EVALUATION REPORT ON SOUTHERN CALIFORNIA GAS COMPANY'S GAS COST INCENTIVE MECHANISM

Application 00-06-023

ENERGY DIVISION

Richard Myers

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This report was prepared by Richard Myers, Program and Project Supervisor, Energy Division.

Errata to Energy Division January 2001, Evaluation Report on Southern California Gas Company's Gas Cost Incentive Mechanism

1. pg. 21: on the fifth line from the top: the phrase "about 6% to 26%" should be changed to "about 6% to 28%". ✓

2. Appendix 1, second page, table for Border Gas Purchases: the headings "After Gas Sales" and "Prior to Gas Sales" should be reversed. (The heading "After Gas Sales" should be replaced by "Prior to Gas Sales". The heading "Prior to Gas Sales" should be replaced by "After Gas Sales".) ✓

Richard Myers
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EVALUATION REPORT
ON THE SOUTHERN CALIFORNIA GAS COMPANY
GAS COST INCENTIVE MECHANISM

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I. SUMMARY

As ordered by the California Public Utilities Commission in Decision No. (D.) 00-06-039, the Energy Division submits its evaluation report on the Southern California Gas Company (SoCalGas) Gas Cost Incentive Mechanism (GCIM). The Energy Division finds that the GCIM has achieved the Commission's goals for the GCIM. The Energy Division found that:

1) SoCalGas has taken innovative measures to minimize gas costs under the GCIM.

2) SoCalGas has purchased gas near or below market benchmark prices under the GCIM.

3) The GCIM has streamlined the regulatory process and has resulted in lower regulatory costs for the Commission and SoCalGas.

4) The GCIM flexibly allows SoCalGas to stay focussed on minimizing costs with a known overall target and minimal micromanagement or hindsight, and allows appropriate risk-taking.

The Energy Division recommends that the GCIM be continued. The GCIM is superior to various alternatives, such as traditional reasonableness reviews, elimination of SoCalGas from the gas procurement function, or inclusion of gas procurement costs in an overall performance-based ratemaking mechanism.

While much of the GCIM structure is basically sound, and provides a good incentive for SoCalGas to minimize gas costs, the Energy Division believes that certain modifications to the GCIM should be considered by the Commission at this time. These modifications include:

1) an increase in the "lower tolerance band" from its current level of ½%;

2) a decrease in the magnitude of the "higher tolerance band" from its current level of 2%;
3) changing the shareholder/ratepayer sharing percentages, to allow ratepayers to receive a larger portion of initial savings, and allow shareholders to receive a larger portion of subsequent savings;
4) elimination of the New York Mercantile Exchange (NYMEX) weighting of the GCIM price benchmark, and
5) incorporation of daily or weekly published spot market prices in the benchmark price.

The Energy Division believes that other measures could be taken to enhance the effectiveness of the GCIM. These measures include the incorporation of core storage in the GCIM and an incentive to purchase from least-cost basins. These measures are more complex, and might need longer-term consideration by the Office of Ratepayer Advocates, SoCalGas, possibly other parties, and the Commission.

II. INTRODUCTION

In D.00-06-039, the Commission ordered the Commission staff to arrange for the preparation and submittal of an evaluation report on the Southern California Gas Company (SoCalGas) Gas Cost Incentive Mechanism (GCIM) by January 1, 2001. This report provides the Energy Division's evaluation of the SoCalGas GCIM. The Energy Division's report will be addressed in "Phase II" of Application No. (A.) 00-06-023 (SoCalGas' Year 6 GCIM Application).

The Commission adopted the GCIM in D.94-03-076. This ratemaking mechanism was intended to provide regulatory controls superior to gas cost reasonableness reviews, and to be structured to provide a monetary incentive for SoCalGas to keep gas costs low for its gas procurement customers. The Commission ordered in that decision that the former Commission Advisory and Compliance Division (CACD) issue an evaluation report reviewing the GCIM by August 1, 1996. The Commission expressed an interest in reviewing CACD's analysis before addressing whether to continue, modify, or eliminate the GCIM after its third year of operation.

CACD's evaluation report was never submitted to the Commission. However, the GCIM has been extended through its sixth year of operation by the Commission in various decisions.[1]

In D.00-06-039 the Commission deferred judgment on whether to extend the GCIM into its seventh year (Year 7) in anticipation of this Energy Division evaluation report. The Commission stated that:

"We anticipate that the staff report will analyze the conditions which led to the adoption of the SoCalGas GCIM and the goals sought to be achieved in gas procurement. Have these conditions changed? Is it necessary that customers paid $23,000,000 over five years to SoCalGas for it to procure gas efficiently? Are the benchmarks against which SoCalGas measures its gas procurement performance fair and reasonable? Are the benchmarks a true measure of gas costs? Is the 50 percent sharing formula fair to SoCalGas shareholders and to its ratepayers? Other questions come easily to mind.

In sum, we again request a full independent review of GCIM which will go to the merits of the program itself and not duplicate ORA's annual audits." (Slip op, pg. 6)

To comply with the Commission's above request, the Energy Division developed the following set of questions and addresses them in this GCIM evaluation report:

1) Why did the Commission initially adopt the GCIM, and what were the Commission's goals for the GCIM? Do those goals remain appropriate?
2) Has the GCIM adequately met the Commission's goals? Will the current structure meet those goals?
3) Have conditions changed such that the GCIM is no longer necessary?
4) If not, should the GCIM be modified in some respects? Is the detailed structure of the GCIM reasonable?
5) What are the alternatives to a GCIM-type of mechanism? Is the GCIM superior to those alternatives?

[1] In D.97-06-061, the Commission ordered that the GCIM should continue until March 31, 1999 rather than terminate on March 31, 1997. In D.98-12-057, the Commission ordered that the GCIM be extended on annual 12-month cycles beginning April 1, 1999, unless the mechanism is modified or discontinued by further order of the Commission.

III. BACKGROUND LEADING TO THE GCIM

The Commission has advocated the use of "incentive regulation" for energy utilities since the early 1990's. The Commission adopted gas cost incentive mechanisms for SDG&E in 1993, SoCalGas in 1994, and PG&E in 1997.[2] [3] Prior to the implementation of these mechanisms, the Commission conducted annual reasonableness reviews of the utilities' gas procurement costs. Gas utilities had little incentive to take risks to attempt to lower gas procurement costs. Their only incentive to take "reasonable" measures to keep gas costs low was the threat of the annual reasonableness review. Gas costs, if found reasonable, would simply be recovered from ratepayers, with no rewards for utilities doing an exceptional job. If gas costs were unreasonably incurred, those costs would not be recovered from ratepayers. Before the late 1980's, the Commission had typically found utilities' gas costs to be reasonable.

Gas utilities had bought much of their supply directly from interstate pipeline companies. Toward the end of the 1980's, coming on the heels of gas price deregulation and the development of a spot market for natural gas, gas reasonableness review proceedings became major regulatory proceedings before the Commission. Extensive Commission staff and utility resources were devoted to the proceedings for lengthy periods. It was not uncommon for Commission decisions to be reached on these proceedings years after the gas procurement costs were incurred, and in one major case the Commission decision was then appealed to the court system by the utility. Significant issues concerning reasonable and possible procurement practices were debated, and the costs at issue reached hundreds of millions of dollars, particularly in the cases of SoCalGas and PG&E. The resolution of many of these reasonableness review cases was ultimately reached in major settlements, which also incorporated the adoption of gas cost incentive mechanisms.

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[2] SDG&E's gas PBR was originally adopted in D.93-06-092 and then modified in D.98-08-038. PG&E's Core Procurement Incentive Mechanism (CPIM) was adopted as part of the Gas Accord in D.97-08-055. Although the CPIM wasn't adopted until 1997, it was technically operational beginning in June 1994.

[3] In addition to adopting incentive regulation for gas procurement practices, the Commission has employed incentive regulation methods: with respect to electric operations in the case of San Diego Gas & Electric Company (SDG&E); with respect to base rate costs for SDG&E, SoCalGas, and Southern California Edison (Edison); and with respect to Other Operating Revenues for Pacific Gas and Electric Company (PG&E) and Edison.

Following are a few brief examples of these reasonableness review and related proceedings:

1) **PG&E's gas procurement practices for the years 1988-1990, Application Nos. (A.) 89-04-001, A.90-04-001, and A.91-04-003.** The major issue in these proceedings was whether PG&E could have purchased its Canadian gas supplies at lower prices, via the spot market for gas in Alberta, Canada. Related to the determination of the reasonableness of this threshold issue were numerous, complex sub-issues. The Division of Ratepayer Advocates (DRA, the predecessor to the current Office of Ratepayer Advocates) recommended that the Commission disallow $405 million plus interest in gas costs for the years 1988-1990. Evidentiary hearings consumed 54 days in 1992. Gas reasonableness reviews typically required about five to six staff assigned by DRA and one or two staff assigned by CACD, but this proceeding required the direct and indirect involvement of a much greater number of DRA staff and managers. Based on discussions with current Commission staff and its own acquaintance with those proceedings, Energy Division estimates that as many as ten staff were directly involved in these proceedings for lengthy periods of time, along with two or three supervisors, two Branch managers, the Assistant Director and Director of DRA, and two or three attorneys. In addition, the Commission assigned an Administrative Law Judge (ALJ), and court reporters. PG&E also needed to devote numerous staff to this proceeding. The Commission's decision, D.94-03-050, was issued years after the costs in question were incurred, and adopted a disallowance of $90 million plus interest. This decision affected disallowances in subsequent years as well, resulting in total disallowed costs well in excess of $100 million. PG&E appealed this case to the court system, requiring yet more attention and resources by the Commission, but ultimately dropped its appeal as part of the Gas Accord (A.96-08-043 et al). The Gas Accord was adopted in D.97-08-055.

