ALJ/km

Decision 82 02 135 February 17, 1982

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of SOUTHERN CALIFORNIA GAS COMPANY for Authority to Implement a Residential Conservation Service (RCS) Program and to Increase Rates to Recover the First Year's Cost of the Program, and to Include the RCS Program Costs in the Conservation Cost Adjustment Procedure.	Application 60446 (Filed April 14, 1981)
In the Matter of the Application of SOUTHERN CALIFORNIA GAS COMPANY for Authority to Implement a Zero Interest Weatherization Financing and Credits Program and to Increase Rates to Recover the First Year's Cost of the Program, and to Include the Weatherization Program Costs in the Conservation Cost Adjustment Procedure.	Application 60447 (Filed April 14, 1981)

(See Appendix A for appearances.)

INDEX

I N D E X

Summary of Decision

The decision authorizes Southern California Gas Company (SoCal) to begin new programs which greatly expand its existing aid to residential ratepayers in financing cost-effective weatherization investments. SoCal's Residential Conservation Service (RCS) will audit 146,000 homes in 1982. The Weatherization Financing and Credits Program (WFCP) will provide 8% loans or cash credits to 187,000 homes in 1982. Together, the two programs will provide SoCal's customers with their best opportunity to reduce their utility bills, in this time of skyrocketing costs.

RCS is SoCal's version of a federally mandated program providing residential ratepayers with free "energy audits" which will identify for each participating ratepayer weatherization measures which can be installed cost-effectively in his or her home. SoCal has been initially authorized $12 million for RCS in 1982. Actual expenditures will be recorded in a balancing account, for evaluation and adjustment after one year. One likely source of savings is the streamlining of RCS audit provisions by the California Energy Commission, which has been designated as California's lead agency. Additional savings should also occur through contracts with local governments, community groups and private firms which offer to provide RCS audits at lower costs than the utility.

The WFCP program is considerably larger; SoCal is authorized to spend $34,256,000 in 1982 to reach 187,000 units. SoCal will provide 8% financing, or cash credits providing comparable assistance, for up to 13 cost-effective measures. Six measures have been found to be so clearly cost-effective that SoCal will provide WFCP assistance without any prior audit. These "Big 6" items are attic insulation, weatherstripping, water heater blankets, low-flow shower heads, caulking and duct wrap. Seven additional measures will be eligible for WFCP only when shown to be cost-effective by an RCS audit of the ratepayer's

residence. These measures are wall insulation, floor insulation, clock thermostats, pipe insulation, storm or thermal windows, intermittent ignition devices to replace pilot lights, and replacement of inefficient space heating appliances. To ensure program cost-effectiveness, two items will be reconsidered at the end of the year: storm or thermal windows and replacement of inefficient heating appliances.

The Commission has ordered a number of provisions to ensure that the benefits of WFCP are spread equitably. First, limits have been placed on the total size of WFCP loans have been limited to no more than $3,500 for each dwelling unit: $750 for the attic insulation; $250 for the remaining Big 6 items; and $2,500 for the seven RCS-requiring items. Second, WFCP loans are repayable over 100 months, ensuring relatively small monthly payments (loans are due in full upon sale of the unit). Minimum loans will be $150, and minimum monthly payments $5.

Third, special efforts have been taken to allow renter participation. The credit option will ensure that renters can recover the costs of weatherization investment quickly, especially if they install measures themselves, on a do-it-yourself basis.

Fourth, additional efforts are directed to allowing low-income ratepayers the opportunity to participate. SoCal will cooperate with community action agencies (CAAs) and community-based organizations (CBOs) for targeted outreach and inspections. SoCal will provide credits upon receipt of cash deposit slips, before the low-income participant pays for measures. SoCal will also provide low-income participants in WFCP with up to $200 in credits for cost-effective "building envelope" repairs, such as repairing holes in walls and replacing broken windows.

The Commission also made a number of modifications in SoCal's proposal to reduce program costs. SoCal was authorized to continue its direct sales program, in which contractors agree to provide weatherization packages including commissions to the SoCal employees who line up the contracts. This effort is expected to save over $5 million in 1982. SoCal will also reduce program costs while ensuring the quality of WFCP-financed work by adopting flexible inspection methods.

RCS and WFCP expenses will be recorded in a balancing account for recovery through a uniform $0.00726 per therm adjustment to rates. A balancing account is established today, but the adjustment to rates will not commence until the time of SoCal's next CAM adjustment decision.

Because the programs are so cost-effective, even customers who never participate directly in the programs will save money over the life of the weatherization measures. SoCal will be able to "supply" energy through conservation at far less cost than if new gas supplies were purchased to provide equivalent amounts of energy.

INTERIM OPINION

I. Introduction

During the past year, this Commission has been faced with repeated applications by California gas and electric utilities seeking to offset skyrocketing fuel costs. Both the utilities and the State have attempted to respond to this situation by increasing the level of energy conservation among residential customers. As we have previously observed, conservation resulting from increased energy efficiency "has consistently risen to the fore as the most readily available, least costly, and most reliable source of energy supplies." (Pacific Gas and Electric Company (PG&E), Decision (D.) 92653 at p. 2 (1981).)

Today we have the opportunity to draw further on this resource by considering the instant applications filed by Southern California Gas Company (SoCal). By these applications, SoCal seeks to implement two complementary conservation programs: the Residential Conservation Service Program (RCS) (Application (A.) 60446) and the Weatherization Financing and Credits Program (WFCP) (A.60447).

The RCS program represents SoCal's proposed compliance with federal and state law. As required by the National Energy Conservation Policy Act of 1978 (NECPA) (Pub. L. 95-619, 92 Stat. 3206, et seq.), the federal Department of Energy (DOE) has established a national energy conservation program. The purpose of this program, designated RCS, is to encourage the installation of energy conservation and renewable resource measures in existing homes of customers of large gas and electric utilities.

While the RCS program is defined by specific DOE regulations (10 CFR 456), state governments have been given the authority to expand the RCS program to tailor it, if necessary, to a state's particular needs. In keeping with DOE's regulations (10 CFR 456), the California Energy Commission (CEC), this State's designated "lead agency" for RCS, has developed the California Plan for the RCS (Cal Plan) to guide California utilities in the implementation of the RCS program in their service areas.

To undertake its RCS program which is designed to meet these federal and state standards, SoCal seeks to increase its rates by $17,611,000 to cover the estimated first year's costs of the program which are not already covered in rates. With these funds SoCal plans to audit 146,000 residences, approximately 5% of its total residential ratepayers. Following the audits, SoCal hopes to achieve an energy savings of 10,118,000 therms through customer implementation of the various practices and measures recommended during the audits.

SoCal's WFCP would offer residential customers the option of zero interest financing or utility credits in connection with the purchase and installation of various cost-effective energy conservation measures. The loans, which would be available to owners of single- or multi-family dwellings, would have a maximum term of 100 months and a minimum amount of $150. In contrast, the credits would be available to all residential customers, including renters. The amount of the credit will vary depending on a percentage of the value of the gas saved over the life cycle of each installed conservation measure. SoCal believes its program is designed to attract low-income participants as well.

The interrelation between SoCal's WFCP and RCS programs is evident. As part of his duties, SoCal's RCS representative will explain WFCP financing to audited ratepayers. Although seven "core" conservation measures, already considered by SoCal to be cost-effective, will qualify for the WFCP without an RCS audit, other measures will be financed by SoCal only if found cost-effective by an RCS audit. The seven proposed "core" measures not requiring an RCS audit include attic insulation, replacement of inefficient space heating appliances, air duct insulation, water flow control devices, water heater blankets, caulking/weatherstripping, and solar pool covers.

SoCal estimates that its WFCP will achieve energy conservation in 187,000 dwelling units in the first year. To fund the program, SoCal requests a rate increase of $41,026,000 to cover the estimated first-year costs. SoCal proposes that the costs for both WFCP and RCS be accounted for in a balancing account and rates adjusted in accordance with the proposed Conservation Cost Adjustment (CCA) procedure.

Although we consider conservation to be a significant energy resource, we have not lost sight of the fact that this resource will continue to realize its potential only if we approve the most cost-effective conservation programs. To this end, we have carefully scrutinized our authority with respect to the implementation of SoCal's two programs, examined the current language and potential modifications of related state and federal regulations, and analyzed the proposed requirements and estimated costs of both RCS and WFCP.

In this decision, we conclude that the RCS program can be implemented in its first year at costs below those estimated by SoCal without diminishing the effectiveness of that program or violating the letter or spirit of the applicable law. We expect that efforts in the coming year at both the state and federal level will simplify RCS and thereby reduce the costs associated with that program. Because of this circumstance, coupled with our finding that SoCal's program as it now stands could be more streamlined, we authorize SoCal to increase its rates for the RCS program by $12,000,000 as opposed to the requested $17,611,000.

We have also reviewed SoCal's WFCP proposal in light of SoCal's tremendous success in the past year with its 8% financing program for residential attic insulation. In particular, we have compared the loan commitments achieved under that program with SoCal's forecasted goals for WFCP. Based on that analysis and the record in this case, we have concluded that SoCal can achieve reasonable penetration levels of weatherization in single-family and multifamily homes providing financing at an 8% interest rate and optional credits and can do so at considerably less cost to its ratepayers than a zero percent financing.

In addition to this adopted modification of WFCP, we have also determined that the most effective program from the standpoint of both costs and penetration levels must have certain elements. While we approve the credit feature of WFCP, our adoption of an 8% interest rate on loans has required a 15% reduction in the overall amount requested by SoCal for its credit offering in order to maintain comparability between these two incentives. A credit or loan will be provided by SoCal to eligible customers, with or without an energy audit, for attic insulation, weatherstripping, water heater blankets, low-flow showerheads, caulking, and duct wrap. If an energy audit demonstrates their cost-effectiveness, WFCP financing will also be available for wall and floor insulation, clock thermostats, pipe insulation, specified window and door treatment, intermittent ignition device (IID) retrofit, and replacement of inefficient space heating appliances. Limits have been placed on loan amounts with maximum financing of $3,500 available to customers who install all of the eligible WFCP measures. Special incentives are adopted for low-income residents to ensure their participation in WFCP.

We also adopt a project financing approach for WFCP. We find that the use of SoCal's highly leveraged affiliate can lower the costs of providing weatherization financing. The return on the equity portion of the affiliate's capital structure will be limited to SoCal's last authorized overall rate of return on rate base. Reductions in SoCal's expense estimates for WFCP promotion, labor, and advertising are also warranted.

To implement WFCP, as approved by this decision, we authorize SoCal to increase its rates annually for the first year of that program by $34,265,000. For both WFCP and RCS, we have adopted SoCal's proposed Conservation Cost Adjustment procedure.

II. Procedural Background

Twenty-three days of public hearing were held in these applications between June 16, 1981 and August 4, 1981. Copies of the applications were served and notices of the hearings were published in accordance with this Commission's Rules of Practice and Procedure. A description of the applications as well as a notice of the date reserved for public witness testimony were provided to each SoCal customer by a bill insert.

Concurrent briefs in the two applications were filed on August 28, 1981. The matters were submitted upon the presentation of oral argument before the Commission en banc on September 18, 1981, in San Francisco. During oral argument, SoCal representatives made certain statements which required clarification to determine the extent to which, if any, modifications or additions to SoCal's proposed programs were being contemplated. SoCal's statements involved those portions of the WFCP related to low-income participation and lender assurances. At the direction of the presiding administrative law judge (ALJ), SoCal filed such a clarification on October 6, 1981. Comments on this filing were received from other parties to the proceeding ten days later. These comments included requests by two of the parties to set aside the submission of these applications.

III. Public Witness Testimony

Seven public witnesses testified with respect to both of SoCal's applications. Each voiced their opposition to the programs and to the advent of another rate increase. Several witnesses specifically questioned the rate design proposed for both programs, the potential for tenant participation, and the need for more conservation programs.

IV. RCS

The RCS program is intended by both the DOE and CEC to be an educational and informational program, the heart of which is the residential energy audit. Under the CEC's Cal Plan, each "eligible customer" is entitled to a home energy or "Class A" audit. This audit consists of a trained utility auditor visiting a customer's home at the customer's request and determining which "practices" (personal habits) and "measures" (energy conservation devices) will cost-effectively reduce his energy consumption and costs. The audits provide energy cost savings calculations for each applicable measure. Customers will also eventually be given the opportunity to collect information about their residences themselves and send that information to SoCal for evaluation. This questionnaire-type audit is known as the "Class B" audit.

It is SoCal's position, shared by the CEC, that the Cal Plan is a mandated program which each affected utility is required to implement. According to SoCal, the only issues for this Commission to resolve with respect to A.60446 are whether SoCal's RCS proposal complies with the Cal Plan and whether SoCal's estimated costs for implementing that program are just and reasonable.

The Commission staff (staff), along with the Insulation Contractors Association, question the cost-effectiveness of the Cal Plan itself. The staff believes that it is this Commission's responsibility to evaluate and, if necessary, improve the cost-effectiveness of RCS before any ratepayer is required to fund that program. Even if the Commission determines that this course of action is not within its authority, the staff urges the Commission to keep "a vigilant eye on first-year results" and if those results are not encouraging, to abandon the program.

A. RCS Program Description

In Exhibit 2, SoCal outlined its responsibilities under the Cal Plan as follows: sending a program announcement providing full information on the program and the benefits offered, conducting home energy audits, arranging for the installation and financing of conservation measures, providing post-installation inspections, and helping to resolve complaints from program participants. To generate ratepayer awareness of and participation in the program, SoCal has planned a multimedia advertising program supported by numerous promotional activities. SoCal will also undertake other miscellaneous functions required by the Cal Plan such as recordkeeping, training, maintenance of contractor and lender lists, and coordination of the program with other utilities also participating in RCS. As stated previously, it is SoCal's goal to audit 146,000 dwelling units, approximately 5% of its single-family residential customers, during the first year of the program. SoCal estimates that customer implementation of the recommended conservation practices and measures could result in an energy savings of 10,118,000 therms in the first year.

1. Program Announcement

Under the Cal Plan, SoCal is required to prepare and send an RCS program announcement to each eligible customer who receives a bill from SoCal. This announcement is to be sent no later than six months after DOE approval of the Cal Plan and every two years thereafter until January 1985. At the time hearings commenced in this proceeding, SoCal had already sent a conditional announcement to its customers stating that a "free" home energy audit would be "available soon." A Spanish-language version of this announcement was also distributed.

The program announcement itself will actually offer the program audits in addition to describing those audits, the arrangements for installation and financing, and the audit request procedures. In compliance with the Cal Plan, SoCal intends the program announcement to contain a list of the suggested conservation measures and practices along with an estimate of energy cost savings which are likely to result from the installation of those measures in the first five years. The estimates will be based on the most recently issued CEC projection of fuel prices and escalation rates. The announcement will also include an explanation of the benefits of energy tax credits and government-administered weatherization assistance programs for low-income persons. In addition to the announcement, the Cal Plan requires each participating utility to "use any of a number of advertising media techniques, such as billboards, radio, T.V., bill inserts, positive response envelopes, or other appropriate means" to encourage customer participation in the program.

2. Audits

The principal focus of the Cal Plan is the "Class A" or home energy audit. This audit is designed to provide a customer with information on those weatherization measures and practices which are likely to be cost-effective for his residence and to assist the customer in purchasing, installing, and financing those measures. The audit itself will consist of the following:

1. A utility employee (RCS "auditor") visiting an individual's home, inspecting the premises, and taking certain measurements;
2. The completion of a computer-based evaluation of the customer's potential energy savings from the installation of conservation measures in his residence;
3. A discussion of this evaluation with the customer;

4. The arrangement of installation and/or financing of suggested measures if requested by the customer; and

5. The provision of guidelines for the customer on obtaining bids.

The Class B or self-audit will be developed by SoCal using data derived from a Class B audit test program to be conducted during the first year of the RCS program. According to SoCal, this test is necessary to determine the most appropriate design and question format for the questionnaire and the degree of customer acceptance of that form. Based on the results of the test, SoCal plans to have Class B RCS audits available beginning no later than the second year of the RCS program.

3. Installation and Financing

SoCal will, at the request of the customer, arrange for the installation and financing of any eligible conservation measure. From a list provided by the CEC, SoCal proposes to supply to each customer with the names, addresses, and phone numbers of three or more installers for each measure in which the customer is interested. The customer will then be responsible for contacting the installers and arranging for bids. If a customer should request SoCal's assistance in arranging financing, SoCal will provide the customer with a standard credit application form and a list of qualified lenders who will accept such a form.

4. Inspections

As required by the Cal Plan, SoCal will perform post-installation inspections of measures installed under the RCS program. In addition, SoCal would provide the customer with a standard credit customer complaint. Upon completion of the installation, each installer will send SoCal a certificate of completion. SoCal will determine whether the conservation measures operate properly and have been installed in compliance with appropriate state and federal standards. SoCal will send a copy of the completed inspection report to the customer. Should the inspection reveal a failure to meet RCS standards, SoCal will contact the installer to facilitate correction of the violation.

B. RCS Program Cost-Effectiveness

1. Positions of the Parties

During the hearings, this Commission's authority to examine the cost-effectiveness of the RCS program became an issue. The resulting debate was primarily stimulated by the position taken by the Energy Conservation Branch (ECB) of the staff.

In Exhibit 26, staff witness Grayson Grove expressed concern about the future of the federal RCS legislation and the cost-effectiveness of that program as prescribed by the CEC. Based on his analysis of these factors, Grove made the following four alternative recommendations to this Commission:

> "1) Not fund RCS and prepare to meet any possible consequences.
>
> "2) Charge $15 for the RCS audit to discourage customers with newly built housing (not now excluded from RCS) and non-serious customers from asking for an audit.
>
> "3) Suggest the offering of a free simple utility walk-through audit, in lieu of the RCS audit, aimed at predetermined cost-effective conservation measures which qualify for the AB-2030 tax credit and ZIP [zero interest program] financing.
>
> "4) Tie all incentive programs in with the RCS audits and endeavor to generate the maximum amount of energy conservation from a combined program."

The presentation of Exhibit 26 led to objections to its admission by attorneys representing SoCal, the CEC, and PG&E. The granting of all of these objections, based on grounds of irrelevancy, speculation, and hearsay, would have had the combined effect of removing the substance of Exhibit 26 from the record in this proceeding.

The presiding ALJ concluded that those portions of Exhibit 26 asking this Commission essentially to modify or contravene the Cal Plan were inadmissible. The ALJ reasoned that the CEC, not this Commission, was the designated lead agency with respect to the formulation of the Cal Plan and, as such, the CEC was the proper forum to address and recommend changes to that plan. Using this logic and relying on the CEC's representations of the Cal Plan's requirements, particularly the CEC's decision to reject the DOE option to charge up to $15 per Class A audit in favor of a free audit, the ALJ initially ruled Grove's recommendations (2) and (3) inadmissible. Neither a subsequent review of the Cal Plan nor argument by CEC's counsel revealed, however, any specific requirement in the Cal Plan that the Class A audit, like the Class B audit, be offered "free". For this reason, the ALJ's Ruling with respect to recommendation (2) was reversed, and that recommendation and related discussion were restored to Exhibit 26.

Exhibit 26 appears to have one purpose: to impress upon this Commission that the cost-effectiveness of the RCS program is in question and that the Commission should act to cure this deficiency before SoCal's RCS program costs are passed on to its ratepayers. The staff claims that both our general statutory duty and the Cal Plan itself require this Commission to evaluate the cost-effectiveness of RCS. The following language of the Cal Plan is specifically cited:

> "All costs associated with the State Plan, in the case of investor-owned utilities, shall be subject to the review of the California Public Utilities Commission as to reasonableness and cost-effectiveness."

The staff believes that this language, proposed to the CEC by this Commission's staff, permits us to review not only the reasonableness of a utility's estimated RCS expenses, but also the cost-effectiveness of its RCS program prior to our approval of any of those costs. Any contrary interpretation, according to the staff, renders the words "and cost-effectiveness," superfluous.

Relying on this interpretation, the staff assails the Cal Plan and SoCal's resulting RCS proposal on the following grounds:

1. The Cal Plan is overly prescriptive and has yet to be analyzed on the basis of cost-effectiveness. The staff asserts that the only fair and accurate manner by which to test the cost-effectiveness of RCS is by collecting and analyzing "real world" results. Such analysis would reflect, among other things, climatological influences, participation rates, reactions to audits, customer habits, and construction practices of new homebuilders.

2. Prior test audit programs, in particular one undertaken by Lawrence Berkeley Laboratory (Lawrence Lab) and another by SoCal in its San Gabriel Valley service area, reveal that home energy audit programs have not yet been well-received by the public. The staff also asserts that data from the Lawrence Lab test showed that the audit failed to return energy savings commensurate with the expenses of performing the audit.

3. The staff believes that the following table indicates that the majority of RCS audits will fail to achieve the intended results of moving sufficient numbers of audited ratepayers to undertake a practice or install a measure to obtain estimated energy savings. The table restated by staff counsel from Figure 4-2 in Exhibit 26, is based on SoCal's

calculations of the frequency with which a customer will install measures or perform practices as a result of an RCS audit.

Audits Necessary to Motivate One Person
To Implement Practice or Measure

	Practices	# of Audits
1.	Change filter in FAU	15
2.	Lower temperature at night	4.5
3.	Lower temperature during the day	3.7
4.	Lower water heater temperature	2
5.	Turn off pilot in summer	3.2
6.	Close fireplace damper	5
7.	Flow restrictor on showers	12
	Measures	
8.	Water heater blanket	9
9.	Caulking and Weatherstripping	10
10.	Duct insulation	36
11.	Attic insulation	73

4. The staff also argues that SoCal has overstated first-year savings from the performance of the audits on both an annual and life cycle basis. According to the staff, the effect of the overstatement of life cycle savings is to understate the cost per saved therm over the life of the RCS program.

5. Finally, the staff contends that skepticism regarding the cost-effectiveness of RCS is reinforced by its uncertain future, including potential revisions to the program intended by both the DOE and CEC.

Despite the staff's alternative recommendation for the Commission to deny funding of SoCal's RCS program, the staff concedes that such action, although lawful, is "highly undesirable". Instead the staff relies on the preceding analysis to demonstrate the necessity and propriety of the Commission taking two actions "to swing the balance [of RCS] towards cost-effectiveness." These two actions include reducing program costs, discussed infra, and requiring SoCal ratepayers to pay $15 per Class A audit.

