Decision 93891 DEC 30 1989

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of PACIFIC GAS AND ELECTRIC COMPANY for authority among other things to implement a Conservation Financing Program and include a procedure for a Conservation Financing Adjustment of PGandE's electric and gas tariffs to provide funds for Commission approved conservation financing program.

Application 59537 (Filed March 25, 1980)

(Electric and Gas)

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.

Application 60700 (Filed July 1, 1981)

(Electric and Gas)

Application of PACIFIC GAS AND ELECTRIC COMPANY for authority to increase its Electric and Gas rates and charges effective January 1, 1982, in accordance with the Conservation Financing Adjustment (CFA) authorized in Application 59537, for operation of a zero-interest program (ZIP) of conservation financing.

Application 60701 (Filed July 1, 1981)

(Electric and Gas)

Application of PACIFIC GAS AND)
ELECTRIC COMPANY for authority to)
revise its gas rates and tariffs,)
effective April 1, 1981, under the)
Gas Adjustment Clause, and to modify its Gas Adjustment Clause.)

Application 60263 (Filed February 17, 1981)

(Gas)

(See Decision 92653 for appearances.)

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OPINION

I. Introduction

This proceeding, on the consolidated applications listed above, concerns Pacific Gas and Electric Company's (PG&E's) request for the Commission to authorize the systemwide expansion of its Zero Interest Program (ZIP) of conservation financing, and for authorization to increase electric and gas rates to carry out ZIP and PG&E's Residential Conservation Service (RCS) program for 1982. By Application (A.) 60700, PG&E is seeking \$17,620,000 in revenue requirements to carry out the RCS program in 1982, the revenue to be collected by increasing base rates by \$0.00189 per therm for gas and \$0.00006 per kilowatt-hour (kWh) for electric base rates. By A.60701, PG&E is requesting \$33,295,000 in revenue requirements for 1982 to carry out ZIP systemwide, the resulting increase in rates to be collected in its Conservation Financing Account (CFA) rates by increasing the currently authorized levels of \$0.00105 per therm for all gas sales and \$0.00002 per kWh for electric sales to \$0.00329 per therm and \$0.00016 per kWh, respectively.

After extensive hearings the Commission authorized PG&E on January 28, 1981 in Decision (D.) 92653 to launch a test of ZIP

in its San Joaquin Division. The test, known as Phase I, formally commenced in April 1981, although full-scale implementation was not achieved until September.

In D.92653, issued in A.59537, the Commission ordered further hearings to consider whether ZIP should be expanded throughout the rest of PG&E's service area, Phase II. These hearings were conducted from April to June of 1981.

On July 1, 1981 PG&E filed A.60701 for an increase in rates with which to carry out the systemwide expansion of ZIP, and A.60700 for an increase in rates to implement RCS in 1982. ZIP, among other things, was designed to amplify conservation results from activities PG&E is required to perform under the federally mandated RCS program. RCS requires major utilities such as PG&E to provide home energy audits and services to their customers. In California, it is governed by a State Plan created and administered by the California Energy Commission (CEC). Given the relationship between ZIP and RCS, the Commission consolidated these cases with A.59537.

At PG&E's request the Commission issued D.93497 on September 1, 1981 approving various details of the project financing of ZIP.

Hearings were held from September to November, 1981 on the consolidated rate applications. A total of 47 days of hearings relating to ZIP and RCS have been conducted, and the record includes over 100 exhibits and almost 5,600 pages of transcripts. The following parties actively participated: PG&E, CEC, the City of Palo Alto (Palo Alto), the Western Mobilehome Association (WMA), the Natural Resources Defense Council, Inc. (NRDC), the SolarCal Council and Local Government Commission (SolarCal, the Southern California Gas Company (SoCal), and the Commission staff. The consolidated applications were submitted on December 4, 1981, with the receipt of concurrent briefs, and we are now prepared to issue our decision.

II. Positions of the Parties

A. Pacific Gas and Electric Company

1. ZIP Should Be Expanded Systemwide

PG&E feels that ZIP will be a fundamental element of its total efforts to take advantage of conservation as an energy resource for its ratepayers. ZIP represents a sound investment which will achieve very significant energy savings over the lifetime of the installed measures. The evidence shows that by the year 2005, a systemwide ZIP will save an estimated 6.1 billion therms of gas and 14.5 billion kWhs of electricity.

