

Decision 83 04 015 'APR 6 1983

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of PACIFIC GAS AND)
ELECTRIC COMPANY for Authority to)
Decrease its Electric and Increase)
its Gas Rates and Charges)
Effective January 1, 1983, in)
Accordance with the Conservation)
Financing Adjustment (CFA))
Authorized in Applications Nos.)
59537 and 60701, for Operation of)
a Zero-Interest Program (ZIP) of)
Conservation Financing.)

(Electric and Gas))

Application 82-09-17
(Filed September 14, 1982;
amended November 19, 1982)

Application of PACIFIC GAS AND)
ELECTRIC COMPANY To Increase Rates)
for Electric and Gas Service for)
the Costs of the Residential)
Conservation Service (RCS))
Program Authorized in Application)
No. 60700.)

(Electric and Gas))

Application 82-09-18
(Filed September 14, 1982;
amended November 19, 1982)

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Community Action Association; Joseph J. Honick, for Insulation Contractor Association; Robert M. Loch, Thomas D. Clarke, David Gilmore, and Marc D. Christensen, Attorneys at Law, for Southern California Gas Company; William E. Swanson, for Stanford University; W. Randy Baldschun, for City of Palo Alto; William A. Claerhout, for Southwest Gas Corporation; Darren Goebbels, Attorney at Law, for CP National Corporation; and Biddle & Hamilton, by Richard L. Hamilton and Halina Osinski, Attorneys at Law, for Western Mobilehome Association; interested parties.
Thomas P. Corr, Attorney at Law, for the Commission staff.

O P I N I O N

I. Summary of Decision

This decision authorizes Pacific Gas and Electric Company (PG&E) to continue its Zero Interest Program (ZIP) for financing of residential weatherization investments, and its Residential Conservation Service (RCS) providing energy audits to residential customers. Limited revisions are approved in both programs.

PG&E expects to provide ZIP service to at least 180,000 homes in the next year. Zero interest loans will be provided to 153,600 homes, and 26,400 low-income homes will be weatherized at no direct cost to the homeowners. PG&E's 1983 ZIP budget will be \$39.71 million, an increase of \$13.76 million from last year.

PG&E is authorized \$15.05 million to provide 102,400 RCS audits over the next year. This includes 100,000 audits of single-family homes, and 2,400 Multi-Unit Dwelling (MUD) audits. This is a \$3.05 million increase over 1982.

ZIP and RCS were first implemented throughout PG&E's service territory during 1982, so that last year's budget did not represent a full year of full scale operations. The higher expenditures authorized today will allow PG&E to continue to make ZIP and RCS fully available to its residential customers.

II. Introduction

This consolidated proceeding concerns PG&E's request for an adjustment in its electric and gas rates to carry out its 1983 ZIP and RCS programs.

PG&E's weatherization financing efforts began in 1978 with 8% attic insulation loans. By Decision (D.) 92653 dated January 28, 1981 Phase I of the ZIP was authorized for PG&E's San Joaquin Division. On December 30, 1981 Phase II of ZIP was authorized systemwide by D.93891. The 1982 ZIP budget was \$29 million. PG&E's RCS program, as mandated by the National Energy Conservation Policy Act was authorized by D.92653 dated January 28, 1981. Its authorized 1982 budget was \$12 million.

By Application (A.) 82-09-17 as amended, PG&E seeks authority to adjust its Conservation Financing Adjustment (CFA)¹ rates to increase revenues by \$11.34 million to fund its 1983 ZIP.² The adjustment requested would result in a decrease of approximately 0.06% (\$2.42 million) in electric revenues and an increase in gas revenues of about 0.37% (\$13.76 million). The amended application reduces the total 1983 CFA revenue requirement from \$70.15 million (\$10.63 million for the electric department and \$59.52 million for the gas department) to \$39.71 million (\$5.16 million for the electric department and \$34.55 million for the gas department). The final adjustment requested would result in a decrease in electric rates to \$0.00010 per kilowatt-hour (kWh) (down from \$0.00020 per kWh) and an increase in gas rates to \$0.00482 per therm (up from \$0.00290 per therm).

¹ The CFA account was established by D.92653 dated January 28, 1981 and D.93891 dated December 30, 1981. It provides for periodic adjustment of CFA rates designed to recover the annual costs of approved conservation programs.

² In its original application PG&E requested \$38.73 million for the 12-month period January 1, 1983 to December 3, 1983.

By A.82-09-18, PG&E seeks an additional \$4.07 million in revenue by increasing current RCS electric rates to \$.00006 per kWh (up from \$.00004 per kWh) and gas rates to \$.00171 per therm (up from \$.00130 per therm). Total 1983 expenditures for the RCS program would be \$15.56 million consisting of \$12.29 for gas and \$3.26 million for electric.

Hearings were held on a consolidated record December 13-16, 1982 in San Francisco. Parties participating included PG&E, Contractor Advisory Board--PG&E North Bay Division, California Coalition of Welfare Rights Organization (Coalition), Guiton's Pool and Store Center (Guiton), California/Nevada Community Action Association (Cal/Neva), Insulation Contractors Association (ICA), Southern California Gas Company (SoCal), Stanford University, City of Palo Alto (Palo Alto), Southwest Gas Corporation (Southwest), CP National Corporation (CPN), Western Mobilehome Association, and the Commission staff. The consolidated applications were submitted on December 16, 1982 subject to filing of concurrent briefs due January 7, 1983. .

PG&E presented testimony of five witnesses, and the staff presented one witness. Also testifying were witnesses from FAFCO Solar Energy Sales, Community Network for Appropriate Technologies (CNAT), CPN, Southwest, ICA, and Cal/Neva.

Statements were made by Mr. Sherrer of Celotex Corp., Kevin Aslanian of Coalition, Mark Guiton of Guiton's, Michael Arendes of the Contractor Advisory Board-PG&E North Bay Division, and Morris Pinsky a private citizen. Except for Pinsky each statement made was in favor of ZIP and RCS with interest generally limited to specific provisions of the programs. Briefs were filed by PG&E, staff, ICA, South Bay Chapter of ICA (South Bay) Cal/Neva, SoCal, and Guiton.

III. Positions of Parties

PG&E

These consolidated applications are for authority to continue the ZIP and RCS programs in 1983. PG&E proposed no major changes in ZIP or RCS for 1983, other than the incorporation of a direct weatherization program. PG&E's 1983 ZIP goals are to weatherize approximately 180,000³ dwelling units while attempting to stimulate and meet a larger demand for ZIP services. The 180,000 units include 26,400 units to be weatherized through direct weatherization. PG&E plans to continue 1982 advertising and promotional activities, with outreach activities focusing on obtaining participation by renter, senior citizen, non-English speaking and low income customers.

PG&E's witnesses stated that ZIP depends on the RCS audit program with ZIP designed to take advantage of the conservation opportunities created. Overall program costs are minimized by coordinating the two programs.

Witness Heim stated that PG&E has developed a ZIP marketing and promotional package to promote the program. It includes materials for PG&E employees, the media, and community groups. Primary emphasis is placed on maximizing participation by community leaders and organizations representing low income, non-English speaking, senior citizen, renter, and landlord customers.

With respect to outreach activities, the application states that PG&E's report on the low income component of ZIP was filed on June 11, 1982. The report reviewed the existing low income component; analyzed barriers to participation and examined alternatives to increase the availability of ZIP to these customers, concluding that direct weatherization should be substituted for marketing activities.

³ In its original application PG&E proposed a goal of 350,000 dwelling units to be weatherized in 1983.

"Direct weatherization" consists of free installation of conservation measures in homes of low income customers. This element has the potential for greatly increasing low income single family homeowner participation in ZIP. It overcomes the major obstacles preventing low income single family homeowners from participating in ZIP. To implement the direct weatherization component, PG&E proposes to negotiate with community based organizations (CBOs), local governments, and insulation contractors to install the Big 6⁴ measures in single family homes owned by customers who meet the Commission's definition of low income.

CBOs and local governments would be able to submit bids to perform direct weatherization services according to their abilities. Contracts would be awarded based upon cost per dwelling unit to CBOs with demonstrated ability to perform services provided and other factors. Insulation contractors who are RCS-listed could submit bids for the installation of all Big 6 measures or for installation of insulation and one or more of the other five of the Big 6. ✓

Other target groups in the ZIP outreach program include senior citizens, minorities, non-English speaking families, renters, and landlord groups. Although their non-low income members are not eligible for direct weatherization, these groups are to be contacted, informed of the advantages of ZIP loans, and encouraged to participate.

⁴ The Big 6 conservation measures are ceiling insulation, caulking, weatherstripping, duct wrap, low flow showerheads, and water heater blankets.

With this adjustment, PG&E stipulated with the staff that the rate adjustment for funding the 1983 RCS program should be \$0.00006/kWh for electricity and \$0.00166/therm for gas rather than the \$0.00006/kWh and \$0.000171/therm requested.

