

Application of Southern California Gas Company
for authority to update its gas revenue requirement
and base rates effective on January 1, 2012.
(U904G)

Application 10-12-____
Exhibit No.: (SCG-39)

PREPARED DIRECT TESTIMONY OF
HERBERT S. EMMRICH
ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

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

DECEMBER 2010



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1 and share the benefits with customers and shareholders. The specifics of the productivity
2 sharing mechanism are described in Section VI below.

3 **II. THE PROPOSED GRC TERM.**

4 SoCalGas proposes that this PTY ratemaking mechanism will remain in effect
5 during the four-year GRC term. SoCalGas is proposing a four-year GRC term to provide
6 greater incentives to the utility to make productivity-enhancing investments and to focus
7 on operating the business efficiently, as opposed to a three-year perpetual rate case cycle
8 that uses up significant resources in the preparation of GRC analyses and testimonies. In
9 addition, this longer-term proposal provides customers with the benefits of rate stability
10 for known cost drivers and guaranteed productivity enhancements at levels equal to
11 customer growth. SoCalGas proposes an earnings sharing mechanism for earnings above
12 its ROR that provides ratepayers an initial high share of revenues above SoCalGas'
13 authorized ROR while providing shareholders the incentive to increase efficiency
14 investments and thereby increase shareholder earnings as earnings above ROR increase.
15 In addition, SoCalGas proposes a productivity sharing mechanism that will credit one
16 half of the earnings above ROR achieved in 2015, if any, to SoCalGas' base margin in
17 2016. The combination of these incentive mechanisms will provide the utility with the
18 incentive to invest in longer-term productivity enhancing investments and operations
19 changes.

20 SoCalGas also proposes to continue balancing account treatment for revenues
21 adopted in this proceeding to balance changes in revenues due to sales fluctuations as
22 approved by the Commission in the SoCalGas and San Diego Gas & Electric
23 ("SDG&E") 2009 BCAP Decision, D. 09-11-006. SoCalGas is proposing this PTY
24 framework as a package of balanced revenue adjustments, revenue sharing, productivity
25 and other adjustments as contained herein. To the extent that the Commission does not
26 approve this proposed PTY framework as outlined, SoCalGas reserves the right to
27 withdraw this request and instead propose a traditional three-year GRC with annual
28 attrition in the years 2013 and 2014, based on separate adjustments for capital and O&M
29 as proposed in this application, with no adjustment for customer growth and productivity
30 and no earnings sharing.

1 **III. POST TEST YEAR RATEMAKING MECHANISM**

2 **A. Background**

3 The traditional GRC framework has a three-year GRC period with an
4 annual attrition mechanism to make interim adjustments to the test-year revenue
5 requirements in the second and third years. The attrition mechanism for
6 authorized O&M-related revenue requirements is an adjustment for cost
7 escalation, based on appropriate utility cost escalation factors (utility price
8 indexes), with no explicit adjustments for customer growth and productivity. The
9 attrition mechanism for authorized capital-related revenue requirements is based
10 on an escalation of authorized rate base using Global Insight’s utility capital cost
11 escalation factors and a forecast of capital-related costs based on the Results of
12 Operations (RO) model outputs in the Test Year shown in Ms. Deborah
13 Hiramoto’s testimony [Exhibit SCG-38]. SoCalGas proposes a four-year GRC
14 period with a three-year PTY period. This longer-term PTY proposal is not
15 unusual since the Commission has previously established rate case terms longer
16 than the traditional three-year cycle for SoCalGas. The Commission adopted rate
17 case terms for SoCalGas of a minimum of 5 years in D.97-07-054 that was
18 extended through 2003 pursuant to D.01-10-030 (1997-2003) and 4 years in D.04-
19 12-015 (2004-2007). Currently SoCalGas is under a non-precedent setting
20 Settlement agreement per D. 08-07-046 that provides SoCalGas with a fixed
21 dollar amount base margin increase to account for inflation, customer growth and
22 productivity through 2011.

23 **B. Proposed PTY Ratemaking Mechanism**

24 The SoCalGas proposed PTY mechanism consists of six components: (1)
25 O&M Expense Adjustment; (2) Capital-Related Cost; (3) Medical Cost
26 adjustment; (4) Z-factor Adjustment, if applicable; and, (5) an Earnings Sharing
27 Mechanism; and, (6) a Productivity Investment Sharing Mechanism. Section A of
28 my work papers presents a sample calculation of the 2013 revenue requirement
29 based on the proposed PTY ratemaking mechanism.

1 SoCalGas proposes a PTY ratemaking mechanism very similar to the
2 traditional GRC mechanism that adjusts the 2012 authorized revenue requirement
3 in the post test years by applying separate formulas to the O&M-related and
4 capital-related revenue requirements. SoCalGas will absorb the costs associated
5 with customer growth as a productivity factor. These revenue requirement
6 adjustments are needed to recover increases in costs during the post test years due
7 to inflation, increased capital spending, and growth in customers, especially given
8 the fact that gas revenues adopted in this proceeding will be balanced for sales
9 fluctuation. Under balancing account treatment, revenue changes resulting from
10 increases in sales are returned to customers and thus, revenue increases are not
11 available to offset increases in SoCalGas' costs during the post test years.
12 SoCalGas proposes to continue the revenue balancing account treatment during
13 this GRC period as adopted by the Commission in the SoCalGas/SDG&E BCAP
14 decision, D.09-11-006, November 20, 2009.