Based on current projections of 1982 energy consumption, estimated ZIP energy savings would be enough to meet the natural gas requirements of all PG&E residential customers for 32.6 months and to meet their entire electric requirements for 9.7 months. Assuming for illustrative purposes that these savings accrued at an equal rate each year, they represent the yearly energy equivalent of almost 5 million barrels (MM Bbl.) of oil (4.07 MM Bbl. for gas savings and .967 MM Bbl. for electric), for a total energy savings of 120.8 MM Bbl. over the life of the installed measures.

a. ZIP Can Be Project Financed

Since the issuance of D.93497, which provided PG&E with a structural framework for the project financing of ZIP, PG&E has pursued negotiations with prospective lenders to arrange for the initial financing of Phase II. Although detailed negotiations and documentation remain to be completed, the framework for ZIP financing which that decision provided appears acceptable to lenders, and a conditional commitment letter containing the basic terms for the initial increments of financing already has been obtained from prospective lenders. Approval from PG&E's Board of Directors for systemwide expansion of ZIP on a project-financed basis also has been given.

In its decision in the current proceedings, the Commission should reaffirm its commitment to the project financing of ZIP. It should expressly incorporate into Phase II the structure and procedures for ZIP financing which it established in the second interim decision, and authorize the use of project letter filings (such as for approval of specific financings) and of advice letter filings (such as for notification of rate adjustments of the CFA debt service rate) complying with General Order 96-A to obtain Commission approval:

- (1) of financial arrangements between PG&E and Pacific Conservation Services Company (PCSC), PG&E's financing subsidiary:
- (2) of financial arrangements between PCSC and lenders; and
- (3) of quarterly rate adjustments associated with the CFA debt service rate (such as due to fluctuations in interest rates) as approved in D.93497.
- b. Results from Phase I Testing Show that ZIP Can Stimulate Satisfactory Levels of Customer Participation

Phase I efforts have served as the building blocks upon which Phase II can be erected. Phased implementation allowed PG&E to identify and eliminate problems which could limit the success of Phase II. Although Phase I developmental problems were not resolved until mid-September, subsequent results have been dramatic and positive. In a little over two months, more than 5,000 customers requested ZIP loans under the newly developed Phase II-type procedures. This achievement, together with the over 7,000 transitional ZIP loans processed under 8% procedures means a total of over 12,000 customers already are participating in Phase I. Furthermore, additional new ZIP loans will continue to be added until the \$10 million budget

authorized in D.92653 is exhausted. PG&E estimates that by the end of Phase I the total of new Phase II-type loans could reach 7,000.

Phase I results to date indicate that the program design itself is workable and that customers will enthusiastically respond to it. Phase I demonstrates that PG&E can promote and handle the kind of rapid influx of loan demand which by necessity must occur during systemwide expansion in order to reach the 1982 Phase II participation estimate of 250,000 loans. If in just one division PG&E can stimulate and process over 5,000 loans in a little over two months, it is not unreasonable to anticipate that in all 13 operating divisions it can stimulate and process up to 250,000 loans in the first year of systemwide operation.

c. ZIP Will Be Cost-Effective

PG&E's current marginal cost-based methodology for estimating cost-effectiveness of a conservation program, as applied to ZIP in these proceedings does not pretend to be an exact science, but it is sufficiently reliable to be used as the basis to authorize systemwide expansion of ZIP. Forecasting the values for the assumptions to be used in the methodology also may be an uncertain science, but PG&E has used its best estimates in the application of the methodology to the ZIP program.

The evidence in these proceedings shows that ZIP will be highly cost-effective from the societal, utility, and participant perspectives. As calculated utilizing the staff's system average cost methodology, the program is also cost-effective from the nonparticipant or ratepayer perspective. It is slightly noncost-effective, however, from the nonparticipant ratepayer perspective when estimated using PG&E's methodology.

Specifically, PG&E's analysis showed:

(1) From the societal perspective, estimated electric benefits exceed costs by a

factor of 2.5 to 1; estimated gas benefits exceed costs by a factor of 3 to 1.

- (2) From the utility perspective, estimated electric benefits exceed costs by a factor of 4.8 to 1; on the gas side, this ratio increases to 5.5 to 1.
- (3) From the participant perspective, estimated benefits on the electric side exceed costs by a factor of 4.5 to 1, while estimated gas benefits are 5.2 times costs.

Thus, based on the criteria set forth by the Commission in D.92653 and based on PG&E's best current estimates of energy savings and costs, PG&E's ZIP Phase II program is highly cost-effective on an overall basis. In addition, the evidence indicates that the vast majority of individual conservation measures included in ZIP are also anticipated to be cost-effective.

In weighing the costs and benefits of ZIP, it should be recognized that the actual effects on ratepayers will be very small. Rate impacts on a typical customer in 1982 due to the CFA will be 7 cents (d) a month for electric and 10d a month (summer) or 21d a month (winter) for gas. For RCS, rate impacts on a typical customer will be 3d per month for electric and 9d per month (summer) or 18d per month (winter). These figures are based on typical energy usage of 500 kWh and 45 therms (summer) and 95 therms (winter). The effects of ZIP on the bills of residential customers, because of their relatively low consumption levels, are anticipated to remain small throughout the life of the program. Renters or customers consuming within the lifeline block will experience an even smaller effect.

d. ZIP Will Not Be Anticompetitive

In response to Ordering Paragraph 1 of D.92978, dated April 22, 1981, PG&E presented the expert testimony of Dr. Jeffrey L. Skelton on the subject of the potential anticompetitive effects of ZIP on conventional lenders.