2) **SoCalGas gas procurement costs for the years April 1989 through March 1992, A.90-06-030, A.91-06-030, and A.92-06-015.** DRA found many problems with SoCalGas' overall procurement policy and practices. Particularly objectionable was SoCalGas' practice of entering into long-term gas contracts with suppliers at fixed prices, or at indexed prices which included a "premium" over spot market prices. In addition, DRA had stated its concerns related to the above-market prices paid by

SoCalGas pursuant to its long-term contracts with Pacific Interstate Transmission Company (PITCO) and Pacific Offshore Pipeline Company (POPCO), affiliates of SoCalGas. Again, these reasonableness reviews required about five staff directly assigned to the case by DRA, an attorney, an ALJ and court reporter, and staff assigned by CACD. These proceedings required numerous hearing days. The disallowances at issue were ultimately settled as part of the SoCalGas "Global Settlement" (conditionally adopted in D.94-04-088) around the same time the SoCalGas GCIM was approved, amounting to $65 million. The Global Settlement also established risk-sharing amounts related to buying out of the PITCO and POPCO contracts. SoCalGas subsequently bought out those contracts.

3) **SoCalGas long-term purchase contracts, A.91-04-038:** With this application, SoCalGas requested Commission pre-approval of five long-term gas contracts with varying terms. DRA opposed the pre-approval of these contracts, because these contracts either involved a fixed price or a premium above spot market prices. SoCalGas filed a "Notice of Withdrawal of Application" in this proceeding after hearings were held, and the Commission ordered the application dismissed in D.92-04-027.

4) **Southern California Edison Canadian gas supply and transportation contracts, A. 93-05-044, et. al.:** In the early 1990's, Southern California Edison entered into some Canadian gas supply contracts and interstate transportation contracts, in order to purchase gas supply for its formerly-owned gas-fired power plants. That company began to incur costs under those contracts in 1993. DRA issued its initial testimony in these proceedings two years after Edison filed its initial application. DRA found the contracts to be unreasonable, and that excess costs associated with the contracts should be disallowed. Numerous days of hearings were finally held in 1997. Edison and the newly-formed ORA then entered into a settlement to resolve the reasonableness issues over five previous years, and the treatment of the future costs of the contracts. The agreed upon disallowances ultimately amounted to tens of millions of dollars, but still much lower than ORA's initial recommendations. The Commission adopted the settlement in D.97-12-040.

5) **PG&E Transwestern capacity subscription, A.93-04-011, et al.** PG&E entered into a long-term subscription for firm interstate pipeline capacity rights on the Transwestern pipeline and its San Juan Lateral in

the early 1990's. PG&E began using these capacity rights and incurring costs in 1992. In January 1994, DRA recommended that the Commission find this capacity subscription unreasonable, and that the Commission disallow all of the reservation costs associated with the subscription. Numerous days of hearings were held in 1994 and 1995. In D.95-12-046, the Commission found the capacity subscription to be unreasonable and disallowed all of the 1992 costs. The Commission ordered that the reasonableness of these costs be reviewed in each subsequent reasonableness review application. DRA again reviewed the costs for 1993 and 1994 in reasonableness review proceedings, and again recommended a 100% disallowance of these costs. The resolution of these "litigation costs" was ultimately achieved in the Gas Accord. The total disallowance of Transwestern costs amounted to over $100 million.

In summary, beyond the disallowances directly ordered by the Commission, PG&E estimated that it made about $283 million in "regulatory concessions" in the Gas Accord, much of which was related to the above gas reasonableness review proceedings. About $65 million in gas disallowances were settled in the SoCalGas Global Settlement, and PITCO/POPCO buyout risk sharing procedures were established. Well over $40 million in gas cost disallowances were settled between Edison and ORA.

Prior to the GCIM and the Global Settlement, SoCalGas purchased gas from several primary sources. These included:

- California, Elk Hills, and federal supplies;
- PITCO and POPCO supplies;
- Southwest supplies purchased in supply basins and delivered on interstate pipelines under firm transportation contracts.

Purchases from California and federal suppliers and PITCO and POPCO were made pursuant to multi-year, long-term contracts. Contracts with various terms were annually negotiated with southwest suppliers, and a portion of core demand was provided with short-term spot purchases. Except for the spot gas purchases, each of these primary supply sources was generally priced over market prices, and much of the purchases were made pursuant to long-term contracts. Even where SoCalGas had opportunities to regularly renegotiate its contracts for its southwest supplies, it would largely enter into long-term contracts, many of which were at fixed prices, contained a premium over market prices, or contained some type of "take-or-pay" clause. For the four years prior to the GCIM, the Energy Division

estimates that SoCalGas total gas purchases annually ranged from 6% to 28% in excess of short-term ("spot") market prices.

In the early 1990's, the Commission was becoming interested in incentive regulation, and the GCIM was proposed by SoCalGas as a method of providing SoCalGas with an incentive to minimize its gas costs and streamlining the regulatory process. The GCIM structure had been extensively discussed with DRA.

IV. COMMISSION GOALS FOR INCENTIVE REGULATION

In Order Instituting Rulemaking (R.) 90-08-008, the Commission initially expressed interest in exploring new gas cost incentive mechanisms, and providing both positive and negative incentives. In D.90-07-065 the Commission asked parties for comments on indexing utility costs to a market price and on incentives.[4] Although the Commission later deferred the implementation of an "indexing approach" for gas costs at that time (see D.91-03-032), the Commission expressed the intent to adopt practices that could "eliminate or lessen the need for after-the fact reasonableness reviews, and that could provide the utilities with balanced incentives to make efficient purchases and minimize costs to ratepayers." As noted above, several gas cost incentive mechanisms were subsequently adopted.

In addressing SDG&E's proposal for a gas procurement PBR, the Commission stated in D.93-06-092:

> "For this or any other new regulatory approach to be effective, we must articulate clear standards of performance for the utility. Those standards should broadly cover gas purchasing activities to give the utility the flexibility to (1) make sound business decisions, without micromanagement by regulators, (2) develop innovative methods for improving performance and (3) adjust to changing circumstances.
>
> "SDG&E has proposed to replace after-the-fact reviews of its gas procurement operations with a market-based gas price benchmark. We see the proposal as an attempt to align ratepayer and shareholder interests through sharing of gains and losses. This proposal promises an improvement over the current regulatory approach by providing

[4] See D.90-07-065, pgs. 62-64.

lower gas costs to ratepayers than would be achieved under the status quo, and by reducing the regulatory burden and complexity for all parties." (D.93-06-092, slip op, pgs. 22-23)

The Commission has also generally set forth the following objectives for the SDG&E base rate PBR:[5]

a. To provide greater incentive than exists under current regulation for the utility to reduce rates.

b. To provide a more rational system of incentives for management to take reasonable risks and control costs in both the long and short run. This includes extending the relatively short-term planning horizon associated with the three-year GRC cycle, and reducing the company's incentive to add to rate base to increase earnings.

c. To prepare the company to operate effectively in the increasingly competitive energy utility industry. This entails providing greater flexibility for management to take risks combined with a greater assignment of the consequences of those risks to the company.

d. To reduce the administrative cost of regulation.

V. THE GCIM STRUCTURE AND RESULTS

The SoCalGas GCIM was adopted in D.94-03-076 (A.93-10-034). It originally had two separate components: one that measures performance for cost effective gas procurement efforts, the Procurement Incentive Mechanism (PIM), and one that rewards efficient gas storage performance for the core class, the Storage Incentive Mechanism (SIM). The GCIM adopted in D.94-03-076 originally had a three-year term.

V.A. SoCalGas' Procurement Incentive Mechanism

The PIM structure was intended to provide an incentive for SoCalGas to minimize the cost of its gas purchases, while assuring a reliable supply of gas for procurement customers. Some types of gas purchases were specifically excluded from the original mechanism. These purchases were excluded from the GCIM because they had been questioned by DRA in reasonableness review proceedings. Costs associated with those contracts were addressed in the SoCalGas Global Settlement. For example, the GCIM excluded SoCalGas purchases made pursuant to a long-term gas supply

[5] See D.94-08-023, pg. 29.

contract, the "Enron Bank" contract, and purchases made pursuant to long-term contracts with PITCO and POPCO. Beginning in 1999, these latter contracts were restructured and purchases began to be included in GCIM actual costs. The Enron contract expired in September 1999. The GCIM now includes all SoCalGas gas purchases.