Finally, the staff analyses accepted PG&E's 1983 goal of 102,400 RCS audits (100,000 single family Class A and 2,400 multiple unit dwelling (MUD)) with the cost per audit of \$98 for Class A and \$1.177 for MUD. ✓

ICA

ICA supported continued funding of ZIP (A.82-09-17) but took exception to the staff recommendation that the Commission establish pricing guidelines for the entire program. ICA argued that staff guidelines were improperly based on responses from an undefinable group of insulation contractors. It asserted that price guidelines set floor prices which ultimately become the going price. It also argued that price guidelines could raise antitrust questions by taking PG&E out of its traditional role of supplying energy. ICA stated that price guidelines would diminish competition in the insulation contractor marketplace, reduce contractor participation and frustrate the Commission's conservation goals. ICA also stated that staff desires to establish levels of financing are really an attempt to control prices in a marketplace not under the Commission's jurisdiction, nor its responsibility.

Finally, ICA objected to PG&E monitoring bid prices and requiring that the customer obtain an additional bid when the first is deemed excessive in light of the range of bids for work known to PG&E at the time.

South Bay

South Bay also objected to staff recommended financing limits and the requirement that a customer be required to obtain more than one bid. It too argued that proposed ceilings would have severe anticompetitive effects, would cause contractors to cease participating or reduce participation in the program, and that there are no overriding considerations to justify the anticompetitive

effects. If any guidelines are imposed, South Bay suggested that the order specify that the ceilings are for financing only and would not disallow contracts at higher prices if the customer is willing to pay the difference.

With respect to direct weatherization, South Bay stated that the definition of low income should not be increased to 150% of the HHS guidelines. It argues that raising the income definition could have an anticompetitive effect, that no showing was made that an overriding public need existed for this redefinition, and that there is no evidence that Commission conservation goals are not being met.

Finally, South Bay stated that PG&E's 1983 advertising budget should not be cut as proposed by the staff. It stated that the broad educational advertising done by PG&E to accomplish the Commission conservation goals cannot be handled by individual contractors.

Cal/Neva

Cal/Neva is the association of the Executive Directors and Board Chairpersons of 45 Community Action Agencies throughout California and Nevada. Its interest in the proceeding centers on the cost of weatherization of low-income homes, the income eligibility guideline, and the target number of homes to be weatherized in 1983.

Cal/Neva states it has experience with both San Diego Gas & Electric and SoCal low-income weatherization programs. Based on this experience, Cal/Neva developed cost models estimating the cost per unit of weatherizing low income single family homes in PG&E's service territory. It estimates that, out of 30,000 homes weatherized, 40% could be weatherized by CBOs performing all the tasks associated with the program, including outreach, verification, and installation of all Big 6 measures. Another 40% of the homes could be weatherized by CBOs doing all but installing ceiling insulation, which would be subcontracted to a private insulation contractor. The remaining 20% are estimated to be in rural areas, with higher attendant costs of weatherization. Cal/Neva assumed a 10% performance fee for agencies which reach contracted goals and have less than a 10% inspection failure rate.

The calculation for its estimate is as follows:

<u>Model</u>	<u>Total Units</u>	<u>Per Unit Cost</u>	<u>Total</u>
CBOs do all work	12,000 (40%)	\$487	\$ 5,844,000
CBOs sub attic to			
Private Contractor	12,000 (40%)	597	7,164,000
Rural	6,000 (20%)	599	<u>3,594,000</u>
			\$16,602,000
Home Repair (\$115 per unit X 30,000)			<u>3,450,000</u>
			\$20,052,000
Average cost per unit (not including performance fee) = \$668			
Projecting 60% of agencies qualify for performance fee, adds average of \$40 per unit \$ 40			
Cost of project development, administration, monitoring adds average of \$38 per unit \$ 38			
Average Cost Per Unit <u>\$746</u>			

With respect to the use of 150% of the Office of Management & Budget (OMB) poverty guideline, Cal/Neva states that under Title 26 of the Federal Omnibus Reconciliation Act of 1981, the Low Income Home Energy Assistance Act of 1981 provides the authorization for home energy grants for the federal fiscal years 1982, 1983, and 1984. The Act designates the HHS as the agency administering the Low Income Home Energy Assistance Program. This allows the states to make payments to households with incomes which do not exceed 150% of the poverty level. Poverty level is defined by guidelines prescribed annually by OMB.

Using PG&E's request for \$19,219,200 for direct weatherization and its \$746 per unit cost, Cal/Neva calculates 25,763 units could be weatherized. Using \$3,000,000 of 1982 program year funds in 1983, and again using a \$746 unit Cal/Neva states an additional 4,021 units could be weatherized.

Finally, it recommends defining eligibility as 150% of the OMB guideline, even though it may have the effect of enlarging the direct weatherization target market.

Guiton

Guiton proposed that the Commission adopt, on an experimental basis in PG&E's Shasta District, wood burning stoves as a measure for ZIP financing. Using the thermal value in burning a cord of wood and the assumption that a given amount of wood is burned, Guiton calculated savings in kilowatts (actually kilowatt-hours) of electricity. He states that the Tennessee Valley Authority has such a financing program and that in 1982 41,000 such loans were approved.

SoCal

SoCal did not support or oppose the applications but took exception to the cost comparisons made by the staff witness between PG&E's proposal and SoCal's Weatherization Financing and Credits Program (WFCP). SoCal states its WFCP program cannot be relied on for cost comparison to ZIP because:

1. SoCal's costs include CBO expenses.
2. The maximum WFCP credit of \$536 will be paid for weatherization only where all Big 6 measures can be and are installed in single-family residences.
3. SoCal's direct weatherization program includes multifamily units at a cost below \$536. Thus SoCal's average amount per installation will be less than \$536.

SoCal also stated that noncost comparisons to the ZIP program are meaningless because the programs are different. For example the WFCP program includes a rebate while ZIP does not and WFCP loans are 8% while ZIP loans are at 0%. Other differences include climate, size of market, gas and/or electric customer participants, and cost of capital.

CNAT

CNAT's interest was in the RCS program. Witness Keller testified that the Commission should not allow PG&E to (1) continue to monopolize RCS services to communities, (2) bypass those most in need of RCS, and (3) violate the intent of the California Energy Commission that utilities contract at the local level for RCS. She urged that every effort be made to use CBOs to perform RCS audits.

Keller compared PG&E's RCS activities in its North Bay Division to the potential target populations (low income, renters, elderly, and non-English speaking) and argued that only one percent of the target populations received RCS services annually. She argued that community groups and local governments could provide RCS services more effectively, referring in particular to efforts by the City of Santa Monica (in cooperation with SoCal and Southern California Edison Company), and a proposal submitted to PG&E by the County of Santa Cruz. Keller reported that Santa Cruz had proposed to provide RCS services and ZIP outreach activities for \$97 per household. She contrasted the Santa Cruz proposal with what she characterized as PG&E's "head hunting" offer to pay community groups \$137 for every target group household they could induce to ZIP participation.

Keller urged the Commission to reaffirm earlier decisions encouraging PG&E to cooperate with CBOs and local governments. She also urged the Commission to authorize additional support and payments by PG&E to expand local energy conservation efforts.

Pinsky

Pinsky appeared on his own behalf as a member of the public. He objected to any rate increase for PG&E whatever the reason. He stated PG&E should not be granted any increase since it is a monopoly and has been granted substantial rate increases in the recent past.

IV. Discussion

The rate adjustments requested by these applications are to support PG&E's ZIP financing and RCS programs during 1983. The CFA was authorized by D.92653 dated January 28, 1981 and D.93891 dated December 30, 1981. The RCS program was authorized by D.93891 and modified by D.82-03-048 dated March 2, 1982. With the adoption of these programs we recognized the importance of conservation in the residential sector through the ZIP and RCS programs. As we stated in D.93891:

"Our decision to authorize implementation of Phase I of ZIP in PG&E's San Joaquin Division underscored our commitment to utility-provided zero interest conservation financing as an imaginative and cost-effective means to achieve significant amounts of long-term energy savings in the residential sector."

The evidence in this proceeding is that PG&E's 1982 ZIP program has been cost-effective to program participants, the utility and society, and slightly noncost-effective to nonparticipating ratepayers. Its 1983 program should be similarly cost-effective. The small bill increases for ratepayers which result from ZIP are more than offset by the overall benefits derived.

1983 Weatherization Goals

Most critical of the issues in determining overall ZIP financing is the estimate of the number of units to be weatherized. PG&E stated that it revised its estimates downward from 350,000 units to 180,000, including direct weatherization, in order to present a conservative estimate of customer demand. The estimate is based on (1) a lower level of customer interest in the program in 1982 than anticipated; (2) the general economic downturn which has reduced customers' willingness to take advantage of even interest-free loans:

- (3) resistance by customers to the requirement for installation of all "Big 6" conservation measures in order to qualify for a loan; and
- (4) an inability of contractors to sign up as many loans as expected.

