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Decision No. 92497 DEC 5 - 1980

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

| In the Matter of the Application of SOUTHERN CALIFORNIA GAS COMPANY for authority to increase rates charged by it for gas service. | Application No. 59316 (Filed December 11, 1979) |
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(Appearances are listed in Appendix A.)

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## INTERIM OPINION

Southern California Gas Company (SoCal or applicant) seeks authority to increase its rates approximately $178.9 million (8.43 percent) annually at the estimated test year 1981 level of sales.

Two prehearing conferences and fifty days of hearing were held before Administrative Law Judge Mary Carlos during the period December 17, 1979 - July 9, 1980. The matter was submitted subject to the receipt of concurrent opening briefs due July 28 and concurrent closing briefs due August 12, 1980 and subject to oral argument on October 29, 1980.

Opening and/or reply briefs were received from SoCal, the Commission staff (staff), California Manufacturers Association (CMA), General Motors (GM), the cities of Los Angeles and San Diego (cities), San Diego Gas & Electric Company (SDG&E), Southern California Edison Company (Edison), Tehachapi-Cummings County Water District (Tehachapi), Kimberly-Clark Corporation (Kimberly-Clark), Western Mobilehome Association (WMA), Rockwool Industries, Inc. (Rockwool), and California Association of Utility Shareholders (Shareholders).

SUMMARY OF DECISION

This decision authorizes an increase of $142,726,200 in gross revenues for test year 1981 and authorizes an additional increase of $45,000,000 effective through step rates on January 1, 1982 to reflect the operational attrition expected to occur in 1982.

A return on equity of 14.6 percent based on a year end capital structure is authorized, resulting in a rate of return on rate base of 10.75 percent. This return will provide an after tax interest coverage of 2.4 times.

SoCal is given a definite conservation savings goal to reach by the end of test year 1981. The staff recommendation for a $5 million penalty on rate of return is rejected, but if SoCal does not achieve 60.6 Bcf savings in high priority sales by year end 1981, it will be penalized $1.0 million for each 1.3 Bcf it falls short of the goal. If SoCal achieves in excess of 63.7 Bcf savings by year end 1981, it will be rewarded by $1.0 million for each 1.3 Bcf it exceeds our goal. Both reward and penalty have maximum amounts of $5 million.

SoCal is authorized to recover the expenses of the WESCO project in the amount of $8,315,000 which represents the prudently incurred expenses exclusive of Allowance for Funds Used During Construction (AFUDC). No rate base treatment is allowed but the amortization period is shortened to four years.

Major rate design issues addressed include retention of the $3.10 residential customer charge and revision of the basis for calculation of wholesale rates to exclude allocation of SoCal's conservation expenses to SDG&E. Rates will be spread in conjunction with the rate reduction being ordered in our decision on SoCal's Application No. 59929 issued today.

Public Witness Statements and Testimony

Public hearings were held in Los Angeles, San Bernardino, Palm Springs, Ventura, and Bakersfield during January 1980 to provide SoCal's customers with an opportunity to comment on the rate increase application. Sixty-eight people gave either statements or testimony. The presentations were made largely by senior citizens who were almost uniformly opposed to the rate increase. They spoke of the frequent increases in rates (making no distinction between increases coming as a result of Consolidated Adjustment Mechanism proceedings (CAM) and those resulting from general rate increase applications such as this one), and of the fact that their bills continued to rise despite the fact that they were using less gas this year than last. Many noted that SoCal proposed to increase its customer charge to $6.50 and stated that they felt that this was in conflict with the idea of conservation since that amount would double their current bill regardless of whether they effected any saving of gas through conservation measures. People were particularly concerned with the ability of senior citizens and those on low or fixed incomes to pay continued utility increases. There were comments on the size of the requested increase and on the proposed distribution of that increase, which falls most heavily on the residential ratepayer according to SoCal's rate design. In addition to the public witnesses who appeared at hearing, approximately 400 letters were received by the Commission and are a part of the formal file in this matter. The letters addressed the same concerns that the public witnesses spoke to. We will consider all of these concerns in our disposition of this matter.

Transcript Corrections

Parties were directed to submit requests for transcript corrections by letter served on all parties not later than July 10, 1980. Exceptions were to be taken by the due date of the opening briefs, July 28, 1980. Those corrections not protested would be placed in the formal file as approved. Requests for transcript corrections were received from SoCal and the staff. The staff took exception to several of SoCal's proposed changes as not being corrections in the true sense of the word, but rather attempts to change the meaning or to clarify testimony, of both its own witnesses and the staff witnesses. Only one specific example was given and the staff in its reply brief has apparently withdrawn its objection to that particular correction. We have reviewed the requested corrections and will approve them.

SOCAL'S PRESENT OPERATIONS

SoCal is a public utility engaged in purchasing, distributing, and selling natural gas to customers in the counties of Los Angeles, Fresno, Imperial, Kern, Kings, Orange, Riverside, San Bernardino, San Luis Obispo, Santa Barbara, Tulare, and Ventura. SoCal also sells gas at wholesale to the Municipal Gas Department of the city of Long Beach and to SDG&E.

SoCal owns underground storage fields at Playa del Rey and Honor Ranchero in the Los Angeles area and Ten Section Field in Kern County. SoCal, under its contract with Pacific Lighting Service Company (PLS), operates storage reservoirs owned by PLS at Goleta, Montebello, East Whittier, and Alison Canyon.

As of December 31, 1978 SoCal's transmission system consisted of 2,246 miles of pipelines and its distribution system contained 32,905 miles of various size mains and its 2,913,976 gas services supplied 3,636,293 active meters.

The capital stock of SoCal is 93 percent owned by Pacific Lighting Corporation (PLC), a holding company which also owns all of the outstanding capital stock of PLS. PLC also owns 26 nonregulated subsidiaries engaged in utility-related enterprises such as the exploration, development, transportation and sale of natural gas, coal gasification companies, sales assistance, equipment leasing, petroleum products companies, and in nonutility enterprises such as mortgage loan servicing, building construction real estate development, furniture sales, agricultural growing, packing, and marketing services.

PLS is a public utility engaged in acquiring, transporting, storing, and selling natural gas for resale exclusively to SoCal, the distributing affiliate. PLS sells gas to SoCal under a Cost of Service Tariff authorized by Decision No. 76598 dated

December 23, 1969 and subsequently modified from time to time. Included in the cost of service is the rate of return found reasonable by the Commission for SoCal.

As of December 31, 1978, PLS owned 940 miles of natural gas transmission pipelines, including 19 miles owned jointly with SoCal. PLS also owns the Ten Section underground storage field in Kern County.

SoCal and PLS purchased gas in 1979 from various California sources, including Pacific Gas and Electric Company (PG&E), and from out-of-state sources such as El Paso Natural Gas Company (El Paso), Transwestern Pipeline Company (Transwestern), Federal Offshore, and Pacific Interstate Transmission Company, Northwest and Southwest Divisions (PITCO-NW and PITCO-SW, respectively).

## CONSERVATION

Background

In Decision No. 84902 dated September 16, 1975, we identified conservation as the most important task facing the utilities today and stated our intention to make the vigor, imagination, and effectiveness of a utility's conservation efforts a key question in future rate proceedings and decisions on supply authorizations.

In Decision No. 86595, dated November 2, 1976, we authorized SoCal to expend the amount of $7,244,000 for conservation programs (including $2,500,000 for conservation advertising). We noted that we expected a continued expansion of SoCal's efforts in conservation and required SoCal to perform studies to determine the effectiveness of its conservation programs. These studies were to include an assessment of the degree and effectiveness of efforts to distribute information and to market conservation hardware, with estimates of cost-effectiveness and resulting energy savings. We directed SoCal to take the initiative to develop and bring before the Commission programs of incentives, including but not limited to subsidies, low-interest loans and modified rates, for inducing conservation-oriented behavior and investment by end users. We placed SoCal on notice that we would adjust its rate of return upward or downward in subsequent proceedings as the evidence indicated.

In Decision No. 89710 dated December 12, 1978, we authorized $21,777,910 for conservation-related expenditures, including $2,923,000 for advertising and $11,592,700 for the insulation incentives program planned by SoCal in Case No. 10032. In the event that the planned programs were denied by any determination in Case No. 10032, the $11,592,700 was to be applied to other

conservation activities with emphasis directed to the installation of hardware devices primarily for residential gas customers. These alternate programs were to meet the following criteria:

1. Funds shall be used only for cost-effective programs.
2. The programs should emphasize more direct communication with customers and less media advertising.
3. Program emphasis should be directed to the high priority residential and small commercial gas customers.
4. The programs should emphasize the installation of proven conservation hardware (such as water heater insulation and furnace filter replacement).
5. Expanded residential energy audit activity as defined in the National Energy Act may also be an appropriate candidate program element.

In this proceeding, SoCal requests $34,678,000 in conservation expenses including $4,428,000 for general advertising for test year 1981.

Position of the Parties (Conservation)

Position of SoCal

Testimony on conservation was presented on behalf of SoCal by its policy witness, Harvey Proctor, Chairman of the Board, and by Michael Neiggemann, manager of Market Services. Witness Proctor addressed the matter of the 0.25 percent conservation adjustment, which SoCal has included in its requested rate of return and witness Neiggemann addressed SoCal's various conservation programs.

Witness Proctor testified that SoCal was without rival in its accomplishments in the field of conservation, recognizing many years ago the major changes which have since occurred in

the energy market. He stated that past SoCal conservation programs have resulted in a significant decrease in customers' annual gas usage per meter and that SoCal has received recognition for its success in conservation from the Federal Energy Administration, Los Angeles County Board of Supervisors, and the American Marketing Association, among others. SoCal believes that few utilities can match its conservation achievements. It is appropriate, he thinks, to reward SoCal for this achievement by adjusting its rate of return upward by 0.25 percent.

Witness Neiggemann testified that SoCal had designed an expanded overall conservation program for Test Year 1981 titled Energy Efficiency Conservation Plan (EECP) consisting of 72 separate conservation programs. He noted that the total projected expenses related to Market Services' activities for the promotion of the EECP were $38,447,000, comprised of $34,678,000 for conservation programs and $3,769,000 for service-related expenses. The total conservation and service expenses are 54.2 percent greater than the amount allowed in SoCal's last general rate case. The application contains some funds for activities such as the Residential Conservation Service (RCS) mandated by the National Energy Act of 1978. SoCal estimates as much as $14,250,000 additional funding may be required to implement the state RCS program when it is developed. Funds for implementing any activity under Order Instituting Investigation (OII) No. 42 are not included. Neiggemann estimated that almost $40 million dollars additional funding might be required for 77,000 solar installations.

The current EECP had its genesis in the Voluntary Load Reduction Plan (VLRP) in 1975. Neiggemann testified that this major program was designed to stretch existing gas supplies to fulfill customers' basic energy needs until new long-term supplies

reach the southern California market. Subsequent programs were designed to bring about a change in all customers' attitudes concerning energy usage. The current EECP expands previously successful programs and introduces new ones with the emphasis on encouraging SoCal Customers to take voluntary actions which are supportive of the conservation objectives outlined in both state and federal energy goals.

SoCal's 1981 EECP is designed to effect a 10.2 percent savings in gas use amounting to 251,180 M therms for 1981. This figure was developed through use of a simulation model and consists of 185,331 M therms specific savings and 65,849 M therms general savings. When added to savings attributable to previous years of 286,280 M therms a total savings of 537,460 M therms results.

SoCal's EECP is divided into six program descriptions: energy efficiency audits, new construction, solar, direct company merchandising, product and energy efficiency improvement, and general. Although individual programs are discussed throughout Neiggemann's testimony, they are presented in general terms only, and savings, goals, and justifications for each are not provided as a part of SoCal's original direct showing. However, in response to a data request, SoCal provided the staff and subsequently had entered as an exhibit in this proceeding, individual program descriptions which include the program objective, its description, its goal, the savings, and the justification for the program. We found this detail very helpful and will require that SoCal include similar detail for any future proposal for conservation programs.

In addition to its direct presentation on its conservation programs, SoCal takes issue with certain conclusions reached by the staff. In response to these conclusions, SoCal believes that:

1. It has complied with Finding 19 from Decision No. 89710.

2. Its penetration of the attic insulation retrofit market exceeds that of PG&E, and is only slightly less than that of SDG&E.

3. Its conservation programs show vigor and imagination.

4. It did implement conservation programs to accelerate residential insulation penetration during the pendency of the rehearings in Case No. 10032.

5. Its policy of hiring contract labor for conservation programs does not indicate lack of a long-term commitment to conservation.

6. Its hiring policy does not reflect a difference in attitude toward conservation projects as opposed to new supply projects.

7. Its approach to the solar market is not an "all or nothing" approach and its solar activities do not indicate any lack of commitment to energy conservation.

8. Its actions in Case No. 10032 and in OII No. 13 have not caused delays in accelerating penetration of the retrofit attic insulation and solar markets.

9. It should not be penalized because of any lack of improvement in its energy conservation programs but rather should be rewarded by increasing its rate of return 0.25 percent for its successful conservation activity.

Neiggemann's prepared testimony addresses three general elements of SoCal's EECP: direct merchandising, advertising, and cost-effectiveness. With respect to direct merchandising he notes that once a conservation opportunity is identified, there is no guarantee that a product can or will be marketed without a pioneering effort. SoCal not only engages in the actual merchandising

and promotion of such products but develops approaches to interest retailers in marketing the product. He gave the water heater insulation blanket sales program as an example.

He characterized advertising as "marketing conservation" and indicated that SoCal considered advertising as the most cost-effective way to communicate to its customers the need for conservation, and effective ways to conserve energy. SoCal contends that the effectiveness of the EECP is directly related to the willingness of its customers to take conservation action. It divides its communications into two categories: energy information and energy efficiency. The first communicates the reasons natural gas should be used efficiently and the second explains how to do it. SoCal's position is that advertising is a key element in a continuing effort to convince consumers of the need to conserve and that there are cost-effective ways to do so.

SoCal takes issue with staff recommendations to reduce the level of spending for particular programs arguing that this Commission cannot reasonably expect SoCal to pursue such programs with vigor if it blocks SoCal's efforts by refusing to authorize the necessary funds. It particularly objects to the reduction in advertising expense as being inconsistent with the staff recommendation for increased communications with customers, and to the reduction of expenses for incentives to motivate industrial customers to install conservation devices.

SoCal maintains that it shares the Commission's concern for the need for conservation and the efficient use of natural gas, and that it has actively pursued conservation activities even during the pendency of the litigation in Case No. 10032. It points to its promotion of solar energy (which it terms as aggressive in light of existing market conditions), to the Solar-Assisted Gas Energy (SAGE)

project and to its direct marketing of insulation and the penetration of the residential retrofit market as illustrative of its successful achievement. It is particularly concerned that the staff has recommended that the unexpended funds authorized by Decision No. 89710 for insulation incentives (estimated by the staff to be about $3.5 million) be returned to the ratepayer through a reduction in the amount requested in the present proceeding. SoCal points out that Commission Resolutions Nos. EC-1 and EC-2 authorize use of these unexpended funds to support other conservation programs.

SoCal points out that its commitment to conservation is long-term and is consistent with acquisition of new supply. It takes issue with the staff position that its attitude is inconsistent with the Commission's general energy conservation policy and that its activities (including the use of contract labor rather than permanent utility employees for certain conservation activities) are short-term or temporary in nature, designed to save energy only until new supplies become available. It argues that its use of contract labor is more economical and has no bearing on its commitment to conservation goals. This commitment, according to SoCal, can be clearly seen when its entire conservation effort is analyzed.

Finally, SoCal believes that it has complied with Finding 19 in Decision No. 89710 requiring certain measures to improve its existing conservation measurement methods.

Position of the Staff

Testimony from the Commission staff was presented by Maurice Monson, Marshall Enderby, and Sesto Lucchi from the Energy Conservation Branch and by Barbara Barkovich, the Director of Policy and Program Development (now the Policy and Planning Division). The staff report covered the areas of quantitative

measurement, individual program analysis, overall conservation program evaluation, and evaluation of SoCal's conservation policy. The staff recommends a reduction of $4.5 million in the expense levels requested by SoCal and imposition of a $5 million penalty in the form of a rate of return reduction for inadequate conservation efforts. Staff recommendations in specific areas are discussed below.

Quantitative Measurement

The staff found major deficiencies in SoCal's measurement program in the following areas: the determination of general and specific savings, the timely response to Commission directives, and the forecasting methodologies used.

The staff contends that under SoCal's present method of calculating general savings, it is impossible to determine which savings accrue as a result of SoCal's programs and those which accrue from the effects of others' efforts.

The staff also believes that SoCal has not yet complied fully with Finding 19 in Decision No. 89710, specifically subparts a, d, and e. While the staff notes that SoCal is in the process of developing the conditional demand methodology which responds to Finding 19, subparts a, d, and e, this did not begin until July 1979, well after the 120-day deadline set forth in Decision No. 89710.

Finally, staff recommends that SoCal use forecasting methodologies which can deal explicitly with factors such as conservation, technological change, and regulatory change. These methodologies should incorporate data from each of these factors independently and should allow for sensitivity analysis of important explanatory variables.

Program Analysis

The staff recommends a downward adjustment to SoCal's conservation program of approximately $4.5 million which includes:

a. A reduction of $3,533,000 to the Insulation Incentive Program amortizing the unexpended portion of SoCal's allowance from the last rate case.

b. A reduction of $95,000 to Professional Communications Programs reducing use of media in conservation programs.

c. A reduction of $932,000 to the Industrial Equipment Improvement Program deleting monetary incentives for industrial customers.

d. A reduction of $3,000 based on the staff estimate of inflation.

The staff also recommends reductions of:

a. $2,543,000 for Conservation Advertising Expense, reducing use of media in conservation programs.

b. $156,000 for Customer Installation Expense based on the history of costs allocated to this account.

c. $64,000 deleting Programmed Heating from the direct merchandising program.

d. $8,000 based on staff estimates of inflation rates.

In addition to the dollar adjustments to SoCal's conservation programs, the staff recommends that SoCal:

1. Aggressively pursue a goal of 90 percent penetration of the retrofit ceiling insulation market by March 1983.

2. Increase customer contact, particularly in the residential sector.

3. Make periodic post-audit surveys of its 1980 Residential Audit Program.

4. Offer residential audits free of charge to SoCal's customers.

5. Train and directly supervise auditors for its residential audit program and rely less on contract personnel.

6. Extend its toll-free Telephone Hot Line Program to Saturdays from 8 a.m. to 5 p.m.

7. Propose a solar water heater demonstration financing program consistent with Commission Decision No. 91272.

8. Accelerate the Low Temperature Industrial Solar Application Research and Development Project.

9. Discontinue its direct sales Home Insulation Program and in its place substitute a program with the following features:

   a. A referral list of contractors which would allow participation by all eligible contractors in SoCal's service territory.

   b. Criteria of eligibility for participation by contractors.

   c. A post-installation inspection.

   d. Use of cellulose that meets federal standards.

10. Implement a weatherization program for the residential rental market.

11. Resume the aggressive marketing of Solar Swimming Pool covers as soon as possible.

12. Expedite its test market program for the Ecomatic System.

13. Seek means of increasing hardware sales through its Home Improvement Center Program.

14. Attempt to improve the marketing of flow control devices and water heater blankets.

15. Exhort the American Gas Association to establish suitable procedures for furnace modifications.

16. Improve the precision of measurement of energy savings of its programs including the Residential Reduce for existing multi-family dwellings and the Master Meter Conversion Program.

17. File the conditional demand study as an exhibit in this proceeding.

18. Provide the following information with its EECP due December 1 of each year:

    a. Estimated cost of each program on the same basis used in the prior rate case.

    b. Estimated costs of Program and General Advertising.

    c. Estimated cost of General Administration Expenses.

    d. Estimated General Savings for the forecast calendar year.

    e. The maximum potential of each device or program.

    f. Estimated gas sales by class of service and by end use priority group for the forecast calendar year.

19. In its Energy Efficiency Conservation Report due March 31 of each year SoCal should provide the following information:

    a. Status report of each new program and program discontinued.

    b. Reasons for any significant difference between energy savings forecast and recorded.

c. Number of solar installations installed in SoCal's service territory.

d. Separately reported energy savings due to commercial audits, and due to industrial audits.

20. Both December 1 and March 31 reports should have:

a. A format consistent with that used in the prior rate case.

b. Workpapers supporting the report.

c. Energy savings, program cost, and cost per therm saved forecast/recorded for each program.

d. Number of insulation jobs, solar, or other conservation devices sold/installed, recorded/forecast for each program.

e. Man-years forecast/recorded for each program.

f. Estimate of market penetration of attic insulation, for each conservation device and for solar devices.

g. Total recorded costs of Market Services; General Administrative and transferred costs to AC 879 and AC 903.

21. Report the following quarterly:

a. Sales of each conservation device directly merchandised.

b. Number of insulation jobs completed by SoCal and by others.

c. Number of square feet of attic space, units directly under the attic and number of structures insulated in rental housing in SoCal's service territory by SoCal and by others.

d. Present saturation, company goals, and total potential for each device.

22. Implement a weatherization training program for CETA employees.

23. Plan and file an application providing for zero interest financing of all cost-effective residential gas conservation measures.

Evaluation of the Overall Conservation Program

The staff recommends a reduction in SoCal's gross revenues of $5 million as a penalty for inadequate conservation efforts and for failure to improve its conservation program effort since the last rate case. The staff recommends that this penalty be lifted at the earliest on January 1, 1982 but in no event until SoCal has developed and implemented the following conservation activities and program elements:

1. An in-home residential energy audit program meeting the objectives of the Department of Energy - Residential Conservation Service Program.

2. A Zero Interest Financing Program for all natural gas conservation measures determined to be cost-effective during the in-home residential audit.

3. Discontinuance of the direct sales program for retrofit attic insulation.

4. An insulation contractor referral program.

5. The referral program should use contractors supplying any insulation materials approved by federal, State of California, and local county or city governments.

6. Weatherization and solar training centers to train weatherization technicians.

7. A program to track the energy conservation measures undertaken by all customers and to determine the resulting energy savings by measurements at the meter.

8. Programs to assist small businesspersons to improve their efficient use of natural gas.

9. Termination of the $50 cash incentive for retrofit attic insulation upon implementation of items (1) and (2) above.

10. The large scale solar financing (demonstration) programs as directed by Decision No. 91272 issued January 29, 1980 in OII No. 42.

11. Accelerated conservation activities to approach the staff's 20 percent goal.

12. Greatly accelerated insulation programs.

13. Ratepayer-supported public statements by the company supportive of the overall conservation effort of the utility that has been approved by this Commission.

14. A more complete measurement program.

15. A more complete solar information program.

16. A vigorous and effective retrofit insulation rental market program.

SoCal's Energy Conservation Policy

Barkovich reviewed SoCal's conservation program to assess the consistency of its activities with Commission policy directives and with the actions of other utility companies in regard to stated Commission energy policy. She discussed the general outlines of the Commission's energy conservation policy and reviewed certain management practices of SoCal which appeared to her to demonstrate a poor attitude toward energy conservation as a cost-effective investment opportunity as a long-term energy supply source. Her specific review was concentrated on SoCal's efforts in the areas of insulation financing and solar energy.

She concluded that SoCal's efforts were insufficient and that its rate of return should be reduced. She did not quantify a rate of return adjustment. She further recommended that SoCal be given an opportunity to recover the related lost revenues after the test year if its energy conservation efforts improve sufficiently. When asked to clarify this recommendation, she indicated that she intended to recommend that SoCal be treated in the same fashion as PG&E in Decision No. 91107 with respect to the opportunity to remove the penalty.

Position of Cities

The cities filed a joint brief in this proceeding and they represent a single position on the issue of conservation. The cities agree with the conclusion of the staff that SoCal has not engaged in the vigorous and imaginative pursuit of energy conservation; however, the cities believe that the staff-recommended penalty of $5 million is inadequate. The cities recommend a minimum $10 million penalty as an incentive to SoCal to pursue energy conservation programs aggressively. The cities believe that SoCal is not spending funds authorized by this Commission for conservation programs wisely and that its programs are not cost-effective.

Neither city presented witnesses on the conservation issue. As a consequence, they relied primarily on the reports and testimony of staff witnesses in support of their position that SoCal's conservation performance is poor. The cities discussed SoCal's conservation performance in the areas of insulation, solar, and quantitative measurement as illustrative of their position that SoCal has failed to demonstrate to the Commission that it was making a good-faith effort in the area of conservation.

The cities alleged that SoCal has disregarded the Commission mandate for energy conservation in an arrogant, flippant manner and that inasmuch as SoCal will not voluntarily join the Commission and other utilities in the spirit of energy conservation, the Commission must exert pressure in the form of a significant monetary penalty.

Discussion

In Decision No. 91107 dated December 19, 1979 in PG&E's Applications Nos. 58545 and 58546 we reiterated our commitment to the promotion of energy conservation and the use of alternative energy resources. We stated in unequivocal terms: "Where the marginal cost of conserved energy is less than the marginal cost of new supply, the former should always be the investment of choice." (Mimeo p.152.) We stated that we expected the energy utilities we regulate to make these principles central in their planning and investment decisions. We repeat that admonition here because we believe that there is a large conservation potential in SoCal's service territory that has not yet been tapped and because we are not convinced that SoCal's 1981 EECP effectively realizes this potential.

Conservation Goals

By letter dated January 4, 1980, SoCal was directed to "state your goals for accomplishing market saturation of cost-effective conservation programs within a reasonable time frame." SoCal's response to this directive was made in six paragraphs set forth in Exhibit 51. SoCal agreed that goal-setting was important, indicated that it had concentrated on a goal-setting procedure for the retrofit insulation market because it appeared to offer the greatest opportunity for savings, and concluded that it recognized the important of goal-

setting and its application to all programs. In expanding the retrofit insulation approach to its other activities SoCal states: "This effort will include a consideration of the marginal cost of gas supply in the projection of annual goals moving toward cost-effective saturation of potential."

This reply is a prime example of what we find so disappointing about SoCal's energy conservation efforts. In a word, it's a platitude. It sounds good yet says nothing specific. The very essence of a good conservation program is its goal. Without this, individual programs simply become receptacles for increasing amounts of dollars with no firm objective in sight. The level of conservation spending for all the utilities which we regulate is too high for us to accept such vague generalities in lieu of well-defined goals. We would be shirking our duty to the ratepayer if we were to continue to authorize such high levels of conservation expenses without requiring the utility to state its goals. It is obvious from this response that SoCal has a lot of work to do to develop its conservation program goals.

In establishing specific goals, SoCal should be guided by the following overall goal: All currently cost-effective conservation potential shall be achieved to the level of effective market saturation by 1986. This is five years after the test year in this case, and eleven years after we stated our intention to make the vigor, imagination, and effectiveness of a utility's conservation efforts a key question in future rate proceedings and decisions on supply authorization.

Some conservation technologies are likely to achieve effective market saturation more rapidly than others. For example, retrofit attic insulation is shown in Exhibit 51 at 15 percent

penetration, duct insulation at 29 percent, and shower flow restrictors at 8 percent penetration. With vigorous promotion and participation by SoCal, we would expect to see market saturation for these programs well before 1986.

Some programs may require additional time. For any cost-effective conservation technology for which SoCal feels it cannot achieve effective market saturation by 1986, or any program for which it believes it is not cost-effective to pursue further increments of market saturation, it will be required to make a convincing showing to this Commission. Extensions of time and shifts in emphasis will be granted on a case-by-case basis.

With respect to SoCal's goal-setting, we direct it to do the following:

> Develop and submit by July 1, 1981, a more rigorous methodology for projecting conservation goals for its programs. The submission shall clearly indicate both its evaluation of what constitutes effective market saturation for each technology for which it has identified potential and its goals for achieving such saturation in each sector of its service territory.

We recognize that the likelihood of achieving conservation potential will vary among markets. SoCal's statement of goals must clearly reflect an examination of projected and actual market responses, as well as program cost-effectiveness.