15 As discussed in more detail below, the PTY ratemaking mechanism
16 adjusts O&M expenses using utility cost escalation factors, utility price indexes,
17 and uses SoCalGas' customer growth rates as an offset for productivity gains.
18 Capital-related cost escalation for plant additions are based on Global Insight's
19 gas utility capital cost escalation factors as shown in Mr. Scott Wilder's cost
20 escalation testimony [Exhibit SCG-31]. This proposed PTY mechanism
21 represents a change from SoCalGas' current mechanism that increases its total
22 revenue requirement by a flat dollar amount each year. SoCalGas believes that its
23 proposed mechanism does a better job of aligning SoCalGas costs and revenues.
24 The revenue adjustments proposed are based on major utility O&M and capital
25 cost drivers, including adjustments for cost escalation specific to the utility sector,
26 customer growth, and necessary replacement capital spending and achieved
27 productivity in O&M expenses.

28 For example, the proposed utility cost indexes used to adjust O&M
29 expenses contain cost components consistent and reflective of utility sector cost
30 increases as opposed to the generic Consumer Price Index ("CPI") which is based
31 on a basket of goods that has very little correlation to SoCalGas' cost structure. In

1 addition, the PTY mechanism separately adjusts for capital-related costs and is
2 more aligned with SoCalGas' capital investments to improve and maintain the
3 utility infrastructure and deal with cost escalation related to these capital
4 expenditures rather than the CPI adjustment. SoCalGas' proposed PTY
5 mechanism is more reflective of current extraordinary cost escalation issues, such
6 as medical costs, that have very unique drivers and, therefore, SoCalGas is
7 proposing to separately identify medical costs and index them on a basis more
8 reflective of the cost trends experienced in Southern California as forecasted by
9 Towers Watson. The following is a more detailed description of SoCalGas'
10 proposed PTY Ratemaking Mechanism proposal.

11 1) O&M Adjustment

12 The first component of the proposed PTY ratemaking mechanism is an
13 adjustment to O&M expenses by including payroll taxes, which are not included in the
14 FERC Form 2 data as O&M but which will need to be escalated to assure cost recovery,
15 and excluding medical costs, which will be escalated at the Towers Watson forecast of
16 medical costs escalation forecast, to recover cost increases in expenses resulting from
17 utility cost escalation. The mechanism adjusts O&M expenses to reflect the effects of
18 cost escalation on goods and services SoCalGas uses to provide service to its customers
19 by multiplying the previous year's authorized O&M expenses by Global Insights national
20 utility cost escalation factors. SoCalGas will absorb recorded customer growth as a
21 productivity factor. Annually, SoCalGas will submit an advice letter to the Commission
22 providing the change in the mechanism's inputs, along with the resulting adjustment to
23 the O&M related revenue requirement based on these input changes, as explained in
24 Section VII. The proposed inputs to the O&M adjustment mechanism are discussed in
25 more detail below:

26 (a) Utility Cost Escalation Factors (Utility Price Indexes)

27 SoCalGas proposes that the labor and non-labor utility cost escalation factors
28 (utility price indexes) used in the mechanism to calculate PTY O&M expenses be based
29 on the Global Insight Fall Economic Forecast for each year of the four-year PTY
30 mechanism starting in 2013. Forecasted escalation for gas operations will be derived

1 from Global Insight's Utility Cost Information Service ("UCIS"), as addressed in the
2 direct testimony of SoCalGas witness Mr. Scott R. Wilder [Exhibit SCG-31]. Starting in
3 September 2012 and every PTY thereafter, one-year-ahead projections of the price
4 indexes (with true-up of past forecasts to reflect actual national utility price changes) will
5 be used to calculate the percentage change in the indexes in the forecast year relative to
6 the current year.

7 (b) Productivity Factor

8 SoCalGas proposes that the productivity factor used in the mechanism to calculate
9 PTY O&M expenses be based on customer growth. In SoCalGas' proposed attrition
10 method both customer growth and productivity are omitted from the attrition formula
11 (i.e., they offset each other). This requires that SoCalGas achieve a level of productivity
12 such that the costs associated with customer growth are offset by achieved productivity.
13 Based on Mr. Scott Wilder's customer growth forecast, over the PTY term these
14 proposed productivity factors average 1.3 percent. The imputed O&M productivity factor
15 would start at 1.1% in 2013, 1.3% in 2014 and 1.4% in 2015 or an average productivity
16 factor of 1.3% over the PTY period. SoCalGas believes the proposed productivity factor
17 is reasonable for use in the PTY O&M mechanism, especially since this productivity level
18 is expected to be comparable to that adopted for the other major utilities in California
19 over the GRC period and greater than the national gas utility O&M productivity increases
20 as shown in Dr. Mark Lowry's testimony. In order to achieve the productivity increases
21 required to absorb customer growth, SCG is implementing the Operational Excellence
22 ("OpEx") programs designed to reduce O&M costs over the PTY period. As shown in
23 Mr. Rick Phillips testimony [Exhibits SCG-13 and SDG&E-19], the OpEx programs are
24 designed to achieve the following goals: Operational efficiency; Improved customer
25 options; and, More information in employees' hands.

26 As shown in Mr. Rick Phillip's testimony, on a direct cost basis, OpEx O&M
27 benefits are significant in TY2012 in the post-test year 2013-2015 period. However, to
28 achieve those savings, the OpEx program will be investing \$420 million in capital over
29 the 2007-2015 OpEx program timeframe. As noted by Mr. Phillips, the expenses
30 associated with these capital investments must be translated into annual capital-related

1 revenue requirements to properly consider the impact of these expenses on the post-test
 2 year period. SoCalGas has performed this translation and the net capital-related revenue
 3 requirements (ROR, depreciation, taxes, etc.) are shown in Table HSE-1 below and in my
 4 workpapers in Appendix A. As shown in Table HSE-1, the capital-related OpEx 20/20
 5 revenue requirement is \$52 million for TY2012, increasing to \$66.5 million in 2013, and
 6 a continuing but declining capital-related revenue requirement for the 2014-2015 period.