The staff notes that the Commission adopted PG&E's projected 1982 goal of 250,000 loans. With this application PG&E is seeking more money to achieve less.

The staff urges that we require 260,000 loans for 1983. It argues that program costs must be kept down to ensure that the program remains cost-effective and that PG&E's goals must be realistic and attainable within lean budgets if ratepayers are to receive a fair value for their investment.

We agree with the staff's assessment of the need for realistic and attainable goals if the program is to achieve the desired results and make the program a success. Based on past results it appears, however, that the staff's recommendation that PG&E be required to achieve a total of 260,000 ZIP loans may be unrealistic. ✓

We will accept PG&E's estimate of 180,000 as a realistic minimum number of units to be weatherized. We will expect PG&E to undertake all reasonable efforts to surpass this minimum total. Any number of units less than the 180,000 may have undesirable consequences on the overall ZIP program and future financing.

1983 RCS Program

This decision adopts the revised RCS program agreed on by PG&E and the Commission staff. This program includes 102,400 1983 RCS audits, 100,000 Class A audits of single-family dwellings and 2,400 MUD audits.

We will not at present require PG&E to provide Class B do-it-yourself audits to single-family dwellings. We take notice that the California Energy Commission (CEC), which is California's designated lead agency for RCS, has recently amended the RCS State Plan to replace the requirement that utilities provide Class B audits with a utility option to provide these audits.⁵ The CEC reserved the right to design a Class B audit which utilities might then be required to perform. We note also that the CEC staff report had recommended these changes, noting a lack of customer demand for existing Class B audits.

PG&E should continue to consider changes in RCS audits, including Class B audits, which may reduce further the cost of the RCS program. Should the CEC impose new requirements on the utilities, PG&E may file an advice letter with this Commission seeking authority to revise RCS, including any necessary revision in rates.

We will authorize 1983 RCS program costs of \$12,659,000. We will also authorize \$2,270,000 to eliminate the undercollection in RCS rates carried over from 1982. PG&E's total RCS revenue, including allowances for franchise fees and uncollectibles, is \$15.05 million.

Zip Credits and RCS Installations

Two proposals were presented in this proceeding, which would add to ZIP programs already included within the weatherization programs operated by SoCal and Edison in southern California. First, staff has proposed that PG&E be required to establish within ZIP the option for participating ratepayers to receive utility credits instead of a loan. Second, CNAT referred to the proposal by the City of Santa Monica to provide RCS services within its city limits, including installation of several inexpensive weatherization devices, and sought a similar program for PG&E. ✓

⁵ CEC, Residential Conservation Service, Amending the State Plan: Phase II, January 12, 1983.

While both of these proposals have merit, we decline to adopt them at this time. Instead, we expect our staff and PG&E to monitor the progress of the southern California rebate program. If this program is successful, we will consider initiation of a similar effort in PG&E's service territory. The appropriate proceeding for such consideration is the next annual review of ZIP. In addition, we expect PG&E to cooperate effectively with cities, community groups and others who can demonstrate that their organizations can deliver residential audits more cost effectively than PG&E.

Advertising

For administrative expenses PG&E asks for \$17,253,000 (\$36,472,000 if \$19,219,000 for direct weatherization is added). The only item questioned by the parties was the staff's challenge to the \$1,422,000 advertising budget. PG&E plans to build on its 1982 program with new and innovative marketing methods such as an employee incentive and telecommunication contact program. The staff recommendation to cut advertising is based solely on the 1982 program results. It fails to consider the many problems encountered in 1982 which caused the slow start. We believe that PG&E's plans should be given an opportunity to succeed. We will however expect the stated goals to be achieved with the understanding that expenditures will be given close scrutiny on review.

Revised Financing Guidelines

The most controversial staff recommendation was that the Commission refine further the limitations on authorized ZIP financing per unit. Since the inception of utility financing efforts, we have been aware that these programs could affect the price of weatherization measures. In our decisions authorizing PG&E's ZIP program, we have included bid monitoring and financing limitations. These provisions have evolved, as PG&E and the Commission have sought to develop effective, flexible mechanisms for assuring the cost-effectiveness of ZIP. In considering the present staff recommendations, it is useful to review briefly the history of financing and bidding limitations in ZIP.

In D.92653 (January 28, 1981) the Commission included bidding requirements and a financing limit in PG&E's Phase I demonstration of ZIP. At least two bids were to be required, with PG&E authorized to finance the lower of two bids, or one of the two lower of three bids. Participants were to be allowed to choose any eligible contractor, and to pay any additional costs above PG&E's financing limit. The decision also limited ZIP financing for the six RCS-requiring measures to the limit found cost-effective by an RCS audit. Finally, ZIP financing was restricted to no more than \$3,500 per residence unit.

D.92978 modified D.92653 to remove the multiple bidding requirement. Instead, PG&E was directed to monitor bid prices, and to call for an additional bid whenever the first bid or bids were considered excessive. Although the Commission found no evidence that ZIP had prompted untoward price increases, PG&E was ordered "to monitor bid prices carefully to see whether any further limiting conditions on ZIP financing need to be imposed." (D.92978 at mimeo p.4). The Commission also ordered in part:

"PG&E's ZIP loan application shall include a notice to the effect that, inasmuch as the applicant must repay the loan amount in full, he is advised to obtain more than one bid and that PG&E has the right to require an additional bid before approving the loan."

In D.93891 (December 30, 1981), the Commission authorized PG&E to expand ZIP system-wide. The Commission also ordered a number of modifications in ZIP's design. The \$3,500 financing limit was refined to include a \$1,000 limit on financing for the Big 6 measures, and a \$2,500 limit on the other ZIP measures. The Commission also required installation of all Big 6 measures as a condition for ZIP financing.

The history of ZIP, then, has included an ongoing effort by the Commission to design financing limitations and monitoring

mechanisms which will protect ZIP participants and the ratepayers as a whole from unreasonable pricing.

In this proceeding, staff recommended that the Commission adopt measure-by-measure limits on ZIP financing to be made available by PG&E. Witness Grove presented a table of what he characterized as "average" prices for the ZIP measures (Table 19-2 of Exhibit 6). These "averages" included a price of 38 cents per square foot (¢/ft^2) for ceiling insulation installed to an R-19 level. Grove made no specific recommendations as to reasonable financing limits, but illustrated his discussion by presenting price estimates for 80% of average cost, average cost, and 110% of average cost, as he defined average cost.

Grove was cross-examined extensively by PG&E and ICA, concerning the derivation and reliability of his so-called "average" prices. Based on the record before us, we cannot say that Grove's numbers are statistically valid averages. However, they do appear to be representative of prices charged in PG&E's service territory.

Taken as a whole, the record in this proceeding supports a conclusion that the average price of installed ceiling insulation in PG&E's service territory is 38¢/ft^2 . It also is apparent that the prices charged by different contractors in different locations vary considerably. Under some circumstances, prices considerably higher or lower than this average may be reasonable.

In the decisions cited above, the Commission has established financing guidelines in order to increase ZIP's cost-effectiveness to the ratepayers as a whole, and particularly to the so-called nonparticipating ratepayers. In D.92653 we found that ZIP was cost-effective under all four of the Commission's tests of cost-effectiveness, including the nonparticipant test. In D.93891 (as modified by D.82-03-048, dated March 2, 1982) we questioned the continuing cost-effectiveness of three ZIP measures (floor insulation, storm or thermal windows, and storm or thermal doors) to non-participants, but reaffirmed the cost-effectiveness of the program as a whole under all four tests.

The record in this proceeding indicates that the ZIP program has become slightly noncost-effective to nonparticipants. This situation has resulted from changes in energy prices and in PG&E's rate structure, and so may not be a permanent change. We do not use this situation as a basis for reducing our commitment to ZIP, especially since over 100,000 ratepayers have already made use of ZIP, or PG&E's predecessor 8% ceiling insulation financing program. Continuing ZIP, including the direct weatherization element, will assure PG&E's remaining residential customers an equitable opportunity to participate as well. ZIP remains an effective program for reducing residential utility bills, and we expect PG&E to continue it vigorously through its planned sunset date of December 31, 1986.

In order to minimize any burdens on the residential class as a whole, we will revise PG&E's financing guidelines to limit further the amounts which PG&E can finance through ZIP. We will establish a financing limit of 48¢/ft² for installed R-19 cellulose ceiling insulation. For fiberglass, mineral wool, and other approved ceiling insulation materials, which are consistently

more expensive to purchase, we will allow PG&E financing up to 52¢/ft². The higher limit applies also to materials to insulate flat roofs and beam ceilings.

These financing ceilings are roughly 10¢/ft² above the average prices presented on this record. These ceilings thus allow contractors the opportunity to recover significant additional costs, whether overhead, salespersons' commissions or extraordinary expenses.

We emphasize that these prices are intended to be used only as limits to PG&E-provided ZIP financing. They are in no way intended to restrict the opportunity of contractors and customers to bargain for other prices. The ceilings are intended only to limit the size of the ZIP subsidy to be provided by PG&E and its ratepayers.