We recognize that the staff in this proceeding has not provided any detailed analysis of appropriate conservation goals; however, it is our belief that this is essentially a utility management function and the initial effort at least ought to come from SoCal. We initiated a staff program in Decision No. 91107 to develop, update, and monitor progress toward definable goals for PG&E. We will do the same thing in this proceeding for SoCal. These goals will be used to evaluate SoCal's conservation program performance in the next general rate case.

Cost-Effectiveness

SoCal uses the life cycle savings to determine the cost-effectiveness of each of its conservation programs. While its costs per therm to the customer and to society at large are calculated for each program, SoCal provides no comparison with the marginal price of energy. We expect to see such a comparison in future rate proceedings. This cost will permit a comparison between the cost to society of the last increment of energy conserved and the equivalent unit of new energy supply. Where the comparison shows that conservation energy is cheaper than new supply, it is obviously economic for a utility to promote conservation programs.

The staff has reviewed all of SoCal's programs for cost-effectiveness and finds that costs per therm for all except the Programmed Heating/Water Heating device (one of the direct merchandising programs) were below the marginal cost of gas.

It is clear from this comparison and from a comparison of SoCal's estimated cost of conservation of $.133/therm annually and $.022/therm on a life cycle basis with its estimate of $5.77/Mcf as the cost of gas in 1981 strongly suggests to us that an expanded conservation effort is desirable.

With respect to cost-effectiveness comparisons, we direct SoCal to:

> Expand its program cost-effectiveness in figures to include marginal cost of conserved energy, in addition to the average cost of conserved energy.

Measurement of Conservation Savings

Tied hand in hand with cost-effectiveness is the measurement of specific and general savings. Cost-effectiveness of a conservation program relies on energy savings generated by

the program (otherwise referred to as specific savings). General savings are the total market savings minus specific savings and savings of prior years. Program costs divided by savings equal the cost of conservation in $/therm.

As pointed out previously, there are problems with the accuracy of SoCal's measurement of estimated savings. General savings do not relate directly to a level of expenditure of any SoCal conservation program and may, in fact, represent savings due to efforts of entities other than SoCal. Estimates of specific savings per installed conservation device are not based on actual use data and do not take into account any synergistic effects of conservation hardware.

We recognize that the problem of accurate measurement of energy conservation savings is a difficult one; however, the problem was brought to SoCal's attention in the last rate case, with specific direction to improve its conservation measurement methods. (Finding 19, Decision No. 89710.) SoCal presently estimates having the results of the conditional demand analysis model near the end of 1980 for the residential market and in mid-1981 for the commercial/industrial market. Because of the complexity of this undertaking, we will not find SoCal in noncompliance with Finding 19. We do observe, however, that SoCal did not begin to use the conditional demand analysis technique until July 1979. SoCal may find this initial delay costly in terms of having the tools to meet the conservation goals we set forth herein. We do not expect that SoCal will fail to meet any of the deadlines we set in this order.

With respect to measurement, we direct SoCal to do the following:

1. File the conditional demand analysis for the residential market 15 days after the effective date of this order.

2. File the conditional demand analysis for the commercial/industrial market on or before June 1, 1981.

We expect these filings to respond specifically and in detail to items a, d, and e of Finding 19 in Decision No. 89710, which are set forth below:

"a. Analyze and describe the impacts of price on gas consumption (especially for commercial and industrial gas use). Relate such price (rate increase) effects to the conservation projections for the various sections. Identify reductions in gas consumption due to price (rather than conservation) as precisely as possible."

* * *

"d. Improve the ten year cumulative conservation estimates by adding data (to the GUESS program) about the actual effectiveness of SoCal's programs such as commercial and industrial energy audits. Attempt to make the computer-modeled savings account for the <u>total</u> estimates of savings. Avoid arbitrary adjustments aside from the modeled savings (e.g, setting conservation estimates at 125 percent of the previous year's estimates)."

* * *

"e. Alternatively, consider using a multiple regression approach to determine the overall impact of conservation programs. However, because of the limitations noted earlier with respect to a time series multiple regression approach (lack of data, etc.), methods a. through d. are likely to yield greater benefits per dollar spent, especially since they can be used within SoCal's operational GUESS program."

Conservation Potential

Conservation potential is the quantity of energy that could be saved cost-effectively if every possible conservation action were taken by all parties. Although potential is difficult to measure and is dependent upon savings to date, it is a fixed engineering quantity, independent of public attitudes or customer willingness. SoCal has historically evaluated the conservation potential in the residential sector from a device perspective rather than on a volumetric approach, and constrained these device-specific potentials by various factors such as available product, available contractors, and available manpower. Nonresidential conservation estimates have been addressed from the standpoint of what SoCal felt could reasonably be achieved.

Neither of these approaches is consistent with the term "potential" as defined above. By definition "potential" is not constrained by any factor. We believe that knowledge of the total potential conservation available in any market sector is basic to setting goals for conservation. Once potential conservation is established, the likelihood or expectation of achieving it can be factored into the equation to develop forecasted savings.

With respect to conservation potential we direct SoCal to:

> Develop and submit by July 1, 1981, a clear statement of gas conservation potential in each sector of its service territory (i.e., residential, commercial, industrial, and by priority group). It is desirable that the statement be based on experimental data to the maximum extent possible. Areas of uncertainty and the sensitivity of the final estimate to that uncertainty must also be identified.

SoCal Programs

Because of the action we propose to take as prescribed under the heading Negative Adjustment herein, we are going to authorize conservation expenses at a level close to what SoCal is requesting in this proceeding in order to afford it the best opportunity of increasing its projected conservation savings. We will, however, set forth certain deletions, mostly notably in the level of advertising expenses, and direct that the dollars deleted from this area be diverted to other programs.

Because SoCal has such a large number of programs comprising its EECP we will not analyze them individually here, except where we are making specific program deletions. Instead, we will discuss SoCal's EECP by general category as SoCal has set out in its presentation. In doing so, we note that 72 programs may well be too many for effective management and aggressive pursuit and urge SoCal to consolidate or otherwise reduce their numbers considerably. Since we are adopting a level of expense for each general category rather than for each specific program, we leave the decision of which programs to eliminate or consolidate (other than those we specifically delete) to SoCal's management. We express our concern that programs such as awards and energy efficiency centers may not contribute to savings identifiable with SoCal's efforts. Since we will be basing our judgment on SoCal's success or failure at achieving our savings goal on those savings directly attributable to SoCal's conservation efforts, expenditures on such programs may be money down the drain. On the other hand, such programs may support other productive programs such as residential audits, and therefore may represent

prudent expenditures despite lack of identifiable savings. We leave this judgment to SoCal's management. The following table sets forth SoCal's 1981 conservation program cost estimates, the staff estimates, and the adopted level of expenses:

| Program Category | SoCal | Staff | Adopted |
|---|---|---|---|
| | (Dollars in Thousands) | | |
| Energy Efficiency Audits | $5,809 | $5,583 | $5,583 |
| New Construction | 2,633 | 2,522 | 2,522 |
| Direct Company Merchandising | 115 | 51 | 51 |
| Solar | 1,208 | 1,127 | 1,127 |
| Product and Energy Efficiency Improvement | 19,326 | 13,933 | 17,564 |
| General Advertising | 4,428 | 3,131 | 3,131 |
| Total Conservation Programs | 33,518 | 26,348 | 29,978 |
| General Administrative Expense | 1,275 | 1,275 | 1,275 |
| Less Direct Company Merchandising | (115) | (51) | (51) |
| Reallocation Funds | - | - | 1,500 |
| Total Conservation Programs | 34,678 | 27,572 | 32,702 |

(Red Figure)

In authorizing $32,702,000 for energy conservation expenses we believe this amount is reasonably necessary to achieve the conservation goals we have established, however, any funds authorized herein for energy conservation expenses which are unexpended at the end of 1982 will be subject to refund to the ratepayers.

1. Energy Efficiency Audits

SoCal groups conservation programs which involve direct contact by utility personnel with customers under this heading. The 27 programs in this group will assess energy use, identify areas of potential conservation, and make recommendations to motivate customers to change their energy use habits voluntarily and invest in conservation products.

We note that there are 8 awards programs and 4 energy center programs in this general category. As SoCal itself has noted, the remaining areas with potential savings are going to prove more difficult to achieve than those achieved under prior plans. We think that a more aggressive approach, particularly in the area of residential and commercial audits and the multi-family residential programs, might produce more striking results in terms of savings. We have not deleted any programs in this category; the sole difference between the utility estimate and our adopted expense is due to advertising expenditures in excess of those levels set forth in Decision No. 89710 adjusted for inflation.

We observe that SoCal began offering residential audits in 1980, pursuant to Resolution No. EC-2 dated June 17, 1980. To encourage greater participation in this program and until further determination of the reasonableness of the $15 charge, SoCal should offer the audits free of charge, instead of following its present practice of requiring a $15 deposit refundable if the customer purchases a conservation device.

2. New Construction

SoCal's efforts in this category are directed at motivating all segments of the building industry to incorporate efficient energy-use techniques and gas efficient appliances in the design and construction of new structures. There are six programs in

this classification, three of them contain (but are not limited to) awards. The difference between the utility estimates of expenses and our adopted expenses is due solely to our elimination of advertising expenses above levels adopted in Decision No. 89710 adjusted for inflation.

The staff has noted that in the Commercial and Industrial New Construction programs there is no assurance that such energy-saving features will be installed only as a direct result of SoCal's efforts. We will require that any savings claimed by SoCal must be shown to be directly attributable to its efforts. We will also require that SoCal report only energy savings attributable to conservation features other than or beyond those required by law.

3. Direct Company Merchandising

This category contains eleven programs, each of which represents a product sold directly to the consumer by SoCal. Several of the programs (home insulation, the Economizer, and the Ecomatic hydronics system) take in more in revenues than is incurred in costs. We have made no deletions for advertising to the adopted expenses but have deleted the Programmed Heating/Water Heating device because it is not cost-effective.

The staff notes that SoCal's direct merchandising of insulation programs may have outlived its usefulness. The staff feels that SoCal has a moral obligation to open up the insulation market to all contractors by establishing a contractor referral list, establishing a means of ascertaining reasonableness of prices and establishing a post-installation inspection of not less than 10 percent of all jobs. SoCal points out that such a program would have to be supported by the ratepayers while the present program is paid for out of profits and is not a burden on the ratepayers.

In Decision No. 88551 dated March 7, 1978, we set a goal of 90 percent saturation of the uninsulated and underinsulated single-family dwellings in utilities' service territories by March 1983. SoCal now forecasts such penetration by 1986. We will not require that SoCal cease its direct marketing of insulation until it applies for and has approved a zero interest loan program (ZIP). This will allow SoCal to continue with its current program as grandfathered by Department of Energy until a ZIP program is in place. We do expect to see 90 percent penetration by 1983 and observe that SoCal has not met its forecast for sales of insulation jobs under this program for the years 1978 and 1979. This failure does not augur well for its chances of meeting the 1983 penetration date or of meeting the savings required by this order. We strongly suggest that SoCal consider other approaches to achieve better penetration of the insulation market, both in single-family residences and in the rental market.

We particularly encourage SoCal to continue its program of training and supervising installation of intermittent ignition devices and Ecomatic hydronic systems.

4. Solar

There are five programs included in this category designed to meet consumer needs for efficient cost-effective solar/gas systems. The programs are aimed largely at manufacturers, retailers, and builders. We have reduced the level of expenses required only to eliminate excessive advertising; all other funding has been approved. Although the total cost of these programs is small ($1,127,000), we note that there are no specific energy savings. All savings forecast are included in the contribution to General savings. This is not desirable since, as pointed out previously, we cannot ascertain that any savings are the direct result of SoCal's programs. SoCal should give priority in this category to the multi-family conversion program which is very promising, and to the very cost-effective solar pool cover program under the direct merchandising category.

5. Product and Energy Efficiency Improvements

This group of 24 programs is an effort to motivate residential, commercial, and industrial customers to reduce energy waste through installation of energy-saving equipment. SoCal provides merchanding assistance to manufacturers, distributors, and retailers and information to customers to encourage them to purchase conservation measures.

We have made adjustments to our adopted expenses to exclude $829,000 in excessive advertising (including $320,000 for advertising appliances which are mandated by law) and $933,000 to eliminate incentives to industrial customers.

The staff recommends that we reduce the insulation incentive allowance by figures variously estimated at $3.5 million to $4.6 million representing the amount collected in rates in 1979 remaining unexpended.

SoCal points out that our Resolution No. EC-2 dated July 17, 1980 allowed expansion of its Residential Energy Audit and Low Income Weatherization programs using funds previously authorized for insulation incentive to meet the expenses of these enlarged programs. Since we wish SoCal to proceed vigorously with these programs, we will not reduce the present level of funding for insulation incentives. We will, however, require that any unspent funds from the 1979 rate case authorized for insulation incentives and not spent on them or on the EC-2 programs authorized in 1980 be applied to programs authorized in the 1981 EECP in the same manner as the reallocated funds. Since we do not at this time know the amount of unspent funds, we will not include a precise figure in our adopted allowances; however, we will expect a report by April 1, 1981 of the level of unspent insulation incentive funds from the 1979 rate case together with an indication of where SoCal intends to apply those funds in its 1981 program.

6. Advertising

In addition to the advertising designed for individual programs in the previous categories, SoCal also uses general advertising to promote conservation techniques which can be practiced by customers to minimize energy use. The level of funding requested was $4,428,000 and the level authorized is $3,121,000.

In Decision No. 89710 we reduced SoCal's proposed conservation advertising expense level similarly and directed it to reallocate its advertising to provide maximum support to all conservation programs and concentrate its efforts toward more direct individual customer contact. SoCal was specifically told to resort to newspaper, billboard, and media coverage only in instances where prompt action and mass appeals are necessary for proper program implementation. We are disappointed that SoCal did not take this admonition to heart. We are alarmed that the level of advertising proposed in this case represents 17.4 percent of SoCal's proposed conservation expenses (compared to 11.5 percent for PG&E). We are particularly concerned since dollars spent on general advertising yield no specific savings which can be identified as the result of SoCal's efforts.

SoCal contends that its advertising is the most cost-effective method of conveying three basic themes to ratepayers: (1) The need to conserve, (2) the benefits of conservation, and (3) how to conserve. We believe that only the third element remains a valid use of advertising. In the infancy of utility conservation programs, there may have been a need to persuade people that conservation was needed and was a benefit to them. We would hope to be past that point now. If nothing else, the recent increases in gas rates are more likely than not to convince people that conservation is a necessity. The only question that remains is "how"?

We have taken $1.5 million of the $2.543 million we have identified as excessive advertising and placed it in a category we have titled "reallocated funds". The utility will be authorized to recover these funds in rates and may allocate them to supplement existing programs provided it is cost-effective to do so. We especially recommend programs that will increase SoCal's customer contact, including low-income weatherization training and assistance, residential energy audits (including multi-family residentials), low-cost financing for residential conservation devices and added emphasis in the small commercial sector. The remainder of $1.043 million is disallowed as excessive.

The staff has taken exception to SoCal's use of contract labor in certain areas, contending that this practice represents only a temporary commitment to conservation. SoCal argues that it has the same hiring policy for conservation programs as it does for gas supply projects, that its use of contract labor permits more flexibility to adjust manpower to level of activity thereby reducing labor costs and that SoCal has the same quality standards for contract work as for company work.

We are not convinced that the use of contract labor per se represents less commitment to conservation that if company labor were used and we will not, therefore, make any adjustment for SoCal's use of contract labor. We do direct SoCal to increase its responsibility in the areas of training and supervision of contract labor, particularly in the areas of residential audits, installation of conservation devices, and on consultation on proper operation and maintenance of such devices.

Negative Adjustment to Rate of Return

The staff was generally critical of past conservation efforts of SoCal, citing lack of managerial commitment to

conservation on a long-term basis, lengthy delays in planning and implementing programs, lack of goals, and lack of criteria to measure cost-effectiveness.

In a policy overview, staff witness Barkovich explored her perception, as the Director of Policy and Program Development group, of SoCal's attitude towards conservation. She concluded that the attitude of SoCal toward conservation was stopgap in nature, short-sighted, and inconsistent with previously expressed Commission policy. She examined two case studies, insulation retrofit, and solar energy activities, in support of her conclusions.

SoCal took vigorous exception to Barkovich's conclusions, arguing that they were superficial, biased, and overlooked or failed to consider other programs SoCal had pursued. SoCal asserts that it is committed to conservation as a long-term goal.

We have examined the record thoroughly on this issue and conclude that no constructive purpose would be served by recounting herein each argument made in support of each position. Attitude is a nebulous concept; it is largely in the eye of the beholder and is almost impossible to measure. While we are not convinced that the two case studies on insulation retrofit and solar energy activity show the complete ambit of SoCal's attitude about conservation, neither are we convinced that SoCal's commitment is as complete as it would have us think.

We think it instructive in this instance to return to our last decision to examine items that were of concern to us then and to see what SoCal has done since then to meet these concerns.

In Decision No. 89710 we reduced SoCal's proposed conservation advertising expense by some $2.1 million dollars as excessive. We instructed SoCal to resort to newspaper, billboard, and media coverage only in instances where prompt action and mass appeals are necessary for proper program implementation. Yet in

this rate case we find SoCal making essentially the same arguments that it made in the last case, that the advertising is not advertising directly in support of programs but is advertising essential to motivate customers to conserve, by informing them of the reality of potential severity of energy shortages. We do not find repetition of arguments in support of expense levels previously reduced particularly imaginative on the part of SoCal.

We authorized $11,592,700 for insulation incentive programs in the last rate decision. SoCal chose a monetary insulation incentive in Case No. 10032 rather than the hardware incentive the Commission recommended both in that case and in Decision No. 89710. We observe that SoCal installed 19,000 insulation jobs in 1979, up marginally from 17,000 the prior year when its witness testified "the bottom dropped out of the insulation market." At this rate it will take 30 years to saturate the remaining 600,000 uninsulated and underinsulated dwellings in SoCal's service territory. We don't consider this particularly effective use of incentives considering the level of achievement.

In Decision No. 89710 we stated: "It is obvious from the record that SoCal has an opportunity to expand its cost effective conservation programs well beyond what is presently under consideration during this proceeding. . . Therefore, while we will accept SoCal's 1979 goals of 7.2 percent, we will require SoCal to continue to expand its conservation activities to move toward a level commensurate with the staff goals." Far from expanding its programs, the staff indicated that SoCal had not implemented conservation programs authorized for test year 1979 and did not notify the Commission or its staff. Further the utility proposes a rather modest 10.2 percent savings for test year 1981, and a 12.9 percent estimated savings by year end 1983

contrasted with the staff goal of 20 percent savings by 1983. We would expect that a truly vigorous conservation program would show more than a 3 percent increase in savings in the two years since the last rate case.

In the last rate decision we also required SoCal to institute adequate evaluation programs so that we can adequately monitor the effectiveness of its efforts to achieve further conservation. We concluded that SoCal's methodology and programs for evaluating the effectiveness of its programs were inadequate and ordered specific measures for quantitative measurement of SoCal's programs. SoCal began to develop the conditional demand analysis which it asserts will respond to these concerns in mid-July 1979, some six months after our decision and at the time of hearing on this application SoCal was still in the process of completing this study.

We directed SoCal to revise its billing format to effect "report card billing," to inform the public of the rate design innovations we adopted to encourage conservation. SoCal implemented report card billing in January 1980, a full year after our direction. This is not the prompt response we would hope to see in the future.

On the balance, we see SoCal setting up a subsidiary to finance low-interest insulation loans (Resolution No. EC-1 dated January 29, 1980) and the beginnings of a residential energy audit and low-income weatherization program (Resolution No. EC-2 dated June 17, 1980). These are both areas in which we have previously expressed much interest and we are pleased to see SoCal joining other utilities in this State in undertaking such activities. While these efforts are small in scope at present and are being initiated much later than we would have like, still they do represent the beginnings of what we hope we will be a truly enlarged conservation commitment for SoCal.

SoCal has been aware of our commitment to conservation since 1975, but we are only recently seeing the beginnings of its management commitment to conservation. In making this observation, we are cognizant of SoCal's individual program efforts, but we are also cognizant that these individual efforts lack a well-thought-out, long-term goal driven by top-down direction and priority. We are beginning to notice a desirable change in SoCal's program directions, particularly in the area of residential audits and residential customer contract. We have noticed some improvement in SoCal's 1979 recorded conservation and wish we could be more certain from objective measurement that the entire improvement was due to SoCal's efforts. However, we believe that the tools for measuring are now in place, and with the establishment of definitive goals, plus the funding to implement programs, we are convinced that SoCal can produce substantial additional conservation in test year 1981.

Because we do not wish to dampen or discourage this budding improvement, we think it appropriate to measure SoCal's success at the end of the test year in terms of actual achievement rather than at the beginning and so will not adopt the staff and cities' recommendation for a rate of return penalty at the beginning of the test year.

SoCal should be on notice, however, that there is a very real cost associated with failure to conserve or to effect conservation. That cost is borne most often by the ratepayer who pays more in his gas bill for excessive use, and who pays for ever larger new supply projects as more and more gas must be supplied. From now on, there will also be a cost to the shareholders associated with failure to conserve. We will review SoCal's conservation achievement at the conclusion of the test year to determine whether

it has met the goals we set forth herein. If it has not met them, its rate of return will be reduced. If it exceeds our goal, then its rate of return will be increased.

Staff has recommended that SoCal achieve a 20 percent conservation goal by 1983 on efforts since 1978 and based on 1978 sendout. SoCal maintains that it cannot meet this goal because of the following barriers:

1. Stimulating the customer to make sizable expenditures,
2. Stimulating dealers and contractors while avoiding discrimination,
3. Quality control,
4. Ability of suppliers to provide production,
5. Need for a larger advertising budget,
6. Customer education,
7. A large percentage of high priority customers have already initiated conservation programs,
8. Industry view of conservation projects requiring economic payback of over three years as undesirable,
9. SoCal's effective planning cycle takes about one year,
10. Funds must be provided on a timely basis,
11. Manpower must be gathered and trained,
12. Too many customers would need to be contacted in too short a time,
13. Customer slowness to replace equipment, and
14. Large capital expenditures would add to product cost.

We are not convinced that these "barriers" cannot be overcome by management's aggressive, innovative, creative, and imaginative actions. Indeed, the staff proposed a 30 percent goal in the last general rate proceeding which we did not adopt at that time, in part because of lack of effective tools to measure such savings. SoCal was on notice at that time that it should have been gathering manpower, instituting training programs, and

adjusting its planning cycle to meet what was clearly a call for greater conservation.

To evaluate SoCal's 1981 effort, we will use a base sales level of 509.6 Bcf, which is the staff's sales estimate for high priority (residential and P1 and P2A nonresidential) customers, plus SoCal's estimated conservation of 54.1 Bcf. A 20 percent increase by 1983 translates to an additional level of conservation for test year 1981 of 63.7 Bcf, which is an additional 9.6 Bcf over SoCal's projected savings for 1981. Such savings shall be exclusive of those savings which result from our order in OII No. 42 for establishment of solar demonstration projects which we expect will be separately funded and accounted for.

Should SoCal fail to save at least 60.6 Bcf[1/] at the conclusion of the test year, it will be penalized $1.0 million for each 1.3 Bcf it falls short of the goal for a maximum adjustment of $5.0 million. There will be no penalty assessed if the conservation savings fall in the range of 60.6 - 63.7 Bcf. Should SoCal produce conservation savings in excess of our 63.7 Bcf goal, for each 1.3 Bcf above that level, a $1.0 million reward will be earned to a maximum of $5.0 million. These adjustments represent approximately a .026 percent increase (decrease) to our authorized rate of return for each 1.3 Bcf change in energy savings.

We do not expect to use this procedure routinely because of the obvious opportunity for utilities to estimate unduly conservative projected conservation savings. We use the method here because it appears a reasonable response to the concern that there is no standard against which to measure reward or penalty for achievement in the conservation arena. We establish it here, for this proceeding only, because SoCal has not developed concrete goals of its own from which to work. Should we see this condition

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1/ This equals SoCal's 1981 projected conservation level of 54.1 Bcf plus approximately two-thirds of the additional conservation achievement needed in 1981 to achieve a conservation level of 63.7 Bcf.

pertain in the next general rate case, we would expect to make a negative adjustment in SoCal's rate of return at the beginning of the test year.

In setting a specific goal for SoCal to meet, and in approving the major part of its request for funding, but without approving specific levels of funding for individual programs, we believe that we have given SoCal the maximum amount of management flexibility consistent with good regulation. We expect to see this flexibility used constructively to produce results within the test year. SoCal should work closely with our Energy Conservation Branch throughout the test year for assistance in meeting the goal we set; however, it should be clear that the basic responsibility for meeting the goal is SoCal's. We will use the utility's March 31, 1981 report to determine whether it met our conservation savings goal. This report will be supplemented by the reporting requirement we set forth herein to form the technical backbone to support SoCal's measurement of the effects of its conservation programs. We will expect to see a filing from SoCal, in addition to the March 31 report, which indicates the level of savings it achieved for test year 1981.

We emphasize that the savings must come from continuing customers of the utility and should a large user, such as a cement plant, leave the system, the savings from that customer shall not be counted as part of the conservation savings reported. Data may be adjusted for weather and may include new customers but shall not contain other adjustments. The percent savings shall be determined from recorded data and shall represent the use per customer at the meter divided by the total customers.

Should SoCal fail to meet our minimum conservation goal, and thereby incur a penalty, we will establish the conditions for removal of the penalty at the time it attaches giving consideration to circumstances as they exist at that time.

RATE OF RETURN

A regulated utility's net revenue requirement is the product of its rate base, authorized for ratemaking purposes, and a rate of return found fair and reasonable. The determination of a fair and reasonable rate of return by this Commission is not the direct result of a rigid technical formula but rather a judgmental decision reached after making a full evaluation of the evidence.

The United States Supreme Court has established guidelines for ratemaking bodies in their determination of the just and reasonable rate of return for regulated utilities. Broadly defined, the revenue requirement of utility companies is the minimum amount which will enable the company to operate successfully, to maintain its financial integrity and to compensate its investors for the risks they assume (Federal Power Commission et al v The Hope Natural Gas Company (1944) 320 US 591; 88 L ed 333; 64 S.Ct. 281), and which will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties (Bluefield Waterworks and Improvement Company v West Virginia Public Service Commission (1923) 262 US 679; L ed 1176; 43 S.Ct. 675).

These two cases establish that a reasonable rate of return should be sufficient to enable a utility to maintain its financial integrity, to attract capital, and to compensate investors for the risks assumed. The rate of return which will satisfy these tests depends on many circumstances (General Telephone Company (1969) 69 CPUC 601; Pacific Gas and Electric Company (1971) 71 CPUC 724).

We have followed these guidelines in establishing the rate of return found reasonable herein. While we realize that each rate of return witness may have used different tests and refinements in making his recommendation, each case must be decided after consideration

of many variables, such as the cost of money, the capital structure of SoCal as compared with similar utilities, interest coverage ratios, and return on common equity. Our decision in this matter ultimately involves a substantial amount of discretion and judgment after weighing the evidence presented by all parties in order to determine a just and reasonable rate of return.

Complete showings on rate of return were presented by SoCal, the staff, city of Los Angeles (LA), and Shareholders. SoCal and PLS are discussed in portions of this decision as though they are a single entity because they essentially operate as a single unit. Because of the integrated nature of SoCal and PLS, this Commission has for a number years considered their capital structure and financial requirements on a consolidated basis for the purpose of rate of return determination. The following discussion continues that treatment, including both under the single designation SoCal.

Position of SoCal

Harvey A. Proctor, chairman of the board of SoCal, appeared as the general policy witness for SoCal. He discussed the companies' general situation regarding gas supply, market served and earnings, and identified particular items requiring an increase in rates.