The GCIM benchmark, against which SoCalGas' actual core gas purchases are measured, is based on a weighted combination of bids based on the New York Mercantile Exchange (NYMEX) index for gas futures, and southwest gas price indices published in Natural Gas Intelligence and Inside FERC. The weighting depends on the number and volume of NYMEX-related bids. Every month SoCalGas solicits bids from suppliers with prices set at a basis in relation to the NYMEX gas futures price established for the following month.[6] The southwest gas price portion is itself a weighted combination of San Juan and Permian basin prices on El Paso and Transwestern pipelines. The weighting of the southwest gas price portion depends on the actual volumes purchased by SoCalGas from these sources. A "tolerance band" (i.e. a "deadband") generally allows for variances in service reliability and supply security. It appears that the amount of the GCIM deadband may also have been initially set to allow for the inclusion of California gas contracts under the GCIM, and for the treatment of San Juan Lateral costs. (California gas contracts were long-term contracts, and contract prices for California gas purchases were above market prices.) The tolerance band was 4.5% above the benchmark for the first year of the GCIM and 4% for Years 2 and 3.[7] There was initially no deadband below the benchmark.[8]

SoCalGas' core interstate pipeline demand charges on El Paso and Transwestern (for firm capacity rights of 743 MMcfd and 301 MMcfd, respectively) less costs recovered for brokered capacity are included in both the benchmark cost and actual costs. For the period prior to Year 4,

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[6] For example, basis bids would be placed by suppliers with SoCalGas at the end of June. This would establish an average basis amount. In July, daily NYMEX futures prices for the month of August are established. The average basis bid is then added to the average daily NYMEX price to establish the NYMEX benchmark for July in the GCIM.

[7] To calculate the range of deadband costs, the deadband percentage is multiplied by benchmark gas commodity costs only, i.e. excluding firm reservation and volumetric charges.

[8] A 2% deadband above the benchmark and ½% deadband below the benchmark were later proposed as part of a joint recommendation by SoCalGas and ORA, and adopted by the Commission in D.97-06-061. The change in the deadband seemed to reflect other new GCIM components, also proposed in the joint recommendation, which provide SoCalGas with greater opportunity to lower gas costs. The deadband may also have been revised to reflect the restructuring or elimination of California gas contracts.

Transwestern San Juan Lateral capacity costs were not included in benchmark costs. However, actual purchases made on the San Juan Lateral (SJL) were measured against a Permian Basin price index. Firm volumetric interstate transportation charges are included in the benchmark and actual costs for basin purchases.

Procurement Incentive Mechanism

Actual costs outside the PIM deadband are shared equally between ratepayers and shareholders. Shareholders pay 50% of the costs above the upper end of the deadband, and are rewarded by 50% of the difference between actual costs and the lower end of the deadband.

For the period after the first three-year term of the GCIM, SoCalGas and ORA jointly proposed in A.96-06-029 various modifications of the GCIM based on experience with the program. The proposed measures accounted for some changes in the gas market and allowed for greater opportunities for lowering core gas costs. In D.97-06-061 the Commission adopted the following changes:

1) The 4% tolerance band above the benchmark cost was replaced with a 2% tolerance band above, and a 1/2% tolerance band below, the benchmark cost for Years 4 and beyond.
2) "Hub" revenues were allowed as a credit to GCIM actual costs.
3) SoCalGas was permitted to include border purchases in its benchmark costs. Up to 10% of its annual demand may be purchased at the border or via incremental interstate capacity. A monthly border index in proportion to the volumes purchased is included in the benchmark price.
4) San Juan Lateral capacity costs were allowed in benchmark costs, and SJL purchases were measured against a San Juan Basin price index.
5) Any revenues generated through the release of core interstate pipeline capacity were to be included as adjustments to the GCIM benchmark budget with no benefit to shareholders.
6) SoCalGas was allowed to include revenues from gas sales in its calculations of GCIM actual costs.
7) The SIM was eliminated.

In SoCalGas Advice Letter 2836, filed on August 5, 1999, and Advice Letter 2836-A filed on August 25, 1999, SoCalGas notified the Commission that purchases from Pan-Alberta Gas U.S. Inc. (former PITCO purchases) and Exxon/POPCO would be included in GCIM actual costs beginning on April 1, 1999.

In September 1999, the Enron "Bank" contract expired. After this time, all SoCalGas gas purchases were subject to the GCIM.

V.B. SoCalGas' Storage Incentive Mechanism

As noted above, the SIM was eliminated for years beyond Year 3, but it is briefly described here for convenience. The SIM was designed to reduce the cost of gas by encouraging SoCalGas to shift its planned storage injections and withdrawals so that it would take advantage of seasonal gas price variations.

Basically, SoCalGas compared NYMEX gas futures prices for future months. When the NYMEX price indicated a difference of greater than 10% between two future months within the injection cycle months (April through October) or within the withdrawal cycle months (November through March), a shift in the planned storage injections or withdrawals was to be made. The "planned storage injections and withdrawals" were specified in advance.

In determining whether the requisite 10% spread exists, the futures price of a distant month must have been at least 10% greater/less than the near month against which it is being compared. Volume shifts were made on the basis of the largest percentage price difference observed, of 10% or greater. In the case of equal spreads of at least 10%, the first available opportunity was to be utilized to make a SIM volume shift. To "lock in" the price spread advantage for the SIM, SoCalGas entered into equal and offsetting positions in the futures market. The mechanism also included operating constraints, which assured that enough storage reserve existed to accommodate peak day demands and unplanned outages on the transportation and storage system.

"Spread dollars" were calculated as the product of 1) the difference between the futures prices for the months acted upon at the time of the decision, and 2) the volume shifted. As an incentive, the SIM allowed SoCalGas to receive as a reward 10% of the difference between actual futures transaction costs and the "spread dollars".

V.C. SoCalGas GCIM Monitoring and Evaluation

Under the monitoring and evaluation ("M&E") program of the GCIM, SoCalGas provides detailed monthly core procurement activity reports,

including data on purchases, sales, futures transactions and swaps, and hub transactions.

SoCalGas annually submits an application to the Commission on June 15th which reviews the operation of the GCIM during the previous GCIM Year, from April through March, and requests the approval of the annual reward or penalty which results from the operation of the GCIM. ORA then reviews SoCalGas' operations and calculations, performs an audit, and makes its own recommendations to the Commission.

As noted earlier, in D.00-06-039, the Commission ordered the Commission's staff to conduct "a full independent review of GCIM which will go to the merits of the program itself and not duplicate ORA's annual audits." The Commission deferred judgment on whether to extend operation of the GCIM into Year 7 pending completion of the evaluation report.

The Energy Division notes that ORA has actively monitored the GCIM. ORA has issued a monitoring and evaluation report for every GCIM Year, has worked with SoCalGas to make recommended modifications to the GCIM over the years, and has recommended reductions in the GCIM rewards requested by SoCalGas. For example:

- for Year 2 ORA originally recommended a reward which was $4.6 million less than SoCalGas' request;
- ORA and SoCalGas agreed that various GCIM modifications should be made for Year 4 and subsequent years;
- ORA has also recommended modifications for Year 7 and subsequent years.

No other party has taken an active role in the annual SoCalGas GCIM proceedings. The Energy Division typically reviews SoCalGas' and ORA's reports, and regularly communicates with SoCalGas and ORA on GCIM activities. The Energy Division has seen no reason to differ with ORA's annual recommendations to date, some of which have been jointly recommended with SoCalGas. Evidentiary hearings have not been required in any GCIM proceeding, and the Commission has adopted all of ORA's recommendations.

V.D. SoCalGas GCIM Results

The following table illustrates annual overall GCIM results.

Table 1
SoCalGas GCIM Results
($1000)

	MMMBtu Purchased	PIM Benchmark Costs	PIM Actual Costs	PIM Reward/ (Penalty)	SIM Reward
Year 1	276,627	$567,448	$568,566	0	$103
Year 2	242,565	$448,713	$442,313	$ 3,200	$ 67
Year 3	242,637	$680,062	$658,876	$10,593	$171
Year 4	252,219	$672,132	$665,307	$ 2,039	NA
Year 5	288,353	$649,295	$631,138	$ 7,733	NA
Year 6*	*402,352	$1,061,264	$1,037,113	$9,760	NA

*The Commission as of the date of this report has not adopted Year 6 results. However, ORA has recommended that the Commission approve SoCalGas' Year 6 requested reward, and no other party filed testimony on Year 6. Year 6 volumes and costs are much larger than in previous years because: 1) the former PITCO/POPCO purchases (which were excluded from the GCIM) have been replaced by purchases pursuant to new contracts and are now included in the GCIM, and 2) the Enron Bank contract expired in September 1999, and replacement purchases are also now included in the GCIM.

