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Decision 94-03-076 March 16, 1994

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of)	
SOUTHERN CALIFORNIA GAS COMPANY)	
(U 904 G) for authority to establish)	Application 93-10-034
an experimental Gas Cost Incentive)	(Filed October 20, 1993)
Mechanism.)	

And Related Matters.

-) R.88-08-018
-) R.92-12-016
-) I.92-12-107
-) Application 90-06-030
-) Application 91-06-030
-) Application 92-06-015
-) Application 93-09-006
-) Application 92-11-017
-) Application 93-02-021
-) Application 93-01-018
-) Application 93-03-069
-) I.93-02-026

O P I N I O N

This decision grants the application of Southern California Gas Company (SoCalGas) for approval of a change in the way the Commission oversees the reasonableness of gas purchases and gas storage decisions made by SoCalGas on behalf of its captive core customers.

I. Background

SoCalGas currently procures gas on behalf of core and core subscription customers, and transports and stores gas for core customers. Gas costs are entered into balancing accounts. The Commission reviews SoCalGas' gas purchases and operations in annual reasonableness reviews. In those proceedings, the Commission

A.93-10-034 et al. ALJ/KLM/jac

grants SoCalGas dollar-for-dollar recovery of gas costs which it finds were reasonably incurred.

We have in recent years expressed concerns regarding the wisdom of balancing accounts and the associated reasonableness review procedure because they may not provide adequate incentives for the utility to minimize gas costs. The only risk SoCalGas faces under the current review procedure is that regulators will disallow imprudently incurred costs. The procedure offers no opportunity for profit and, under it, the utilities face no market risk.

In response to our expressed preference for regulatory mechanisms that impose some measure of market risk and some opportunity for profit, SoCalGas filed this application following what it describes as "extensive discussions" with the Division of Ratepayer Advocates (DRA). It refers to its proposal as a Gas Cost Incentive Mechanism (GCIM). A copy of the Agreement between SoCalGas and DRA with regard to the GCIM is attached to this decision as Appendix A.

The essential elements of the proposed GCIM are included as part of a settlement filed by several parties in Rulemaking (R.) 88-08-018, et al. The settlement would resolve several outstanding controversies regarding SoCalGas' costs and operations. We consider this application separately because it was filed separately and, unlike the other elements of the settlement filed in R.88-08-018, the GCIM should be implemented by a particular date--which is fast approaching--in order for it to be most effective, as we describe below.

SoCalGas' GCIM application was formally protested by the Indicated Producers, a consortium of large gas producers. Several other parties raised concerns during the course of the proceeding.

The Commission reviewed this application informally at a reported workshop, held January 5, 1994, and conducted by the assigned administrative law judge. Several parties filed comments

A.93-10-034 et al. ALJ/KLM/jac

on the GCIM proposal following the workshop, among them, Toward Utility Rate Normalization (TURN), California Independent Producers Association (CIPA), Southern California Edison Company (Edison), San Diego Gas & Electric Company (SDG&E), Indicated Producers, and the State of New Mexico (New Mexico). SoCalGas and DRA jointly filed comments responding to other parties' objections.

II. SoCalGas' GCIM Proposal

The GCIM consists of two separate elements, one that measures performance for gas procurement efforts and the other that measures performance for efficient gas storage operations for the core class. The GCIM as proposed would affect about 75% of SoCalGas' total gas purchases.

The procurement incentive is, according to SoCalGas, designed to provide SoCalGas an incentive to purchase gas supplies at or below prevailing market prices. It would accomplish this by establishing a benchmark against which to measure the price SoCalGas pays for core gas supplies. The benchmark is based on a combination of the New York Mercantile Exchange (NYMEX) index for gas futures and gas price indices published in Natural Gas Intelligence and Inside FERC. The GCIM proposal includes a "tolerance band" above the benchmark which SoCalGas explains is required to allow SoCalGas to meet objectives related to service reliability and supply security. The tolerance band, as proposed, would be 4-1/2% during the first year of the CGIM and 4% for the subsequent two years. SoCalGas also comments that no benchmark is a perfect proxy for market prices. It believes, however, that the benchmark negotiated with DRA and presented here provides a reasonable measure of market prices.

The incentive mechanism operates so that SoCalGas' actual annual total purchased gas cost is compared to the annual benchmark

A.93-10-034 et al. ALJ/KLM/jac

budget plus tolerances to determine if a reward or penalty applies. The difference between the annual benchmark and budget and the total purchased gas cost for the year--whether positive or negative--is shared equally between shareholders and ratepayers.¹

The storage incentive, like the procurement incentive, is designed to reduce the cost of gas by encouraging SoCalGas to time its storage injections and withdrawals so that it may take advantage of gas price variations which occur seasonally. The storage incentive, in essence, allows SoCalGas to receive 10% of the difference between actual transaction costs and a benchmark based on futures prices. Ratepayers would reap the benefit of the remaining savings.

The storage incentive includes operating constraints which assure that enough gas is stored to accommodate peak day demands and unplanned outages on the transportation and storage systems.

SoCalGas proposes a three-year experimental program. It proposes that the GCIM be implemented beginning April 1, 1994, which is the start of the storage injection season and coincides with the end of the previous reasonableness review period. It also proposes that the Commission adopt a monitoring and evaluation plan comparable to the one adopted for SDG&E's performance-based ratemaking mechanism. Specifically, SoCalGas proposes to submit quarterly reports regarding its procurement and storage activities,

¹ Certain gas supply contracts are excluded from the GCIM procurement incentive, namely those of its affiliates PITCO and POPCO, and those identified as ARCO '90, Meridian '90 and Enron Bank. These several contracts are for long-term gas purchases and are priced above the proposed benchmark. The PITCO and POPCO contracts would be subject to a different incentive mechanism proposed in the settlement filed in R.88-08-018, et al. We will address that mechanism and other settlement provisions in a subsequent decision.