It is the staff's opinion that a $15 audit fee will not only help to defray a portion of the cost of Class A audits, but will deter the nonserious customer from requesting an audit. According to the staff, the Cal Plan, which makes no specific provision for a "free" Class A audit, presents no obstacle to this Commission imposing the $15 fee. The only contrary precedent is a prior Commission decision (D.92497) in which we directed SoCal to "(o)ffer residential audits free of charge to its customers until further determination of the reasonableness of the $15 charge." Staff counsel submits that the questionable cost-effectiveness of the entire RCS program makes it reasonable to impose this fee. The staff also believes, based on results from SoCal's San Gabriel Valley test program, that no difference in the rate of participation will occur as the result of a fee being charged and that if it becomes a barrier to participation, i.e., among low-income persons, the fee could be waived. The staff fully supports SoCal's decision to charge the full cost of a Class A audit to customers requesting a second audit. The CEC agrees that the Cal Plan provisions on this subject are not clear.

Joseph J. Honick, appearing on behalf of the Insulation Contractors Association, concurred with the staff in its opinions regarding the Cal Plan and this Commission's obligation to examine the cost-effectiveness of SoCal's RCS proposal. Specifically, Honick testified that the uncertain future of RCS requires this Commission to forestall any action approving SoCal's proposal until all planned modifications of RCS by DOE and CEC have been completed.[1/] He further

---

1/ The Tehachapi-Cummings County Water District (Tehachapi-Cummings) also voiced concern over the future of RCS.

urged the Commission to "assume its responsibility in protecting ratepayers' money by requiring that recipients of audits take some measurable action." Honick contended that "[a]bsent any requirement of consumers who obtain Class A audits to actually install measures, these audits become excessive luxuries, however mandated." (Exhibit 37.)

The three parties originally objecting to staff witness Grove's Exhibit 26 uniformly interpreted the Cal Plan's provision regarding this Commission's "cost-effectiveness" review as limited to an examination of the reasonableness of the costs of implementing the Cal Plan and not the cost-effectiveness of the plan itself. According to SoCal, the California government has spoken through the CEC, the designated lead agency, in promulgating a plan intended to forward the State's aggressive energy conservation strategy. SoCal argues that it is incumbent upon this Commission to implement its program based on a plan which has undergone close government scrutiny and in which SoCal is required to participate. SoCal further believes that an audit charge (1) will tend to defeat the goals of the Cal Plan by discouraging participation and (2) will harm program credibility and public relations by causing SoCal to renege on its conditional announcement to offer a "free" home energy audit.

Although not an appearance in this proceeding, Southern California Edison Company (Edison) wrote to the presiding ALJ indicating its concurrence with SoCal's views on the staff's proposed audit fee. Edison requests consideration of its argument based on the working relationship and shared activities between Edison and SoCal related to RCS. In addition to its agreement with SoCal's objections to a $15 charge, Edison argues (1) that imposition of such a charge will impair uniform administration of the RCS program, there currently being no utility in California charging audit fees;

(2) that the propriety of a $15 charge should be determined by the CEC and not this Commission; and (3) that insufficient evidence was offered by the staff to support its recommendation.

The CEC acknowledges that while the "cost-effectiveness" language was included in the Cal Plan at staff's request, neither staff nor the CEC defined what cost-effectiveness would mean in the context of RCS. Left unanswered were such questions as which RCS costs would be subject to such a review and what standard of cost-effectiveness (i.e., to the consumer, utility, nonparticipating ratepayer, or society) would be relevant.

The CEC argues that although this Commission has analyzed the cost-effectiveness of weatherization incentive programs, such analysis is not applicable to RCS which does not directly provide any incentives. Unlike the weatherization programs, where both the level of incentive and expected savings are quantifiable and comparable, many RCS benefits, aimed at education and information, are not easily quantified or correlated to particular costs. Even where SoCal's RCS program produces quantifiable savings, the CEC asserts that more information is required to estimate those savings. According to the CEC such information will be provided through a comprehensive monitoring program initiated by the CEC to obtain reliable data on RCS-related energy savings. The CEC plans to review that data later this year.

The CEC objects to the staff's recommendation of a $15 audit fee on three grounds:

1. The Cal Plan does not permit such a charge. In renewing this argument, the CEC cites other provisions of the Cal Plan which appear to limit this Commission's cost review to an examination of the administrative and general or current operating expenses of the RCS program, including audits. (Cal Plan, Section X(B)(2).) Also noted is the CEC's rejection of a proposed amendment by staff which would have permitted this Commission

to determine to whom such costs would be charged, including the "eligible customer." With respect to the Cal Plan's requirement that the program announcement must list the "direct cost, if any, of receiving the service" (Section III(B)(1)(e)(3)), the CEC states that this language could not under any circumstances include the cost of the audit since, accepting the CEC's interpretation of Cal Plan Section X(B)(2), that plan does not permit any direct cost of the audit being charged to the customer.

2. The staff has failed to follow federal criteria which require that the agency determining the amount to be recovered directly from customers take into consideration the customer's ability to pay and the likely levels of participation in the utility program which will result from such a charge. (42 USC 8216 (c)(C).) The CEC asserts that the staff did not consider the first of these standards and only noted the possibility of an accommodation for low-income people who might be impacted by the charge.

3. Like Edison, the CEC argues that no evidence to support the imposition of a charge was offered. Both parties believe that the staff should be required to provide statistical data or other evidence on the effect of the audit charge on participation levels, energy savings, and program costs; the cost of collecting and processing the $15 charge; and the cost to the utility of publicizing the new charge to customers who were previously informed that the audit would be free.

2. <u>Discussion</u>

In addition to questions concerning the cost-effectiveness of the Cal Plan, the most often repeated criticism of our approval on SoCal's RCS proposal is the uncertain future of the RCS program itself. In particular, concerns have been expressed regarding the impact of potential modifications of the federal RCS program and the Cal Plan on the utility program we authorize.

Since the submission of these applications, some of this uncertainty has been removed. Specifically, DOE has asked the Congress not to appropriate any funds for the further implementation or enforcement of the RCS program beginning in fiscal year 1982 (October 1, 1981). Recognizing its legal obligation to execute the existing law until the program is discontinued or amended, however, the DOE has now embarked on a course of withdrawing proposed modifications of the program in favor of a proposed rule aimed at simplifying, reducing the burdens, and increasing the flexibility of the RCS program. In its proposed rule issued November 12, 1981, DOE summarized its reasoning and intended actions as follows:

> "The Department believes that largely as a result of rising energy prices and tax incentives, private firms, utilities, and other nongovernmental institutions now have sufficient incentive to provide the services required by customers to conserve energy and increase the utilization of renewable energy. For this reason, the Department does not believe there is any longer a need for the Federal Government to mandate the provision of the services required by the RCS program.
>
> "Until the RCS program is discontinued or further amended by Federal law, however, the Department is obligated to continue to implement and enforce the program in accordance with provisions of the current legislation. In doing so the Department is proposing to administer the program under regulations modified to be as simple and flexible as is consistent with the existing program legislation and sound management practices." (46 Fed. Reg. 55836 (1981).)

DOE's order, however, also includes the following assurances to states and utilities:

> "Consistent with our goal to reduce burdens and increase flexibility, we wish to assure States and utilities that nothing in these proposed rules, if made final, would require changes to any approved RCS plan or utility program. . . . If, however, a State or nonregulated utility wishes to amend its plan in light of this new rule, when made final, it may do so." (46 Fed. Reg. 55837.)

In November, 1981, the CEC commenced the first of a two-phased hearing schedule to consider modifications to the Cal Plan. The first phase (Phase I) is designed to consider certain CEC staff proposed modifications of RCS and the comment responses from interested parties. Phase II, to commence some time in the first half of 1982, will consider those issues carried over from Phase I and will focus, in particular, on the results of the monitoring reports and audit summaries completed during the first six months of RCS activity. The CEC believes that its extensive monitoring and evaluation program, designed to assess the cost-effectiveness of the Cal Plan, will enable it to undertake a definitive cost-effectiveness evaluation based on this data during the Phase II hearings.

On the subject of cost-effectiveness, the CEC staff's revisions of the Cal Plan to be considered during the Phase I hearings include a section on "Targeting Audits for Maximum Cost Effectiveness." In that section, the CEC staff reviews public comment on its proposal, including staff's renewed argument for a $15 audit charge. The CEC staff concludes, however, that greater cost-effectiveness can be achieved by participating utilities targeting high users through the sequencing of audit offers, marketing, and audit appointments based on customer usage and geographic location. The CEC staff rejected the proposal to charge for the audit on the basis that "[f]ocusing the audit on high users will achieve the same goal of increased energy savings per audit at less cost."

Despite the DOE's concerns about the continued necessity of the RCS program, RCS remains, as the DOE has recognized, a federally mandated program. Further, the CEC has been designated by this State as the lead agency for the development of an RCS plan and has fulfilled that duty by the adoption of the Cal Plan. The DOE has made it clear that no state will be required to alter final state RCS plans to conform to DOE's new regulations. The CEC, however, like the DOE, is taking appropriate steps to ensure the effectiveness of the RCS through amendment of the Cal Plan and continued monitoring of the program.

It is not conclusive either from the language of the Cal Plan or the arguments of the parties that we do not have the authority to review the cost-effectiveness of the Cal Plan. We do find, however, that insufficient evidence was presented during this proceeding to make such an evaluation at this time. Many of the parties, including the CEC, have correctly identified the analysis which would still be required for us to reach any definitive conclusions about the cost-effectiveness of the Cal Plan. Further, it appears that the CEC is taking all steps necessary eventually to make that determination based on, as staff counsel agreed was necessary, "real world" results.

We also find persuasive the many arguments made in favor of our refraining from adopting a $15 charge per audit. The staff has had the opportunity to renew its request for this modification of the Cal Plan in the proper forum, the CEC. That request has been rejected by the CEC staff in favor of another approach, targeting high users. It would be untenable for us to substitute our judgment for the CEC and its staff when we have not had the responsibility to formulate the Cal Plan. Additionally, we note that although the Cal Plan does not use the word "free" with respect to the Class A audit, all other portions of the plan and CEC decisions made prior to adoption of the

Cal Plan point to the conclusion that the CEC intended both types of audits to be offered free of charge. Finally, the purpose of having a statewide RCS plan is clearly to ensure its consistent application in utility service areas throughout the state. The RCS programs we have approved to date (PG&E, D.93891 and San Diego Gas & Electric Company (SDG&E), D.93892) do not require an audit charge. For these reasons, we find no basis for the imposition of a $15 charge for Class A audits at this time.

C. RCS Program Costs

While we currently are unable to make a definitive statement regarding the cost-effectiveness of the RCS program, the staff's arguments underlying its "cost-effectiveness" recommendations most certainly justify a cautious approach to our approval of RCS program costs. We agree with the staff that not only should we closely scrutinize those costs, but that we must remain vigilant in our continued review of the RCS program.

Initially, the staff's entire effort in the RCS portion of this proceeding (Exhibit 26) was directed at recommendations relating to the cost-effectiveness of the RCS program. Only at the direction of the presiding ALJ did the staff prepare a specific analysis of SoCal's RCS program costs (Exhibit 44). Although the staff initially concluded in Exhibit 26 that most of SoCal's RCS costs were "justified," the ALJ sought specific evaluation of those costs to quantify information elicited during staff counsel's in-depth cross-examination of SoCal's cost witness, Warren Mitchell.

1. Positions of the Parties

A summary of SoCal's first-year RCS budget is contained in Exhibit 3 sponsored by Mitchell. According to Exhibit 3, SoCal estimates the costs of implementing its RCS program to total $20,181,000.

In Exhibit 44, staff witness Grove notes that SoCal's actual first-year budget is $20,464,000, a figure derived from adding the $20,181,000 overall cost estimated by SoCal to the franchise tax and uncollectible expense ($283,000) associated with the additional revenues sought under the CCA balancing account. Because we have previously authorized funds for SoCal's RCS program, the actual amount left for collection through the CCA balancing account and requested in this application is $17,611,000.

In the following table staff witness Grove enumerated his recommended reductions in the first-year expenses. According to Grove these recommendations, compared with SoCal's request, supersede his earlier testimony in Exhibit 26:

FIRST-YEAR
RCS PROGRAM
JULY 1, 1981 - JUNE 30, 1982
($000)

Function	SoCal's Request	Recommended Reduction	Net Recommended Expense
Advertising	672	307.6	364.4
Public Affairs	83	80.9	2.1
Marketing and Communications			
Labor, Rent, etc.	1,597	82.1	1,514.9
Computer Analysis	1,849	-	1,849.
Class B Audits	404	336.7	67.3
Printed Materials	3,194	-	3,194.
Research	48	16.5	31.5
Data Processing	1,722	-	1,722.
Audits and Consumer Affairs	10,612	762.2	9,849.8
Total	20,181	1,586.0	18,595.0

Staff recommends that the Commission authorize rates sufficient to generate $15,999,100 in additional revenues. According to the staff, this figure was calculated by deducting $2,853,000, the amounts allocated to RCS by SoCal's last general rate decision, from the staff's first-year net recommended expenses and adding $257,100, the resulting franchise tax and uncollectible expense.

Prior to his analysis of specific expense reductions, Grove explained his overall reasons for his recommendations as follows:

> ". . . Essentially what I tried to do was to eliminate the unnecessary frills from SoCal's proposal and to provide the checks and balances against wasteful expenditures which the balancing account mechanism lacks. This is a new venture for the gas company and consequently we are very unsure as to what things should be funded to make the program successful. However, what we do know is that people are gradually becoming more and more conservation-minded; rising energy costs have had a good deal to do with this. As a result, I concluded that we should be able to expect that people will

> seize upon the opportunity to learn how to reduce their utility bills. If my conclusion is incorrect, funds for, say promotional activities, could be increased in subsequent years. But initially we should be looking to see if RCS can sell itself on its own intrinsic merits."

In Exhibit 44 the staff explained specific reductions of each budget item as follows:

1. Advertising. Staff believes that SoCal's advertising program for RCS will essentially result in a "media blitz". A reduction of one-half of the advertising expense is recommended on the basis that:

   a. RCS may be able to sell itself on its own merits;

   b. SoCal has underestimated the synergistic effects of its total conservation efforts;

   c. SoCal could do more to develop joint advertising programs between itself and the other southern California utilities participating in RCS; and

   d. SoCal has underestimated ratepayer resentment of utility advertising.

2. Public Affairs. Staff asserts that the recommended reductions in this budget item are justified because "no estimate [was made] by SoCal as to the number of persons who would be moved to participate as a result of the items here funded or whether those items would reach anyone not reached through general advertising of the RCS program." Staff recommends that these services should be incorporated into SoCal's existing news bureau and public relations office already funded through general rates.

3. Marketing and Communications. The staff's reductions to this budget item involved the elimination of funds for an RCS program manager ($82,062); reductions in the costs associated with the Class B audit, $336,700 from this budget and $680,500 from the Audits and Consumer Affairs budget; and a disallowance of one-half or $16,500 for the costs of SoCal's follow-up conservation survey. Staff argued that the RCS manager was a "mere titular head"; that the PG&E Class B audit had been estimated to cost $13 per audit, as opposed to SoCal's projections of $90 per audit; and that costs for the follow-up survey would be reduced if undertaken jointly by SoCal and Edison.

4. Audits and Consumer Affairs. In addition to the recommended reduction already noted for the Class B audit, staff sought to reduce costs related to training, labor, and related expenses. The labor item included the elimination of $18,000 in consultant's fees associated with the selection of the Consumer Advisory Committee. Staff argued that SoCal, with the aid of local groups, would be able to select conscientious and balanced Advisory Committee members without a "high priced overseer."

Staff also believes that SoCal should be encouraged to find more cost savings in its RCS program, including joint advertising or interutility training programs, which would reduce costs to ratepayers.

The CEC is also of the opinion that duplication could be avoided through coordination of the advertising, public affairs programs, printed material, and labor force of SoCal's RCS and WFCP programs. The CEC believes, however, it is the WFCP, not the RCS program, which creates such duplication. According to the CEC, SoCal's RCS application reflects an effort by SoCal "to maintain consistency of policy and to avoid duplication of effort between its RCS program and those of other utilities." Further, while the costs of all shared RCS-WFCP activities are charged to SoCal's RCS program, resulting energy savings are attributed to WFCP. CEC argues that this approach leads to an unfair allocation of conservation program costs and a serious understatement of the energy saved by SoCal's RCS program.

With respect to SoCal's Class B audit test program, the CEC advises us that it is presently coordinating an effort between staff and various utilities to develop and accelerate the implementation of those audits. In the CEC's opinion, a separately funded SoCal test program would duplicate this ongoing cooperative effort and would therefore result in an unnecessary expenditure.

Finally, the CEC is concerned with SoCal's proposal to enter agreements to perform audits for customers shared with other utilities in its service area. Under those agreements the nonauditing utility would pay the auditing utility 50% of the cost of conducting each audit in the event that the number of audits per shared customers is not the same. The CEC hypothesizes that if the customer response to one utility's program were significantly greater than the others, this arrangement would result in a substantial amount of unanticipated revenue. The CEC therefore recommends that the Commission direct SoCal to establish an accounting system for revenue accruing from audits of shared customers with such revenue "credited to next year's account."

In response to the staff's position on RCS costs, SoCal asserts that staff's recommendations are not supported by any extensive analysis or any pertinent research. Counsel for SoCal states:

> "Only general conclusions were presented by the Staff that reduced costs would not cause reduced achievement of conservation goals, and the record is replete with Staff's admissions of lack of analysis, speculation, lack of surveys, lack of knowledge, lack of studies, lack of time to perform the work required, as well as acknowledgment by the Staff that there is merit to SoCal's approach. . . ."

2. <u>Discussion</u>

SoCal has designed its RCS program to comply with federal and state law. A comparison of that program's requirements with the prescriptions of the Cal Plan indicate that SoCal has achieved that goal.

The costs to implement that program, however, are another matter. The general rationale supporting the staff's proposed reductions in SoCal's first-year RCS budget compels us to consider a rate increase below that requested. The staff's testimony, both Exhibits 26 and 44, as well as recent federal and state action, verify our conclusion made in PG&E's RCS application that the "status of RCS on both the federal and state level is one of dynamic flux." (D.93891 at page 45.) The staff's assertions that "RCS may sell itself" and that the program should be as streamlined as possible mirrors the most recent sentiments of the federal government. Upcoming CEC modifications of the Cal Plan should also simplify RCS procedures and further reduce the costs of providing audits.

The problem with the staff cost analysis is that it is insufficient to justify our adopting the specific reductions recommended for contested budget items. The staff's assertion relative to PG&E's planned costs for Class B audits is highly speculative, based on a document with little foundation and an inadequate statement of the costs being examined. Staff's testimony regarding labor cuts is not based on an adequate analysis of the personnel required to meet SoCal's RCS program goals. Even the specific reductions in advertising and public affairs are only supported by general explanations of why the particular disallowance is being recommended.

We do believe, however, that the staff has given us a sufficient basis for concluding that SoCal's RCS costs may be reduced due to upcoming federal and state modification of RCS and due to an overstatement by SoCal of its overall first-year budget, even without those changes. We recall that although the DOE does not propose to mandate its new regulations for states whose RCS plans have become final, those states are not precluded from taking advantage of the simplified RCS procedures. Further, the staff's testimony suggests the general level of reduction which can be undertaken in SoCal's program without diminishing that program's effectiveness. The staff and, to some extent, the CBC (i.e., coordinated Class B audit implementation) have also identified those budget areas which SoCal might first consider in making cost-cutting reductions.

For these reasons, we do not believe that SoCal's requested increase should be passed on in full to its ratepayers at this time. Such a decision reflects our awareness, stated most recently in D.92653 (PG&E), "of the financial uncertainties facing the utility customer and of his limited capacity to absorb further rate increases. . . ." As we did for PG&E, we will therefore authorize SoCal to increase its rates to generate $12 million in revenue for implementation of RCS in 1982. This figure takes into account cost reductions possible under SoCal's present RCS program as well as the simplification in RCS procedures anticipated in the upcoming year. SoCal's management will determine how this lower level of revenues will be allocated among the required program elements.2/

2/ With respect to the approved level of post-installation inspections for measures financed through WFCP, see discussion *infra*.

Because of the balancing account treatment of this program, (see discussion infra), should SoCal's expenses in reaching its RCS program goals exceed the authorized amount, a request to offset that undercollection can be made at the time of the CCA review. Only those expenses which are reasonably incurred, however, will be recovered through rates. In its exhibit, the staff added this caveat:

> "The Commission should exercise stricter scrutiny over the CCA balancing account in ensuing years to force economic and efficient uses of funds for the various conservation programs."

We believe that "strict scrutiny" is advisable for SoCal's RCS program and that this review will be aided by the kind of monthly reports adopted for PG&E with respect to both PG&E's RCS program and zero interest program (ZIP). Such reports may also satisfy the CEC's concern with SoCal's accounting for revenues realized from its agreements with other utilities relating to shared customer audits. Because of the application of such reports to both SoCal's RCS and WFCP, reporting requirements will be examined along with other issues common to both programs (i.e., low-income participation, the CCA balancing account, and rate design) following our discussion of WFCP.

V. WFCP

The WFCP was developed by SoCal to expedite and encourage the installation of cost-effective conservation measures by its residential customers. Under WFCP, SoCal will provide zero interest loans or utility credits for the purchase and installation of such measures in single-family and multifamily residences. The program is intended to operate over a five and one-half year period with an approximate termination date of December 31, 1986. During this period, SoCal expects to make loans to 168,350 customers and to arrange credit transactions for another 430,575 customers. SoCal estimates these goals will affect approximately 862,100 residential units, resulting in savings of 1.4 billion therms over 25 years. SoCal estimates that its first-year costs of WFCP will require $41,026,000 in additional revenue. Financing of a customer's weatherization measures will be arranged through the Southern California Conservation Financing Company (CFC), a subsidiary of Pacific Lighting Corporation (PLC), SoCal's parent company.

A. SoCal's WFCP Proposal

1. Program Elements

a. Energy Conservation Measures

SoCal's WFCP proposal includes a list of energy conservation measures which will qualify for financing if shown to be cost-effective and if installed to California RCS standards or on a do-it-yourself basis. For certain measures, cost-effectiveness must be shown by an RCS audit. Other measures, identified as "core measures," are considered by SoCal to be cost-effective and will qualify for financing with or without an RCS audit. The measures are as follows:

No Audit Required	Audit Required
Attic insulation	Clock Thermostats
Replacement of inefficient space heating appliances	Heat absorbing or heat reflective glazed windows and door materials (milar)
Air duct insulation	Intermittent Ignition Device (IID) retrofit
Water flow control devices	Pipe insulation
Water heater blankets	Thermal windows
Caulking/Weatherstripping	Floor insulation
Solar Pool Covers	Wall insulation

SoCal proposes that should other measures become cost-effective during the course of the WFCP, they will be added to the list following review by this Commission.

SoCal notes that the Cal Plan does not include multifamily structures of five or more units in the RCS audit program until January 1, 1982. SoCal, however, intends to include owners and tenants of such dwellings in its WFCP program. These customers will therefore be able to finance qualifying measures either selected from SoCal's "core" group or determined to be cost-effective by a building energy analysis performed by SoCal.

b. Zero-Interest Loans

WFCP zero-interest loans will be available to owners of single-family and multifamily residences.[3/] Single-family residences include mobile homes and residences with one to four units; multifamily residences are those with five units or more.