We will not attempt in this decision to adopt new specific financing limitations on the five remaining Big 6 measures, or to change the RCS-based limit on available financing of the so-called "second 6" items. Instead, we will continue to require PG&E to demand a second bid for installation of these measures when the first bid is excessive, as previously determined in D.92978.

Rate of Return

With respect to staff's recommendation for an adjustment downward of PG&E's rate of return on its investment in PCSC, we do not believe such an adjustment is appropriate. The basis for staff's recommendation was the small number of loans made in 1982 and contractor complaints for slow processing of payments for ZIP work performed. We agree that at the start of the program, performance in these two areas was indeed poor. However, the record shows that PG&E is making progress in eliminating these problems. For example, program processing for 1982 rose from an average of 550 applications per day in October to 950 applications in December.

We will, however, expect PG&E to pay contractors within 15 working days (21 calendar days) and carry out its inspections of completed work promptly within a similar time frame. Failure by PG&E to achieve this payment and inspection standard by May 15, 1983 will be reasonable cause to reconsider the staff recommended downward adjustment in rate of return. We will also require PG&E to file on June 1, 1983 a report documenting the lag time in paying contractors and inspecting completed ZIP installations. PG&E subsequently should include this same information in its periodic reporting on ZIP to the staff of the Energy Conservation Branch. Further, we believe that the proper proceeding for the assessment of any rate of return penalty is in a general rate case. Should cause appear, such an adjustment may be recommended in PG&E's pending general rate case.

Credit Standards

PG&E proposes that the language of D.93891 on ZIP credit standards be amended to be consistent with Rule 6 of its electric and gas tariffs. D.93891 requires that to qualify for a ZIP loan participants must have been a PG&E customer for 12 months with no shut-offs and no more than three 24-hour notices for nonpayment during that time. PG&E proposes the requirement read:

"Participants must have been PG&E customers for 12 months, within the past 24 months, with no shut offs and/or no more than three 48-hour notices for nonpayment during the most recent 12 months of that time."

For consistency we will accept PG&E's request.

ZIP Eligibility for Additional Measures

In past decisions, the Commission has expressed its willingness to consider adding weatherization measures to the 12 already eligible for ZIP financing. That period is now ended. In the interests of equity, however, we will permit manufacturers of new models of presently eligible measures to seek their inclusion in ZIP.

Accordingly, we must reject Guiton's proposal to approve ZIP financing for wood stoves. We make no comments regarding

the potential benefits of his products, but decline to include them within this particular program.

Direct Weatherization

One issue of concern to many participants was the definition of low income used to determine eligibility for PG&E's direct weatherization program. Cal/Neva recommends that 150% of the OMB poverty level be used as the definition for eligibility. Both the staff and PG&E support this recommendation and it will be adopted.

For its outreach target group, PG&E seeks to revise the definition of elderly to those over 60 years of age to conform to Older Californians Act. Staff agrees with this proposal but suggests that because this revision would enlarge the elderly target group, that the definition of elderly should be those persons over age 60 with income at or below 200% of the HHS guidelines. The staff's position is well-taken and will be adopted. ✓

Findings of Fact

1. Significant energy savings can be achieved through ZIP and RCS which can reduce the need for costly new energy supplies and production facilities.

2. PG&E's 1983 ZIP and RCS programs are cost-effective to program participants, the utility, and society.

3. The net societal benefits of ZIP and RCS justify extraordinary efforts to achieve conservation by the utility and its ratepayers.

4. Although the 1983 ZIP and RCS programs are slightly non-cost-effective to nonparticipating ratepayers, estimated rate impacts on such nonparticipants are minimal.

5. It is appropriate for PG&E to continue to offer its ZIP as authorized by D.92653 and D.93891, as modified or supplemented by D.92978, D.93497, D.82-03-048, and D.82-11-019, without substantial change in 1983 in order to provide program stability, minimize customer confusion, aid in program marketing, increase overall participation levels, and avoid unnecessary administrative costs.

6. PG&E has taken appropriate steps to stimulate high levels of customer participation in ZIP, and its 1983 marketing and advertising plans for the program, including the proposed telecommunication contact and employee incentive plans, are reasonable.

7. PG&E's payments to contractors under the ZIP program have in many cases been delayed substantially beyond the 15 workdays limit of the established standard.

8. PG&E's inspections under the ZIP program have in many cases been delayed substantially beyond the established standard of 15 workdays for payment of contractors.

9. PG&E has made progress toward eliminating delays and problems in processing ZIP loans and making payments to participating contractors. Plans and budget for improved loan processing and payments, including use of an on-line computer system by mid-1983, are reasonable.

10. The ZIP program measures specified in D.92653 and D.93891 are appropriate and should continue to be financed.

11. It is not appropriate to extend ZIP eligibility to any additional conservation measures, although new models of existing measures may be considered. ✓

12. It is not appropriate or necessary at this time to require PG&E to offer a weatherization credits or subsidy program in lieu of or in addition to the current ZIP program. A credits program should be proposed in the next annual review of ZIP.

13. For ratemaking purposes PG&E's estimate of 180,000 dwelling units to be weatherized in 1983 is reasonable. PG&E should use its best efforts to stimulate and satisfy a larger demand for ZIP services in 1983.

14. PG&E should continue to make special outreach efforts to assure an adequate opportunity to participate in ZIP for target customers: the elderly; the non-English speaking; those with low incomes; renters; and owners of rental property.

15. It is reasonable to define low income customers for ZIP, including direct weatherization, as those with incomes which do not exceed 150% of the poverty guidelines specified by OMB as adopted by HHS, without regard to whether such customers are "categorically eligible" for other programs.

16. It is reasonable to define target elderly customers as those who are 60 years old or older with income at or below 200% of the HHS guidelines.

17. PG&E's direct weatherization component of ZIP is cost-effective and will permit conservation measures to be provided and installed in the dwellings of low income homeowners at no cost to participants.

18. It is reasonable for PG&E to provide direct weatherization services through contracts with community-based organizations, local government, and insulation contractors, and to use the services of a qualified outside agency to help coordinate and manage this activity.

19. PG&E's budget and rate treatment for its 1983 direct weatherization component of ZIP are reasonable and appropriate, and will minimize costs to ratepayers.

20. PG&E's 1983 direct weatherization goal of 26,400 homes is reasonable. PG&E should use its best efforts to minimize the cost per home weatherized.

21. It is appropriate for PG&E to inspect the direct weatherization installations performed under contract by community-based organizations, local governments, and insulation contractors.

22. It is reasonable to limit the magnitude of the ZIP subsidy by limiting PG&E's financing of ceiling insulation costs. PG&E should be allowed to finance no more than $48\text{¢}/\text{ft}^2$ for installed R-19 cellulose insulation, and $52\text{¢}/\text{ft}^2$ for all other R-19 ceiling insulation installed in units with attics, beam

ceilings, or flat roofs. These limits are for financing purposes only, and should not exclude higher prices agreed to by the customer, where the customer pays directly any amount above the financing limit.

23. In lieu of the reporting requirement specified in D.93891, it is appropriate for PG&E to submit monthly reports to the Commission on RCS and ZIP progress, including the status of all program expenses, and serve copies on all parties.

24. For reporting target group participation in ZIP, the format of PG&E's monthly report in each target group category is reasonable, so long as results are not aggregated to show overall results in a way which count any participant more than once; i.e., a low income elderly renter participant would be counted in each of those three categories, but would be counted only once for aggregate purposes.

25. It is appropriate for ZIP credit standards to be consistent with established PG&E tariffs, so that a participant who receives a loan must have been a PG&E customer of record for 12 months within the past 24 months, with no shutoffs and/or no more than three 48-hour notices for nonpayment during the most recent 12 months of that time.

26. To avoid overcollections or undercollections, it is reasonable for CFA debt service rates to be set under PG&E's quarterly advice letter filings as authorized in D.93497.

27. For future project financings for ZIP, PG&E should use its best efforts to achieve as high a debt-to-equity ratio as possible for PCSC.

28. It is reasonable for PG&E to finance any outstanding 8% loans not converted to zero interest through PCSC, and to recover all administrative and debt service costs associated with those 8% loans through CFA rates.

29. It is reasonable for the CFA balancing accounts to remain on the books of PG&E, and for an amount equal to the CFA revenues received each month from customers, less franchise fees and uncollectables, to be paid to PCSC in the following month.

30. It is reasonable and appropriate for PG&E to receive a rate of return on its equity investment in PCSC equal to PG&E's last authorized overall rate of return on rate base.

31. Because it offers equivalent conservation programs to its ratepayers, it is reasonable to exclude CPN from paying CFA and RCS rates as a gas resale customer; similarly, because it will begin offering an RCS program under D.82-11-061, it is reasonable to exclude Southwest Gas Company from paying RCS rates as a gas resale customer.

32. PG&E's estimate of 102,400 RCS audits in 1983, consisting of 100,000 Class A audits and 2,400 MUD audits, is reasonable.