7 As described in the testimony of Mr. Phillips, SoCalGas has included the 2010-
 8 2012 capital expenditures associated with OpEx in the TY2012 revenue requirement.
 9 Mr. Phillips also describes that because of this we are proposing to return to customers
 10 the net TY2012 O&M benefits. However, as shown in Table HSE-1, the capital-related
 11 revenue requirement in 2013-2015 will be greater than the O&M cost savings in those
 12 years and thus there are no incremental net benefits in the post-test year period until 2014
 13 and beyond. The full Net present Value analysis of the entire OpEx 20/20 program from
 14 2007 to 2022 is shown in Appendix A.

15 **TABLE HSE-1**

Year	2012	2013	2014	2015
Dollars	Millions	Millions	Millions	Millions
O&M Net Benefits & Shared Billing	(25.0)	(35.8)	(39.1)	(41.5)
Capital-Related Rev. Req.	52.0	66.5	62.2	54.6
OpEx Net Revenue Requirement	27.0	30.7	23.1	13.1
Rev, Req. Costs / savings Compared to 2012 TY		3.7	(3.9)	(13.9)

16
 17 However, compared to the OpEx project 2012 Test Year revenue requirement of
 18 \$27 million, the revenue requirement for OpEx, increases to \$30.7 in 2013, and then
 19 declines to \$23.1 million in 2014 and \$13.1 million in 2015 as shown in Table HSE-1.
 20 SoCalGas is not requesting funding to recover the 2013 incremental revenue requirement
 21 in rates. The revenue requirement savings in 2014 and 2015 will be used to help meet our
 22 productivity targets. However, even with the OpEx-generated O&M and capital revenue
 23 requirement savings in 2014 and 2015, they will not be enough to offset the costs of
 24 absorbing customer growth. As shown in Table HSE-2 below, SCG will have to achieve
 25 an additional annual average of about 1.0% productivity gain in order to offset customer
 26 growth. Therefore, SCG maintains that using the absorption of customer growth as the

1 proposed productivity measure is reasonable and should be approved by the Commission.
 2 However, should OpEx benefits exceed the projected savings, customers and
 3 shareholders will share gains as part of the proposed Earnings Sharing Mechanism.

4 **TABLE HSE-2**

Year	2012	2013	2014	2015
Customer % Growth	0.99%	1.13%	1.26%	1.37%
OpEx Net Benefits % of Margin (+ = Costs; - = Benefits)	1.19%	0.19%	-0.20%	-0.68%
Required Productivity with Customer Growth and OpEx (Average of 2013-2015 = 1.1%)	2.18%	1.32%	1.06%	0.69%

5
 6 2) Capital-Related Cost Adjustment

7 The second component of the proposed PTY ratemaking mechanism is the
 8 adjustment to the capital-related revenue requirements to reflect the cost of plant
 9 additions. The capital-related portion of the revenue requirement consists of the
 10 authorized ROR on rate base, depreciation expenses, and taxes as shown in Ms. Deborah
 11 Hiramoto's Summary of Earnings testimony [Exhibit SCG-38]. SoCalGas proposes to
 12 update its authorized 2012 capital-related base margin costs based on the Global Insight
 13 UCIS escalation factors UCIS, as shown in the testimony of Mr. Scott Wilder [Exhibit
 14 SCG-31], during the PTY period. The capital-related 2012 base margin costs for the
 15 subject year are multiplied by the UCIS escalation factors. As with O&M, SoCalGas will
 16 absorb customer growth as the implied capital cost productivity factor. Based on
 17 SoCalGas' customer growth forecast, the capital-related imputed productivity factor
 18 would start at 1.1% in 2013, 1.3% in 2014 and 1.4% in 2015. Traditionally, the rate base
 19 growth component of the PTY mechanism has been limited to increases in plant,
 20 depreciation reserve, depreciation expense, and deferred taxes caused by capital
 21 additions. Consistent with this practice, SoCalGas is not proposing to adjust the rate base
 22 elements of materials and supplies, customer advances, or working cash.

23 3) Medical Cost Adjustment

24 The third component of the proposed PTY ratemaking mechanism is an
 25 adjustment to medical costs. Because SoCalGas' medical costs are expected to continue

1 increasing faster than general utility cost escalation, medical costs included in FERC
2 Account 926.3 are escalated separately based on Towers Watson's actuarial forecasts. As
3 described in the direct testimony of SoCalGas witness Ms. Debbie Robinson [Exhibit
4 SCG-19]. The Medical cost escalation based on the Towers Watson forecast is 8.0% in
5 2013 and 7.5% in 2014 and 2015.

6 As discussed in Section VII, SoCalGas will file an advice letter on or before
7 November 1 of each year (beginning November 1, 2012) to update the authorized
8 medical cost revenues to reflect one-year ahead projections of the medical cost escalation
9 with no adjustment for customer growth, productivity, or true-up.

10 4) Z-factor Adjustment

11 SoCalGas proposes to keep in place the current Z-factor process. It proposes no
12 changes to the current identification of Z-factors. It will continue to use the eight¹ criteria
13 outlined by the Commission in D. 94-06-011 to identify exogenous cost changes that
14 qualify for Z-factor treatment. To implement the Z-factor adjustment, SoCalGas will
15 request increases (or decreases) only for the portion of Z-factor impact not already
16 contained in the annual revenue requirement and only costs that exceed the \$5 million
17 deductible per Z-factor event. Capital-related Z-factor costs will be converted to revenue
18 requirements before application of the \$5 million deductible. A Z-factor should operate
19 in a symmetrical fashion, that is, it should operate identically for extraordinary cost
20 increases as well as for extraordinary cost decreases. The deductible also applies
21 symmetrically for either extraordinary cost increases or decreases. Through total
22 symmetry of operation, ratepayers and shareholders are equally and equitably treated in
23 the case of an unforeseen Z-factor event. SoCalGas proposes to continue the "Z-factor
24 memorandum account" procedure. Upon the occurrence of a potential exogenous event,
25 SoCalGas or DRA will notify the Executive Director of the event, providing all relevant
26 information about the event, such as description, amount, timing, etc. In informing the

¹ In D.97-07-054, the SoCalGas PBR decision, the Commission established a Z-factor mechanism for SoCalGas based on the same nine criteria established for D.94-06-011. In D.05-03-023 (SDG&E/SoCalGas' 2004 COS Phase II decision), mimeo., at 78 (Ordering Paragraph No. 2 authorizing SDG&E and SoCalGas to file for rate adjustments using the mechanisms described in the Settlement Agreement) and p. 12 of Appendix C (Settlement Agreement). The eliminated criteria provided that the costs and event are not part of the rate update mechanism.

