlement is not intended by the Settling Parties to be precedent for any future proceeding. The Settling Parties have assented to the terms of this Settlement only for the purpose of arriving at the settlement embodied in this Settlement. Except as expressly precluded in this Settlement, each of the Settling Parties expressly reserves its right to advocate, in current and future proceedings, positions, principles, assumptions, arguments and methodologies which may be different than those underlying this Settlement, and the Settling Parties expressly declare that, as provided in Commission Rule 12.5, this Settlement should not be considered as a precedent for or against them. Likewise, the Settlement explicitly does not establish any precedent on the litigated issues in the case.

C. Partial Settlement

This Settlement is a settlement of some but not all of the issues within the scope of this proceeding. This Settlement is not intended to resolve issues not covered by the Settlement, or to preclude any of the Settling Parties from making any arguments or taking any positions with respect to such issues.

D. Indivisibility

This Settlement embodies compromises of the Settling Parties' positions. No individual term of this Settlement is assented to by any of the Settling Parties, except in consideration of the other Settling Parties' assents to all other terms. Thus, the Settlement is indivisible and each part is interdependent on each and all other parts. Any party may withdraw from this Settlement if the Commission modifies, deletes from, or adds to the disposition of the matters stipulated herein. The Settling Parties agree, however, to negotiate in good faith with regard to any

Commission-ordered changes to the Settlement in order to restore the balance of benefits and burdens, and to exercise the right to withdraw only if such negotiations are unsuccessful.

The Settling Parties acknowledge that the positions expressed in the Settlement were reached after consideration of all positions advanced in the prepared testimony of SoCalGas, SDG&E, ORA, TURN, SCGC, WMA, Long Beach, and Clean Energy, as well as proposals offered during the settlement negotiations. This document sets forth the entire agreement of the Settling Parties on all of those issues, except as specifically described within the Settlement. The terms and conditions of this Settlement may only be modified in writing subscribed by all Settling Parties.

E. Entire Settlement

This Settlement, along with all appendices to it, encompasses the entire agreement of the parties who have signed below, and supersedes all previous understandings and agreements between the parties on the issues addressed herein, whether oral or written. The Settling Parties hereby acknowledge and represent, by signing below, that said parties have not relied on any representation or other assurance, except those set out in this Settlement, made by or on behalf of any other party or any other person or entity whatsoever, prior to the execution of this Settlement.

Dated this 26th day of May, 2016.

SOUTHERN CALIFORNIA GAS COMPANY and
SAN DIEGO GAS & ELECTRIC COMPANY

By: */s/ MICHAEL R. THORP*
MICHAEL R. THORP
Title: Chief Regulatory Counsel

OFFICE OF RATEPAYER ADVOCATES

By: */s/ ELIZABETH ECHOLS*
ELIZABETH ECHOLS
Title: Director, Office of Ratepayer Advocates

THE UTILITY REFORM NETWORK

By: */s/ ROBERT FINKELSTEIN*
ROBERT FINKELSTEIN
Title: General Counsel

CALIFORNIA MANUFACTURERS & TECHNOLOGY ASSOCIATION

By: */s/ RONALD LIEBERT*
RONALD LIEBERT
Title: Counsel

CITY OF LONG BEACH GAS & OIL DEPARTMENT

By: */s/ PATRICK WEST*
PATRICK WEST
Title: City Manager

CLEAN ENERGY FUELS CORP.

By: */s/ KATY MORSONY*
KATY MORSONY
Title: Counsel

INDICATED SHIPPERS

By: */s/ NORA SHERIFF*
NORA SHERIFF
Title: Counsel

SOUTHERN CALIFORNIA EDISON COMPANY

By: */s/ COLIN CUSHNIE*
COLIN CUSHNIE
Title: VP of Energy Procurement & Management

SOUTHERN CALIFORNIA GENERATION COALITION

By: */s/ NORMAN PEDERSEN*
NORMAN PEDERSEN
Title: Counsel

SOUTHWEST GAS CORPORATION

By: *\/s\/ KYLE O. STEPHENS*
KYLE O. STEPHENS
Title: Assistant General Counsel

THE WESTERN MANUFACTURED HOUSING COMMUNITIES ASSOCIATION

By: *\/s\/ EDWARD G. POOLE*
EDWARD G. POOLE
Title: Counsel

APPENDICES

Appendix A

SoCalGas

LRMC Marginal Unit Customer Costs $/customer	
Residential	$177.67
Core C/I	$535.56
G-AC	$4,894.04
G-GEN	$3,983.71
NGV	$20,164.57
Non-Core C/I	$24,167.47
EG Tier 1	$27,318.17
EG Tier 2	$91,072.82
EOR	$60,889.20
Long Beach	$585,007.21
SDG&E	$836,175.87
Southwest Gas	$592,651.35
Vernon	$383,708.45
DGN	$178,481.39

LRMC Distribution	
MPD LRMC ($/Mcfd)	$199.44
HPD LRMC ($/Mcfd)	$1.91

SDGE

LRMC Marginal Unit Customer Costs $/customer	
Residential	$225.87
NGV	$3,297.00
Core C/I	$377.07
Non-Core C/I	$7,092.95
EG Tier 1	$5,209.59
EG Tier 2	$6,297.08

LRMC Distribution	
MPD LRMC ($/Mcfd)	$242.50
HPD LRMC ($/Mcfd)	$24.41

Appendix B

Inter-Class Adjustments $000	
SoCalGas	
Residential	($4,000)
Core C/I	$4,000
SDGE	
Non-Core C/I Distribution	$500
EG-Distribution Tier 1	($500)

Appendix C
SoCalGas and SDG&E Illustrative Rates[1]

TABLE 1
Natural Gas Transportation Rates
Southern California Gas Company
2016 TCAP Phase II Application

2016 TCAP Phase II Settlement Agreement Ilustrative Rates

		Present Rates			Proposed Rates			Changes		
		Jan-1-15 Volumes Mth	Average Rate $/therm	Jan-1-15 Revenues $000's	Jan-1-17 Volumes Mth	Proposed Rate $/therm	Jan-1-17 Revenues $000's	Revenue Change $000's	Rate Change $/therm	% Rate change %
		A	B	C	D	E	F	G	H	I
1	CORE									
2	Residential	2,337,534	$0.71570	$1,672,983	2,435,160	$0.63255	$1,540,361	($132,622)	($0.08315)	-11.6%
3	Commercial & Industrial	984,102	$0.33979	$334,392	1,023,186	$0.24364	$249,288	($85,104)	($0.09616)	-28.3%
4										
5	NGV - Pre SempraWide	117,220	$0.13363	$15,665	157,095	$0.10274	$16,140	$476	($0.03089)	-23.1%
6	SempraWide Adjustment	117,220	$0.00867	$1,016	157,095	($0.00486)	($763)	($1,779)	($0.01353)	-156.1%
7	NGV - Post SempraWide	117,220	$0.14230	$16,681	157,095	$0.09788	$15,377	($1,304)	($0.04442)	-31.2%
8										
9	Gas A/C	825	$0.14108	$116	772	$0.09529	$74	($43)	($0.04579)	-32.5%
10	Gas Engine	16,774	$0.12163	$2,040	20,699	$0.12163	$2,518	$477	$0.00000	0.0%
11	Total Core	3,456,455	$0.58621	$2,026,212	3,636,911	$0.49702	$1,807,616	($218,596)	($0.08919)	-15.2%
12										
13	NONCORE COMMERCIAL & INDUSTRIAL									
14	Distribution Level Service	893,164	$0.06968	$62,239	865,102	$0.06168	$53,358	($8,881)	($0.00801)	-11.5%
15	Transmission Level Service (2)	654,456	$0.01804	$11,806	660,238	$0.01640	$10,827	($979)	($0.00164)	-9.1%
16	Total Noncore C&I	1,547,620	$0.04784	$74,045	1,525,339	$0.04208	$64,185	($9,860)	($0.00577)	-12.1%
17										
18	NONCORE ELECTRIC GENERATION									
19	Distribution Level Service									
20	Pre Sempra Wide	333,969	$0.05403	$18,044	285,096	$0.06398	$18,240	$196	$0.00995	18.4%
21	Sempra Wide Adjustment	333,969	($0.00910)	($3,041)	285,096	($0.01458)	($4,158)	($1,117)	($0.00548)	60.2%
22	Distribution Post Sempra Wide	333,969	$0.04492	$15,003	285,096	$0.04939	$14,082	($922)	$0.00447	9.9%
23	Transmission Level Service (2)	2,641,080	$0.01487	$39,270	2,392,699	$0.01372	$32,818	($6,452)	($0.00115)	-7.8%
24	Total Electric Generation	2,975,049	$0.01824	$54,273	2,677,795	$0.01751	$46,899	($7,374)	($0.00073)	-4.0%
25										
26	TOTAL RETAIL NONCORE	4,522,669	$0.02837	$128,318	4,203,134	$0.02643	$111,084	($17,234)	($0.00194)	-6.8%
27										
28	WHOLESALE									
29	Wholesale Long Beach (2)	92,897	$0.01453	$1,350	73,520	$0.01350	$992	($358)	($0.00104)	-7.1%
30	Wholesale SWG (2)	67,209	$0.01453	$977	65,367	$0.01350	$882	($95)	($0.00104)	-7.1%
31	Wholesale Vernon (2)	87,906	$0.01453	$1,278	95,137	$0.01350	$1,284	$7	($0.00104)	-7.1%
32	International (2)	69,979	$0.01453	$1,017	91,378	$0.01350	$1,233	$216	($0.00104)	-7.1%
33	Total Wholesale & International	317,990	$0.01453	$4,622	325,403	$0.01350	$4,392	($229)	($0.00104)	-7.1%
34	SDGE Wholesale	1,247,558	$0.01258	$15,692	1,251,556	$0.01360	$17,023	$1,332	$0.00102	8.1%
35	Total Wholesale Incl SDGE	1,565,548	$0.01298	$20,313	1,576,959	$0.01358	$21,416	$1,102	$0.00061	4.7%
36										
37	TOTAL NONCORE	6,088,217	$0.02441	$148,631	5,780,093	$0.02292	$132,500	($16,132)	($0.00149)	-6.1%
38										
39	Unbundled Storage (4)			$26,476			$17,020	($9,456)		
40	System Total (w/o BTS)	9,544,672	$0.23063	$2,201,319	9,417,004	$0.20783	$1,957,136	($244,183)	($0.02280)	-9.9%
41	Backbone Trans. Service BTS (3)	2,809	$0.15777	$161,782	2,818	$0.21578	$221,908	$60,125	$0.05800	36.8%
42	**SYSTEM TOTALw/BTS**	**9,544,672**	**$0.24758**	**$2,363,102**	**9,417,004**	**$0.23139**	**$2,179,044**	**($184,058)**	**($0.01619)**	**-6.5%**
43										
44	EOR Revenues	203,920	$0.03081	$6,283	231,570	$0.03483	$8,065	$1,782	$0.00402	13.0%
45	Total Throughput w/EOR Mth/yr	9,748,592			9,648,574					