\.93-10-034 et al. ALJ/KLM/jac

an annual report outlining cost savings, rewards or penalties, and related pertinent information. SoCalGas proposes that DRA undertake four audits over a three-year period to assure the program is functioning as the Commission intends.

SoCalGas also proposes that the Commission ultimately evaluate the success or failure of the experimental program by considering several criteria:

- o The effect of the program on reliability and service quality;
- o The effect of the program on operational efficiency and costs;
- o The effect on competition;
- o The program's regulatory burden.

During the third year of the experiment, SoCalGas proposes to file an application or petition proposing to continue or eliminate the GCIM.

III. Discussion

Decision (D.) 91-03-032 expressed our 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 financial incentives to make efficient purchases and minimize costs to ratepayers."

Consistent with D.91-03-032, D.93-06-092 adopted a "performance-based ratemaking" mechanism for SDG&E that is similar to the one proposed by SoCalGas. We found in that decision that

"...incentives based solely on exposure to after-the-fact penalties may cause utility management to focus on defending expenses rather than promoting efficiency and on avoidance of error rather than performance improvement. The regulator also may miss the success of an overall procurement strategy by focusing on particular contracts and a narrow

A.93-10-034 et al. ALJ/KLM/jac

timeframe. Since the utility does not share in the gains from successful innovations, but may be saddled with all the losses from unsuccessful innovations, the utility would prefer the safety of the status quo to risks, even where they offer good prospects for lowering costs."

The GCIM proposed by SoCalGas would replace retrospective reviews of its gas procurement operations with a benchmark derived from market prices. We believe the GCIM will be an improvement over existing regulatory review from the standpoint of both shareholders and ratepayers.

We have little experience with incentive mechanisms such as the one proposed here today for gas purchases. Partly for that reason, we do not expect the GCIM to be ideal in every detail. We take seriously the observations made by several parties regarding the potential shortcomings of the CGIM. We addressed many of their concerns extensively in D.93-06-092 and do not need address them in depth a second time. We will reiterate our views briefly, however, and address those issues which did not arise in the context of SDG&E's incentive proposal.

A. Unintended Effects of the GCIM

Indicated Producers believe a program that focuses on a single input, such as gas, will distort utility decision-making in favor of that input, potentially promoting less efficient use of other inputs, such as capital and labor.

DRA and SoCalGas respond that they find no basis for tying adoption of the GCIM to a non-gas cost incentive mechanism. They believe the Commission's rules on sales of excess core would prevent any utility "gaming" and suggest that monitoring would expose any impropriety.

We appreciate Indicated Producers' concern that a single regulatory incentive is preferable to several. Such an approach would help assure that management decisions are not

A.93-10-034 et al. ALJ/KLM/jac

influenced by opportunities offered or risks imposed by uneven regulatory incentives in ways that would not be cost-effective.

However, we are not convinced that applying differing incentives for various utility operations presents insurmountable problems. The current regulatory regime distinguishes between gas costs and other costs in terms of the type of regulatory incentives imposed. SoCalGas is at risk for operating expenses between general rate cases, and receives dollar-for-dollar recovery of gas costs. We believe the GCIM is an improvement over the existing arrangement and brings regulation of gas purchases more in line with our regulation of non-gas costs.

Although we do not anticipate serious problems with the GCIM, we can conceive of several ways that such a regulatory mechanism could distort management and investment decisions in unintended ways. For example, a utility could negotiate "side deals," whereby its gas supply contracts offer low gas prices and negotiate extra-contract terms that are not cost-effective to ratepayers. A utility could purchase cheap, untreated gas from which it would profit, and then purchase otherwise unneeded treatment facilities which would go into rate base.

An incentive mechanism that concludes after three years could encourage the negotiation of contracts providing short-term price discounts as a trade-off for premiums on gas prices in subsequent years, allowing the utility to benefit from the discounts and leaving ratepayers to pick up the difference after the three-year period ends.

The audits and monitoring efforts SoCalGas proposes should identify these types of transactions and any other activity that might unfairly benefit shareholders at the expense of ratepayers. We address these requirements below. We comment in advance that we will not hesitate to disallow any costs that appear to have been incurred in an attempt to profit improperly from the GCIM mechanism at ratepayer expense. We would also be within our

A.93-10-034 et al. ALJ/KLM/jac

authority to impose penalties on SoCalGas if it violates any order, rule or decision in its implementation of the GCIM.

B. Effects of the GCIM on Portfolio Construction

New Mexico, CIPA and Indicated Producers argue that reliance on 30-day spot prices as the benchmark for gas purchases will promote purchase of short-term gas and may compromise ratepayer interests by discouraging purchases of longer-term, secure sources of supply. New Mexico also observes that a short-term purchasing strategy may not be the least expensive option for ratepayers because spot prices are volatile over the course of a year.

SoCalGas and DRA respond to Indicated Producers' concerns regarding the benchmark by stating that they do not propose any change in the Commission's procurement policies or the mix of short- and long-term contracts in SoCalGas' supply portfolio. They also state that no market measure of long-term performance is available at this time.

We have considered this issue in the context of SDG&E's gas procurement incentive mechanism and found that the associated risk is not significant. The benchmark approved as part of SDG&E's performance-based ratemaking mechanism was similarly based on 30-day spot market prices. In addressing concerns raised in the related proceeding, D.93-06-092 observed that "Logically, SDG&E would project various price scenarios and associated likelihoods, and procure a mix of gas supplies that offers the best expected value when all outcomes are considered." We have more than once stated our view that a gas portfolio should, in order to minimize risk, include a mix of pricing indices, terms, and vintages. If, upon reviewing SoCalGas' procurement practices over the next three years, we find that the GCIM benchmark compromises these objectives, we will eliminate it in favor of a regulatory mechanism that better promotes a balanced gas portfolio.