VI. THE GCIM HAS ACHIEVED THE COMMISSION'S GOALS

The Energy Division generally summarizes the Commission goals for the GCIM as follows:

- to provide greater incentive than exists under traditional regulation for the utility to operate efficiently and minimize gas procurement costs in a manner which is consistent with assuring reliability and is fair to non-procurement customers;

- to streamline and stabilize the regulatory process, and reduce the administrative cost of regulation for regulators, the utilities, and interested parties;
- to allow the utility flexibility to make sound business decisions, without micromanagement or "hindsight" management by regulators, develop innovative methods for improving performance, take reasonable risks and control costs in both the long and short run, and adjust to changing circumstances;
- to align ratepayer and shareholder interests through sharing of gains and losses.

To evaluate the GCIM, the Energy Division:
1) reviewed past reasonableness review documents, annual GCIM applications, ORA's annual reports, and monthly GCIM reports;
2) obtained numerous data request responses from SoCalGas;
3) met with SoCalGas on several occasions, for a total of five days, including a trip to SoCalGas' "trading room";
4) met with ORA staff,
6) reviewed information from the Commission's "natural gas strategy" (R.98-01-011) and "gas industry reform" (I.99-07-003) proceedings, and
7) reviewed SoCalGas' price risk management manual.

VI.A. SoCalGas Has Taken Innovative Measures to Minimize Gas Costs under the GCIM

One of the positive aspects of the GCIM is that it provides the utility with stable, known, reasonable targets to achieve, and known penalties and benefits associated with its performance. If the utility performs better than that target, it knows it will gain benefits for its shareholders and ratepayers alike. (Whether the GCIM benchmark is in fact a reasonable target is addressed later in this report.) Knowing that target and associated risks, the utility is given a great deal of flexibility in how it purchases gas, and can look for various opportunities to achieve lower costs.[9]

[9] Energy Division staff visited the SoCalGas Gas Acquisition trading room and attended Gas Acquisition meetings on August 22nd and 23rd, 2000. Procurement, supply nomination, risk management and hub staff all work closely in the same room. Price movements and pipeline supplies are constantly being monitored and updated, and staff is able to quickly effectuate opportunities. In addition, Gas Acquisition meets several times weekly to review purchasing, risk management, and operational strategy and developments in the gas market. Finally the Gas Acquisition Committee formerly meets once per month to discuss overall status and strategy.

The Energy Division found that SoCalGas has undertaken several innovative methods to try to minimize and manage overall gas costs for core procurement customers. These methods include sales of core gas to other parties, hub transactions, exchanges, and financial instrument transactions. In addition, SoCalGas renegotiated its California gas contracts around the time the GCIM began.

Sales of core gas were authorized in D.97-06-061 (for GCIM years beyond Year 3) as one of the tools by which SoCalGas could reduce gas costs to core customers. Gas sales can be used to reduce overall gas costs, adjust deliveries within core delivery rights, and make effective use of core assets, such as core pipeline capacity. While the Gas Acquisition Department primarily is a purchaser of gas supply, it also monitors the gas market to make sales where those sales could be advantageous to its procurement customers. SoCalGas makes gas sales to a variety of parties, including marketers, producers, other utilities, and noncore customers such as electric generators. There are a variety of terms for these sales, and sales might be made at various locations, such as in the supply basin, from core storage inventory, or at the California border. An example of a gas sale might entail SoCalGas selling gas at the California border, using gas it has purchased in a southwest basin. If SoCalGas' core customers have adequate supply, storage inventory is adequate, and excess core capacity is available, SoCalGas might be able to sell supplies at the border and generate additional revenues for core customers. Or, SoCalGas may make a sale to a party which needs to purchase gas to meet its burn requirements. Occasionally, SoCalGas will even make a purchase with the intention of making a sale. These sales have generated significant additional revenues for core gas customers over the GCIM years since Year 3. Gas sales had a significant impact on SoCalGas' actual purchase price, particularly for border purchases. Energy Division found that these sales are one of the primary means by which SoCalGas been able to beat the GCIM benchmark. GCIM sales revenues are shown in Appendix 2.

Gas sales not only provide SoCalGas with an opportunity to lower gas purchase costs, but it also provides an effective way to use core interstate pipeline capacity. If unused core interstate capacity is available, SoCalGas has the choice of trying to broker that capacity, or using that capacity to make a sale at the California border. SoCalGas could make a basin purchase, use core interstate capacity to move the gas to the California border, and make a sale at the border. Since SoCalGas would only need to

pay the interstate pipeline volumetric usage charge to move the gas to the border, it could essentially obtain the market value of the core interstate capacity, less the usage charge.

Hub transactions[10] also have had a positive impact on actual gas costs. SoCalGas' California Energy Hub is a service offered through the Gas Acquisition Department which provides interruptible parking, loaning, and wheeling services for a negotiated fee. SoCalGas originally proposed a hub program in Advice Letter 2313-G, dated June 7, 1994, with Hub Services, Inc., an affiliate of Natural Gas Clearinghouse, helping to administer the program.[11] However, the revenues from hub transactions began to become more significant once these revenues were credited against actual gas costs under the GCIM, after Year 3. The Commission found in D.97-04-082 that these transactions are made using core assets, and core customers should benefit from hub revenues. The crediting of hub revenues to actual GCIM Gas costs was authorized in D.97-06-061, for years beyond Year 3. These revenues generated $1.4 million in Year 4, $7.1 million in Year 5, and $7.1 million in Year 6. SoCalGas has dedicated staff to look for and engage in hub transactions. These personnel work directly in the Gas Acquisition Department trading room in order to effectively work with purchasing and supply personnel. The salaries for these personnel are deducted from the revenues generated by hub transactions.

Financial instruments help SoCalGas manage the risk associated with various gas transactions and with the movement of the price of gas. SoCalGas enters into a variety of financial instrument transactions, including futures contracts and swaps. SoCalGas looks for opportunities for financial gains, but SoCalGas is not supposed to be engaged in speculative trading of these instruments, and these instruments are not primarily a revenue generator. (In fact, through Year 6, SoCalGas had lost a slight net amount of money with these transactions.) These instruments are mainly used as risk management tools. SoCalGas has developed risk management guidelines and policies, and provided these guidelines and policies to the Energy Division. Annual gains and losses from futures transactions and swaps are shown in Appendix 2.

Exchanges are essentially a modified form of a hub transaction on the interstate pipeline system. Exchange revenues are negotiated for services

[10] A "hub" is simply a gas market center where various types of transactions might occur.
[11] SoCalGas' hub proposal was conditionally approved by the Commission in Resolution G-3147.

where the California Energy Hub accepts gas at a receipt point on an interstate pipeline system and delivers gas at a different point on an interstate pipeline system. Core interstate pipeline capacity is used to make exchanges. Exchange revenues are deducted from actual procurement costs under the GCIM. Exchange transactions have generated millions of dollars in revenues. The revenues from exchanges are shown in Appendix 2.

Gas sales, hub transactions, and exchanges all not only help reduce gas costs, but do so with the effective use of core assets, such as storage and interstate pipeline capacity. The Energy Division believes that SoCalGas would have little incentive to make such efforts as diligently in the absence of the GCIM.

The Energy Division also notes that, around the time the GCIM began operation, SoCalGas renegotiated its California gas contracts. These contracts had typically been entered into many years earlier, and had long-term or "life-of-field" terms. Purchases pursuant to those contracts were priced well above spot market prices. DRA expressed concerns about these contracts for several years in previous gas reasonableness reviews, and had recommended that SoCalGas attempt to negotiate prices at or below spot prices.[12] Around the time the GCIM began, SoCalGas began to restructure or eliminate these contracts, such that subsequent purchases were priced much lower than previous purchases. Many of these contracts may have been renegotiated or eliminated absent the GCIM, but the Energy Division believes that the GCIM gave SoCalGas an incentive to lower gas costs associated with its California gas contracts as much as possible. The GCIM basically compares California gas prices to southwest basin gas prices moved to the SoCalGas border, excluding reservation costs. This required SoCalGas to renegotiate or eliminate these contracts, and obtain the lowest price possible for any contracts still in effect.

VI.B. SoCalGas Has Purchased Gas Near or Below Market Benchmark Prices Under the GCIM, Resulting in Lower Overall Gas Costs

The Energy Division reviewed SoCalGas purchases to determine how closely to the established benchmarks SoCalGas had purchased gas. Energy Division also wanted to determine whether SoCalGas had been purchasing

[12] For example, see DRA's Report on the Reasonableness of Gas Supply Operations of Southern California Gas Company 1990-1991, Chapter 3 (A.91-06-030).

gas above market prices, while the GCIM structure was allowing the company to receive a reward.

On an annual average basis, SoCalGas has been making its "pre-sales" gas purchases very near or even below the monthly market price of gas. ("Pre-sales" costs are the costs of gas purchases prior to the reduction in costs due to sales of that gas.) This is true for mainline gas purchases, NYMEX-related purchases, and purchases made at the California border.