The WFCP loans will have a maximum term of 120 months. However, as a special incentive to owners of multifamily dwellings with five or more units, the first payment will be delayed one year with the balance payable over 108 months. The minimum amount which SoCal intends to finance under the program is $150. Although no ceiling or cap on the loan amount is planned, SoCal will require all weatherization loan agreements which exceed $1,000, either individually or in combination with other such loans, to be secured by a deed of trust and assignment of rents on the property. The unpaid balance of a loan will become due and payable upon the sale or transfer of ownership of the property. SoCal will reserve the right to inspect the premises prior to disbursement of loan proceeds.

Financing will be offered for the purchase and installation of eligible measures when the installation is performed by a state licensed contractor or for the purchase of materials only when the installation is made on a do-it-yourself basis. If a contractor is used, a customer must obtain at least two competitive bids. SoCal will finance to the amount of the lowest bid.

3/ SoCal's decision to exclude renters from the loan program was based on their mobility. According to SoCal witness Mitchell, the ability to pay played no role in that decision.

SoCal has also included in its first-year WFCP budget the cost of converting its presently outstanding low cost home insulation loans from their current 8% interest rate to the zero percent WFCP interest rate. SoCal proposes to take this action in order to avoid "penalizing" persons who have insulated their homes prior to the inception of the WFCP.

c. Credits

Unlike the WFCP loans, utility credits will be available to all residential customers, both owners and tenants of single-family and multifamily dwellings. A specific monetary value for the credits has been set for each measure calculated at 20 percent of the total life cycle savings of each installed measure adjusted to the present value of those savings. The specific credit amounts for each measure were summarized in Exhibit 20, Table A as follows:

Weatherization Measures and Utility Credit Values

Measures	Average Value Of Utility Credits	
	Single	Multifamily
Attic Insulation	$355	$160
Replacement of inefficient space heating appliances	260	90
Air Duct Insulation	125	100
Water Flow Control Device	25	25
Water Heater Blanket	9	6
Caulking/Weatherstripping	22	10
Solar Pool Cover	118	185
Clock Thermostat	42	21
Heat absorbing or heat reflective glazed windows and door materials (milar)	6	6
I.I.D. Retrofit	80	80
Pipe Insulation	10	10
Thermal Windows	158	158
Floor Insulation	150	75
Wall Insulation	170	85

SoCal intends to pay these credits to the applicant in a single payment within 30 days following a satisfactory inspection of the installed measures. A tenant's application for utility credits, however, must be accompanied by a signed waiver from the property owner releasing his claim for utility credits on those measures installed on his property.

SoCal believes that the credits will provide a significant incentive for tenants and low-income homeowners to participate in the WFCP. SoCal intends to make a concerted effort to demonstrate to owners of multifamily units the significant energy savings which could be realized in a master-metered utility bill through installation of cost-effective conservation measures. SoCal witness Mitchell also provided the following example of energy savings in an individually metered apartment building:

> ". . . if the renter, as an example, can save 55 therms by installing a showerhead and can install that showerhead for $25 or less and save that 55 therms on their individually metered gas bill, then that renter would be made whole after installing that conservation measure and would appreciate the conservation savings during the period of time he or she remained as a tenant in that apartment structure." (Tr. 918.)

Mitchell also stated that if the credits were found to be too low to induce significant renter participation, SoCal would consider increasing them.

SoCal will advise persons opting for the utility credits that their state income tax credit will be affected. (See Revenue & Taxation Code Section 17052.8h(7).)[4/] SoCal adjusted its estimate of credit transactions downward to reflect the effect of that advice.

4/ The state government will give a 40% tax credit up to $1,500 per taxpayer per year for certain weatherization improvements. Grants from utilities or public agencies, however, must be subtracted from the cost of the improvement in determining the amount of the tax credit.

d. Insulation/Weatherization Referral Program

SoCal's first-year WFCP budget includes a cost of $7,144,000 for implementation of an "Insulation/Weatherization Referral Program" (referral program). This referral program involves customer contacts to be made by SoCal weatherization representatives who will describe WFCP, provide contractor referrals, arrange financing, and aid customers in obtaining credit approval.

With the advent of the referral program and WFCP, SoCal intends to discontinue its self-supporting program of direct sales (from SoCal to consumer) of attic insulation. SoCal states that it was directed by the Commission to take this action in D.92497 (1980), the final order in SoCal's last general rate increase application (A.59316). Under the direct sales program, commissioned agents sell consumers insulation which is installed by one of the contractors under contract with SoCal to perform this work. In A.59316, it had been staff's position that this direct merchandising of insulation had outlived its usefulness. Specifically, staff believed that SoCal had a moral obligation to open up the insulation market to all contractors by establishing a contractor referral list, a means of ascertaining reasonableness of prices, and a post-installation inspection of not less than 10 percent of all jobs. SoCal responded to this position by pointing out that staff's proposal would require ratepayer funding while its direct sales program paid for itself out of profits and was not a burden on ratepayers.

In D.92497 we concluded:

"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." (D.92497, at p.34.)

e. Program Promotion, Training, and Quality Assurance

To reach its weatherization financing goals, SoCal believes that a certain level of program promotion, training, and product assurance is required. In particular, SoCal proposes that its representatives will work with retailers and contractors to develop special promotional programs to stimulate the market. These programs, intended to be of short duration, will include parking lot sales, carload sales, and week-end specials tailored to meet the needs of the specific marketing area. SoCal also plans to provide retailers and contractors with point-of-sale materials such as window and wall banners, easel back cards, truck cards, and special price tags to promote program benefits where in-store display areas permit their use. Special displays will be developed for retailers with "high traffic" flow through their stores. SoCal believes that these displays will draw attention to the various conservation measures and their energy saving values and will thereby assist customers in their purchase decisions.

SoCal plans to announce WFCP to its customers through a communications program that will include the use of bill inserts, direct mail, newspaper, television, and radio. Publicity releases will also be prepared and a broad-based public communications effort undertaken to increase public awareness of the program. SoCal will use Home Energy Efficiency Centers to communicate program opportunities and benefits to customers. Industry members engaged in the sale and installation of weatherization measures will be notified of SoCal's program through special announcements, group meetings, trade publications, and one-on-one discussions. RCS audit announcements will also provide opportunities to disseminate financing information to customers. Consumer and public information literature will be developed and distributed by SoCal.

SoCal's weatherization representatives will follow up on customer inquiries or requests, and leads developed through bill inserts, direct mail, RCS audits, and other consumer communications programs. These representatives will also verify that the recommended conservation measures have been installed.

SoCal seeks to ensure quality installations by requiring that RCS audit-related conservation measures be eligible for WFCP financing only if the measures are installed in accordance with California RCS standards and by a California RCS listed contractor or the customer. Customers contracting with State licensed contractors who may or may not be included on the state Master RCS List may still qualify for utility credits if the conservation measures installed meet RCS standards. Because a high level of technical expertise is required to assure safe and satisfactory operation of IID retrofits, SoCal will provide IID installation and service training to interested licensed contractors and their employees.

To promote consumer confidence in the purchase of conservation measures, SoCal proposes to inspect all installed measures in the initial stages of the WFCP. If an installing contractor's record of quality installations warrants,this inspection schedule may be reduced to 10% inspection, as required by RCS, for all conservation measures except IID retrofit or other furnace modifications. Warranties against defects in installation (contractor's warranty) and in materials and workmanship (manufacturer's warranty) would be required to comply with the requirements set forth in the Cal Plan. Customer-installed measures must meet the standards and manufacturer warranties stated in that plan.

Finally, SoCal intends to undertake research and evaluation of WFCP which will include measuring consumer and industry attitudes as well as gathering field results for monitoring and ultimately determining program effectiveness. Special evaluation activities will include the development of quarterly reports on the type and number of conservation devices installed under WFCP, reports on the percentage of contractors participating in the program, and finally reports tracking actual program results.

f. Project Financing

SoCal proposes that financing of its customers' weatherization measures under WFCP will be arranged through CFC, a nonutility financing affiliate. As stated earlier, CFC is a subsidiary of PLC, SoCal's parent company. According to SoCal, CFC's main purpose is to hold notes receivable from customers who have been provided WFCP financing and to supply capital for the loans. SoCal intends this affiliate to have a highly leveraged capital structure of 80% debt and 20% equity. A ceiling of $150 million would be placed on the total capital (debt and equity) to be provided through CFC over the five and one-half year duration of WFCP. The equity investment in CFC would not exceed $30,000,000, and would be furnished by PLC and included in its consolidated financial statements. The debt would be off-balance sheet.

SoCal contemplates that CFC will borrow from conventional and other available financing sources and will issue debentures to raise further capital. SoCal also plans that CFC will have a cost of service agreement with SoCal for all of its prudently incurred incremental costs associated with the WFCP, including debt service and a return on equity of 20%. SoCal believes that the capital structure, together with the cost of service agreement, should minimize costs to ratepayers while at the same time protect the ability of SoCal to finance its utility operations.

SoCal witness Levitin testified that the use of the proposed financing affiliate would result in lower program costs for SoCal's ratepayers by ensuring that the smallest possible amount of relatively more expensive equity would be required. In addition, the affiliate proposal would ensure that there would be no adverse impacts upon SoCal's normal utility financing requirements. By using CFC, the specific financing and administrative costs of WFCP would be isolated and identified. Finally, the CFC approach would provide a set of records that could be easily audited by the Commission.

In its concurrent brief, SoCal restates its position taken during the hearings that to create such a highly leveraged affiliate, lender assurances are required. In particular, the lender should be able to rely on (1) a Commission-approved cost of service agreement between CFC and SoCal; (2) equity contributions by PLC; and (3) timely Commission approval of rate adjustments under SoCal's CCA procedure. Further, SoCal argues that the Commission should acknowledge in its final order its awareness that lenders are relying on the cost of service agreement and CCA offset procedures as the credit support for their loans. All of the foregoing, if expressly approved by the Commission, should in SoCal's view, assure lenders that the resulting revenue stream adequately supports the financing of the program.

During oral argument in this proceeding, SoCal refined its position by requesting that the specific assurances provided lenders on September 1, 1981 in D.93497, relating to PG&E's ZIP program, be applied to SoCal. SoCal argues that lenders aware of the decision expect the same assurances from the Commission in this proceeding. SoCal therefore urges that the findings and ordering paragraphs relating to this aspect of the WFCP be patterned after those contained in PG&E's decision. The assurances we approved in that decision have the overall effect of guaranteeing debt service recovery with ratepayer funds and specifically include the following:

1. We approved PG&E's proposal to create a Conservation Financing Adjustment (CFA) mechanism with a bifurcated rate (one for debt service and the other for expenses (taxes and the return on PG&E's investment in the subsidiary)). We stated in D.93497 that such a mechanism would provide a reasonable means by which the Commission can guarantee potential lenders recovery of their debt service and that its approval would entitle lenders to rely on the Commission's commitment to CFA debt service cost recovery.

2. We stated that any decision by a future Commission to cut back or discontinue ZIP as no longer in the public interest can properly apply only to prospective financing. To avoid confiscation of funds provided in good faith by lenders, we noted that we would not interrupt the revenue stream on which lenders relied in making Commission-approved debt commitments.

3. We assured that the balancing account would endure throughout the life of the debt financing.

4. We authorized quarterly advice letter filings to adjust the debt service rate. Adjustments to the expense rate were to be treated in the annual review of PG&E's ZIP.

The other parties to this proceeding were given the opportunity to provide written comment on SoCal's request for lender assurances like those adopted for PG&E. Those comments are discussed <u>infra</u> along with the parties' other positions.

SoCal proposes a 20% return on equity for the financing affiliate. It is SoCal's position that its witness Levitin presented strong evidence that the current cost of equity capital to PLC and

CFC is 20%. SoCal in particular points to the results of "three widely-used methods" of determining cost of common equity (earnings valuation, dividend valuation, and utility bond to equity risk premium valuation) as showing that PLC's cost is in the range of 20%. Witness Levitin identified the risks of CFC project financing as (1) regulatory risks associated with changes by future Commissions in its approval of the cost-of-service agreement; (2) judicial risks associated with litigation over WFCP; (3) legislative risks associated with new laws restricting CFC's ability to recoup its expenses; and (4) the risks of imprudence on the part of CFC in incurring its expenses. Levitin considered the latter risk "very remote." (Tr. 548.)

2. Estimated First-Year Program Costs

To fund WFCP, SoCal's witness Mitchell in Exhibit 21 summarized the estimated first year costs for WFCP. This summary, restated below, was based on an 80% debt and 20% equity capital structure with a cost of debt of 15% and return on equity of 20%.

First Year
Total Weatherization Financing and Credits Program Costs*
(Including Incentive Costs)

		($000)
A. Program Incentive Costs		
Single Residence Credits (96,000 Units)		$17,300
Cost of Capital for Single Residence Zero Interest Loans (30,500 Units)*		
Interest on Borrowed Capital	$1,528	
Cost of Equity	509	
Income Taxes	534	
Total		2,571
Multi-Residence Credits (2,175 Credits = 24,000 Units)		2,446
Cost of Capital for Multi-Residence Zero Interest Loans (3,300 Loans = 36,200 Units)*		
Interest on Borrowed Capital	$ 749	
Cost of Equity	250	
Income Taxes	262	
Total		1,261
Cost of Capital to Convert 8% to 0% Insulation Loans (53,000 Units) 5/		
Interest on Borrowed Capital	$ 1,792	
Cost of Equity	597	
Income Taxes	626	
Total		3,015
Total Incentive Cost		$26,593
B. Marketing, Inspection, Account Administration, etc.		23,784
C. Subtotal First Year Costs (A + B)		$50,377
D. Less 1981 Rate Case Approved Conservation Funds		(10,013)
E. Reduced Subtotal		$40,364
F. Franchise Fees and Uncollectibles (1.639% of E)		662
G. Additional Revenues to Offset First Year Cost (E + F)		$41,026

5/ This figure is SoCal's estimate of loans to be converted on July 1, 1981.

3. Program Cost-Effectiveness

Exhibit 22, sponsored by SoCal witness Mitchell, examines the cost-effectiveness of WFCP from four perspectives: (1) society or all ratepayers for the entire program; (2) the participating ratepayer for the entire program; (3) the nonparticipating ratepayer for the entire program; and (4) the participating ratepayer for each conservation measure. Mitchell's study was based on estimates which included a zero interest financing and utility credits plan for 573,000 single-family and 289,000 multifamily dwellings and a total customer investment of $531,780,000, $250,832,000 of which would be financed and $280,948,000 of which would be invested by customers selecting credits rather than loans. Although Mitchell's study included the costs of converting SoCal's outstanding 8% loans to zero percent financing, the associated gas savings, already accounted for in SoCal's Low Cost Financing Program, were excluded.

Mitchell also projected that WFCP would generate a life cycle savings of 1.421 billion therms of natural gas. That projection was based on an estimated mix of conservation measures which would be installed as a result of the WFCP incentives. Mitchell calculated the value of those life cycle savings at the predicted marginal cost of gas for the year in which the savings were expected The individual annual savings were reduced to present value using a 10% discount rate, an adjustment factor which reflects the time value of resources.

Using this method, Mitchell calculated a net savings (at present value) to society or all ratepayers of $453,322,000 over the life of WFCP-financed measures. For participating ratepayers, Mitchell compared the savings produced by weatherization measures (gas savings plus utility and tax credits) against the costs of weatherization. For all participants, using the savings and costs on a present value basis discounted at 10%, a net savings of $776,879,000 was calculated. Mitchell therefore thought that WFCP would be cost-effective from the viewpoints of both society and the participating ratepayer.

Because there are no direct dollar savings, only costs, for nonparticipating ratepayer, Mitchell calculated cost-effectiveness for the nonparticipant by comparing program costs to the difference between the marginal and average cost of gas that is saved. SoCal's calculations showed that the nonparticipating ratepayers would find that the costs of the program would exceed the value of gas saved by $161,827,000.

For the single-family participant using zero-interest financing, SoCal estimated the following present values of savings and costs for each of the eligible measures as follows:

Measure	Savings	Estimated Installed Cost	Net Saving or (Cost)
Attic Insulation	$2,117	$410	$1,707
F.A.U. Replacement	1,710	662	1,048
Duct Insulation	1,494	125	1,369
Flow Control Showerhead	358	50	308
Water Heater Insulation	53	40	13
Caulking/Weatherstripping	139	132	7
Solar Pool Cover	509	223	286
Set-Back Thermostat	230	110	120
Window Treatment	77	132	(55)
I.I.D. Retrofit	449	187	262
Pipe Insulation	265	50	215
Thermal Windows	1,017	343	674
Wall Insulation	1,167	473	694
Floor Insulation	1,048	454	594

In a footnote, SoCal stated that window treatment might be cost-effective on a do-it-yourself basis.

SoCal believes the results of its cost-effectiveness study demonstrate that WFCP will be a cost-effective program. In particular, SoCal endorses this Commission's adoption of the societal test of cost-effectiveness in PG&E's ZIP application (see D.92653 (1981)) since that test reflects whether all ratepayers, on the average, will benefit.

4. Anticompetitive Effects of WFCP

SoCal witness Katz analyzed the anticompetitive effects of SoCal's WFCP proposal upon the lending market. Her testimony examined both the present availability of weatherization financing and the probable impact of the WFCP program on the market for this type of financing. Her research and analysis revealed that neither commercial nor public lenders provide much incentive for or interest in the financing of weatherization devices. Many commercial institutions have either abandoned such loans or set high loan minimums in addition to imposing strict security requirements for the transaction. Even for sources which might be used for small weatherization loans (credit cards or credit unions), the amount of business that would be diverted from these sources by WFCP appeared to be small.

According to Katz, the only type of institution that might be affected by the program would be the home finance company. However due to the small number of weatherization purchases over $2,000, the minimum loan for most of these companies, Katz concluded that "the effects [of WFCP] should be negligible." (Exhibit 50.)

B. Positions of the Other Parties

1. Commission Staff

Commission staff members from the Energy Conservation Branch (ECB), Revenue Requirements Branch (RRB), and Policy and Planning Division testified with respect to SoCal's weatherization application. This testimony included analyses of program elements, costs, financing, and cost-effectiveness. Although staff took exception to certain program and financing requirements at the outset, specific expense reductions were recommended only after the ALJ's request of staff witness Grove to reexamine SoCal's RCS budget.

a. Program Elements

(1) Energy Conservation Measures

ECB witness Lucchi did not object to the list of fourteen measures included in SoCal's WFCP or to the distinction between those measures that would require RCS audits to demonstrate cost-effectiveness and those that would not. The subsequent testimony of RRB witness Benjamin, however, revealed a disagreement between the staff branches as to the cost-effectiveness of WFCP and particular measures included in the program. This difference of opinion and related recommendations are discussed infra.

Witness Lucchi recommended expanding available financing to permit WFCP financing for low-income participants undertaking "building envelope" improvements found cost-effective in a prior energy audit.[6] A ceiling of $200 would be set on such financing. A subsequent section of this decision will specifically analyze SoCal's WFCP and RCS programs from the perspective of the low-income participant.

6/ "Building envelope" generally refers to a building's exterior. Repairs to the "building envelope" would include replacement of broken windows and doors and the sealing of wall or floor cracks and holes.

(2) Zero Interest Loans

Staff witness Lucchi took few exceptions to the offering and terms of SoCal's zero interest weatherization loans. Although Lucchi enumerated arguments in favor of and against such a program, his Exhibit 28 drew no conclusions or recommendations from that analysis.

Staff concurred in SoCal's proposal to convert SoCal's presently outstanding home insulation loans from their current 8% interest rate to the zero percent WFCP interest rate. In his brief, however, staff counsel observes that the costs associated with the reduction of the 8% interest rate would probably be higher than estimated by SoCal. This circumstance results from the fact that SoCal's conversion cost estimate was based on the number of 8% loans completed as of July 1, 1981. Those loans, however, were continuing to be issued at a rate of 12,000 to 14,000 transactions per month. By the time of a decision in this matter, staff posited that the actual level of outstanding 8% loans could far exceed the July estimate thereby increasing the cost of converting those loans to a zero percent interest rate.

Staff also did not agree completely with SoCal's two-bid financing requirement. Staff submits that the approach adopted by this Commission for the initial phase of PG&E's ZIP program (D.92978 (1981)) is equally well-suited to SoCal's WFCP. By that decision, PG&E was permitted to finance the applicant's chosen bid, but retained the discretion to require the applicant to obtain an additional bid when, based on PG&E's experience, a bid appeared excessive. Staff counsel argues this approach is not only in keeping with the lender's duty to assess the reasonableness of the loan amount, but also provides some assurance that loan funds are not being wasted. According to staff, that assurance is of vital importance since SoCal will be obtaining its loan principal at ratepayer expense. Staff does suggest, however, that a second bid might reasonably be required when financing is sought in excess of $1,000.

Staff witness Lucchi appeared to agree with SoCal's approach of placing no limit on the size of a loan. He did recommend, however, that loans be authorized on a per building basis and that a second or subsequent loan not be offered to the same owner until the current list of first-time applicants has been processed.

(3) Credits

Staff supports the offering of utility credits as an additional way in which to encourage weatherization. It is staff's opinion that adoption of staff witness Knecht's estimate of a 20%, as opposed to SoCal's 10%, discount rate would not require any reduction in the credit amount. Staff believes that the credits represent reasonable sums calculated to induce participation. In staff's opinion, the difference in discount rate and related recommendations does, however, affect the eligibility of certain of the measures. Staff's position regarding program cost-effectiveness is discussed *infra*.

Staff also advises that since both zero interest loans and utility credits have their advantages and disadvantages,[7/] SoCal should ensure that its explanation of both options is complete. For example, a customer should be informed that all measures, whether financed by loans or credits, must meet RCS standards. This information is necessary to offset any reluctance a customer might have about choosing the loan program which requires the use of an RCS-listed contractor. In staff's view, neither financing mechanism should be advantaged.

(4) Insulation/Weatherization Referral Program

Staff considers SoCal's referral program to be essentially the replacement for the direct sales program which the Commission directed SoCal to discontinue upon implementation of WFCP (D.92497). Staff witness Lucchi testified, however, that he had no idea prior to hearings in this application that adoption of the staff's approach in D.92497 would result in a $7 million WFCP expenditure in the first year. While concerned about this Commission

---

7/ The significant disadvantage of credits include the reduction in the available state tax credit and the prerequisite for customers to make the up front investment for residential weatherization.