1) These rates are for Natural Gas Transportation Service from "Citygate to Meter". The BTS rate is for service from Receipt Point to Citygate.
2) These Transmission Level Service "TLS" amounts represent the average transmission rate, see Table 7 or detail list of TLS rates.
3) BTS charge ($/dth/day) is proposed as a separate rate. Core will pay through procurement rate, noncore as a separate charge.
4) Unbundles Storage costs are not part of the Core Strorage or Load Balancing functions (those are included in transport rates).

TABLE 2
Residential Transportation Rates
Southern California Gas Company
2016 TCAP Phase II Application
2016 TCAP Phase II Settlement Agreement Ilustrative Rates

		Present Rates			Proposed Rates			Changes		
		Jan-1-15 Volumes Mth	Average Rate $/th	Jan-1-15 Revenue $000's	Jan-1-17 Volumes Mth	Rate $/th	Jan-1-17 Revenue $000's	Revenue Change $000's	Rate Change $/th	% Rate change %
		A	B	C	D	E	F	G	H	I
1	RESIDENTIAL SERVICE									
2	Customer Charge									
3	Single Family	3,663,383	$5.00	$219,803	3,750,414	$5.00	$225,025	$5,222	$0.00000	0.0%
4	Multi-Family	1,674,287	$5.00	$100,457	1,743,024	$5.00	$104,581	$4,124	$0.00000	0.0%
5	Small Master Meter	122,347	$5.00	$7,341	124,314	$5.00	$7,459	$118	$0.00000	0.0%
6	Submeter Credit-$/unit/day	147,568	($0.23573)	($12,697)	148,373	($0.27386)	($14,831)	($2,135)	($0.03814)	16.2%
7	**Volumetric Transportation Rate Excludes CSITMA and CAT:**									
8	Baseline Rate	1,583,823	$0.49782	$788,461	1,839,570	$0.43708	$804,036	$15,575	($0.06074)	-12.2%
9	Non-Baseline Rate	743,221	$0.75782	$563,229	584,298	$0.69708	$407,302	($155,927)	($0.06074)	-8.0%
10		2,327,044	$0.71618	$1,666,594	2,423,869	$0.63270	$1,533,571	($133,023)	($0.08349)	-11.7%
11	NBL/BL Ratio:									
12	Gas Rate $/th		$0.42840			$0.40277			($0.02564)	-6.0%
13	NBL/BL rate ratio		1.05			1.31				
14	NBL- BL rate difference $/th		$0.26000			$0.26000			$0.00000	0.0%
15										
16	Large Master Meter Rate (Excludes Rate Adders for CAT):									
17	Customer Charge	55	$373.78	$248	57	$411.17	$280	$32	$37.39	10.0%
18	Baseline Rate	7,802	$0.17921	$1,398	9,428	$0.20351	$1,919	$521	$0.02430	13.6%
19	Non-Baseline Rate	2,688	$0.27281	$733	1,863	$0.32458	$605	($129)	$0.05176	19.0%
20		10,490	$0.22688	$2,380	11,291	$0.24831	$2,804	$424	$0.02143	9.4%
21										
22	**Residential Rates Includes CSITMA, Excludes CAT:**									
23	CSITMA Adder to Volumetric Rate	1,671,915	$0.00244	$4,082	1,800,739	$0.00221	$3,988	($94)	($0.00023)	-9.3%
24	Residential:									
25	Customer Charge		$5.00			$5.00			$0.00000	0.0%
26	Baseline $/therm		$0.50026			$0.43929			($0.06097)	-12.2%
27	Non-Baseline $/therm		$0.76026			$0.69929			($0.06097)	-8.0%
28	Average NonCARE Rate $/therm		$0.71863			$0.63491			($0.08372)	-11.6%
29	Large Master Meter:									
30	Customer Charge		$373.78			$411.17			$37.39	10.0%
31	BaseLine Rate		$0.18166			$0.20573			$0.02407	13.3%
32	NonBaseLine Rate		$0.27525			$0.32679			$0.05154	18.7%
33	Average NonCARE Rate $/therm		$0.22932			$0.25052			$0.02120	9.2%
34	**Residential Rates Includes CSITMA & CAT:**									
35	CAT Adder to Volumetric Rate	8,732	($0.00831)	($73)	49,671	($0.00003)	($2)	$71	$0.00828	-100%
36	Residential:									
37	Customer Charge		$5.00			$5.00			$0.00000	0.0%
38	BaseLine Rate		$0.49195			$0.43926			($0.05269)	-10.7%
39	NonBaseLine Rate		$0.75195			$0.69926			($0.05269)	-7.0%
40	Large Master Meter:									
41	Customer Charge		$373.78			$411.17			$37.38634	10.0%
42	BaseLine Rate		$0.17335			$0.20570			$0.03235	18.7%
43	NonBaseLine Rate		$0.26694			$0.32675			$0.05981	22.4%
44	**Other Adjustments :**									
45	TCA for CSITMA exempt customers		($0.00244)			($0.00221)			$0.00023	-9.3%
46										
47	**TOTAL RESIDENTIAL**	**2,337,534**	**$0.71570**	**$1,672,983**	**2,435,160**	**$0.63255**	**$1,540,361**	**($132,622)**	**($0.08315)**	**-11.6%**

See footnotes Table 1

TABLE 3
Core Nonresidential Transportation Rates
Southern California Gas Company
2016 TCAP Phase II Application
2016 TCAP Phase II Settlement Agreement Illustrative Rates