It appears that SoCalGas would be doing a good job making its gas purchases even if it was not allowed to make gas sales, engage in exchanges, or make hub transactions under the GCIM. Without these additional measures, the magnitude of the rewards achieved under the GCIM would be significantly lower, if not eliminated. If these additional measures were not allowed, SoCalGas gas costs would generally have fallen much closer to or in the deadband range. These additional measures clearly have a significant beneficial effect on the actual cost of gas paid by SoCalGas procurement customers.[13]

In Year 1, SoCalGas' actual costs were within the deadband. In Year 1, hub revenues and gas sales were not yet allowed, and no exchange revenue was obtained. While SoCalGas purchases were made near the benchmark price, actual costs were lowered by a solid gain in futures transactions.

In Years 2 and 3, SoCalGas achieved rewards, with the Year 3 reward being unusually large. Sales and hub revenues were still not incorporated into the GCIM. SoCalGas continued to purchase supplies near benchmark prices. The Energy Division found that two major reasons for these rewards had to do with the manner in which San Juan Lateral (SJL) costs were incorporated into the GCIM, and an unusual price spike in December 1996 and January 1997.[14]

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[13] Energy Division also believes this illustrates the overall benefits of retaining Local Distribution Company (LDC) core procurement as an option for California ratepayers. The Company is able to efficiently procure gas to ensure a reliable supply of gas and is able to command good deals. In addition, the Company is able to use core assets such as storage and interstate capacity rights, primarily obtained for core reliability, for significant core gas cost benefits.

[14] San Juan Lateral costs were included as GCIM actual costs, but not as benchmark costs. However, actual purchases made using the SJL (i.e. San Juan basin purchases) were included in the GCIM benchmark as Permian basin purchases. Beginning in Year 2 and continuing in Year 3, the differential between the San Juan and Permian price began to be unusually large, allowing SoCalGas to achieve rewards, even though

In Year 4, 5, and 6, gas sales and hub revenues were incorporated into the GCIM and the SJL component was revised. SoCalGas continued to do a good job purchasing supplies near or below benchmark prices. In Year 4, the reward was achieved due to gas sales, but the reward was not large due to a moderate loss on futures transactions, hub and exchange revenues were moderate, and the lower tolerance band was increased to ½% below the benchmark price. In Years 5 and 6, gains were achieved on financial transactions, hub and exchange revenues significantly increased, and gas sales continued to contribute to a lowering of gas costs, resulting in substantial rewards.

Appendix 1 shows the annual average price paid by SoCalGas for basin and border purchases compared to market benchmark prices.

The fact that SoCalGas is now purchasing its gas supplies at or below market prices provides a good indication that the interests of shareholders and ratepayers are aligned under the GCIM. Table 1 above shows that SoCalGas has achieved a net procurement reward for its shareholders for every year under the GCIM except for the first year. Energy Division notes that gas sales and hub revenues were not included in the GCIM in Year 1. In addition, in Years beyond Year 3 the deadband was lowered to ½% below the benchmark cost. This caused the rewards after Year 3 to be reduced. The rewards over the first six years of the GCIM amounts to $33.3 million, or 0.83% of the $4.003 billion in actual GCIM gas costs. This added 1.9 cents/Dth to the 1.7 million MDth purchased under the GCIM.

The Energy Division can not say if similar results would have been produced with a smaller reward or if similar results could be produced with no reward at all. **However, the gas purchases made under the GCIM are definitely far more favorable to ratepayers than those made when reasonableness reviews were in effect**. The Energy Division compared the purchases made under the GCIM to the purchases made during a four-year period just prior to the GCIM, when reasonableness reviews were in effect. Purchases made under the GCIM have been generally near San Juan and Permian spot market prices. Purchases made in the four years prior to the GCIM were well above those spot market prices. Even the prices of southwest purchases transported over interstate pipelines (i.e. purchases

SJL reservation costs were included as actual costs. For example, in some months, the differential was over 80 cents/ Dth. The SJL component was revised for GCIM Year 4 and subsequent years.

made on a spot basis and pursuant to contracts negotiated during this reasonableness review time frame) were well above spot market prices prior to the GCIM. The Energy Division estimates that the average price for SoCalGas total purchases for the four years prior to the GCIM ranged from about 6% to 28% over an annual weighted average of monthly spot gas prices. (See Appendix 3.) For the GCIM period, purchases under the GCIM were generally at or slightly below spot gas prices on average. Even when including the purchases excluded from the GCIM, SoCalGas' total purchases were over the market price in Year 1, but were at or below market prices for subsequent years.

Another indication that the GCIM has been working well has been the low level of core transport in the SoCalGas area, particularly among residential customers. Less than 0.1% of residential customers have opted to take procurement from core aggregators, and only 3.8% of core commercial industrial customers have switched. While there may be additional reasons why these customers haven't switched, Energy Division found that SoCalGas basically buys gas at or below the market price of gas. This makes it very difficult for marketers to compete with the LDC procurement price strictly on the basis of gas costs, even though the brokerage fee and the GCIM rewards are included in the monthly procurement price.[15]

VI.C. The GCIM Has Streamlined the Regulatory Process and Has Reduced the Required Regulatory Resources for the Commission and SoCalGas

The GCIM has significantly reduced the magnitude of the resources devoted to regulation of SoCalGas' procurement activities. Prior to the establishment of the GCIM, the Commission conducted annual reasonableness reviews. As discussed above, in the early 1990's, these proceedings had become controversial, complicated, lengthy proceedings, requiring significant resources from both the Commission and its staff and SoCalGas. The GCIM regulatory process has been much smoother, faster, and less controversial, and has required much less resources.

[15] Under current market conditions, SoCalGas has apparently even been receiving increasing requests from noncore customers to be allowed to take core subscription service. On December 11, 2000, SoCalGas recently filed two "emergency" advice letters (Advice Letters 2978 and 2979) to request authority to accommodate these requests. In Resolution G-3304, the Commission denied SoCalGas' requests as filed, and ordered SoCalGas to file an application to address in detail the ratemaking and customer equity issues entailed in the two advice letters.

For the reasonableness reviews conducted just before the operation of the GCIM, SoCalGas estimated to the Energy Division that it required as many as:

- ten utility individuals directly involved in the proceeding as witnesses and attorneys,
- seven supporting individuals from the regulatory department,
- five individuals providing accounting support, and
- 53 individuals providing technical input, support, or advice.

To address an annual GCIM filing, SoCalGas estimates that it requires:

- three individuals for the regulatory process (witnesses have not been required in the GCIM process), and
- 24 individuals providing accounting and technical input support, and advice.

Much of this reduction in resources could be attributed to greater efficiency on SoCalGas' part in addressing regulatory proceedings. It's also possible that, over the years, had SoCalGas developed a different procurement strategy, reasonableness reviews may have required fewer resources. Nevertheless, from its own direct involvement in both reasonableness review proceedings as well as GCIM filings, along with the above figures, the Energy Division finds that the GCIM approach requires a significantly lower amount of SoCalGas resources devoted to the regulatory process. Not only are fewer people involved, the amount of time needed for the GCIM review is much less than needed for a reasonableness review.

The GCIM process also requires fewer resources from the Commission and its staff. Energy Division met with ORA staff who currently work on annual GCIM reviews and who have previously worked on SoCalGas' traditional reasonableness reviews. ORA staff noted that it (as the Division of Ratepayer Advocates' Fuels Branch) typically used five to seven full-time employees devoted to gas reasonableness reviews for all three of the major gas utilities (i.e., SoCalGas, PG&E, and SDG&E). (This is a conservative estimate in Energy Division's view, and doesn't even consider the unusual case of the PG&E Gas reasonableness reviews.) Now, only one or two full-time staff are required to address the three major gas utilities' gas procurement incentive mechanisms. ORA estimated that, to address the SoCalGas GCIM, it needs a full-time employee for three or four months, and 25% of that staff person's time for another two months plus

time for various meetings throughout the year. These estimates don't include attorney, ALJ, and court reporter time, all of which were far greater under reasonableness reviews than under the gas cost incentive mechanisms.

GCIM proceedings are also conducted much more quickly than a typical gas reasonableness review. ORA's testimony is usually issued in a timely fashion, virtually no hearing time is typically required, and decisions by the Commission are issued much more quickly. Under reasonableness reviews, it would often be the case that proceedings would take years to complete, and would ultimately be resolved not through Commission decisions but through settlements.

VI.D. The GCIM Flexibly Allows SoCalGas to Stay Focussed on Minimizing Gas Costs with a Known Overall Target and Minimal Micromanagement or Hindsight, and Allows Appropriate Risk-taking

When traditional gas reasonableness reviews were conducted a common complaint from SoCalGas (and other gas utilities) was that the Commission and its staff were engaging in "hindsight" reviews. That is, SoCalGas believed that the Commission was judging the reasonableness of utility gas purchasing decisions with the benefit of information gathered after those purchasing decisions were made. It was not uncommon for Commission decisions in a reasonableness review proceeding to be issued years after certain purchasing decisions were made. In addition, the utilities asserted that they were given no "credit" for the good decisions they made; they were only penalized for certain decisions which turned out badly.