1 Commission that the previously approved “Z-factor memorandum account” has been
2 activated, this notification would be followed by a supplement to the annual revenue
3 requirement adjustment filing providing sufficient details for the Commission to conduct
4 an examination of the identified Z-factor event. SoCalGas proposes to utilize the
5 Commission’s Advice Letter process to request approval of Z factor costs, should they
6 occur. This is currently the process utilized by Southern California Edison.

7 5) Earnings and Productivity Sharing Mechanism

8 SoCalGas proposes an annual earnings sharing mechanism that shares earnings
9 above or below authorized ROR with customers and shareholders during the post test
10 years, 2013 through 2015. This sharing mechanism will provide ratepayers a high initial
11 share of productivity benefits and provides SoCalGas’ shareholders with increasing
12 shares for earnings above ROR, if any, and thereby provide the utility the incentive to
13 continue to invest in productivity enhancing programs and process changes.

14 6) Productivity Sharing Mechanism

15 In addition, SoCalGas proposes that productivity benefits that the utility has
16 generated in the GRC PTY period be reflected in the subsequent 2016 Test Year to
17 encourage the utility to continue to make productivity enhancing investments that go
18 beyond the proposed PTY term. SoCalGas proposes that 50% of the above authorized
19 ROR earnings in 2015, if any, should be credited to the utility in the subsequent 2016
20 Test Year base margin true-up. This mechanism will assure that the utility continues to
21 make productivity enhancing investments that provide ratepayer benefits over multiple
22 GRC periods.

23 **C. Costs Excluded Form PTY Ratemaking Mechanism**

24 The starting point for the proposed PTY ratemaking mechanism used to
25 calculate SoCalGas’ PTY revenue requirement is the 2012 authorized total gas
26 revenue requirement less revenues that should be excluded from PTY ratemaking
27 treatment. Appendix A presents the starting point for calculating the PTY revenue
28 requirement under the PTY ratemaking mechanism based on SoCalGas’ proposed
29 revenue requests in this proceeding. In addition to the exclusion of Pension and

1 PBOP costs from the PTY mechanism, there are other cost items not included in
2 the GRC filing that should be excluded from the mechanism.

3
4 **(1) BASE MARGIN EXCLUSIONS IN PTY PERIOD**

5 The following cost items need to be excluded from the PTY base margin

6 (a) Pension and Post Retirement Benefits Other than Pension (PBOP) costs are
7 excluded since SoCalGas is proposing that these costs continue to receive two-
8 way balancing account treatment (see Direct testimony of SoCalGas witness
9 Greg Shimansky).

10 (b) Catastrophic Event Memorandum Account (CEMA);

11 (c) Hazardous Substance Cleanup Cost Recovery Account (HSCRCA);

12 (d) Regulatory Transition Costs;

13 (e) Mandated Social Programs, including California Alternate Rates for Energy
14 (CARE) and the low-income Direct Assistance Program (DAP);

15 (f) Gas Costs (including Company Use Gas and Unaccounted For Gas) and
16 Pipeline Demand Charges and Gas Cost Incentive Mechanism items;

17 (g) Costs imposed by the Commission, such as, Intervener Compensation Fees
18 and costs related to Commission staff supervised management or financial audits;

19 (h) RD&D costs recovered through the Public Purpose Program rates;

20 (i) Performance Based Ratemaking (PBR) and DSM shareholder incentives;

21 (j) Montebello storage field costs;

22 (k) Aliso Canyon and Goleta storage fields' costs associated with the sale of
23 cushion gas;

24 (l) Transmission and storage use fuel;

25 (m) Native Gas Program costs and revenues

26 (n); Honor Rancho and Aliso Canyon Storage Expansion Program costs;

27 (o) California Solar Initiative costs;

28 (p) Self Generation costs;

29 (q) Medical Expenses;

30 (r) New Environmental Regulation Balancing Account (NERBA); and

31 (s) Any other costs recoverable through a separate mechanism as authorized by
32 the Commission.

33 As described in the proposed PTY Mechanism Tariff in Section C of my work
34 papers, these items are being excluded to retain the items as separate regulatory

1 mechanisms or preserve the Commission's discretion to prescribe specific ratemaking
2 treatment at an appropriate time in the future.

3 **IV. GRC TERM**

4 SoCalGas proposes a four-year GRC term of 2012-2015. The rationale for
5 proposing a term longer than the three-year term of a traditional GRC is that a longer
6 term will: (a) provide SoCalGas with greater incentives to undertake technology-driven
7 investments that enhance efficient operations; (b) provide customers and the Commission
8 a measure of rate certainty, since the cost elements to be escalated and associated
9 escalation factors will be clearly identified and known; and, (c) reduce the considerable
10 costs that would have been incurred by SoCalGas, the Commission, and interested parties
11 of litigating another GRC proceeding within a mere three years. In a traditional GRC
12 framework, utility shareholders are fully at risk for the difference between achieved
13 returns and authorized returns between GRC periods. This risk exposure provides an
14 incentive to operate efficiently and reduce costs. The longer period encourages the utility
15 to undertake investments that will increase productivity, since if successful, it will lower
16 costs.