A.93-10-034 et al. ALJ/KLM/jac

C. Effects on Purchases of California Gas

CIPA objects to the GCIM mechanism because it does not include the price of California gas in the benchmark calculation. Instead, the utility would determine whether to purchase California gas by comparing its cost to the cost of Southwest supplies minus the cost of interstate transportation. CIPA observes that SoCalGas must pay the interstate demand charges in any event. The effect of this part of the mechanism, according to CIPA, will be to discourage purchases of California gas.

CIPA believes the formulation and application of the GCIM with respect to California gas production is contrary to the provisions of the California Gas Policy Act. CIPA cites Public Utilities Code Section 785 which directs the Commission to

"encourage as a first priority, the increased production of gas in this state...and shall require...every gas corporation to purchase that gas which is...produced in this state having an actual delivered cost...equal to or less than other available gas."

Indicated Producers also believe that the GCIM as proposed promotes a bias against purchases of California gas because the formula for comparing California gas costs to Southwest gas costs fails to reflect market prices for those supplies.

In response to CIPA's comments, SoCalGas and DRA argue that the GCIM measures California gas purchases on the same basis as it measures all other purchases.

The GCIM compares California gas prices to Southwest gas prices, net of transportation costs. We believe this is an appropriate comparison and does not bias procurement decisions in favor of either gas source. Because the GCIM does not discourage purchases of California gas relative to gas from other producing regions, the GCIM does not violate Section 785.

A.93-10-034 et al. ALJ/KLM/jac

D. Sales of Excess Core Gas

Indicated Producers express a concern that under the GCIM SoCalGas may have an incentive to sell "excess" core gas to noncore customers. They believe that the GCIM provides this incentive because the more gas SoCalGas can sell, the greater its chance for profit as it spreads fixed costs over larger total sales to thereby reduce unit costs. Indicated Producers do not propose any specific change in the rules to address this potential problem.

SoCalGas has not sold any core gas to noncore customers in two years. Under the circumstances, sales of excess gas after the implementation of the GCIM would not go unnoticed. The rules for sales of excess gas are clear. If SoCalGas violates them, it would be subject to a penalty. We are not convinced that Indicated Producers have identified a serious problem. We will, however, require continued monitoring of excess core gas sales.

E. Benchmark Anomalies

TURN supports the GCIM as proposed. It does, however, raise one concern which it believes can be addressed in the monitoring process. It presents a market scenario which might actually increase gas costs rather than decrease them in a case where the benchmark prices had differing relationships to actual prices:

	<u>Permian</u>	<u>San Juan</u>
Benchmark Price	\$2.08	\$2.00
Actual Price	\$2.06	\$2.02

TURN observes that from a ratepayer perspective, SoCalGas should, in the example, purchase the lower priced San Juan gas at \$2.02 rather than the Permian gas at \$2.06. Under the GCIM, however, SoCalGas would be rewarded for purchasing Permian gas at less than the benchmark price or suffer a penalty for buying San Juan gas at a price above the benchmark price.

TURN states it has agreed with SoCalGas and DRA that SoCalGas should keep track of such a circumstance, should it ever

A.93-10-034 et al. ALJ/KLM/jac

occur and, if it becomes a problem, program modifications can be proposed.

F. Monitoring and Evaluation

SoCalGas suggests a monitoring program similar to the one we adopted for SDG&E when we approved its gas procurement incentive mechanism. We will adopt SoCalGas' monitoring program as proposed. In addition to requiring the reports SoCalGas proposes to provide, we will direct SoCalGas (1) to document its excess core gas sales to assure that it is not selling core gas in order to increase its sales and thereby decrease its unit cost, and (2) to track any gas purchases that occur under the pricing anomaly TURN identifies where the two benchmark prices are not similarly calibrated to market prices.

We will rely on DRA to undertake such audits and to review the monitoring reports submitted by SoCalGas, as the application suggests. Of course, Commission Advisory and Compliance Division (CACD) may undertake its own review as it deems appropriate. We will also require CACD to issue an evaluation report reviewing the program. CACD may engage the services of an independent consultant which will be funded by SoCalGas. The report should be submitted no later than August 1, 1996 in order to provide the Commission with guidance regarding the success or failure of the program prior to its completion.

G. Regulatory Review

The GCIM would eliminate the need to review the reasonableness of gas costs in annual reasonableness reviews. We note, however, that it will not obviate the need for a forum in which we may review SoCalGas' operations and compliance with our rules, and also the effects of the GCIM itself. We will direct SoCalGas to file an annual application by June 15 of each year for this purpose.

SoCalGas proposes that it will determine whether or not it wishes to extend the GCIM past the three-year experimental

1.93-10-034 et al. ALJ/KLM/jac

period. We welcome SoCalGas' analysis about the operation of the GCIM. The Commission will determine whether to continue the GCIM mechanism after the third year. We will do so by reopening this proceeding in mid-1996 to review the monitoring reports, audits, and observations of all interested parties.

Finally, we note that our adoption of the GCIM today does not in any way affect the Commission's consideration of the settlement filed in R.88-08-018, et al. except to the extent that this order approves one element of that settlement.

Findings of Fact

1. SoCalGas filed this application seeking approval of a gas cost incentive mechanism.

2. Under the Commission's current regulatory regime, SoCalGas receives dollar-for-dollar recovery of all reasonably incurred gas costs based on a retrospective review.

3. The Commission has stated its support for regulatory mechanisms that provide utilities an incentive to manage their costs well by providing risks and rewards for management decision-making.