Under the GCIM, while the utility is able to focus on the current gas market, it is also allowed the flexibility to take risks, knowing there could be a sharing of financial rewards or penalties associated with those decisions, with a minimum of regulatory "hindsight". In the years since the GCIM began, a significant change has been made in SoCalGas' purchasing practices. In the early 1990's, SoCalGas was oriented toward constructing a "balanced portfolio" of different types of purchases and contracts, with different terms and conditions. Some of these contracts were fixed-price contracts, and some had very long terms. SoCalGas also believed it needed to pay some type of "premium" for its long-term gas contracts, and that it needed to pay some type of "gas inventory charge", requiring it to pay a penalty if it purchases from a particular supplier fell below a certain point.

SoCalGas now largely focuses on the daily and monthly spot market when making its purchases, and its purchases are mainly daily and monthly spot deals. It still has the flexibility to enter into longer-term deals with a variety of terms, and in fact does so regularly. However, these deals are not nearly as extensive or as long-term as its previous deals, and tend to be indexed contracts with no "premium". Occasionally SoCalGas is even able to obtain a discount to indexed prices. The Energy Division is unable to conclude that such a change would not have occurred anyway in the absence of the GCIM, but the GCIM has definitely allowed and has been a significant factor in bringing about this change.

Because SoCalGas is not constantly concerned about Commission staff discovering information regarding potential disallowances, both ORA and SoCalGas indicated that there is better communication between themselves regarding market conditions, purchasing and gas accounting practices, and operations. Penalties related to gas purchasing practices automatically flow through the GCIM. Also, SoCalGas appears to be enthusiastic about the GCIM, so it would like to maintain good communication with Commission staff regarding the GCIM. (Of course, there is still the possibility that unintended consequences would occur or significant flaws would exist in the GCIM which might need to be dealt with. Monitoring and evaluation is still important.) This has led to better staff insight into market conditions, purchasing and gas accounting practices, and operations and a better working relationship with SoCalGas.

Finally, with the GCIM, the Company maintains attention to doing a good job in core procurement, staffing the Gas Acquisition Department with highly qualified personnel,[16] organizing the Department in an efficient fashion, and devoting adequate resources to its tasks.[17]

[16] Energy Division requested the educational and work experience of all of the Gas Acquisition staff. All staff appear to be highly qualified. The Energy Division was also impressed with the knowledge and cohesion of the staff during its visit to SoCalGas Trading Room, and attendance at Gas Acquisition Department meetings. This visit happened to occur during one of the most difficult weeks of recent years for the Gas Acquisition Department, just after an explosion occurred on the El Paso pipeline system, electric generator gas demand was very high, and border spot prices from the southwest rose by about 80 cents/Dth in a matter of days.

[17] During the Energy Division's meeting with ORA, ORA spoke highly of the organization of the "back office" and SoCalGas' accounting techniques.

VI.E. Reliability Has Not Been an Issue under the GCIM

SoCalGas has not curtailed any core or noncore customers while the GCIM has been in effect, and the Energy Division is unaware of any gas reliability problems attributed to the GCIM.[18]

VII. THE GCIM IS STILL A REASONABLE REGULATORY MECHANISM

VII.A. The GCIM Benchmarks are Reasonable Overall Indicators of Reasonable Gas Purchases

The benchmark prices under the GCIM are basically derived from two sources: independent, published gas price indices obtained from monthly "bidweek" prices, and the NYMEX bidding program, obtained from the bids made to SoCalGas by potential suppliers. While some adjustments may need to be made in the details, as discussed below, Energy Division believes that independent prices obtained in a broad, competitive, liquid market still provide an appropriate measure of reasonable gas purchases for core customers. It is very important to assure that these prices do indeed reflect prices a reasonable purchaser would obtain in a broad, competitive, liquid market and are not simply a small sampling of prices or the prices reflective of a dominant marketer. It is also important to assure that these prices are for the kinds of purchases SoCalGas should reasonably make. In all likelihood, if traditional reasonableness reviews were conducted, market prices would provide the basic measure of reasonable gas purchases.

Southwest basin prices continue to be appropriate as the main benchmark prices in the SoCalGas GCIM. SoCalGas continues to hold firm interstate pipeline capacity rights on El Paso and Transwestern to these southwest basins. Most of that firm capacity is allocated to serve SoCalGas' core requirements. Those southwest basins are where SoCalGas purchases most of its core supply. The published price indices employed in the GCIM as southwest basin benchmark prices are taken from respected, independent gas industry journals.

[18] The Commission recently issued an Order Instituting Investigation (I.) 00-11-002 into SoCalGas' and SDG&E's gas capacity planning, but the issues in that OII are related to the SoCalGas gas transmission capacity to SDG&E and SDG&E's curtailment rules, not to any impact by the GCIM on gas reliability.

The degree of volatility of the southern California border price and the difference between that price and southwest basin prices have recently reached unprecedented levels. The southern California border price has been the highest in the U.S. in recent months. However, at times, SoCalGas may need to make additional purchases beyond its basin purchases. The Energy Division believes that the southern California border price continues to be appropriate, for the time being, as the benchmark price for these purchases. However, because of its current volatility, the difference between it and basin prices, and its high amount, this benchmark should continue to be reviewed by the Commission to ensure it remains appropriate.

As discussed below, Energy Division believes the Commission should consider incorporation of weekly or daily published price indices in the GCIM, and elimination of the NYMEX bidding program.

VII.B. The GCIM Allows for Imperfections in the Mechanism, and Requires SoCalGas to Do a Good Job in Order to Achieve Rewards

After Year 3, the upper range of the tolerance band was reduced from 4% to 2% of the amount of procurement costs, while the lower range was reduced from 0% to ½% below the benchmark cost. The tolerance band allows SoCalGas a degree of flexibility in making purchasing core supplies, in recognition of the responsibility the utility has to assure a reliable supply of gas for core customers, and the role of the utility as the default provider of core gas supply. The reductions in the tolerance band also allow for relatively small imperfections in the mechanism, and require the utility to do a good job in order to achieve a reward. In order to get into the "reward" area, SoCalGas must purchase supplies at a cost which is already on the order of $4.5 million lower than the benchmark cost.

VII.C. The GCIM Has Been Revised Over the Years in Recognition of Changed Conditions and Accumulated Experience, or Has Been Able to Accommodate Changes

Significant changes have occurred in the gas market in California since the early 1990's. The GCIM has been able to accommodate these changes, or modifications have been made to the GCIM in recognition of these changes. The following addresses some examples of the relevant changes in the gas market, and how the GCIM has been able to accommodate these changes:

1) Need for border purchases: As noted earlier, SoCalGas reduced its California gas contractual commitments over the years. SoCalGas now makes less than a tenth of the California gas purchases it made when the GCIM began. SoCalGas' core demand has also increased over the years, while the core allocation of interstate capacity has remained the same. Under the original GCIM, a benchmark for border purchases was not included. After Year 3, a border benchmark was included, and SoCalGas was allowed to make up to 10% of its GCIM purchases at the California border.

2) San Juan Lateral capacity: DRA originally recommended that the Commission find that SoCalGas' subscription to San Juan Lateral pipeline capacity was unreasonable. To account for these costs under the GCIM, SJL capacity costs were allowed as an actual cost, but not as a benchmark cost. Any purchases made using the SJL (i.e. from the San Juan basin) were to be included in the benchmark price as Permian basin purchases. However, with time, very significant differentials were occurring between the San Juan and Permian price, making it easy for SoCalGas to not only recover its SJL costs but to achieve GCIM rewards. DRA and SoCalGas recognized this, and the GCIM was revised to include SJL costs as both a benchmark and actual cost, and include SJL purchases in benchmark and actual costs as San Juan basin purchases.

3) Number of transactions: The number of transactions made by SoCalGas every month has skyrocketed compared to the number of transaction seven or eight years ago. The Energy Division roughly estimates that the Company now makes between 10,000 and 20,000 purchasing and operational decisions in a typical year, including numerous decisions related to hub transactions, gas sales, financial transactions, and exchanges. Fewer long-term contracts are signed; any contracts are much shorter in term, and more emphasis is placed on the short-term market. Electronic trading is becoming increasingly important. It would be very difficult for the Commission staff to review these transactions in detail and place them in context in a traditional reasonableness review. The GCIM provides an overall benchmark of reasonableness to determine whether SoCalGas has been doing a good job in procuring gas for procurement customers.

4) Fuller opportunity to lower gas costs and use core assets: SoCalGas' Gas Acquisition Department has been given tools under the GCIM to be more than simply a passive buyer of gas, looking to purchase supply at market prices. With the opportunity to make gas sales at different locations, hub transactions, exchanges, and financial transactions, along with aggressively pursuing low-priced gas supplies, SoCalGas behaves more like a marketer. However, in SoCalGas' case, as a regulated utility under the GCIM, its incentive to benefit its shareholders is obtained when it lowers the cost of gas for its customers. The opportunity to make gas sales and include hub revenues in the GCIM was proposed by SoCalGas and DRA, and incorporated in the GCIM after Year 3.