"breaking a pledge" to contractors to terminate direct company merchandising, Lucchi suggested that the Commission might consider authorizing only $2 million for SoCal's operation of a scaled-back referral program while continuing SoCal's direct sales into the first year of WFCP. Lucchi's recommendation of a $5 million reduction in the referral program is derived from his estimate of the amount of sales commissions which could be generated from the continuation of direct sales and which could be used to offset costs. Lucchi suggests that if this approach is adopted, the direct sales program be expanded to include all RCS-listed contractors, the functions of sales agents and referral program representatives be carried out by a single labor force, and practical problems resulting from the merger of these two programs be resolved through guidelines established by SoCal's management.

SoCal's concerns with Lucchi's suggestion can be identified from its cross-examination of that witness. The following differences between SoCal's direct sales and referral programs, as well as potential problems with their coexistence, were highlighted:

(a) SoCal's direct sales program is self-supporting, funded through insulation product sales. The referral program, on the other hand, is dependent on ratepayer funding and involves more than sales.

(b) Current SoCal sales agents only sell insulation and are compensated solely by sales commissions. Weatherization representatives, on the other hand, will be responsible for many other functions, and will be salaried. SoCal questioned how the "new" sales/weatherization representative, acting as both salesman and advisor, would be paid: would he receive the commission portion of his compensation directly or would he be salaried, with commissions passed on to SoCal?

(c) If integrating direct sales with the referral program required offering participation to all RCS-listed contractors, SoCal fears that it will be faced with an overwhelming administrative burden and will become the sole seller of insulation in its service area.

(d) SoCal is concerned that the combined sales/weatherization representative will find it difficult to close sales based on multiple contracts and to avoid favoring sales for SoCal.

(5) Program Promotion, Training, and Quality Assurance

Staff finds its objections to SoCal's RCS advertising program equally applicable to SoCal's proposed WFCP advertising. Staff is particularly concerned about the overlap between these two advertising programs and the excessiveness of such advertising when seen in combination with the overall conservation advertising undertaken by SoCal and other utilities in its service area. In particular, staff points out that SoCal's WFCP advertising will provide advertising exposures additional to those generated by RCS. For television alone, staff notes that SoCal will reach 90% of its target audience 9 times over eight weeks for WFCP and 9 times over four weeks for RCS. To achieve those 18 exposures, however, SoCal will purchase 380 spots in the Los Angeles Basin area alone. Staff believes that such a program constitutes "media overkill" especially in light of SoCal's testimony that only 3 to 4 exposures are required to gain program awareness and that Edison will be providing contemporaneous advertising for its own RCS and weatherization financing programs. Staff therefore recommends a reduction of $443,000 for SoCal's "air-time" budget. No adjustments were made, however, in SoCal's production expenses.

For SoCal's promotional programs, included in SoCal's public affairs and marketing and communications budgets, staff recommends a total reduction of $640,000. This recommendation is derived from the staff's proposed elimination of or reductions in certain presentations, meetings, printed materials, consumer information literature, display materials, training, studies, and labor costs. Staff left fully funded the news media photographic expense, speakers bureau, and customer pamphlets.

While recommending the reduction of numerous contractor-retailer incentives, staff left untouched the SoCal contractor cooperative advertising which staff believes has proved extremely successful in SoCal's 8% home insulation financing program. Staff, however, completely eliminated an expense item of $54,000 for 3,000 contractor dinners intended to familiarize contractors with WFCP. Staff believes this education to be a contractor, not ratepayer, obligation. Staff also cut the point-of-purchase "give-aways" by one-half and recommends that SoCal test the more expensive elements of these promotional items by placing them with a limited number of contractors. Staff counsel states in his brief: "The WFCP proposal promises a boon to contractors and retailers and should therefore not also include full ratepayer subsidy for their promotional activities."

Staff witness Lucchi testified that staff's method of determining its proposed cuts to this portion of SoCal's program consisted of a review of "the supporting evidence for the company's figures." Where staff felt insufficient support for the estimates was given, a "reasonable" reduction was made. No "exhaustive study", however was undertaken. (Tr. 1954-1955).

With respect to quality assurance, staff concludes that, for the life of the program, SoCal should be required to perform inspections on 100% of WFCP-financed installations, with no reduction to 10%. Staff finds the Commission's holding regarding PG&E-performed ZIP inspections equally compelling in SoCal's case. (D.92653.) In D.92653 at p.87, we found that the "cost of providing 100% inspections of ZIP installations is a small price to assure reliable energy savings".

(6) Project Financing

Staff basically agrees with the reasonableness of using the highly leveraged CFC, SoCal's proposed financing affiliate, to provide WFCP financing. According to the staff, the higher debt ratio will result in an overall lower cost of capital from which ratepayers should benefit.8/ Staff believes, however, that CFC's costs must withstand the test of prudency and that managerial expertise must be exercised to ensure the lowest possible capital costs.

Staff also concurs that SoCal's proposed financing of WFCP is only feasible if required lender assurances are built into the SoCal-CFC cost of service agreement for which SoCal seeks Commission approval. Staff believes those assurances are provided by the following terms of that agreement:

8/ Although staff witness DeBarr suggested the possibility of replacing CFC with a ratepayer-funded trust, another staff witness later concluded that, in the long run, the trust-fund concept would be slightly more expensive than SoCal's CFC proposal.

(a) SoCal shall pay CFC a cost of service charge for all costs presently incurred including interest expense relating to CFC's long- or short-term debt obligations.

(b) CFC will recover from SoCal uncollectibles incurred because of WFCP.

(c) If CFC is unable to refinance its debt, SoCal will provide CFC interim debt financing at bank prime interest rates.

(d) CFC agrees to maintain its authorized debt equity capitalization ratio at all times, ensuring an equity contribution from PLC.

Staff believes that further assurance is provided by SoCal's proposal to include charges by CFC to SoCal as a debit entry to SoCal's CCA balancing account. Staff questions whether the Commission ever envisioned the use of the CCA mechanism in this way. In order to accumulate some historical record on this application of the CCA mechanism, however, staff does not object to its initial adoption.

One lender assurance with which staff does not agree is embodied in paragraph 9 of the cost of service agreement. As originally written in SoCal's WFCP application that paragraph provided:

> "9. This agreement shall be subject to approval by the CPUC and to such charges or modifications as it may, from time to time, direct in the exercise of its jurisdiction."

When the cost of service agreement was introduced during hearing (Exhibit 18), this paragraph stated:

> "9. This Agreement shall be subject to approval by the CPUC and shall remain in full force and effect until the later of (1) July 1, 1997; or (2) six months after the last payment is due on any loan made under this program."

SoCal witness Levitin testified that he did not believe that the Commission could bind future Commissions by requiring that the cost of service agreement remain in effect until 1997. He stated, however, that this language would provide lenders the assurance that the Commission approves of the CFC concept and recognizes that lenders are relying on it. Levitin believes that if the Commission makes this clear in its decision in this application, no future Commission would change the CFC agreement.

In contrast, staff finds the original language of paragraph 9 to be a correct statement of this Commission's regulatory authority and prerogatives regarding utility contracts. Because the modified version of paragraph 9 may cloud the Commission's authority to modify any portion of the entire agreement until July 1, 1997, staff recommends its rejection in favor of the original language.

With respect to SoCal's subsequent request to have assurances like those adopted for PG&E's ZIP program (D.93497), staff counsel provided this comment:

> "Staff is concerned over the numerous 'assurances' being required of the Commission by utility management in the name of assuaging lender fears and reducing lender risks. Staff is reluctant to believe that such fears run rampant amongst lenders or that such risks exist to the extent that SoCal's request for regulatory assurances additional to those described by SoCal witness Levitin are necessary. If granted, however, staff believes that two caveats should be attached to such a Commission action: first, that no impairment of the Commission's authority to review the reasonableness of debt-related expenses and the circumstances under which said expenses were incurred is intended by the accession to SoCal's request, e.g., interest rate obtained, the

> timing of debt flotation, etc., may be fully explored in any CCA proceeding; and, second, that the Commission will expect a better-than-Aa cost of debt rate for WFCP-related debt to reflect the less-than-Aa risks associated with the financing affiliate. SoCal should certainly understand the need for giving ratepayers some assurances qua quid pro quo...".

The most significant difference between staff and SoCal relating to the proposed financing of WFCP involves the allowable return on the equity portion of CFC's capital. Although the Commission does not directly regulate CFC, staff believes that CFC's return on equity is properly at issue since its profit will be charged as a "cost" to SoCal under the cost of service agreement.

Disputing SoCal's request for a 20% return on equity for CFC, staff witness DeBarr testified that 10.75%, SoCal's last authorized overall rate of return on rate base (D.92497), was a more appropriate rate of return. Staff's recommendation is based on the following reasoning:

(a) The incremental cost of equity to PLC is irrelevant in determining a fair return on equity for CFC. Because the equity investment will presumably be drawn from all of PLC's current sources of capital, SoCal's capital contribution to PLC would bear its 10.75 overall cost rate. It is this same capital that PLC would then extend to CFC. Staff believes that this fact has two significant implications. First, the capital provided to the CFC by PLC and booked as equity is part debt and part equity capital. The incremental cost of equity to PLC for new equity is therefore irrelevant to the determination of an appropriate ROE for the CFC's equity; that capital is neither new nor 100% equity in character. Second, in reality, the capital provided to the CFC by PLC has two opportunities to earn a return, initially by SoCal and again by PLC as its ROE on its CFC investment. This "second return" should be no more than PLC's imputed cost of capital, viz., the 10.75% overall rate of return authorized to SoCal.

(b) PLC's investment risks in this project are considerably less than the risks associated with its investment in SoCal or its own investors' risks in PLC shares. Although witness Levitin attempted to find risk in the CFC venture, his list excluded the key risks faced by all other utilities of operational and financial attrition. The cost of service agreement, the full flow-through of bad debts expense, and the balancing account treatment of CFC's expenses, inclusive of a return on equity, combine to eliminate attrition. These mechanisms virtually assure the full collection of expenses and costs associated with CFC capital requirements. Additionally, the RCS and WFCP gas savings permit increased sale of gas to SoCal's GN-5, G-60,and G-61 customers. This circumstance shifts some revenues from the residential class to the commercial-industrial (GN-5) and wholesale (G-60, G-61) customers. Witness DeBarr noted that this revenue shift benefits SoCal by reducing its operational risks.

(c) The staff's approach is consistent with that used by the Commission in its approval of PG&E's ZIP project financing. (D.92653.)

Staff found SoCal's methods used to evaluate the cost of equity to PLC, irrelevant and inappropriate. Among other things, staff believes that SoCal's approach ignores the impact of risk in fixing return on equity and fails adequately to predict or reflect market conditions.

Staff did adopt SoCal's projected cost of debt to CFC of 15%. Staff tempered its agreement, however, with the recommendation that during the first review of SoCal's WFCP costs a full review of CFC's debt costs and related costs of capital be made. Staff also agreed with the imposition of a $150,000,000 ceiling on CFC's total capital because that amount bore a reasonable relationship to the maximum amount of accumulated loan principle which might be outstanding at any one time.

b. Program Expenses

The following table compares SoCal's and staff's final expense estimates. The table reflects SoCal's request for a 20% return on equity for CFC compared to staff's recommended 10.75% return.

First-Year WFCP Program Expenses

($000)

Function	SoCal	Staff
Program Incentives		
Single-Family Credits	$17,300	$17,300
Single-Family Loans		
Cost of Debt	1,528	1,528
Cost of Equity (including income taxes)	1,043	561
Multifamily Credits	2,446	2,446
Multifamily Loans		
Cost of Debt	749	749
Cost of Equity (including income taxes)	512	275
Loan Conversions (8% to 0%)		
Cost of Debt	1,792	1,792
Cost of Equity (including income taxes)	1,223	657
Subtotal Program Incentives	$26,593	$25,308
Marketing, Administration, Etc.		
Advertising	$ 960	$ 517
Public Affairs	73	24
Marketing & Communications	2,607	2,016
Referral Program	7,144	2,000
1981 EECP	5,840	5,840
Account Administration & Inspections	7,160	7,160
Subtotal Program Costs (including incentives)	$50,377	$42,865
Less 1981 Rate Case Approved Conservation Funds	(10,013)	(10,013)
Franchise and Uncollectibles	662	538
TOTAL COSTS	$41,026	$33,390

c. Program Cost-Effectiveness

Staff's cost-effectiveness evaluation of WFCP was initially presented by staff witness Cavagnaro of the Commission's Policy and Planning Division. Cavagnaro provided his own independent estimates of SoCal's marginal and average costs of gas. For purposes of testing the cost-effectiveness of WFCP, Cavagnaro concluded the following:

(1) SoCal's estimate of low-sulphur fuel oil should be used as the equivalent of SoCal's long-run marginal cost. According to Cavagnaro, exclusive use of the long-run estimate, rather than partial use of short-run estimates, effectively includes the largely fixed costs associated with the weatherization measures. Cavagnaro believes, however, that even in the short-run the conserved gas will be sold at prices approaching the low-sulphur fuel oil cost.

(2) SoCal has significantly overstated its average cost of gas by assuming de-regulation of natural gas earlier than that presently provided under federal law. SoCal has also provided inconsistent projections of its marginal and average costs of gas. The result of this higher estimate of the average cost of gas is to indicate a greater cost impact on non-participants.

Cavagnaro subsequently sponsored Exhibit 30, a cost-effectiveness analysis prepared by SoCal using Cavagnaro's estimates of SoCal's marginal and average costs of gas. That analysis showed WFCP to be cost-effective, based on present values, from the viewpoints of society, the participant, and the nonparticipant.

Following Cavagnaro's presentation, an additional staff witness, Robert Benjamin, testified on the subject of WFCP cost-effectiveness. Although using Cavagnaro's projections of SoCal's marginal and average costs of gas, Benjamin's cost-effectiveness analysis led to results in marked contrast to Exhibit 30. These results, indicating reduced program and measure cost-effectiveness, appear to have been produced by two significant differences in the approach and data used by SoCal:

(1) Discount Rate

In performing his analysis, Benjamin relied on staff witness Knecht's projection of a 20% discount rate, as opposed to the 10% rate chosen by SoCal. Knecht testified that his discount rate estimate was properly an approximation of the cost to the ratepayer of covering the utility's cost of its investment, including the costs to the utility of debt, equity, income taxes, and franchises and uncollectible expense. Staff counsel believes SoCal's objection to the 20% discount rate as being excessively high is made groundless by SoCal's lack of legitimate methodology by which it calculated its 10% discount rate. Staff counsel charges that the 10% rate was chosen only as the mid-point between the 8% and 12% discount rates used by this Commission in prior decisions.

(2) Staff's Cost-Effectiveness Methodology

Staff witness Benjamin evaluated the cost-effectiveness of WFCP on a measure-by-measure basis. Benjamin first calculated the present value (based on a 20% discount rate) of the costs of implementing the various measures. That figure was divided by the present value of the energy savings derived from that measure, producing the total per unit (therm) cost of energy saved. That product was compared to staff's estimate of the marginal cost of gas to determine if the cost of implementing the measure exceeded the cost of purchasing the amount of gas saved at marginal cost. The following table quantifies Benjamin's findings; an asterisk indicates which measures are not cost-effective to society (i.e., a cost higher than the 1981 marginal cost of gas ($.759/therm).)

Staff WFCP Cost-Effectiveness Results

Measure	Societal Cost of Savings ($/therm) Single Family	Multi-Family
Attic Insulation	$.636	$.924*
F.A.U.(Inefficient Furnace Replacement)	1.295*	3.794*
Duct Insulation	.159	.275
Flow Control Showerhead	.175	.269
Water Heater Insulation	1.009*	1.535*
Caulking/Weatherstripping	1.487*	3.230*
Solar Pool Cover	.504	.465
Set-back Thermostat	.686	1.392*
Window Treatment	5.564*	5.522*
I.I.D. Retrofit/Heating	.728	.738
Pipe Insulation	.373	.378
Thermal Windows	1.127*	.582
Wall Insulation	1.543*	1.877*
Floor Insulation	1.685*	2.323*

Total Program (single- & multifamily) $.678

Benjamin recommends that only the measures with costs below the staff's 1981 estimate of the marginal cost of gas be financed through WFCP. Measures eligible for WFCP would then include attic insulation, duct insulation, flow-restrictive showerheads, solar pool covers, set-back thermostats, intermittent ignition devices for pilot-equipped furnances, and pipe insulation. Eliminated from WFCP financing would be forced air unit replacements, water heater blankets, caulking and weatherstripping, window treatment, thermal windows, wall insulation and floor insulation. Although attic insulation for multi-family dwellings showed a negative cost-effectiveness, staff witness Benjamin recommended that it be treated as cost-effective to avoid marketplace confusion. Further, since the cost of set-back thermostats for multifamily devices was almost double the staff's marginal cost of gas, staff would limit the financing of that measure to single-family dwellings. By altering the measures eligible for WFCP in this manner, staff estimates that a savings in total program costs of $114,000,000 (roughly 25%) can be realized.

With respect to SoCal's measure-by-measure WFCP cost-effectiveness study, staff counsel objected to this study on two grounds. First, SoCal only provided an analysis for single-family dwelling units whereas staff's analysis includes data for multifamily dwelling units. Second, SoCal calculated its value of saved gas at marginal cost rather than the average cost of gas that participants would otherwise pay.

2. <u>California Energy Commission</u>

Although the CEC does not take issue with the WFCP proposal, financing, or program cost-effectiveness, it does continue its objections to duplicative costs between SoCal's RCS and WFCP programs. As discussed previously, the CEC did not recommend cost reductions to RCS because of this duplication, but does support many of staff's WFCP expense recommendations. Generally, the CEC believes that the Commission should discourage the operation of SoCal's RCS and WFCP programs as "isolated but parallel programs" by approving only those funds necessary for SoCal to undertake two carefully coordinated programs.

The CEC believes the costs of WFCP can be reduced in the following manner:

(1) SoCal's RCS and WFCP programs should be promoted jointly. In answer to SoCal's position that combined advertising would complicate the message, the CEC submits that two separate advertising campaigns directed at the same audience will complicate the message more than a single, carefully coordinated campaign. The CEC also believes that the record demonstrates that the amount of media coverage planned by SoCal "will unnecessarily oversaturate the target population." The CEC similarly objects to duplication with RCS created by SoCal's proposed public affairs and printed materials, programs, and budget.

(2) Functions performed by RCS auditors and WFCP weatherization representatives should be combined in a single work force. The CEC is especially critical of SoCal's request for approximately $5,144,000 to fund WFCP weatherization representatives. The CEC believes that the weatherization representatives' functions could be easily and simultaneously undertaken by RCS auditors. By doing so, SoCal would avoid the duplication of work forces and the unnecessary costs and delays of "call backs" by a different company representative. The CEC found SoCal's two problems with a combined work force, the tying up of audit equipment while an auditor performs other functions and the varying employment ranking of the two jobs, insubstantial and easily surmountable. The CEC recommends that the Commission place the amount requested to hire weatherization representatives in a contingency fund, to be released to SoCal upon approval by the Commission staff. The CEC suggests that this fund be used to hire only as many weatherization representatives as necessary to assist customers who do not receive RCS services, and, when the original auditor is unavailable, to those customers who do receive RCS audits, but request weatherization financing subsequent to the audit.

3. Mineral Insulation Manufacturers Association (MIMA)

MIMA provided both testimony and argument in this proceeding. It is MIMA's position that the Commission should undertake specific changes to SoCal's WFCP proposal and continue, at least in part, SoCal's current 8% home insulation financing and direct insulation sales program. Hereafter, those programs will collectively be referred to as SoCal's Home Insulation Program (HIP).

a. Proposed WFCP Modifications

With respect to changes in WFCP, MIMA believes that two areas of WFCP require modification: WFCP bidding procedures and do-it-yourself incentives.

(1) WFCP Contractor Bidding

SoCal's WFCP bidding proposal should be replaced with "the more reasonable" standard adopted for PG&E's ZIP in D.92978. It is MIMA's position that SoCal's financing of the lowest of two bids assumes potential "over-escalation" of contractors bids caused by utility financing programs. MIMA contends that this assumption was without support in the record and that the only testimony on the subject, provided by MIMA's witness Gove, in fact, contradicted this conclusion. It was Gove's testimony, coupled with supporting data, that home insulation prices in the Los Angeles Area have increased at a pace comparable to other larger metropolitan areas and, for MIMA member Owens-Corning, at a pace comparable to increases in the wholesale price index. MIMA notes that this Commission's changes in PG&E's ZIP bidding requirements to the present standard (bids monitored with an additional bid required only for an excessive initial bid) were in response to similar testimony and argument provided by MIMA in PG&E's ZIP application. Like the staff, MIMA believes that PG&E's standard is equally applicable to SoCal's WFCP program and should be the only criterion authorized.

(2) Do-It-Yourself Purchases

MIMA witness Gove testified that do-it-yourself installation is the most cost-effective method of insulation retrofit since it eliminates labor costs. Further, do-it-yourself sales account for 45% of the home insulation retrofit in the Los Angeles Area. Unlike those customers who will be able to obtain WFCP financing through submission of a contractor's bid, the do-it-yourselfer must carry the front-end cost of purchasing weatherization items before he can obtain any WFCP assistance. To remove this "significant financial barrier" and avoid discrimination between participating customers, MIMA asks this Commission to require SoCal to process WFCP applications from do-it-yourselfers upon being furnished proof of a cash deposit for retrofit materials and proof of the total sales price. Upon approval, SoCal could then directly pay the retailer for the materials purchased. Further, since SoCal proposes to inspect weatherization work which it finances, do-it-yourselfers would be deterred from diverting WFCP loan or credit proceeds to any other purpose. Staff supports MIMA's do-it-yourself proposal and urges its adoption.

b. Incorporation of HIP and WFCP

MIMA also recommends the continuation in some form of SoCal's 8% home insulation loan and direct merchandising programs. MIMA notes that the Commission's order (D.92497) directing SoCal to cease its direct insulation sales upon implementation of WFCP was supported by a finding that HIP was proceeding slowly to market saturation. MIMA believes its testimony in this case reveals a dramatic change in that situation. According to MIMA, the record clearly shows loan volumes under SoCal's current program have accelerated rapidly in the year following the conclusion of hearings in SoCal's last rate case on July 9, 1980; that direct sales by utility employees have achieved better penetration than would referrals under the WFCP; and integration of the direct sales staff in WFCP can lower the cost of the ratepayer-subsidized WFCP plan.

In this regard, MIMA witness Gove introduced two charts prepared by SoCal and mailed to SoCal's insulation suppliers which showed the actual and projected growth in the number of loans and commitments for its current HIP program. (Exhibits 40, 41.) According to Gove, HIP financing is available only to single-family residential customers. As shown on the charts, for the first five months of 1981, the volume of attic insulation jobs financed by SoCal had increased more than 700% over the comparable period in 1980, from an average of 1,265 loans and commitments per month to 9,065 per month. The total number of loans and commitments for five months exceeded those for the entire year 1980. The charts also included two projections for the year ended 1981. The first, made on June 10, 1981, forecast 118,157 loans and commitments; the second made on or about June 23, 1981, forecast 148,000 loans and commitments.