4. SoCalGas' GCIM proposal provides a reasonable incentive for improved gas procurement strategies on an experimental basis.

5. The GCIM could distort management decision-making in unintended ways.

6. The Commission can guard against unintended effects of the GCIM by monitoring utility gas procurement activities.

7. The GCIM will not necessarily promote utility reliance on short-term gas purchases.

8. The GCIM will not bias utility procurement decisions against purchases of California gas.

9. The GCIM will not eliminate the need to review the reasonableness of SoCalGas' operations.

A.93-10-034 et al. ALJ/KLM/jac

Conclusions of Law

1. The Commission should adopt SoCalGas' GCIM proposal as set forth in this decision. The Commission should direct CACD to undertake an evaluation of the GCIM. CACD should be directed to submit the evaluation no later than August 1, 1996 so that the Commission may review CACD's analysis before addressing whether to continue, modify or eliminate the GCIM after the third year of its operation.

2. SoCalGas should be required to file by June 15 of each year an application to review the reasonableness of its operations in the context of Commission rules and the results of the GCIM.

O R D E R

IT IS ORDERED that:

1. The application of Southern California Gas Company (SoCalGas) for approval of a three-year experimental gas cost incentive mechanism (GCIM), governing regulation of SoCalGas' procurement operations, is granted as set forth in this order. SoCalGas shall file an advice letter no later than March 11, 1994, containing any necessary revisions to its gas tariffs. The advice letter shall be effective no sooner than April 1, 1994.

2. SoCalGas shall submit to the Division of Ratepayer Advocates and the Commission Advisory and Compliance Division (CACD) the information and reports as proposed in its application.

3. CACD shall submit to the assigned administrative law judge and any interested party a report evaluating the GCIM. The report shall be submitted no later than August 1, 1996 and should recommend whether the GCIM should be continued, modified or eliminated.

A.93-10-034 et al. ALJ/KLM/jac

4. SoCalGas shall continue to file an application by June 15 of each year which addresses the reasonableness of its operations in light of Commission rules. That application shall also provide information regarding the results of the GCIM for the previous twelve months.

This order is effective today.

Dated March 16, 1994, at San Francisco, California.

DANIEL Wm. FESSLER
President
NORMAN D. SHUMWAY
P. GREGORY CONLON
JESSIE J. KNIGHT, JR.
Commissioners

Commissioner Patricia M. Eckert is absent.

APPENDIX A

**AGREEMENT BETWEEN SOUTHERN CALIFORNIA GAS COMPANY
AND THE DIVISION OF RATEPAYER ADVOCATES
FOR A GAS COST INCENTIVE MECHANISM
TO REPLACE REASONABLENESS REVIEWS**

The following sets forth the agreement between Southern California Gas Company (SoCalGas) and the Division of Ratepayer Advocates (DRA) of the California Public Utilities Commission (CPUC or Commission) for a Gas Cost Incentive Mechanism (GCIM) to replace the current reasonableness review process for those activities addressed by the GCIM. The initial term of the GCIM will be for a three-year period commencing April 1, 1994, and ending March 31, 1997. SoCalGas will file an Application for Commission approval of the GCIM outlined in this agreement and DRA agrees to support in concept such an application. Any details which may be reflected in SoCalGas' Application that vary or are omitted from this Agreement are subject to further review by DRA. This will also include a review of all tariffs submitted and proposed by SoCalGas in conjunction with the GCIM.

Beginning on July 1, 1995, and continuing, if necessary, through February 29, 1996, SoCalGas and DRA will confer, as needed, and retain a log of these discussions, to monitor, evaluate and determine if modifications to the Commission-approved GCIM, are necessary for the balance of the initial three-year period. Any such modifications would be submitted for Commission approval. If an external event occurs that clearly, uncontrollably, and massively affects the GCIM, SoCalGas or DRA will propose to the CPUC remedial action or propose to halt the experimental GCIM.

An annual filing to the CPUC will be made by SoCalGas which reviews and documents activity under the GCIM.

APPENDIX A

The GCIM consists of two parts. Part One is the Procurement Incentive portion of the GCIM and Part Two is the Storage Incentive portion of the GCIM. The GCIM excludes consideration of purchases from PITCO and POPCO and three existing long-term contracts, ARCO '90, Meridian '90 and Enron Bank.

PART ONE

PROCUREMENT INCENTIVE MECHANISM PORTION OF GCIM

The Procurement Incentive Mechanism portion of the GCIM is designed to provide SoCalGas with an incentive to achieve a cost of gas that is at or below the prevailing market price for gas. The Procurement Incentive Mechanism consists of establishing a benchmark against which to measure the actual cost SoCalGas pays for gas purchased to meet the needs of retail core (henceforth "core") and core subscription customers. The benchmark is to be a proxy for the prevailing market price for gas, which is defined as the price for 30-day firm spot supplies delivered to the SoCalGas market area.

A tolerance band above the benchmark is desirable because of SoCalGas' responsibility to meet its public policy objectives of core service reliability, core supply security and core service obligation and because no benchmark is a perfect proxy for the market. The tolerance band provides a zone of reasonableness above the benchmark within which no incentive or penalty applies. The Procurement Incentive Mechanism is a symmetric sharing of the costs savings or losses incurred by SoCalGas to procure gas at a price below the benchmark or above the sum of the benchmark and tolerance band, respectively. The following is a description of the benchmark, tolerance, actual cost and incentive elements of the Procurement Incentive portion of the GCIM. (See Exhibit A)

APPENDIX A

Benchmark Reference Price and Budget

The Procurement Incentive Mechanism compares, on an annual basis, the actual cost of SoCalGas purchases to an annual procurement benchmark budget. The annual procurement benchmark budget is the sum of twelve monthly benchmark budget amounts. The monthly benchmark budget amount is the sum of monthly benchmark gas commodity costs, monthly commodity transportation costs and monthly transportation demand charges.