He testified that additional gas supplies adequate for the needs of southern Californians are essential to the economic welfare of the area and that there are no viable alternate sources of energy available. He noted that all prospective new supplies available to southern California will require significant capital investment.

He stated that the 1979 gas supply situation was somewhat improved over 1978 levels and is now about equal to 1974 levels but added that almost none of the increased supply over 1978 levels is dedicated to SoCal. The new long-term gas supplies necessary for SoCal's customers whether from pipelines, conversion of coal to methane, or shipped as liquefied natural gas (LNG) will require significant capital investments. He stated that by 1981 rates will be seriously deficient because of increased costs caused by: inflation, system growth,

**proposed expansion of energy conservation activities and research and development programs, and increased business risks.**

He discussed generally the need for new facilities not related to supply projects and specifically the need for additional underground storage at the Ten Section Field, noting that without the added storage, P-1 and P-2A customers would soon be subject to curtailment on extreme peak hours and extreme peak days.

In arriving at his recommended return on equity of 15.1 percent, Proctor evaluated many factors, including legal, economic, and financial considerations. He also included a "reward" of 0.25 percent for SoCal's conservation activity (discussed in detail in this order under the heading Conservation) and 0.75 percent attrition factor for the two-year rate life of the decision.

He cited the Hope and Bluefield cases for the proposition that rates must be adequate to allow the company to maintain its financial integrity, maintain its credit standing, and enable it to attract capital on reasonable terms. He noted that the economic conditions, both generally and in the service territory, form the basis for investment decisions in the primary capital markets. Within the scope of economic and financial considerations, factors such as gas supply financing requirements, inflationary pressures, comparative operations, conservation size, service area regulatory environment, and quality of service were all a part of the recommendation for a fair and reasonable rate of return.

He discussed three risks facing SoCal: gas supply, regulatory risk, and financial risk, with the largest risk being that of gas supply. The continued shrinking of gas supplies produces substantial risk to the investors in the single-purpose gas distribution system called SoCal. New supplies must be secured under conditions of greater financial requirements and at significantly greater gas costs, thereby increasing the risk to investors.

Although he admits that past Commission actions such as the Regulatory Lag Plan, Supply Adjustment Mechanism (SAM), and Gas Exploration and Development Adjustment (GEDA) have had favorable results in the investment community, he still believes that inflationary effects in a regulated environment continue to erode earnings so that they fall substantially below authorized rates. This is the regulatory risk of which he speaks.

Factors which magnify financial risk to utilities, especially in time of inflation, include the capital-intensive nature of utilities and the resulting inability to postpone trips to the capital market, their restricted ability to react quickly to price changes, and their generally lower margins for return. He was concerned that SoCal and PLS debt securities carry only an average rating in the utility industry and noted the detrimental impact on financial standing and the severe limitation on capital attraction that would take place if the securities were downgraded further.

In arriving at a recommended return on equity of 15.1 percent, Proctor relied on his perception of the risks involved in owning and operating a gas utility and received input from contacts with the investment community and rating agencies as well as internal recommendations.

SoCal's presentation on its required revenue increase, expressed as test year 1981, requested rate of return of 10.70 percent (plus 0.75 percent for the two-year rate life) with a 15.1 percent return on equity to provide a times interest coverage of 2.47 after taxes, was made by George L. Jahelka, financial analysis manager in the Regulatory Affairs Department.

Jahelka prepared a Cost of Capital Study organized in three sections. Tables 1 through 12 show statistics relating to SoCal and develop the test year capitalization. Tables 13 through 20 are a comparative analysis with other utilities. Tables 21 and 22 show the anticipated market impact of the requested rate of return, and Table 23 outlines the impact of financial and operational erosion if rates are in effect for two years.

The capital structure developed by Jahelka appears as follows and does not include the effects of the sale of $70 million SoCal Series M bonds at a cost to the company of 12.845 percent in October 1979. This effect is shown in parentheses beside Jahelka's capital structure.

Requested Rate of Earnings on Capital

| Item | Capital Ratio | Cost Rate | Return Component |
|---|---|---|---|
| Test Year 1981 Request | | | |
| Long-Term Debt | 48.2% | 8.25% (8.56) | 3.98% (4.13) |
| Banker's Acceptances | 3.5 | 10.50 | .36 |
| Total Debt | 51.7 | | 4.34 |
| Preferred Stock | 9.1 | 5.47 | .50 |
| Unamortized IDI | .4 | 0 | 0 |
| Common Equity | 38.8 | 15.10 | 5.86 |
| Total Capital | 100.0 | | 10.70* (10.85) |
| | | | 2.47X (2.42) |

* Includes conservation adjustment but not the attrition adjustment.

Forecasts of the embedded interest cost are based on current financing plans and assume a 9.75 percent interest factor for future A-rated long-term debt issues. Had the October 1979 issue been incorporated in the utility's showing, it would have reflected the 12.845 percent rather than the assumed 9.75 percent cost. SoCal urges the Commission to take this cost into consideration in making its judgment on rate of return.

SoCal expects to increase its long-term debt by $112.7 million between November 1979 and October 1981 to a total long-term debt of $585.2 million. Its preferred stock level is unchanged from the last rate case and represents $21.5 million of SoCal and $110.1 million of PLC outstanding preferred stock.

Banker's Acceptances are short-term debt instruments used for financing gas-in-storage as part of rate base. They are expected to approximate $50 million at year end of 1981. Their

cost approximates the banker's prime commercial loan rate and SoCal has used 10.50 percent in its capital structure, although it urges the Commission to use the prime rate in effect at the time of decision to reflect the cost of Banker's Acceptances.

The unamortized gain on reacquired debt (IDI) reflects net gains from the acquisition of long-term debt purchased to meet sinking fund obligations. Under procedures established in Decision No. 86595, the noncash account was to be treated as "interest free capital". SoCal contends that the treatment proposed in this application complies fully with the intent of Decision No. 86595, although it notes that IDI was not isolated in the capital structure adopted by the Commission in its most recent general rate case Decision No. 89710. Total IDI for 1981 is $6 million.

Total equity is expected to reach $561.8 million as of the end of the test year, up $50.4 million from the last general rate case using test year 1978. Total capitalization will thus reach $1,447.3 million at year end 1981.

The comparative analysis made by Jahelka included the 20 largest gas distribution utilities, 10 largest integrated gas systems, and 10 straight electric utilities. He also included data on industrial earnings. SoCal's position is that the investor perceives no significant difference between the risk associated with gas utilities and that associated with industrials and noted that industrial returns on equity currently exceed 16 percent. Comparison with other utilities shows institutional holdings of SoCal's common stock at 2.4 percent of shares outstanding at year end 1978, compared to 4.9 percent for other gas distribution utilities, 14.5 percent for integrated gas utilities, and 13.0 percent for electric utilities. SoCal believes this is an indication of the general disfavor in which professional investors view its stock, as well as that of other gas distribution utilities. It also compares its market price to book value ratio of 75 percent (at year end 1978) with the slightly higher 85 percent for gas distribution utilities and 91 percent for electric utilities and the much

higher 124 percent of integrated gas companies. SoCal feels that this discount of market price from book value is the direct result of inadequate earnings and has prepared a regression analysis to show that a return on equity of 15.1 percent could be expected to produce an average market to book ratio of 1.07 times for a utility similar to SoCal.

Finally, SoCal argues that a gas distribution utility like itself faces significantly greater business risks which the Commission should recognize through an adequate return on equity. It points out that between general rate cases it is not permitted to earn any more than is authorized under SAM and that any growth in customer or customer use cannot be reflected in the margin. Further, the margin (difference between each dollar of revenue and cost of money) in a gas distribution utility is less than in electric utilities which have a larger profit margin between their revenue and cost of fuel. It argues that it must compete, however, for the same capital as other utilities, both electric and integrated gas, as well as the industrials and that inadequate returns on equity place it at a disadvantage in successfully attracting capital at reasonable rates.

Position of Staff

The staff witness on rate of return, Edwin Quan, developed his recommendation of 13.50 percent return on equity based on an average year, rather than year end capital structure. His recommendation is linked with the staff recommendation for an allowance of financial attrition through step rates at the end of test year 1981. His recommendation translates to a rate of return on rate base of 10.26 percent for 1981 and 10.37 percent for 1982. Because the recommendation is based on an average year capital structure, it is not comparable to other rate of return recommendations in this proceeding, nor to the presently authorized return on equity of 13.49 percent.

Quan's recommended capital structure is as follows:

| | Capitalization Ratios | Cost | Weighted Cost |
|---|---|---|---|
| | | 1981 | |
| Long-Term Debt | 50.29% | 8.63% | 4.34% |
| Banker's Acceptances | 1.75 | 10.50 | .18 |
| Preferred Stock | 9.24 | 5.47 | .51 |
| Common Equity | 38.72 | 13.50 | 5.23 |
| | 100.00 | | 10.26 |

Impact of Financial Attrition
Based on Staff's Recommendation

| | Capitalization Ratios | Cost | Weighted Cost |
|---|---|---|---|
| | | 1982 | |
| Long-Term Debt | 50.29% | 8.85% | 4.45% |
| Banker's Acceptances | 1.75 | 10.50 | .18 |
| Preferred Stock | 9.24 | 5.47 | .51 |
| Common Equity | 38.72 | 13.50 | 5.23 |
| | 100.00 | | 10.37 |

The staff witness believes that an average capital structure and related costs more accurately reflect actual capital costs during the period in which rates are in effect. Since rate increases are being filed on a two-year cycle, an average year capital structure is appropriate, he believes.

The staff has also used a weighted average estimate of Banker's Acceptances outstanding. These instruments, which have maturities of less than a year, are used to finance gas in storage and fluctuate seasonally. Staff believes that the weighted average amount outstanding is the most accurate reflection of their true capital cost. Use of the weighted average results in $25 million less Banker's Acceptances being included in the staff's recommended capital structure. Quan disagreed with Jahelka's recommendation that the cost of Banker's Acceptances reflect the current prime rate.

The staff included in its long-term debt costs the actual cost of the debt issued in October 1979 (which was not included in SoCal's presentation) and also includes 1980 debt issues estimated at 11.50 percent and 1981 and 1982 issues estimated at 10 percent.

Lastly, the staff rate of return recommendation addresses only financial attrition whereas the utility presentation includes an estimate of the average amount of both operational and financial attrition. Quan's recommendation does not contain any adjustment for conservation activity although he agrees that a reward or penalty for conservation is appropriately recognized in the form of a rate of return adjustment.

The staff's presentation included 27 tables of comparative data, including comparison of 10 gas utilities, 10 combination utilities, and 10 electric utility companies. The 10 gas utilities are the same utilities included in Jahelka's comparative group of 20 natural gas distribution companies.

Quan arrived at his recommendation by comparing returns with returns on investments in other enterprises having similar risks, by using the attraction of capital test, and by balancing the interests of investors (both existing and prospective) and ratepayers. His recommendation will produce a 2.28 times interest coverage which he states is adequate to maintain the current A rating for the system's bonds. He also considered the following additional factors in arriving at his recommendation:

a. Pacific Lighting Utility (PLU) System is a regulated public utility which affects the public interest and it must provide its service at reasonable rates.

b. Fair and reasonable rates must balance the interest of the ratepayers and investors.

c. PLU System is over 90 percent owned by PLC and draws upon PLC for management expertise and guidance.

d. The PLU System's capital requirements, capital structure, and financial history.

e. The PLU System's recorded earnings experience.

f. The PLU System's election to use ratable flow-through for the additional 6 percent investment tax credit provides greater internal cash flow than companies which use full flow-through.

g. Economic conditions - the effects of continued inflation and increases in embedded costs of capital.

Position of Shareholders

Shareholders is a corporation composed of those who hold common stock in the utilities regulated by this Commission. It has as one of its goals an effective representation of the interests of those shareholders.

The position of Shareholders was represented by Ross Cadenasso, president of Shareholders. Cadenasso based his recommendations on his reading of the Hope and Bluefield cases and on Missouri ex rel Southwestern Bell Telephone Company v Public Service Commission (1923) 262 US 276, citing Justice Brandeis in dissent.

It is the position of Shareholders that failure to authorize rates which will produce earnings sufficient to bring the market price of a stock up to book value or slightly above is confiscation. Shareholders uses the capital structure developed by SoCal and recommends that the Commission authorize an overall rate of return for 1981 of 12.03 percent. Shareholders believes that a 17 percent return on common equity is required to meet the standards of the courts and the marketplace. This recommendation assumes that the Commission will give specific recognition for attrition. Shareholders suggests that the Commission review the earnings levels of SoCal at the end of 1981 in an abbreviated proceeding and thereafter make an order reflecting the real world facts as they exist at that time.

Although he developed his rate of return by studying Moody's gas distribution stocks, Cadenasso takes issue with the practice of comparing SoCal exclusively with other similarly impacted utilities and urges those who offer advice about rate of return to look at cases where the enterprise can attract capital on reasonable terms without confiscation. He insists that the marketplace is the ultimate arbiter of the cost of money and the measurement of risk because it is in the marketplace that the investor faces the initial choice of whether to invest in a public utility or a nonregulated enterprise. He believes that there is no rational reason why the cost of equity capital should be the exception to the rule of measuring capital costs generally,

pointing out that the long-term debt costs are determined by the market price, as are short-term debt and preferred stock costs. He asks the Commission to look at the "hard evidence" - the price at which investors will risk their money in the marketplace - in setting rate of return.

He discusses at length the problem of dilution, saying that the only way investors now are attracted to regulated utilities is by requiring existing shareholders to give up a portion of their investment. This dilution he terms impermissible confiscation of the interests and and property of the existing shareholders.

Position of LA

The position of LA was set forth by Manuel Kroman, a consulting engineer in the field of public utility regulation. Kroman recommended a 12.75 percent return on common equity which translates to a 10.17 percent rate of return using the following year end capital structure:

| | Capital Ratios | Cost Factors | Weighted Costs |
|---|---|---|---|
| Long-Term Debt | 44.2% | 8.67% | 3.83% |
| Short-Term Debt | 8.6 | 12.00 | 1.03 |
| Preferred Stock | 9.8 | 5.47 | .54 |
| Common Equity | 37.4 | 12.75 | 4.77 |
| Total | 100.0% | | 10.17% |
| After-Tax Interest Coverage | | | 2.1x |

Kroman testified that he developed his recommended rate of return by making a critical analysis of SoCal's request, examining the underlying bases for the asserted need for a rate of return of 10.70 percent. He took issue with Jahelka's comparison of returns for regulated public utilities with those of unregulated industrial enterprises, stating that unless comparability of risk is clearly established, the comparison is not valid. He further testified that the method used to develop SoCal's recommendation did not appear to him to be based on a clearly stated inductive process which one studying the method can follow, step by step, which establishes that the method comports with the classic criteria of the Hope and Bluefield cases.

Kroman disagrees with the use Jahelka makes of the three groups of utilities he selected for comparative purposes, which can be summarized as follows:

1. Incomparability of size of SoCal and other gas utilities.
2. Incomparability of risk of SoCal and electric utilities.
3. Inaccurate presentation of average return on equity due to mixing gas distribution utility figures with integrated gas utility figures.

Kroman disagrees with SoCal (and presumably with Shareholders) that a market-to-book ratio of one justifies a 15.1 percent return on equity. He states that a utility's market-to-book ratio is a function of many more complex variables than simply its earnings on common equity.

Kroman notes generally that the gas supply situation has improved since the last rate application, that Value Line now considers PLU an ideal investment, t at the trend in earnings per share has increased steadily over the last five years for a five-year compound annual average increase of 12.5 percent, and that Commission procedures such as SAM, CAM, GEDA, and the Regulatory Lag Plan all reduce risk to SoCal.

It is LA's position that short-term debt should be included in the capital structure. It notes that Kroman's recommendation is virtually identical to staff's in this proceeding and that his recommendation should not be discounted because he included short-term debt in his recommended capital structure. It is also LA's position that interest expense on short-term debt should be included as a deduction for income tax purposes irrespective of the inclusion or exclusion of short-term debt in the capital structure. This issue will be discussed in our section on income tax expense.

Position of City of San Diego (SD)

SD did not present independent testimony on the issue of rate of return; however, it joins in the arguments of LA on this issue.

Discussion

With regard to the treatment of unamortized gain on reacquired debt, we will adopt the staff treatment which adds the unamortized gains to the net proceeds of outstanding bonds to derive an embedded cost of debt. As we noted in Decision No. 89710, this methodology conforms with general instruction 17(B) of the Uniform System of Accounts and complies with the spirit and intent of Decision No. 86595 wherein we held that there was no basis for continuing to consider these gains as nonoperating income.

We adopt 10.50 percent as the cost of Banker's Acceptances. It was used by both staff and applicant. We believe this cost accurately recognizes the costs expected for the test year. We will not adopt SoCal's recommendation that the cost of Banker's Acceptances be adjusted for the latest prime rate at the time this decision is issued since the prime rate can be expected to change over the course of the test year and selection of the prime rate at any point in time is not reflective of the true cost of Banker's Acceptances throughout the test year. Similarly, we will not adopt SoCal's estimate of $50 million as the level of Banker's Acceptances properly includable in the capital structure. Since Banker's Acceptances finance gas in storage, which level fluctuates throughout the year, we believe that staff's method of computation using an average amount outstanding is more reflective of conditions in the test year than selection of a year end balance.

Short-Term Debt

Neither SoCal nor staff included short-term debt (other than Banker's Acceptances) in their recommended capital structures; SoCal because it relied on Decision No. 89710

which excluded short-term debt from the capital structure, and staff because it believes it inappropriate to include short-term debt in the capital structure. LA recommends that short-term debt be included in the capital structure, reiterating a position it has put forth in the last several general rate cases.

Very late in this proceeding the Commission indicated, during a discussion at conference involving the rehearing of Decision No. 91015, that we would be interested in seeing the issue of the proper treatment of short-term debt explored in this proceeding. We subsequently issued Decision No. 92018 on July 2, 1980, declining to include short-term debt in our capital structure adopted in Decision No. 89710 because of the passage of time, the effect on interest coverage, and impact on return on equity authorized.

In response to a request by the Administrative Law Judge, the staff prepared an analysis of SoCal's short-term debt. SoCal prepared very limited additional testimony. SoCal does not have short-term debt in the traditional form, but rather obtains funds through a vehicle called the Open Account from PLC.

The Open Account has two functions: (1) It is used as a financing vehicle for GEDA and non-GEDA project costs, and (2) it is used as a cash management account to flow cash between the parent PLC and the operating subsidiaries SoCal and PLS. The balances in the account fluctuate throughout the year with the average monthly balance for test year 1981 for SoCal and PLS estimated at $9 million payable to PLC. The staff excluded GEDA and non-GEDA project costs from its calculation because GEDA is handled in a separate proceeding outside the rate case and non-GEDA project costs (such as coal gasification, LNG, Alaska Highway pipeline, etc.) are not included in the determination of rates. Both SoCal and staff testified that including $9 million in the capital structure would have a negligible effect and both recommended against it.

LA, on the other hand, estimated short-term debt of $116.2 million. This figure apparently includes GEDA and non-GEDA supply projects investments and is derived from 1978 data. Kroman based his recommended capital structure on figures that carry forward assumptions made in arriving at 1977 and 1978 capital structure. He did not know whether the figures he used contained amounts for GEDA and for LNG projects and noted that there was no mention of this matter in the staff rate of return exhibit. His position is that the figures as reported to the public are the best figures on which to base the recommendation.

Because of the uncertain content of LA's short-term debt figures, we hesitate to rely on them. Similarly, because the staff has testified that it is unable to track the dollars received by SoCal through the Open Account and determine which costs are paid by those dollars, we cannot say with certainty that short-term debt should be included in the capital structure.

Accordingly, we will not include a component in our adopted capital structure for short-term debt in this proceeding. However, we place parties on notice that we wish to reexamine the question in SoCal's next general rate case, determining if possible what the dollars are used for. There was simply insufficient time to pursue the matter in this rate case and still adhere to the Regulatory Lag Plan schedule. We specifically invite SoCal to include short-term debt in its next proposed capital structure should it feel it appropriate. SoCal should not consider that our position in Decisions Nos. 89710 and 92018 preclude this.

Capitalization Ratios

SoCal, Shareholders, and LA have all used year end capital ratios while the staff has used an average year capital structure. Shareholders is of the opinion that in inflationary times, a year end capital structure is more appropriate to use for ratemaking than an average year structure. LA does not specifically address the issue

but since its witness testified that he applied the capital ratios derived from Table 17 of his report which reflected year end 1978 data as those reasonably appropriate for application to test year 1981, we surmise that LA supports use of a year end capital structure. SoCal believes that the use of a year end capital structure facilitates the best representation of a forecasted test year, and inferred, from its cross-examination of the staff witness, that a year end capital structure might give a utility a better opportunity to defer a general rate increase for the second year following the test year. Staff disagrees with this proposition, particularly in view of the fact that most major utilities, and particularly SoCal, are financing every year and the use of a year end capital structure would not necessarily keep the utility from seeking rate relief the year after the test year. Staff argues that the average year capital structure more accurately reflects debt costs for the two-year period and, coupled with step rates and an attrition allowance in the second year, provides for a more proper matching of expenses and revenues when they actually occur.

Since we are not adopting a specific allowance for financial attrition in this proceeding, we will not adopt the average year capital structure set forth in the staff rate of return exhibit. Instead, we will adopt the following year end structure, shown in Exhibit 53, the staff exhibit on attrition:

| Component | Ratio | Cost Factor | Weighted Cost |
|---|---|---|---|
| Long-Term Debt | 49.30% | 8.69 | 4.28 |
| Banker's Acceptances | 1.76 | 10.5 | .18 |
| Preferred Stock | 9.29 | 5.47 | .51 |
| Common Equity | 39.65 | 14.60 | 5.78 |

These ratios recognize year end long-term debt and equity ratios thereby more closely reflecting actual conditions over the rate life of this decision. The cost factors associated with long-term debt reflect more recent high-interest rates associated with SoCal's bond issues. We believe that a cost component of 8.69 percent for long-term debt will

more accurately reflect conditions for the two-year rate life of this decision. Use of this ratio of long-term debt and associated cost will make it unnecessary for us to include a component in our attrition allowance for financial attrition since SoCal should not actually incur the higher debt costs until some time past the beginning of 1982, yet will earn on them from the beginning.

Comparative Companies

There was much debate over the appropriate companies to which SoCal should be compared for purposes of setting a return under Hope and Bluefield guidelines. Shareholders and SoCal **claim SoCal should be compared to industrials since SoCal has to compete in the marketplace with the** industrials for the investor's dollar. Staff and LA argued that it was inappropriate to compare SoCal to industrials because the risks were dissimilar. We concur. Despite the fact that SoCal must compete with industrials for the investor dollar, we note that SoCal's witness admits that it has had no difficulty in selling stock. He simply contends, as does Shareholders, that the stock is not sold on reasonable (i.e. undiluted) terms. Far better, we think, to compare SoCal to other utilities, preferably like utilities and businesses of similar risk, to determine whether the rate of return we set is reasonable.

In comparing SoCal to other utilities, which has been done in its presentation, in the staff showing, and in LA's showing, there is an inherent weakness, which is that the data used for comparative purposes is, because of the extended duration of these proceedings, stale. Recorded data for 1978 is the latest used, and ordinarily this would provide an adequate measure; however, in times of rampant inflation, it may not present an accurate picture of the conditions utilities face in a future test year.

We have carefully considered the recommendation of the staff for a return on equity of 13.50 percent based on an average year capital structure and conclude that even with an attrition allowance, it is simply inadequate, given our desire to have the rates we set herein last a minimum of two years. Similarly, the recommendation of LA for a return of 12.75 percent based on a year end capital structure (which tends to reduce financial attrition) together with a recommendation for adjustment of debt cost at the end of the test year, is even less adequate on a two-year basis.

SoCal, on the other hand, presents a comparatively low recommendation for a return on equity of 15.1 percent. However, when the effect of the attrition allowance of 0.75 percent is reflected in the proposed capital structure, the following results:

| Component | Ratio | Cost | Weighted Cost |
|---|---|---|---|
| Long-Term Debt | 48.20% | 8.24% | 3.98% |
| Banker's Acceptances | 3.50 | 10.50 | .36 |
| Preferred Stock | 9.10 | 5.47 | .50 |
| Unamortized IDI . | .40 | - | - |
| Common Equity (ROE) | 38.80 | 17.04 | 6.61 |
| Total Requested Rate of Return | | | 11.45 |
| Less: Attrition Factor | | | .75 |
| Rate of Return at 15.1% ROE | | | 10.70 |

Thus the requested return on equity is actually in excess of 17 percent, which we think is much too high. Shareholders makes the same recommendation for return on equity but would add an attrition allowance in an undetermined amount on top of that. These returns would be excessive.

We will adopt a return on equity of 14.6 percent, recognizing that we are adopting a figure substantially higher than either the median (12.84 percent) or the average (12.63 percent) recorded return on average common equity shown for the gas distribution utilities for 1978 in applicant's Exhibit 5, Table 21. Our adopted

return while appearing high by comparison with the 1978 figures it merely reflects the unprecedented inflation which has occurred over the last two years. Further, this rate of return is designed to last a minimum of two years until 1983. Our adopted rate of return strikes a reasonable balance between the interests of the ratepayers and the shareholders.

A return on equity of 14.6 percent will produce a rate return of 10.75 percent with a times interest coverage of 2.4. This compares favorably with the historical five-year average for SoCal shown on staff Exhibit 42, Table 10, of 2.49 times and is substantially identical to the five-year average of 2.45 times for the 10 comparative gas utilities.

In authorizing SoCal a $45 million attrition allowance in addition to a return on equity of 14.6 percent, we believe that SoCal's management has every opportunity to earn the return authorized for the two-year rate life of the decision. We note that LA has quoted certain investment counselors as recommending PLU as an ideal investment for income, which is a marked improvement over the situation noted in our last general rate decision when the financial community had for some time either not recommended the purchase of California utility stock or had been relatively apathetic toward such stocks. The change we hope has been a reaction to the innovative ratemaking procedures we have adopted, such as SAM, purchased gas adjustment (PGA),

and now the attrition allowance, separately stated. We expect to see a full effort on the part of SoCal to apply its management talents in increasing its efficiency and productivity. We will examine carefully in the next general rate case its efforts toward doing so because we are concerned that the ratepayer, as well as the shareholder, receive value for the rate of return we authorize herein.

In arriving at our return on common equity, we have considered the risks to SoCal in seeking new gas supplies, the level of conservation programs SoCal plans and which we expect for the test year, the impact of the abandoned WESCO project on the shareholders and the bond rating of SoCal, which ultimately may affect the cost of capital paid for by the ratepayer. We believe the return is reasonable and hope that it will serve as an incentive to SoCal to pursue conservation as a supply option more vigorously than it has in the past.

In setting our rate of return, we cannot conclude stock market values establish SoCal's earnings requirements. We reject this contention, just as we reject the use of book value as an index for setting rates. If we were to use stock market values in establishing rate of return, we would be taking a very narrow, one-point-in-time view of the subject of rate of return. Financial requirements of SoCal cannot be determined solely by reference to current financial market conditions, particularly if such current conditions reflect

investors' future expectations. Consumers have been subjected to rapid increases in utility rates over the past two years as a result of the rapidly rising cost of gas. Increasing energy costs have been and will be reflected in rates. Higher capital costs incurred by SoCal as a result of inflation are reflected in utility rates. Under these circumstances, we cannot support increases in the rate of return to levels approaching those in nonregulated, nonmonopoly industries in the hope of improving the market price of securities. There is no assurance that this will be successful and there is every indication that it will only further burden the ratepayer.

ATTRITION

Both SoCal and the staff have recommended that the Commission recognize operational attrition in setting rates and have quantified their recommendations. As noted previously, shareholders support the view that the Commission must recognize attrition but did not set forth a specific level for either financial or operational attrition. LA's witness on rate of return recommended recognition of changed debt costs (financial attrition) but, in brief, LA and SD argue against an attrition allowance generally. Specific positions are set forth below.