		Present Rates			Proposed Rates			Changes		
		Jan-1-15 Volumes Mth	Average Rate $/th	Jan-1-15 Revenue $000's	Jan-1-17 Volumes Mth	Rate $/th	Jan-1-17 Revenue $000's	Revenue Change $000's	Rate Change $/th	% Rate change %
		A	B	C	D	E	F	G	H	I
1										
2	CORE COMMERCIAL & INDUSTRIAL									
3	Customer Charge 1	147,208	$15.00	$26,497	146,202	$15.00	$26,316	($181)	$0.00	0.0%
4	Customer Charge 2	60,603	$15.00	$10,909	61,115	$15.00	$11,001	$92	$0.00	0.0%
5	**Volumetric Transportation Rate Excludes CSITMA & CAT:**									
6	Tier 1 = 250th/mo	223,928	$0.54382	$121,776	203,321	$0.42919	$87,263	($34,513)	($0.11463)	-21.1%
7	Tier 2 = next 4167 th/mo	495,650	$0.28796	$142,725	453,170	$0.21394	$96,951	($45,774)	($0.07402)	-25.7%
8	Tier 3 = over 4167 th/mo	264,524	$0.11640	$30,792	366,694	$0.06962	$25,528	($5,263)	($0.04679)	-40.2%
9		984,102	$0.33807	$332,699	1,023,186	$0.24146	$247,059	($85,639)	($0.09661)	-28.6%
10										
11	**Volumetric Transportation Rate Includes CSITMA, Excludes CAT:**									
12	CSITMA Adder to Volumetric Rate	980,381	$0.00244	$2,393	1,008,238	$0.00221	$2,233	($161)	($0.00023)	-9.3%
13	Tier 1 = 250th/mo		$0.54626			$0.43140			($0.11486)	-21.0%
14	Tier 2 = next 4167 th/mo		$0.29040			$0.21615			($0.07424)	-25.6%
15	Tier 3 = over 4167 th/mo		$0.11885			$0.07183			($0.04701)	-39.6%
16			$0.34051			$0.24368			($0.09684)	
17	**Volumetric Transportation Rate Includes CSITMA & CAT:**									
18	CAT Adder to Volumetric Rate	84,283	($0.00831)	($700)	137,753	($0.00003)	($4)	$696	$0.00828	-100%
19	Tier 1 = 250th/mo		$0.53795			$0.43137			($0.10658)	-19.8%
20	Tier 2 = next 4167 th/mo		$0.28209			$0.21612			($0.06597)	-23.4%
21	Tier 3 = over 4167 th/mo		$0.11054			$0.07180			($0.03874)	-35.0%
22			$0.33221			$0.24364			($0.08856)	-26.7%
23	Other Adjustments :									
24	TCA for CSITMA exempt customers		($0.00244)			($0.00221)			$0.00023	-9.3%
25										
26	**TOTAL CORE C&I**	**984,102**	**$0.33979**	**$334,392**	**1,023,186**	**$0.24364**	**$249,288**	**($85,104)**	**($0.09616)**	**-28.3%**
27										
28	NATURAL GAS VEHICLES (a sempra-wide rate)									
29	Customer Charge, P-1	229	$13.00	$36	229	$13.00	$36	$0	$0.00000	0.0%
30	Customer Charge, P-2A	83	$65.00	$64	130	$65.00	$101	$37	$0.00000	0.0%
31	Uncompressed Rate Excludes CSITMA & CAT	117,220	$0.12748	$14,943	157,095	$0.08102	$12,728	($2,215)	($0.04646)	-36.4%
32	Total Uncompressed NGV	117,220	$0.12833	$15,043	157,095	$0.08189	$12,864	($2,179)	($0.04644)	-36.2%
33	Compressed Rate Adder	1,287	$1.05002	$1,351	2,099	$1.03134	$2,164	$813	($0.01869)	-1.8%
34										
35	**Uncompressed Rate Includes CSITMA, Excludes CAT**									
36	CSITMA Adder to Volumetric Rate	117,175	$0.00244	$286	157,073	$0.00221	$348	$62	($0.00023)	-9.3%
37	Uncompressed Rate $/therm		$0.12992			$0.08323			($0.04669)	-35.9%
38	**Other Adjustments :**									
39	TCA for CSITMA exempt customers		($0.00244)			($0.00221)			$0.00023	-9.3%
40										
41	**TOTAL NGV SERVICE**	**117,220**	**$0.14230**	**$16,681**	**157,095**	**$0.09788**	**$15,377**	**($1,304)**	**($0.04442)**	**-31.2%**
42										
43	RESIDENTIAL NATURAL GAS VEHICLES (optional rate)									
44	Customer Charge	5,460	$10.00	$655	5,618	$10.00	$674	$19	$0.00000	0.0%
45	**Uncompressed Rate Excludes CSITMA & CAT**	5,346	$0.19467	$1,041	4,540	$0.17816	$809	($232)	($0.01651)	-8.5%
46		5,346	$0.31722	$1,696	4,540	$0.32665	$1,483	($213)	$0.00943	3.0%
47	**Uncompressed Rate Includes CSITMA, Excludes CAT**									
48	CSITMA Adder to Volumetric Rate		$0.00244			$0.00221			($0.00023)	-9.3%
49	Uncompressed Rate $/therm		$0.19711			$0.18038			($0.01674)	-8.5%
50										
51	**Uncompressed Rate Includes CSITMA & CAT**									
52	CAT Adder to Volumetric Rate	0	($0.00831)	$0	0	($0.00003)	$0	$0	$0.00828	-99.6%
53	Uncompressed Rate		$0.18880			$0.18034		$0	($0.00846)	-4.5%
54	Other Adjustments :									
55	TCA for CSITMA exempt customers		($0.00244)			($0.00221)			$0.00023	-9.3%
56										
57	**TOTAL RESIDENTIAL NATURAL GAS VEHICL**	**5,346**	**$0.31722**	**$1,696**	**4,540**	**$0.32665**	**$1,483**	**($213)**	**$0.00943**	**3.0%**

TABLE 4
Core Nonresidential Transportation Rates (continued)
Southern California Gas Company
2016 TCAP Phase II Application
2016 TCAP Phase II Settlement Agreement Ilustrative Rates

		Present Rates			Proposed Rates			Changes		
		Jan-1-15 Volumes Mth	Average Rate $/th	Jan-1-15 Revenue $000's	Jan-1-17 Volumes Mth	Rate $/th	Jan-1-17 Revenue $000's	Revenue Change $000's	Rate Change $/th	% Rate change %
		A	B	C	D	E	F	G	H	I
1										
2										
3	NON-RESIDENTIAL GAS A/C									
4	Customer Charge	12	$150.00	$22	9	$150	$16	($5)	$0.00000	0.0%
5	Volumetric Rate	825	$0.11244	$93	772	$0.07209	$56	($37)	($0.04035)	-35.9%
6		825	$0.13864	$114	772	$0.09308	$72	($42)	($0.04556)	-32.9%
7	**Volumetric Rates Includes CSITMA, Excludes CAT**									
8	CSITMA Adder to Volumetric Rate	825	$0.00244	$2	772	$0.00221	$2	($0)	($0.00023)	-9.3%
9	Volumetric		$0.11488			$0.07430			($0.04058)	-35.3%
10	**Volumetric Rates Includes CSITMA & CAT**									
11	CAT Adder to Volumetric Rate	0	($0.00831)	$0	0	($0.00003)	$0	$0	$0.00828	-99.6%
12	Gas A/C Rate		$0.10657			$0.07427		$0	($0.03230)	-30.3%
13	Other Adjustments :									
14	TCA for CSITMA exempt customers		($0.00244)			($0.00221)			$0.00023	-9.3%
15										
16	**TOTAL A/C SERVICE**	**825**	**$0.14108**	**$116**	**772**	**$0.09529**	**$74**	**($43)**	**($0.04579)**	**-32.5%**
17										
18	GAS ENGINES									
19	Customer Charge	708	$50.00	$425	712	$50	$427	$2	$0.00000	0.0%
20	Volumetric Excludes CSITMA & CAT	16,774	$0.09387	$1,575	20,699	$0.09878	$2,045	$470	$0.00491	5.2%
21		16,774	$0.11919	$1,999	20,699	$0.11942	$2,472	$472	$0.00023	0.2%
22	**Volumetric Rates Includes CSITMA, Excludes CAT**									
23	CSITMA Adder to Volumetric Rate	16,774	$0.00244	$41	20,699	$0.00221	$46	$5	($0.00023)	-9.3%
24	Volumetric		$0.09631			$0.10099			$0.00469	
25	**Volumetric Rates Includes CSITMA & CAT**									
26	CAT Adder to Volumetric Rate	0	($0.00831)	$0	0	($0.00003)	$0	$0	$0.00828	-99.6%
27	Gas Engine Rate		$0.08800			$0.10096		$0	$0.01296	14.7%
28	**Other Adjustments**									
29	TCA for CSITMA exempt customers		($0.00244)			($0.00221)			$0.00023	-9.3%
30										
31	**TOTAL GAS ENGINES**	**16,774**	**$0.12163**	**$2,040**	**20,699**	**$0.12163**	**$2,518**	**$477**	**$0.00000**	**0.0%**
32										
33	STREET & OUTDOOR LIGHTING (equals average Non-CAT CCI Rate)									
34	Street & Outdoor Lighting Base Rate		$0.33807			$0.24146			($0.09661)	-28.6%
35										