Gove found these estimates comparable with SoCal's projections for single-family WFCP loan and credit transactions. For the first year of WFCP, SoCal projects 30,800 single family residential home loans, and 96,800 single family residential credits, for a total of 126,800 single family transactions. MIMA asserts that these statistics demonstrate that the current volume of loans under SoCal's present home insulation program for single family residences only, match or exceed the projected volumes of WFCP zero interest loans <u>and</u> credits for the same market. In MIMA's view, the volumes which will be achieved under HIP by the end of 1981 no longer justify its abandonment.

MIMA believes that many benefits can be realized by continuing and incorporating HIP with WFCP and that significant reasons exist for the Commission to alter its prior position (D.92497). MIMA sees these benefits as follows:

(1) In agreement with the staff, MIMA points to the significant savings of labor costs ($5,144,000) to be realized by maintaining SoCal's direct sales program.

(2) The cost-effectiveness of SoCal's direct sales program which is self-supporting, compared with the revenue increases required for WFCP is unrebutted. MIMA argues that it is manifestly unreasonable to terminate a program which is achieving, at reduced costs, loan volumes which meet or exceed those forecast for a new program.

(3) The significant marketing principle of "closing the sale" at a customer's home will continue to produce maximum penetration at the least possible cost to the ratepayer. MIMA notes that WFCP representatives would only be advisory while HIP personnel are able to obtain a decision from the customer at his home ("close the sale"). According to Gove without such a closure, the significant amounts of money required to perform an audit and to recommend installation and financing alternatives could be expended or "wasted" without getting any results.

For these reasons, MIMA urges the Commission to consider incorporation of certain aspects of HIP with WFCP. MIMA believes that WFCP is directed most particularly at achieving penetrations in the multifamily and rental market, where more incentives are perceived necessary to obtain customer participation. On the other hand, HIP has shown itself successful at achieving substantial penetration of the single family owner-occupied residential market. As an alternative to WFCP, therefore, MIMA recommends that the Commission continue the existing HIP program and offer single family residential customers the option of financing with an 8% loan with no lien and the ability to take the state tax credit. Such customers could also elect a WFCP loan or lump-sum credit depending on their economic circumstances.

4. Insulation Contractors Association (ICA)

ICA witness Honick's testimony primarily focused on his objections to the proposed bidding requirements of WFCP. Honick asserts that:

(a) the bidding process will place unfair and costly burdens upon ethical contractors;

(b) bidding requirements will substantially delay achievement of the Commission's conservation goals by diminishing vendor incentives and placing new burdens on the consumer;

(c) bidding requirements open the door to unethical practices in the marketplace;

(d) bidding requirements provide only illusory consumer protection; and,

(e) controlling and monitoring such bidding procedures will increase costs unnecessarily to utilities, and, therefore, to ratepayers.

Honick concludes that the WFCP bidding procedure is an "unwarranted intrusion into a free competitive marketplace." (Exhibit 38.) Honick also believes that the absence of any need for bidding is further demonstrated by SoCal's never having been required to operate under such constraints in its direct sales program. In this regard, Honick further states that "given the fact that SoCal itself indicates the current program is responsible for 3,500 loans per week, we are at a loss to understand the need for further incentives to encourage market participation." (Exhibit 38.) While acknowledging that ICA is "not very thrilled with the fact that the utility itself is an insulation contractor," Honick acknowledges the success of SoCal's direct program and ICA's preference for that program over WFCP. Honick sees WFCP as a program which not only "superimposes heavy costs to the ratepayer but... invents new means for getting in the way of competitive people to do business." (Tr. 1634.)

5. Tehachapi-Cummings County <u>Water District</u>

Tehachapi-Cummings enumerated its many objections to WFCP both through testimony by its counsel and the filing of a concurrent brief. These objections are stated in a largely conclusionary manner and include assertions that (1) the need for WFCP has been eliminated by the state tax credit "which will provide customers with a 'payment' for 'conservation energy' that exceeds the value of their conservation effort"; (2) the program is "simply too expensive" and is designed to serve the affluent, rather than tenants or low income customers; (3) the primary effect of WFCP will not be natural gas conservation, but increased gas supplies to lower priority customers who are not required to pay any of the program's costs; and (4) adoption of WFCP results in the Commission levying a "tax", an undertaking for which it has no authority. Among other recommendations, Tehachapi-Cummings urges the Commission to either reject WFCP in its entirety or to require SoCal to charge a "meaningful interest rate" on its loans.

C. Discussion

As noted by most of the parties, in December, 1980, we directed SoCal to cease its direct marketing of insulation upon implementation of a zero interest loan program for residential weatherization. (D.92497.) We observed that SoCal had not met its forecast for insulation sales for the years 1978 and 1979 despite our goal of 90% penetration of the single-family market by 1983. We concluded:

> ". . . . This failure does not augur well for (SoCal's) 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." (D.92497, at p.34.)

In 1981, SoCal apparently met this challenge. SoCal's HIP, with its financing incentive of an 8% interest rate and direct company merchandising, has become an overwhelmingly successful program. The data produced by MIMA witness Gove reflects an increase of 700% in the number of loans made on an average monthly basis between comparable periods in 1980 and 1981. As of May, 1981, SoCal's 1981 loan commitments were averaging 9,065 a month, compared to 1,265 a month for the period January to June, 1980. This rapid growth led SoCal to first forecast a total of 118,157 loans and commitments for 1981, with a later updating of that forecast to 148,000. (Exhibits 40 and 41.)

On October 20, 1981, we issued a ceremonial resolution officially commending SoCal and its ratepayers "for being the first investor-owned utility in the nation to reach [the] timely and unprecedented achievement of providing 100,000 low-interest attic insulation loans to the far-reaching benefit of the State of California." SoCal actually issued its 100,000th loan on October 14, 1981. The resolution also noted that this achievement represented energy savings of $142,000,000 over twenty years to those SoCal customers who insulated and a benefit to all residential customers of $56,000,000 over twenty years through lowered demand for natural gas at marginal cost. We attributed SoCal's success "to excellent management and marketing skills on the part of the company as well as enthusiastic public participation."

SoCal's forecasts of its loan commitments essentially became reality by the end of 1981. Reports by SoCal to our ECB indicate that in 1981, 164,302 loans had been processed, a figure not including cancellations or rejections, and over 114,000 had been completed.

In reviewing these figures and comparing them with WFCP penetration goals, we find most appropriate those sentiments voiced by ICA witness Honick questioning the need for further incentives in light of the success of SoCal's current 8% financing and direct sales program. SoCal has projected 30,800 single family loans and 96,000 credits for a total of 126,800 single family transactions under WFCP. For single-family residents, using presently available figures, SoCal has now processed more 8% loans in 1981 than the combination of both loans and credits forecasted to be issued in the first year of WFCP.

The need for increasing the incentives to weatherize in SoCal's service area is further undermined by the significant benefits to both participating and non-participating ratepayers in maintaining SoCal's current 8% financing and direct sales programs. Authorizing the continuation of both programs and their expansion to include multi-family residents will not only substantially reduce overall program costs, but may also provide a mechanism which may further a customer's motivation to take action following an audit. This mechanism was described by MIMA as a utility representative's ability to "close the sale." By allowing the representative to obtain a decision from the customer at his home, the level of actual installations might be increased and might in turn improve the effectiveness of an RCS audit. ICA witness Honick had charged that, absent any requirement of audited customers to install measures, the audits would become "excessive luxuries."

Additionally, an 8% interest rate on financing will, of course, provide SoCal with customer interest payments to offset its own costs of borrowing money for the program. With respect to SoCal's other expenses, we agree that, to avoid penalizing customers who undertook weatherization early, a conversion of outstanding 8% loans to zero percent would be considered. However, by continuing SoCal's present low cost financing program, any need for this costly conversion is eliminated.9/ SoCal witness Mitchell testified in this proceeding that the loan conversion based on a 20% return on equity for its financing affiliate and a 15% cost of debt, would be $3,015,000. This figure was based, however, on 53,000 outstanding loans. As our previous discussion indicates, that figure has now escalated substantially and, as predicted by staff, SoCal's original cost estimate for such a conversion has been dramatically exceeded. Based on 114,500 presently existing 8% loans, the cost of conversion, using SoCal's variables, would now in fact be $9,182,000. This figure is derived from adding the cost of SoCal's carrying 114,500 outstanding 8% loans into the first year of WFCP's, ($5,712,000) to the cost of converting those loans to zero percent ($3,470,000.) This significant change from SoCal's originally projected $3,015,000 for carrying its existing loans at zero interest results from an increase not only in loan volume, but also in the outstanding loan balance.

The direct sales program, as noted earlier, is self-supporting. By incorporating this program with WFCP, commissions earned on sales could directly be used to offset labor costs associated with WFCP's referral program. The staff's concern that continuing SoCal's direct sales program would anger contractors seems to be diminished by ICA's apparent, although reluctant, preference for SoCal's current program over the proposed WFCP. Even the staff admitted that it was not previously aware that discontinuance of direct company merchandising and replacement of that program with WFCP would require an expenditure of $7,144,000. Based on the record in this proceeding, staff's prior assertion that such direct merchandising may have outlived its usefulness appears to have been premature.

9/ Should SoCal subsequently be authorized to offer zero-interest loans, we would consider at that time whether to allow conversion of the 8% loans then outstanding.

The preceding facts and analysis lead us to an inevitable conclusion: SoCal can achieve reasonable penetration levels of weatherization in single-family and multifamily homes providing financing at an 8% interest rate and optional credits and can do so at considerably less cost to its ratepayers than zero percent financing. Continuation of the direct sales program will also help enhance customer conservation while contributing to the reduction in program costs.

The cost-effectiveness of such an approach is also clear. Evidence presented by SoCal indicates that weatherization financing at a zero percent interest rate will be cost-effective from society and participant perspectives. Applying staff's estimates of the marginal and average cost of gas to that methodology revealed that WFCP would also be cost-effective from the nonparticipant viewpoint. This level of cost-effectiveness to the nonparticipant can only be heightened by increasing the interest rate charged for financing from zero to 8%.

The cost-effectiveness of zero interest financing in SoCal's service area was only seriously brought into question by staff witness Benjamin's testimony. The failure of certain measures to meet Benjamin's measure-by-measure societal cost-effectiveness analysis appears to be primarily related to his use of a 20% discount rate. As expressed by SoCal, this rate is excessive especially in light of the 8% to 12% range for such rates adopted in recent Commission decisions.[10/]

10/ We also reaffirm our policy that the measure-by-measure analysis is only appropriate to test cost-effectiveness, and that evaluation of the impact on nonparticipants should only be considered for the program as a whole.

We therefore adopt an 8% interest rate for SoCal WFCP loans available to owners of single-family and multifamily residences. The distinction drawn by SoCal between property owners and tenants for purposes of loan and credit eligibility is acceptable. The mobility of tenants does make the propriety of a long-term loan to tenants questionable. Also, homeowners and landlords benefit from any increase in home value. The credit option gives renters a meaningful opportunity to benefit directly from SoCal assistance through a significant and comparable alternative to low-interest loans.

We also conclude that testimony presented in this case compels us to reconsider our decision to discontinue SoCal's direct sales program upon implementation of WFCP. We agree with staff and MIMA that direct company merchandising should be continued and incorporated with WFCP at least for the first year of that program. We understand the many administrative concerns that SoCal expressed, but concur with the staff that these concerns are not beyond resolution by SoCal management. In this regard, SoCal will be aided by certain basic guidelines which we will set:

1. A single labor force should fulfill the functions of both SoCal's weatherization representative and direct sales agent. We believe that this requirement can be met by the same number of employees (130) proposed by SoCal for WFCP. Essentially, the employee (hereafter "weatherization-sales representative") will have the same advisory responsibilities as the weatherization representative, but with the additional and significant authority of the sales agent to "close the sale" at the customer's premises.

2. SoCal's direct sales should extend to all eligible WFCP measures approved by this decision whether requiring a prior audit or not. In this way, a customer will have the valuable assistance and incentive received from dealing with an individual who can complete a sale of any cost-effective measure while at the customer's residence. Further, the commissions received from sales will not be limited to one program measure (attic insulation) and may thereby be increased by the broader spectrum of sales.

3. SoCal should offer participation in its direct sales program to all RCS-listed contractors. Such a requirement is in keeping with SoCal's decision to require RCS-listed contractors for installations qualifying for WFCP financing. Additional limited hearings will be required, thereafter, to consider the reasonableness of the program as it is to be implemented, as well as any potential anticompetitive effects of an ongoing direct sales program.

In addition to item 3 above, we recognize that many other aspects of incorporating SoCal's direct sales program with WFCP will require refinement (i.e., the payment of employees who can earn commissions for sales, as well as salaries for financing and weatherization advice.) We believe, like the staff, that the manner in which the integrated weatherization-direct sales program will function, other than the guidelines set forth above, can be determined by SoCal management. We will direct SoCal, however, within 30 days of the effective date of this order to report on the details and manner in which they will operate this program. The report must contain an analysis of the anticompetitive effects, if any, of the direct sales program and the steps to be taken to minimize such effects. We will consider this matter in further hearings if it appears necessary to do so.

Staff has estimated that SoCal's original cost of $7,144,000 to operate an insulation referral program could be offset by $5,144,000, the estimated level of commissions to be realized by continuing SoCal's direct sales program. Only $2 million was recommended by staff to be used to operate a scaled-back referral program. The $5 million figure used by staff also corresponds to the cost of employing the labor necessary for the referral program. In a different approach to cost-saving through integrating multiple functions in a single labor force, the CEC asks that all duties of the weatherization representative be undertaken by RCS auditors and the $5 million be placed in a "contingency fund" to hire additional employees if necessary.

Although we are anxious to adopt the most cost-effective conservation program possible, we must keep in mind the goals of both RCS and WFCP. It is therefore not our intention to combine the functions of an RCS auditor with those of the weatherization representative-sales person. Such an overtaxed labor force could not do justice to any of these programs. We do believe, however, as previously stated, that reason requires the integration of WFCP and SoCal's direct sales program. Further, even though staff concludes that continuation of SoCal's direct merchandising can produce $5 million in commissions, we conclude that $2 million is not sufficient to cover the remaining costs of this integrated program. Reviewing SoCal's itemization of its original $7,144,000 request for the referral program, $2 million alone was required to provide supporting services (i.e., vehicles, fuel) for this labor force. As noted above, the nature of the "new" combined program will increase SoCal's administrative burden; further, the weatherization sales representatives duties other than making sales will no doubt require additional salary payment to each employee. For this reason, we will authorize $3,144,000 to SoCal to operate the combined weatherization-direct sales program. This amount in addition to employee-earned commissions should cover the reasonable costs associated with that program. Because of previous objections to direct company sales, however, we will reevaluate its effectiveness and propriety at the time of the first annual CCA review.

With respect to the measures eligible for financing and credits, we believe some modification is required of SoCal's proposal. The list which we have adopted for PG&E's ZIP represents those measures which we have found to be the most cost-effective and appropriate for inclusion in an weatherization incentives program. With the addition of replacement of inefficient space heating appliances, similar measures will be adopted for SoCal's WFCP. The division of the measures between those requiring a prior audit and those which do not should mirror the audit requirements of AB 2030 for state tax credit eligibility. We will therefore authorize SoCal to provide WFCP financing and credits, either with or without an energy audit, for the following measures:

1. Attic insulation,
2. Weatherstripping,
3. Water heater blankets,
4. Low-flow showerheads,
5. Caulking, and
6. Duct wrap. (Hereafter referred to as the "Big 6" items.)

If an energy audit demonstrates their cost-effectiveness, the following conservation measures will also be eligible for WFCP financing and credits:

1. Wall insulation,
2. Floor insulation,
3. Clock thermostat,
4. Pipe insulation,
5. Storm or thermal windows, and
6. IID.
7. Replacement of inefficient space heating appliances.

To ensure the continued cost-effectiveness to ratepayers of financing all these measures, we will require SoCal to file a report on December 1, 1982 providing data on the cost-effectiveness of thermal windows and furnace replacements to nonparticipants.

Recently in our D. 93891 addressing the systemwide expansion of PG&E's ZIP plan, we made certain adjustments to that program. In particular, we imposed loan ceilings and conditioned loan availability on the installation of all "Big 6" measures. With respect to the latter change, we concluded that zero interest financing would be available for the "Big 6" measures only if all the measures were installed and, for the remaining ZIP measures, only if the program participant had first installed the "Big 6" measures in his residence.

With respect to SoCal's WFCP, we find, in contrast, that our change from a zero percent to 8% interest rate requires a transition period before mandatory requirements on the installation of particular measures are imposed. This period is essential to the commencement of the program and an examination of its effectiveness. This transition period should conclude on October 31, 1982, at which time we will require SoCal to file a modification of WFCP, converting it from an optional to mandatory program along the lines adopted for PG&E

We do find, however, that a need for a cap or ceiling on loan amounts presently exists. Both this Commission and SoCal have recently learned the price which may be paid for providing open-ended financial incentives. In OII 42, the Commission's investigation relating to solar energy financing, we placed no ceiling on low cost loan amounts in authorizing SoCal's solar program. Because low interest loans were soon being issued by SoCal in amounts in excess of those determined to be cost-effective we were required to take emergency action to impose limitations on loan amounts and availability to avoid any unreasonable utility expenditure. (D.93774, 93885.)

Other reasons also support financing limits. Adoption of such an approach furthers the potential for reducing program costs and enhancing its cost-effectiveness. In PG&E's ZIP, we also noted the necessity of loan ceilings "to ensure equal allocation of program moneys among potential ZIP participants." (D.93891 at p.34.)

For these reasons, we will impose the following financing limits on WFCP weatherization:

1. $1,000 for installation of all "Big 6" measures,
2. $750 for installation of attic insulation alone,
3. $250 for installation of the five "Big 6" measures excluding attic insulation,
4. $2,500 for installation of the remaining WFCP measures to the extent they are found cost-effective by a prior energy audit.

Under this scheme, the owner of a single-family or multifamily dwelling has the potential of borrowing a maximum of $3,500 from SoCal at an 8% interest rate for the installation of all twelve WFCP measures. With respect to multifamily residences, the loans will be available and limits imposed for each dwelling unit to be weatherized.

Our adoption of an 8% interest rate for WFCP financing will, of course, increase the monthly payments which a customer would have under ZIP. This factor reinforces the need for a lengthy repayment period for all participants. We therefore adopt a single repayment period, in contrast with PG&E's ZIP loans, which single-family home owners repay over 50 months, and all other participants over 100 months (D.92653).

We adopt a uniform 100-month repayment period for WFCP, consistent with the longer period adopted for PG&E ZIP. We adopt this 100-month period instead of SoCal's 120-month (10-year) proposal in order to reduce further the cost to nonparticipants of financing and administering WFCP loans. The potential for cost reductions and reduced administrative burden also mandates that repayment of a SoCal loan commence immediately after issuance. The possible participation incentive of a delay in repayment which SoCal proposed to offer multi-family residents is outweighed by these considerations.

Other features of WFCP loans which we find reasonable are SoCal's requirements of minimum financing of $150, a minimum monthly payment of $5, and the proposed credit criteria for financing. We also find reasonable SoCal's requirement of repayment of the unpaid loan balance upon transfer of the property on which the improvements were made. However, we believe that reason and consistency require that WFCP provide for "exempt transfers," as defined in PG&E's ZIP program, and for liens only on loans in excess of $5,000.[11] (See D.92653 and D.93891.) Since only owners of multiple unit dwellings will be able to borrow more than $3,500 per building, singe-family homeowners will never be required to give a lien.

The only remaining contested aspect of SoCal's WFCP loan provisions is SoCal's requirement of two competitive bids, with SoCal financing the lower of the two. MIMA reasserts the position which we found persuasive in modifying PG&E's ZIP. Originally, PG&E was to provide ZIP financing up to the lower of two bids or one of the two lower of three bids obtained by a prospective ZIP participant. (D.92653 at p. 52.) Following petitions for rehearing filed by MIMA and ICA, among others, we modified this decision concluding that the record did not demonstrate a need for such limitations on ZIP financing in order to prevent an undue escalation of bids. We also found:

> "However, inasmuch as any such escalation could impinge on the cost-effectiveness of that program, it is reasonable to order PG&E to monitor bid prices and to require that an additional bid be obtained by a customer when a bid is not within the reasonable range known to PG&E at the time." (D.92978 at p. 4.)

11/ Although SoCal requests its loans to be secured by a deed of trust, we find a lien to be sufficient security and its application consistent with our decisions relating to PG&E's ZIP. (D.92653 and 93891.)

Ordering paragraph 1dd. of D.92653 was also modified to embody this finding and to require all ZIP loan applications to include a notice advising the applicant to obtain more than one bid and noting PG&E's right to require an additional bid before approving the loan.

We agree with the staff and MIMA that our approach in PG&E's ZIP is equally well-suited to SoCal's WFCP. As MIMA has again demonstrated, there is nothing in this record to support a finding of potential "over escalation" of bids in the southern California area caused by utility financing programs. Further, with the ceilings we have imposed on loan amounts, we have already in some measure protected SoCal and its ratepayers from run-away bidding and price inflation. These loan limitations also make it unnecessary to adopt staff's suggestion of a mandatory second bid on loans over $1,000. As with PG&E, however, we also wish to provide SoCal with the ability to maintain control over this situation and to ensure program cost-effectiveness. We therefore will adopt the bidding procedures prescribed for PG&E in D.92978.

With our adoption of an 8% interest rate on SoCal's WFCP loans, we must now address the propriety of SoCal's credits offering and, in particular, the level of those credits. With respect to the credits themselves, such an approach appears desirable and will be authorized. While there are advantages and disadvantages to a customer choosing a utility credit, it is certain that credits will be more attractive than loans to a number of participants as well as provide renters with a viable incentive to participate in WFCP.

We agree, however, with staff's admonition that neither loans nor credits should provide a significantly greater incentive. If these two financing mechanisms are not relatively equivalent, we will be unable to assess accurately the impact each measure has on market penetration. In approving programs such as WFCP, we are interested both in attaining an overall increase in residential conservation and in determining the most effective and least costly way of achieving that end. This goal of comparability between loans and credits not only requires SoCal to provide a clear explanation of both options, but now, with our adoption of an 8% loan, requires this Commission to reevaluate the credit amounts to be made available for each measure.