Position of SoCal

SoCal recommends that the Commission recognize operational attrition in the total amount of $46,214,000 or $23,107,000 to be included both in 1981 and 1982.[2/] The estimate of attrition was developed using a least squares trending method where appropriate. SoCal used 1977 and 1978 recorded and 1979, 1980, and 1981 estimated data and extended the trend into 1982. It argues that this method is not reliant on conditions prevailing in a single year and addresses the issue of anticipated second year erosion more accurately than the staff method does.

2/ An oral argument SoCal indicated that it had changed its position and that it now supports the concept of step rates reflecting the attrition allowance in the year in which it will occur. SoCal continues to disagree with the method Staff used to calculate the attrition allowance.

SoCal would have the Commission add an increment to its rate of return authorization of approximately .70 percent at the beginning of the test year to recognize operational attrition.

**Position of Staff**

The staff recommends that the Commission recognize operational attrition in an amount not to exceed $38,358,000 during 1982 only. The staff used the expected change that will occur in 1981 and applied it to 1982. The staff has excluded major plant additions such as storage and transmission facilities which, it argues, could be handled in rate base offset proceedings. Staff also excludes operating revenues and production expenses from its considerations since PGA and SAM applications remove the fluctuations in earnings associated with these two items. The staff argues SoCal should be reimbursed for attrition only when it actually takes place and recommends step rates to effect recognition of attrition in 1982.

**Position of Cities**

In their joint brief, LA and SD recognized the validity of the attrition concept but urged that no attrition component be included in present rates. They point out that the Commission can make adjustments on a case-by-case basis if necessary, citing as precedent our action on Pacific Telephone's increased cost of debt in Decision No. 91121 in Application No. 58223. They argue that such a procedure gives all parties an opportunity to cross-examine witnesses, thereby preserving constitutional due process rights, and it meets the staff concern about not recognizing attrition until it occurs.

**Position of Shareholders**

Shareholders did not quantify a level of attrition, nor did it discuss operational attrition separately from financial attrition. Its rate of return recommendation is conditioned on the Commission's recognizing attrition for 1982.

Method of Implementing the Attrition Allowance

SoCal would have the Commission implement the attrition allowance (both for operational and financial attrition) by simply adding a .75 percent increment to the rate of return allowance for 1981. Since this allowance is expected to last two years, it will automatically carry over into 1982.

The staff proposes that SoCal file an advice letter late in 1981, which would include the results of operations for 1981 with eight months' recorded and four months' estimated data. The advice letter would be filed on a ratemaking basis, excluding abnormal or nonrecurring expenses and would contain a rate design consistent with the one adopted in the general rate decision.

Staff would analyze the advice letter to determine whether SoCal has achieved its authorized rate of return plus 20 basis points in 1981. The staff recommends inclusion of the additional 20 basis points (which translates to 50 basis points return on common equity) to provide SoCal with an incentive to increase its rate of return through cost controls. Staff argues that SoCal should not be penalized if it can maintain its level of customer service and at the same time earn the **rate of return authorized.**

If SoCal has not achieved its authorized rate of return plus 20 basis points, an attrition allowance sufficient to bring SoCal back to this level would be authorized. In no event, however, would the amount authorized exceed $40 million for operational and financial attrition combined.

Staff recommends that the advice letter be served on all parties to the general rate proceeding and that a period for comments be allowed and, if necessary, a public hearing held.

SoCal takes exception to this procedure, stating that it perverts the attrition allowance into a penalty/reward device. SoCal does not agree that the results of operations for 1981 should be the measure for an attrition allowance in 1982 because it believes that erosion in 1982 is not a problem totally rooted in 1981 and is largely independent of 1981's recorded earnings.

Discussion

The purpose of an attrition allowance is to give some recognition to costs occurring beyond the test year over which the utility has little or no control. Such items as increased cost of long-term debt have historically been recognized, at least in part, by use of a year end capital structure. Other items, such as increased taxes, franchise taxes, and increased cost of goods and services purchased by the utility are all types of operational costs which are largely beyond its control. Other items, such as addition of distribution plant, are virtually beyond the utility's control if necessary to continue to offer service. Still other items, such as wage rates and benefits to be negotiated, timing of major plant additions and retirements, and certain program expenses, are costs which are arguably within the utility's discretion. They are also arguably nondiscretionary, and it is this possibility of argument that gives us the most concern about the staff's recommendation for recognition of attrition through step rates.

The staff proposal, to be completely effective as envisioned, would require Commission action such that the rates required to recognize attrition for the year after the test year be in place by January 1, 1982. Staff would have SoCal file an advice letter containing a results of operations about October 1, 1981 based on eight months' recorded data and four months' estimated data. The staff estimates that by the time it made its review of the advice letter it would have one and maybe two more months' recorded data. We think it likely that it would have only one, considering the need for speedy review so near the end of the test year. A report of the staff analysis would have to be published and we think it likely that some party to the proceeding, whether utility or intervenor, would request hearing. A hearing would not only take time itself, it would necessarily result in participation by staff witnesses, and staff attorneys, would require reporters, transcribers, and an administrative law judge, and ultimately a second

decision. The staff estimates that the review could be completed expeditiously by two or three staff auditors. We fear that this estimate is far too conservative, especially given the uncertainties attendant upon estimates and given the variety of issues which should not, but undoubtedly will, be raised if we establish this "second look" at the results of operations.

We simply do not have the staff to undertake such a potentially burdensome review in the middle of the rate life of a major energy utility general rate decision. The potential for establishing a "mini-rate case" is all too obvious. We have developed the Regulatory Lag Plan to respond promptly to utility rate requests and to control the frequency with which such requests are filed, so that we can respond promptly. If we were to open the door to a mid-period filing for other than an extreme financial emergency, we would be undoing the carefully constructed Regulatory Lag Plan and the basis on which it operates. We would also severely strain existing staff resources which are already inadequate. We are unwilling to do this.

We do, however, recognize the need to reflect an allowance for attrition for 1982. We will,therefore, authorize an attrition allowance now to be recovered automatically through step rates at the beginning of 1982. Because there will be no review prior to implementation of these step rates, we are concerned that the level of attrition we authorize be set on a conservative basis. We cannot simply apply the staff or utility dollar figure for operational attrition since neither reflects the higher wage rates we are adopting herein. Similarly, the rate base attrition figures are skewed because each applied its recommended rate of return to its recommended rate base to determine the amount of attrition. We are adopting amounts for rate of return and for rate base which differ from both, and we will, therefore, adopt an attrition allowance which reflects our best judgment of the level of attrition expected for 1982, taking into account these changed components. We will include in our adopted results of operations an attrition allowance of $45.0 million to be reflected in rates at the beginning of the second year of the rate life of this decision. We note in authorizing this amount that we

are adopting a year-end capital structure which will tend to reduce financial attrition sharply in the second year of the life of the decision. Accordingly, the bulk of our attrition allowance will cover operational attrition for items which are beyond the utility's control.

In authorizing such a large amount for attrition at the beginning of the second year, we are cognizant of the fact that this allowance reduces SoCal's risk substantially and accordingly we have every expectation that SoCal can earn the return we authorize during the test year and the year following the test year. Under these circumstances, we see no need, barring severe unforeseen financial emergency, to consider further general rate relief until test year 1983.

The $45.0 million attrition allowance represents our best informed judgment at this time of the amount of operational attrition expected to occur in 1982. Because of the potential for volatile economic activity, such as that experienced in the last year, any number that we set may have a substantial chance of being in error relative to general inflation levels. An alternative would be to employ an appropriate index such as a general GNP deflator to determine the amount of attrition. Clearly no record exists in the present case for us to do this; however, SoCal is now on notice that we wish to pursue it in the next general rate case. Accordingly, SoCal and any other party interested in doing so should prepare exhibits and testimony reflecting the effects of using various indices to determine attrition levels for our consideration in the next general rate case.

## WESCO

In late 1971 a project feasibility study for the construction and operation of a coal gasification plant to be located on the Navajo Indian Reservation in northwest New Mexico showed that the project was technically and economically feasible and environmentally sound. Pacific Coal Gasification Company, an affiliate of SoCal and PLS, formed a joint venture with an affiliate of Transwestern Pipeline Company (Transwestern) creating Western Coal Gasification Company (WESCO) to pursue coal gasification.

In 1973 a contract was signed with Utah International, Inc. for coal and water, and an application was filed with the Federal Power Commission (FPC), now the Federal Energy Regulatory Commission (FERC), for a certificate of public convenience and necessity. WESCO's plan was to use the Lurgi coal gasification process to produce initially 250 million cubic feet of substitute natural gas (SNG) per day. Seventy-five percent of the product volume was to be delivered to SoCal.

In April 1975 the FPC issued its Decision No. 728. Both this Commission and WESCO petitioned for rehearing and in November 1975 the FPC issued its amended Decision No. 728-A. The prayed-for certificate was issued, contingent on FPC review and approval of the proposed financing plan and the Final Environmental Impact Statement prepared by the Department of the Interior. The approval provided for filing of tariffs containing a minimum bill provision instead of the "all events" tariffs originally requested. The applicants were given six months from the date of the order to accept the certificates issued therein.

In June 1977 the proposed lease for the plant site was presented to the Navajo Nation's Tribal Council. In February 1978 the terms of the lease were rejected. Several attempts were made during the ensuing year to reopen negotiations but were unsuccessful.

With the Tribal Council rejection of the plant site lease, and the continuing inability of the WESCO sponsors to obtain federal loan guarantees, and the expiration of the coal and water contracts with Utah International at the end of March 1979, the sponsors decided to abandon the project.

Since PLS was the funding company, the applicant in this proceeding, SoCal, has included a request for recovery of approximately $9.7 million in this rate proceeding. Transwestern is seeking recovery of its investment through its current rate case before the FERC. Since 50 percent of Transwestern's share of the production was allocated to California, 50 percent of any monies recovered through Transwestern's FERC tariffs will probably come from the SoCal ratepayer, in addition to any allowance we adopt herein.

Position of SoCal

The position of SoCal was put forth by Harvey Proctor and Loren Sanladerer and by rebuttal witness A. A. Hunt. SoCal is requesting amortization of the net of tax costs (including the interest portion but not the equity portion of the Allowance for Funds Used During Construction (AFUDC)) incurred in connection with the abandoned WESCO project, with rate base treatment for the unamortized balance. SoCal argues that its requested return on equity of 15.1 percent was made on the assumption that the Commission would authorize recovery of these costs and that if it does not, SoCal's risk considerations would change, requiring a much greater return. SoCal points out that this new gas supply project was undertaken for the benefit of its ratepayers, that this Commission recognized and publicly stated that the endeavor was in the public interest, and that the costs were prudently incurred.

As precedent, SoCal cites its abandonment of an SNG project wherein the Commission included rate base treatment of the unamortized balance of the abandoned project costs (Decision No. 83881) and, the abandoned Kaiparowits power plant, in which SDG&E and Edison were allowed to amortize the full amount of the prudently incurred project costs over a five-year period, less certain expenditures which have a continuing value to the utilities (Decisions Nos. 87639 and 89711). In the case of the Sycamore Canyon combined cycle plant, SDG&E was allowed to amortize the full amount of prudently incurred project costs over a five-year period (Decision No. 87639); and finally, in the case of Sundesert nuclear project, SDG&E was allowed to amortize the full amount of all prudently incurred, nonsite-related costs over a five-year period and place the site-related costs in rate base (Decision No. 90405).

The request for only the interest portion of AFUDC is somewhat novel and SoCal states that it was attempting to apply the reasoning this Commission set forth in the Sundesert matter where we

disallowed the request for recovery all AFUDC because "it would be inappropriate and unreasonable for the investors to realize a capitalized return on funds invested to date on this uncertificated and now indefinitely deferred proposed project." SoCal argues that only the equity portion of AFUDC contains a component for return to investors and only that portion represents an allowance for investor risk. SoCall contends that the interest portion of AFUDC has nothing to do with an allowance for risk, that it is a direct out-of-pocket expense, containing no component at all for a return to investors. It points out that the Commission has consistently ruled that all prudently incurred out-of-pocket expenses should be returned to the utility in cases of abandoned energy projects. SoCal notes that the interest portion of AFUDC is now a significant and material cost of new gas supply projects because of the large investment in capital requirements over a long period of time and that denial of recovery of these costs may ultimately preclude California utilities from actively and aggressively pursuing new energy sources.

It is SoCal's position that the process of amortizing the recovery of the WESCO costs over a five-year period in itself creates a project cost for which the investors should be reimbursed, and for this reason it is requesting rate base treatment of the unamortized expenses. If the Commission is unwilling to give rate base treatment to these costs, SoCal suggested that the full amount of the WESCO costs be returned during the 1981 test year or the costs could be amortized over two years. Both alternatives would substantially reduce the carrying cost to the investors.

SoCal takes issue with the position adopted by the staff wherein the costs would be shared by the ratepayer and the investor after certain deductions which the investor alone would bear. SoCal states that it will lose 68 percent of the amount it has applied for in this case and that such a decision would have a material, adverse impact on the net income because an after-tax amount of $5,828,000 would have to be written off at the time of the Commission's decision.

That amount represents over 30 percent of the 1979 net income of PLS, or 8 percent of the 1979 net income of SoCal. SoCal argues that this result would directly impact the ability of PLS to issue new debt and could impact SoCal's financing at a time when the Commission is ordering California utilities to take a number of innovative steps, including financing, to ensure that the installation and use of energy conservation equipment becomes economically attractive.

Finally, SoCal believes that the financial community would view such a sharing of costs as a new precedent signifying a shift in Commission policy which would bring into question the ability of any California utility to recover substantial amounts of money expended in pursuing major energy projects. All three of SoCal's witnesses who testified on WESCO stated that if the Commission adopts the staff recommendation it would be likely that SoCal's independent auditor would give a qualified auditor's opinion which could have serious consequences with regard to the credit and securities of PLC, with regard to the ability of its companies to maintain adequate earnings levels, and with the willingness of investors to advance funds for new capital projects.

Position of the Staff

The position of the staff was put forth by J. Archie Johnson, a financial examiner, and was further discussed by Quan for the rate of return consequences of the staff recommendation. The staff recommends that the net of tax credit balance of $9,715,000 be reduced by the amount of accumulated AFUDC ($1,941,049) and one-half the remainder be amortized over a five-year period with no rate base treatment.

The staff notes that, based on this Commission's position at the FERC hearings, there is a basis for a strong argument that the ratepayer should not have to bear any of the burden of this abandoned project. The staff, however, considered the following facts in arriving at its recommendation in this matter:

1. Applicant received encouragement from the Commission to pursue the project, even though the Commission was concerned over the risk of the project.
2. An audit review of the expenditures did not indicate that the costs were imprudent.
3. The present energy shortage places a high priority on obtaining new sources of fuel.
4. Both the ratepayer and applicant would have benefited from a successful coal gasification project.

Position of Legal Division

Legal Division recommends that all cost recovery for WESCO be denied on the grounds that ratemaking does not function like an insurance contract and should not guarantee recovery of all costs plus a return to compensate shareholders for the risks involved in their business enterprise. Legal Division points out that WESCO is nothing more than one of the normal risks of the utility business and that SoCal's shareholders are already compensated for that risk in the allowed rate of return.

In support of its argument that all WESCO costs should be disallowed, Legal Division cites differences between the WESCO project and SDG&E's Sundesert project, including the relative financial strength of SoCal as compared to SDG&E, the disproportionate size of the two projects, and the separation of the Sundesert expenses into site-related and nonsite-related categories.

Position of Cities

The cities recommend that the Commission not deviate from the traditional ratemaking "used and useful" principle in its decision on this issue and require the utility to bear the entire burden of all costs associated with the abandoned project.

Cities argue that the utilities sponsoring WESCO were warned that all risks should be borne by applicant prior to actual delivery of gas, that this Commission participated in the FERC hearings with respect to WESCO and argued against shifting the costs of WESCO to the ratepayer, and that the criteria set forth by staff witness Johnson for shifting part of the costs to the ratepayer have no foundation in Commission policy.

Position of Shareholders

Shareholders recommends that the entire investment in WESCO be recovered from the ratepayers, including a fair return on the funds invested. It supports SoCal's recommendation that the unrecovered cost of WESCO be put in rate base and amortized over a reasonable (but unspecified) time.

Shareholders argues that while the amount is relatively small, the principle of recovery is of crucial importance to shareholders at a time when SoCal is contemplating huge investments in projects to supplement its gas supply. Shareholders believes that investors deserve to know that when their funds are invested in new projects that have been properly authorized by the regulatory authorities and are later abandoned, they will be able to recover their investment fully. It says that if this principle is not affirmed by the Commission, a substantial new risk will be borne by PLC shareholders, requiring a higher rate of return.

Discussion

We are concerned with the increasing magnitude of abandoned project costs and the frequency of abandonments, the costs of which we are routinely being asked to place on the ratepayers' shoulders. We are also concerned with the increasing burden being placed on the stockholders who in the past have invested in utility stocks as a reliable income stock with some growth possibilities and with very little risk. Although the costs in this case are small in comparison to some abandonment costs, such as those of Sundesert, this in itself is not sufficient

justification for placing the entire burden either on the stockholder or the ratepayer. Neither group is in the same position currently as they have been traditionally. For example, an investor who buys utility stock today may buy more risk than he bought with utility stocks ten years ago. Increasing returns on equity reflect that increasing risk. Similarly, the ratepayer of today bears more costs, including some from abandoned projects, than he was asked to bear ten years ago. As we look at changed conditions we are very much aware that this same situation may well confront us again and, depending on the time and circumstances surrounding that situation, we may arrive at a conclusion different from the one we reach here. We cannot emphasize too strongly the necessity of examining each case on an individual basis to arrive at an equitable decision.

The AFUDC Issue

This Commission has never allowed AFUDC on an abandoned project. In Decision No. 90405, in re Sundesert costs, we stated "We recognize that AFDC is as valid a project cost as any cash outlay for labor or equipment". In requesting only the interest portion of AFUDC, SoCal makes the same argument in this case - that it is requesting only a valid cost. Nevertheless, we feel constrained to point out, as we did in Decision No. 90405, that we are concerned from an equitable viewpoint whether we should burden the shareholder only with the equity portion of AFUDC and the carrying costs from the time of abandonment to the time of decision in this matter. Despite the fact that we recognize interest as a cost of a project, either in the form of an AFUDC component or in the form of cost of money during amortization, we have heard no argument in this proceeding that persuades us to deviate from our longstanding policy of assignment of AFUDC as a cost the investor should bear in the event that no construction results.

SoCal errs in its argument that the interest portion of AFUDC has nothing to do with risk to the investor. It does. When the investor puts his money up for a new project, there is a cost associated with that money for the time it is tied up in the project

until the project is complete and earns a return. This is the interest portion of AFUDC. If the project fails, not only does the investor not earn a return, he is at risk that he will lose both the money he had tied up in the project and the carrying costs of that money during the time it was tied up and not earning elsewhere. The fact that this Commission has in the past authorized recovery of prudently incurred costs on a "share the risk" basis does not change the fact that both the money and the carrying costs were at risk.

SoCal's argument that failure to allow recovery of the interest component of AFUDC may make it difficult to finance future energy supply projects, including alternative energy projects such as solar and conservation, is speculative. So too is SoCal's opinion that failure to allow recovery of any portion of the WESCO costs might result in a qualified opinion from its outside auditors. SoCal has adduced no hard evidence to support either contention and we believe that both contentions represent a "worst case" opinion of what might happen. Given the relatively small dollar amount in issue here, we doubt seriously that either has any real chance of occurring as a result of our decision in this matter. AFUDC, taken in toto, is a part of the risk associated with new plant investments. If the project is successful, that amount is added to the cost, put in rate base, and earns a return. If the project is not successful, we see no compelling reason to shield the investor from the risk of loss of AFUDC. Accordingly, we will disallow all AFUDC accumulated in connection with the WESCO project as a recoverable expense for SoCal.

Rate Base Treatment of Unamortized Costs

In addition to the recovery of costs associated with WESCO, SoCal seeks to have the unamortized portion of these costs included in rate base. SoCal argues that if the Commission finds that recovery of the WESCO costs is reasonable, it will have found that such amount represents money properly payable to the investors by the ratepayers and that returning it to the investors over a five-year period means that they

will not have the use of the unamortized funds until they are fully returned. SoCal believes that the ratepayer should reimburse the investor for his out-of-pocket cost represented by the carrying cost of money by including the unamortized portion in rate base thereby paying the investor a return on it.

SoCal's witnesses testified that rate base treatment has previously been allowed for abandoned plant by this Commission, citing Decision No. 83881 (SNG plant), Decision No. 90405 (Sundesert), and Decisions Nos. 89711 and 87639 (Kaiparowits). These matters can be distinguished from the WESCO project. In the Sundesert and Kaiparowits matters there was something left from the abandonment that was of value to the ratepayer. In Kaiparowits it was interest in coal and in Sundesert it was a plant site certified by the California Energy Commission under its Notice of Intent procedure. It was those portions of the abandoned plant costs which were placed in rate base as plant held for future use and on which the investors now earn a return.

SoCal is not claiming that there is anything left of value from the WESCO project. It asserts nothing which is or may become "used and useful" to the ratepayer in the provision of utility service. Its sole rationale is that the carrying cost of money is a real cost to its investors. We agree that it is a cost but we do not agree that it is a cost that should be recovered from the ratepayer. This is consistent with our rationale stated above that the ratepayer should not have to bear the interest portion of the AFUDC costs representing the carrying cost of money during the construction period and is consistent with the investor's generally bearing the carrying costs. We note that SoCal did not claim the carrying costs between the time of abandonment and the time of decision in this matter, which is also consistent with our overall allocation of costs to the investor.

SoCal suggests as an alternative to rate base treatment a one- or two-year amortization period. We believe these periods too short, both in terms of impact on the ratepayer and in terms of distortion of earnings in the test year. We will, however, shorten our usual five-year amortization period to four years. Under the Regulatory Lag Plan we expect utilities to be filing for general rate relief no more often than every second year. A four-year period will allow complete amortization at the end of the rate life of the general rate decision following this one and will provide a somewhat faster return of funds to the investor without unduly burdening the ratepayer.

Recovery of WESCO Costs

SoCal's basic position is that this Commission encouraged SoCal's efforts on the WESCO project before FERC, worked with it in seeking federal financing, and stated publicly that it was in the interests of the California ratepayer. If the Commission does not authorize full recovery of the costs of WESCO, SoCal asserts extremely serious financial effects will follow, including the possibility of being unable to finance future supply projects and the possibility of a qualified opinion from its outside auditor. SoCal believes that the costs were prudently incurred and therefore should be recoverable in rates.

The staff does not dispute the prudency of the expenditures. It does point out, however, that the technology being used in the WESCO plant was not subject to this Commission's jurisdiction and that the utilities sponsoring WESCO were warned that all risks should be borne by applicant prior to actual delivery of gas. The staff has reviewed the Commission's position, taken in briefs and pleadings before FERC, and believes that there may be a strong argument, in view of those positions held over a period of years, that the ratepayer should not have to bear any of the costs of this abandoned project.

We expressed our concern for the ratepayer's interests very early in the proceedings before FERC (then FPC) when we stated in our opening brief dated March 12, 1974:

> "California urges the Commission to condition its approval of this project, if granted, so as to make it very clear that the risk of a total project failure is not to be borne by the customers of applicants." (Mimeo p. 22.)

It is against this backdrop that SoCal must view our continued encouragement in pursuit of the project and our assistance in the attempts to finance it through federal loan guarantees. We indicated in that same brief that there would be a sharing of risk once gas was produced were FPC to adopt the pricing proposal we were advocating. The FPC adopted a similar pricing proposal, noting that it provided a means of ensuring applicants that they would receive a just and reasonable price for the SNG while providing adequate protection for the consumers against imprudent and improper expenses.

During the time period in which WESCO was pending before the FPC applications to abandon plants came before us and our decisions therein began to depart from the traditional ratemaking principle that ratepayers paid only for used and useful investments and shareholders paid for failed projects, and we began to share the prudently incurred costs between the two.

During this time we have allowed amortization of prudently incurred costs for SoCal's naphtha-SNG plant (Decision No. 83881), for SDG&E's Sycamore Canyon combined cycle plant (Decision No. 87639), for the Kaiparowits plant (Decisions Nos. 89711 and 97639), and for SDG&E's Sundesert plant (Decision No. 90405). Only in the case of Edison's Vidal nuclear generating facility did we deny recovery of costs and that was on the basis of imprudence. In all of the decisions in which we allowed some cost recovery, we have required the investor to bear the AFUDC. In most we have not authorized recovery of the carrying costs through including the unamortized costs in rate base (rate base treatment occurred in Decision No. 83881, as staff notes, through oversight).

With this history developing during the course of the WESCO project before the FPC and FERC, we now find ourselves in a somewhat changed position from our initial insistence that the ratepayer should bear none of the costs of an abandoned project. We find very little in the WESCO matter before us to distinguish from our treatment of the nonsite-related costs in Sundesert or from our treatment of the costs in Sycamore Canyon or Kaiparowits. The costs were prudently incurred and conditions changed in an unexpected way, making abandonment of the project more prudent than continuing it. Consistent with our position in prior cases, we will authorize recovery of $6,877,682 representing the prudently incurred expenses related to WESCO, as described more fully below.

In reaching our decision in this matter, we continue our developing policy of sharing the costs between shareholder and ratepayer but use a formula different from the staff's for determining the relative amounts to be shared. We specifically reject SoCal's proposed rate treatment because under SoCal's proposal the ratepayer would bear costs of $25,600,000 while the shareholder would bear costs only of $3,100,000. This is an unacceptable shift of the basic risk inherent in this type of activity. Such risk properly belongs to the shareholder and the shareholder is compensated for it in rate of return. The ratepayer has no such compensation nor does he have the option not to participate. Accordingly, in assigning a portion of the costs to the ratepayer, we are very conscious of his "captive" position.

**We will authorize recovery from the ratepayer of the remainder of $8,315,000 amortized over four years, with no rate base treatment. Of the total project costs, the ratepayer and shareholder will share percent as follows:**

| | |
|---|---|
| Net expenditures requested by SoCal to be recovered to abandonment 4/79 | $ 9,715,000 |
| AFUDC (equity portion only) | 1,750,000 |
| Return on unamortized portion during 4-year amortization | 1,419,812 |
| Carrying cost of project from abandonment in 8/79 until amortization begins 1/81 | 1,350,000 |
| Total net cost | $14,234,812 |
| Amount to be recovered from shareholders | 5,919,812 |
| Amount to be recovered from ratepayers | 8,315,000 |
| Gross revenue requirement from ratepayers | 17,045,750 |
| Ratepayer share | 74.22% |
| Shareholder share | 25.78% |

This sharing of costs is consistent with our prior decisions wherein we allowed recovery of prudently incurred costs less AFUDC and required the shareholder to bear the carrying costs during amortization.

We authorize recovery of a portion of WESCO costs on a sharing basis only because the costs of failed projects prudently entered into is rising to a level where we can no longer adequately compensate the investor entirely in rate of return for the risk assumed on these projects without skewing the rate of return to the point where it would not be comparable with utilities operating under similar circumstances with similar risks.

We specifically reject SoCal's argument that because this Commission encouraged and supported the WESCO project we are now bound to authorize recovery of the expenses associated with it. Our concern for the costs that the ratepayer would have to bear was manifest from the first brief before the FPC filed in March 1974, where we said:

> "California urges the Commission to condition the approval of this project, if granted, so as to make it very clear that the risk of a total project failure is not to be borne by the customers of applicants." (Opening Brief of the People of the State of California and the Public Utilities Commission of the State of California in Docket No. CP73-211, mimeo, p. 22.)