Dr. Skelton's warefuted testimony established the following points:

- (1) Because of very limited lending activity for conservation improvements by conventional lenders in the anticipated dollar range of individual ZIP loans, ZIP will not have adverse effects on home improvement lending or consumer lending in PG&E's service area, and will supplement rather than compete with lending opportunities for conventional lending institutions;
- (2) The current level of conservation lending by conventional institutions is low:
- (3) ZIP loans will be targeted at disadvantaged groups who may not ordinarily be addressed by conventional lenders;
- (4) Conventional lenders do not currently provide an equivalent of ZIP loans to landlords; and
- (5) Conventional lenders will have the opportunity to participate in ZIP through its project financing structure.

It should also be noted that despite far-reaching notice to lending institutions by the Commission, not one such institution made an appearance to oppose the utility financing proposal.

- 2. Systemwide Expansion of ZIP Should Include Certain Details
 - a. Initial Phase II Program Measures Should Be The Same as Phase I Measures

The Commission should authorize PG&E to begin Phase II by offering the same measures under the same terms as set forth in D.92653. Future changes in the list of ZIP measures to be financed are not only possible, but likely. PG&E will review actual experience with the program and recommend additions or deletions to the list of

ZIP measures in its annual rate applications, based on such considerations as achieved energy savings, quality of contractor, and do-it-yourself installation, and quality of measures as manufactured.

A minor exception to this general policy should be a Phase II program modification which will authorize and encourage mobilehome dwellers to participate in Phase II of ZIP. Mobilehome dwellers should be allowed ZIP financing up to a \$500 limit for rigid polystyrene foam board insulation suitable for mobilehome installation. Furthermore, special credit standards should apply to the mobilehome market. The recommended credit standards parallel those for regular ZIP participants, but take into account both the fact that mobilehomes do not have as long a life expectancy as fixed dwellings and that many mobilehome owners are submetered customers of PGSE without an individual billing record which can be reviewed to determine credit worthiness.

b. Initial Phase II ZIP Procedures Should Be the Same as Phase I Procedures, With Minor Exceptions

The Commission should authorize PG&E to go forward with Phase II of ZIP utilizing the same procedures it approved in D.92653. However, minor modifications to lien and credit requirements should be made to improve cost-effectiveness, control program costs, and minimize likely bad debt experience.

pG&E's original ZIP proposal recommended that liens be obtained to secure all ZIP loans in excess of \$1,500. The major banking institutions which are advising PG&E in arranging the project financing of ZIP analyzed the use of liens for ZIP loans of \$1,500 and up, and they noted numerous disadvantages to such a practice when contrasted with bad debt collection remedies available through alternative security. Increasing the dollar ceiling above which ZIP

loans must be secured by liens will provide for greater flexibility, increase likelihood of successful recovery in the event of nonpayment, and will avoid unnecessary administrative costs. For these reasons, PG&E urges the Commission to permit it to raise the ceiling to \$5,000, and to secure loans in amounts below that by promissory notes, which are quicker and less costly to process, more popular with potential customers, and which permit immediate response through court action in the event of a failure to pay a ZIP debt.

Another facet of the same problem revolves around who will qualify for ZIP loans. PG&E believes adequate safeguards against prospective bad debts can be achieved through rigorous application of the more liberal credit standards concerning the customer's payment history as a PG&E customer. Specifically, PG&E proposes to look at a customer's history for the preceding year as a PG&E customer. All residential customers of record will be eligible for ZIP loans unless they have had either (1) one or more "turnoffs," or (2) more than three 24-hour notices for nonpayment of their bills. The evidence shows this straightforward standard should result in a 25% improvement over the bad debt experience of the 8% ceiling insulation financing program.

c. PG&E's Proposals for Targeting and Outreach Efforts
For Special ZIP Markets Should Be Approved as
Reasonable and Appropriate

PG&E intends to market ZIP aggressively in order to achieve equitable participation by low-income customers, the elderly, minorities, and owners and occupants of rental housing. In response to Ordering Paragraph 10 of D.92653, PG&E filed testimony which outlined detailed marketing strategy for such special target groups of its customers. The plan articulated PG&E's specific objectives:

(1) To make the program equitably available to target groups.