5) High gas prices in the last year: Natural gas prices have been very volatile and have been increasing in the past year, across the U.S. The price of gas at the southern California border has been the highest in the country. Market analysts have suggested different reasons for this increase. The GCIM provides the incentive for SoCalGas to maintain focus on keeping gas costs as low as possible, consistent with maintaining reliability of supply for core customers. It also provides SoCalGas with the flexibility to manage gas costs in view of the price volatility and take appropriate market risks. This can entail a variety of measures, including the use of various contract terms for "physical" purchase contracts or the use of financial instruments.

VIII. ALTERNATIVES TO THE GCIM

VIII.A. The GCIM Is Still a Necessary Regulatory Mechanism

The Energy Division believes that the GCIM (or some type of similar incentive mechanism) is still necessary. In the absence of the GCIM as currently structured, either some other type of regulatory mechanism would need to replace the GCIM, or the LDC would be removed from the procurement role, as discussed below. The Energy Division believes that the GCIM is superior to any of the alternatives.

VIII.B. The GCIM Is Superior to Alternatives

There are several alternatives to some form of GCIM-type of regulation. The Energy Division believes that a GCIM is preferable to each of those alternatives. Alternatives include:

1. return to reasonableness reviews of gas procurement costs,
2. eliminate the LDC from procurement function, or
3. include a forecast of gas costs in the base rate PBR.

The Energy Division does not believe that SoCalGas should be eliminated from the core procurement function. There are clear benefits for ratepayers under utility procurement, and ratepayers clearly want utility procurement as an option. The Commission recently found that there is no reason to eliminate LDCs from the core procurement function in its "Promising Options" decision D.99-07-015. The Commission stated,

"The local distribution companies perform a valuable service for core customers, and we have seen no compelling reason to remove the local distribution companies from that service at this time."

"...we believe this option will help preserve the low costs currently enjoyed by California natural gas customers, provide adequate consumer protection, and ensure the reliability of natural gas service."

"There is no evidence that core customers are being harmed by local distribution company core procurement service. On the contrary, there is evidence that core customers benefit from local distribution company core procurement. The local distribution companies have an incentive to provide core customers with gas supplies at the lowest cost reasonably possible, consistent with assuring reliability of that supply. The gas procurement performance-based ratemaking mechanisms (PBRs) we have adopted appear to be one of our regulatory successes as far as core customers are concerned." (D.99-07-015, slip op, pg. 51)

In Energy Division's discussions with ORA, ORA also expressed serious reservations about eliminating LDC core procurement, and believes that such an action could well lead to higher costs for core customers.

The Energy Division also finds that traditional reasonableness reviews, while better than eliminating the LDC from core procurement, would be less preferable than GCIM regulation. It would now be even more difficult to conduct annual reasonableness reviews of core procurement costs, and doing so would require significant numbers of additional Commission staff. (The only party to do a comprehensive, detailed review of utility procurement costs in previous gas reasonableness reviews was DRA.) As noted earlier, the volume of transactions has greatly increased. Due to changes in procedural requirements, ORA would now have even less

time in which to conduct a review. Previous reasonableness reviews typically took years to complete. Of course, it's possible that utilities would not engage in unreasonable actions to the same degree as in the past, but this should not be counted on, especially as several significant events are occurring now in the gas market. Earlier disallowances may have resulted largely because utilities were concerned about access to and reliability of supply (particularly from low-cost basins), the viability and volatility of the spot market, and pipeline capacity shortages, all of which turned out to be of little concern during much of the 1990's. However, there are signs that some of these same concerns may be returning to the gas market today.[19]

More importantly, the GCIM provides a stronger incentive for the utility to search for opportunities to reduce costs for its customers than traditional reasonableness reviews. Further, under the GCIM, the utility knows that it will achieve benefits for its shareholders only if it can simultaneously achieve similar benefits for its customers. SoCalGas also provides an internal incentive program to its Gas Acquisition personnel, with financial incentives directly tied to GCIM results. If the GCIM did not exist, Gas Acquisition personnel might not be offered this type of incentive.

Another alternative would be to simply treat gas costs as another forecasted expense under a GRC or a base rate PBR. It is Energy Division's experience that gas forecasting is a notoriously inaccurate business. The market price of gas over the last year provides a vivid illustration of the difficulties in accurately forecasting gas prices. As with other expenses, the utility would have a clear incentive to forecast a high gas price, and differences between actual costs and forecasted costs might have little relation to whether the utility acted reasonably in its purchasing decisions.

IX. MODIFICATIONS OF THE GCIM FOR THE COMMISSION TO CONSIDER

The Energy Division believes that various general modifications of the GCIM should be considered at this time. The Energy Division has not

[19] Similar concerns now appear to exist in the California electric market, and there are simultaneous concerns that reasonableness reviews or PBRs may be necessary for utility electric procurement.

specified details of changes which should be made. Detailed changes should be discussed and proposed by SoCalGas, ORA, and other interested parties.

IX.A. Reduction of the Lower Tolerance Band and/or Change in the Sharing of the Rewards

It is clear that under the current GCIM structure SoCalGas is now able to regularly achieve substantial shareholder rewards. As Table 1 shows, SoCalGas has achieved rewards for each GCIM Year after Year 1, and the rewards are not insignificant sums, even for a utility as large as SoCalGas. As noted earlier the rewards have amounted to over $33 million, or 0.8% of its total GCIM costs, including pipeline reservation costs. (Pipeline reservation costs are essentially "pass-through" costs since these costs are included in both the benchmark costs and the actual costs.) This trend has continued in Year 7. Indeed, it is rare that actual costs for any particular month do not result in a GCIM reward. Even during the month when the El Paso pipeline explosion occurred, SoCalGas achieved a reward.

SoCalGas has achieved a return on common equity (ROE) in excess of its authorized ROE every year since 1992.[20] The excess has been over 200 basis points in 1997 through 1999, and the excess was over 500 basis points in 1997. SoCalGas has achieved a rate of return (ROR) in excess of its authorized ROR every year but one since 1992. Its shareholders have not been suffering, and the GCIM rewards provide a good addition to SoCalGas net income and ROE.[21]

SoCalGas bundled ratepayers pay for all SoCalGas' costs for gas acquisition activities.[22] The employees in the Gas Acquisition Department may participate in an employee incentive program to achieve rewards tied to

[20] This may also be true for years prior to 1993, but Energy Division did not ask for data prior to 1993, since the GCIM began in 1994.

[21] SoCalGas has had a base rate PBR since 1998 to provide it with an incentive to lower its non-gas operating costs relative to authorized revenue requirements. The GCIM provides SoCalGas with an incentive to lower its gas costs.

[22] Gas acquisition activities are paid for through the "brokerage fee" included as part of the procurement rate paid by SoCalGas' bundled customers, i.e. its procurement customers. Roughly 95% of core customers are SoCalGas procurement customers, and SoCalGas also provides procurement for a small part of noncore demand.

GCIM performance. SoCalGas ratepayers also pay these incentive rewards to employees.[23]

It appears that SoCalGas has achieved a method of procurement and core asset management which allows fairly stable, positive results under the GCIM. This is not to say that these results have been or are achieved easily. Energy Division would not argue that GCIM rewards should be eliminated. Without a reward, SoCalGas would have little incentive to continue to look for opportunities to further reduce costs. However, Energy Division believes that the magnitude of the shareholder rewards could be reduced or modified from its current level of 50% and/or the lower tolerance band could be increased from its current level of ½%. This could be done without significantly impacting the Company's focus on minimizing gas costs.

Initially, there was no lower tolerance band. Only after Year 3 was a ½% lower tolerance band introduced into the GCIM. With the other measures introduced after Year 3, rewards have continued, and have even grown on the average after Year 3. Based on the monthly GCIM reports received by Energy Division, it appears to be likely that a substantial reward would be achieved in Year 7 as well.

The Commission might also consider modifying the percentages of savings and excess costs shared by shareholders and ratepayers. Under the base rate PBRs adopted by the Commission for SoCalGas, San Diego Gas & Electric Company, and Southern California Edison, the Commission has adopted earnings sharing mechanisms. These mechanisms allocate most of the "easier" gains achieved under the base rate PBR to ratepayers, and as the more difficult gains are achieved, the mechanisms allocate a progressively larger share to shareholders. (In the case of SoCalGas and SDG&E, if an ROR is below the authorized ROR, ratepayers do not share in any of the "loss".) The Commission might consider a "tiered" approach for the GCIM. Alternatively, the Commission could simply lower the shareholder share of savings.