That concern for the effect of the project on the ratepayer is paramount in virtually every pleading we have filed before the FPC and FERC. In our latest brief, filed in Docket No. RP78-88 in November 1979 and clarified in February 1980, we argued to FERC that amortization of WESCO costs should not be permitted. As a minimally acceptable compromise, we suggested to FERC that a 50 percent amortization might be authorized, but noted that FERC precedents justify and mandate that Transwestern's shareholders rather than its ratepayers bear Transwestern's entire expense related to the failed WESCO project. Our decision herein to share the burden of the costs between shareholder and ratepayer differs from our position before FERC only because our own precedents differ. We have previously allowed recovery of these kinds of costs; FERC has not. Our allowance of recovery of part of the costs herein is based solely on our own precedents cited previously and in no way reflects any real or perceived duty to allow recovery of costs of a failed project for which we offered limited encouragement and support during its certification process.

## RESULTS OF OPERATIONS

### General

Both SoCal and staff presented results of operations data in this proceeding. Exhibit 125, presented by SoCal's witness R. N. McCluer but sponsored jointly with staff, provides a comparison of SoCal's and staff's results of operations summaries for test year 1981 for SoCal and PLS.

The staff's total revenue estimate of operating revenues for PLS exceeds SoCal's estimate by $127,300,000 and is flowed through to SoCal via the cost of service tariff. The difference is included in the category Production Expenses below. The greatest portion of this difference is due to staff's higher estimate of gas supply from Transwestern.

The significant differences between SoCal's and staff's estimates for SoCal's 1981 test year operations are summarized below:

1. Revenues: The staff's estimated revenues exceed SoCal's by $142,114,000 due to staff's estimate of gas supply exceeding SoCal's by $219,255,000, staff's estimate of miscellaneous revenues exceeding SoCal's by $69,000, and staff's higher estimate of conservation for residential customers resulting in a sales estimate $77,210,000 lower than SoCal's.

2. Expenses: The expense estimate differentials are summarized as follows:

   a. Production: The staff's estimate of production expenses is $132,206,000 higher than SoCal's, of which $127,300,000 is due to higher charges by PLS on the cost of service tariff and $4,902,000 is due to staff's estimate of greater gas supply.

   b. Storage, Transmission, and Distribution: SoCal's estimate exceeds staff's by $6,111,000. The differences consist of a $1,604,000 wage adjustment and a $4,507,000 difference in O&M expense estimates.

c. Customer's Accounts: SoCal's estimate exceeds the staff's by $1,001,000 with the staff estimate relating to gas sales exceeding SoCal's by $275,000 and SoCal's wage increase and O&M expenses exceeding staff's by $525,000 and $751,000, respectively.

d. Market Services: SoCal's estimate exceeds staff's by $7,244,000 with $1,381,000 being due to SoCal's wage increase and $7,106,000 being due SoCal's higher estimates for Accounts 912 demonstration and selling, and 913 conservation advertising.

e. Administrative and General Expenses: The difference between SoCal and staff amounts to $762,000, which consists of staff's higher estimate of franchise fees associated with its higher estimate of gas supply in the amount of $2,396,000, SoCal's wage increase exceeding staff's by $616,000, staff's higher estimate of pensions and benefits of $159,000, and staff's estimate of research and development expenses lower than SoCal's by $2,045,000.

f. Taxes: SoCal's estimate of ad valorem taxes exceeds staff's by $916,000 and its estimate of payroll taxes exceeds staff's by $346,000. Staff's estimate of income taxes exceeds SoCal's by $6,131,000 due to differences in interest cost estimates on long-term debt and Banker's Acceptances, differences in revenues and expenses listed above and differences in estimates of construction work in progress which result in a nonutility interest adjustment by SoCal but not by staff, and allowances for income taxes on contributions in aid of construction.

g. Depreciation Expenses: SoCal's estimate is $821,000 higher than staff's and is due to differences in estimates of plant additions.

3. Rate Base: SoCal's total estimate of rate base exceeds staff's by $37,965,000, reflecting a wage adjustment of $479,000, an estimate for working cash larger by $10,064,000, and $27,901,000 greater gas plant in service.

Pursuant to the Regulatory Lag Plan, SoCal furnished an exhibit showing certain portions of the staff presentation to which it was willing to stipulate. SoCal agreed to the staff adjustments as follows:

1. Revenues from the sale of crude oil are to be included in future PGA filings;
2. Postage expenses (with the understanding that if postal rates are raised prior to a decision in this case, the increase will be reflected in rates);
3. Charitable contributions;
4. Additional expense for a company airplane;
5. Increased Customer Advances (which reduce rate base); and
6. A gas meter antitrust litigation refund (to be added to the depreciation reserve, thereby reducing rate base).

These adjustments proposed by staff and accepted by SoCal were reflected in the comparative exhibit and are included in the differences discussed above.

Revenues

Revenues can be segregated into three categories, miscellaneous revenue, exchange revenue, and revenue from gas sales.

Miscellaneous revenue is revenue derived from various nongas operations. The staff has proposed and SoCal stipulated that the oil revenue, included in this category in SoCal's application, should be included in the PGA/SAM gas margin calculations. With that stipulation the difference between SoCal's estimate and staff's is only $69,000 and we will adopt the staff's estimate of $1,562,000. The staff has accepted SoCal's estimate of exchange revenue as reasonable, and we will adopt $3,318,000 for this category.

The staff estimate of revenues from gas sales exceeds SoCal's by $142,114,000. The differences are due to the staff's more optimistic estimate of gas supply available from Transwestern

and El Paso under Sections 311(b) and 312 of the Natural Gas Policy Act (NGPA). SoCal has estimated a supply available from Alberta, Canada, that the staff has not included. The supply from Alberta requires prebuilding of the western leg of the Alaskan Pipeline Project, an application for which is presently before us. (Application No. 59793.) SoCal now admits that its estimate for gas from this source is probably overstated in view of the delays which have been and may be associated with this project.

The staff's estimates for Transwestern and El Paso supplies represent total supplies available, including production from proven reserves and short-term purchases. The staff witness indicated that short-term purchases have been increasing since the passage of the NGPA and estimates that they will continue to increase at least through test year 1981.

We will accept staff's estimate of gas supply for use in this rate case as being reasonable on a total basis. In doing this, we note that both staff and SoCal have been conservative in their estimates of gas supply in past cases, ranging from 40 to 60 percent lower than actual supply. The staff estimate of 919 billion cubic feet (Bcf) for test year 1981 is 3 Bcf less than the 1979 recorded figure of 922 Bcf. SoCal's estimate of 841 Bcf is substantially below the 1979 recorded supply and, we think, unrealistically low. Very conservative supply estimates have in the past led to repeated SAM overcollections due to more gas being available for sale than had been estimated. We think an estimate more in line with current supply will tend to mitigate these overcollections.

SoCal and staff also differ in their estimates of customer requirements, primarily in the residential class where the staff has estimated lower requirements due to increased

conservation. Because of its higher supply estimate, staff does not envision any curtailment through Priority 4 (P-4) and assumes that P-5 customers will take all gas available to them. In all other respects, the staff's estimate of gas requirements is in reasonably close agreement with SoCal's estimate of requirements.

SoCal takes issue with the staff estimate of residential use, noting that staff based its estimate in part on a forecast prepared initially in 1977 in Case No. 10342. SoCal believes that these estimates are understated when compared with recorded consumption. In support of its position, SoCal cross-examined the staff witness and elicited his agreement that SoCal's estimate of daily requirements in the P-1 and P-2A classes were virtually identical to the figures contained in the staff Gas Supply and Requirements Team's "Forecast of Natural Gas Supply Requirements and Costs - 1980-1989 - California Distribution Utilities". However, the staff witness explained that these figures had been adjusted to some extent to reflect actual experience which included less conservation than projected in Case No. 10342.

The staff witness went on to point out that conservation estimates reflected both price and nonprice conservation, and that it was his opinion that there was going to be a lot less gas consumption in the test year than SoCal estimated, in part because tail block residential rates have risen 47 percent in the last year and theseprices between now and 1981 will likely be *increasing very significantly due to the NGPA.*

We find the staff arguments persuasive, particularly in view of our decision herein on the conservation issue. We expect to see SoCal increase its conservation savings dramatically in test year 1981 and we would expect to see a large part of that conservation fall within the residential class. Accordingly, we will adopt the staff estimate of revenues from gas sales for test year 1981. The staff estimates, however, were computed using a franchise and uncollectible factor (F&U) of 1.477 and a gas margin of $584,129,000 to compute the SAM overcollection. Because we have a more current F&U factor of 1.539 and because Decision No. 91969 adopted a new gas margin of $563,771,000 computed differently than the previous margin used by staff in its revenue estimates, we will recompute staff revenues at present rates in our adopted results of operations to reflect these changes.

SoCal, notes in its brief, and we concur, that a reasonable sales estimate approach is entirely appropriate in a general rate case since the rates we set herein will be evaluated in April and October of each year in the CAM hearings, based on newly updated gas supply estimates available at that time.

Our adopted gas margin for test year 1981 is as follows:

| | | | (Dollars in Thousands) |
|---|---|---|---|
| 1. | Gas Sales Revenues | | $2,399,551.2 |
| 2. | Exchange Revenue | | 3,318.0 |
| 3. | Total Revenue | | 2,402,869.2 |
| | Cost of Gas | | |
| 4. | PLS Purchases | $ 513,745 | |
| 5. | SoCal Purchases | 1,156,916 | |
| 6. | Total Purchases | | 1,670,661.0 |
| 7. | F&U @ 1.539% | | 25,711.0 |
| 8. | Total Cost | | 1,696,372.0 |
| 9. | Gas Margin (1.3 - 1.8) | | 706,497.2 |
| 10. | Current Margin | | 563,771.0 |
| 11. | Increase | | 142,726.2 |

Consistent with our adoption of an attrition allowance in the amount of $43 million to be recovered through step rates effective January 1, 1982, SoCal is also authorized effective January 1, 1982, to increase its gas margin from $706,497,200 to $752,188,200 which includes an increment for the uncollectible factor associated with the collection of the additional revenues. In accordance with the recommendation of staff, with which SoCal concurs, we will adopt the zero cost of gas concept for general rate cases and will address all gas costs in future CAM proceedings.

EXPENSES

Wage Increase

Both SoCal and staff estimates for test year 1981 reflect a seven percent wage increase, SoCal on an annualized basis and staff on an as-expensed basis. Present rates for 1980 also reflect a seven percent wage increase on an as-expensed basis adopted in Decision No. 89710 (mimeo. p. 50).

Subsequent to the date SoCal and staff filed their respective results of operations showings in this proceeding, SoCal and the unions negotiated a collective bargaining agreement which resulted in a 9½ percent wage increase effective April 1, 1980, plus changes in medical, dental, vacation, and other working conditions. The wage increase agreement is a two-year contract with the second year (1981) based on a cost-of-living adjustment. Effective April 1, 1981, wages will be increased by one percent, plus an increase of one-half of one percent for each one-half of one percent increase (or fraction thereof) in the Los Angeles-Long Beach-Anaheim Revised Consumer Price Index (CPI) for January, 1980 and the Index issued for January, 1981, subject to a maximum combined increase of 13½ percent and a minimum increase of 8½ percent.

SoCal did not amend its application to increase the revenues requested, nor did it amend its results of operations to reflect the change in wages for either 1980 or 1981. Nevertheless, SoCal believes that the Commission should reflect the increased costs resulting from the collective bargaining agreement in its decision for test year 1981. SoCal points out that the Commission will know the increase in the CPI through September 1980, before this decision issues. As a result, a good indication of the effect of the increase in the CPI will have on the amount of wage adjustment for test year 1981 will be available.

The Legal Division objects to the information on the wage increase being considered in this application since it was not used in the preparation of either staff or utility estimates and since it was offered well past the date in the Regulatory Lag Plan on which applicant was to submit all final exhibits, testimony, and other evidence. It argues that this is clearly a major update precluded for procedural reasons, pointing out that the potential effect involves millions of dollars and revision of numerous portions of both staff and utility estimates without adequate opportunity for review.

The staff did review SoCal's wage agreement and determined that SoCal's agreement differed from those of SDG&E and Edison in that SoCal's had a guaranteed "floor" of 8½ percent and the others did not. All had a ceiling of 13½ percent. The staff recommends that the amount authorized for wages and benefits be subject to refund in the event that the CPI rises at a rate less than 7½ percent for the period January 1980 through January 1981.

Council on Wage and Price Stability Guidelines

Commission Resolution No. M-4704 stated that we will support the President's anti-inflation program in granting general rate increases and will see that the Council on Wage and Price Stability (COWPS) guidelines are complied with to the fullest extent possible.

SoCal presented a letter from COWPS dated May 29, 1980 approving a request for exception to the pay standard for the employee unit noted (Utility Workers Union of America, AFL-CIO and International Chemical Workers Union) on the basis of a tandem relationship with other California utilities.

The staff questions whether a tandem relationship truly exists in view of the fact that only SoCal has an 8½ percent guaranteed minimum wage increase and the other utilities do not, and in view of the fact that COWPS indicated in its June 11, 1980

letter to the staff that "under usual circumstances, the Council does not favor the inclusion of guaranteed minimum cost-of-living increases, since it expects those covered by cost-of-living adjustments to assume the down-side risk of the CPI not rising to meet the minimum level anticipated." The COWPS went on to note, however, that in this situation, it was felt that the tandem requirements had been met and that the other utilities would generate increases equal to those of SoCal. As noted, it granted the exception request.

It has long been our policy to authorize expenses only at known wage levels. This policy serves as an incentive to utility management to bargain stringently when negotiating wage settlements and serves as an incentive to protect the ratepayer from exorbitant wage settlements passed through as an operating expense. However, in this case, we do not believe it reasonable to ignore the fact that existing wage levels have changed from those used to estimate expenses. There is a known 9½ percent increase for 1980 expenses and, at the very least, we must recognize this increase if SoCal is going to have a reasonable opportunity to earn the rate of return we authorize herein. We recognize that this change represents essentially an update of the utility showing in contravention of the Regulatory Lag Plan and that it works a hardship on the staff, with its limited resources, to analyze such updates. Normally, we would not countenance them; however, in a time of high inflation, when the labor expense estimates are so obviously lower than actual labor expenses being incurred, we simply cannot decline to recognize the actual increase in 1980 labor expenses. We have therefore increased the 1981 expenses to reflect this 2½ percent wage increase.

The 1981 test year labor expenses are another matter. SoCal's witness Johnson testified that SoCal offered the 8½ percent

minimum increase in exchange for a "cap" or ceiling on the cost-of-living allowance of 13½ percent. He stated that SoCal did this to avoid having the union come in with a request for a 17 percent raise, which had seemed likely given the CPI at the time negotiations started.

While we cannot ignore valid costs that a utility is incurring in providing service to its customers, we must examine closely costs such as labor for reasonableness for the simple fact that the utility is incurring them may not of itself be sufficient justification of reasonableness. For example, as the staff points out, if the CPI does not rise at least 7½ percent (as it did not in 1976 after a period of high inflation in 1974) then SoCal's labor force will still have a minimum of 8½ percent wage increase in 1981 while other utility workers will not have the same guarantee. What did SoCal get in return for this concession? They got the same 13½ percent cap that other utilities got on their cost-of-living allowances. We do not wish to establish the precedent of referencing our adopted labor expenses to the CPI or to automatically passing through any expense the utility negotiated without examining it for reasonableness under the circumstances existing at the time the expense is incurred. To do so, particularly with an expense such as labor, would destroy any incentive the utility has to take a firm position at the bargaining table. Under SoCal's wage settlement, the amount of the second year increase is not definitely known at this time and will not be definitely known until almost three months after this decision is issued. Since we must set rates based on reasonable expense levels under those circumstances, we will use 12.0 percent, for the 1981 labor portion of expenses. We take official notice that the Los Angeles/Anaheim/Long Beach CPI index has risen 8.4 percent from January 1980 through October 1980. Based on this rise, SoCal would pay an 9.5 percent increase in wages under its contract beginning

April 1, 1981. Our use of 12.0 percent is based on our expectation that the CPI will continue its rise over the remaining three months of this year and on our best judgment of how much that rise will be. We believe that 12.0 percent is reasonable, is within the COWPS guidelines, and will afford SoCal an opportunity to earn its authorized rate of return. We will not make these monies subject to refund if the CPI does not rise at least 7½ percent for the period January 1980 through January 1981 since it now appears that the CPI will rise at least this much.

Wage Adjustment

Staff made a wage adjustment in its estimates to reflect the fact that increased wages will be in effect only nine months of the test year while SoCal's estimates reflect the expense annualized. We will adopt SoCal's methodology as reasonable in this proceeding in view of the uncertainty of the actual level of test year wage increase. Since the figures submitted by SoCal and staff in this proceeding reflect only a 7 percent labor escalation for both 1980 and 1981, we will recompute expenses as adopted to reflect both the increase in wage levels and the annualization of the wage increase.

Production Expenses

The difference in production expense estimates between staff and SoCal totals $132.2 million with the staff estimate exceeding SoCal's. The difference consists of $4.9 million due to staff estimates of higher volumes of gas received from El Paso and $127.3 million due to revenue and expense differences between SoCal and staff estimates for PLS. All these differences flow through to SoCal via PLS' cost-of-service tariff. The major portion of the differences is due to staff's estimate of greater volumes of gas received from Transwestern and to staff's adjustments for the WESCO project discussed, infra. Other, less significant differences in the SoCal and staff estimates of PLS expenses relate to rate base items, depreciation expense, and various tax items.

We will adopt the staff estimate of gas supply in accordance with our discussion on revenues. We will adopt the estimates for other PLS expenses in accordance with our discussion and resolution of similar differences in estimates relating to SoCal's operations.

Storage Expenses

The total difference between SoCal and staff estimates in this category is $2,570,000, of which $79,000 is due to the wage adjustment discussed previously. The remaining difference of $2,491,000 is discussed in each account below:

Account 814 - Supervision and Engineering. Staff witness Van Lier testified that he adjusted this account downward by $131,000 after individual analysis, using 1977 and 1978 recorded manpower and escalating it for 1981 test year purposes. SoCal bases its estimate on existing manpower at year end 1978 and planned manpower at year end 1979. Since SoCal estimates use a more current basis, we find them to be more accurate and will adopt them as reasonable.

We note at this point that SoCal took exception to the staff's analyzing this account (and Accounts 819, 832, and 854) on an individual basis rather than using the "normalization technique" applied to other storage expense accounts. We know of no requirement for blindly applying the same technique to analyze all accounts regardless of the type of expenses recorded therein. We adopt SoCal's estimate herein only because it appears more reasonable to us than the staff estimate and not because we find the staff's individual account analysis inappropriate.

Account 817 - Lines Expenses. Staff's estimate of this account is $35,000 less than SoCal's due primarily to postponement of the Honor Rancho gas treatment project until near the end of the test year. Having postponed the project, SoCal will not be incurring the expenses associated with it and we therefore adopt staff's estimate.

Accounts 818 and 820 - Compressor Station and Measuring and Regulatory Station Expenses. The total difference between staff and SoCal is $88,000 for these two accounts. The staff used 1978 recorded data and applied inflation factors for labor and nonlabor to arrive at a 1981 test year. It rejects SoCal's estimates which it says are based on "future plans." The staff witness testified that by "future plans" he meant utility assumptions but was unable on cross-examination to be any more specific as to what he found unreasonable about SoCal's estimates. We will adopt SoCal's estimates for these two accounts.

Account 819 - Compressor Station Fuel & Power Expenses. The staff's estimate of this account is lower than SoCal's by $583,000. This difference is due almost entirely to staff's deletion of the Ten Section storage field cusion gas injection compressor fuel which is a capital item and not an expense. SoCal has not incorporated any Ten Section gas in its test year 1981 estimate for account 819. We find SoCal's estimate more current and accurate and adopt it.

Account 832 - Maintenance of Reservoirs and Wells. The staff estimate for this account is lower than SoCal's by $1,654,000 due to lower estimates of number of subsurface safety valve (SSSV) repairs and lower estimates of the number of general well repairs for the test year. The staff also used a lower inflation factor in its estimates for this account.

SoCal argues that staff's analysis of this account with respect to the SSSV repairs is defective - first, because staff's averaging of percentages of repairs from 1977-1979 to estimate

1981 repairs ignores the upward trend in numbers of repairs and second, because staff confused wells equipped with SSSVs and those equipped for SSSVs and thereby underestimated the growing number of SSSVs in need of repair.

For well repairs, the staff engineer took the difference between what the utility had estimated for 1979 and what it recorded for the same year in number of general well repairs and then deducted this same difference from the utility's 1980 and 1981 estimated number of repairs to arrive at his estimate. The staff apparently ignored information that the 1979 level of repairs was lower than expected due to unavailability of rigs with which to do repairs.

In view of the staff witness' testimony that the expenses in this account showed an unstable history and were changing very rapidly, we concur with SoCal that his method of estimating for this account is highly mechanical and of questionable accuracy. We will adopt SoCal's estimates but will adjust them to use staff's lower inflation factor.

Because SoCal is still in the developmental stages of perfecting SSSV use and repair at the depths at which they are installed in SoCal's reservoirs, we will expect to see a detailed analysis of the expenses associated with operation of these valves in SoCal's next general rate case. We would hope to see a leveling off of the repair rate and attendant costs.

Transmission Expenses

The total difference between staff and SoCal in this category is $656,000, of which $144,000 is due to the wage adjustment discussed previously. The remaining differences are the sum of $168,000 for Account 850, $24,000 for Account 854, and $320,000 for Accounts 851, 853, 856, and 857 combined.

Account 854 - Gas for Compressor Station Fuel. The staff used September 1979 gas balances in its computation of the base cost of gas whereas SoCal used February 1979 cost of gas. The staff estimate uses $1.8703 per Mcf as opposed to SoCal's use of $1.9146 per Mcf (due to differences in estimating the base cost of gas and gas mix quantities). Because the staff had the advantage of later data, we will adopt its estimate of expenses for this account, consistent with our adoption of the staff estimates for Account 819, the counterpart account in the Storage category.

For the remaining accounts in the general category Transmission Expenses where staff had differences with SoCal, the differences appear to stem from staff's use of 1978 recorded direct costs escalated by inflation factors for the labor component and the nonlabor component while SoCal developed its estimate for each account in accordance with forecasting practices which are standard in the company. Accounts 850, 851, 856, and 857 are each more than 80 percent labor. Account 853 is 67 percent labor. In view of the fact that staff used a 7 percent wage increase to arrive at labor escalation factor for each account and we are adopting 12.0 percent to reflect the wage increase in the test year, we tend to think the staff estimates for these accounts are low. We will adopt the utility's estimates for Accounts 850,851, 856, and 857 as being more realistic in view of present conditions.

Distribution Expenses

The total difference between staff and SoCal in this category is $2,885,000, of which $1,381,000 relates to the wage adjustment discussed previously. The remaining difference is due to staff adjustment of $619,000 in four operation and maintenance accounts and $885,000 in three customer service activities.

Account 870 - Supervision and Engineering. The staff estimate is $135,000 lower than SoCal's based on staff's use of a lower growth rate. According to staff, the growth rate in this account far exceeds the rate of customer growth with no support for the difference. SoCal contends that the expenses recorded in this account include costs with activities such as cogeneration studies, NOX reduction studies, fuel cell development, expansion of storage field capability and field testing of equipment to enhance conservation, which costs are not necessarily related to direct customer growth. We believe both positions have some merit and we will adopt $3,485,000 as a reasonable compromise for this account.

Account 880 - Other Expenses. SoCal's estimate is $150,000 higher than staff's due largely to increased training load, although SoCal indicated that the costs fluctuate from year to year because of inclement weather. The staff averaged the growth in this account for the five recorded years 1974-1979, giving an overall percentage growth of 8.0 percent compared to SoCal's estimate of 8.3 percent growth. The staff adjustment was made to discount SoCal's estimate of high potential for increased rainy weather in 1980, which would have the effect of putting more company employees in classrooms for training. Staff also assumed that there would be no workforce additions in this account. We will adopt SoCal's estimate as reasonable but note that we are concerned that the expenses associated with this account are rising much more rapidly than the customer growth on the system. If SoCal's estimates for its next general rate case continue to show this pattern, we will expect to see a detailed justification for it.

Account 887 - Mains. SoCal's estimate exceeds staff's by $106,000 due primarily to the shortening of the time interval between leak surveys from five to four years. The staff maintains that the reduced period was planned by the utility in anticipation of proposed changes in federal rules which were still speculative

at that time. SoCal pointed out that the Department of Transportation's notice of proposed rulemaking, expected to produce a final rule for leak surveys in early 1981, would drastically change the requirements for system leak inspection intervals which, if adopted, would increase costs for this activity by about $750,000 more than even SoCal's estimates for 1981 show. Even apart from the Department of Transportation proposal, SoCal maintains that its efforts to promote conservation of natural gas include a shortening of the time interval between scheduled leakage surveys. In view of the strong potential for increased federal requirements with the attendant increased costs, we will adopt SoCal's estimate. We will expect to see a shortening of the time intervals regardless of the regulations adopted by the federal government, consistent with SoCal's representation that **the dollars expended for this activity will** save natural gas.

Account 892 - Maintenance of Services. The staff estimate for this account is less than SoCal's by $228,000. The staff adjusted the account to exclude expenses associated with anodeless risers, which were already included in another maintenance sub-account. Staff's adjustment eliminates duplicate accounting of expenses and will be adopted.

**Customer Service Expenses**

In addition to the four operation and maintenance accounts adjusted, staff adjusted three activities in two customer service accounts for a reduction of $885,000 as discussed below.

Account 878 - Meter and House Regulator Expenses. The staff adjustment of $161,000 to this account is based on the expected level of Planned Meter Change (PMC) program activity. This program is undertaken pursuant to Commission order and involves a meter performance evaluation wherein given families of meters are sampled and compared against a meter performance standard. Those meters

not meeting certain statistical tolerances are removed and either rebuilt or retired. A certain number of PMCs should occur each year but may be limited by the capability of the meter shop to handle the workload. The staff engineer testified that he applied his engineering judgment and balanced the PMC target with what he believed the meter shop could handle, given that it was adding only 10 personnel. Staff's estimate allows for achievement of 89 percent of SoCal's targeted PMCs and is reasonable, particularly when compared to percentage achievement in this activity in prior years. We will adopt the staff estimate.

Account 879 - Customer Installation Expenses. The staff made two adjustments to this account. One in the amount of $368,000 based primarily on the amount of spider removal activity expected in conjunction with the pilot light turnoff program and the other in the amount of $156,000 based on expenses transferred from Market Services for conservation activity performed in Customer Services. This latter adjustment leaves this expense at a level less than 1978 recorded expenses and will not be adopted.

SoCal testified that the problem of spider removal was growing as increasing numbers of pilot lights were turned off for the summer. A particular kind of spider nests in the pilot orifice and must be removed before the pilot can be relit. The staff estimate trends past expenses in this account (which already includes some spider removal activity) and adds an incremental amount of 13,000 hours for additional spider removal activity (1,000 hours for each SoCal district). SoCal's estimate includes an estimated 46,000 hours for spider removal activity, although spider removal activity was not segregated on its work papers by work order hours. Without documentation to justify its estimate this figure appears excessive and we will adopt the staff estimate as reasonable.

Because customer service includes conservation support activities (which we hope to see expanded) in addition to spider removal, we will require SoCal, in its future filings, to delineate order hours by conservation activity and by spider removal activity by district in support of its request for expenses in these categories.

Customer Accounts

EDP Billing Operations. Staff's estimate for this activity is $858,000 less than SoCal's. The difference is due entirely to the estimates of postage in the test year and reflects staff's assumption that current rates will not increase. SoCal has stipulated to the staff estimate and the staff has agreed that if a postage rate increase is approved prior to our decision in this matter, it should be reflected in test year rates.

The remainder of the difference is due to staff adjustment in Account 902 in the amount of $249,000 and Account 903 in the amount of $502,000.