- (2) To achieve participation in ZIP by members of target groups equal to or greater than their proportion of PG&E's total customer population.
- (3) To draw extensively upon the resources of community-based and other organizations which may have special abilities to extend ZIP benefits to target groups.
- (4) To integrate ZIP with federal assistance programs so that qualified persons get maximum benefits from each without duplication or waste.

PGGE has presented an ambitious but reasonable plan for reaching the target markets. It analyzes these markets statistically, identifies disincentives to be overcome, and outlines various marketing strategies and special outreach activities which can be employed to make ZIP benefits available to the target markets. Subsequently, in A.60701, PGGE further refined its design, proposing to devote \$4.5 million of a total \$13 million administrative budget for the 1982 ZIP program to outreach activities. PGGE proposes to dedicate up to this entire sum to contracts with community agencies or groups for direct, personalized marketing efforts among the target customer population. Such efforts, building upon the agencies' established credibility and intimate knowledge of the target markets, should stimulate the desired levels of participation.

d. PG&E's Proposed Schedule for Transition From Phase I to Phase II Is Reasonable and Should Be Authorized

Assuming the financing subsidiary is established and functioning so that sufficient funds are available to meet customer demand for ZIP loans, PG&E proposes:

(1) To expand the program within 45 days of receiving all necessary regulatory

approvals to its Bay Area divisions (East Bay, San Jose, San Francisco, and North Bay);

- (2) Within 90 days after completion of the first expansion, to its Coast Valleys, Stockton, and Sacramento divisions; and
- (3) Within 90 days of the second expansion, to the remaining divisions.

PG&E proposes to commence Phase II expansion in the Bay Area, noting that the majority of PG&E residential customers live in those four divisions, and that the utility wants to make ZIP available to as many customers as possible, as rapidly as possible.

- 3. PG&E's Recommended CFA Rates and Rate Design Proposals Should Be Adopted as Reasonable
 - a. Proposed CFA Rates Are Reasonable To Carry Out Phase II of ZIP in 1982

PGSE has presented its best estimates of revenue requirements to carry out the first year of a systemwide ZIP program structured in accordance with D.92653. Since PGSE seeks to maximize energy savings through conservation which will be accomplished by ZIP, it has not set arbitrary limits on program's size over its life. It is the penetration estimates for ZIP which drive the 1982 revenue requirements, not the other way around.

The only testimony which challenges the revenues PG&E seeks came from the staff. The staff did not, however, take issue with PG&E's program design, administrative plans, or personnel requirements, but staff recommended a \$4.9 million reduction to the proposed CFA rate increase entirely due to its differing estimate of measure penetration. However, the record reveals that the lower staff-estimated penetrations levels for floor insulation, clock thermostats, storm doors and windows, and intermittent ignition

devices (IIDs) are flawed by improper comparisons and assumptions. submits that its penetration estimates for ZIP measures are more accurate than those presented by the staff, and that no reduction to the CFA rate increase requested should be made on that basis.

PG&E maintains that there is no fat in A.60701. The \$33.3 million requested represents the minimum revenue requirement for 1982 if ZIP is to meet its ambitious targets. PG&E believes that any reduction to the CFA rate requested not only would be unjustified, but also could undermine the chances for Phase II success. Despite the existence of a balancing account, PG&E's current financial health will not permit it to expend money beyond the amount authorized in this proceeding.

b. Overall Rate Design Should Be Done in Conjunction With PG&E's General Rate Case, A.60153

To promote rate stability, PG&E testified that overall rate design for both the CFA and RCS rate increases should be accomplished in conjunction with the upcoming decision in PG&E's test year 1982 general rate case. Although PG&E has proposed rates on a uniform d/therm or d/kWh basis, it also has proposed that actual rates established by a decision in these proceedings be set in conjunction with the rate design principles established in the decision resulting from A.60153. This can be accomplished by authorizing recovery of revenue requirements in these proceedings through the actual rates established in the decision in A.60153.

In any event, the CFA rate is a balancing account factor to provide revenue to the CFA balancing account on a uniform \$\ell\$/therm or \$\ell\$/kWh basis. PG&E is not proposing to change this relationship. The CFA balancing account factors should be increased to 0.329 \$\ell\$/therm and 0.016 \$\ell\$/kWh.

c. All Customers Should Share in ZIP Costs

In considering A.60263 to modify PG&E's Gas Adjustment Clause, the Commission granted rehearing of D.93198 limited to the question whether resale customers of PG&E should pay for its conservation programs. Consideration of this issue was consolidated with the ongoing ZIP and RCS proceedings.

Two parties presented testimony on the rate design question. Palo Alto and SoCal argued that as resale customers of PG&E they should be exempt from CFA rates since they conduct their own conservation programs. If not exempted, they claim their retail customers will bear a double cost burden.