Assuming a homeowner can obtain a home improvement loan from a conventional lender at 18% interest, increasing the interest rate on available utility financing from zero to 8% reduces the incentive provided by such financing by somewhat less than half. Reducing the credit levels first proposed by SoCal by this amount (approximately 45%), however, might in some cases make the credit so small as to provide little incentive for a SoCal customer to even consider this option. This circumstance would be aggravated if the available state tax credit were reduced because of the customer's acceptance of a utility credit. We might also be faced with a program under which the costs of operation far exceed the incentives to be offered. For tenants who do not have the option of a utility loan, there is, of course, no need to make loans and credits equivalent for purposes of effectively comparing the respective impact of each incentive on the marketplace.

As will be discussed, we intend to reduce SoCal's proposed marketing and promotional costs by 15%. We believe that a corresponding decrease in the overall amount requested by SoCal for its credit incentives is also reasonable. We will therefore authorize $13,983,000 for single-family residence credits and $1,921,000 for multifamily residence credits.

As modified, SoCal's WFCP credit amounts will be:

Weatherization Measures and Utility Credit Values

Measures	Average Value Of Utility Credits Single	Multifamily
Attic insulation	$302	$136
Replacement of inefficient space heating appliances	221	77
Air Duct Insulation	106	85
Water Flow Control Device	21	21
Water Heater Blanket	8	5
Caulking/Weatherstripping	19	9
Clock Thermostat	36	18
I.I.D. Retrofit	68	68
Pipe Insulation	9	9
Thermal Windows	134	134
Floor Insulation	128	64
Wall Insulation	145	72

These measures are similar to the measures authorized for the PG&E ZIP program, except for the addition of replacement of inefficient space heating appliances. The measures for which WFCP credits are available and the amount of the credits are subject to later revision.

Before we leave the area of incentives, both MIMA and the staff have asked us to give special consideration to do-it-yourselfers. MIMA's proposal, endorsed by the staff, would enable a do-it-yourselfer, faced with the burden of an up-front capital investment, to have his WFCP application processed upon furnishing SoCal with a cash deposit receipt for eligible measure materials. SoCal would then directly pay available financing to the retailer.

We are most anxious to encourage conservation among as many of SoCal's customers as possible at the least cost to its ratepayers. MIMA's proposal aimed at the significant numbers of do-it-yourselfers estimated in SoCal's service area, appears to be well-designed to achieve this end. Without any increase required in SoCal's financing incentives and an insignificant alteration in program administration, more do-it-yourselfers could be drawn to WFCP by the adoption of MIMA's proposal. The cash deposit receipt and the direct payment by SoCal to the retailer will provide SoCal and this Commission with some assurance that ratepayer funds are being properly applied. We will adopt MIMA's proposal in principal, but will add the following requirements to offset any potential abuse of SoCal's financing: (1) the cash deposit receipt must specifically identify the material being purchased and the total price of that material, and (2) SoCal will only finance the lesser of either the actual price of the measure or the applicable credit. The do-it-yourselfer, of course, will have the ability to forego this option in favor of receiving the full amount of the credit upon installation and inspection of the measure.

Although we have already examined the reasonable costs to be authorized for WFCP incentive and weatherization/sales representative programs, there remains the subject of WFCP promotional costs. Like

RCS, the record in this case, particularly staff's testimony, provides a number of general, but good, reasons to approve costs below those requested by SoCal. Unfortunately, the specific cuts recommended by the staff again do not withstand close scrutiny. Nevertheless, we are able to conclude that the advertising of SoCal's RCS and WFCP and similar programs of other utilities in SoCal's service area could be better coordinated to avoid unnecessary duplication in effort and costs. The marketing and promotion intended by SoCal for WFCP appears excessive especially in light of our partial return to a program (low-cost financing and direct sales) with which SoCal's customers are already familiar. The extent of the meetings and materials planned by SoCal to introduce contractors to WFCP also appears unnecessary when we consider the natural impetus to contractors (i.e., increased installations) to initiate an investigation of WFCP.

On the other hand, we do not wish to undermine the penetration goals set by SoCal for WFCP under circumstances where we have already reduced program incentives. We will therefore authorize the following funding for SoCal's promotional budgets: advertising, $816,000; public affairs, $62,000; and marketing and communications, $2,216,000. These figures represent an overall reduction of 15% in SoCal's requests. This percentage reduction will also ensure corresponding cost levels for WFCP incentives and implementation.

With respect to quality assurance, staff objects to SoCal's proposal to inspect all installed measures only in the initial stages of WFCP, with a later reduction to 10% inspection if a contractor's record so warrants. We believe, however, that adequate assurance is provided by SoCal's inspection of 100% of customer-installed do-it-yourself packages, and 100% of packages installed by contractors. As a contractor develops a demonstrated record for error-free installation, however, SoCal may reduce inspection toward a limit of no less than 20% of jobs performed. Should errors appear, we expect the utility to raise inspection proportions. SoCal will develop guidelines for inspections consistent with this decision and present them to the Commission. We will also adopt warranty requirements for WFCP measures and installations consistent with those adopted for PG&E's ZIP. (D.92653, 93891.)

We now turn to the subject of WFCP financing. Both the staff and SoCal are in agreement on two basic issues: project financing is appropriate for WFCP, and lender assurances are required to attain the high degree of leverage (80% debt/20% equity) proposed for SoCal's financing affiliate, CFC.[12/] Despite our modifications of SoCal's WFCP proposal,

12/ We have adopted the definition of "project financing" as a form of financing in which lenders lend money for a specific project or program rather than for the overall operation of the corporation, and amounts lent are primarily serviced by the flow of funds from the specific project. (D.92653.)

(i.e., increasing the interest rate on WFCP loans from zero to 8%), the reasons favoring our approval of CFC have not diminished. In PG&E's ZIP application, we have closely examined the propriety of using project financing to fund utility conservation programs like ZIP. (D.92653, 93497.) Our findings in that application are equally applicable to SoCal's WFCP. Among other things, CFC project financing, with a capital structure primarily constituted of lower cost debt and a reliance on balancing account treatment of costs,

(1) Will minimize the cost of capital and income taxes SoCal will incur in carrying out WFCP,

(2) Will create a source of capital from lenders (i.e., traditional suppliers of home improvement loan capital) not ordinarily used for the financing of traditional utility plant; and

(3) Will not create a serious risk of wasteful expenditures because of the substantial leveraging of equity investment, the source of which is PLC, and investment decisions made by program participants, rather than SoCal, based on energy audits.

The extent of these benefits, however, are largely dependent on the ratio of debt to equity achieved for CFC. As we did in the case of PG&E's ZIP, it is our intention to direct SoCal to use its best efforts to achieve the 80/20 debt to equity ratio proposed for CFC.

We recognize, however, that for SoCal to meet this directive, we "must provide reasonable assurances to potential lenders that they will recover their loans in a timely manner and under all circumstances." (D.93497 at p. 16.) This conclusion, also reached with respect to PG&E's

ZIP project financing, led us to provide the lender assurances for PG&E which we have previously outlined (see discussion of SoCal's position on this issue). SoCal now asks that these same assurances be applied to SoCal's WFCP. Although staff is concerned over the numerous lender assurances being sought by utility management, we find these assurances a prerequisite of the type of financing we have authorized for both ZIP and WFCP. We therefore agree with SoCal's request for assurances similar to those approved for PG&E. The assurances provided PG&E are for the most part equivalent to those SoCal sought to provide in its cost of service agreement, an agreement, with the exception of one paragraph, the staff approved. The refinement of a bifurcated rate (debt service and expense) adopted for PG&E's ZIP will only provide more precise accounting of the costs associated with CFC. The desirability of this result was particularly emphasized by the staff.

We assume from SoCal's request that it is now no longer seeking any greater assurance regarding our binding future Commissions than we provided PG&E in D.93497. We agree with the staff that the present language included in paragraph 9 of SoCal's cost of service agreement is an improper statement of our regulatory authority. Paragraph 9 states that the agreement shall be approved by the Commission and shall remain in effect until the later of July 1, 1997 or six months after the last payment is due on any WFCP loan. Recognizing our inability to bind future Commissions, the greatest assurance we can give in this regard and SoCal can represent to potential lenders is embodied in Finding 24 of D.93497:

> "While the Commission finds that ZIP is in the public interest and serves public convenience and necessity, it recognizes that a future Commission could determine that further ZIP financings no longer would be in the public interest and public convenience and necessity. If this should occur, to avoid confiscation of funds already lent in good faith by lenders, the Commission finds that only prospective financing can be affected and that CFA debt service recovery for previously approved ZIP financings will not be reduced or impaired in any way."

We find that the lender assurances, including the one recited above, which were found reasonable for PG&E's ZIP, are equally applicable to SoCal's WFCP and will be adopted. We also approve of the concept of a cost of service agreement to be entered between SoCal and CFC. That agreement, however, must strictly comply with our findings in this decision. We will direct that SoCal file for our approval that agreement and any others between SoCal and CFC which relate to the assignment of revenues to CFC by SoCal for costs incurred for WFCP financing.

The remaining issue relating to SoCal's project financing is the return to be authorized on the equity investment in CFC. It is staff's position that this return should be SoCal's last authorized overall rate of return on rate base (10.75%). In addition to the foundation for staff's recommendation which we have recited above, the staff emphasizes that its approach is consistent with and results from this Commission's finding on return on equity for PG&E's Phase I ZIP project financing. In D.92653, at page 70b, we concluded:

"The element of project financing with which we are most concerned is the assumed recovery of equity investment through a balancing account procedure. We will authorize such recovery at this time, expecting PG&E to minimize its equity share in (its financing affiliate) and providing PG&E to earn on that equity...the overall rate of return on total rate base last authorized for PG&E. We will, however, invite PG&E, the Commission staff, and other interested parties to present their further view on these matters, in light of experience with the implementation of ZIP, in the context of the first annual ZIP cost offset proceeding."

In our September, 1981 decision approving PG&E's project financing for the systemwide implementation of ZIP, we also adopted this approach, ordering PG&E to "accrue a rate of return on its investment in the subsidiary equal to the rate of return on rate base adopted in PG&E's most recent general rate case." (D.93498, Ordering Paragraph 8.)

On the other hand, we authorized a return to SoCal on equity invested in its solar financing affiliate equal to SoCal's last authorized return on equity (D.93204 in A.59868). That return is currently 14.6%.

The rates of return authorized at other times in other proceedings are informative, but obviously not controlling. In each proceeding, our responsibility is to provide the utility with an opportunity to earn a reasonable rate of return on money invested in activities. This return represents what the market requires to attract investment funds to activities with those risk and return characteristics.

SoCal should be allowed a return commensurate with its cost to provide its 20% equity share in CFC, considering current market conditions, including the relative risk of this investment. Financial theorists and analysts consider various sets of factors relevant, and assign differing importance among factors. These theoretical problems are compounded by the practical problem of anticipating the performance of any financial or economic indicator in today's highly volatile markets.

As the record in this proceeding demonstrates, the identification of a "reasonable" return is more a matter of judgment than of calculation.

At the most general level, there are two main alternative conceptual approaches for evaluating what returns are "reasonable". The first is the cost to Pacific Lighting of the money invested in CFC. It would not be reasonable to force PLC to invest money knowing it could not recoup the cost of the investment. The second alternative is to analyze the range of investments available to PLC, including the investment in CFC envisioned here. Viewed as an independent business investment, CFC must compete with these alternative investments, which present PLC with different risks and returns.

Using the first approach, we note that the record in this proceeding does not show the source of PLC's $30 million investment, so this Commission cannot estimate with certainty its cost. Staff assumes the money will come from accumulated funds, and so asserts that the cost of the capital should be the 10.75% overall cost of capital estimated in the last rate case. SoCal argues that the money for WFCP should be charged at the incremental cost of new capital - the rate of return demanded by new investors in PLC stock. SoCal claims this rate is 20%.

SoCal does not actually claim that the entire $30 million would be raised exclusively be selling PLC stock. Rather, it appears from SoCal witness Levitin's testimony that PLC would approximate the 50:50 debt:equity proportions in SoCal's present capitalization structure. Were PLC to raise the money entirely through new issues of debt and equity, the average cost of the two would be more appropriate. Even using SoCal's estimates of 20% for equity and 15% for debt (the cost of SoCal's January 1981 debt issue), 17.5% would appear to be a more reasonable estimate.

Were PLC to finance its equity share in CFC entirely by issuing new debt, yet another cost of capital would be appropriate. Again, SoCal's estimates put this figure at 15%, as of a year ago. We note, however, that one of SoCal's major rationales for creating the financing subsidiary has been to avoid encumbering the utility's balance sheet with a higher proportion of debt.

The four scenarios above produce very different costs of capital - 10.75%, 15%, 17.5% and 20%. Even if the Commission adopted and applied one of the estimated costs of debt or equity, new or embedded, we could not determine from this record what balance of the sources would be used to fund the investment in CFC.

Using the alternative basis for determining the "reasonable" return, let us look to the "opportunity cost" of SoCal's decision to invest its money (from whatever source) in CFC, instead of in some other available investment. These opportunities might include new gas supplies, cost-saving productivity investments, or even treasury bonds. Each alternative presents different nominal returns, different risks of lower-than-expected returns, and different opportunities for higher-than-expected returns.

SoCal was allowed a 14.6% return on equity in its last rate decision (D.92492). Investment in CFC is less risky than the general risk SoCal faces, because of the relative certainty of conservation investments, and the many ratepayer guarantees built into WFCP and the cost of service agreement, to assure lenders of the safety of their investment. Despite SoCal's enumeration of the unique risks of WFCP the Commission believes that considerations of risk, taken alone, might justify a lower rate of return on the equity invested in CFC. Were SoCal's 14.6% return on equity updated to reflect current market conditions, it might therefore be reasonable to authorize something less than the updated return on the dollars in CFC.

However, we note that the latest rate for risk-free United States government Treasury bonds is 14.6% for a seven-year terms. The common wisdom is that investors will not accept less return for a risk-bearing investment in equity than they can obtain from a risk-free loan for a term of similar length. This simplistic formula is affected by investors' perceptions of possible increases in returns on risky investments (e.g., if the Commission raises SoCal's authorized return at the next rate case), or by other considerations (such as concern for the balance of payments or environmental benefits of conservation). We therefore are hesitant to authorize less than risk-free Treasury notes.

We conclude that SoCal's currently authorized return on equity, 14.6%, is reasonable for the equity portion of CFC financing. We will review the costs of debt and equity at the time of SoCal's test year 1983 rate case.

Finally, we deal with the issue of whether WFCP will have any unacceptable anti-competitive impact on the lending market. As in PG&E's ZIP proceeding, no conventional lending institution appeared to oppose SoCal's WFCP, despite widespread notice of SoCal's application. Further, the uncontested evidence indicates (1) that the effect of WFCP on the current market for loans such as those to be made under WFCP are "negligible", and (2) that conventional lenders can participate in WFCP through the project financing structure. We therefore conclude that WFCP will not have any anticompetitive effect on conventional lenders, much less an unacceptable one.

With the addition of $2,000,000 which we will authorize for credits for building envelope repairs undertaken by low income customers (see discussion <u>infra</u>), the following table reflects the approved expenses for SFCP. The revenue requirement necessary to implement WFCP, based on a 14.6% return on the equity portion of CFC's capital structure, totals $34,265,000. We will authorize a rate increase to produce revenues in that amount.

In order to minimize rate fluctuations, such rate increase will take effect simultaneously with the effective date of whatever change results from SoCal's forthcoming April 1 consolidated adjustment mechanism proceeding. We will authorize SoCal to establish a balancing account for entry of costs incurred from the effective date of this decision and for entry of revenues derived in part from base rates and in part from the rate increase which will take effect subsequently.

First-Year WFCP Program Expenses

Function	SoCal	Staff	Adopted
	($000)		
Program Incentives			
Single-Family Credits	17,300	17,300	13,983
Single-Family Loans			
Cost of Debt	1,528	1,528	1,548
Cost of Equity (including income taxes)	1,043	561	772
8% Loan Interest Paid by Participant	-	-	(1,032)
Multifamily Credits	2,446	2,446	1,921
Multifamily Loans			
Cost of Debt	749	749	759
Cost of Equity (including income taxes)	512	275	379
8% Loan Interest Paid by Participant	-	-	(506)
Costs of Carrying Outstanding 8% loans			
Cost of Debt	1,792	1,792	5,688
8% Loan Interest Paid by Participant	-	-	(3,860)
Cost of Equity (including income taxes)	1,223	657	2,835
Subtotal Program Incentives	26,593	25,308	22,487
Marketing, Administration, Etc.			
Advertising	960	517	816
Public Affairs	73	24	62
Marketing & Communications	2,607	2,016	2,216
Referral Program	7,144	2,000	3,144
1981 EECP	5,840	5,840	5,840
Account Administration & Inspections	7,160	7,160	7,160
Subtotal	-	-	19,238
Subtotal Program Costs (including incentives)	50,377	42,865	41,725
Low Income Program	-	-	2,000
Less 1982 Rate Case Approved Conservation Funds	-	-	(10,013)
Subtotal	-	-	33,712
Franchise and Uncollectibles (1.639%)	662	538	553
TOTAL COSTS	51,039	43,403	34,265

(Red Figure)

VI. Low Income/Renter Participation

During hearings in these applications, SoCal proposed for both RCS and WFCP to make a "special effort" to encourage participation by customers whose annual household incomes are at or below 125% of poverty level. SoCal planned to conduct its own "outreach" to these customers by:

(1) Working closely with Community Action Agencies (CAAs) and minority contractors to assist these customers in participating in WFCP;

(2) Making contacts with tenants and owners of multifamily and low-income units to encourage weatherization;

(3) After an audit, assisting customers who cannot afford monthly payments to contact the proper agencies to arrange for weatherization of their residences (i.e., referral to the federal weatherization program, providing a list of CAAs);

(4) Contracting with agencies with qualified personnel to conduct the inspections of installations resulting from RCS and WFCP; and

(5) Retaining a consultant to work with community groups to determine the best methods of utilizing and contracting with these groups.

SoCal witness Mitchell testified that participation would be enhanced by SoCal's good name in low-income communities, its Spanish-language advertising, and the rapport which its appliance service representatives have developed in those communities.

At oral argument, SoCal discussed an additional means of encouraging low income participation. Pursuant to an ALJ ruling, SoCal filed a written statement of this proposal to which all other parties were given the opportunity to respond. Specifically, for low-income families who qualify for government weatherization assistance, SoCal proposes to:

> "1. Make utility credit dollars available to community action agencies (CAAs) and community based organizations (CBOs) for the purchase and installation of conservation measures included in SoCal's WFCP program.
>
> "2. Provide inspections to ensure satisfactory installation of the measure(s), and establish qualification for utility credit funds. SoCal will arrange for payment of the utility credits directly to the CAA or CBO (rather than the resident) to supplement their funding."

SoCal estimates that federal funding for low-income weatherization in 1982 will be approximately $4 million for all of California. SoCal believes that the combination of this funding with utility credits "will enable community groups to weatherize as many low-income homes as they are capable of completing." SoCal also notes that its proposal will require no funding in addition to that already requested for WFCP.

A. <u>Positions of the Parties</u>

The response to both SoCal's original and modified low-income proposals was distinctly unfavorable. During hearing, this opinion was most strongly expressed through the testimony, cross-examination, and argument of two community organizations: The East Los Angeles Community Union (TELACU) and the California/Nevada Community Action Association (Cal/Neva). TELACU and Cal/Neva found SoCal's proposal particularly deficient for its lack of target levels for low-income participation; its unfounded reliance on past success in low income communities; and insufficient incentives for, but substantial economic barriers to, low-income participation.

In addition to procedural objections to SoCal's modification TELACU and Cal/Neva found SoCal's subsequent proposal little improvement on its original plan. Both groups seek to set aside submission of SoCal's applications arguing that further hearings are required to give all parties an opportunity to examine the "new" proposal.13/ TELACU and Cal/Neva, although providing separate comment, voiced similar objections to SoCal's new proposal because of its reliance on federal funding, which TELACU and Cal/Neva claim ended on December 31, 1981, and its failure to provide adequate incentives.

With respect to modifications of SoCal's approach to low-income participation, TELACU and Cal/Neva each provided independent testimony and argument. Their combined recommendations for change included the following:

(1) Target levels for low income participation must be set to assure that low income rate-payers are reached.

(2) Increased economic incentives must be provided for low income participants. In this general category, Cal/Neva and TELACU recommend lengthening the pay-back period for a zero interest loan, making credits inversely proportional to income, using the 125% Bureau of Labor Statistics (BLS) standard of poverty level which may result in a slightly higher income level than the Office of Management and Budget (OMB) standard used by SoCal, funding "building envelope" repairs, and offering up-front cash payments to cover initial costs. With respect to the latter incentive, both Cal/Neva and TELACU argue that it is that type of repair or "weatherization" most needed by low-income customers. Without curing existing defects in the building envelope, the effectiveness of any of the eligible WFCP measures would be greatly reduced.

13/ On similar grounds, ICA's Honick also asks for further hearings.

(3) Economic barriers to low income participation must be removed. Cal/Neva and TELACU direct their attention particularly to SoCal's requirements that loans must be serviced by a deed of trust on the property and that eligible customers must not have had their gas service shut off for nonpayment within the preceding ten months. Cal/Neva asserts that low-income persons, in the greatest need for weatherization, may occasionally have difficulty meeting their resulting high energy bills. Testimony by Cal/Neva and TELACU also revealed the reluctance a low-income customer would have in using his residence, most likely his sole asset, as security for conservation financing. Cal/Neva recommends that no credit or lien requirements be imposed on low-income customers. TELACU suggests a lien on loans over $2,000.

The testimony of Cal/Neva and TELACU culminated in a joint proposal for CAAs, represented by Cal/Neva, and CBOs, represented by TELACU, to conduct "outreach" for SoCal's RCS and WFCP programs. Specifically, Cal/Neva and TELACU ask the Commission to authorize and earmark $1.37 million to be used by SoCal to contract with these agencies for their services in providing audits, inspections, administration, and outreach to their communities. It is the opinion of Cal/Neva and TELACU, that CAAs and CBOs familiar with the communities they represent, could ensure greater low-income participation.

With respect to tenants, TELACU and Cal/Neva also claim that target levels for all renters should be set and that landlords be actively solicited to undertake weatherization. For low-income tenants, these groups urge increased incentives including eligibility for loans.

Cal/Neva witness Hodges also recommended several additional modifications of SoCal's WFCP to eliminate any appearance of that program being designed for the wealthy. In particular, Hodges urges the exclusion of second and vacation homes from WFCP financing and the removal of swimming pool covers from the list of WFCP measures. Hodges also requests a $3,500 loan ceiling to prevent any individual from receiving disproportionate benefits from WFCP through extraordinarily large loans.

Although the staff took no position on TELACU's and Cal/Nevas recommendations, staff did request their serious consideration. The CEC, however, believes that the TELACU-Cal/Neva proposal provides a "useful design for allocating funding in the area of low-income participation." Noting that the Cal Plan strongly encourages utilities to contract with community groups, the CEC supports increased community involvement in all phases of RCS. The CEC warns, however, that the proposal should not serve to limit the number or types of groups with which SoCal may contract or restrict the types of activities which these groups may perform.