TABLE 5
Noncore Commercial & Industrial Rates
Southern California Gas Company
2016 TCAP Phase II Application
2016 TCAP Phase II Settlement Agreement Ilustrative Rates

	Present Rates			Proposed Rates			Changes		
	Jan-1-15 Volumes Mth	Average Rate $/th	Jan-1-15 Revenue $000's	Jan-1-17 Volumes Mth	Rate $/th	Jan-1-17 Revenue $000's	Revenue Change $000's	Rate Change $/th	% Rate change %
	A	B	C	D	E	F	G	H	I
NonCore Commercial & Industrial Distribution Level									
Customer Charge	602	$350.00	$2,530	584	$350.00	$2,452	($79)	$0.00000	0.0%
Volumetric Rates Includes CARB fee, Excludes CSITMA									
Tier 1 = 250kth/yr	133,045	$0.14882	$19,800	121,573	$0.13535	$16,455	($3,345)	($0.01347)	-9.1%
Tier 2 = 250k to 1000k	217,578	$0.09108	$19,818	205,061	$0.08232	$16,881	($2,937)	($0.00876)	-9.6%
Tier 3 = 1 to 2 million th/yr	109,379	$0.05415	$5,923	109,960	$0.04840	$5,322	($601)	($0.00575)	-10.6%
Tier 4 = over 2 million th/yr	433,162	$0.02776	$12,024	428,508	$0.02416	$10,352	($1,672)	($0.00360)	-13.0%
Volumetric totals (excl itcs)	893,164	$0.06445	$57,564	865,102	$0.05665	$49,009	($8,555)	($0.00780)	-12.1%
Volumetric Rates Includes CARB Fee & CSITMA									
CSITMA Adder to Volumetric Rate		$0.00244	$2,145		$0.00221	$1,897	($248)	($0.00023)	-9.3%
Tier 1 = 250kth/yr		$0.15126			$0.13756			($0.01370)	-9.1%
Tier 2 = 250k to 1000k		$0.09352			$0.08453			($0.00899)	-9.6%
Tier 3 = 1 to 2 million th/yr		$0.05659			$0.05061			($0.00598)	-10.6%
Tier 4 = over 2 million th/yr		$0.03020			$0.02637			($0.00383)	-12.7%
Other Adjustments :									
TCA for CSITMA exempt customers		($0.00244)			($0.00221)			$0.00023	-9.3%
CARB Fee Credit $/th		($0.00110)			($0.00071)			$0.00040	-35.9%
NCCI - DISTRIBUTION LEVEL	893,164	$0.06968	$62,239	865,102	$0.06168	$53,358	($8,881)	($0.00801)	-11.5%
NCCI-TRANSMISSION LEVEL Incl CARB Fee E	10,674	$0.01564	$167	6,438	$0.01421	$91	($75)	($0.00143)	-9.2%
NCCI-TRANSMISSION LEVEL Incl CARB Fee	643,782	$0.01808	$11,639	653,799	$0.01642	$10,735	($904)	($0.00166)	-9.2%
NCCI-TRANSMISSION LEVEL (2)	654,456	$0.01804	$11,806	660,238	$0.01640	$10,827	($979)	($0.00164)	-9.1%
TOTAL NONCORE C&I	**1,547,620**	**$0.04784**	**$74,045**	**1,525,339**	**$0.04208**	**$64,185**	**($9,860)**	**($0.00577)**	**-12.1%**

TABLE 6
Noncore Electric Generation Rates and Enhanced Oil Recovery Rates
Southern California Gas Company
2016 TCAP Phase II Application
2016 TCAP Phase II Settlement Agreement Ilustrative Rates

		Present Rates			Proposed Rates			Changes		
		Jan-1-15 Volumes Mth A	Average Rate $/th B	Jan-1-15 Revenue $000's C	Jan-1-17 Volumes Mth D	Rate $/th E	Jan-1-17 Revenue $000's F	Revenue Change $000's G	Rate Change $/th H	% Rate change % I
1										
2	**ELECTRIC GENERATION**									
3										
4										
5	**Small EG Distribution Level Service (a Sempra-Wide rate) Excludes CARB fee & CSITMA:**									
6	Customer Charge	147	$50.00	$88	201	$50.00	$121	$32	$0.00000	0.0%
7	Volumetric Rate	42,850	$0.10380	$4,448	77,207	$0.09658	$7,457	$3,009	($0.00721)	-7.0%
8	Small EG Distribution Level Service	42,850	$0.10586	$4,536	77,207	$0.09814	$7,577	$3,041	($0.00771)	-7.3%
9										
10	**Large EG Distribution Level Service (a Sempra-Wide rate) Excludes CARB Fee & CSITMA**									
11	Customer Charge	34	$0.00	$0	28	$0.00	$0	$0	$0.00000	
12	Volumetric Rate	291,119	$0.03506	$10,208	207,889	$0.03128	$6,503	($3,705)	($0.00378)	-10.8%
13	Large EG Distribution Level Service	291,119	$0.03506	$10,208	207,889	$0.03128	$6,503	($3,705)	($0.00378)	-10.8%
14										
15	EG Distribution excl CARB fee & CSITMA	333,969	$0.04415	$14,744	285,096	$0.04939	$14,080	($663)	$0.00524	11.9%
16										
17	**Volumetric Rates Includes CARB fee, Excludes CSITMA**									
18	CARB Cost Adder	235,121	$0.00110	$260	1,838	$0.00071	$1	($258)	($0.00040)	-35.9%
19	EG-Distribution Tier 1 w/CARB fee		$0.10490			$0.09729			($0.00761)	-7.3%
20	EG-Distribution Tier 2 w/CARB Fee		$0.03617			$0.03199			($0.00418)	-11.6%
21	Total - EG Distribution Level	333,969	$0.04492	$15,003	285,096	$0.04939	$14,082	($922)	$0.00447	9.9%
22	CARB Fee Credit $/th		($0.00110)			($0.00071)			$0.00040	-35.9%
23										
24	EG Transmission Level Service Excl CARB fee	1,839,870	$0.01453	$26,741	1,655,460	$0.01350	$22,345	($4,396)	($0.00104)	-7.1%
25	EG Transmission Level Service Incl CARB Fee,	801,210	$0.01564	$12,529	737,239	$0.01421	$10,473	($2,056)	($0.00143)	-9.2%
26	EG Transmission Level (2)	2,641,080	$0.01487	$39,270	2,392,699	$0.01372	$32,818	($6,452)	($0.00115)	-7.8%
27										
28	**TOTAL ELECTRIC GENERATION**	**2,975,049**	**$0.01824**	**$54,273**	**2,677,795**	**$0.01751**	**$46,899**	**($7,374)**	**($0.00073)**	**-4.0%**
29										
30	**EOR Rates & Revenue Excludes CARB Fee & CSITMA:**									
31	Distribution Level EOR:									
32	Customer Charge	23	$500.00	$138	17	$500.00	$102	($36)	$0.00000	0.0%
33	Volumetric Rate Excl CARB Fee & CSITMA	109,229	$0.04366	$4,769	137,620	$0.04865	$6,695	$1,926	$0.00499	11.4%
34										
35	**Volumetric Rates Includes CARB Fee, Excludes CSITMA**									
36	CARB Fee		$0.00110			$0.00071				
37	Volumetric Rate Incl CARB fee & Excl CSITMA		$0.04476			$0.04936			$0.00459	10.3%
38	Distribution Level EOR	109,229	$0.04492	$4,907	137,620	$0.04939	$6,797	$1,890	$0.00447	9.9%
39	CARB Fee Credit $/th		($0.00110)			($0.00071)			$0.00040	-35.9%
40										
41	Transmission Level EOR Excludes CARB fee	94,691	$0.01453	$1,376	93,950	$0.01350	$1,268	($108)	($0.00104)	-7.1%
42	**Total EOR**	**203,920**	**$0.03081**	**$6,283**	**231,570**	**$0.03483**	**$8,065**	**$1,782**	**$0.00402**	**13.0%**