PG&E presented testimony explaining why it is reasonable for resale customers to pay CFA rates:

Conservation is equivalent to any conventional or new source of gas supply. Because each therm of gas a customer conserves is available for another customer's use, the need to acquire new supply from a traditional or new source is reduced. Therefore, conservation is just as valid a source of supply as would be a new gas contract, a new storage facility, or a new synthetic natural gas plant.

As demonstrated by the prior testimony the ZIP program will, over the course of the life of the installed weatherization measures, save PG&E money as a result of not having to purchase equivalent gas supplies. These savings will be reflected in the rates of all ratepayers, including resale customers. Similarly, the costs of the program as reflected in the CFA rates, should also be borne by all customers. It is inequitable for all to share the benefits without likewise sharing the costs.

PG&E submits that it is equitable and consistent with general Commission policy on rate design to apply the cost of PG&E's conservation programs such as ZIP to all customers, including resale customers.

Although CFA rate increases will be applied to all sales on the gas side, PG&E recommends that the Department of Water Resources (DWR) and Experimental Schedule A-20 should be exempted on the electric side. This proposed rate design would be consistent with Commission policy and would avoid masking the results of the time-of-use rate testing being conducted in connection with Experimental Schedule A-20.

- 4. 1982 RCS Program Is Reasonable and Should Be Funded
 - a. RCS and Its Procedures Are Fully Integrated With ZIP and Both Programs Are Needed to Achieve Conservation Goals

PG&E believes there is ample evidence in the record to demonstrate that PG&E's 1982 RCS program by itself represents a valid conservation investment for PG&E ratepayers. However, RCS and ZIP have been designed from the very beginning to be completely integrated with each other. ZIP depends upon RCS audit recommendations for financing half of its measures; it also builds upon RCS procedures throughout its program design. Given this symbiosis between the two programs, any inadequacy in RCS funding inevitably will be reflected in decreased achievement of ZIP goals.

PG&E therefore urges the Commission to recognize that the utility's ZIP and RCS applications represent a "package" and that it must approve the requested rate increases for both programs if 1982 conservation goals are to be achieved.

b. RCS Will Be Cost-Effective

PG&E provided credible evidence demonstrating that RCS is cost-effective. Based on preliminary results of market research,

program and determine that from a societal perspective, estimated benefits on the electric side will be approximately three times the costs; on the gas side, estimated benefits will exceed costs by a factor of approximately 1.4. These benefits do not include external effects such as environmental improvements or reduction in imported oil. Similarly, from the utility perspective, estimated electric benefits exceed costs by a factor of approximately 17, while estimated gas benefits are approximately 7.3 times costs.

c. The Use of the ENERCOM Computer System Is Reasonable and Should Be Authorized

In order to produce the energy savings information which it must give to customers as part of RCS audits, PG&E is using the ENERCOM system. ENERCOM is a computerized system certified by Department of Energy (DOE) which calculates savings based on detailed measurements and evaluation of a customer's home. When PG&E's auditor collects data on the dwelling, they are entered into the computer which then creates a mathematical model of the building "thermal shell" and evaluates the energy consumption effect of adding applicable RCS measures.

PG&E has evaluated alternative systems to ENERCOM, and currently is performing a thorough analysis of such alternatives, including use of in-house computer support. At the present time, however, ENERCOM is providing a vital RCS service and its continued use should be authorized. If PG&E is able to identify a less costly but equally or more effective alternative to ENERCOM, of course, it will seek Commission authorization to take advantage of it.

d. PG&E's Multi-Unit Dwelling Audit Procedures
Are Reasonable and Should Be Adopted

An essential objective of PG&E's RCS and ZIP programs is to reach the rental market, a goal which the Commission has conceded

presents special challenges. A key element in PG&E's plan to achieve conservation goals in the rental market is its MUD audit program. A detailed explanation of the procedures necessary to audit MUDs is present in Exhibit 99. Between ZIP and RCS roughly \$3 million in administrative expenses has been allocated to the MUD program. PG&E's MUD plans are based in part upon actual experience gained in a pilot program of MUD audits conducted in the San Jose division. That evidence showed that the utility's procedures for MUD audits and its estimates of personnel requirements and costs to reach its 1982 RCS target of serving complexes with 60,000 dwelling units are reasonable.

e. Rates Requested For PG&E's 1982 RCS Program Are Reasonable and Should Be Authorized

PG&E believes that its 1982 RCS program fully complies with federal and state law. It also believes that the costs and budget for that program are reasonable. Specifically, it takes issue with staff, who through unsupported and unjustified recommendations for reductions in program and labor costs, would reduce RCS funding by \$3,722,000.