17 The longer the term between rate cases, the stronger the incentive to reduce costs
18 since many productivity enhancing investments have a longer cost/benefit life than the
19 usual three-year GRC cycle. A longer GRC term allows a longer planning cycle and is
20 essential to encourage the utility to undertake technology-driven investments that have
21 long-term benefits than the traditional three-year GRC cycle provides. Therefore,
22 SoCalGas is proposing a PTY ratemaking mechanism that will benefit customers and
23 shareholders from the efficiency-promoting incentives generated by this four-year GRC
24 term. Another benefit of implementing a longer GRC term is that it reduces the time and
25 money that the utility, Commission, and intervenor parties spend on SoCalGas GRC
26 filings. For instance, if SoCalGas proposes a traditional three-year GRC term, its next
27 GRC Notice Of Intent (NOI) would need to be filed in August 2013, approximately 19
28 months after this GRC is scheduled to be implemented. To meet the August 2013 filing
29 date, preparation would need to begin in 2012, which would mean that SoCalGas'
30 personnel would begin their work on the next GRC shortly after this GRC is completed.

1 This results in SoCalGas' personnel being in constant rate case mode, which takes them
2 away from their main work responsibilities to provide safe and reliable utility service to
3 its customers.

4 The Commission has previously established rate case terms longer than the
5 traditional three-year cycle for SoCalGas. The Commission adopted rate case terms for
6 SoCalGas of a minimum of 5 years in D.97-07-054 that was extended through 2003
7 pursuant to D.01-10-030 (1997-2003) and 4 years in D.04-12-015 (2004-2007). The
8 additional operating incentives provided under the four-year GRC term should provide
9 benefits to both its customers and shareholders while mitigating the risks of the longer
10 term because of the earnings sharing mechanism proposed in the PTY framework.
11 Therefore, a four-year GRC term for SoCalGas with a 2016 GRC Test Year would seem
12 to be the best option from a regulatory efficiency standpoint.

13 **V. COST-OF-CAPITAL**

14 **COST-OF-CAPITAL Trigger Mechanism**

15 In D.97-07-054, SoCalGas' 1997 Performance Based Ratemaking ("PBR")
16 decision, the Commission adopted a Cost of Capital ("COC") trigger mechanism known
17 as MICAM (or Market Indexed Capital Adjustment Mechanism). SoCalGas has
18 previously stated that the MICAM should be re-addressed in an upcoming regulatory
19 proceeding². However, SoCalGas does not recommend changing the mechanism in this
20 GRC application, but rather proposes that its cost of capital be appropriately litigated as
21 part of the next state-wide utility COC application that is scheduled to be filed in April
22 2012 effective January 1, 2013³. Until such time, SoCalGas will continue to use the
23 currently approved mechanism. Commission-approved authorized COC per D. 96-11-
24 060 as adjusted by a MICAM triggering event as established in D.97-07-054 in October
25 2002. That MICAM triggering event changed the ROR from 9.49% to 8.68% as

² Most recently, SoCalGas filed a Petition to Modify D.97-07-054 on April 7, 2009 seeking to suspend the MICAM and re-address the mechanism in the next state-wide utility COC application. In D.09-07-033, the Commission denied SoCalGas' request.

³ D.10-01-017 (SDG&E) and D.09-10-016 (PG&E and SCE) granted the utilities' request to defer their next COC applications from April 20, 2010 to April 20, 2012.

1 implemented by Advice Letter 3199-A. SoCalGas anticipates filing a cost of capital
 2 application and participating in the statewide COC proceeding to be filed in April 2012.

3 **VI. EARNINGS AND PRODUCTIVITY SHARING MECHANISM**

4 **A. Earnings Sharing Mechanism**

5 SoCalGas proposes an annual earnings sharing mechanism that shares
 6 earnings above or below authorized ROR with customers and shareholders during
 7 the post test years, 2013 through 2015. There will be no sharing of earnings in
 8 2012. This sharing mechanism will provide ratepayers a higher share of initial
 9 productivity benefits and SoCalGas' shareholders with a fair opportunity to earn
 10 its authorized ROR and provide the utility the incentive to continue to invest in
 11 productivity enhancing programs and process changes. Earnings' sharing is based
 12 on authorized base margin only and excludes incentive mechanism earnings
 13 derived from the Gas Cost Incentive Mechanism, Energy Efficiency programs,
 14 safety programs, and all other non-base margin associated earnings.

15 **Earnings Sharing Mechanism**

16 <u>Bands</u>	<u>Basis Points Above Authorized ROR</u>	<u>Ratepayer %</u>	<u>Shareholder %</u>
17 Inner	0-50	0	100
18 1	51-100	65	35
19 2	101-150	50	50
20 3	151-200	35	65
21 4	201-250	25	75
22 5	251-300	10	90
23 Outer	Above 301	Off-ramp	Off-ramp

25 <u>Bands</u>	<u>Basis Points Below Authorized ROR</u>	<u>Ratepayer %</u>	<u>Shareholder %</u>
26 Inner	0-100	0	100
27 1	101-250	40	60
28 Outer	Below 251	Off-ramp	Off-ramp

29
 30 The proposed earnings sharing framework shown above has sharing bands that

1 benefit ratepayers while providing the utility ongoing incentives to invest in
2 productivity enhancing measures on the upside. The sharing mechanism contains
3 a 50 basis point "inner deadband" on the upside and five sharing bands between
4 51 and 251 basis points above the authorized ROR. Shareholders would retain the
5 earnings in the inner band. Ratepayers receive 65 percent of the earnings above
6 the authorized ROR in the first outer band, decreasing to 50 percent in the second
7 band, down to 35 percent in the third band and decreases to 10 percent for all
8 earnings 251 to 300 bases points above authorized ROR. If earnings exceed 301
9 basis points the mechanism would be suspended and a review of the earnings
10 sharing mechanism would be initiated.