Monthly benchmark gas commodity costs are the product of the monthly gas commodity reference price multiplied by the volume of gas actually purchased for core and core subscription customers by SoCalGas, calculated at the mainline (excluding purchases from PITCO and POPCO and the three existing long-term contracts, ARCO '90, Meridian '90 and Enron Bank).

Monthly commodity transportation costs are the product of pipeline weighted commodity firm transportation rates and fuel costs multiplied by the volume of gas actually purchased as used in the calculation of gas commodity costs as described above.

Monthly transportation demand charges are the pipeline weighted transportation demand charges for 848.5 MMcfd of core capacity (1067 MMcfd total core capacity reserved on El Paso and Transwestern minus 218.5 MMcfd of PITCO capacity) plus core subscription transportation demand charges, minus those pipeline reservation charges paid directly to interstate pipelines by core aggregators. In addition, should SoCalGas be required to obtain additional monthly firm capacity to meet the needs of core customers, the transportation demand charges for such capacity will be included in the monthly benchmark budget. Any such purchases will be reviewed by DRA in SoCalGas' annual

APPENDIX A

GCIM filing and are subject to reasonableness review. San Juan Lateral capacity costs on Transwestern are excluded from the determination of monthly transportation demand charges.

The gas commodity reference price is determined for the market price of gas at the mainline for each of two southwest U.S. producing basins (Permian and San Juan) which supply SoCalGas. Since SoCalGas' purchases from the Anadarko basin are minimal, these volumes are included in SoCalGas' Permian purchases for purposes of developing basin weighting factors.

The Gas Commodity Reference Price consists of three components:

GAS COMMODITY

REFERENCE	A	B	C
PRICE =	50% ((Average of Futures Prices) + (Basis))	+ (25% IFERC)	+ (25% NGI)
=	50% (A + B) + C

where A = The simple average of the daily settlement prices of New York Mercantile Exchange (NYMEX) for all days of the natural gas futures contract during the approximate 30 days that it is trading as the nearby month while deliveries are being made (i.e., August futures contract, while it trades as the nearby month, will be used to price July deliveries).

where B = Basis, which is defined as the differential between cash price for gas in the regional buying area and the applicable NYMEX natural gas futures contract (i.e., gas for delivery in July versus the August futures contract).

APPENDIX A

Basis is the volume weighted average of the lowest 50% of monthly Basis bids received by SoCalGas.

where C = 25% of 1st of the month published index price from Inside FERC and 25% of 1st of the month published index price from Natural Gas Intelligence delivered to El Paso and Transwestern pipelines from the Permian and San Juan Basins.

The following is a more detailed description of the Gas Commodity Reference Price:

The index values for both Inside FERC (IFERC) and Natural Gas Intelligence (NGI) equal the product of pipeline and basin weights applied to pipeline and basin specific indices reported in each of these publications. Each weight equals the ratio of the actual gas purchased from a specific pipeline (either El Paso or Transwestern) and basin (Permian and San Juan) to the total gas purchased during that month by SoCalGas on both pipelines (El Paso and Transwestern). If one publication does not report an index value for a specific basin-pipeline combination for a given month, the Gas Commodity Reference Price will use the corresponding index value from the other publication.

In contrast to the publication indices, the Basis value is a single value for each month and is not pipeline-basin specific. The Basis value equals the volume weighted average of the lowest half of all Basis bids submitted to SoCalGas. Suppliers can submit basis bids under one of two methods. SoCalGas will rank all Basis bids at the California border after the intermonth spread adjustment described in the Basis determination section below.

APPENDIX A

If Basis bids submitted to SoCalGas are less than 200,000 Dth/day, or less than 5 different companies submit Basis bids, then the Gas Commodity Reference Price will be composed entirely of 1st of the month published index prices from Inside FERC (50%) and Natural Gas Intelligence (50%). If Basis bids submitted to SoCalGas are at least 200,000 Dth/day but less than 400,000 Dth/day and are submitted by at least 5 different companies, then the Gas Commodity Reference Price will be composed of 25% of the average NYMEX futures prices plus Basis, as defined above, and 1st of the month published index prices from Inside FERC (37.5%) and Natural Gas Intelligence (37.5%). If Basis bids submitted to SoCalGas total 400,000 Dth/day or more and come from at least 10 different suppliers, then the Gas Commodity Reference Price will be calculated pursuant to the above formula (50% (Average of Futures Prices + Basis) + 25% IFERC +25% NGI).

For an illustration of the NYMEX based portion of the reference price determination, please see the attached Exhibit A pages 6 and 7. For a detailed example of the monthly procurement benchmark budget calculation, please see attached Exhibit A.

Basis Determination

Under Method One, the supplier submits a Basis bid and if SoCalGas accepts the supplier's bid, the supplier receives from SoCalGas the sum of two components: first, the value of the supplier's Basis bid; and second, the average of the nearby futures prices during the next month. In the context of the GCIM, nearby futures prices means the simple average of the daily settlement prices of the NYMEX natural gas futures contract during its last trading month (e.g., for July purchases, nearby prices mean the settlement prices for the August futures contract during its last trading month from the end of June to the end of July as the nearby month).

APPENDIX A

Under Method Two, the supplier submits a Basis bid and if SoCalGas accepts the supplier's bid, the supplier receives from SoCalGas the sum of three components: first, the value of the supplier's Basis bid; second, the average of the nearby futures prices; and third, the value of the intermonth spread as traded in the futures market at the time of the acceptance of the supplier' bid.