33. PG&E's decision to exclude Class B audits from its 1983 RCS program is reasonable at this time, but should be subject to review if the CEC revises its RCS State Plan.

34. PG&E's 1983 RCS budget, staffing, program design, and rates are reasonable and appropriate.

35. It is appropriate and PG&E is encouraged to contract with outside organizations to provide RCS services.

Conclusions of Law

1. PG&E's ZIP and RCS programs are cost-effective overall and should be continued as authorized by D.92653 and D.93891, and modified in the order below.

2. PG&E has made progress in stimulating customer participation in ZIP and improvements in processing loans and payments.

3. \$39,710,000 should be authorized as a reasonable level of expenditures for PG&E's 1983 ZIP consisting of \$5,160,000 for electric and \$34,550,000 for gas.

4. \$15,050,000 should be authorized as a reasonable level of expenditures for PG&E's 1983 RCS program consisting of \$11,880,000 for gas and \$3,170,000 for electric.

5. Changes in the CFA expense rate balancing account for all classes of service, except as noted in this proceeding from \$0.00010 per kWh to \$0.00007 per kWh and from \$0.00203 per therm to \$0.00349 per therm respectively are just and reasonable and should be applied on a uniform cents per kWh and per therm basis for rate schedules subject to the CFA rate.

6. Adjustments to the CFA debt service rates should be made using the quarterly advice letter procedure authorized in D.93497.

7. Increases in the RCS balancing account factors for all classes of service, except as noted in this decision, for \$0.00004 per kWh to \$0.00006 per kWh and from \$0.00130 per therm to \$0.00166 per therm respectively are just and reasonable and should be applied on a uniform cents per kWh and per therm basis for rate schedules subject to the RCS rate.

8. PG&E's 1983 ZIP direct weatherization program complies with federal and state requirements.

9. PG&E should be allowed to treat its direct weatherization expenses as necessary and ordinary business expenses as they are incurred.

10. Low income customers should be defined for purpose of ZIP, including direct weatherization, as those whose incomes do not exceed 150% of the poverty guidelines specified by the OMB.

11. Elderly customers for direct weatherization should be defined as those who are 60 years old or older with income at or below 200% of the HHS guidelines.

12. The evidence indicates that ZIP financing limits for installed R-19 attic insulation of 48¢/ft² for cellulose, and 52¢/ft² for other materials installed in units with attics, beam ceilings, or flat roofs, will impose reasonable limitations on the cost to ratepayers of the ZIP subsidy.

13. Credit standards for ZIP loans should be consistent with filed PG&E tariffs.

14. CFA debt service rates should continue to be set by quarterly advice letter filing as authorized by D.93497.

15. For ZIP financing PG&E should strive for a 90% to 10% debt-to-equity ratio for PCSC.

16. Outstanding conservation 8% loans should be converted to zero interest through PCSC.

17. There should be no penalty on rate of return on the investment in PCSC at this time.

18. PG&E should file periodic reports documenting the average time which elapses between receipt of certificates of performance and mailing of checks to contractors. The report should also include the average time elapsed between receipt of certificates of performance and inspection of completed work.

19. In order to avoid further delays in the implementation of PG&E's 1983 ZIP and RCS programs, this order should be made effective today.

O R D E R

IT IS ORDERED that:

1. Pacific Gas and Electric Company (PG&E) shall continue to offer its ZIP, including a direct weatherization component, as authorized in D.92653 and D.93891, and as modified by D.92978, D.93497, D.82-03-048, and D.82-11-019. Program details shall remain as outlined in the foregoing decisions except as follows:

- a. PG&E shall conduct inspections of installations performed by community-based organizations, local governments, and insulation contractors as part of its direct weatherization component of ZIP.
- b. PG&E is authorized to use the services of a qualified outside agency to help in the coordination and management of the direct weatherization component.
- c. Low income customers are defined as those with incomes which do not exceed 150% of the poverty guidelines specified by the federal OMB, as adopted by the HHS, without regard to whether such customers are "categorically eligible" for other

types of assistance; elderly customers with less than 200% of the federal guidelines shall be treated as low income for direct weatherization purposes.

- d. Elderly customers are defined as those who are 60 years old or older.
- e. PG&E shall use its best efforts to minimize costs per home weatherized in the direct weatherization component of ZIP, and to weatherize as many homes as possible with the budget authorized by this decision.
- f. PG&E shall make monthly reports to the Commission on RCS and ZIP progress, including the status of all program expenses, timing of contractor payments, and a breakdown of target group participation with copies served on all parties of record to this proceedings.
- g. A loan participant must have been a PG&E customer of record for 12 months, within the past 24 months, with no shutoffs and/or no more than three 48-hour notices for nonpayment during the most recent 12 months of that time.
- h. PG&E shall revise its financing limits for installed R-19 ceiling insulation, to limit financing to 48 cents per square foot for cellulose insulation, and 52 cents per square foot for other insulation materials installed in units with attics, beam ceilings, or flat roofs.

2. PG&E shall use its best efforts to weatherize more than 180,000 dwelling units through ZIP in 1983.

3. Adjustments to the CFA debt service rate shall be made under the quarterly advice letter filing procedure authorized in D.93497 and not as part of annual ZIP cases. However, pending Commission action on the first such advice letter, filed on January 7, 1983, the debt service portion of the current CFA rate shall continue in effect and be applicable to all classes of services, except as noted in this proceeding or in PG&E's applications.

4. PG&E is authorized to change CFA expense rate balancing account factors for all classes of service, to \$0.00007 per kWh and \$0.00349 per therm, respectively, on a uniform-cents-per-kWh and cents per therm basis.

5. PG&E is authorized to offer its 1983 RCS program as proposed.

6. PG&E is authorized to increase the RCS balancing account factors for all classes of service, except as noted in this proceeding or in PG&E's application, to \$0.00006 per kWh and to \$0.00166 per therm, respectively, on a uniform cents-per-kWh and cents-per-therm basis.

7. CPN, as a gas resale customer, is not required to contribute to CFA or RCS rates, and Southwest, as a gas resale customer, is not required to contribute to RCS rates.

8. PG&E shall use its best efforts to achieve as high a debt-to-equity ratio as possible for PCSC in any future project financings for ZIP.

9. PG&E is authorized to finance any outstanding 8% loans which are not converted to zero interest through PCSC, and to recover all administrative and debt service costs associated with those 8% loans through CFA rates.

10. PG&E is authorized to carry the CFA balancing accounts on its own books, and to pay an amount equal to the CFA revenues received from customers each month, less franchise fees and uncollectables, to PCSC the following month.

11. PG&E is authorized to earn a rate of return on its equity investment in PCSC equal to PG&E's last authorized overall rate of return on rate base.

12. PG&E shall file a report in this proceeding with the Energy Conservation Branch on or before June 1, 1983, documenting the average elapsed time between receipt of certificates of performance and mailing of checks to contractors for each of the finance centers or divisions processing ZIP loans. This report shall also include the average elapsed time between the receipt of certificates of performance and inspections of completed work for each of the divisions. PG&E shall include this same information in subsequent periodic reports provided on ZIP to the staff of the Energy Conservation Branch.

13. The adjustments to CFA and RCS balancing account factors authorized today shall take effect at the time of PG&E's next Energy Cost Adjustment Clause and Gas Cost Adjustment Clause rate adjustment.

This order is effective today.

Dated APR 6 1983, at San Francisco, California.

LEONARD M. GRIMES, JR.
President

VICTOR CALVO
PRISCILLA C. CREW
DONALD VIAL
Commissioners

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

Joseph E. Bodovitz
Joseph E. Bodovitz, Executive Director

"Direct weatherization" consists of free installation of conservation measures in homes of low income customers. This element has the potential for greatly increasing low income single family homeowner participation in ZIP. It overcomes the major obstacles preventing low income single family homeowners from participating in ZIP. To implement the direct weatherization component, PG&E proposes to negotiate with community based organizations (CBOs), local governments, and insulation contractors to install the Big 6⁴ measures in single family homes owned by customers who meet the Commission's definition of low income.

CBOs and local governments would be able to submit bids to perform direct weatherization services according to their abilities. Contracts would be awarded based upon cost per dwelling unit to CBOs with demonstrated ability to perform services provided and other factors. Insulation contractors who are RCS-listed could submit bids for the installation of all Big 6 measures or by installation of insulation and one or more of the other five of the Big 6.

Other target groups in the ZIP outreach program include senior citizens, minorities, non-English speaking families, renters, and landlord groups. Although their non-low income members are not eligible for direct weatherization, these groups are to be contacted, informed of the advantages of ZIP loans, and encouraged to participate.

⁴ The Big 6 conservation measures are ceiling insulation, caulking, weatherstripping, duct wrap, low flow showerheads, and water heater blankets.