1) CSITMA - Noncore C&I D Tariff rate includes CSITMA. Customers exempt , including Constitutionally Exempt, receive Transportation Charge Adj. (TCA).
EG Tariff Rate excludes CSITMA, since EG customers are exempt.
2) CARB Fee - EG-D and NCCI-D rates include CARB Fee.
3) EOR customers tariff includes CARB Fee and excludes CSITMA; since EOR customers are exempt from CSITMA and get a credit for CARB Fee.
See footnotes Table 1

TABLE 7
Transmission Level Service Transportation Rates
Southern California Gas Company
2016 TCAP Phase II Application
2016 TCAP Phase II Settlement Agreement Ilustrative Rates

		Present Rates			Proposed Rates			Changes		
		Jan-1-15 Volumes Mth	Average Rate $/th	Jan-1-15 BCAP Vols $000's	Jan-1-17 Volumes Mth, Mdth	Rate $/th	Jan-1-17 Revenue $000's	Revenue Change $000's	Rate Change $/th	% Rate change %
		A	B	C	D	E	F	G	H	I
1	**Rate Excluding CSITMA & CARB Fee:**									
2	Reservation Service Option (RS):									
3	Daily Reservation rate $/th/day		$0.00597			$0.00685			$0.00088	14.7%
4	Usage Charge for RS $/th		$0.00650			$0.00316			($0.00334)	-51.4%
5	Class Average Volumetric Rate (CA)									
6	Volumetric Rate $/th		$0.00803			$0.01035			$0.00232	28.8%
7	Usage Charge for CA $/th		$0.00650			$0.00316			($0.00334)	-51.4%
8	Class Average Volumetric Rate (CA) $/th		$0.01453			$0.01351			($0.00103)	-7.1%
9										
10	115% CA (for NonBypass Volumetric NV) $/th		$0.01671			$0.01553			($0.00118)	-7.1%
11	135% CA (for Bypass Volumetric BV) $/th		$0.01962			$0.01823			($0.00139)	-7.1%
12	Total Transmission Level Service (NCCI, EOR, E	3,295,536	$0.01453	$47,897	3,052,937	$0.01350	$41,207	($6,690)	($0.00104)	-7.1%
13										
14	**C&I Rate Including CSITMA & CARB Fee:**									
15	CSITMA Adder to Usage Charge	643,782	$0.00244	$1,572	653,799	$0.00221	$1,448	($124)	($0.00023)	
16	CARB Fee Adder	1,455,666	$0.00110	$1,607	1,397,477	$0.00071	$989		($0.00040)	
17	Reservation Service Option (RS):									
18	Daily Reservation rate $/th/day		$0.00597			$0.00685		$0	$0.00088	14.7%
19	Usage Charge for RS $/th		$0.01004			$0.00608		$0	($0.00397)	-39.5%
20	Class Average Volumetric Rate (CA)									
21	Volumetric Rate $/th		$0.00803			$0.01035		$0	$0.00232	28.8%
22	Usage Charge for CA $/th		$0.01004			$0.00608		$0	($0.00397)	-39.5%
23	Class Average Volumetric Rate (CA) $/th		$0.01808			$0.01643		$0	($0.00165)	-9.1%
24										
25	115% CA (for NonBypass Volumetric NV) $/th		$0.02026			$0.01845		$0	($0.00180)	-8.9%
26	135% CA (for Bypass Volumetric BV) $/th		$0.02316			$0.02115		$0	($0.00201)	-8.7%
27	Other Adjustments :									
28	Transportation Charge Adj. (TCA) for CSITMA exempt custom		($0.00244)			($0.00221)			$0.00023	
29	California Air Resources Board (CARB) Fee Credit $/th		($0.00110)			($0.00071)			$0.00040	
30	**Total Transmission Level Service Includes C**	**3,295,536**	**$0.01550**	**$51,076**	**3,052,937**	**$0.01430**	**$43,645**	**($7,431)**	**($0.00120)**	**-7.8%**
31										
32	**EG & EOR Rate Including CARB, excluding CSITMA:**									
33	CARB Fee Adder		$0.00110			$0.00071			($0.00040)	
34	Reservation Service Option (RS):									
35	Daily Reservation rate $/th/day		$0.00597			$0.00685		$0	$0.00088	14.7%
36	Usage Charge for RS $/th		$0.00760			$0.00386		$0	($0.00374)	-49.2%
37	Class Average Volumetric Rate (CA)									
38	Volumetric Rate $/th		$0.00803			$0.01035		$0	$0.00232	28.8%
39	Usage Charge for CA $/th		$0.00760			$0.00386		$0	($0.00374)	-49.2%
40	Class Average Volumetric Rate (CA) $/th		$0.01564			$0.01421		$0	($0.00142)	-9.1%
41										
42	115% CA (for NonBypass Volumetric NV) $/th		$0.01782			$0.01624		$0	($0.00158)	-8.8%
43	135% CA (for Bypass Volumetric BV) $/th		$0.02072			$0.01894		$0	($0.00178)	-8.6%
44										
45	**Other Adjustments :**									
46	California Air Resources Board (CARB) Fee Credit $/th		($0.00110)			($0.00071)			$0.00040	-35.9%
47										
48	**Rate Excluding CSITMA, CARB Fee, & Uncollectibles (applicable to Wholesale & International):**									
49	Reservation Service Option (RS):									
50	Daily Reservation rate $/th/day		$0.00595			$0.00683			$0.00088	14.7%
51	Usage Charge for RS $/th		$0.00648			$0.00315			($0.00333)	-51.4%
52	Class Average Volumetric Rate (CA)									
53	Volumetric Rate $/th		$0.00801			$0.01032			$0.00231	28.8%
54	Usage Charge for CA $/th		$0.00648			$0.00315			($0.00333)	-51.4%
55	Class Average Volumetric Rate (CA) $/th		$0.01449			$0.01347			($0.00102)	-7.1%
56										
57	115% CA (for NonBypass Volumetric NV) $/th		$0.01667			$0.01549			($0.00118)	-7.1%
58	135% CA (for Bypass Volumetric BV) $/th		$0.01956			$0.01818			($0.00138)	-7.1%
59	**Total Transmission Level Service (WS & Int'l)**	**317,990**	**$0.01453**	**$4,622**	**325,403**	**$0.01350**	**$4,392**	**($229)**	**($0.00104)**	**-7.1%**
60										
61	**Average Transmission Level Service**	**3,613,526**	**$0.01541**	**$55,698**	**3,378,340**	**$0.01422**	**$48,037**	**($7,661)**	**($0.00119)**	**-7.8%**

TABLE 8
Backbone Transmission Service and Storage Rates
Southern California Gas Company
2016 TCAP Phase II Application

2016 TCAP Phase II Settlement Agreement Ilustrative Rates

		Present Rates			Proposed Rates			Changes		
		Jan-1-15 Volumes Mth	Average Rate $/th	Jan-1-15 BCAP Vols $000's	Jan-1-17 Volumes Mth, Mdth	Rate $/th	Jan-1-17 Revenue $000's	Revenue Change $000's	Rate Change $/th	% Rate change %
		A	B	C	D	E	F	G	H	I
1	**Backbone Transmission Service BTS**									
2	BTS SFV Reservation Charge $/dth/day	2,809	$0.15777	$161,782	2,818	$0.21578	$221,908	$60,125	$0.05800	36.8%
3	BTS MFV Reservation Charge $/dth/day		$0.12622			$0.17262				
4	BTS MFV Volumetric Charge $/dth		$0.03155			$0.04316				
5	BTS Interruptible Volumetric Charge $/dth		$0.15777			$0.21578			$0.05800	36.8%
6										
7										
8	**Storage Rates: (incl. HRSMA)**									
9	Core $000			$52,836			$65,731	$12,895		
10	Load Balancing $000			$10,260			$27,834	$17,575		
11	Unbundled Storage $000			$26,476			$17,020	($9,456)		
12				$89,571			$110,585	$21,014		

See footnotes Table 1

1) CSITMA - NCCI and EG TLS Tariff rates include CSITMA. Customers exempt (Constitutional Exempt and EG) receive Transportation Charge Adjustment TCA.

2) CARB - TLS NCCI, EOR and EG Tariff rates include CSITMA. TLS NCCI, EOR and EG customers exempt as they pay CARB fees directly receive credit.

3) Wholesale Customers exclude CSITMA and CARB since these customers are exempt.