11 On the below authorized ROR earnings side, SoCalGas proposes that
12 shareholders absorb 100% of earnings below authorized for the first 100 basis
13 points and shareholders absorb 60% and ratepayers 40% of below authorized
14 ROR for earnings from 101 to 250 basis points. Should earnings drop 251 basis
15 points below authorized ROR, the earnings sharing mechanism would be
16 suspended and a review of the mechanism would be initiated to make appropriate
17 adjustments. The tax impact of the change in the return on preferred stock would
18 be calculated using the authorized net-to-gross multiplier to arrive at the revenue
19 requirement change. The tax impact of the change in the return on equity (ROE)
20 would be calculated using the authorized net-to-gross multiplier to arrive at the
21 revenue requirement change.

22 **B. Productivity Sharing Mechanism**

23 In addition, SoCalGas proposes that productivity benefits that the utility
24 has generated in the GRC PTY period be reflected in the subsequent 2016 Test
25 Year to encourage the utility to continue to make productivity enhancing
26 investments that go beyond the proposed PTY term. SoCalGas proposes that 50%
27 of the above authorized ROR earnings in 2015, if any, should be credited to the
28 utility in the subsequent 2016 Test Year base margin trued-up. This mechanism
29 will assure that the utility continues to make productivity enhancing investments
30 that provide ratepayer benefits over multiple GRC periods.

1 Utilities, like firms in other sectors of the economy, routinely face
2 opportunities to reduce costs or slow cost escalation. Technological change
3 creates a steady stream of new opportunities to improve the efficiency of
4 operations. The kinds of cost reduction and cost containment opportunities
5 available to a firm are typically varied. For example, there are usually a number of
6 opportunities to achieve temporary cost reductions. A utility might, for instance,
7 find a parcel of needed distribution equipment temporarily available at an
8 especially low price. Some expenditures must be made periodically but some can
9 be deferred for a time without jeopardizing the quality of service. Examples
10 include expenditures on maintenance and the replacement of aging plant. Other
11 projects involve up front costs to achieve more sustained, longer-term cost
12 reductions. A company might, for example, know of a way to reduce its labor
13 force but face the prospect of substantial up front capital costs to do so. With
14 projects like these, the utility must realize several years of lower cost in order to
15 recoup the up front costs. The payback periods on projects of this kind can vary
16 substantially. Companies also typically find that available cost reduction
17 initiatives vary in their rates of return. There are a few projects with a relatively
18 high rate of return. Once these have been pursued, the remaining projects that are
19 available have lower rates of return. There exists, for this reason, diminishing
20 returns to incremental cost containment efforts at any point in time.

21 For companies in the private sector, the main consideration is the effect on
22 after tax earnings. However, earnings are not the only consideration. There are
23 important psychological and other unaccountable costs of cost containment effort.
24 Haggling with vendors, downsizing staff, and getting maximum effort from
25 remaining employees are stressful for all concerned. The fashioning of a cost
26 containment strategy is further complicated for companies that are subject to rate
27 regulation. Utility managers know that efforts to reduce cost today will result,
28 sooner or later, in lower rates in the future. In a rate case, new rates are
29 established that typically reflect costs in one or more recent years that may be
30 called historical “reference years”. Adjustments are then usually made for
31 changes in business conditions that occur after the reference years in order to

1 make rates more reflective of the business conditions that will prevail when rates
2 take effect. Insofar as costs in the reference years reflect the cost savings that have
3 been achieved, this approach passes on the full annual benefits of these gains to
4 customers. This reduces the returns to the company from cost containment
5 initiatives because the higher returns that are achieved are already reduced
6 substantially by higher income taxes.

7 The frequency of rate cases has a major impact on performance incentives.
8 The incentive impact of the rate case cycle is especially great for projects with
9 long payback periods. Suppose, for example, that the company is subject to a
10 three year rate case cycle and has available a cost containment initiative with a
11 five year payback period. Even if it begins the initiative immediately upon the
12 conclusion of its rate case, it will incur the upfront cost of the initiative but will
13 enjoy only two years of the benefits before the next rate case lowers rates to
14 reflect the annual benefits. If the upfront cost of the initiative is incorporated in
15 the initial rates the expected net present value (“NPV”) of the initiative may be
16 positive but may be lower than in an unregulated initiative. If the initiative is un-
17 budgeted the expected NPV will be negative. The company is thus discouraged
18 from pursuing opportunities that could benefit its customers. By sharing
19 productivity gains across the GRC cycle, the utility has the incentive to invest in
20 productivity enhancing projects on an ongoing basis instead of waiting to the next
21 rate case cycle to begin. It is for these reasons that SoCalGas proposes a
22 productivity sharing mechanism that encourages SoCalGas’ management to
23 continue to invest in long-term productivity enhancing investments that transcend
24 the normal GRC cycle.

25 **C. Suspension of the PTY Ratemaking Mechanism**

26 The PTY ratemaking mechanism should be subject to automatic
27 suspension if SoCalGas reports one year of Net Operating Income subject to
28 treatment under the PTY ratemaking mechanism which results in a ROR of 300
29 or more basis points above or 250 basis points below its authorized ROR. Such a
30 suspension will trigger a formal review of SoCalGas' PTY ratemaking

1 mechanism. Net Operating Income subject to PTY treatment is SoCalGas' Net
2 Operating Income after taxes and adjusted to remove the effects of performance
3 indicator rewards and penalties, Energy Efficiency rewards, and other earnings
4 related to exclusions. The PTY ratemaking mechanism should be subject to
5 voluntary suspension if SoCalGas reports one year Net Operating Income subject
6 to PTY treatment which results in a ROR of 175 basis points below its authorized
7 ROR. However, this voluntary suspension provision is needed due to the non-
8 symmetrical earnings sharing proposal. These levels of voluntary and automatic
9 ROR off-ramps are at the same levels that existed in SoCalGas' previous PTY
10 earnings sharing mechanism.