For example, staff's figures were based on an incorrect understanding of the amount of time and labor required for MUD audits:

- (1) Staff failed to consider actual needs for personnel to staff PG&E's Energy Conservation Center:
- (2) Staff failed to consider that its proposed reduction in the number of RCS auditors would increase the likelihood of audit backlogs;
- (3) Staff failed to take into account elements of time required for PG&E supervisory and support staff such as division managers, division marketing managers, and general office and budget officers; and

(4) Staff based its cuts in part upon totally unsubstantiated allegations of possible double accounting of RCS costs in other applications.

Staff also failed to take into account that a reduction in the availability of RCS auditors resulting from its proposed cuts in the auditing staff would likely increase demand for Class B (do-it-yourself) audits; instead of increasing the staffing to handle Class B audits, staff decreased it.

PG&E, on the other hand, amply demonstrated the reasonableness of its estimated 1982 RCS costs through its witnesses. PG&E submits that the Commission should disregard the reductions proposed by staff and authorize the full 1982 program budget and the full increase in rates as requested.

B. Intervenors

1. California Energy Commission

The CEC is predominantly concerned with one issue. The CEC maintains that the proposal by the Commission staff for a \$15.00 audit charge must be rejected.

The Commission staff has continued in this proceeding to advocate the institution of a \$15.00 charge for RCS audit recipients. As the CEC demonstrated in the SoCal ZIP/RCS proceeding, such an action by the Commission would be improper for several reasons:

- (a) The staff's recommended imposition of a \$15.00 charge for audits violates the terms of the RCS Plan. Section X(B)(2) of the California Plan states that RCS costs are to be charged to all ratepayers as are other current operating expenses. Charging audit costs to participants rather than to all ratepayers would require amending the RCS State Plan. The Commission, therefore, does not have the authority to institute such a charge.
- (b) The Commission staff recommendation does not include consideration of two issues which

federal law establishes as preliminary to determining the amount to be charged. Specifically, Congress requires consideration of the customer's ability to pay and the likely levels of participation which would result from such a charge. (42 USC 8216(c)(C).) These federal statutory criteria have not been met.

(c) The Commission cannot properly implement a \$15.00 charge for PG&E's RCS audits because the Commission staff has failed to provide factual information to support that alternative.

2. Natural Resources Defense Council, Inc.

electric and gas rates to provide funds for RCS and ZIP in 1982. There is an enormous, untapped potential for energy conservation. Although prices for gas and electricity have continued their dramatic upward climb, only a small fraction of the possible cost-effective residential conservation measures have been implemented. Price alone has failed to push society close to the optimal point, where our energy needs are satisfied with the minimum overall expenditures on energy production and conservation. Significant barriers to conservation investment prevent the expected consumer actions from taking place. Two of the major impediments to increased conservation are insufficient information and the unavailability of capital. RCS, as proposed, would help provide the information; ZIP, in place throughout the PG&E service area, would finance measures otherwise almost certainly left undone.

A staff witness has suggested that RCS suffers from biases against nonparticipants and conserving customers, unnecessary audits, and insufficient rigor and conservation potential. These criticisms of RCS are either unsupported or unrelated to the decision pending. The suggested staff solution is a \$15 direct audit charge. This

would fail to solve the problems feared by the staff, and it would severely restrict RCS and reduce the energy conserved.

3. SolarCal and Local Government Commission

The testimony provided by SolarCal focused on two primary issues: First, the ZIP/RCS programs should provide energy savings in a cost-effective manner; and second, the programs should be defined broadly enough to allow local initiatives and involvement.

a. The Commission Must Establish Goals and PG&E's Conservation Services Must Meet Such Goals

A conservation service proposal must be cost-effective in order to maximize its chances of success. If conservation and renewable energy use are less expensive than conventional alternatives only in theory but not in fact, then such programs are failures. The state role in the energy-related utility customer services programs should be to establish cost-effectiveness goals for energy savings under such programs, then carefully monitor them to ensure the goals are met, and to take actions necessary to correct failures or maintain successes.

The Commission should establish the value of conservation and peak reduction to the utility system and hold individual utility program efforts within that amount. This approach would likely entail a substantive delegation of program administration from the Commission to the utilities, but monitoring by the Commission and/or the CEC can be sufficient to ensure that the cost goals are in fact being met. This will further ensure the long-term competitiveness of conservation and solar with conventional sources of energy.

b. PG&E's Conservation Services Should Incorporate Local Community Participation

There is clear potential for supplementing or complementing the efforts of the RCS or ZIP programs with local participation. For example, mandatory retrofit ordinances provide a means to affect

Mandatory retrofit is more cost-effective than a voluntary audit or loan program. Yet, PG&E cannot guarantee it will be able to cooperate with local governments to support such ordinances by providing either audits and/or inspections to determine compliance. This damages local efforts with the ordinances, an effect the Commission surely does not intend. It is incumbent upon the Commission to devise a program which allows for local participation.