TABLE 1
Natural Gas Transportation Rate Revenues
San Diego Gas & Electric
2016 TCAP Phase II Application

2016 TCAP Phase II Settlement Agreement Ilustrative Rates

		At Present Rates			At Proposed Rates			Changes		
		Jan-1-15 Volumes mtherms A	Average Rate $/therm B	Jan-1-15 Revenues $000's C	Jan-1-17 Volumes mtherms D	Average Rate $/therm E	Jan-1-17 Revenues $000's F	Revenues $000's G	Rates $/therm H	Rate change % I
1	**CORE**									
2	Residential	321,869	$0.92062	$296,319	319,982	$0.72265	$231,235	($65,084)	($0.19797)	-21.5%
3	Commercial & Industrial	177,578	$0.34893	$61,962	182,660	$0.15567	$28,435	($33,527)	($0.19326)	-55.4%
4										
5	NGV - Pre SempraWide	11,417	$0.24253	$2,769	18,501	$0.08327	$1,541	($1,228)	($0.15926)	-65.7%
6	SempraWide Adjustment	11,417	($0.08949)	($1,022)	18,501	$0.04150	$768	$1,789	$0.13098	-146.4%
7	NGV Post SempraWide	11,417	$0.15304	$1,747	18,501	$0.12476	$2,308	$561	($0.02828)	-18.5%
8										
9	Total CORE	510,864	$0.70474	$360,028	521,144	$0.50270	$261,979	($98,050)	($0.20204)	-28.7%
10										
11	**NONCORE COMMERCIAL & INDUSTRIAL**									
12	Distribution Level Service	25,161	$0.05420	$1,364	27,807	$0.02421	$673	($690)	($0.02999)	-55.3%
13	Transmission Level Service (2)	13,582	$0.01901	$258	17,168	$0.01457	$250	($8)	($0.00444)	-23.4%
14	Total Noncore C&I	38,743	$0.04186	$1,622	44,975	$0.02053	$923	($699)	($0.02133)	-51.0%
15										
16	**NONCORE ELECTRIC GENERATION**									
17	Distribution Level Service									
18	Pre Sempra Wide	103,761	$0.01729	$1,794	95,807	$0.00123	$118	($1,676)	($0.01606)	-92.9%
19	Sempra Wide Adjustment	103,761	$0.02947	$3,058	95,807	$0.04364	$4,181	$1,124	$0.01418	48.1%
20	Distribution Level post SW	103,761	$0.04676	$4,852	95,807	$0.04487	$4,299	($552)	($0.00188)	-4.0%
21	Transmission Level Service (2)	577,118	$0.01461	$8,431	574,075	$0.01349	$7,744	($686)	($0.00112)	-7.7%
22	Total Electric Generation	680,879	$0.01951	$13,283	669,882	$0.01798	$12,044	($1,239)	($0.00153)	-7.8%
23										
24	**TOTAL NONCORE**	719,622	$0.02071	$14,904	714,857	$0.01814	$12,967	($1,937)	($0.00257)	-12.4%
25										
26	**SYSTEM TOTAL**	**1,230,486**	**$0.30470**	**$374,933**	**1,236,000**	**$0.22245**	**$274,946**	**($99,987)**	**($0.08226)**	**-27.0%**

1) These rates are for Natural Gas Transportation Service from "Citygate to Meter". The BTS rate is for service from Receipt Point to Citygate. BTS is a SoCalGas tariff and service is purcahsed from SoCalGas.
2) Average transmission level service rate is shown here, see Rate Table 6 for detail list of TLS rates.
3) All rates include Franchise Fees & Uncollectible charges

TABLE 2
Core Gas Transportation Rates
San Diego Gas & Electric
January, 2015 Rates

2016 TCAP Phase II Settlement Agreement Ilustrative Rates

		At Present Rates			At Proposed Rates			Changes		
		Jan-1-15 Volumes mtherms	Average Rate $/therm	Jan-1-15 Revenues $000's	Jan-1-17 Volumes mtherms	Average Rate $/therm	Jan-1-17 Revenues $000's	Revenues $000's	Rates $/therm	Rate change %
		A	B	C	D	E	F	G	H	I
1	**RESIDENTIAL RATES Schedule GR,GM**									
2	**Rates Excluding CSITMA & CAT**									
3	Customer Charge $/month	848,086	$0.00	$0	884,624	$0.00	$0	$0	$0.00	
4										
5	Baseline $/therm	217,220	$0.86716	$188,364	215,947	$0.68366	$147,635	($40,729)	($0.18349)	-21.2%
6	Non-Baseline $/therm	104,649	$1.05344	$110,241	104,035	$0.84019	$87,409	($22,832)	($0.21325)	-20.2%
7	Average Rate $/therm	321,869	$0.92772	$298,605	319,982	$0.73455	$235,044	($63,561)	($0.19317)	-20.8%
8	NBL/BL Ratio									
9	NBL/BL rate ratio		1.14			1.14				
10	NBL- BL rate difference $/th					$0.15652				
11										
12	**Rates Including CSITMA, Excluding CAT**									
13	CSITMA Adder to Volumetric Rate	256,575	$0.00407	$1,045	258,048	$0.00112	$288	($758)	($0.00296)	-72.6%
14	Baseline $/therm		$0.87123			$0.68478			($0.18645)	-21.4%
15	Non-Baseline $/therm		$1.05751			$0.84130			($0.21621)	-20.4%
16	Average NonCARE Rate $/therm		$0.93180			$0.73567			($0.19613)	-21.0%
17										
18	**Sub Meter Credit Schedule GS,GT**									
19	GS Unit Discount $/day	6,004	($0.29392)	($644)	5,870	($0.38268)	($820)	($176)	($0.08877)	30.2%
20	GT Unit Discount $/day	27,745	($0.36460)	($3,692)	27,189	($0.40932)	($4,062)	($370)	($0.04471)	12.3%
21										
22	**Schedule GL-1**									
23	LNG Facility Charge, domestic use $/month	289	$14.79	$51	321	$14.79	$57		$0.00000	0.0%
24	LNG Facility Charge, non-domestic $/mth/mbtu		$0.05480			$0.05480			$0.00000	0.0%
25	LNG Volumetric Surcharge $/th	100	$0.16571	$16	74	$0.16571	$12		$0.00000	0.0%
26				$68			$69			
27	**Volumetric Rates Including CSITMA & CAT**									
28	CAT Adder to Volumetric Rate	247	$0.00000	$0	2,764	$0.00000	$0	$0	$0.00000	
29	Baseline $/therm		$0.87123			$0.68478			($0.18645)	-21.4%
30	Non-Baseline $/therm		$1.05751			$0.84130			($0.21621)	-20.4%
31	Average Rate $/therm		$0.93180			$0.73567			($0.19613)	-21.0%
32										
33	**Other Adjustments :**									
34	Employee Discount			($412)			($349)	$63		
35	SDFFD			$1,349			$1,064	($285)		
36										
37	Credit for CSITMA Exempt Cutomers:		($0.00407)			($0.00112)			$0.00296	-72.6%
38										
39										
40	**Total Residential**	**321,869**	**$0.92062**	**$296,319**	**319,982**	**$0.72265**	**$231,235**	**($65,084)**	**($0.19797)**	**-21.5%**

See footnotes Table 1

TABLE 3
Natural Gas Transportation Rate Revenues
San Diego Gas & Electric
2016 TCAP Phase II Application
2016 TCAP Phase II Settlement Agreement Ilustrative Rates