To contrast the two methods, under Method One, the supplier submits a Basis bid which potentially includes two components, both a location and time component, while under Method Two, the supplier submits a Basis bid which potentially includes only a single location component because under Method Two SoCalGas adjusts the Basis bid for the intermonth spread (or time component). To characterize each component, a location component accounts for the supplier's estimated value of the difference between delivery at Henry Hub (the location of the delivery under a futures contract) and delivery at the supplier's preferred delivery point while the intermonth spread accounts for any difference between the value of delivery for pricing under a futures contract expiring during the month of bidding (probably on the next day) and pricing under one expiring during the month following.

Before ranking the Basis bids, SoCalGas will adjust the bids as follows. For bids made under Method Two, SoCalGas will add the intermonth spread in the futures market at the time of the acceptance of suppliers' bids. All bids will be utilized to develop the benchmark and to meet the minimum bid requirement. California border bids will be adjusted to an average mainline equivalent by deducting the average unit commodity and fuel transportation rate as calculated for the commodity transportation dollars.

APPENDIX A

Tolerances

The tolerance, which is a percentage of the monthly gas commodity portion of the benchmark budget, reflects the security, reliability and volume take flexibility needs which may effect the price of gas. In addition, the tolerance reflects existing long-term contracts which have been found to be prudent but are above prevailing market prices and existing contracts which have not been challenged in previous reasonableness reviews. Tolerance above the benchmark will be 4½% for the first year of the GCIM and 4% for the next two years.

For a detailed example of the tolerance calculation, please see Exhibit A.

Actual Costs

SoCalGas' actual total annual purchased gas cost, like the annual procurement benchmark budget, is the sum of gas commodity dollars and transportation dollars (see Exhibit A).

The annual, actual purchased gas costs are the sum of twelve monthly total gas commodity purchases at the mainline, plus the sum of the twelve monthly transportation costs. Actual purchased gas cost is exclusive of purchases from PITCO, POPCO and the three existing long-term contracts, ARCO '90, Meridian '90 and Enron Bank.

The actual cost of gas for California contracts will be included in the actual purchased gas costs measured by the GCIM. The "actual" cost of California gas purchases will be reduced by an amount equal to the Minimum Purchase Obligation (MPO) costs allocated to the noncore in rates.

Monthly transportation demand charges are the pipeline weighted transportation demand charges for 848.5 MMcfd of core capacity minus core aggregation transportation plus core subscription transportation demand charges. In addition, should SoCalGas be

APPENDIX A

required to obtain additional monthly firm capacity to meet the needs of core customers, the transportation demand charges for such capacity will be included in the determination of the monthly actual transportation demand charges. Any such purchases will be reviewed by DRA in SoCalGas' annual GCIM filing and are subject to reasonableness review.

San Juan Lateral

In determining the monthly Benchmark Reference Price and Budget, San Juan Lateral capacity costs will not be directly included. However, the monthly pipeline basin weighting factor for the Transwestern San Juan Basin will be reduced by the actual San Juan purchases on Transwestern up to 200 MMcfd (down to a minimum of zero) and the monthly pipeline basin weighting factor for Transwestern Permian Basin will be increased by an equal volume up to 200 MMcfd. A shift from the San Juan Basin to the Permian Basin can be made even if SoCalGas brokers or releases any or all of the San Juan Lateral capacity.

Monthly pipeline demand charges for the San Juan Lateral capacity are to be considered as a core cost of gas when determining SoCalGas' monthly actual total purchased gas cost. Any revenues received from brokering San Juan Lateral capacity will be credited to core's actual total purchased gas cost.

Incentive Mechanism

On an annual basis, SoCalGas' actual total purchased gas cost is compared to the annual procurement benchmark budget and the annual procurement benchmark budget plus tolerances to determine if a reward/savings or penalty applies. If SoCalGas' actual total purchased gas cost for the year are less than the annual procurement budget, the difference constitutes a savings incentive to be shared 50/50 between shareholders and ratepayers.

APPENDIX A

If, however, SoCalGas' actual total purchased gas costs are above the benchmark budget plus tolerance, then the difference constitutes a cost penalty, and the portion over the budget plus tolerance will also be shared 50/50 between shareholders and ratepayers. The incentive to shareholders, 50% of the savings, is included as part of the total cost of gas procurement. Shareholder penalties are used to reduce the actual total cost of gas procurement which is recoverable in rates.

For a detailed example of the Incentive Mechanism sharing calculation, please see Exhibit A.

Refunds and Surcharges

Commodity cost refunds which are credited to the core purchased gas account (PGA) would be credited to the actual cost of gas in the month during which SoCalGas receives the refund. Refunds recorded to the PGA are very limited and are only recorded when the supplier refunds related to purchase gas costs have not yet been flowed through to customers in the form of adjustments to the Commission adopted portfolio WACOG that is set periodically in the utility's cost allocation proceedings. Commodity cost refunds which are not credited to the core PGA, but instead are refunded directly to customers, would not be considered in determining the monthly actual cost of gas.

Surcharge adjustments to the core cost of gas are treated as an additional cost in the month during which SoCalGas is billed. As long as any surcharge is the result of adjustments within a single 12-month Procurement Incentive Mechanism cycle (April-March), then considering these surcharges as an added gas cost in one month will have no effect on the Procurement Incentive Mechanism since SoCalGas makes an annual accumulation for purposes of determining any reward or penalty. If, however, the surcharge occurs due to adjustments across more than one procurement incentive

APPENDIX A

mechanism cycles, then a recalculation of the monthly actual costs of gas will be necessary to fairly reflect any potential Procurement Incentive Mechanism impacts.

In addition, any prospective refunds, surcharges, penalties, liabilities, or adjustments to purchases made during the term of the GCIM specifically in conjunction with existing long-term contracts shall be included as actual gas costs and are not subject to subsequent reasonableness review absent fraud or abuse.