11 **VII. PROPOSED REGULATORY FILINGS**

12 SoCalGas proposes the continuation of the following regulatory filings to
13 implement and monitor the PTY framework:

14 **1) Annual Rate Adjustments**

15 One of the goals of a PTY ratemaking mechanism is to provide a streamlined
16 process for setting revenue requirements between GRCs. Currently SoCalGas updates
17 revenue requirements in the post test years through an annual advice letter filing.
18 SoCalGas requests that the Commission continue this process of implementing PTY
19 revenue requirement adjustments annually after the test year through an advice letter
20 process. Consistent with current treatment, SoCalGas will make an annual PTY advice
21 letter filing on or before November 1 (beginning November 1, 2012) to update the
22 authorized revenue requirements, according to the adopted PTY ratemaking mechanism,
23 with the resulting customer rate adjustments to recover the updated revenue requirement
24 to be effective the following January 1. The filing will clearly identify each input of the
25 calculations, including the (a) one-year-ahead projection of the UCIS utility price indexes
26 as reported in September (2nd Quarter projections), with true-up of past forecasts to
27 reflect actual national utility cost changes, (b) one-year-ahead projection of the Towers
28 Watson's actuarial medical cost forecast; and (c) SoCalGas proposes to file an Advice
29 Letter in May 1 of each year showing the shareholder earnings or losses as recorded in
30 the Rewards and Penalties Balancing Accounts (RPBA) and request that the balance in

1 the RPBA be reflected in rates in the annual consolidated customer rate update filing
2 effective on January 1 of each subsequent year. In May of 2016, SoCalGas will make an
3 advice letter filing showing the productivity sharing amount earned, if any, in 2015, to be
4 included in the annual consolidated update filing for rates effective January 1, 2017.

5 **2) Annual PTY Report**

6 SoCalGas will file an annual advice letter in May following each PTY (2014,
7 2015 and 2016) providing: (a) earnings subject to the sharing mechanism. The annual
8 advice filing shall include any sharable earnings allocated to customers in PTY years
9 2013 -2015 and will be recorded in the Rewards and Penalties Balancing Accounts. Any
10 sharable earnings and RPBA sharing awards or penalties will be included in rates in the
11 following January 1 of each year as part of the annual consolidated update filing. In 2016,
12 SoCalGas will also include the productivity sharing amount, if any, in the consolidated
13 update filing for rates effective January 1, 2017.

14 **VIII. PROPOSED PTY MECHANISM TARIFF**

15 Section C of my work papers reflects the tariff language of the PTY mechanism
16 that SoCalGas proposes to be adopted, providing detail of the PTY revenue requirement
17 calculation. The tariff language describes the exclusions to the PTY mechanism and the
18 PTY mechanism formula including the O&M expenses component of the formula,
19 capital-related component of the formula, Z-factor process, Earnings Sharing
20 Mechanism, and, Productivity Sharing Mechanism in 2015.

21 **IX. EXAMPLE OF PTY REVENUE REQUIREMENT CALCULATION**

22 The following provides an example of the calculation of the 2013 through 2015
23 revenue requirements based on the proposed PTY ratemaking mechanism and the Global
24 Insight spring 2010 forecasts of utility cost escalation as shown in Mr. Wilder's direct
25 testimony [Exhibit SCG-31].

26 **1) 2012 GRC Post-Test-Year Escalation: Timing and Examples**

27
28 Escalation will be part of the annual rate adjustment Advice Letter to be filed by
29 November 1 each year for adjusted rates effective January 1 of the following year.

30 The escalation adjustment will use inputs from the most recent Global Insight
31 utility cost forecast available as of September 15. (Typically this is the "2nd Quarter"

1 Power Planner forecast, which is usually released each August.) The calculated escalation
2 index (i.e. GOMPI) and its Global Insight component inputs are all to be set to Test Year
3 2012 = 1.0000.

4 The percentage GOMPI escalation adjustment will include both the year-ahead
5 (“subject year”) escalation forecast, and a true-up to account for revisions in recorded and
6 estimated data from the starting year (TY 2012) through the current year. The formula
7 for escalation --including both the year-ahead forecast and the true-up-- simplifies to: $(F_s$
8 $/ F_c) - 1$ where: F_s is the currently forecasted GOMPI value for the subject year (the year
9 ahead); and F_c is the GOMPI value for the current year that was forecasted in the prior
10 year.

11 **2) Example Calculations:**

12 For 2013:

13 November 1, 2012 AL filing for GRC rate adjustment effective January 1, 2013.
14 GOMPI inputs from Global Insight 2nd Quarter 2012 utility cost forecast (all set to
15 2012=1.0000):

16 GOMPI values

17 2012 =1.0000

18 2013 (forecast)=1.0318

19 GOMPI escalation for 2013 = $(1.0318 / 1.0000) - 1 = 0.0318 = \underline{+3.18\%}$

20 For 2014:

21 November 1, 2013 AL filing for GRC rate adjustment effective January 1, 2014.

22 GOMPI inputs from Global Insight 2nd Quarter 2013 utility cost forecast (all set to
23 2012=1.0000):

24 GOMPI values

25 2012 =1.0000

26 2014 (forecast)=1.0629

27 GOMPI escalation for 2014 = $(1.0629 / 1.0318) - 1 = 0.0301 = \underline{+3.01\%}$

28 For 2015:

29 November 1, 2014 AL filing for GRC rate adjustment effective January 1, 2015.

30 GOMPI inputs from Global Insight 2nd Quarter 2014 utility cost forecast (all set to
31 2012=1.0000):

32 GOMPI values

33 2012 =1.0000

34 2015 (forecast)=1.1064

35 GOMPI escalation for 2015 = $(1.1064 / 1.0629) - 1 = 0.0409 = \underline{+4.09\%}$

36 **X. CONCLUSION**

37 This concludes my prepared direct testimony.
38

1 **XI. QUALIFICATIONS**

2 My name is Herbert S. Emmrich. My business address is 555 West Fifth Street,
3 Los Angeles, California 90013-1011. I am employed by Southern California Gas
4 Company as Gas Rates and Analysis Manager in the Regulatory Affairs Department. I
5 have been in this position since April 2010. I have previously testified before this
6 Commission.