In staff's view, low-income participation in WFCP would be greatly enhanced by SoCal providing WFCP financing up to $200 for cost-effective building envelope repairs. The staff also suggests our applying the same methods for maximizing low-income participation adopted in PG&E's ZIP application (D.92653.) These methods include providing low-income areas with special priority in audit scheduling and with special outreach efforts.

Staff's comments in response to SoCal's "new" proposal for low-income participation mirror those of TELACU and Cal/Neva. Staff found particularly objectionable the procedure followed by SoCal in making this change during oral argument rather than during hearing; SoCal's disregard of the criticisms and suggestions voiced during hearing; and its reliance on illusory federal funding.

Regarding tenant participation, staff recommends that in the event renter participation falls below 10 percent of total WFCP transactions at the end of six months following the availability of incentives that SoCal file revised renter incentives. Staff asks that under those circumstances, SoCal be required to investigate not only increased credits for the eligible measures but also the prospects of limited loans for that portion of measure costs not defrayed by the credit offered.

The final matter brought to the attention of the Commission during hearings in these applications was a proposal by Harvey Eder of the Public Solar Power Coalition directed at low-income participation. Eder, who described his group as an "emerging coalition," requested our earmarking of 20% of all funds authorized for SoCal's RCS and WFCP programs for use in a low-income program; the leveraging of utility funds with those from local, state, and federal energy programs; and the use of community groups and local agencies to perform RCS functions.

B. Discussion

As we have demonstrated in our decisions involving PG&E's ZIP, we are most concerned that the weatherization financing programs of utilities we regulate reach all classes of customers. The involvement of TELACU and Cal/Neva in this proceeding provides us with valuable insight into the social and economic barriers to low-income participation in WFCP. We are persuaded by the testimony of those organizations and the staff that the incentives offered under WFCP must take into consideration the special needs of low-income residents and in some instances be made more attractive to gain their participation.

We will therefore authorize the following:

(1) 'Low income' will be defined as any person meeting the standards set by the U.S. Bureau of Labor Statistics for eligibility to receive payments under the Federal Energy Assistance Program. Not only could application of this standard slightly broaden the category of low income participants, as suggested by TELACU and Cal/Neva, but it is also consistent with our decision in PG&E's ZIP. (D.92653.)

(2) Up to a $200 credit will be available to low income participants for improvements to the 'building envelope,' so long as such improvements have been found cost-effective in the course of a prior audit. Although the defects in the building envelope may not be included in the list of eligible WFCP measures, the record in this case clearly demonstrates that it is this type of repair which is required first and foremost by low income residents. A few inexpensive repairs could prove enormously cost-effective for both the resident and the utility.

> Although we provided in PG&E's ZIP for financing up to $200, SoCal's distinction in eligibility between loans and credits requires us in this case to make these funds available as a credit. A credit is the only incentive in SoCal's WFCP available to both tenants and homeowners.

With respect to building envelope repairs, we believe a low-income customer buying materials only should be aided in his purchase. We will therefore direct SoCal to process a "building envelope" credit request upon presentation of a cash deposit receipt stating the actual price of the item. SoCal will then directly pay the retailer up to the lesser of either the actual price or the $200 credit. In this regard we note that for material purchases related to the eligible measures, the adopted do-it-yourself proposal applies to all classes of customers. Low-income residents, both tenants (if a landlord waiver is obtained) and owners, will be able to receive up-front assistance with their purchases under the guidelines previously discussed.

Additionally, many of the concerns expressed by Cal/Neva's witness Hodges have already been addressed by this decision. Our conclusions regarding loan ceilings will help prevent any disproportionate allocation of program funds and will ensure that no loan will be greater than $3,500 per dwelling unit. We have also eliminated swimming pool covers from the list of measures eligible for WFCP financing and will adopt staff's recommendation that a second or subsequent loan cannot be obtained by the same owner until the current list of first-time applicants has been processed. The ceilings imposed on loan amounts also makes SoCal's lien requirement (for loans in excess of $5,000) irrelevant to single-family homeowners. With our modifications of WFCP, a low-income homeowner will be able to finance all measures eligible for WFCP financing ($3,500 loan), as well as cure building envelope defects ($200 credit) without the requirement of securing that financing with a lien on his property. In this regard we make two final observations: (1) the loan repayment period for all customers is 100 months, a considerable period of time, and (2) SoCal's credit requirements (no gas shut-offs within 10 months of seeking financing) are no more burdensome than those adopted for PG&E's ZIP while being considerably less burdensome than traditional credit requirements.[14/] We are reminded that while we wish to extend the energy savings to be realized from weatherization to all customers, reasonable protection of ratepayer funds must also be provided.

Finally, we turn to the question of generating low-income participation through promotion or "outreach". Although we understand the parties' objections to SoCal's modification of its proposal during oral argument, we do not think that its altered approach requires further hearing at this time. As explained by SoCal, no additional dollars are requested to fund this change. Further the modification appears to be one within SoCal's managerial discretion in making a "special effort" to reach low-income residents. In our recent systemwide expansion of ZIP, we rejected the proposal of the staff that PG&E select community organizations to assist in outreach on the basis of a competitive bidding process. We stated:

14/ PG&E intends to review a customer's history for the preceding year. Residential customers will be available for ZIP loans unless they have had (a) one or more "turnoffs", or (b) more than three 24-hour notices for nonpayment of their bills. (D.93891.)

"We will not impose such requirements upon PG&E. We think it is more important to provide the utility with the necessary flexibility to manage its program." (D.93891 at p. 38.)

Similarly, we will not require SoCal to contract with specific community organizations nor will we allocate specific ratepayer dollars to fund those contracts. The record in this case was not clear as to which agencies we should designate or what standard we should adopt to guide or instruct SoCal in this endeavor. We have no basis for extending our authority to the regulation and funding of community organizations.

We are not certain, however, that even SoCal's somewhat belated proposal is a workable or sufficient solution to maximizing low-income participation. Like the other parties, we found SoCal's original proposal for low-income participation quite vague as to what special efforts or outreach would be undertaken and the extent to which CAAs and CBOs would be involved in the process other than as inspectors. Regarding the use of utility credits, we too question SoCal's reliance on federal funding and are unclear for whom SoCal intends to "establish qualification for utility credit funding." For now, we must assume that this phrase refers to the community organizations to which these funds will be paid.

While we will approve in principal SoCal's proposal for providing credit dollars to community organizations, we will require SoCal within 30 days of the effective date of this order to further detail its total plan for low-income participation in RCS and WFCP. This plan must include a statement of the level of federal weatherization funding approved for 1982; the actual credit amounts which will be available to CAAs and CBOs for each measure now deemed eligible for WFCP financing; the circumstances under which and the groups to whom credit funding will be available; and SoCal's specific guidelines for achieving low-income outreach, including its plans, if any, to contract with community organizations for outreach. In this regard, we believe that SoCal's proposal does not yet meet the specific techniques which PG&E proposed in its ZIP application for penetration of the low-income market. We find those techniques (i.e., special priority in scheduling audits, door-to-door delivery of outreach materials) equally applicable to SoCal's WFCP.

The testimony of TELACU and Cal/Neva indicates that these organizations are primarily interested in conducting outreach activities. In addition, their proposal contemplates the use of community organizations to conduct RCS audits. This issue arose in connection with the RCS program of Pacific Gas and Electric Company (PG&E). In Decision No. 93891 (December 30, 1981), regarding PG&E's RCS program, we found that:

> "It is appropriate for PG&E to contract with outside groups to provide services under ZIP or RCS whenever it cannot accomplish necessary program functions with its own employees." (Finding No. 44, p.54)

We believe that it is likewise appropriate for SoCal to enter into contracts with outside groups, whether they be government agencies, community groups or private firms, to provide RCS audits. Such contracts are desirable under the circumstances permitted by the CEC's Cal Plan or as otherwise approved by the CEC, but only where they result in no greater expenditure than SoCal would have incurred to achieve the same estimated conservation through its own RCS and WFCP efforts. In addition, when a city or county government within the utility service area requests that it assume the responsibility for delivering RCS to its residents, the utility should make a special effort to accommodate that request, suggesting only modifications that will bring the proposed program within the limitations stated above, and where parties can agree, will improve the initial scheme presented. Moreover, we expect SoCal to be prudent in its expenditures on such activities.

To fund the addition of building envelope repairs to available WFCP incentives for low-income participants, we will authorize an additional $2 million increase in revenues. Although we believe utility credits offer renters a viable incentive to participate in WFCP, we will adopt staff's recommendation for SoCal to revise its incentives if renter participation falls below 10% of total WFCP transactions at the end of six months following the commencement of the program.

VII. CCA Procedure

SoCal proposes to collect the costs of both its RCS and WFCP programs through its CCA tariff procedure. (Exhibits 7, 8, 14, and 15.) This procedure contained in Section H (Commodity Rate Adjustments) of the Preliminary Statement of SoCal's tariff schedule, provides for rates to be adjusted on an annual basis. With respect to RCS, SoCal asserts that it will implement the applicable accounting procedures as set forth in the Cal Plan and will account for all RCS program costs in subaccounts. SoCal will also ensure that appropriate records will be maintained to allow identification of the fully allocated costs attributable to both programs.

With respect to rate design, SoCal seeks to recover its first-year RCS and WFCP expenses through a uniform cents-per-therm charge to all residential customers and to commercial-industrial customers except GN-5 (SoCal's six steam-electric customers), G-60, and G-61 (SoCal's two wholesale customers (SDG&E and the City of Long Beach Gas Department)), and the ammonia producers. SoCal explained these exclusions resulted from the following: (1) The price of natural gas to the ammonia producers was fixed by Senate Bill 1301 at the price of gas to SoCal plus 10% until January 1, 1983. (2) Each of the customers in the GN-5, G-60, and G-61 category have their own RCS and weatherization financing programs. To avoid "double-charging" these customers' ratepayers, once for their own program and once for SoCal's programs, for no corresponding benefit, SoCal chose to exclude them from its rate treatment of RCS and WFCP.

Staff basically concurs with the use of the CCA procedure and the method of collection of RCS and WFCP costs. Staff asks, however, that for both RCS and WFCP the costs of these programs be carefully scrutinized during the first annual CCA offset proceeding and that the reasonableness of using the CCA procedure for both programs be reviewed on a periodic basis.

For the first-year operation of both SoCal's WFCP and RCS programs,we will adopt the CCA procedure. The balancing account will be established concurrent with the effective date of this order. The rate design proposed by SoCal is consistent with the rate treatment which we have previously adopted both for SoCal's solar financing program (D.92584) and the recent systemwide expansion of PG&E's ZIP (D.93891). In both cases, the uniform charge to all residential and commercial-industrial customers provided for exclusions similar to those proposed by SoCal in these applications. The exception for the ammonia producers is required as the result of a legislative mandate. In PG&E's ZIP D.93891 we also indicated that we did not think it was appropriate to impose a double burden on the customers of PG&E's resale customers, the City of Palo Alto, and SoCal, with no corresponding opportunity to share in the direct benefits of PG&E's ZIP. We find this rationale equally applicable to SoCal's RCS and WFCP applications and will adopt the rate treatment proposed by SoCal.

Given these exemptions, the following CCA rates, based on current sales estimates, will be approved to generate the authorized revenue requirement of $12 million for RCS and $34,265,000 for WFCP.

	RCS	WFCP
CCA Rate	$0.00188/therm	$0.00538/therm

SoCal's rate increase requests for both RCS and WFCP were offset by amounts previously authorized for these programs in SoCal's last general rate case. (D.92497.) These sums, already authorized for recovery in base rates, totaled $2,853,000 for RCS and $10,013,000 annually for WFCP. As an accounting matter, we will direct SoCal to contribute this amount of revenue from base rates to the CCA balancing account and submit accounting details for its treatment of these dollars for review by the Commission's Revenue Requirements Division staff. In this manner, all expenses and revenues associated with WFCP and RCS will be accounted for in the CCA balancing account.

VIII. Reports on RCS and WFCP

In our most recent decision involving PG&E's ZIP and RCS programs, we ordered PG&E to "provide detailed monthly reports enumerating the costs and results associated with the 1982 RCS and ZIP programs, serving a copy on all appearances in these proceedings." (D.93891.) We believe that such reporting is necessary particularly in the first year of SoCal's RCS and WFCP. Such reports will enable the Commission to keep fully informed on a current basis about the performance of both programs. This information is especially critical for our evaluation of RCS, which may undergo significant modifications by the state and federal government during this year.

With respect to penetration levels, the monthly reports should, at a minimum, contain the following information:

a. The total number and dollar amount of the loans and credits issued during the month and collectively.

b. The total number and dollar amount of loans and credits in processing.

c. The average size of loans and credits issued, and a tabulation of the number of loans made in $500 increments (e.g., 221 loans at $500 or less, 334 loans at $500 to $1,000).

d. A breakdown of the number of loans and credits issued to renters, low-income, non-English speaking, and elderly customers.

e. The total dollars spent during the month for advertising and promotion of RCS and WFCP and a description of items included.

f. The total number of measures installed and estimated annual and life cycle energy savings.

Copies of each of these reports should be served on all appearances in these proceedings, as well as the Chief of our Energy Conservation Branch.

Findings of Fact

1. An urgent need exists for public utilities to take aggressive steps to promote energy conservation.

2. By accelerating the pace of residential conservation through aggressive programs of residential energy audits and weatherization financing, SoCal can achieve significant energy savings which can reduce its need for costly new energy supplies and production facilities.

3. Under the Cal Plan for RCS, which has been adopted by the CEC and approved with slight modifications by DOE, energy audits are required to be offered to eligible customers with space heating service.

4. The purpose of having a statewide plan for the RCS is to ensure its consistent application in utility service areas throughout the state.

5. The offering of free RCS audits by SoCal or outside groups with which it contracts is consistent with the Cal Plan and this Commission's prior approval of the RCS programs of other utilities.

6. SoCal's RCS program conforms to the requirements of the Cal Plan as presently written.

7. Modifications by DOE and CEC to simplify RCS requirements are expected to be adopted by those agencies in 1982.

8. SoCal's RCS program can be implemented in its first year at costs below those estimated by SoCal without diminishing the effectiveness of that program or violating the letter and spirit of the applicable law.

9. An increase in revenues of $12,000,000 for the first year of SoCal's RCS program is fair and reasonable.

10. As this Commission has previously found, there are substantial opportunities for highly cost-effective investments by public utilities in providing financial incentives for weatherization retrofit by their residential customers.

11. Many SoCal residential customers will find it difficult or impossible to arrange their own financing for weatherization retrofit without additional assistance and incentives.

12. The adoption of an aggressive weatherization financing program to accelerate residential conservation is necessary to help increase energy savings and reduce dependence on costly new energy supplies.

13. The tests of cost-effectiveness to the installing customers, to the utility, to nonparticipating customers, and to society are relevant to the determination of whether utility financing should be provided for specific conservation measures.

14. The WFCP program authorized herein will be cost-effective for participants, nonparticipants, the utility, and society.

15. In 1981 SoCal experienced a rapid growth in customer response to its current 8% financing program for residential attic insulation.

16. In October, 1981, this Commission commended SoCal and its ratepayers "for being the first investor-owned utility in the nation to reach [the] timely and unprecedented achievement of providing 100,000 low-interest attic insulation loans to the far-reaching benefit of the State of California."

17. For the year 1981, the number of 8% loans processed by SoCal for single-family residents exceeds the number of both zero interest loans and utility credits forecasted to be issued to single-family residents in the first year of WFCP.

18. The offering by SoCal of weatherization financing at an interest rate of 8%, as opposed to zero percent, will provide customer interest payments to offset partially SoCal's cost of providing financing.

19. SoCal can achieve reasonable penetration levels of weatherization in single-family and multifamily homes providing financing at an 8% interest rate and optional credits and can do so at considerably less cost to its ratepayers than at a zero percent rate.

20. It is reasonable for SoCal to charge an 8% interest rate on WFCP financing for eligible measures.

21. SoCal's current direct sales program involves sales of attic insulation to residential customers by commissioned sales agents.

22. SoCal's direct sales program is self-supporting.

23. The incorporation of SoCal's direct sales program in WFCP will substantially reduce labor costs while providing the additional inducement to installation of "closing the sale."

24. Incorporation of SoCal's direct sales program in WFCP and its expansion to include sales of all conservation measures eligible for WFCP financing is reasonable.

25. The combined functions of weatherization representative and direct sales agent can be performed by a single labor force.

26. To provide equal access to the WFCP direct sales program, SoCal must offer participation in that program, under uniform standards, to all RCS-listed contractors.

27. Guided by these findings, SoCal's management is capable of determining the specific manner in which direct company merchandising will be incorporated with weatherization advice provided under WFCP.

28. It is necessary to require that the functions of RCS auditor be undertaken by a labor force separate from that involved in the combined weatherization advice and sales program to ensure the effectiveness of both RCS and WFCP.

29. An amount of $3,144,000 is a reasonable expenditure for the operation of a combined weatherization advice and sales program.

30. Under the WFCP program, single-family residences are defined as residences with one to four units and mobile homes; multifamily residences are those with five units or more.

31. The following measures, already determined to be cost-effective, can qualify for WFCP financing and credits, either with or without an energy audit: attic insulation, weatherstripping, water heater blankets, low-flow showerheads, caulking, and duct wrap (the "Big 6" items).

32. If an energy audit demonstrates their cost-effectiveness, the following conservation measures will also be eligible for WFCP financing and credits; wall insulation; floor insulation; clock thermostats; pipe insulation; storm or thermal windows; IID retrofit; and replacement of inefficient space heating appliances. It is reasonable for SoCal to report to the Commission at the end of 1982 on the cost-effectiveness of thermal windows and furnace replacements.

33. Before mandatory requirements on the installation of particular measures are imposed, a transition period, during which time customers will have the option of choosing any of the eligible measures for WFCP financing, is necessary to aid in the implementation of WFCP.

34. Limitations on loan amounts are appropriate to help control program costs and to ensure equitable allocation of program money among potential WFCP participants.

35. It is appropriate to impose a financing limit of $1,000 for the installation of all of the "Big 6" measures; $750 for the installation of attic insulation alone; $250 for the installation of the five "Big 6" measures excluding attic insulation; and $2,500 for installation of the remaining WFCP measures to the extent they are found cost-effective by a prior energy audit.

36. For multifamily residences, it is reasonable for loans to be available for each dwelling unit to be weatherized.

37. It is appropriate to require repayment of SoCal loans to begin immediately and to provide a 100-month loan repayment period for owners of both single-family and multifamily residences.

38. It is appropriate to require repayment of the unpaid balance of a WFCP loan upon the sale or transfer of ownership of the property on which the installation has been made, subject to an exception for exempt transfers as defined for PG&E's ZIP in D.92653.

39. It is reasonable for SoCal to require minimum financing of $150, a minimum monthly payment of $5, the credit criteria proposed by SoCal, and a lien on the affected property for loans in excess of $5,000.

40. While SoCal's bidding procedures are not required to prevent an undue escalation of bids, some utility oversight of bidding is required.

41. It is reasonable for SoCal to monitor bid prices and to require that an additional bid be obtained by a customer when a bid is not within the reasonable range known to SoCal at the time.

42. Subject to modifications adopted herein, the offering of utility credits, in the manner proposed by SoCal, is appropriate and will provide a significant incentive to customers to purchase and install eligible WFCP measures.

43. With the availability of credits to all residential customers, including tenants, it is reasonable for SoCal to offer WFCP loans only to owners of single-family and multifamily residences.

44. To maintain comparability between the two financial incentives provided by WFCP, credits must be available for all those measures eligible for WFCP loans; further, the original credit amounts designated by SoCal should be reduced in keeping with the increase from zero to 8% interest rate authorized herein for WFCP loans.

45. A reduction in the overall sum requested by SoCal for its credit incentives by 15% to $13,983,000 for single-family credits and $1,921,000 for multifamily credits is reasonable.

46. As further encouragement to the significant numbers of potential do-it-yourselfers in SoCal's service area, it is appropriate to require SoCal to process a do-it-yourselfer's WFCP application when furnished a cash deposit receipt specifically identifying the material being purchased and the total price of that material. If a do-it-yourselfer chooses this option, it is reasonable for SoCal to finance only the lesser of either the actual price of materials for the measure or the applicable credit and to pay that amount directly to the retailer.

47. SoCal's WFCP installation and warranty requirements are reasonable to the extent of their consistency with PG&E's ZIP program as prescribed in D.92653.

48. It is reasonable to reduce SoCal's estimated costs of WFCP promotion and advertising by 15%.

49. A 100% inspection level of all WFCP installations is a reasonable initial requirement to assure reliable energy savings, but it is reasonable to reduce the inspection rate of contractors who develop proven records of proficiency.

50. WFCP, as modified, will require SoCal's financing affiliate, CFC, to borrow millions of dollars during its operation.

51. Project financing provides a means to finance WFCP which is attractive both for the utility and its ratepayers. The higher leverage resulting from project financing will result in relatively low-cost financing and lower income taxes. Project financing also should not impinge on SoCal's ability to meet its other capital requirements and thus will enable it to conduct its WFCP program and simultaneously meet its other obligations to provide adequate service to its customers.

52. WFCP does not represent a traditional application of project financing in that it does not provide a pledged assets form of security. The funds will be devoted to hundreds of thousands of individual projects, all separately owned, which lenders could not realistically take over in the event of default and which would not produce revenue for the lenders.

53. SoCal's financing affiliate will use borrowed and PLC funds to make loans not to exceed $3,500 total to any individual SoCal customer participating in WFCP. To achieve the Commission's goal of maximum market penetration, it is necessary to make WFCP available and attractive to low-income, elderly, non-English speaking, and landlord and tenant customers. As a result, the Commission recognizes that many loans will be made to WFCP participants who ordinarily would not qualify for home improvement loans from conventional lending sources.

54. SoCal's financing affiliate will be permitted to secure WFCP loans by liens. While the liens may aid collection, they will be of questionable value for purposes as collateral security for borrowing from lenders.

55. Because of the nature of the underlying assets (such as insulation, weatherstripping, caulking, etc.), the questionable value of the security and the lack of traditional lender credit standards, lenders cannot be expected to rely on enforcement of the notes and liens to insure loan repayment.

56. It is necessary to have an assured revenue stream large enough to cover, at a minimum, the recoupment of debt service in a timely manner under all circumstances in order to attract lenders to advance the large borrowings envisaged for SoCal's WFCP. In the absence of such security, WFCP may not be project financed under terms most favorable to the ratepayers' interest in minimizing the cost of capital.

57. Debt service is defined to include principal not recovered from participants in a timely manner, interest whether at a variable or fixed rate, and associated fees.