Recovery of Rewards/Penalties

The annual GCIM filing will specify the rewards or penalties which have occurred due to operation of the GCIM and request Commission approval for inclusion of rewards or penalties in customer rates through an adjustment to the core purchase gas account (CPGA). DRA and other parties may review and respond to the request. SoCalGas will be permitted to adjust the CPGA once determination of the rewards or penalties is made after conclusion of the annual GCIM cycle.

PART TWO

STORAGE INCENTIVE MECHANISM PORTION OF THE GCIM

The Storage Incentive Mechanism portion of the GCIM is designed to provide SoCalGas with an incentive to reduce the cost of gas stored on behalf of retail core customers (core). The basic approach is to take advantage of opportunities to shift planned injection and/or withdrawal volumes away from higher cost months and into lower cost months. However, in order to insure that core's reliability of service needs are continually met, certain storage operating parameters are established. Decisions to shift volumes will, at times, be subject to operating constraints such as: peak day minimum inventory needs and planned/unplanned outages to storage or pipeline facilities. In addition, a base case for storage operations injections and withdrawals is established for purposes of determining

APPENDIX A

the amount of storage shifts which could take place. The following is a description of the storage operating parameters, base case storage operations, storage incentive mechanism, and other elements of the Storage Incentive Mechanism portion of the GCIM.

Storage Operating Parameters

During the three years of the GCIM, the following storage operating parameters will be observed:

- The core November 1 opening inventory reliability target is 70.0 Bcf, with an accepted variance of +5.0 Bcf.
- The core March 31 minimum inventory level is the March peak day month-end minimum, with an accepted variance of up to an additional 8.0 Bcf plus any volume not withdrawn as a result of the Swing Mechanism.
- The firm injection capacity reserved for core use is 327 MMcfd. The firm withdrawal capacity reserved for core plus wholesale (Long Beach and SDG&E) core is 3207 MMcfd.
- Total Core peak day month-end minimum inventory levels (Bcf) are set in the annual Operations Plan and are expected to be:

	<u>1995-1997</u>
January	25-35
February	10-15
March	3-5

These minimums are for SoCalGas' "Big 4" fields -- Aliso Canyon, Honor Rancho, LaGoleta and Montebello.

APPENDIX A

Operations within these parameters will be deemed to be prudent. Operations outside these parameters will be reviewed by DRA following SoCalGas' annual GCIM filing and ~~are could~~ be subject to reasonableness review.

Base Case Storage Operations

The Base Case for Storage Operation is for SoCalGas to inject an equal volume of gas each month ($\pm 10\%$) during the injection period of April through October to reach the 70.0 Bcf November 1 core inventory reliability target. This is described as levelized monthly injections for the core.

For the winter withdrawal period of November through March, core purchases, together with core storage withdrawals will be at levels sufficient to provide full and uninterrupted service to core customers under cold year conditions and maintain required peak day minimum inventory levels for Total Core as shown above.

The level of winter monthly core purchases will be determined by re-levelizing. Re-levelizing is the process of determining a steady-state purchase level which, together with the remaining storage inventory, will meet the forecast core demand under average temperature conditions over the remaining winter period, and assure that Total Core peak day inventory minimums are sustained. The re-levelizing process avoids large swings in purchase levels which would otherwise occur due to short-term events affecting operations.

Re-levelizing generally occurs on a monthly basis, but is done more frequently during extended periods of cold weather (and the resulting high core demand) or in order to sustain inventory volumes and minimum pipeline supply levels in the event of a peak day. Adjustments to purchases are averaged over the remaining winter period to establish the

APPENDIX A

new re-levelized purchase amount. SoCalGas' initial purchase level for the winter period is specified in its Annual Operations Plan. Although winter purchase levels for the three years of the GCIM have not been set, they are expected (under average temperature conditions) to be about 1,000 MMcfd.

Storage Incentive Mechanism

The Storage Incentive Mechanism is designed to take advantage of monthly price differences during the Basic Injection and Swing Withdrawal periods to reduce core's cost of gas. The NYMEX natural gas futures market is the price mechanism to be used for purposes of month-to-month price comparisons (spread) under the Storage Incentive Mechanism. Thus, the spread between two specific months during the Basic Injection or Swing Withdrawal period will be used to determine if shifts in injections/withdrawal decisions are to be made. If the futures price spread between two specific months is 10% or greater, then shifts in injection/withdrawal decisions are to be made.

In determining whether the requisite 10% spread exists, the futures price of a distant month must be at least 10% greater/less than the near month against which it is being compared. Volume shifts will be made on the basis of the largest percentage shift. In the case of equal spreads of at least 10%, the first available opportunity will be utilized to make a Storage Incentive Mechanism volume shift. To capture the price spread advantage for the Storage Incentive Mechanism, SoCalGas will use financial hedging opportunities on the futures market (see Storage Hedging). The Storage Incentive Mechanism consists of the following Basic Injection and Swing Withdrawal mechanisms.

Basic Injection

The volume subject to the Basic Injection Mechanism is equivalent to the March-ending retail core inventory level or a maximum of 5 Bcf, whichever is lower. The time period of

APPENDIX A

physical activity of this mechanism is April 1 through October 31. Thus, SoCalGas can shift between months during this period a maximum of 5 Bcf to reduce core's cost of gas.

To assure that core's costs will actually be reduced, SoCalGas will hedge the available NYMEX spread. Hedging requires that the hedged volume be actually injected (see Storage Hedging). Currently, core customers have firm injection rights of 327 MMcfd. They are also entitled to over deliver by 10% of their burn. SoCalGas will hedge only that extra volume which it is certain it will be able to inject for the hedged month (see Storage Hedging). Therefore, if only a portion of the 5 Bcf can be injected in the most desirable single month, SoCalGas will inject the balance of the 5 Bcf in the next most desirable month(s) providing that at least a 10% spread (based upon futures prices) exists.