Account 902 - Meter Reading Expense. The staff adjustment is based on its observation that the growth in meter readers outstrips the growth in customers resulting in a decline in meter reading productivity. We will adopt the staff estimate as reasonable in the absence of a complete justification from SoCal for this increase. We note that SoCal's simple comparison with Edison's number of additional meter readers is not sufficient justification for the increase on SoCal's system.

Account 903 - Customer Records & Collection Expenses. The staff adjustment in this account is based on a lower cost per telephone call. SoCal notes that not only is the call volume increasing, the length of call is increasing due to greater number of bill inquiries, an increase in collection activity due to the higher cost of gas and a greater need for providing conservation information. The increase in costs for this account is approximately 30 percent, which is larger than we would normally expect. However, given the increased consumer interest in bills, we will adopt SoCal's estimate as reasonable for this rate case. In SoCal's next rate filing we expect to see a detailed breakout of the call length and the proportional amount of time spent on each call for conservation information.

Market Services Expenses

As discussed in the Conservation section we have reduced SoCal's estimate for Product and Energy Efficiency Improvements by $933,000 to delete expenses for incentives for industrial customers. We have adjusted SoCal's authorization for advertising **expense and disallowed $1.043 million as excessive. We have aggregated the remaining $1.5 million for SoCal's use in demonstrably cost-effective programs.**

Administrative and General Expenses

SoCal has stipulated to staff adjustments for Community Settlement, Civic and Cultural Organizations, Charitable Organizations, Company Dues and Donations, LNG Film, amounting to $1,230,000, and Law Department Benefits and Additional Expense for Company Airplane amounting to $325,000. SoCal's stipulation is for this rate case only as an expediting device, and its basic position that these types of expenses are reasonable, necessary, and justifiable remains unchanged. SoCal apparently intends to include such expenses in its next rate filing. We can only point out, as we did in Decision No. 89710, that the California Supreme Court upheld our policy of excluding dues, donations, and contributions for ratemaking purposes in Pac. Tel. and Tel. v Commission (1965) 62 C 2d 634, 669. Absent a material change in the circumstances surrounding such costs, we do not anticipate a change in our policy and, accordingly, do not expect to see expenses of this type included in future requests for rate relief. Relitigating such issues wastes everyone's time, including SoCal's.

The staff has also made an adjustment in Pensions and Benefits in the amount of $43,416 to disallow a special benefit given to four high-level executives to make up for break-in-services losses. The benefits were given in 1976 for employees rehired in 1941, 1952, and 1965. SoCal made the argument that the benefit was offered to reacquire the services of these employees but the long lag between the time they were rehired and the time they were given the benefit makes it unlikely that this was actually the reason. There was no documentation of any agreement to this effect offered by SoCal. We agree with the staff that the benefit is discriminatory and we will not authorize it. SoCal has not met its burden of proof to justify it.

Franchise Fees and Uncollectibles

The staff estimate is greater than SoCal's because the staff witness used the staff's estimate of revenues and applied a ratio of 1.28 percent. The utility used its own revenue estimates, which were lower than staff's, and a ratio of 1.34 percent.

Staff derived its ratio of franchise fees paid to total revenues by using a five-year average from 1974 through 1978. The staff witness testified that an average was more appropriate than a trend, particularly in view of the fact that there was an aberration occurring between the first and second years and again, to a lesser extent, between the fourth and fifth years. He testified that using a trend for the last four years would not be statistically valid because there were too few data points. The last recorded data showed a ratio of 1.36 percent paid in 1979 for 1978, which number is higher even than the utility's estimate of 1.34 percent. The record is not clear as to how SoCal developed its percent, nor is it clear what caused the variances in ratios from year to year (1.32 to 1.22 to 1.25 to 1.27 to 1.36). We concur that the staff use of an average under these circumstances is correct in the abstract; however, we are concerned that the result may well be low in light of recent recorded history. Accordingly, we will use a ratio of 1.31 and apply it to the staff revenue estimate which we have adopted.

Research and Development

One major difference between staff and SoCal in the A&G expense category is in research and development (R&D) expenses. The staff has made an adjustment of $2,045,000 for this activity.

SoCal's R&D program for test year 1981 is comprised of 73 programs grouped according to five categories: industrial, commercial, residential, operations, and supply.

The projects are evaluated and selected in a three-step process. The first step screens new project ideas, using the Project

Evaluation Process which uses a series of decision factor questions designed to identify the most promising projects. Typical decision factor questions include: Is there a need/want for the product? Is it technically feasible? Is the price right? Is the risk acceptable? Does it support company research program objectives?

The second step performs the project ranking and budget analysis for those projects which appear most promising. SoCal uses the Multiple Option Ranking Techniques (MORT), a computer based tool to evaluate alternative research program plans and select the most effective project mix for varying levels of proposed funding. SoCal uses the following research criteria in its evaluation of the research program: demand reduction, net primary energy savings, environmental/ safety, advanced supply technology, increased company operating efficiency, nonload building, external impact (regulatory agencies and general public), and royalty return. SoCal maintains that these criteria are consistent with those set forth in Decision No. 86595. For comparison, the guidelines from Decision No. 86595 are set forth below:

1. The project should support the R&D objectives of SoCal and the Commission. SoCal must comply with the then existing environmental regulations.
2. The project should lead to environmental improvement and/or increased safety.
3. The project should support the Commission's conservation objectives and promote conservation by efficient resource use, and by reducing and/or shifting system load.
4. The project should help to develop new resources and/or processes and to advance supply technology.
5. The project should help to improve operating efficiency.
6. SoCal's priority setting process should minimize expense on those concepts which have a low probability of success.

The final major step in the process is to initiate the projects selected and monitor their progress until the project is either discontinued or completed. Project summaries of the 73 projects actually included in the proposed test year 1981 R&D program were included, as were an additional 36 projects which were on the candidate list but not in the final R&D program. SoCal argues that its programs require full funding as set forth in its exhibits and testimony but suggests that if the Commission decides not to fund certain programs, we substitute other programs from the candidate list in their place.

The staff concluded that as a whole, SoCal's R&D program would meet its objectives but noted that SoCal had consistently failed to complete originally scheduled programs due to delayed rate decisions and difficulty in hiring qualified project managers. In 1979, only 80 percent of the budgeted amount was spent and, in 1978, only 75 percent was spent.

The basis for the staff adjustment of $2,045,000 is as follows:

1. Two of the 73 projects, jet impingement technology and solar energy experiments and developments will be completed prior to the test year ($125,000).
2. Five of the projects, the kiln preheater, the flue gas stock preheater, the steam replacement for boilers, the gas-fired ceramic heating element, and the improved commercial broiler are designed to maintain or expand SoCal's market share ($425,000).
3. Five of the projects, in-line storage, solar windows, improved ignition system, advance conservation techniques, and seasonal efficiency program, would produce inadequate benefits to the ratepayers ($300,000).
4. Four projects in the residential subprogram area deal with solar collector development and should be combined and five projects in the industrial subprogram area deal with NOX abatement and should be combined ($375,000).

5. Two projects, industrial solar demonstration and commercial storage could be combined with similar projects ($125,000).
6. Six projects will potentially be co-sponsored with partial funding coming from the co-sponsors: ladle preheater, commercial total energy system, SAGE, residential total energy system, pipe location device, and determining aging of plastic pipe ($395,000).
7. Two projects, agricultural residue demonstration and land-based biomass, are behind schedule, resulting in reduced spending in the test year ($300,000).

We are concerned that SoCal is underspending budgeted amounts for its R&D program. When we authorize a level of spending to accomplish a stated goal, we do so on the basis that those dollars are reasonable and necessary for the purpose. Consistent underspending indicates that perhaps the authorized level has been unnecessarily high or that the utility's planning process is deficient. SoCal argues that in 1978, for example, the decision authorizing R&D expenses came late in the year and impacted the planning and achievement of that year's programs. That was not true, however, for 1979 and will not be true of this decision. SoCal indicated in its brief that 1980 programs were now on schedule although the staff had found earlier this year that some of them were delayed.

We are also concerned about the magnitude of SoCal's R&D program and the rate of increase in its budget. Just five years ago SoCal's R&D budget was in the range of $2 million per year. The record shows that in 1978 SoCal spent $3.3 million out of an R&D budget of $4.4 million and in 1979 its expenditures were $5.1 million based on a $6.5 million budget. The 1980 budget is only slightly higher than for 1979, but SoCal apparently will spend a greater portion of it than previously. For 1981 the utility seeks an $8.5 million budget.

These increases have come at the same time SoCal's ratepayers, along with the rest of the nation's gas customers, have been required to assume the burden of supporting a national Gas Research Institute (GRI). SoCal was one of the earliest sponsors of GRI, which was presented as a means of centralizing gas industry R&D and thereby rendering such work more efficient.

The FERC recently approved a 5.6 mills per Mcf surchange on interstate gas rates to support GRI's 1981 funding requirement of $64.5 million (FERC Opinion No. 96, issued September 30, 1980, in Gas Research Institute, Docket No. RP 80-108). Based on our adopted SoCal service volume of 919 Bcf for test year 1981 and upon the 90 percent minimum of "funding services" under the GRI funding formula (set forth in FERC Opinion No. 11, issued March 24, 1978 in Gas Research Institute, Docket No. RM 77-14) SoCal's customers will provide over $4.6 million in funding for GRI in 1981.

We will authorize $6,500,000 as an appropriate level of funding for 1981 R&D programs. This is less than SoCal has asked for but is substantially more than it has actually spent in past years. The authorized amount is slightly above the amount recommended by the staff and is adopted in recognition of the validity of the staff's concerns. It is a reasonable amount for SoCal to spend in the test year given the past few years' recorded history and given the contributions of SoCal ratepayers to the R&D activities of the Gas Research Institute.

We will not authorize specific R&D programs. Selection of appropriate programs is basically a management function subject to our review. It is not our function to select the projects for inclusion in the R&E program. We will make the following observations for SoCal's guidance in its selection of appropriate projects to consider:

1. Combination of projects with similar subject matter is desirable and appears to be a method for reducing R&D costs while obtaining substantially the same benefit. We are aware of SoCal's contention that projects which are technically different cannot be combined merely because they have common goals. We hope to see combination of similar technical aspects of projects to avoid reinventing the wheel at duplicate cost. SoCal should be prepared in its next rate filing if it has not combined similar aspects of different projects to justify fully the expense of exploring them separately.

2. Desire to maintain market share is not, per se, an undesirable goal so long as increased use of natural gas does not result. We do not see, however, how the ratepayer benefits from expenditures of research and development funds to preserve market share when SoCal can sell all the gas it can supply to priority 5 steam electric users and thereby not incur any revenue deficiency from failure to maintain market share.

3. R&D projects that are not cost-effective or which provide inadequate benefits to the ratepayers are not desirable. SoCal should carefully reexamine the five projects identified by staff as falling into this category, and be prepared to justify continuation of the projects if, in fact, it chooses to do so.

4. It is important that SoCal vigorously pursue opportunities for co-funding from independent sources of research projects of broad potential benefit to lessen the financial burden upon its ratepayers. SoCal should avoid duplication of work being pursued by GRI.

Depreciation Expense

The staff estimate of depreciation expense is lower than the utility's due to the lower estimate of plant in service. The staff also excluded $37,000 as the depreciation expense accrual on the expected $1,000,000 refund due SoCal from the Gas Meter Antitrust Litigation suit. SoCal was a party to this class action suit in the U.S. District Court, Eastern District of Pennsylvania, which was filed in response to public disclosures by Singer Company of price-fixing for domestic gas meters. The District Court signed an order on August 10, 1979 approving a settlement in the total amount of $15,375,000. At the time the staff exhibits were prepared, SoCal's share of this settlement was expected to be between $900,000 and $1,000,000 less a pro rata share of the attorney's fees which sum was in dispute and remained to be set by the court.

In the stipulations entered into at the beginning of the Regulatory Lag Plan, SoCal agreed to this exclusion (and to the concomitant reduction in rate base by the addition of an estimate $1,000,000 to Depreciation Reserve). By letter dated April 23, 1980 SoCal indicated that the settlement totaled $1,325,157 with a reduction in depreciation expense of $49,000.

Since we adopted the staff estimate of plant in service, we will adopt the staff estimate of depreciation expense, reduced an additional $12,000 to reflect the actual amount of the settlement and associated accruals. This amounts to a total of $78,355,000 for SoCal and PLS combined and which also includes $320,000 additional expense to reflect the addition of Ten Section expenses to the staff estimates.

## TAXES

Ad Valorem Taxes

There is a difference between staff and SoCal for ad valorem tax expense of $2,368,000 for SoCal and PLS combined. This difference is due almost entirely to the difference in estimates of 1981-1982 market value which will be established by the State Board of Equalization (SBE) in late May 1981 for the 1981-1982 tax year.

According to staff, SoCal has taken the 1979-1980 market value set by SBE (which was the one most recently known at the time the application was filed) and added net additions to plant plus a 2 percent per year inflation factor to develop its 1980-1981 and 1981-1982 market value used in its test year ad valorem tax expense estimates.

The staff based its ad valorem expense estimate on staff estimates of plant in service, materials, and supplies, less book depreciation. It asserts that this practice is consistent with SBE's use of Historical Cost Less Depreciation (HCLD) used to set the utility's market value for the utility as a whole. The staff indicates five areas of disagreement with SoCal:

1. SoCal's use of 2 percent inflation factor on its market value.
2. SoCal's failure to take depreciation into account.
3. SoCal's failure to deduct 1979-1980 gas-in-storage from its projected market value through 1981-1982 per Chapter 1150, 1979 Statutes.
4. SoCal's allocation of market value between PLS and SoCal on Replacement Cost Less Depreciation (RCLD) basis.
5. Staff adjustment to plant and depreciation.

The staff takes exception to SoCal's use of the 2 percent per year inflation factor on its market value because it is irrelevant to valuation of utility plant, which is depreciating in value. The staff witness noted that the issue of whether the 2 percent inflation factor incorporated in the California Constitution by Article 13, as a result of the passage of the Jarvis-Gann initiative, impacts the assessment of utility property is currently before the California Supreme Court. The California Supreme Court has now decided this issue (27 Cal 3d 277) reversing the State Court of Appeals and upholding a lower court ruling that the 2 percent inflation factor did not apply to state assessed property. It is staff's contention that even if the lower court's ruling were to stand, which it has, then the effect on utilities would be virtually negligible. Staff rejects the use of 2 percent inflation factor on the grounds that it does not take into account accumulated depreciation and that it is contrary to both SBE assessment practice and the HCLD method of assessment.

Staff also notes that the Business Inventory Exemption applied to gas in storage has increased from 50 percent to 100 percent as a result of the passage of AB 66 (Chapter 1157, 1979 Statutes). It notes that SoCal has deducted this from the 1979-1980 market value and then added it back in developing its 1980-1981 estimate and carries it through to 1981-1982 estimate of market value. Staff objects to this procedure because SoCal assumes that SBE would not set a 1980-1981 market value at a figure lower than the 1979-1980 market value. The 1979-1980 market value set by SBE was $1,275,000,000 and the 1980-1981 market value, issued in late May 1980, was $1,162,000,000 effectively destroying SoCal's basic assumption.

The SBE assesses SoCal and PLS as a single unit, and bills only the parent company, PLC. The total assessed valuation

is allocated by SBE back to SoCal and PLS and eventually down to the local taxing jurisdictions based on a RCLD formula. The staff has used the HCLD method, noting that the total tax liability is not changed by the RCLD process, simply the allocation of it. Use of HCLD results in a large difference between staff and PLS for ad valorem tax expenses. The staff notes that PLS ad valorem taxes are charged directly back to SoCal through the cost of service tariff and that the shift through the use of different allocation procedures has no net effect on the ratepayer.

The staff developed HCLD for the last assessment and compared it with the 1979-1980 SBE assessment. The SBE assessment was .56 percent lower than the staff's HCLD. The staff then developed the HCLD for the test year and adjusted it by this same percentage. Both staff and SoCal used estimated tax rates of $4.87 per $100 of assessed valuation for SoCal and $4.66 for PLS.

SoCal takes issue with the staff reliance on the HCLD method, claiming that it ignores the other two principal indicators of value, Capitalized Earnings and Stock and Debt, both of which are materially affected by prevailing interest rates. According to SoCal, the staff adjustment assumes that the historically high interest rates which prevailed during 1980 will continue without decline into 1981. In its brief, SoCal notes that interest rates have declined substantially from the peak levels experienced in early 1980 and that they will continue to decline. It argues that the 1981-1982 Capitalized Earnings Indicator will more accurately reflect interest rates prevailing in 1981 rather than those experienced during 1980 as shown by the HCLD indicator. The staff maintains that since the capitalized earnings indicator and the HCLD indicator are related through rate of return and rate base

for a rate case test year, they should be nearly identical and that it is, therefore, appropriate to use the HCLD method to estimate test year ad valorem taxes. We agree.

In Decision No. 91107, PG&E's last general rate case, we adopted the HCLD method as just and reasonable for ratemaking purposes. We noted there, as the staff has here, that the use of HCLD is not grounded in statute but rather is used by SBE as a matter of in-house practice. Application on a uniform basis for all utilities is desirable and we will continue the practice adopted in Decision No. 91107 and adopt it herein.

Payroll Taxes

The staff estimate of total payroll taxes is $354,000 lower than SoCal's. About half of this difference is due to the labor expense cuts made by staff witnesses and the remainder is due to the annualization of wage increases by SoCal discussed previously. Because we are adopting wage rates in excess of those used by either staff or SoCal in their estimate, we have recomputed payroll taxes to reflect these higher amounts.

Income Taxes

Staff and SoCal have a number of differences in the area of income taxes. In addition, the cities have raised the issue of whether short-term debt interest expense should be included as a deduction for income tax purposes regardless of whether short-term debt is included in capital structure or not. In Decision No. 92018, dated July 2, 1980, in the rehearing of Application No. 57639, we excluded the interest expense tax deduction for short-term debt in computing operating income tax expense, as the concomitant result of excluding short-term debt from the capital structure. Further, we stated:

> "The generic questions of whether to include interest expense for construction work in progress or on debt that is not part of a utility's capital structure when calculating income tax expense for test year ratemaking purposes is, as pointed out in Decision No. 89710, the subject of Order Instituting Investigation No. 24." (Mimeo p. 12.)

We have not included short-term debt in the capital structure in this proceeding and, therefore, consistent with our prior treatment of this issue, have excluded the related interest as a deduction from income tax expense. It is better, in our opinion, to treat the issue generically in OII No. 24 than to deal with it on a piecemeal basis for some utilities and not for others. Even if we were inclined to do otherwise, we note that there is serious question in this proceeding as to what actually constitutes short-term debt (other than Banker's Acceptances) since SoCal and PLS do not have short-term borrowings from financing institutions in the traditional sense.

The record in this proceeding is simply too incomplete on the matter of short-term debt for us to make a decision even if we were so inclined. We invite LA, as we did SoCal previously, to submit an extensive presentation on the issue of short-term debt in the next proceeding. We hope to have the related tax treatment issue well-developed in OII No. 24 by that time and will consider the matter in SoCal's next rate case in light of our decision therein.

Differences between SoCal and staff include the following:

Long-Term Debt Interest: The difference arises because staff has used its average embedded effective interest rate developed as a component of its average year capital structure. SoCal has used estimated debt balances for each issue and the interest rates for each. Since we are not adopting the staff's recommended average

year capital structure, we will recompute this item using the year-end balances and an embedded effective interest rate of 8.69 percent.

Ratemaking Treatment of Investment Tax Credit (ITC): The staff has proposed to change the method of determining ITC for the test year by flowing through that amount of ITC not covered by SoCal's ratable flow-through election on a two-year average basis consistent with what was done in Decision No. 91107 in PG&E's Applications Nos. 58545/6. SoCal has made its calculations based on the five-year average used previously. SoCal argues that the Commission has used the five-year average historically and that no good reason exists to change it now. We noted in PG&E decision that historically ITC credits to income were averaged over a five-year period to more or less coincide with the regulatory cycle of general rate cases. This is no longer realistic under the Regulatory Lag Plan for a two-year program for processing general rate proceedings. This changed circumstance alone is sufficient justification to change from a five-year average to a two-year average in determining ITC for the test year.

Additionally, we note that SoCal presented no evidence in this case showing any harmful effect of such a procedure. The arguments against it in brief rely on testimony and exhibits presented in Application No. 52696 in 1972 in support of its position that PLS' ability to finance major facilities with long-term debt securities is impaired by full current flow-through. This evidence is stale at best and in the absence of any more current showing, we believe that the two-year average is reasonable and we will adopt the staff's ITC estimates.

ITC: Under the Tax Reduction Act of 1975 (TRA) SoCal elected to flow through the additional 6 percent ITC on eligible distribution property ratably over the average life

of the related property. In Decision No. 85627 dated March 30, 1976 and affirmed in Decision No. 86117, we ordered a refund to customers to reflect a 0.25 percent reduction in SoCal's allowed rate of return due to our determination that SoCal's investment risk was reduced by the ratable flow-through election. The California Supreme Court affirmed our decision (SoCal Gas v PUC 23 Cal 3d 470).

Based on a letter ruling from Internal Revenue Service (IRS) dated April 19, 1976, SoCal believes that IRS will disallow the additional 6 percent ITC on distribution property from 1975 through 1978 as recorded and the credits estimated for 1979 and 1980. It bases this belief on the fact that our decisions are now final and that indications (through the inquiry of its outside lawyers) are that IRS will not grant SoCal's November 1979 request for reconsideration of the facts and reverse its prior position. SoCal's brief states "When the California Supreme Court upheld the Commission's orders on February 28, 1979, (23 Cal 3d 470), SoCal became ineligible for the additional ITC under the TRA." SoCal goes on to state that the amounts should be allowed, as expressed by the Court, citing the opinion p. 486, n. 18 as its authority for this statement. Note 18 reads as follows: "However, if the credit is eventually disallowed, thus increasing SoCal's tax liability, SoCal may petition the Commission for appropriate relief".

SoCal has not yet been assessed any tax deficiency, nor has the ITC in question actually been disallowed by IRS. SoCal's contention that this is an accomplished fact is in error. IRS letter rulings, as noted by the California Supreme Court, are not final. They are subject to revocation or modification at any time (26 C.F.R. and 601.201(L)(1) and (4) (1978)), and are reviewed in

determining a taxpayer's actual tax liability (26 C.F.R. and 601.201 (1)(2)). Accordingly, the Court noted that neither it nor IRS was bound by that letter ruling.

We see no evidence at this time that requires us to be bound by a letter ruling that does not bind the issuing authority. Unless and until IRS makes a deficiency assessment, we will not consider that the additional ITC has been or will be lost. Accordingly, we make no allowance in this proceeding for its purported loss.

Nonutility Interest Adjustment: The basis for calculation of the nonutility interest adjustment is the excess of construction work in progress (CWIP) over the open account balance. SoCal has considered the interest on Banker's Acceptances as short-term debt interest for making this computation. The staff has excluded Banker's Acceptances interest in its calculation on the grounds that Banker's Acceptances are used to finance gas inventories.

We will adopt staff's estimates of CWIP modified to include Ten Section and will recalculate nonutility interest adjustment accordingly. Since we have included Banker's Acceptances in our adopted capital structure on the rationale that the funds will be used to finance gas inventories (which are a part of rate base) we cannot here assume that they will finance CWIP or other nonrate base items also and should be included in the income tax calculation.

Contributions for Service Fees: IRS Code Section 118, as revised by the Revenue Act of 1978, excludes all contributions in aid of construction from taxable income except service connection fees. The staff based its estimate on a three-year average percentage of service connection fees to test year contributions in aid of construction. SoCal asserts that this understates the taxable income representing contributions for service fees and erroneously

assumes a constant relationship between the service installations account and total contributions in aid of construction.

We are inclined to accept SoCal's position on this issue because we note the dip in 1978 contributions for service fees but do not see a corresponding dip in total contributions in aid of construction, but rather see a gradual increase.

Staff notes that if SoCal's estimate of taxable contributions for service fees is adopted, then a corresponding increase in the contributions in aid of construction should be made. SoCal has no objection to this and we will make that change to our adopted depreciated rate base.

Repair Allowance: The staff adopted the utility's estimate for this item. However, since we have adopted the staff's gas plant in-service estimate which shows that certain plant additions would not be made, there must be a recalculation of the repair allowance to match properly the plant in-service.

Pension and Benefit Costs Capitalized: The staff witness agreed on cross-examination that his estimate of this deduction should be adjusted downward to reflect the fact that to the extent that SoCal performs work for others, including PLS, it is not entitled to deduct the amount of pensions and benefits capitalized attributable to that work from income taxes. Accordingly, we will adopt SoCal's estimate and we will recompute payroll taxes capitalized consistent with our higher adopted wage levels herein. We note that the following income tax items will change as a result of our adopted ratemaking treatment of the related items: tax depreciation - excess of book, and the ad valorem tax adjustment - billed versus expensed treatment. These items will be recomputed to reflect appropriate income tax expense.

RATE BASE

The difference between SoCal and staff on their respective adjusted weighted average rate base estimates is $45,364,000. $8,721,000 of this difference is due to the WESCO project expenses not being included by staff in rate base, an issue discussed more fully previously. $479,000 relates to the staff's wage adjustment for SoCal and $30,000 for PLS and the remainder is due to staff exclusion of projects eliminated, deferred, or added by the utility. The remaining differences will be discussed item by item herein.

Gas Plant In Service

By far the largest difference between staff and SoCal exists in this category, amounting to $27,422,000 for SoCal and $7,603,000 for PLS. For SoCal, the staff excluded approximately $16,000,000 for the Needles Crossover Project on the grounds that since the out-of-state gas supply was adequate at this time there was no need for the tie line from SoCal's 30-inch line at South Needles to its 34-inch line at North Needles. The staff also excluded six other projects totaling a little over $4,000,000 and adjusted the Honor Rancho gas treatment project also totaling about $4,000,000 for a completion date of December 31, 1981. For PLS, staff removed $1,400,000 as a duplication since the same Aliso observation well project was shown twice under two budget numbers. The cogeneration project at Aliso Canyon underground storage facility was revised downward by $3,500,000 for 1980 and 1981, with anticipated installation being done in 1982.

The Ten Section underground gas storage facility was initially excluded by staff and the exclusion stipulated to by SoCal with the agreement that the costs associated with the project would be recovered through an advice letter filing if a favorable decision were issued in Application No. 58905, the application for a certificate of public convenience and necessity for Ten Section.

Decision No. 91856 issued June 3, 1980 and by common consent, the costs of Ten Section were restored to both staff and utility rate base estimates for this proceeding. The staff has reviewed the acquisition and cushion gas estimates SoCal presented and considers them reasonable. Accordingly, we will include $33,615,000 for the weighted average plant in service, and $302,000 for weighted average depreciation reserve for Ten Section.

SoCal takes exception to the staff adjustments to rate base on the grounds that the staff's review of plant additions and deletions was selective, taking into account only major projects in the transmission and underground storage areas but ignoring the distribution area thereby distorting its estimate. Staff witness testified that he reviewed SoCal's plant estimates as shown in the revised NOI submitted in October 1979, and used this as the starting point for his estimates. He noted that SoCal updated its plant estimates from the original NOI tendered in June 1979, and he used the updated estimates for his starting point. He secured additional data from the transmission and underground storage departments and from the distribution administrative assistant. He made adjustments to all three areas, although the adjustment to the distribution was not made in the same manner as the other two. He gave as his reason the fact that distribution did not have the same type of major projects that transmission and underground storage had, and that the thrust of his investigation was to review such major projects because the greatest impact occurs there due to the large number of dollars involved.