58. Lenders will advance the debt funds required by SoCal's financing affiliate only if the lenders can rely on the CCA procedure and balancing account to guarantee, at a minimum, a debt service revenue stream over the life of the borrowings from the lenders and the equity investment to provide a "cushion" for the debt service.

59. It is appropriate for SoCal to project finance WFCP in accordance with the policies and procedures specified in D.93497 in PG&E's ZIP application.

60. An important component of the CCA procedure will be the agreements between SoCal and its financing affiliate, particularly as they relate to the assignment of the CCA revenues to the financing

affiliate by SoCal for costs incurred for WFCP financings. The Commission expects SoCal to submit for approval by advice letter any such agreements and any credit agreements between its financing affiliate and lenders concerning borrowing of WFCP funds.

61. In negotiations with lenders, SoCal is expected to use best efforts to achieve an 80/20 debt-to-equity ratio in the financing affiliate, although a higher equity contribution may be necessary in order to obtain favorable financing terms. It is reasonable to place a ceiling of $150,000,000 on the total capital (debt and equity) to be provided through CFC for the duration of WFCP.

62. It is appropriate that SoCal's last authorized return on equity (14.6%) be earned. This return will be subject to review during the first annual WFCP cost offset proceeding.

63. Loans for conservation purposes such as SoCal will be offering in WFCP represent a small fraction of the lending activities of conventional lending institutions.

64. WFCP loans will supplement rather than compete with lending opportunities for conventional lending institutions.

65. Conventional lending institutions will have an opportunity to participate in WFCP through its project financing structure.

66. Special efforts are necessary to gain the participation in WFCP of elderly, non-English speaking, low-income persons, and renters.

67. In order to overcome barriers to participation in WFCP to low-income residents it is necessary and appropriate to make additional incentives available to them. A low-income participant will have the ability to obtain an additional $200 credit under WFCP for "building envelope" improvements found to be cost-effective by a prior energy audit. Low income is defined by the standards set by the U. S. Bureau of Labor Statistics for eligibility to receive payments under the Federal Energy Assistance Program.

68. As an additional incentive for low-income residents, it is reasonable for SoCal to process a "building envelope" credit request upon presentation of a cash deposit receipt stating the actual price of the item. SoCal will directly pay the retailer up to the lesser of either of the actual price of materials for building envelope repairs or the $200 credit.

69. To ensure the availability of WFCP financing to all classes of customers, a second or subsequent loan cannot be obtained by the same owner until the current list of first-time applicants has been processed.

70. SoCal's proposal to provide utility credits to local community organizations appears reasonable. The specifics of SoCal's plan to encourage low-income participation in WFCP, however, requires additional explanation and refinement along the lines stated in our discussion of this issue.

71. It is appropriate to reconsider and possibly increase the incentives for renters if renter participation falls below 10% of total WFCP transactions at the end of the six months following the commencement of WFCP.

72. The CCA procedure and balancing account treatment of costs associated with both SoCal's RCS and WFCP programs are reasonable.

73. Until 1983, the ammonia producers gas rate has been fixed by legislation.

74. SoCal's GN-5, G-60, and G-61 customers administer their own weatherization financing and RCS programs. It is inappropriate to require these customers' ratepayers to bear a double burden by funding the weatherization financing and RCS programs of their utility as well as those of SoCal.

75. It is reasonable to charge the costs of RCS and WFCP uniformly to all residential and commercial/industrial customers except those identified in Findings 73 and 74.

76. The increase in revenues of $34,265,000 authorized for SoCal's WFCP is fair and reasonable.

77. Deferral of a rate increase to provide the additional authorized revenues is appropriate in order to minimize rate fluctuations.

78. Authorization of the proposed CCA balancing account will protect SoCal from any ultimate loss of revenue due to deferral of a rate increase at this time.

79. For those sums already authorized for recovery in SoCal's base rates for RCS and WFCP, it is necessary for SoCal to contribute an equivalent amount of revenue from base rates to the CCA balancing account.

80. Detailed monthly reports on RCS and WFCP must be submitted by SoCal to keep this Commission fully informed on a current basis about the effectiveness and results of RCS and WFCP.

Conclusions of Law

1. SoCal should be authorized to implement its RCS and WFCP programs as described in this decision and under the terms and conditions provided.

2. $34,265,000 should be authorized as a reasonable level of SoCal's expenditures for the first year of implementation of WFCP.

3. $12,000,000 should be authorized as a reasonable level of SoCal's expenditures for the first year of its RCS program.

4. SoCal's RCS program should conform to mandatory features of the Cal Plan for the RCS as approved by DOE.

5. The approved WFCP program is consistent with the purposes and requirements of the National Energy Conservation Policy Act of 1978 and the Energy Security Act 1980.

6. SoCal's WFCP will not be anticompetitive in lending or any other relevant markets and will not violate federal or state antitrust laws.

7. The ammonia producers and SoCal's GN-5, G-60, and G-61 customers should not contribute to SoCal's WFCP and RCS program funding.

8. Advice and project letters filed in accordance with General Order 96-A are appropriate to obtain Commission approval of financial arrangements between SoCal and its financing affiliate, CFC and between CFC and lenders, and to approve quarterly rate adjustments associated with CCA debt service rate.

9. Filed reports are also appropriate to advise and obtain Commission approval of SoCal's proposal (a) for integrating its current direct sales program with WFCP as described in this decision; (b) for providing for low-income participation in RCS and WFCP; and (c) for revising renter incentives, if renter participation falls below 10% of total WFCP transactions at the end of six months following commencement of the program.

10. An advice letter filing in accordance with General Order 96-A is appropriate to convert SoCal's WFCP from an optional program of measure installations to a mandatory one along the lines adopted for PG&E's ZIP program.

11. The CCA balancing account factors for all classes of gas service, except as noted, of $0.00188/therm or RCS and $0.00538/therm for WFCP are just and reasonable and should be applied in accordance with the CCA tariff, but their effectiveness should be deferred until the effective date of whatever rate change is subsequently authorized in SoCal's April 1 CAM proceeding.

12. The RCS program is mandated under the National Energy Conservation Policy Act, the Energy Security Act, DOE regulations, and the Cal Plan promulgated by the CEC.

13. SoCal is legally obligated to go forward with RCS as currently required under federal and state law.

14. This order should become effective immediately to allow SoCal to extend the benefits of WFCP and RCS to all its customers as quickly as possible.

INTERIM ORDER

IT IS ORDERED that:

1. Southern California Gas Company (SoCal) shall implement its WFCP throughout its service territory subject to the following requirements:

a. SoCal shall provide WFCP financing and credits, either with or without a prior energy audit, for the following residential energy conservation measures (measures), denominated the "Big 6" measures.

(1) Attic insulation.

(2) Weatherstripping of all doors and windows which lead to unheated or uncooled areas (weatherstripping);

(3) External water heater insulation blankets (water heater blankets);

(4) Low-flow devices on all accessible showerheads (low-flow showerheads);

(5) Caulking or sealing of major cracks and other openings in building exterior and sealing of wall outlets (caulking); and

(6) Insulation of accessible heating and cooling system ducts which enter or leave unheated or uncooled areas (duct wrap).

b. To the level found to be cost-effective in the course of a prior energy audit, SoCal shall provide WFCP financing and credits for the following measures:

(1) Wall insulation;

(2) Floor insulation;

(3) Clock thermostats;

(4) Pipe insulation;

(5) Storm or thermal windows for the exterior of dwellings;

(6) Electrical or mechanical furnace ignition systems which replace gas pilot lights (intermittent ignition devices); and

(7) Replacement of inefficient space heating appliances.

c. SoCal is authorized to provide WFCP financing and credits subject to the following procedures and requirements:

(1) For purposes of SoCal's WFCP program, "single-family" residence shall include mobile homes and residences with one to four units; "multifamily" residences are those with five units or more.

(2) WFCP loans shall be available to all owners of single-family and multifamily residences; credits shall be available to all SoCal residential customers, including renters. For customers eligible for both loans and credits, the incentive chosen shall be at the customer's option.

(3) To qualify for a loan the applicant must have been a SoCal customer for twelve months with no shutoffs for 10 months prior to applying for a WFCP loan.

(4) All WFCP loans shall bear an interest rate of 8%.

(5) Loan ceilings shall be imposed in the following amounts:

(a) $1,000 for installation of all "Big 6" measures,

(b) $750 for installation of attic insulation alone,

(c) $250 for installation of the five "Big 6" measures excluding attic insulation, and

(d) $2,500 for installation of the remaining WFCP measures, to the extent they are found cost-effective by a prior energy audit.

(6) Repayment of loan amounts shall commence immediately after issuance. Both single-family and multifamily homeowners shall have 100 months to repay a WFCP loan.

(7) SoCal shall finance a minimum amount of $150 and shall require a minimum monthly repayment of $5.

(8) SoCal shall record a lien upon title to any residence with respect to which it has issued a WFCP loan in excess of $5,000.

(9) Every WFCP loan shall provide that the balance due on any WFCP loan shall be repayable in full upon the sale or transfer of ownership (other than an exempt transfer as defined below) of the property on which the WFCP loan improvements have been made.

(10) Transfers to close relatives, as hereinafter defined, of residences which have been weatherized under the WFCP program shall be exempt transfers not requiring repayment of the balance of the WFCP loan at the time of such transfer if the transferee assumes in writing all obligations of the transferor regarding the WFCP loan. An exempt transfer is defined as a transfer to a husband, wife, father, mother, grandfather, grandmother, son, daughter, brother, or sister, including such relationships brought on by adoption or marriage, without limitation, such as stepmother, stepdaughter, daughter-in-law, or mother-in-law.

(11) SoCal shall monitor bid prices for the installation of eligible measures and shall require that an additional bid be obtained by a customer when a bid is not within the reasonable range known to SoCal at the time. All WFCP loan applications shall include a notice advising applicant to obtain more than one bid and noting SoCal's right to require an additional bid before approving the loan.

(12) For multifamily residences, WFCP loans shall be available and loan ceilings imposed for each dwelling unit to be weatherized.

(13) Credits shall be paid to the applicant in a single payment within 30 days following a satisfactory inspection of the installed measures.

(14) A renter's application for a credit shall be accompanied by a signed waiver from the property owner releasing his claim for utility credits on those measures installed on his property.

(15) SoCal shall advise all applicants for credits of the nature and extent to which their state income tax credit can be affected by choosing this incentive.

(16) For purposes of WFCP, a "low-income" person shall be defined as any person meeting the standards set by the U.S. Bureau of Labor Statistics for eligibility to receive payments under the Federal Energy Assistance Program.

(17) SoCal shall make available to all low-income customers a $200 credit for improvements to the "building envelope," so long as such improvements have been found cost-effective in the course of a prior energy audit. At the election of a low-income participant, SoCal shall process his application for a building envelope credit upon the applicant furnishing SoCal a cash deposit receipt identifying the purchase and stating the actual price of the item. SoCal shall then directly pay the retailer up to the lesser of either the actual price of materials for building envelope repairs or the $200 credit.

(18) SoCal shall process the WFCP applications of do-it-yourselfers upon being furnished with a cash deposit receipt for eligible measure (Ordering Paragraphs 1.a. and 1.b.) materials. The cash deposit receipt must specifically identify the material being purchased and the total price of that material. SoCal shall only finance the lesser of either the actual price of the measure or the applicable credit. The do-it-yourselfer shall have the ability to forego this option in favor of receiving the full amount of the applicable credit upon installation and inspection of the measure.

(19) SoCal shall not process second or subsequent applications for a loan or credits by the same homeowner until the current list of first-time applicants has been processed.

(20) All work financed under WFCP shall be installed in accordance with California RCS standards and by a California RCS listed contractor or the customer. Customers contracting with state licensed contractors, who may or may not be included on the master RCS list, shall qualify for utility credits if the conservation measures installed meet RCS standards.

(21) SoCal shall promptly inspect all weatherization work installed and financed under the WFCP plan.

(22) All work financed under the WFCP program shall be covered by repair or replacement warranties equalling or exceeding those required by the state RCS plan, including a three-year manufacturer's warranty for free repair or replacement of materials and devices financed under the WFCP program, but including labor costs only for the first year as provided in the state RCS plan.

(23) All dwellings constructed prior to the effective date of this order will be eligible to qualify for WFCP loans and credits.

(24) No WFCP loans or credits shall be issued by SoCal for weatherization measures included in the present WFCP program if installed after December 31, 1986.

d. SoCal shall provide advice to customers about WFCP, contractor referrals, and financing through a weatherization representative who will also have the authority to make direct company sales to customers of all eligible WFCP measures. SoCal shall offer participation in its direct company sales program to all RCS-listed contractors under uniform standards established by SoCal. SoCal shall develop its own guidelines, consistent with this decision, to implement this combined weatherization advice/sales program and shall file a report within 30 days of the effective date of this order detailing the manner in which the program will be operated and the standards to be required of contractors participating in direct company sales. This filing shall be served on all appearances in these proceedings.

2. SoCal shall use its best efforts to promote WFCP and RCS and achieve satisfactory levels of participation in both programs for its low-income, elderly, non-English speaking, and renter customers. Within 30 days of the effective date of this order, SoCal shall file a report consistent with this decision detailing and explaining its entire plan for promoting low-income participation in WFCP and RCS. This filing shall be served on all appearances in these proceedings.

3. SoCal shall offer optional credits for installation of WFCP measures, in the amounts described in this decision. Expenditures of $13,983,000 for single-family credits, and $1,921,000 for multi-family credits are authorized for 1982, subject to balancing account treatment.

4. SoCal is authorized to project finance WFCP and to file project letters and advice letters in accordance with General Order 96-A to obtain Commission approval of financial arrangements between SoCal and its financing affiliate, the Southern California Conservation Financing Company (CFC), and between CFC and lenders and to obtain Commission approval of quarterly rate adjustments associated with the CCA debt service rate. SoCal's project financing shall be subject to the following additional requirements:

a. SoCal shall use its best efforts to achieve an 80/20 debt-to-equity ratio for CFC. A ceiling of $150,000,000 shall be placed on the total capital (debt and equity) to be provided through CFC over the five-year duration of WFCP.

b. The rate of return on the equity investment in CFC shall equal SoCal's last authorized return on equity (14.6%). This return will be subject to review in SoCal's next general rate case.

c. The CCA balancing account shall not be terminated so long as CFC borrowings remain outstanding.

d. SoCal is authorized to assign the CCA tariff revenues to CFC.

5. To implement WFCP SoCal is authorized, as of the effective date of whatever rate change is authorized in SoCal's April 1, 1982 CAM proceeding, to increase gross revenues annually in the amount of $34,265,000 to be recovered through the CCA procedure. From that date forward, the CCA balancing account shall reflect a rate for WFCP of $0.00538 per therm for all classes of customers, except as noted below. Expenses related to WFCP will be accrued in the CCA balancing account beginning with the effective date of this order. SoCal shall contribute to the balancing account $10,013,000 in revenues from base rates (the amount previously authorized for recovery in 1982 rates for programs now superseded by WFCP).

This amount may be adjusted for monies SoCal can demonstrate were spent in 1982 prior to the date of this order. This matter will be addressed in the annual review. Expenses and revenues resulting from the operation of WFCP shall be categorized separately from other programs subject to the CCA procedure. Accounting details for the handling of CCA revenues and expenses shall be submitted for review to the Commission's Revenue Requirements Division staff. SoCal shall file an application for any proposed changes to the CCA rates (aside from the CCA debt service rate).

6. SoCal is authorized to carry out as proposed the federally mandated RCS program in 1982.

7. For the first-year operation of RCS, SoCal further is authorized, as of the effective date of whatever rate change is authorized in SoCal's April 1, 1982 CAM proceeding, to increase gross revenues annually in the amount of $12,000,000 to be recovered through CCA procedure. From that date forward, the RCS balancing account shall reflect a rate for RCS of $0.00188 per therm for all classes of customers, except as noted below. Expenses related to RCS will be accrued in the CCA balancing account beginning with the effective date of this order. SoCal shall follow the accounting requirements, procedures, and review for RCS as provided for WFCP in Ordering Paragraph 5.

8. The costs of SoCal's RCS and WFCP programs are to be applied to all customers, excluding the ammonia producers and SoCal's GN-5, G-60, and G-61 customers.

9. SoCal shall file annual rate applications for future WFCP and RCS costs and shall include the following information in its presentations:

a. An analysis of the WFCP and RCS programs from the date of the start of the programs or from the date of the last filings, as the case may be, to the date of the current filings which show:

(1) The number of households audited.

(2) The number and type of conservation measures financed.

(3) The costs of the audits.

(4) The costs of the conservation financing program, including administrative costs, WFCP loan costs, and the costs of the conservation measures.

(5) The energy savings experienced, based on recorded data, of the measures installed.

(6) The overall costs of the energy conserved.

(7) The specific techniques and efforts which SoCal has employed to reach the low-income market, the elderly, and minorities, with its WFCP and RCS programs together with a summary of the results of its efforts to penetrate such market.

(8) The specific techniques and efforts which SoCal has employed to reach the rental market with its WFCP and RCS programs together with a summary of the results of its efforts to penetrate such market.

(9) Data on the actual market share of weatherization products and measures financed under the WFCP program.

(10) Data on the hiring of auditors and inspectors relating to the utility's affirmative action responsibilities.

b. Any requests for proposed changes in the WFCP and RCS programs to improve their efficiency and cost-effectiveness.

10. In conformance with this decision, SoCal shall provide detailed monthly reports enumerating the costs and results associated with the 1982 RCS and WFCP programs, serving a copy on all appearances in these proceedings.

11. At the end of six months following the commencement of WFCP, SoCal shall file a report comparing the number of renter applications for WFCP financing with the total number of WFCP transactions for that period. If renter participation is below 10% of total WFCP transactions, at that time, SoCal shall include a proposed revision in its WFCP renter incentives.

12. On October 31, 1982, SoCal shall file an advice letter in accordance with General Order 96-A to convert WFCP from an optional program of measure installations to a mandatory one along the lines adopted for PG&E's ZIP in D.93891.

13. SoCal is authorized to file revised tariffs to reflect the $0.00538 per therm for WFCP and the $0.00188 per therm for RCS, which can apply to the schedules directed in this order. The tariffs shall be filed in compliance with General Order 96-A and may be filed and effective on or after the effective date of whatever rate change is authorized in SoCal's April 1, 1982 CAM proceeding. The revised tariffs shall apply to service on and after the date filed.

14. On December 1, 1982 SoCal shall file a report providing data on the cost-effectiveness to the nonparticipant of financing of thermal windows and furnace replacements.

15. Within 30 days of the effective date of this order, SoCal shall file a report on the details and manner in which it plans to operate its direct conservation sales program. The Administrative Law Judge shall set limited further hearings, to be held as soon as possible thereafter, to consider the reasonableness of the program as it is to be implemented, as well as any potential anticompetitive effects of an ongoing SoCal direct sales program.

This order is effective today.

Dated February 17, 1982, at San Francisco, California.

JOHN E. BRYSON
President
LEONARD M. GRIMES, JR.
PRISCILLA C. GREW
Commissioners

Commissioners Richard D. Gravelle and Victor Calvo concur and dissent in part.

I CERTIFY THAT THIS DECISION WAS APPROVED BY THE ABOVE COMMISSIONERS TODAY.

Joseph E. Bodovitz

Joseph E. Bodovitz, Executive Director

APPENDIX A

LIST OF APPEARANCES

Applicant: John Craig, Attorney at Law, for Southern California Gas Company.

Protestant: Herman Mulman, for Seniors for Political Action.

Interested Parties: Catherine Johnson and Gregg Wheatland, Attorneys at Law, for the California Energy Commission; Joseph J. Honick, for Insulation Contractors Association; Pettit & Martin, by Edward B. Lozowicki and Jack T. Holland, Attorneys at Law, for Mineral Insulation Manufacturers Association; Martin E. Whelan, Jr., Attorney at Law, for Tehachapi-Cummings County Water District; Matthew Steen, for Community Action Commission of Santa Barbara County, Inc.; Carolle LeMonnier and Jack Parkhill, Attorneys at Law, for TELACU (The East Los Angeles Community Union); Robert W. Parkin, City Attorney, by Richard A. Alesso, Deputy City Attorney, and Vernon E. Cullum, for City of Long Beach Gas Department; Steven Z. Gabriel, for Long Beach Community Services Development Corp.; Ira Reiner, City Attorney, by Ed Perez, Deputy City Attorney, for the City of Los Angeles; Merle K. Albright, for Association of Southern California Energy Programs (ASCEP); Harvey Eder, for Public Solar Power Coalition; Michel Peter Florio, Attorney at Law, for Toward Utility Rate Normalization; Robert Ohlbach, Daniel E. Gibson, and Merek E. Lipson, Attorneys at Law, for Pacific Gas and Electric Company; James Hodges, for California/Nevada Community Action Association; Biddle, Walters & Bukey, by Richard L. Hamilton, Attorney at Law, for Western Mobilehome Association; and Edward Duncan, Timothy D. Rosenfeld, and James C. Dycus, for themselves.

Commission Staff: Alvin S. Pak, Attorney at Law, George A. Amaroli, and Walter Cavagnaro.

(END OF APPENDIX A)

RICHARD D. GRAVELLE, Commissioner and
VICTOR CALVO, Commissioner, Concurring and Dissenting:

We concur in the decision to order Southern California Gas Company to undertake the RCS and WFCP programs. We dissent from that part of the decision which awards PLC a 14.6 percent return on the equity component of the WFCP financing mechanism.

The majority opinion concedes that the record does not show the source of PLC's equity investment in WFCP. There is no evidence that SoCal cannot fund the equity component from its available funds, on which it is earning an overall rate of return of 10.75 percent. There is no evidence that SoCal will be forced to raise the equity component by borrowing money or selling stock. Therefore, we cannot subscribe to the majority's decision, the reasoning of which essentially rests on the assumption that new capital will have to be raised in the financial markets. Even if new capital is required, there is no serious analysis of what such capital would cost PLC, a matter which should not be lightly estimated in view of the virtually total absence of risk on the WFCP program.

On a more fundamental level, we cannot subscribe to the majority's "snapshot Treasury note" method of determining the appropriate rate of return for the equity component. The decision chooses a seven-year Treasury note rate without any explanation. The decision is a "snapshot" because it chooses the rate as of some unidentified date, without any analysis of whether that rate will increase or decrease over the short and/or long term. There is complete disregard for recent volatility in interest rates. The majority's method of estimating the cost of capital here is nothing more than a guess.

Finally we note that PG&E has not been accorded such treatment for its ZIP program. Considering the larger size of PG&E's program, it seems safe to conclude that if PG&E can finance its ZIP program without a higher return on equity than its overall rate of return, then so can SoCal.

Richard D. Gravelle
RICHARD D. GRAVELLE, Commissioner

Victor Calvo
VICTOR CALVO, Commissioner

San Francisco, California
February 17, 1982