SoCalGas will observe futures prices at least weekly, early enough to place hedging orders before the last trading day of the month. SoCalGas will place its hedging transactions for the Basic Injection Mechanism no sooner than during February. SoCalGas will document its observations and report them in the annual GCIM filing.

SoCalGas will act on the Basic Injection Mechanism, i.e. alter its injection pattern, up to three (3) times during the Basic Injection time period, or until a cumulative base volume has been injected ahead of, or delayed from, the levelized monthly injections if the 10% spread exists. For example, assume SoCalGas ends March at 5 Bcf, then levelized monthly injections of 9.3 Bcf ($\pm 10\%$) during April through October would be required to reach the November 1 retail core reliability inventory target of 70.0 Bcf. Each month, SoCalGas will analyze April-October futures prices for the April-October basic injection season. If futures prices are 10%, or more, higher in a distant month (triggering the mechanism) SoCalGas will, if possible, increase injections in the near month(s) by up to the "base volume" while reducing injections by a like amount in the subsequent month

APPENDIX A

from the levelized 9.3 Bcf/month ($\pm 10\%$). If futures prices of the lower month(s) are lower by 10% or more, SoCalGas will delay injections instead. An example of the Basis Injection Mechanism is included in Exhibit B.

Swing Withdrawal

The maximum volume subject to the Swing Withdrawal Mechanism will be 5 Bcf. The time period of physical activity for the Swing Withdrawal Mechanism will be February 1 through May 31.

If the futures price for either April or May is at least 10% higher than the futures price for either February or March, SoCalGas will decrease withdrawals by a maximum of 5 Bcf and increase purchases, i.e., in the month for which the action was taken. The month-end inventory in February and/or March could therefore be up to 5 Bcf higher than if the Swing Withdrawal Mechanism had not been triggered. Nevertheless, the upcoming Storage Injection Mechanism base volume would remain at a 5 Bcf maximum.

SoCalGas will observe futures prices at least once each week, early enough to place hedging orders before the last trading day of the month. SoCalGas will place its hedging transactions for the Swing Withdrawal Mechanism no sooner than during December. SoCalGas will act on the Swing Withdrawal Mechanism up to two (2) times during the Swing Withdrawal time period. SoCalGas will document its observations.

An example of the Swing Withdrawal Mechanism is included in Exhibit B.

APPENDIX A

Other Storage Incentive Mechanism Elements

Storage Hedging

SoCalGas will hedge its decisions relative to the mechanism and thereby reduce the financial impact of a change in cash prices in the month(s) affected by the decision. This will be done by buying futures (going long) in the month(s) of lower futures prices, and by selling futures (going short) in the month(s) of higher futures prices. The spread in the futures prices (the difference between the price of the futures bought and the price of the futures sold) for those months which SoCalGas decides to alter its storage plans will be realized when the position is liquidated. Because of the potential for change in basis, the net benefit to ratepayers may differ from the initial futures spread.

SoCalGas will attempt to manage placing its orders to minimize execution risk, i.e., impact on the market price. SoCalGas will either place spread orders at market or limit spread orders during the three-year program. Spread orders are placed in terms of a price differential rather than a percentage difference. When SoCalGas is attempting to lock in a spread near 10%, a confirmed spread of at least 8% will be considered acceptable.

All hedging gains and losses as well as transaction costs will be considered as a cost of gas and assigned to the core purchase gas account (CPGA).

Reward

The dollars associated with the Reward calculation will be a function of the NYMEX futures prices. The "spread dollars" will be the product of: 1) the differential between the futures prices for the months acted upon at the time of decision, and 2) the volume shifted. The Reward amount to SoCalGas' shareholders will be 10% of the difference between the spread dollars and transaction costs. The remaining cost savings being reflected in reduced core gas costs. All gains from Storage Incentive Mechanism, and the SoCalGas Reward

APPENDIX A

amount, will be reflected in the CPGA account and recovered from ratepayers when the CPGA account is amortized in rates.

Tolerance Adjustment

As a result of the Storage Incentive Mechanism shifting injection volumes between months, there will be an adjustment to the Procurement Incentive Mechanism tolerance budget. The adjustment (positive or negative) will be equal to the volume shifted multiplied by the difference (positive or negative) between the actual WACOG and the benchmark price for the months for which volumes are shifted. The reason for this adjustment is that if actual costs exceed benchmark costs, the tolerance budget will be increased by the difference between the actual costs and the benchmark price.

Carrying Costs

Impacts associated with the carrying cost of gas storage are assumed to be relatively minor and will be ignored for the purpose of determining the action and gains associated with the Storage Incentive Mechanism.

Accounting v. Operating Data

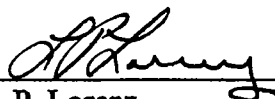
SoCalGas will operate and manage its inventories based upon recorded data (to the extent available) and operating data for the remaining period to date. All calculations of rewards under the Storage Incentive Mechanism will be based on recorded accounting data.

APPENDIX A

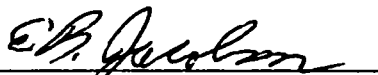
Reporting

SoCalGas will include within the annual GCIM filing a complete description and documentation of activities under the Storage Incentive Mechanism portion of GCIM and a determination of the resulting core cost savings and SoCalGas Reward amount.

Dated: October 15, 1993



L. P. Lorenz
Manager of Supply Operations
Southern California Gas Company



E. B. Jacobson
Deputy Director
California Public Utilities Commission
Division of Ratepayer Advocates

(END OF APPENDIX A)