SoCal does not disagree with the specific significant projects which the staff added or deleted but argues that since the staff's gas plant estimates were based on a selective review of information which became available subsequent to the filing of

the revised NOI, the staff's proposal should be rejected and SoCal's original gas plant estimates should be adopted. We simply cannot accept the logic of this argument. To use SoCal's original gas plant estimates would result in including major projects now known (and admitted by SoCal) to be deferred and ignoring major projects which are now known to be added in the test year. SoCal has urged us, in connection with its request for recognition of its current wage agreement, not to ignore reality. We don't intend to, but SoCal must recognize that the advantage can cut both ways and in this instance results in a total staff estimate for plant in service that is lower than SoCal's. In reviewing the testimony in this case, it appears to us that the staff has adequately explained its reasons for reviewing distribution additions and deletions differently than transmission and underground storage and we accept this treatment as reasonable. We will adopt the staff estimates of gas plant in service.

Materials and Supplies: The staff made a reduction of $119,000 in materials and supplies which SoCal accepted by stipulation. We will adopt $12,995,000 as a reasonable figure for PLS and SoCal combined since both SoCal and the staff are now in agreement on it.

Customer Advances for Construction: SoCal also accepted a staff estimate $1,640,000 higher than its own for this item, based on later data available to staff. This brings the staff and SoCal into agreement on this item. Consistent with our discussion under Contributions for Service Fees, supra, we will increase this amount by $728,000 and will adopt $12,211,000 as reasonable.

Working Cash: Historically, working cash is computed based on adopted levels of revenues, expenses taxes, and rate base. SoCal and staff calculated working cash using different computation methods. The staff used the last authorized rate of return of 9.73 precent in its computation and SoCal used its

results of operations at present rates. Each used it own showing on revenues, expenses taxes, and rate base.

SoCal generally agrees with the average lag days used by the staff with the exception of that shown for California Corporation Franchise Tax (CCFT). The staff has agreed that 84.10 average days lag for CCFT should be used when calculating the adopted working cash allowance. We have recalculated working cash allowance using our adopted levels of revenues, expenses taxes, and rate base, and using the corrected figure of 84.10 average lag days for CCFT.

Depreciation Reserve: The staff estimates are lower than SoCal's estimates due to the difference in estimated plant additions. Initially the staff was lower by $2,421,000 for SoCal and $4,104,000 for PLS. The utility stipulated to the staff's treatment of an expected $1,000,000 refund due SoCal from the Gas Meter Antitrust Litigation suit, discussion of this is presented in the Depreciation Expense portion.

Since we adopted the staff estimate of plant in service and treated the actual antitrust settlement in setting the depreciation expense for SoCal, we will adopt the staff estimate of reserve plus the $325,000 difference between the actual settlement and staff estimated $1,000,000. This amounts to a total of $775,805 for SoCal and PLS combined, which includes $302,000 additional reserves to reflect the addition of Ten Section.

Our adopted results of operations tables follow:

SUMMARY OF EARNINGS

Test Year 1981 at Present Rates

| Item | SoCal (000 omitted) | PLS |
|---|---|---|
| **Operating Revenues** | | |
| Gas Sales | $2,345,500.0 | |
| Exchange | 3,318.0 | |
| SAM (per D.90822) | (88,675.0) | |
| Other | 1,562.0 | |
| Total Operating Revenues | 2,261,705.0 | $572,039.0 |
| **Operating Expenses** | | |
| Production | 1,714,942.0 | 515,823.0 |
| Storage | 26,298.0 | - |
| Transmission | 21,736.0 | - |
| Distribution | 107,940.0 | - |
| Customer Accounts | 63,968.1 | - |
| Market Services | 32,702.0 | - |
| Administrative + General | 138,509.3 | 400.4 |
| Subtotal | 2,106,095.4 | 516,223.4 |
| Diff. 7 - 12.0 Wage Adj. | 8,602.0 | - |
| Subtotal after Wage Adj. | 2,114,697.4 | 516,223.4 |
| Book Depreciation | 69,330.0 | 9,025.0 |
| Taxes Other Than On Income | 24.475.0 | 2,648.0 |
| CCFT | 567.7 | 2,580.1 |
| FIT | 150.2 | 9,289.7 |
| Total Operating Expenses | 2,209,213.3 | 539,766.2 |
| Net Operating Revenues Adjusted | 52,491.7 | 32,272.8 |
| Rate Base | 1,152,272.0 | 331,684.3 |
| Rate of Return | 4.56% | 9.73% |

(Red Figure)

# SUMMARY OF EARNINGS

## Test Year 1981 at Adopted Rates

| Item | SoCal | PLS |
|---|---|---|
| | (000 omitted) | |
| **Operating Revenues** | | |
| Gas Sales | $2,399,551.2 | |
| Exchange | 3,318.0 | |
| Other | 1,562.0 | |
| Total Operating Revenues | 2,404,431.2 | $578,869.0 |
| **Operating Expenses** | | |
| Production | 1,721,772.0 | 515,823.0 |
| Storage | 26,298.0 | - |
| Transmission | 21,736.0 | - |
| Distribution | 107,940.0 | - |
| Customer Accounts | 64,262.2 | - |
| Market Services | 32,702.0 | - |
| Administrative + General | 140,375.2 | 405.2 |
| Subtotal | 2,115,085.4 | 516,228.2 |
| Diff. 7.0-12.0 Wage Adj. | 8,602.0 | |
| Subtotal | 2,123,687.4 | |
| Book Depreciation | 69,330.0 | 9,025.0 |
| Taxes Other Than on Income | 24,475.0 | 2,648.0 |
| CCFT | 13,402.7 | 3,235.3 |
| FIT | 49,871.6 | 12,127.9 |
| Total Operating Expenses | 2,280,766.7 | 543,264.4 |
| Net Operating Revenues Adjusted | 123,664.9 | 35,604.6 |
| Rate Base | 1,150,367.0 | 331,205.4 |
| Rate of Return | 10.75% | 10.75% |

## RATE DESIGN

### General

Testimony and exhibits on rate design were presented by SoCal, staff, SDG&E, Edison, CMA, Rockwool, Glass Manufacturers, and Kimberly-Clark. Briefs on the subject or rate design were submitted by all of the above and by GM, WMA, and Tehachapi. In addition to its testimony and exhibits on rate design, SoCal presented three exhibits setting forth the results of cost allocation studies by various methods for test year 1981 using SoCal's average cost of gas included in September 17, 1979 rates. These exhibits were prepared by SoCal, who presented a witness to verify the accuracy of the figures and computations set forth in the studies and to answer clarification questions. SoCal did not sponsor the exhibits which were offered in evidence by CMA.

### Position of SoCal

SoCal proposes to spread the major portion of the proposed increase of $178,869,000 based on sales of 8,300,673 M therms for the test year 1981 through increases in customer charges to all retail schedules except GN-5 as shown below:

| | Monthly Customer Charge | |
|---|---|---|
| | Current | Proposed |
| Residential Natural Gas Service, Schedules GR, GS, and GM | $3.10 | $6.50 |
| GN-1 | 5.00 | 7.50 |
| GN-2 | 10.00 | 15.00 |
| GN-3 | 15.00 | 20.00 |
| GN-4 | 15.00 | 20.00 |

SoCal also proposes to eliminate the 10 percent discount presently applicable to lifeline sales under the GS schedule. SoCal's proposed rates for each wholesale schedule (G-60 for Long Beach

and G-61 for SDG&E) consist of a two-part rate - a commodity charge set at the average cost of gas and a capacity charge to cover the annual cost of wholesale service. This two-part rate eliminates the demand and peaking components of the current G-61 rate schedule.

SoCal has spread the remaining required revenue increase to the retail commodity rates in proportion to the spread of the base bargin as authorized by Decision No. 90822 for rates effective January 1, 1980.

Position of the Staff

The staff's residential rate design proposal freezes the customer charge at its current $3.10 level and references the Tier I lifeline commodity rate to a maximum of 80 percent at the system average. Staff has reduced the residential Tier II rate in quantity for summer use from 100 therms to 26 therms for single-family and 21 therms for multifamily schedules (except for air-conditioning customers), causing a shift of approximately 162,857 M therms from Tier II into Tier III. According to staff, this shift will place SoCal's summer/winter Tier II relationship on nearly the same basis as that adopted by the Commission for PG&E. Residential Tier III rates are recommended by the staff to be the highest rate in the system, priced at least at the highest incremental cost of gas.

Staff recommends that the rate design criteria established in PG&E's Decisions Nos. 91107 and 91108 be used to set rates for Schedules GN-1 and GN-2 which are commercial and industrial customers who do not have the capability to use alternate fuels. The recommended rate is referenced to the system average less lifeline volumes and revenue.

Staff recommends that rates for Schedules GN-3, GN-4 and GN-5 be referenced to the prevailing alternate fuel prices established in the latest CAM proceedings.

The staff agrees with the capacity and commodity charge concept presented by SoCal for SDG&E but takes no position on the proper method of cost allocation for establishing the capacity charge.

The staff also recommends that the cost of purchased gas be eliminated from general rate proceedings entirely and accounted for within the PGA procedure. This would remove cost of gas from production expenses together with the associated franchise fees and uncollectibles for recovery under the PGA portion of the CAM procedure.

Lastly, the staff has proposed a solar incentive rate to encourage solar hot water heating systems. The staff-proposed solar rate is designed to allow a discount of 5.0 cents per therm off the lifeline rates to a Priority 1 customer who installs and operates solar space heating and/or water heating equipment with natural gas equipment as a backup. The discount would not apply to any volumes over the lifeline allowance.

Position of CMA

CMA was the only party, other than SoCal and staff, to present a complete rate design proposal of its own. CMA believes that many of the policy guidelines adopted for PG&E in Decision No. 91107 are inappropriate for use in this proceeding. CMA objects generally to what it terms as the arbitrary percentage relationship of lifeline rates to a system average rate (SAR) and to the referencing of low priority customer rates to alternate fuel rates saying that use of alternative fuel pricing provides a benefit to high priority customers solely because of excessive rates for low priority customers. CMA notes that the guidelines adopted by the Commission in Decision No. 91107 do not accommodate changes in sales, supplies, and costs from one case to another and from one utility to another and that the guidelines make it impossible to establish rates in a general rate case without resorting to evidence beyond the record in the form of updated alternate fuel prices.

CMA believes that allocated cost of service is a proper starting point for developing any rate proposal. CMA agrees in a general sense with the staff proposal to establish zero cost of gas base rates in general rate proceedings and believes that the base rate devised by staff continue to contain a portion of commodity costs. Accordingly, the base rates CMA uses in its rate design differ from those used by staff.

CMA developed an allocation of noncommodity costs to the various customer classes based on the Base Supply and Load Equation (BSLE) method and on the Annual Average Day (AAD) method and proposes to spread the base revenue requirement to the various classes on these allocated costs.

CMA proposes four recovery options, each with several sub-options. The four basic recovery options are: (1) a full cost customer charge; (2) a customer charge which does not reflect return; (3) a customer charge at the present level and, (4) a no customer charge option. Under the full cost customer charge recovery option, the lifeline commodity rate would be set equal to the current commodity cost, and all base costs would be recovered in the customer charge and commodity Tiers II and III. Under the customer charge without return option, a portion of the customer costs would be recovered in commodity rates, again with variations as to recovery among lifeline, Tier II and Tier III. CMA does not discuss the remaining two options and sub-options in detail since it basically disagrees that these are appropriate recovery options.

CMA's recommended proposal is the second recovery option - (a customer charge which does not reflect return) with a $6.50/month customer charge set equal to cost without return and taxes, a lifeline commodity rate set to recover the gas cost plus a portion of other noncommodity costs so that lifeline is served at a zero rate of

return and two inverted commodity rate tiers above lifeline. CMA believes that this proposal meets the Commission's concern that lifeline be given an inexpensive rate and that the residential rate form be sharply inverted, while collecting an appropriate level of revenue from the class as a whole. CMA maintains that this proposal is both fair to the various customer classes and is designed to maximize the dollar saving to the customer from conservation.

Position of SDG&E

SDG&E currently receives wholesale service from SoCal under Schedule G-61 pursuant to a four-part rate which consists of a demand charge, a commodity rate, a peaking demand charge, and a peaking commodity rate. SDG&E, together with SoCal and staff, would restructure Schedule G-61 to arrive at a two-part rate consisting of a single capacity charge and a single commodity rate.

SDG&E concurs with the staff proposal to adopt zero based rates for Schedule G-61. Under this proposal SDG&E notes that the commodity rate would be equal to SoCal's system average cost of gas plus applicable franchise fees and the capacity charge would equal SDG&E's total contribution to SoCal's gas margin. It takes issue with SoCal's proposal which, it maintains, contains a greater amount than necessary to cover associated franchise fees and which would include SAM-related revenues in both the commodity and capacity rates.

SDG&E believes that Schedule G-61 rate should be based on the cost of providing service to SDG&E and that the real question to be resolved in this proceeding is what is the appropriate methodology to be used in calculating the cost of service. At the time of hearing on this matter, SoCal and SDG&E had not been able to reach agreement on an acceptable methodology.

SDG&E's witness presented a simplified AAD cost allocation methodology which allocates all expenses SoCal incurs to SDG&E in relationship to the cost SDG&E imposes on SoCal as a result of being SoCal's customer. The allocation is made based on certain physical relationships anticipated to exist in the test year, such as SDG&E's purchases from SoCal compared to SoCal's total purchases.

SDG&E seeks to allocate only those costs which are consistent with its status as a wholesale customer. It asserts that it is inappropriate to allocate any of SoCal's expenses in the areas of Market Services, Distribution and Public Affairs to SDG&E because SDG&E does not impose expenses on SoCal for these areas and, further, that SDG&E incurs expenses in these areas as a result of its own retail operations.

The methodology SDG&E proposes uses the expense levels adopted by the Commission for the test year which means that the cost allocation study must be performed after those adopted levels are known. SDG&E contends that the AAD methodology it proposes would permit determination of SDG&E's proper contribution to SoCal's revenue requirement much more quickly than the BSLE methodology proposed by SoCal. It does note, however, that there is less than one percent difference in the revenue requirement from SDG&E resulting from use of BSLE method and the revenue requirement resulting from use of its simplified AAD method, indicating that neither is more or less accurate than the other.

In its reply brief, SDG&E notes that SoCal has apparently changed its position that the G-61 commodity rate should be set at the average cost of gas plus 4-1/2 percent to cover franchise fees. SDG&E supports the position taken by SoCal in its brief with respect to wholesale commodity rates which comports with the zero based two-part rate structure proposed by staff and SDG&E.

It also took issue with SoCal's use of the BSLE and with SoCal's recalculation of the amount of the capacity charge which SDG&E's methodology would produce. SDG&E filed concurrently with its reply brief, a Motion to Strike portions of SoCal's opening brief.

SDG&E's Motion to Strike

SDG&E moves to strike certain portions of SoCal's opening brief on the grounds that it attempts to introduce new evidence, assumes facts not in evidence and misstates evidence in the record. The material to which SDG&E objects is found on page 143 of SoCal's opening brief, which reads:

> "If appropriate corrections were made for all errors in SDG&E's method pointed out by SoCal in cross-examination, that method would produce a margin responsibility for SDG&E of $20,025,000 which is $5,485,000 above the figure arrived at in SDG&E's Exhibit 110, Attachment A. That is hardly insignificant. For the convenience of the parties, SoCal has provided on the following pages a detailed calculation demonstrating how the corrections to SDG&E's method were made. Page 144 of SoCal's opening brief consists of the detailed calculation and explanatory material."

SDG&E argues that SoCal did not elicit the margin responsibility figure it cited through cross-examination of SDG&E's witness, nor did it present its own witness to make the calculations. The result, according to SDG&E, is that the figures are not found in the record, are unsponsored by any competent witness, and are immune from cross-examination by parties who dispute their accuracy.

SoCal replied that it conducted a line-by-line analysis of Exhibit 110 with SDG&E's witness on cross-examination, making corrections to the SDG&E approach as dictated by the facts and required for clarity and that SoCal did nothing more than display this complex material in a form more easily understood. It notes that in one instance, SDG&E's witness proposed that one of the

figures he sponsored be recalculated and that SoCal has simply followed this suggestion. SoCal asserts that the purpose of the table showing the recalculations and the related material is merely to present in one place a clear comparison of the effect of the corrections shown on cross-examination.

SoCal states that its opening brief is not intended to be evidence, but only arguments and explanations of its position. Since it is not evidence, SoCal contends that it would be improper to strike.

We will deny the motion to strike material from a brief. We concur, however, that such material is not evidence and we will not rely on these figures in reaching an adopted rate design for wholesale customers.

Position of Edison

Edison's witness stated that the purpose of his testimony was to point out the following five matters:

1. To show that conservation is not furthered by pricing gas to Edison based on an alternate fuel concept.
2. To point out that the NGPA specifically exempts electric utilities as well as others from the imposition of the incremental pricing scheme.
3. To point out that the imposition of alternative fuel pricing on electric utilities appears to be contrary to the spirit of the Miller-Warren Energy Lifeline Act.
4. To show the basis for Edison's belief that a rate design philosophy based on alternate fuel pricing for sales to Edison is unduly discriminatory.
5. To illustrate the fallacy of a rate design which recovers the bulk of allocated fixed costs through the variable component of the rate.

Edison recommends that the Commission find that SoCal's cost of rendering service to all customer classes, and particuarly

to the GN-5 electric customers, is the appropriate starting point for the establishment of rates. Edison objects to what it terms a "what-the-traffic-will-bear" method of setting rates for GN-5 electric customers and alleges that the resulting rates result in the exploitation of electric utility customers for the benefit of the higher priority gas customers.

Edison suggests that the Commission redesign the GN-5 rate to eliminate the excessive revenues which now accrue to SoCal by reason of the operation of the SAM balancing account. It suggests that the appropriate manner by which this could be achieved is by requiring refunds be made to the contributing classes of all overcollections in the balancing account.

Edison asks the Commission to reject the SoCal and staff rate proposals for GN-5 customers on the grounds that neither proposal will produce conservation of gas.

Position of GM

GM has two assembly plants within SoCal's service area and the bulk of GM's natural gas requirements, consisting of process gas essential to the manufacture of its products, is served under SoCal's Rate Schedule GN-2.

GM takes issue with the staff's proposed rate design on two grounds: first, that there is no legal or rational basis for maintaining a fixed lifeline to SAR relationship and, second, that referencing GN-2 rates to the SAR results in totally arbitrary residual ratemaking.

It also objects to the staff proposal for a solar incentive rate as ineffective and unnecessary. It maintains that staff is advocating a solar incentive rate without attempting to assess its impact on the utility or its effectiveness as an "incremental" incentive over and above existing incentives such as substantial tax credits.

GM supports SoCal's proposal to recover a greater portion of fixed costs through increasing the customer charges. It points out that the current customer charge for the residential class is far below the actual cost to serve and is in effect a subsidy to the residential customer borne mainly by industrial and commercial customers. Not only is such a subsidy discriminatory, GM says, but it also adversely affects SoCal's revenue stability.

GM also supports CMA's proposed cost-based rate design proposal as a move toward more equitable and effective rates. In addition to substantially reducing the subsidy flowing to the residential class, such rates, according to GM, would give residential customers a more realistic price signal of what it costs to serve them.

Position of Rockwool

Rockwool is a manufacturer of mineral fiber insulation products which are produced from slag in a process which spins molten slag and attenuates it into fibers by the application of steam. The principal sources of the steam necessary to this process are a conventional steam boiler and a waste heat steam boiler. Seventy-one percent of Rockwool's natural gas use is for these two sources of steam; the remainder of Rockwool's natural gas is used to fuel machines necessary to the process for the production of insulation batts. Rockwool's rate schedule is GN-32, indicating that its alternate fuel source is No. 2 fuel oil.

Rockwool requests both interim and permanent natural gas rate relief, asserting that without this relief, its manufacturing plant in Fontana will in all likelihood close, putting approximately 90 people out of work and leaving the State of California with one less source of needed insulation products. Rockwool asks at

a minimum for a freeze in its current rate and believes that it would be best served by a reduction in the current rate, either through some form of priority reclassification or other special rate treatment.

The priority reclassification or other special rate treatment would require this Commission, either in this proceedding or in some other manner, to establish a special natural gas rate for those industrial facilities whose primary function is the production of goods specifically required to reduce energy consumption. Rockwool urges that such industries be encouraged to continue to provide California consumers with energy-conserving products at reasonable prices and to do this by means of a special gas rate.

Position of Kimberly-Clark

Kimberly-Clark believes that it is an opportune time for the Commission to develop new rates and rules to encourage the growth of cogeneration in California. To do this, Kimberly-Clark proposes a cogeneration incentive rate. This rate would vary depending upon the thermal efficiency achieved by the particular cogenerator. Under Kimberly-Clark's proposal, the greater the use of the energy received, the lower the rate charged for the natural gas on an interruptible basis. Kimberly-Clark recommended a periodic check by SoCal involving simple tests to measure energy efficiency upon which rates for the ensuing period would be based. Kimberly-Clark asserts that it cannot undertake the significant capital expenditures necessary to institute cogeneration until incentive rates for natural gas are established.

Position of the Glass
Manufacturers Energy Committee

The Glass Manufacturers Energy Committee urges the Commission to reconsider the consequences of two-tier alternate fuel rate structures which it contends encourages a wasteful capital investment to convert facilities from those which use No. 2 fuel oil to those which use No. 6 fuel oil as alternate fuel. It believes that this capital investment should be better used for energy-regulated noninflationary productivity improvements and recommends the elimination of the No. 2 fuel oil pricing-tier applied to industrial users.

The Glass Manufacturers Energy Committee also urges institution of a rate design based more on cost of service is needed to provide a healthy business/industrial climate in California and to provide residential customers with appropriate conservation signals.

Position of WMA

WMA's members purchase gas from SoCal through a master meter and then sell through submeters to their tenants. Mobilehome park operators are served under SoCal's Schedule No. GS which provides the operator with a 10 percent discount on the lifeline sales.

WMA supports the continuance of the 10 percent discount on lifeline blocks as authorized by Decision No. 86087 if the customer charge is left intact because it asserts that the effect will be the preservation of the differential mandated by Section 739.5 of the Public Utilities Code.

WMA supports the staff rate design proposal and does not oppose SoCal's rate design proposal since the adequacy of the

differential is, in its opinion, preserved. WMA opposes a rate design having a zero customer charge unless the 10 percent discount of lifeline blocks is increased substantially.

Position of Tehachapi

Tehachapi is a public entity served natural gas for use in its various pumping facilities. Its position is that SoCal's rate design is equitable, workable,and realistic and should be adopted by the Commission. It takes issue with the staff rate design proposal which it characterized as a continuation of past ratemaking treatment, with no view toward redress of existing inequities in the area of allocated cost of service.

Discussion

Special Considerations: As we noted in Decision No. 91969 in Application No. 59508, both Rockwool and the Glass Manufacturers have alleged substantial hardship from the effect of high natural gas rates on their respective businesses and have asked for special consideration. Their rates were not increased as a result of our decision in that matter, nor were they in the fall CAM (Application No. 59929) which requests an overall decrease in gas rates. Similarly, because of the small change in price of alternate fuel, the rate increase we authorize herein falls on other classes of customers. To that extent, Rockwool and the Glass Manufacturers have both received some relief. We will repeat that we do not believe that it is sound ratemaking practice to set rates based on individual financial circumstances. Extraordinary relief of this nature should appropriately be sought from the Legislature.

We have set rates for the Ammonia Producers under the provisions of SB 1301 (Chapter 219, 1980 Statutes) which provides that the rate "shall not exceed the average price paid by the gas corporation for gas from all suppliers as determined in the latest rate proceeding before the Commission, plus 10 percent of such average price."

We will not adopt in these proceedings either the recommendation of Kimberly-Clark for a cogeneration incentive rate or the recommendation of Rockwool for a special rate within the existing priority classification for manufacturers of energy conservation materials and devices. Both recommendations as presented herein would lead to undue proliferation of rates, which we find undesirable. The matter of a cogeneration incentive rate is the subject of Application No. 59684 which will address that question directly and in which Kimberly-Clark is also an appearance. The matter of a new classification for industrial facilities whose primary purpose is production of energy conservation goods more properly belongs in our gas priorities proceeding, Case No. 9642. We do not have an adequate record or time to establish separate rates in this proceeding for this type of activity. Questions such as: (1) how many such manufacturers are there in SoCal's service territory, (2) what percentage of their business is the production of energy conservation goods, (3) are those goods sold in California or out of state, and (4) what would be the revenue effect of this proposed rate, all need to be addressed before we would begin to have sufficient data to consider such a rate.

For the same reason, i.e., undue rate proliferation, we will not adopt the staff proposal for a special solar incentive rate. The matter of solar incentives has been addressed extensively in OII 13 and OII 42 and in SoCal's Application No. 59869. We think it premature to provide an additional small incentive in the rates we set herein.

Wholesale Rates

All parties apparently agree with the capacity and commodity charge concept presented for determining wholesale rates, but differences exist on the proper method of cost allocation. Additionally, it is not altogether clear from the record whether SoCal continues to assert that the commodity portion of the rate should contain an additional increment (ranging from 217 to 4.5 percent per SoCal's witness Belson) for other variable costs such

as compressor fuel, transmission, and some franchise taxes. The staff witness, consistent with his zero base cost of gas recommendation, did not include this additional increment, noting that these costs were appropriately part of margin, rather than cost of gas. The result of including this additional increment in the commodity portion of the rate would produce a greater margin increase as the cost of gas increases.

We concur with the parties that a two-part rate will be easier to administer in rate design development. We further concur with the staff and SDG&E that the commodity charge should be the average cost of gas as used for the PGA procedure. By eliminating any margin component from the commodity rate, we hope to simplify the setting of wholesale rates in the semiannual CAM proceedings.

We are now faced with the problem of setting an appropriate capacity charge for the two wholesale customers. There is substantial disagreement between SoCal and SDG&E on the appropriate cost allocation method to be used to establish this charge. Staff believes that the two utilities should continue to negotiate this rate between them. Since the city of Long Beach (Long Beach) did not participate in the cross-examination of the rate design witnesses nor did it file a brief in this matter, we have no record of its position on this issue.

Both SDG&E and SoCal advocate determination of the appropriate capacity charge through use of cost allocation methodologies on a simplified basis. SoCal urges that the percentage relationship between the wholesale share of the margin based on the BSLE cost allocation methodology and the total proposed margin be applied to our adopted margin to arrive at an adopted capacity charge.

SDG&E objects to this proposed treatment on three grounds: SoCal did not present a witness in support of it, the percentage relationship could cause further inequities, and SDG&E does not believe that the BSLE handles certain transmission expenses appropriately. SDG&E does agree that the proposal has a desirable element of simplicity.

SDG&E, on the other hand, has presented a fourteen-part calculation worksheet for development of rates (both capacity and commodity) for wholesale customers. It asserts that the worksheet is a simplified application of the AAD cost allocation methodology that is easier to perform, is less time-consuming, and is conceptually correct. SoCal took issue on cross-examination with nine of the fourteen computations made by SDG&E's witness rendering the methodology unreliable in our opinion for use in this proceeding.

This Commission has not, in recent years, used allocated costs determined by any methodology as a basis for setting rates. Cost of service is simply one of the factors we consider when setting rates. Against this backdrop, we are reluctant to use cost of service as the sole basis for setting a capacity charge for wholesale rates, however, we are attracted by the simplicity of SoCal's proposal to use the percentage relationship between the wholesale share of the margin based on the BSLE cost allocation methodology and the total proposed margin applied to our adopted margin. For this proceeding only, we will use this method to arrive at the basic capacity charge for wholesale customers.

We are impressed by the arguments of SDG&E and by city of SD that SDG&E's customers should not be required to bear the expenses for the energy conservation programs of SoCal since SDG&E has its own energy conservation programs and since the system as a whole, rather than SDG&E exclusively, benefits from conservation effected on the SDG&E system for which SDG&E ratepayers bear the cost. We will, therefore, reduce the annual capacity charge for SDG&E by $3.2 million representing the approximate conservation expenses for SoCal that SDG&E would otherwise have to pay in wholesale rates. We will not make the same adjustment for Long Beach's wholesale rates since we have no evidence in this record that Long Beach has conservation programs of its own for which its ratepayers pay.