		At Present Rates			At Proposed Rates			Changes		
		Jan-1-15 Volumes mtherms A	Average Rate $/therm B	Jan-1-15 Revenues $000's C	Jan-1-17 Volumes mtherms D	Average Rate $/therm E	Jan-1-17 Revenues $000's F	Revenues $000's G	Rates $/therm H	Rate change % I
1	**Other Core Rates $/therm**									
2	Schedule GPC - Procurement Price		$0.42840			$0.40492			($0.02348)	-5.5%
3										
4	**CORE COMMERCIAL & INDUSTRIAL RATES Schedule GN-3**									
5	Customer Charge $/month	29,865	$10.00	$3,584	30,265	$10.00	$3,632	$48	$0.00000	0.0%
6										
7	**Rates Excluding CSITMA & CAT**									
8	Tier 1 = 0 to 1,000 therms/month	79,475	$0.41947	$33,337	82,658	$0.20145	$16,652	($16,685)	($0.21801)	-52.0%
9	Tier 2 = 1,001 to 21,000 therms/month	82,322	$0.25230	$20,770	84,219	$0.08318	$7,005	($13,764)	($0.16911)	-67.0%
10	Tier 3 = over 21,000 therms/month	15,781	$0.20507	$3,236	15,783	$0.04977	$786	($2,451)	($0.15530)	-75.7%
11										
12	**Rates Including CSITMA, Excluding CAT**									
13	CSITMA Adder to Volumetric Rate	169,353	$0.00407	$690	182,649	$0.00112	$204	($486)	($0.00296)	-72.6%
14	Tier 1 = 0 to 1,000 therms/month		$0.42354			$0.20257			($0.22097)	-52.2%
15	Tier 2 = 1,001 to 21,000 therms/month		$0.25637			$0.08430			($0.17207)	-67.1%
16	Tier 3 = over 21,000 therms/month		$0.20915			$0.05089			($0.15826)	-75.7%
17										
18	**Rates Including CSITMA & CAT**									
19	CAT Adder to Volumetric Rate	23,606	$0.00000	$0	35,463	$0.00000	$0	$0	$0.00000	
20	Tier 1 = 0 to 1,000 therms/month		$0.42354			$0.20257			($0.22097)	-52.2%
21	Tier 2 = 1,001 to 21,000 therms/month		$0.25637			$0.08430			($0.17207)	-67.1%
22	Tier 3 = over 21,000 therms/month		$0.20915			$0.05089			($0.15826)	-75.7%
23										
24	**Other Adjustments :**									
25	Adjustment for SDFFD			$346			$157	($188)		
26	Credit for CSITMA Exempt Cutomers:		($0.00407)			($0.00112)			$0.00296	-72.6%
27										
28	**Total Core C&I**	**177,578**	**$0.34893**	**$61,962**	**182,660**	**$0.15567**	**$28,435**	**($33,527)**	**($0.19326)**	**-55.4%**

1) CSITMA - Tariff rate includes CSITMA, exempt customers (including CARE participants and Constitutionally Exempt) receive Credit for CSITMA.
CARE participants receive 20% CARE discount (Tariff rate less Credit for CSITMA Exempt Customers)*20%
See footnotes Table 1

TABLE 4
Other Core Gas Transportation Rates
San Diego Gas & Electric
2016 TCAP Phase II Application

2016 TCAP Phase II Settlement Agreement Ilustrative Rates

		At Present Rates			At Proposed Rates			Changes		
		Jan-1-15 Volumes mtherms	Average Rate $/therm	Jan-1-15 Revenues $000's	Jan-1-17 Volumes mtherms	Average Rate $/therm	Jan-1-17 Revenues $000's	Revenues $000's	Rates $/therm	Rate change %
		A	B	C	D	E	F	G	H	I
1	**NATURAL GAS VEHICLE RATES G-NGV & G**	Sempra-Wide NGV Rates			*Sempra-Wide NGV Rates*					
2	Customer Charge									
3	P1 $/month	24	$13.00	$4	28	$13.00	$4	$1	$0.00	0.0%
4	P2A $/month	10	$65.00	$8	10	$65.00	$8	$0	$0.00	0.0%
5										
6	**Uncompressed Rate Excl CSITMA & CAT $/th**	11,417	$0.12819	$1,464	18,501	$0.08147	$1,507	$44	($0.04672)	-36.4%
7	Compressor Adder $/therm Excludes CSITMA &	209	$1.05591	$220	744	$1.03712	$772	$552	($0.01879)	-1.8%
8	Combined transport & compressor adder $/th		$1.18410			$1.11859			($0.06551)	-5.5%
9										
10	**Volumetric Rates Includes CSITMA, Excludes CAT**									
11	CSITMA Adder to Volumetric Rate	11,399	$0.00407	$46	11,409	$0.00112	$13	($34)	($0.00296)	-72.6%
12	Uncompressed Rate $/therm		$0.13227			$0.08259			($0.04968)	-37.6%
13	Combined transport & compressor adder $/th		$1.18818			$1.11971			($0.06847)	-5.8%
14										
15	**Volumetric Rates Includes CSITMA & CAT**									
16	CAT Adder to Volumetric Rate		$0.00000			$0.00000				
17	Uncompressed Rate $/therm		$0.13227			$0.08259		$0	($0.04968)	-37.6%
18	Combined transport & compressor adder $/th		$1.18818			$1.11971			($0.06847)	-5.8%
19	**Other Adjustments :**									
20	Adjustment for SDFFD 0.491%			$6			$4	($2)		
21	Credit for CSITMA Exempt Cutomers $/th		($0.00407)			($0.00112)			$0.00296	-72.6%
22										
23										
24	**Total NGV**	**11,417**	**$0.15304**	**$1,747**	**18,501**	**$0.12476**	**$2,308**	**$561**	**($0.02828)**	**-18.5%**
25										
26	**RESIDENTIAL NATURAL GAS VEHICLES (optional rate)**									
27	Customer Charge	848	$5.00	$51	885	$5.00	$53	$2	$0.00	0.0%
28	**Uncompressed Rate w/o CSITMA & CAT $/th**	929	$0.28739	$267	969	$0.20789	$201	($66)	($0.07950)	-27.7%
29		929	$0.34215	$318	969	$0.26265	$255	($63)	($0.07950)	-23.2%
30										
31	**Volumetric Rates Including CSITMA , Excluding CAT**									
32	CSITMA Adder to Volumetric Rate		$0.00407			$0.00112			($0.00296)	-72.6%
33	Uncompressed Rate $/therm		$0.29146			$0.20900			($0.08246)	-28.3%
34										
35	**Volumetric Rates Includes CSITMA & CAT**									
36	CAT Adder to Volumetric Rate	0	$0.00000	$0	0	$0.00000	$0	$0	$0.00000	
37	Uncompressed Rate $/therm		$0.29146			$0.20900		$0	($0.08246)	-28.3%
38										
39	**Other Adjustments :**									
40	Adjustment for SDFFD			$0			$0	$0		
41	Credit for CSITMA Exempt Cutomers $/th		($0.00407)			($0.00112)			$0.00296	-72.6%
42										
43	**Total Res NGV**	**929**	**$0.34215**	**$318**	**969**	**$0.26265**	**$255**	**($63)**	**($0.07950)**	**-23.2%**

1) CSITMA - Tariff rate includes CSITMA, exempt customers (including CARE participants and Constitutionally Exempt) receive Credit for CSITMA.

TABLE 5
NonCore Gas Transportation Rates
San Diego Gas & Electric
2016 TCAP Phase II Application