4. Low-Income Organization Intervenors and La Raza National Lawyers Association

The fact that no information is available from PG&E regarding the participation of the low-income, elderly, non-English speaking, and renter groups should be dispositive of the proceeding at this point. Whether Phase I, which limits ZIP to specified service territories, is being implemented without prejudice to the interests and of participation of these identified groups is impossible to ascertain now. To extend ZIP into Phase II by allowing the rate increase for ZIP funding without adequate data on this issue would work on inequity to all those ratepayers for whom there is no short-term relief or long-term benefit because their lifestyles are necessarily restricted by the constraints of limited budgets. This result, certainly, is not what the Commission would like to see happen with a program such as ZIP.

5. City of Palo Alto and Southern California Gas Company
Palo Alto and SoCal, as resale customers with conservation
financing programs comparable to PG&E's, urge the Commission to
exempt them from PG&E's proposed CFA and RCS rates. Palo Alto's
rationale, which is also applicable in part to SoCal, supports
Commission authorization of an exemption for resale customers.

Palo Alto has presented substantial evidence and testimony regarding the existence and quality of Palo Alto's own conservation programs, which parallel those of PG&E. Specifically, Palo Alto conducts its own RCS program pursuant to federal law, and furthermore, since April 1978, has offered its customers an insulation financing program entitled "Home Weatherization Program," which is Palo Alto's counterpart to PG&E's ZIP.

Since Palo Alto's ratepayers currently pay for the operating costs of Palo Alto's RCS and conservation financing programs, it is inappropriate and grossly unfair to charge the cost of PG&E's similar conservation programs to Palo Alto ratepayers, especially since Palo Alto retail customers are not eligible to participate in PG&E's ZIP and RCS programs. Recognizing the inequity of this double cost burden upon Palo Alto customers, this Commission, in D.92906, recently exempted Palo Alto and the other PG&E resale customers from PG&E's solar financing expenses (SFA), thus, establishing a clear precedent for exempting Palo Alto from the proposed rates in the present proceeding.

In addition to Commission precedent, there are other considerations that strongly support Palo Alto's exemption from PG&E's RCS and CFA rates. Most importantly, the future of Palo Alto's award-winning, innovative conservation programs, which indirectly benefit all PG&E customers by reducing PG&E's gas purchases at marginal costs, is dependent upon adequate financing. Palo Alto's gas utility, which is currently operating at an increasing deficit, simply cannot afford to pay for PG&E's conservation programs and, at the same time, finance its own similar programs. Palo Alto's exemption from PG&E's CFA and RCS rates becomes even more crucial if Palo Alto is to expand its conservation efforts in a manner comparable to PG&E.

Finally, the substantial benefits derived from Palo Alto's conservation programs, which programs serve as a yardstick to measure

PG&E's programs and as a model for other utilities and communities, clearly outweigh the minimal financial effect that the requested exemption would have upon PG&E's other customers, i.e., a mere \$0.00007 per therm increase for all customers, which represents only a five-cent per year increase for residential customers.

C. Commission Staff

1. Staff Testimony Supports the Cost-Effectiveness of ZIP But Challenges PG&E's Expected Market Penetration Rates

Staff testimony focused on PG&E's cost-effectiveness calculations, particularly PG&E's figures for the marginal costs of equivalent supply and the average cost of electricity and gas. The analysis showed that PG&E significantly understated the marginal costs of electricity and overstated what PG&E describes as "the average rate that would have been paid for the units of conserved energy in 1982." Staff's estimate of 129 mills per kWh for the marginal cost of electricity for 1982 exceeds PG&E's estimate of 103.5 mills per kWh, and his estimate of 800 mills per therm for the marginal cost of gas for 1982 exceeds PG&E's estimates of 739 mills per therm. In effect, because of these differences staff finds the 2IP program even more cost-effective than PG&E does.

The staff carefully analyzed PG&E's request for funding of the ZIP program through 1982. As a result of this analysis, staff recommends that PG&E be granted \$28,357,000 for 1982. This is \$4,917,000 less than PG&E's request of \$33,274,000, the difference resulting exclusively from staff's estimates of the market penetration for various weatherization measures being lower than those submitted by PG&E. Lower market penetration, in turn, causes program costs to be reduced proportionately since a lower volume of ZIP loans entails lower carrying costs, a lower number of delinquent loans, and fewer inspections.

Staff did not take exception to all of PG&E's market penetration estimates, however, but rather only to those for floor

insulation, clock thermostats, storm doors and windows, and IIDs; the estimates for the remaining items he found reasonable.