Proposed direct weatherization cost estimates for 1983 are:

1983 Estimated Direct Weatherization Costs*

<u>Material Costs</u>	<u>Unit Cost</u>	<u>Units Per House</u>	<u>Total Cost Per House</u>
Ceiling Insulation	16c/sq.ft.	1,000 sq.ft.	\$160
Water Heater Blanket	\$10	1	10
Lowflow Showerhead	6	1	6
Duct Wrap**	-	-	-
Caulking	3	1	3
Weatherstripping	21	1	21
Minor Home Repair	65	1	65
Total			<u>\$265</u>

Installation Costs

Ceiling Insulation	20c/sq.ft.	1,000 sq.ft.	\$200
Big 6 installation	\$74***	set of 5 items	74
Total			<u>\$274</u>

CBO Administrative Expenses

Labor	\$42,804	
Equipment	5,622	
Transportation	6,814	
Overhead costs	<u>35,706</u>	
Total	<u>\$90,946</u>	480 units = \$189/unit

Recap of Costs

Total Cost Per House****

Material	\$265
Installation costs	274
CBO administrative cost	189
Total Cost	<u>\$728</u>

Total 1983 Direct Weatherization Costs: \$728/home
\$19,219,200 for 26,400 houses

*For illustrative purposes, these costs assume that all direct weatherization services are provided by CBOs.

**Most homes smaller than 1,600 square feet do not have a duct system for heating.

*** (2 member ground crew) (\$2,400/mo/crew) (12 mo.) (1.23 fringe benefits) = \$35,424; \$35,424 divided by 480 units = \$74/unit.

****1982 estimates.

The requested authorization for 1983 ZIP is \$36,472,000. PG&E states this is based on 1981 and 1982 experience. Following is a breakdown of the 1983 estimated expenses:

1983 Administrative Costs for ZIP

<u>Budget Item</u>	<u>Cost</u>
Labor	\$ 6,328,000
Advertising	1,422,000
Literature	138,000
Program Expenses:	
Promotion	\$ 3,397,000
Support Activities	1,613,000
Manufacturer/Distribution/ Dealer Activities	78,000
Direct Weatherization*	19,219,000
Program Measurement and Evaluation	310,000
Data Processing Support	<u>1,369,000</u>
Subtotal, Program Expenses	25,986,000
Overheads**	<u>2,598,000</u>
Total Administrative Expenses	\$36,472,000

*Includes \$14,230,000 for materials and installation.

**Includes employee benefits and personal expenses.

PG&E estimates first year energy savings of 54.4 million kWh and 29.6 million therms from the 1983 installations. For rates, PG&E proposes to remove the present CFA rate from base rates and add the proposed CFA rate to base rates for both the Electric and Gas Departments. For the Electric Department, the CFA rate would continue to apply to all CPUC jurisdictional sales excluding sales to the Department of Water Resources and experimental Schedule A-20. For the Gas Department, the CFA rate would continue to apply to all sales excluding sales to Palo Alto and SoCal.

The present and proposed CFA rates are as follows:

<u>Electric Department</u>		
	<u>Rate \$/kWh</u>	<u>1983 Revenue \$M</u>
Present CFA Rate	0.00014	7,584
Proposed CFA Rate	0.00010	5,163*
Net Decrease in Base Rates	0.00004	2,421

<u>Gas Department</u>		
	<u>Rate \$/Therm</u>	<u>1983 Revenue \$M</u>
Present CFA Rate	0.00290	20,786
Proposed CFA Rate	0.00482	34,548*
Net Increase in Base Rates	0.00192	13,762

*Revenue Requirement

PG&E proposed to perform 102,400 RCS audits in 1983, consisting of 100,000 "Class A" audits of single-family dwellings, and 2,400 Multi-Unit Dwelling (MUD) audits. PG&E's original proposal also included 4,400 "Class B" do-it-yourself audits, but these were dropped during the proceeding.

After revisions, PG&E stipulated to staff's recommended 1983 revenue requirement of \$15.05 million. This includes \$12,659,000 in 1983 expenditures, \$2,270,000 in the undercollected account balance carried over from 1982, and roughly \$117,000 in allowances for franchise fees and uncollectibles. The budget for actual expenditures in 1983 is:

<u>Budget Item</u>	<u>Cost</u>
Labor	\$7,308,000
Literature	120,000
Advertising	350,000
Program Expenses:	
Support Activities	1,352,000
Manufacturer/Distribution/ Dealer Activities	55,000
Program Measurement and Evaluation	130,000
Data Processing Support	<u>396,000</u>
Subtotal, Program Expenses	1,933,000
Overheads*	<u>2,948,000</u>
Total RCS Budget	12,659,000

*Includes employee benefits and personal expenses.

PG&E projects first year energy savings from the RCS and MUD audits of 11.6 million kWh of electricity and 15.1 million therms of natural gas. These represent an increase from the 1982 first year savings of 8.5 million kWh and 7.1 million therms.

The present and proposed RCS balancing account factors, based on the \$15.05 million 1982 revenue requirement, are:

	<u>Electric Department</u>
	<u>Rate \$/kWh</u>
Present RCS Rate	.00004
Proposed RCS Rate	.00006
Net Increase in Base Rates	.00002
	<u>Gas Department</u>
	<u>Rate \$/Therm</u>
Present RCS Rate	.00130
Proposed RCS Rate	.00166
Net Increase in Base Rates	.00036

Staff

For A.82-09-17, the Commission staff states that since its inception ZIP has encountered problems which raise the question as to the amount that should be financed by ZIP. The staff stated that PG&E's revising target goals downward by one-half brings into question the basis for the original request for 1983 funding. It states that PG&E should (1) develop accurate data illustrating the cost of the program and actual meter reading savings that have resulted, (2) analyze program areas for improvement, and (3) be responsible for assuring participation by all segments of society, that costs do not escalate, that all ratepayers benefit, and that energy savings justify the cost.

Specific staff recommends that:

1. PG&E reestablish its 1983 goal at 260,000 ZIP loans rather than the revised 182,000 and that \$17,253,000 be the amount allowed for 1983 administration costs (260,000 x \$66.35 = \$17,253,000).
2. PG&E's advertising expense be reduced by 30% (from \$1,422,000 to \$995,000) because ZIP has been well-publicized during 1982 and can be effectively promoted with a much lesser amount than requested.
3. A monetary penalty be assessed for failure to supply the Commission and staff with the data necessary to properly monitor the program.
4. PG&E concentrate on the loan processing system to achieve the staff-recommended goal of 1,000 loans per day. This would include computerization of loan processing.
5. PG&E institute a 90-10% debt-to-equity ratio for program funding.
6. PG&E maintain separate budgets and accounting for the ZIP and RCS programs.

7. ZIP and RCS applications should contain information about the budget and activities of supplemental conservation programs authorized in PG&E's general rate case (D.92887).
8. ZIP and RCS applications continue to be heard separately until it can be shown that the programs are running smoothly.
9. A credits program to multiple and single family renters or a 50% subsidy to multifamily landlords be considered as an additional incentive for this target market to install weatherization measures.
10. PG&E develop statistics to define the groups and report levels of participation for low income, elderly, non-English speaking and renter target groups. A primary target group should be low income, specified as 150% of the United States Department of Health and Human Services (HHS) guidelines.
11. As authorized by D.82-11-019, \$600 per unit be used as a guideline for the direct weatherization program. Direct weatherization should be separated from the ZIP program so that each program can be evaluated separately. All costs shall be monitored for comparison with similar programs operated by other utilities.
12. PG&E be required to monitor meter read data for ZIP/RCS and direct weatherization participants in order that an accurate assessment be made.
13. PG&E energy saving measurement data submitted to the Commission be accompanied by workpapers to enable accurate calculation of energy savings.
14. The Commission consider adopting pricing guidelines for the installation of conservation measures.

15. Because of its failure to meet its 1982 ZIP goals, PG&E not be allowed to earn the requested rate of return on its investment in PCSC, the subsidiary established to finance ZIP.
16. To achieve market penetration PG&E be required to issue 260,000 ZIP loans in 1983 and produce 1,000 certificates of performance per day.
17. PG&E adhere to a schedule of 14 working days, (15 working days for divisions that individually process payments) after receipt of a certificate of performance for mailing of checks to contractors and that data processing be implemented to further speed contractor payments.
18. The ZIP program be continued with the possibility of instituting a rebate program July 1, 1983 if indications are that 1983 goals will not be attained.
19. A date for sunseting the ZIP program not be set until the 1983 results are evaluated and a determination made of the remaining market penetration.

For A.82-09-18, the staff took exception to two of the calculations of the undercollected balancing account balance. PG&E's RCS spread sheets showed an undercollected balance of \$306,729 at June 30, 1982 for the gas department. Workpapers submitted October 21, 1982 showed an undercollected balance of \$273,673 at June 30, 1982. Through December 1982 PG&E estimated RCS expenses to be \$6,782,000. In the table which apportioned these expenses, the amount apportioned was \$7,300,000. Taking these figures into consideration the estimated balancing account balance through December 10, 1982 would be \$2,270,637 rather than the \$2,773,536 contained in the application.