2016 TCAP Phase II Settlement Agreement Ilustrative Rates

		At Present Rates			At Proposed Rates			Changes		
		Jan-1-15 Volumes mtherms	Average Rate $/therm	Jan-1-15 Revenues $000's	Jan-1-17 Volumes mtherms	Average Rate $/therm	Jan-1-17 Revenues $000's	Revenues $000's	Rates $/therm	Rate change %
		A	B	C	D	E	F	G	H	I
1	**NonCore Commercial & Industrial Distribution Level**									
2	Customer Charges $/month	54	$350.00	$228	42	$350.00	$177	($51)	$0.00	0.0%
3										
4	**Volumetric Charges Incl CARB Fee, Excl CSI**	25,161	$0.04161	$1,047	27,807	$0.01683	$468	($579)	($0.02478)	-59.6%
5	CSITMA Adder to Volumetric Rate	21,818	$0.00407	$89	25,154	$0.00112	$28	($61)	($0.00296)	-72.6%
6										
7	**Volumetric Charges Incl CARB Fee, Incl CSITMA**									
8	Volumetric Rates $/therm		$0.04568			$0.01794			($0.02773)	-60.7%
9										
10	**Other Adjustments :**									
11	SDFFD 0.727%									
12	Credit for CSITMA Exempt Cutomers $/th		($0.00407)			($0.00112)			$0.00296	-72.6%
13	Credit for CARB Fee Exempt Customers $/th		($0.00041)			$0.00004				
14	**NCCI-Distribution Total**	**25,161**	**$0.05420**	**$1,364**	**27,807**	**$0.02421**	**$673**	**($690)**	**($0.02999)**	**-55.3%**
15										
16	**NCCI-Transmission Total (1)**	**13,582**	**$0.01901**	**$258**	**17,168**	**$0.01457**	$250	**($8)**	**($0.00444)**	**-23.4%**
17										
18	**Total NonCore C&I**	**38,743**	**$0.04186**	**$1,622**	**44,975**	**$0.02053**	**$923**	**($699)**	**($0.02133)**	**-51.0%**
19										
20	**ELECTRIC GENERATION**									
21										
22	**Small EG Distribution Level Service (a Sempra-Wide rate) Excludes CARB Fee & CSITMA**									
23	Customer Charge, $/month	40	$50.00	$24	46	$50.00	$28	$4	$0.00	0.0%
24	Volumetric Rate $/therm	16,347	$0.10438	$1,706	19,210	$0.09712	$1,866	$159	($0.01)	-7.0%
25	Small EG Distribution Level Service	16,347	$0.10584	$1,730	19,210	$0.09857	$1,893	$163	($0.00728)	-6.9%
26	**Large EG Distribution Level Service (a Sempra-Wide rate) Excludes CARB Fee, CSITMA**									
27	Customer Charge, $/month		$0.00			$0.00			$0.00	
28	Volumetric Rate (Incl ITCS) $/th	87,414	$0.03526	$3,082	76,596	$0.03146	$2,409	($673)	($0.00)	-10.8%
29										
30	EG Distribution excl CARB Fee, CSITMA	103,761	$0.04638	$4,812	95,807	$0.04491	$4,303	($510)	($0.00)	-3.2%
31										
32	**Volumetric Rates Including CARB Fee, Excluding CSITMA:**									
33	Carb Fee Cost Adder - Small	14,770	$0.00041	$6	17,633	($0.00004)	($1)	($7)	($0.00045)	
34	CARB Fee Cost Adder - Large	81,853	$0.00041	$33	71,035	($0.00004)	($3)			
35	EG-Distribution Tier 1 Incl CARB fee, Excl CSITMA		$0.10478			$0.09708			($0.00770)	-7.4%
36	EG-Distribution Tier 2 Incl CARB Fee, Excl CSITMA		$0.03567			$0.03141			($0.00425)	-11.9%
37	Total - EG Distribution Level	103,761	$0.04676	$4,852	95,807	$0.04487	$4,299	($552)	($0.00188)	-4.0%
38	Credit for CARB Fee Exempt Customers $/th		($0.00041)			$0.00004				
39										
40	EG Transmission Level Service Excl CARB fee	471,084	$0.01453	$6,847	471,084	$0.01350	$6,359			
41	EG Transmission Level Service Incl CARB Fee	106,034	$0.01494	$1,584	102,991	$0.01346	$1,386	($198)	($0.00)	-9.9%
42	EG Transmission Level Service - Average (1)	577,118	$0.01461	$8,431	574,075	$0.01349	$7,744			
43										
44	**TOTAL ELECTRIC GENERATION**	**680,879**	**$0.01951**	**$13,283**	**669,882**	**$0.01798**	**$12,044**	**($1,239)**	**($0.00153)**	**-7.8%**

1) CSITMA - Tariff rate includes CSITMA, exempt customers (including CARE participants and Constitutionally Exempt) receive Credit for CSITMA.
Schedule EG Tariff Rate excludes CSITMA, since EG customers are exempt.
2) EFMA - GTNC and EG Tariff rates includes EFMA. Those EG and GTNC customers that are exempt will receive EFMA credit.
See footnotes Table 1

TABLE 6
Transmission Level Service Gas Transportation Rates
San Diego Gas & Electric
2016 TCAP Phase II Application

2016 TCAP Phase II Settlement Agreement Ilustrative Rates

		At Present Rates			At Proposed Rates			Changes		
		Jan-1-15 Volumes mtherms	Average Rate $/therm	Jan-1-15 Revenues $000's	Jan-1-17 Volumes mtherms	Average Rate $/therm	Jan-1-17 Revenues $000's	Revenues $000's	Rates $/therm	Rate change %
		A	B	C	D	E	F	G	H	I
1	**Transmission Level Service Rate Excluding CSITMA & CARB Fee**									
2	Reservation Service Option (RS):									
3	Daily Reservation rate $/th/day		$0.00600			$0.00688		$0	$0.00088	14.7%
4	Usage Charge for RS $/th		$0.00653			$0.00317		$0	($0.00336)	-51.4%
5										
6	Class Average Volumetric Rate (CA)									
7	Volumetric Rate $/th		$0.00808			$0.01041		$0	$0.00233	28.8%
8	Usage Charge for CA $/th		$0.00653			$0.00317		$0	($0.00336)	-51.4%
9	Class Average Volumetric Rate CA $/th		$0.01461			$0.01358		$0	($0.00103)	-7.1%
10										
11	115% CA (for NonBypass Volumetric NV) $/th		$0.01681			$0.01562		$0	($0.00119)	-7.1%
12	135% CA (for Bypass Volumetric BV) $/th		$0.01973			$0.01833		$0	($0.00139)	-7.1%
13										
14	Average Transmission Level Service	590,700	$0.01453	$8,585	591,243	$0.01350	$7,980	($605)	($0.00104)	-7.1%
15										
16	**C&I Rate Including CSITMA & CARB Fee**									
17	CSITMA Adder to Usage Rate $/th	13,582	$0.00407	$55	17,168	$0.00112	$19	($36)	($0.00296)	-72.6%
18	EFMA Cost Adder	119,616	$0.00041	$49	120,159	($0.00004)	($5)		($0.00045)	
19	Reservation Service Option (RS):									
20	Daily Reservation rate $/th/day		$0.00600			$0.00688		$0	$0.00088	14.7%
21	Usage Charge for RS $/th		$0.01101			$0.00425		$0	($0.00677)	-61.4%
22										
23	Class Average Volumetric Rate (CA)									
24	Volumetric Rate $/th		$0.00808			$0.01041		$0	$0.00233	28.8%
25	Usage Charge for CA $/th		$0.01101			$0.00425		$0	($0.00677)	-61.4%
26	Class Average Volumetric Rate CA $/th		$0.01909			$0.01466		$0	($0.00444)	-23.2%
27										
28	115% CA (for NonBypass Volumetric NV) $/th		$0.02129			$0.01669		$0	($0.00459)	-21.6%
29	135% CA (for Bypass Volumetric BV) $/th		$0.02421			$0.01941		$0	($0.00480)	-19.8%
30										
31	**Other Adjustments:**									
32	Credit for CSITMA Exempt Cutomers $/th		($0.00407)			($0.00112)			$0.00296	-72.6%
33	CARB Fee Credit for Exempt Customers $/th		($0.00041)			$0.00004			$0.00045	-110.1%
34										
35	**EG Rate Including CARB Fee, excluding CSITMA:**									
36	CARB Fee Cost Adder		$0.00041			($0.00004)			($0.00045)	
37	Reservation Service Option (RS):									
38	Daily Reservation rate $/th/day		$0.00600			$0.00688		$0	$0.00088	14.7%
39	Usage Charge for RS $/th		$0.00694			$0.00313		$0	($0.00381)	-54.9%
40										
41	Class Average Volumetric Rate (CA)									
42	Volumetric Rate $/th		$0.00808			$0.01041		$0	$0.00233	28.8%
43	Usage Charge for CA $/th		$0.00694			$0.00313		$0	($0.00381)	-54.9%
44	Class Average Volumetric Rate CA $/th		$0.01502			$0.01354		$0	($0.00148)	-9.8%
45										
46	115% CA (for NonBypass Volumetric NV) $/th		$0.01721			$0.01558		$0	($0.00163)	-9.5%
47	135% CA (for Bypass Volumetric BV) $/th		$0.02013			$0.01829		$0	($0.00184)	-9.1%
48										
49	**Other Adjustments:**									
50	CARB Fee Credit for Exempt Customers $/th		($0.00041)			$0.00004			$0.00045	-110.1%
51										
52	**Average Transmission Level Service**	**590,700**	**$0.01471**	**$8,689**	**591,243**	**$0.01352**	**$7,995**	**($694)**	**($0.00119)**	**-8.1%**

See footnotes Table 1

APPENDIX D

SoCalGas/SDG&E Demand Forecast (Mdth)

	SOCALGAS	**3-Year Average 2017-2019**
Core		
	Residential	243,516
	Core C&I	102,319
	Gas AC	77
	Gas Engine	2,070
	NGV	15,710
	Total Core	**363,691**
Noncore		
	Noncore C&I	152,534
	Electric Generation	267,779
	EOR	23,157
	Total Retail Noncore	**443,470**
Wholesale and International		
	Long Beach	7,352
	SDG&E	125,156
	Southwest Gas	6,537
	Vernon	9,514
	Mexicali	9,138
	Total Wholesale and International	**157,696**
Average Year Throughput		**964,857**
	SDG&E	**3-Year Average 2017-2019**
Core		
	Residential	31,998
	Core C&I	18,266
	NGV	1,850
	Total Core	**52,114**
Noncore		
	Noncore C&I	4,498
	Electric Generation	66,988
	Total Retail Noncore	**71,486**
Average Year Throughput		**123,600**