Accordingly, we will set a wholesale capacity rate for Long Beach of $3,236,464 annually or $269,705 per month and for San Diego of $12,523,986 annually or $1,044,416 per month. These capacity factors are based on .4581 percent and 2.2269 percent of our adopted margin for Long Beach and San Diego, respectively, with San Diego's capacity charge reduced $3.2 million. These same percentages should be applied to calculate a new capacity charge at the beginning of 1982 when the step rates reflecting our $45 million attrition allowance go into effect.

We are increasingly concerned about the total effect of our allocation of wholesale rates on SoCal's system has on retail customers in SDG&E's system. We have used the BSLF methodology as the basis for our allocation in this proceeding, because of its relative simplicity and because we had no consensus in the record for a more reasonable allocation method. We would be interested in seeing a presentation in the next general rate proceeding by any party on an allocation system between SoCal and SDG&E and/or Long Beach similar to the one which presently exists between PG&E and the city of Palo Alto. If SDG&E's residential customers are to receive the full benefit of our rate design policies, they ought not to be burdened any more than SoCal's residential customers by the rates we set herein. We believe that our adopted two-part rate goes a long way toward achieving this goal but because the customer mix of the two utilities is relatively different, we think an allocation similar to PG&E/Palo Alto bears exploring.

Residential Rates

The amount of the residential customer charge was one of the major issues in the rate design area. SoCal and CMA, supported by other parties, propose an increase to $6.50 while the staff proposes to retain the current $3.10 charge. In support of its $6.50 proposal, SoCal argues that the directly assignable costs to serve residential customers, including the investment in the service, the meters, the costs related to billing, customer service activities and a portion of the directly assignable A&G expenses, amounts to $8.17 based on estimated 1981 costs. SoCal contends that even with a $6.50 customer charge, there will be a deficiency of $4.80 between the amount recovered from residential customers and the amount it costs to serve them after the indirect transmission, storage and distribution system costs are taken into account. SoCal characterizes the proposal as an attempt to restore some equity to its rate structure and reduce the subsidy of the residential ratepayer by other classes of ratepayer. CMA shares this concern, advocating that lifeline rates (including the commodity rate) be set equal to cost without return. According to CMA this would provide an inexpensive lifeline rate and would produce a residential rate form that was sharply inverted while collecting an appropriate level of revenue from the residential class as a whole.

We fail to see how doubling the customer charge produces an inexpensive lifeline rate - since the customer charge is a part of lifeline. At the very minimum lifeline rates are doubled. We are further concerned that such an increase will defeat any desire on the part of the residential customer to conserve. If a bill doubles without any change in customer use patterns and further, if there is no way to reduce that bill below $6.50 by change in use,

we foresee a disastrous result in terms of attitudes about conservation and in amount of conservation achieved. Far better, we think, to place any necessary increase in the commodity portion of the rate, so that the customer can see clearly that a change in his use of gas affects his bill in a significantly measurable way.

We have considered eliminating the customer charge altogether and distributing the revenue requirement among the three tiers of residential usage in various proportions. This type of rate design is totally usage sensitive. We have a number of concerns, however, that make us reluctant to adopt a zero customer charge without further hearings. Among the items that need further development are the question of stability of revenues, the spread of the revenue associated with the customer charge within the residential customer class, the effect on average customer bills in both summer and in winter under various rate spreads using a zero customer charge, information on the number and type of inquiries from customers about the customer charge, the projected effect of a zero customer charge on the pilot light turn off program together with any projected change in costs for this program due solely to elimination of the customer charge, the projected conservation effect of eliminating the customer charge, and the effect of elimination of the customer charge on the 10 percent discount for Schedule GS. Accordingly, we will retain the current customer charge in this order until we have had an opportunity to explore these matters in further hearings. We will make this order interim, with hearings to be scheduled early next year on the customer charge issue.

We will continue the 10 percent discount on the lifeline blocks served under Schedule GS, as provided in Decision No. 86087 until we reach a final decision on the appropriate level of customer charge.

In recommending a rate design for the residential commodity rates staff apparently relied heavily on the criteria developed in the last PG&E general rate case, Decisions Nos. 91107 and 91108, modified in certain respects because the numbers in the SoCal system could not be made to fit the PG&E criteria exactly. For example, the staff recommended commodity rate for lifeline volumes is referenced to a maximum of 80 percent of the SAR (while the PG&E criteria call for a reference of 75 percent). Staff maintains that by this method, the SAR is 125 percent above the lifeline commodity rate, thereby complying with the legislative intent of the Miller-Warren Lifeline Act (Public Utilities Code Section 739).

CMA points out that Section 739 (c) does not require maintenance of any percentage relationship between lifeline and SAR. We agree. Section 739 (c) required only that the Commission authorize no increase in the lifeline rates until the average system rate in cents per therm had increased 25 percent or more over the January 1, 1976 level. As we indicated when we interpreted

Section 739 in Decision No. 88651 dated April 4, 1978 in Case No. 9988, "We believe that the specification of the percentage level is a clear indication of the legislative intent to allow the Commission complete discretion beyond that point". (Mimeo p. 20a.) Accordingly, we will not set the lifeline commodity rate referenced to a fixed percentage of the SAR but rather will set it residually after fixing the second tier, nonlifeline commodity rate referenced to the average retail rate and the third tier rate at the highest rate on the system, not to exceed the marginal cost of gas. The average residential rate shall be referenced to the average retail rate.

This residential rate design is intended to discourage wasteful use in the third tier, while providing an average priced second tier to cover unusual essential uses beyond lifeline. We believe that an approximate $.10 difference between lifeline and second tier is small enough to provide for this nonaverage use without encouraging unnecessary use in the second tier.

The residential rate design adopted herein gives effect to the need for conservation, the value of service and historial rate patterns.

Commercial and Industrial Rates

Consistent with our decision not to increase the residential customer charge, we will not increase the customer charges for the various commercial and industrial schedules.

Priority 1 Customers (Nonresidential)

The priority 1 nonresidential customers are those firm use customers with peak day demands of less than 100 Mcf/day. These customers are served under SoCal's Schedule GN-1. The staff recommends that the rate for this schedule be referenced to the system average less lifeline volumes and revenue. We believe it more appropriate to reference the rate level to the average retail rate, excluding wholesale. Because wholesale rates are

based on cost and commercial and industrial rates are not, it is appropriate to exclude wholesale volumes and revenues from our average comparison. Accordingly, we will reference GN-1 (and GN-2) schedules to the average retail rate.

Priority 2 Customers

This catetory includes customers who are firm non-residential use customers with peak-day demands in excess of 99 Mcf. These customers are served on Schedule GN-2 (with the exception of priority 2A igniter which is served under GN-5 for steam electric generating plants). The primary difference between the customers on this schedule and Schedule GN-1 is volume of use, therefore we will also reference GN-2 rates to the average retail rate, less wholesale volumes and revenues.

Priority 3 and 4 Customers

These customers have alternative fuel capacity, either No. 2 or No. 6 fuel oil, and are served under Schedules GN-32, GN'42, GN-36, and GN-46 (with the exception of Priority 3 turbine sales which are served under Schedule GN-5). We will continue our policy of referencing these rates to the cost of alternate fuel. This policy has been discussed in previous decisions most notably Decision Nos. 90822 and 91077 for SoCal and Decision Nos. 91107 and 91720 for PG&E. The arguments that allocated cost of service should be used instead of the price of alternate fuel as the basis for setting low priority rates are not new. The arguments in support of this are the same ones adduced in prior proceedings. We hear nothing that convinces us that we should change our policy of referencing these rates to alternate fuel costs.

Priority 5 Customers

Priority 5 customers consist of utility steam electric generating plants, utility gas turbines, and priority 2A igniter gas.

We will continue to reference these rates to the alternate cost of No. 6 low sulfur fuel oil, with the rate to Edison set not to exceed 80 percent of the cost of alternate fuel oil, so that Edison can pay the costs associated with using unanticipated supplies of gas (such as underlift charges) and still realize an economic advantage from burning such gas. We adopted this position in Decision No. 90822 and believe it reasonable to retain it.

Findings of Fact

1. SoCal is in need of additional revenues but the proposed increase of $178.9 million (plus an additional unquantified sum reflecting an increase in wages for 1980 and 1981) is excessive.

2. A rate of return of 10.75 percent on the combined adopted rate base is reasonable. Such a rate of return will provide a return on equity of approximately 14.6 percent and a times interest coverage of approximately 2.44 for debt and a combined coverage factor for all interest and preferred stock dividends of 2.20 times. This return on capital is the minimum needed to attract capital at a reasonable cost and not impair the credit of SoCal.

3. The authorized rate of return on rate base and return on common equity (resulting in the increased revenue requirement found necessary herein) is expressly authorized in recognition that the next earliest test year to be used in establishing SoCal's revenue requirement will be 1983. Accordingly, the rates found reasonable herein are reasonable only if 1983 is the next earliest test year used to set rates for SoCal.

4. An allowance for operational attrition is necessary to reflect increasing costs in the second year of the rate life outside SoCal's control.

5. An adjustment in rate of return to reflect the "vigor, imagination, and effectiveness" of SoCal's conservation programs is appropriate at the end of test year 1981 and it is appropriate to base any adjustment to rate of return for success or failure in the conservation area on SoCal's recorded conservation achievement as reported in the December 31, 1981 report submitted to our Conservation Branch.

6. The use of a year-end capital structure and associated cost factors reasonably reflect the costs of capital at a midpoint in the two-year rate life of this decision.

7. The authorized increase in rates is expected to provide total company gross increased revenues for test year 1981 of approximately $142,726,200 over base rates in effect as of January 1, 1979. This amounts to a 6.07 percent increase in revenues over rates in effect as of January 1, 1979.

8. A fixed rate of return of 10.75 percent on our adopted rate base of $331,205,400 is reasonable for PLS for application in its cost of service tariff.

9. Specific goals for accomplishing market saturation of cost-effective conservation programs within a reasonable time frame are necessary for an effective conservation effort. SoCal presently lacks clearly stated goals for its individual conservation programs.

10. Comparison of the cost of conservation programs with the marginal cost of energy is desirable to show clearly the cost of the last increment of energy conserved and the equivalent unit of new energy supply. SoCal does not presently compare the cost of its conservation programs to the marginal cost of gas.

11. Accurate measurement of the specific savings of individual conservation programs and general savings of overall conservation efforts is crucial to the determination of cost-effectiveness. SoCal does not presently have a method of measurement which clearly differentiates between specific and general savings.

12. Knowledge of the conservation potential for each class of customer and by priority group is necessary to set realistic goals for conservation. SoCal has not presently developed data on gas conservation potential by class of customer and by priority.

13. The level of advertising expense requested by SoCal represents 17.4 percent of its total proposed conservation expenses and is excessive.

14. Funds disallowed as advertising expenses are more appropriately reallocated in part to supplement existing programs.

15. Use of contract labor for conservation activities does not per se indicate less commitment to conservation than would use of company labor and an adjustment for use of contract labor will not be made.

16. SoCal has been slow to implement report card billing, and evaluation programs mandated in our last rate decision, and its insulation retrofit program, with the monetary incentives is proceeding slowly to saturation.

17. SoCal has recently implemented low interest insulation loans and a residential energy audit and low-income weatherization program.

18. It is appropriate to measure SoCal's success or failure in the conservation area at the end of the test year rather than at the beginning because actual achievement can be quantified at that time. Determination of reward or penalty will be made at that time.

19. A minimum goal of 60.6 Bcf in conservation savings by the end of 1981 can be achieved by concerted effort on SoCal's part.

20. Failure to meet the minimum goal of 60.6 Bcf will reflect lack of effort and commitment to our conservation goals and will be penalized.

21. An achievement of conservation savings greater than 63.7 Bcf at the end of 1981 would reflect superior effort on SoCal's part and would be deserving of a reward.

22. It is reasonable to use 10.50 as the cost of Banker's Acceptances since this cost will reflect conditions which are expected for the test year.

23. City of LA's short-term debt amounts used in its proposed capital structure are based on 1978 data escalated for 1981 test year conditions. Because these short-term debt figures may contain GEDA and non-GEDA project amounts, which are now accounted for separately, it is not reasonable to rely on them for determining a capital structure for this proceeding.

24. The record in this proceeding is otherwise inadequate to support inclusion of short-term debt in the capital structure.

25. An allowance for operational attrition is necessary to recognize costs occurring beyond the test year over which SoCal has little or no control.

26. Review of the results of operations in late 1981 to determine the attrition allowance for 1982 as proposed by the staff, is administratively cumbersome and would in all likelihood create a "mini-rate case" in contravention of the Regulatory Lag Plan.

27. Reflection of an attrition allowance at the beginning of 1982 will substantially reduce SoCal's risk of doing business and will properly reflect the expenses when they are actually being incurred.

27a. An attrition allowance of $45 million for 1982 is reasonably necessary to reflect expected increases in costs which are beyond SoCal's control.

28. The WESCO coal gasification project was abandoned in March 1979 when its sponsors were unable to obtain federal loan guarantees and when the coal and water contract with Utah International expired.

29. The Navajo Nation's Tribal Council rejected the proposed plant site lease in February 1978 and SoCal then wrote off the equity portion of AFUDC from its books.

30. It is reasonable to allow expenses incurred until April 1979, the date of abandonment of the project.

31. Of the $9.715 million net WESCO expenditures sought to be recovered, we will disallow all AFUDC since the project has not led to construction and the return on the unamortized portion during the four-year amortization period since these are costs the shareholders have traditionally been required to bear. We will find as reasonable WESCO expenditures of $8,315,000 which result in the ratepayers bearing 74.22 percent of the total abandoned project costs and the shareholders bearing 25.78 percent.

32. It is not reasonable to allow rate base treatment on the unamortized WESCO expenses since this treatment would place the same burden on the ratepayers for an unsuccessful construction project as for a successful construction project that is placed in service. We will, however, authorize a four-year amortization of these expenses so that they will be fully amortized at the conclusion of the rate life of the general rate decision following this one.

33. SoCal has negotiated a wage increase for 1980 effective April 1, 1980 of 9.5 percent and a wage increase for 1981 of not less than 8.5 percent nor more than 13.5 percent to be determined by the change in the CPI between January 1980 and January 1981. SoCal's estimates of labor expense in this proceeding were based on increases of 7 percent for both 1980 and 1981. It is reasonable to use 9.5 percent for 1980 and 12.0 percent for 1981 because it will more closely reflect actual expenses expected to be incurred. Such wage increases fall within the President's wage and price guidelines.

34. Past estimates of gas supply have ranged from 40 to 60 percent below actual supply available. Staff estimates of gas supply in this proceeding are more in line with current supply and will be adopted.

35. Substantial underspending of authorized allowances for given program areas, especially in Conservation and in R&D, is an indication that the amount authorized was in excess of that reasonably necessary for the purpose.

36. It is not this Commission's function to select R&D programs for SoCal to pursue, it is SoCal's responsibility to design an overall R&D program acceptable to the Commission under previously established guidelines.

37. Adoption of a franchise fee ratio of 1.31 percent reflects recent recorded levels while at the same time taking into account the fluctuations occurring over the last five years.

38. Ad valorem tax expenses for test year 1981 as computed by employing a uniform HCLD method to compute the utility's total unitary assessed market value as the basis for subsequent tax calculations, has been fully justified and reasonable for ratemaking purposes.

39. The amortization of ITC over a two-year period in lieu of the historical five-year amortization period is consistent with the Regulatory Lag Plan and with Decision No. 91107 in re PG&E and will be adopted for SoCal.

40. Since OII 24 will fully explore the feasibility and ramification of adopting new methods for calculating income taxes (including exclusion of short-term debt interest as a deduction from income taxes), it is appropriate in this proceeding to continue computing income taxes for ratemaking purposes by the traditional methods as recommended by staff.

41. SoCal has not been assessed any tax deficiency, nor has the additional 6 percent ITC on distribution property for the period 1975 through 1978 as recorded or 1979 and 1980 as estimated been disallowed. No adjustment in rates will be made for a loss which is still speculative.

42. The staff's estimates of gas plant in service are based on more recent data than SoCal's estimates.

43. The Ten Section gas storage field was certificated by Decision No. 91856 dated June 3, 1980, and expenses associated therewith will be included in the rates authorized.

44. The Gas Meter Antitrust Litigation suit has been settled and SoCal's share of the class action suit is $1,325,157 and will be reflected in rate base and depreciation expense.

45. Special consideration for Rockwool or the Glass Manufacturers, and solar incentive rates would lead to a proliferation of rate schedules which is undesireable.

46. Wholesale rates composed of a capacity charge based on cost and a commodity charge based on the average cost of gas will simplify rate setting with respect to wholesale customers, both in general rate proceedings and in CAM proceedings and will produce an appropriate amount of revenue from this class of customer.

47. The issue of the residential customer charge bears further study in additional hearings.

48. Retention of the $3.10 residential customer charge temporarily will provide a portion of the fixed costs to serve this class of customer while not unduly burdening him with fixed costs so high that they might discourage conservation.

49. It is reasonable to set GN-1 and GN-2 rates referenced to the average retail rate, excluding wholesale sales and revenues which are based on cost.

50. The GN-32 and GN-42 rates are appropriately referenced to the alternate cost of No. 2 fuel oil.

51. The GN-36 and GN-46 rates are appropriately referenced to the alternate cost of No. 6 fuel oil.

52. The GN-5 rate is reasonably referenced to the alternate cost of low sulfur No. 6 fuel oil, with the rate for Edison not to exceed 80 percent of this alternate cost.

53. A differential of approximately 10 cents between lifeline commodity rate and second tier residential rate is sufficiently small to provide for essential nonaverage use in the second tier, yet is high enough to discourage wasteful use in this tier.

54. The third tier residential rate set at the highest rate on the system not to exceed the marginal cost of gas, will effectively discourage profligate use of gas at this level.

55. The average residential rate set with reference to the average retail rate is reasonable.

56. In the absence of data pertaining to the current cost of natural gas, as well as alternate energy fuel costs, it is not possible on the basis of the evidence now before us in this proceeding to establish a just, reasonable, and nondiscriminatory schedule of gas rates which would afford SoCal an opportunity to recover its full revenue requirements for test year 1981.

57. The $172,726,200 annual increase in gross revenues now authorized SoCal should be held in abeyance to be subsequently combined with whatever further relief may be authorized pursuant to SoCal's current CAM filing now pending before the Commission in Application No. 59929. Under this procedure, the level of gas rates adopted in the CAM proceeding will not only include the increase found reasonable here but will also reflect the more current cost of natural gas and alternate fuel cost.

58. The increases in rates and charges authorized by this decision are justified and are reasonable; and the present rates and charges, insofar as they differ from those prescribed by this decision are for the future unjust and unreasonable.

Conclusions of Law

1. When SoCal is authorized to file revised gas rates pursuant to its CAM filing now pending before the Commission, it should be further authorized to file gas rates designed to generate the $142,726,200 in additional 1981 test year gross revenues based on our adopted results of operation in this proceeding.

2. The effective date of the ensuing order should be the date hereof because there is immediate need for rate relief concurrently with the commencement of the 1981 test year pursuant to the Commission's Regulatory Lag Plan.

3. SoCal should improve its existing conservation activity by defining its goals, and establishing potential, by improving its measurement techniques and by taking specific actions as further set forth in our order herein.

4. SoCal should be authorized to file revised gas rates to be effective January 1, 1982 to generate additional gross revenues of $45 million based on our allowance for attrition expected to occur in 1982.

INTERIM ORDER

IT IS ORDERED that:

1. Southern California Gas Company (SoCal) is authorized an annual increase in gross revenues in the amount of $142,726,200. This increase in gross revenues will be deferred to SoCal's CAM Application No. 59929 now pending before the Commission for subsequent inclusion with whatever other rate relief may be authorized in that decision.

2. SoCal shall take the following actions with respect to its conservation programs:

a. Make periodic post audit surveys of its 1980 Residential Audit Program.

b. Offer residential audits free of charge to its customers until further determination of the reasonableness of the $15 charge.

c. Train and directly supervise auditors for the residential audit program.

d. Extend the toll free Telephone Hot Line Program to Saturdays from 8 a.m. to 5 p.m.

e. Implement a weatherization program for the residential rental market.

f. Resume the aggressive marketing of Solar Swimming Pool covers.

g. Expedite the test market program of the Ecomatic system.

h. Seek means of increasing hardward sales through the Home Improvement Center Program.

i. Improve the marketing of flow control devices and water heater blankets.

j. Improve the precision of measurement of energy savings in programs consistent with our direction in the body of this decision.

k. Implement a weatherization training program for CETA employees.

l. Develop an insulation contractor referral program containing a referral list of contractors which would allow participation by all eligible contractors in SoCal's service territory and which would contain criteria of eligibility of participation by contractors.

m. Continue with its direct sales program for insulation only until it files for and has approved a zero interest loan program (ZIP). When the ZIP program is in place SoCal is directed to cease direct marketing of insulation.

3. SoCal shall develop and submit by July 1, 1981, a more rigorous methodology for projecting conservation goals for its programs. The submission shall clearly indicate both its evaluation of what constitutes effective market saturation for each technology for which it has identified potential and its goals for achieving such saturation in each sector of its service territory.

4. SoCal shall expand its program cost-effectiveness in figures to include marginal cost of conserved energy, in addition to the average cost of conserved energy.

5. SoCal shall file the conditional demand analysis for the residential market fifteen days after the effective date of this order and shall file the conditional demand analysis for the commercial/industrial market on or before July 1, 1981.

6. SoCal shall develop and submit by July 1, 1981, a clear statement of gas conservation potential in each sector of its service territory. The statement should be based on actual experimental data to the maximum extent possible and should identify areas of uncertainty and the sensitivity of the final estimate to that uncertainty.

7. SoCal shall provide the following information with its EECP due December 1 of each year:

a. Estimated cost of each program on the same basis used in the prior rate case.

b. Estimated cost of Program and General Advertising

c. Estimated cost of General Administration expenses.

d. Estimated General Savings for the forecast calendar year.

e. The maximum potential for each device or program.

f. Estimated gas sales by class of service and by end use priority group for the forecast calendar year.

8. In its Energy Efficiency Conservation Report due March 31, of each year SoCal shall provide the following information:

a. Report of each new program instituted and each program discontinued.

b. Reasons for any significant difference between energy savings forecast and recorded.

c. Number of solar installations installed in SoCal's service territory.

d. Separately reported energy savings due to commercial audits and due to industrial audits.

9. SoCal shall report the following quarterly with the first report due March 31, 1981:

a. Sales of each conservation device directly merchandised.

b. Number of insulation jobs completed by SoCal and by others.

c. Number of square feet of attic space, units directly under the attic and number of structures insulated in rental housing in SoCal's service territory by SoCal and by others.

d. Present saturation, company goals and total potential for each conservation device included in SoCal's conservation programs.

10. SoCal shall accomplish a minimum energy conservation level of 60.6 Bcf by the end of the test year 1981. Failure to achieve this level of conservation by this date will result in rate reductions in accordance with the provisions set forth in the conservation section of this decision.

11. Any funds authorized for conservation expenses which remain unexpended at the end of 1982 shall be subject to refund.

12. Any funds authorized for research and development which are unexpended at the end of 1982 shall be considered in the next general rate case as reducing the revenue requirement necessary for research and development.

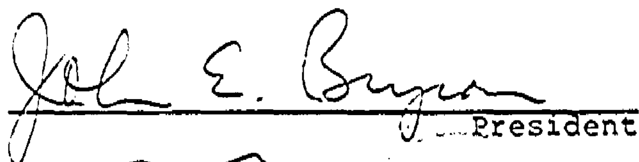
13. Further hearings on the issue of the appropriate level of residential customer charges will be scheduled in early 1981.

13. SoCal is authorized an attrition allowance of $45.0 million for 1982 and is authorized to file revised gas rates reflecting this allowance to be effective January 1, 1982. The rate design spreading this additional increase shall follow the general guidelines set forth in this decision.

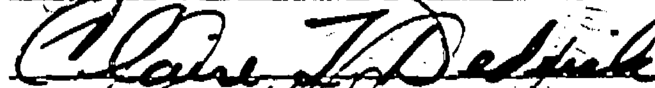
14. The motion filed by SDG&E to strike portions of SoCal's brief in this proceeding is denied.

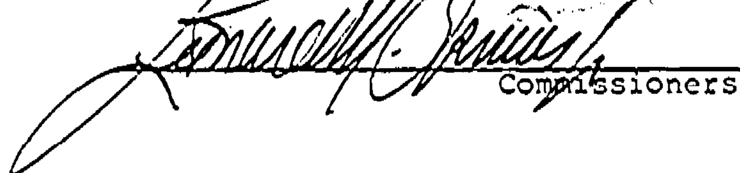
The effective date of this order is the date hereof.

Dated DEC 5 - 1980, at San Francisco, California.



President





Commissioners

Commissioner Vernon L. Sturgeon, being necessarily absent, did not participate in the disposition of this proceeding.

# APPENDIX A

## LIST OF APPEARANCES

Applicant: David B. Follett, John H. Craig III, Robert B. Keeler, and Michael D. Gayda, Attorneys at Law, for Southern California Gas Company.

Protestants: Herman Mulman and Edward B. Novikoff, for Seniors for Political Action; Hyman Finkel, for Seniors for Legislative Issues; and Virgil Ed Duncan, for himself.

Interested Parties: K. D. Walpert, for Donald R. Howery, General Manager, Department of Transportation, City of Los Angeles; Larry R. Cope, John R. Bury, David N. Barry III, H. Robert Barnes, and Rollin E. Woodbury, Attorneys at Law, for Southern California Edison Company; William E. Emick, Attorney at Law, and Vernon Cullum, for City of Long Beach Gas Department; Stephen A. Edwards, Jeffrey Lee Guttero, and William L. Reed, Attorneys at Law, for San Diego Gas & Electric Company; Graham & James, by Boris H. Lakusta, David J. Marchant, Byde W. Clawson, and Thomas J. MacBride, Attorneys at Law, for Western Mobile home Association, California Hotel and Motel Association, Valley Nitrogen Producers Inc., and Union Chemicals Division of Union Oil Company of California; H. R. Carroll, for Glass Containers Corporation; William Knecht, Attorney at Law, for California Association of Utility Shareholders, Brobeck, Phleger & Harrison by Gordon E. Davis, William H. Booth, James M. Addams, and Cynthia Choate, Attorneys at Law, for California Manufacturers Association; Downey, Brand, Seymour & Rohwer, by Richard R. Gray, and Philip A. Stohr, Attorneys at Law, for General Motors Corporation; Harry Winters, for University of California; John W. Witt, City Attorney, by William S. Shaffran, Deputy City Attorney, for City of San Diego; Carl M. Faller, Jr. and Martin E. Whelan, Jr., Attorneys at Law, for Tehachapi-Cummings County Water District; David G. Vander Wall, Attorney at Law, for Rockwool Industries; Allen R. Crown and Glen J. Sullivan, Attorneys at Law, for California Farm Bureau Federation; Gibson, Dunn & Crutcher by Gary L. Justice, Manuel Kroman, Kenneth A. Strassner, and William M. Mazur, Attorneys at Law, for Kimberly-Clark Corporation; Ed Perez, Deputy City Attorney for Burt Pines, City Attorney, for City of Los Angeles; David K. Takashima, for Agricultural Council; James C. Dycus, for himself and other rate-payers; Henry F. Lippitt, 2nd, Attorney at Law, for California Gas Producers Association; and Joseph H. Weisman, Attorney at Law, for California Carpet Finishing Company and Carpet Manufacturers of the West.

Commission Staff: Maxine Brody and James S. Rood, Attorneys at Law, John Hughes, and Martin Abramson.