With this adjustment, PG&E stipulated with the staff that the rate adjustment for funding the 1983 RCS program should be \$0.00006/kWh for electricity and \$0.00166/therm for gas rather than the \$0.00006/kWh and \$0.000171/therm requested.

Finally, the staff analyses accepted PG&E's 1983 goal of 102,400 RCS audits (100,000 single family Class A and 2,400 multiple unit dwelling (MUD)) with the cost per audit for \$98 for Class A and \$1,177 for MUD.

ICA

ICA supported continued funding of ZIP (A.82-09-17) but took exception to the staff recommendation that the Commission establish pricing guidelines for the entire program. ICA argued that staff guidelines were improperly based on responses from an undefinable group of insulation contractors. It asserted that price guidelines set floor prices which ultimately become the going price. It also argued that price guidelines could raise antitrust questions by taking PG&E out of its traditional role of supplying energy. ICA stated that price guidelines would diminish competition in the insulation contractor marketplace, reduce contractor participation and frustrate the Commission's conservation goals. ICA also stated that staff desires to establish levels of financing are really an attempt to control prices in a marketplace not under the Commission's jurisdiction, nor its responsibility.

Finally, ICA objected to PG&E monitoring bid prices and requiring that the customer obtain an additional bid when the first is deemed excessive in light of the range of bids for work known to PG&E at the time.

South Bay

South Bay also objected to staff recommended financing limits and the requirement that a customer be required to obtain more than one bid. It too argued that proposed ceilings would have severe anticompetitive effects, would cause contractors to cease participating or reduce participation in the program, and that there are no overriding considerations to justify the anticompetitive

IV. Discussion

The rate adjustments requested by these applications are to support PG&E's ZIP financing and RCS programs during 1983. The CFA was authorized by D.92653 dated January 28, 1981 and D.93891 dated December 30, 1981. The RCS program was authorized by D.93891 and modified by D.82-03-048 dated March 2, 1982. With the adoption of these programs we recognized the importance of conservation in the residential sector through the ZIP and RCS programs. As we stated in D.93891:

"Our decision to authorize implementation of Phase I of ZIP in PG&E's San Joaquin Division underscored our commitment to utility-provided zero interest conservation financing as an imaginative and cost-effective means to achieve significant amounts of long-term energy savings in the residential sector."

The evidence in this proceeding is that PG&E's 1982 ZIP program has been cost-effective to program participants, the utility and society, and slightly noncost-effective to nonparticipating ratepayers. Its 1983 program should be similarly cost-effective. The small bill increases for ratepayers which result from ZIP are more than offset by the overall benefits derived. Since we conclude that the ZIP and RCS should continue through 1983, the issues to be resolved are the amounts necessary for PG&E to achieve its 1983 goals.

1983 Weatherization Goals

Most critical of the issues in determining overall ZIP financing is the estimate of the number of units to be weatherized. PG&E stated that it revised its estimates downward from 350,000 units to 180,000, including direct weatherization, in order to present a conservative estimate of customer demand. The estimate is based on (1) a lower level of customer interest in the program in 1982 than anticipated; (2) the general economic downturn which has reduced customers' willingness to take advantage of even interest-free loans;

- (3) resistance by customers to the requirement for installation of all "Big 6" conservation measures in order to qualify for a loan; and
- (4) an inability of contractors to sign up as many loans as expected.

The staff notes that the Commission adopted PG&E's projected 1982 goal of 250,000 loans. With this application PG&E is seeking more money to achieve less.

The staff urges that we require 260,000 loans for 1983. It argues that program costs must be kept down to ensure that the program remains cost-effective and that PG&E's goals must be realistic and attainable within lean budgets if ratepayers are to receive a fair value for their investment.

We agree with the staff's assessment of the need for realistic and attainable goals if the program is to achieve the desired results and make the program a success. Based on past results it appears, however, that the staff's recommendation that PG&E be required to achieve a total of 260,000 ZIP loans may be unrealistic.

We will accept PG&E's estimate of 180,000 as a realistic minimum number of units to be weatherized. We will expect PG&E to undertake all reasonable efforts to surpass this minimum total. Any number of units less than the 180,000 may have undesirable consequences on the overall ZIP program and future financing.

1983 RCS Program

This decision adopts the revised RCS program agreed on by PG&E and the Commission staff. This program includes 102,400 1983 RCS audits, 100,000 Class A audits of single-family dwellings and 2,400 MUD audits.

We will not at present require PG&E to provide Class B do-it-yourself audits to single-family dwellings. We take notice that the California Energy Commission (CEC), which is California's designated lead agency for RCS, has recently amended the RCS State Plan to replace the requirement that utilities provide Class B audits with a utility option to provide these audits.⁵ The CEC reserved the right to design a Class B audit which utilities might then be required to perform. We note also that the CEC staff report had recommended these changes, noting a lack of customer demand for existing Class B audits.

PG&E should continue to consider changes in RCS audits, including Class B audits, which may reduce further the cost of the RCS program. Should the CEC impose new requirements on the utilities, PG&E may file an advice letter with this Commission seeking authority to revise RCS, including any necessary revision in rates.

We will authorize 1983 RCS program costs of \$12,659,000. We will also authorize \$2,270,000 to eliminate the undercollection in RCS rates carried over from 1982. PG&E's total RCS revenue, including allowances for franchise fees and uncollectibles, is \$15.05 million.

Zip Credits and RCS Installations

Two proposals were presented in this proceeding, to add to ZIP programs included within the weatherization programs operated by SoCal and Edison in southern California. First, staff has proposed that PG&E be required to establish within ZIP the option for participating ratepayers to receive for utility credits instead of a loan. Second, CNAT referred to the proposal by the City of Santa Monica to provide RCS services within its city limits, including installation of several inexpensive weatherization devices, and sought a similar program for PG&E.

⁵ CEC, Residential Conservation Service, Amending the State Plan: Phase II, January 12, 1983.

While both of these proposals have merit, we decline to adopt them at this time. Instead, we expect our staff and PG&E to monitor the progress of the southern California ^{state} programs. If those ^{these} programs ^{are} successful, we will consider initiation of similar efforts in PG&E's service territory. The appropriate proceeding for such consideration is the next annual review of ZIP. ^{In a decision} ^{we expect PG&E to be compared with other utilities, community groups, and others who can demonstrate that their organizations can} Advertising ^{delivers}

For administrative expenses PG&E asks for \$17,253,000 (\$36,472,000 if \$19,219,000 for direct weatherization is added). ^{audits more} The only item questioned by the parties was the staff's challenge to the \$1,422,000 advertising budget. PG&E plans to build on its 1982 program with new and innovative marketing methods such as an employee incentive and telecommunication contact program. The staff recommendation to cut advertising is based solely on the 1982 program results. It fails to consider the many problems encountered in 1982 which caused the slow start. We believe that PG&E's plans should be given an opportunity to succeed. We will however expect the stated goals to be achieved with the understanding that expenditures will be given close scrutiny on review. ^{cost} ^{effectively} ^{than PG&E}

Revised Financing Guidelines

The most controversial staff recommendation was that the Commission refine further the limitations on authorized ZIP financing per unit. Since the inception of utility financing efforts, we have been aware that these programs could affect the price of weatherization measures. In our decisions authorizing PG&E's ZIP program, we have included bid monitoring and financing limitations. These provisions have evolved, as PG&E and the Commission have sought to develop effective, flexible mechanisms for assuring the cost-effectiveness of ZIP. In considering the present staff recommendations, it is useful to review briefly the history of financing and bidding limitations in ZIP.

In D.92653 (January 28, 1981) the Commission included bidding requirements and a financing limit in PG&E's Phase I demonstration of ZIP. At least two bids were to be required, with PG&E authorized to finance the lower of two bids, or one of the two lower of three bids. Participants were to be allowed to choose any eligible contractor, and to pay any additional costs above PG&E's financing limit. The decision also limited ZIP financing for the six RCS-requiring measures to the limit found cost-effective by an RCS audit. Finally, ZIP financing was restricted to no more than \$3,500 per residence unit.

D.92978 modified D.92653 to remove the multiple bidding requirement. Instead, PG&E was directed to monitor bid prices, and to call for an additional bid whenever the first bid or bids were considered excessive. Although the Commission found no evidence that ZIP had prompted untoward price increases, PG&E was ordered "to monitor bid prices carefully to see whether any further limiting conditions on ZIP financing need to be imposed." (D.92978 at mimeo p.4). The Commission also ordered in part:

PG&E's ZIP loan application shall include a notice to the effect that, inasmuch as the applicant must repay the loan amount in full, he is advised to obtain more than one bid and that PG&E has the right to require an additional bid before approving the loan."

In D.93891 (December 30, 1981), the Commission authorized PG&E to expand ZIP system-wide. The Commission also ordered a number of modifications in ZIP's design. The \$3,500 financing limit was refined to include a \$1,000 limit on financing for the Big 6 measures, and a \$2,500 limit on the other ZIP measures. The Commission also required installation of all Big 6 measures as a condition for ZIP financing.