7 My academic and professional qualifications are as follows: I earned an
8 undergraduate degree in Economics and Behavioral Sciences from California State
9 University at Dominguez Hills in 1970 and a Master of Arts Degree in Economics from
10 California State University at Long Beach in 1974. I also completed 2 years of post-
11 graduate coursework in Economics at UCLA from 1970 to 1972. In addition, during the
12 past 26 years, I held analyst, manger and director positions in the Regulatory Affairs,
13 Planning, Customer Services, Marketing, Gas Acquisition, and Commercial and
14 Industrial Services Departments of SoCalGas and SDG&E.

15 My employment outside of SoCalGas has been in the areas of economics,
16 environmental assessment, business planning, and energy sector development. I held the
17 positions of: Economist, Regional Economist and Environmental Assessment Manager at
18 the U.S. Bureau of Land Management's Pacific Outer Continental Shelf Office, in Los
19 Angeles, from 1975 to 1979; Economic Policy Supervisor and Issues and Policy Manager
20 of Getty Oil Company from 1979 to 1984; and, Senior Energy Advisor of the U.S.
21 Agency for International Development's Caucasus Office in Tbilisi, Republic of Georgia,
22 from 1998 to 2002.

23 In addition, I have taught micro and macro economic theory at El Camino
24 College, Torrance, CA; Cal State University, Dominguez Hills, CA; and the Georgian
25 Institute of Public Policy in Tbilisi, Republic of Georgia, off and on, on a part time basis,
26 over the past 30 years.

APPENDIX A

SoCalGas	Test Year	Post Test Year (2013-2015)		
Year	2012	2013	2014	2015
RB Growth and O&M at GI Escalation	\$ Millions	\$ Millions	\$ Millions	\$ Millions
RB Growth at GI Gas Utility Capital Escalation	3,665	3,770	3,900	3,986
Cap. Rev Req.	909	935	968	989
Cap. Rev Req. % Growth		2.86%	3.45%	2.20%
Base Margin O&M w/o Medical	916	940	965	989
Base Margin O&M w/o Medical %		2.61%	2.65%	2.54%
Medical	58	63	68	73
Medical Percent Growth		8.0%	7.5%	7.5%
Base Margin O&M with Medical	974	1,003	1,032	1,062
Base Margin O&M w/Medical %		2.93%	2.95%	2.86%
Total Base Margin Cap & O&M	1,884	1,938	2,000	2,051
Change \$ Millions	155	55	62	51
Percent Change		2.90%	3.19%	2.54%
Customer Growth %		1.13%	1.26%	1.37%
OpEx revenue Requirement	27	31	23	13
OpEx Rev Req. vs. TY	0	3.7	-3.9	-13.9
OpEx Net Cost/Benefits % of Margin (+ = Costs; - = Benefits)		0.19%	-0.20%	-0.68%
Required Productivity with Customer Growth and OpEx		1.32%	1.06%	0.69%

OpEx 20/20 NPV Analysis

SEU Revenue Requirement	Total	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Nominal																	
Costs	904,061	687	(6,892)	(27,825)	(12,519)	26,813	93,039	120,699	118,152	112,009	103,842	79,904	74,470	70,167	64,499	57,917	29,100
Hard benefits	(1,170,470)	-	(405)	(4,158)	(15,417)	(29,444)	(48,933)	(64,808)	(75,398)	(83,162)	(102,072)	(118,996)	(128,139)	(136,526)	(145,773)	(151,122)	(66,119)
Soft benefits	(267,930)	-	(1,888)	(4,444)	(7,518)	(12,427)	(15,608)	(18,003)	(18,833)	(21,121)	(23,411)	(24,484)	(21,936)	(24,206)	(26,476)	(24,306)	(23,270)
Total Rev req w/o soft benefits	(266,409)	687	(7,297)	(31,983)	(27,937)	(2,631)	44,107	55,892	42,754	28,847	1,770	(39,092)	(53,669)	(66,359)	(81,273)	(93,205)	(37,019)
Total Rev req w/ soft benefits	(534,338)	687	(9,184)	(36,428)	(35,454)	(15,058)	28,499	37,888	23,922	7,726	(21,640)	(63,575)	(75,605)	(90,565)	(107,749)	(117,511)	(60,290)
NPV																	
Costs	506,000	805	(7,491)	(27,825)	(11,510)	22,790	72,720	86,844	78,285	68,349	58,347	41,224	35,353	30,668	25,978	21,502	9,962
Hard benefits	(607,385)	-	(440)	(4,158)	(14,201)	(24,973)	(38,212)	(46,613)	(49,953)	(50,739)	(57,372)	(61,616)	(61,108)	(59,960)	(58,962)	(56,293)	(22,784)
Soft benefits	(149,868)	-	(2,050)	(4,444)	(6,922)	(10,549)	(12,214)	(12,986)	(12,515)	(12,936)	(13,216)	(12,735)	(10,549)	(10,730)	(10,818)	(9,140)	(8,060)
Total Rev req w/o soft benefits	(101,385)	805	(7,931)	(31,983)	(25,711)	(2,184)	34,509	40,231	28,332	17,610	975	(20,392)	(25,755)	(29,292)	(32,984)	(34,791)	(12,822)
Total Rev req w/ soft benefits	(251,253)	805	(9,981)	(36,428)	(32,634)	(12,733)	22,294	27,245	15,817	4,673	(12,242)	(33,127)	(36,304)	(40,022)	(43,803)	(43,932)	(20,882)