In the SDG&E gas procurement PBR, adopted by the Commission in D.98-08-038, savings below the benchmark costs are still shared 50/50 between shareholders and ratepayers, but only 25% of excess costs above

[23] The Gas Acquisition employee incentive program with rewards tied to GCIM performance is an option which may be taken in lieu of the Incentive Compensation Plan (ICP) for SoCalGas employees. The ICP costs are also paid by ratepayers.

the deadband are paid by ratepayers. There is no tolerance band below the benchmark, and there is a 2% tolerance band above the benchmark.

In the PG&E gas procurement PBR, adopted by the Commission in D.97-08-055, savings above and below the deadband are shared 50/50 between shareholders and ratepayers. There is a 1% tolerance band below the benchmark, and there is a 2% tolerance band above the benchmark.

The Commission should now also consider lowering the lower tolerance band for the SoCalGas GCIM, and/or revising the sharing of savings to make "initial" savings go largely to ratepayers while making more of the difficult savings go to shareholders.[24] The Energy Division does not recommend a "penalty-only" approach to the GCIM. If rewards were entirely eliminated, this would remove or significantly stifle the incentive for SoCalGas to take any extra steps or unusual risks or measures to lower gas costs. It would also lower any attraction for SoCalGas to be in the procurement function.

Although it appears that penalties are much less likely to be incurred, the Commission should also consider making the higher tolerance band symmetric with the lower tolerance band. For example, if the Commission were to adopt a 1% lower tolerance band, a higher tolerance band of only 1% should also be considered. SoCalGas has accumulated a great deal of experience under the GCIM, and is allowed a great deal of flexibility in how it tries to lower costs. There is no reason why the "high" tolerance band should be any different from the lower tolerance band.

IX.B. Replacement of the NYMEX Weighting Component

The NYMEX component of the GCIM price benchmark was described earlier. The NYMEX bid program was initially viewed as an important component of the GCIM because: 1) it allowed another type of market price to be incorporated into the GCIM, other than the bidweek published prices, 2) it allowed for a weighting of the GCIM which was more closely tied to daily gas prices and market expectations than the "beginning-

[24] The Energy Division notes that ORA has recommended that the SoCalGas GCIM lower tolerance band to 1% in ORA's October 30, 2000 "Monitoring and Evaluation Report" on GCIM Year 6. The Energy Division generally believes that this recommendation is a step in the right direction, and should be considered by the Commission, possibly along with a change in the savings sharing percentages. As with the ORA recommendation to eliminate the NYMEX weighting, the Energy Division had been considering such recommendations as well, even before receiving the ORA Report.

of-the-month bidweek" prices, and 3) the published daily and weekly price indices were viewed as less reliable as market indicators than NYMEX daily settlement prices.

With time there has been less interest in the NYMEX bidding program. The NYMEX weighting is only included if a certain number of bidders participate and if a certain volume is bid. The number of months in which no NYMEX weighting is included in the GCIM benchmark price has generally increased. Originally, there were a large number of bids and the bid volume was high, allowing the NYMEX component to be 50% of the benchmark price is every month of the first year. But in subsequent years the number of bids and volume bid has decreased, to the point where the NYMEX component is zero most months and only 25% in other months. The Energy Division is unsure about all of the reasons this has occurred, but believes that "market consolidation" is one likely reason. Mergers and buyouts may have resulted in fewer numbers of major participants on the supply end. In addition, the volatility and uncertainty of the current gas market may be making suppliers hesitant about bidding into the program.

The Energy Division believes that the NYMEX component could be eliminated from the GCIM with no impact on the overall effectiveness of the GCIM, especially if it was replaced with another component that included published weekly or daily prices.[25] The Energy Division believes that some daily and weekly published prices are now viewed as more reliable market indicators than when the GCIM first began. These daily and weekly prices could likely be included as good market indicators of price changes occurring during the month.

IX.C. An Incentive to Purchase from the Least-Cost Basin

The GCIM does not provide a direct incentive to purchase from the least-cost resource. This is important because San Juan basin supplies are typically priced lower than Permian basin supplies, sometimes by substantial amounts.[26] These two southwest basins are the major source of supply for SoCalGas. Under the GCIM, the benchmark prices for these two basins are

[25] The Energy Division notes that ORA has recommended in its October 30, 2000 "Monitoring and Evaluation Report" on GCIM Year 6 that the NYMEX component be replaced with daily or weekly published prices, and that possibly the California border price component might be replaced with some daily or weekly weighting. The Energy Division would support such modifications.

[26] For example, in the summer and early fall of 2000, the price differential between the San Juan and Permian basin has ranged from 18 cents/Dth to as much as $1.06/Dth.

simply weighted according to the actual purchases made by SoCalGas from each of those basins.

Unfortunately, as the Commission is well aware, there is currently a serious problem for SoCalGas in obtaining as much San Juan gas as it should be getting over the El Paso pipeline, due to El Paso's problematic method of allocating pipeline capacity to firm shippers. If this problem is finally resolved, ORA, the Energy Division, and SoCalGas should explore how to incorporate an incentive into the GCIM for purchasing from the least-cost basin. For the time being, ORA and the Energy Division should continue monitoring SoCalGas' San Juan purchases and its use of El Paso capacity to ensure, to the extent possible, that SoCalGas is maximizing its purchases from the least-cost basin. ORA has not noted any significant problem in its annual reviews associated with a failure to maximize purchases from the least-cost basin.

IX.D. An Incentive to Make Optimal Use of Storage for Price Advantage

The GCIM formerly had a Storage Incentive Mechanism which provided SoCalGas with an incentive to lower gas costs by taking advantage of price differences by changing its planned storage injections or withdrawals. Hub transactions allow SoCalGas to employ core storage to generate hub revenues, but there is currently no mechanism in the GCIM to directly provide SoCalGas with an incentive to employ storage in the most beneficial manner when price advantages present themselves. Such an incentive might be difficult to construct, especially one that doesn't automatically reward SoCalGas to take prescribed steps as under the old SIM. Core reliability would also need to be considered.[27] Still, this could be a good additional component to the GCIM. The PG&E CPIM includes a storage incentive built directly into the overall mechanism.

[27] Parties may need to consider the outcome of the Gas Industry Reform proceeding, I.99-07-003. In that proceeding, several settlements have been proposed. The Energy Division does not presume which of those settlements, if any, will be adopted by the Commission. The settlements make different provisions for the allocation of core storage rights. It would be inappropriate to fashion a storage mechanism under the GCIM until the outcome of the Gas Industry Reform proceeding is known.

X. CONCLUSION

The Energy Division finds that the GCIM provides a superior regulatory mechanism than the traditional gas reasonableness reviews conducted in the early 1990's. The GCIM allowed a very significant reduction in resources devoted to regulation of SoCalGas' gas procurement costs by both the Commission and SoCalGas. SoCalGas has changed its procurement practices in positive fashion, now making purchases at or even below spot prices. The Company has introduced several innovations in its operational and procurement practices, such as gas sales to entities other than core customers, the incorporation of hub and exchange revenues into the GCIM, and the use of financial instruments in managing its price risk, some of which result in a significant lowering of gas costs below the GCIM benchmark. SoCalGas has provided its employees with a direct financial incentive tied to GCIM performance. There have been no curtailments of any customers since the GCIM was implemented, so it has not had a negative effect on reliability. The Energy Division also believes that the Company and Commission staffs generally communicate more effectively and openly together than when reasonableness reviews were conducted. The GCIM has either accommodated change in the gas market over the years, or has been modified in minor ways.

The Energy Division cannot say with certainty that SoCalGas would fail to continue purchasing gas at or near market prices if the GCIM was terminated, or if rewards were eliminated and a "penalty-only" incentive was applied. However, if such measures were taken, SoCalGas would no longer have any incentive to take risks in further lowering gas costs below market benchmarks or continue searching for ways to use core assets to lower gas costs. In fact, other than a Commission order, SoCalGas would have little incentive to stay in the procurement business at all, especially now that there are numerous entities capable of undertaking the procurement function. Of course if another entity were to undertake the procurement function, it would only do so if there were a good prospect for obtaining profits on gas sales. As noted earlier, SoCalGas has made less than 1% in GCIM rewards.

The Energy Division would not favor a return to reasonableness reviews, elimination of the core procurement function by SoCalGas, or the incorporation of gas costs into an overall PBR mechanism. Some form of incentive-type of mechanism is still preferable to any of these alternatives. Some changes may be necessary to the current GCIM structure, however.

The Energy Division recommends that the Commission consider the following changes to the current GCIM structure:

1) an increase in the magnitude of the lower tolerance band from its current level of 1/2% of commodity costs,
2) a decrease in the magnitude of the higher tolerance band from its current level of 2% of commodity costs,
3) elimination of the NYMEX weighting component,
4) inclusion of daily or weekly published price indices in the benchmark price, and
5) a change in the ratepayer/shareholder sharing percentages of savings and penalties to allocate more of the "easier" savings to ratepayers, and more of the "harder" savings to shareholders.

Additional modifications, which should eventually be considered, are an incentive to purchase from the least-cost basin and the incorporation of storage into the GCIM.

APPENDICES