The history of ZIP, then, has included an ongoing effort by the Commission to design financing limitations and monitoring

In the decisions cited above, the Commission has established financing guidelines in order to assure ZIP's cost-effectiveness to the ratepayers as a whole, and particularly to the so-called nonparticipating ratepayers. In D.92653 we found that ZIP was cost-effective under all four of the Commission's tests of cost-effectiveness, including the nonparticipant test. In D.93891 (as modified by D.82-03-048, dated March 2, 1982) we questioned the continuing cost-effectiveness of three ZIP measures (floor insulation, storm or thermal windows, and storm or thermal doors) to non-participants, but reaffirmed the cost-effectiveness of the program as a whole under all four tests.

The record in this proceeding indicates that the ZIP program has become slightly noncost-effective to nonparticipants. This situation has resulted from changes in energy prices and in PG&E's rate structure, and so may not be a permanent change. We do not use this situation as a basis for reducing our commitment to ZIP, especially since over 100,000 ratepayers have already made use of ZIP, or PG&E's predecessor 8% ceiling insulation financing program. Continuing ZIP, including the direct weatherization element, will assure PG&E's remaining residential customers an equitable opportunity to participate as well. ZIP remains an effective program for reducing residential utility bills, and we expect PG&E to continue it vigorously through its planned sunset date of December 31, 1986.

In order to minimize any burdens on the residential class as a whole, we will revise PG&E's financing guidelines to limit further the amounts which PG&E can finance through ZIP. We will establish a financing limit of 48¢/ft² for installed R-19 cellulose ceiling insulation. For fiberglass, mineral wool, and other approved ceiling insulation materials, which are consistently

more expensive to purchase, we will allow PG&E financing up to 52¢/ft². The higher limit applies also to materials to insulate flat roofs and beam ceilings.

These financing ceilings are roughly 10¢/ft² above the average prices presented on this record. These ceilings thus allow contractors the opportunity to recover significant additional costs, whether overhead, salespersons' commissions or extraordinary expenses.

We emphasize that these prices are intended to be used only as limits to PG&E-provided ZIP financing. They are in no way intended to restrict the opportunity of contractors and customers to bargain for other prices. The ceilings are intended only to limit the size of the ZIP subsidy to be provided by PG&E and its ratepayers.

We will not attempt in this decision to adopt new specific financing limitations on the five remaining Big 6 measures, or to change the RCS-based limit on available financing of the so-called "second 6" items. Instead, we will continue to require PG&E to demand a second bid for installation of these measures when the first bid is excessive, as previously determined in D.92978.

Rate of Return

With respect to staff's recommendation for an adjustment downward of PG&E's rate of return on its investment in PCSC, we do not believe such an adjustment is appropriate. The basis for staff's recommendation was the small number of loans made in 1982 and contractor complaints for slow processing of payments for ZIP work performed. We agree that at the start of the program, performance in these two areas was indeed poor. However, the record shows that PG&E is making progress in eliminating these problems. For example, program processing for 1982 rose from an average of 550 applications per day in October to 950 applications in December.

the potential benefits of his products, but decline to include them within this particular program.

Direct Weatherization

One issue of concern to many participants was the definition of low income used to determine eligibility for PG&E's direct weatherization program. Cal/Neva recommends that 150% of the OMB poverty level be used as the definition for eligibility. Both the staff and PG&E support this recommendation and it will be adopted.

For its outreach target group, PG&E seeks to revise the definition of elderly to those over 60 years of age to conform to Older Californians Act. Staff agrees with this proposal but suggests that because this revision would enlarge the elderly target group, that the definition of elderly should be those persons over age 60 with income at or below 200% of the HHS guidelines. The staff's position is well-taken and will be adopted.

Findings of Fact

1. Significant energy savings can be achieved through ZIP and RCS which can reduce the need for costly new energy supplies and production facilities.

2. PG&E's 1983 ZIP and RCS programs are cost-effective to program participants, the utility, and society.

3. The net societal benefits of ZIP and RCS justify extraordinary efforts to achieve conservation by the utility and its ratepayers.

4. Although the 1983 ZIP and RCS programs are slightly non-cost-effective to nonparticipating ratepayers, estimated rate impacts on such nonparticipants are minimal.

5. It is appropriate for PG&E to continue to offer its ZIP as authorized by D.92653 and D.92891, as modified or supplemented by D.92978, D.93497, D.82-03-048, and D.82-11-019, without substantial change in 1983 in order to provide program stability, minimize customer confusion, aid in program marketing, increase overall participation levels, and avoid unnecessary administrative costs.

6. PG&E has taken appropriate steps to stimulate high levels of customer participation in ZIP, and its 1983 marketing and advertising plans for the program, including the proposed telecommunication contact and employee incentive plans, are reasonable.

7. PG&E's payments to contractors under the ZIP program have in many cases been delayed substantially beyond the 15 workdays limit of the established standard.

8. PG&E's inspections under the ZIP program have in many cases been delayed substantially beyond the established standard of 15 workdays for payment of contractors.

9. PG&E has made progress toward eliminating delays and problems in processing ZIP loans and making payments to participating contractors. Plans and budget for improved loan processing and payments, including use of an on-line computer system by mid-1983, are reasonable.

10. The ZIP program measures specified in D.92653 and D.93891 are appropriate and should continue to be financed.

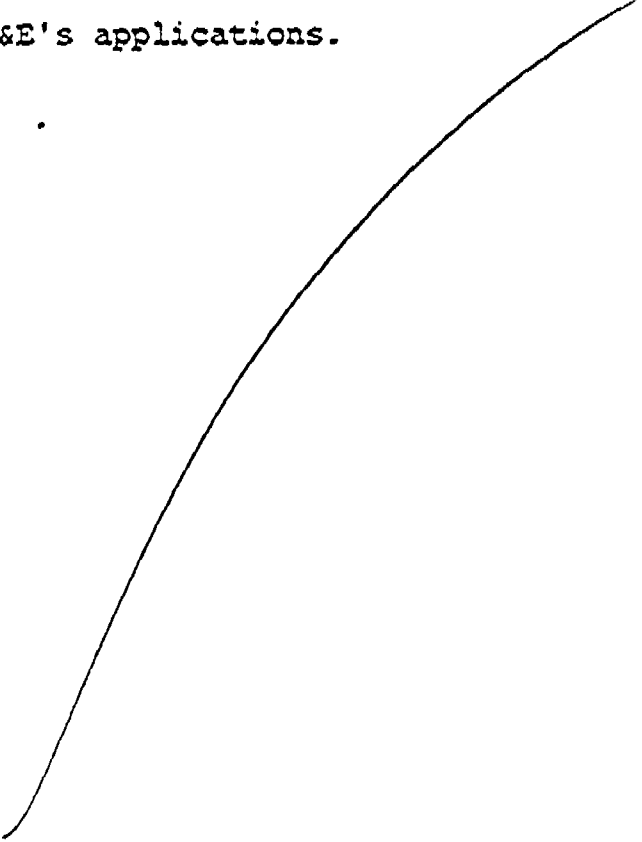
11. It is not appropriate to expend ZIP eligibility to any additional conservation measures, although new models of existing measures may be considered.

12. It is not appropriate or necessary at this time to require PG&E to offer a weatherization credits or subsidy program in lieu of or in addition to the current ZIP program. A credits program should be proposed in the next annual review of ZIP.

13. For ratemaking purposes PG&E's estimate of 180,000 dwelling units to be weatherized in 1983 is reasonable. PG&E should use its best efforts to stimulate and satisfy a larger demand for ZIP services in 1983.

14. PG&E should continue to make special outreach efforts to assure an adequate opportunity to participate in ZIP for target customers: the elderly; the non-English speaking; those with low incomes; renters; and owners of rental property.

3. Adjustments to the CFA debt service rate shall be made under the quarterly advice letter filing procedure authorized in D.93497 and not as part of annual ZIP cases. However, pending Commission action on the first such advice letter, filed on January 7, 1983, the debt service portion of the current CFA rate shall continue in effect and be applicable to all classes of services, except as noted in this proceeding or in PG&E's applications.



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11. PG&E is authorized to earn a rate of return on its equity investment in PCSC equal to PG&E's last authorized overall rate of return on rate base.

12. PG&E shall file a report in this proceeding on or before June 1, 1983, documenting the average elapsed time between receipt of certificates of performance and mailing of checks to contractors for each of the finance centers or divisions processing ZIP loans. This report shall also include the average elapsed time between the receipt of certificates of performance and inspections of completed work for each of the division. PG&E shall include this same information in subsequent periodic reports provided on ZIP to the staff of the Energy Conservation Branch.

This order is effective today.

Dated APR 6 1983, at San Francisco, California.

LEONARD M. GRIMES, JR.
President
VICTOR CALVO
PRISCILLA C. CREW
DONALD VIAL
Commissioners