The table below shows PG&E's estimates and staff's adjusted estimates for market penetration by measure:

Measure	PG&E Estimate	Staff Estimate	
Floor Insulation	59,000	38,791	
Clock Thermostats	100,000	32,760	
Storm Doors & Windows	82,000	47,757	
IIDs	60,000	12,376	

Because staff found PG&E's estimates of market penetration to be too high, it also concluded that the revenue requirement proposed by PG&E was excessive. Staff's recommendation is that PG&E's requested revenue be reduced to conform to its market penetration estimates. The below table shows PG&E and staff recommended revenue requirements.

REVENUE REQUIREMENT IN THOUSANDS OF DOLLARS FOR 1982

	PG&E Proposed (a)	Staff Recommended (b)	Recommended Reduction (c)
Loan Carrying Costs a. Converted 8% Loans b. ZIP Phase I Loans c. ZIP Phase II Loans	3,115 1,051 19,491	3,115 1,051 15,756	- 3,735
Total	23,657	19,922	3,735
Administrative Costs	13,001	12,411	590
Provision for Doubtful Accounts a. Converted 8% Loans b. ZIP Phase I Loans c. ZIP Phase II Loans Total	283 92 3,087 3,462	283 92 2,495 2,870	592 592
Total Costs	40,120	35,203	4,917
Less Balance of Loan Principal Capitalized By Subsidiary from ZIP Phase I Loans Revenue Requirement	<u>6,846</u> 33,274	6,846 28,357	- 4,917

Staff also reviewed the RCS program and PG&E's RCS budget for 1982. Staff argues that the RCS program in the current State Plan is not cost-effective because the cost of Class A audits is high and the potential energy savings which result from an audit alone are low. But although staff sees the RCS program as not cost-effective, staff is also aware that the California Public Utilities Commission (CPUC) is not lawfully empowered to alter the structure of the State Plan and that the CEC is now formally reviewing the State Plan for possible revisions. Thus the only substantive recommendation staff makes is that the Commission impose a \$15 charge to customers for an RCS audit. Staff recommends, however, that the \$15 charge be waived for low-income persons.

The purpose of a \$15 charge is to discourage customers who are not seriously intent upon energy conservation from requesting an RCS audit merely for informational purposes. Staff also believes that PG&E customers would be encouraged to take greater advantage of Class B-type audits by having the \$15 fee apply only to Class A audits.

Staff also offered testimony on PG&E's RCS program expenses for 1982, as submitted in A.60700. Because staff was concerned about the RCS audit program not being cost-effective, it thoroughly reviewed PG&E's budget to eliminate any waste. The staff witness recommends that PG&E be granted a total of \$13,898,000 for 1982 RCS expenses instead of PG&E's requested \$17,620,000. Staff's reduction in PG&E's requested revenue for RCS is entirely due to adjustments in labor costs; staff recommends fully funding PG&E's estimated program costs, although it suggests that program funds be distributed differently than PG&E estimated.

PG&E has requested \$17,620,000 for 1982 to promote and conduct 182,000 audits - actually 125,000 audits since 60,000 of this

figure is derived from 3,000 MUD audits. It is important to notice that PG&E's funding proposal for RCS program costs, unlike ZIP costs, does not include a balancing account procedure but rather the revenue is to be obtained through base rates. Although PG&E states in A.60700 that "the increases sought in this application merely reflect and pass through to customers only the effective increased costs to PG&E for the expense it must incur in carrying out the RCS program" (p. 5), there is no mention in the application that the rates collected would be subject to refund in the event that PG&E has overestimated its costs for 1982. This is a serious deficiency in the proposed RCS funding which the Commission ought to correct. If PG&E fails to deliver the promised number of audits, there may be a substantial overcollection. The Commission should require that RCS revenues be collected subject to refund, particularly if the Commission decides to grant PG&E its full rate request.

There is also another reason that PG&E's estimated expenses may be overstated. The CEC is currently revising the State Plan and may make modifications to the RCS audit requirements which streamline the procedures. As a consequence of CEC modifications to the State Plan, the RCS program, as presented in this proceeding, may be changed significantly by PG&E. It would be a waste of time to require PG&E to return to the Commission to present new estimates of RCS program expenses in light of changes in the State Plan. A better way of dealing with the problem, at least for the first year, would be to make RCS rates subject to refund.

2. Ratepayers Should Not Be Penalized If PG&E Fails To Achieve Program Goals

PG&E may now be on the path of achieving the kind of program results it promised the Commission back in April. The November 20th report from PG&E indicates that there are 3,032 ZIP loans being processed and that the average size of these loans is \$967. Perhaps

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PG&E accurately stated that the poor results the first six months of Phase I were caused by start-up problems attendant to any new and innovative program of the magnitude of Phase I. Staff is willing to give PG&E the benefit of the doubt, but for the Phase II expansion the ratepayers should not be forced to pay for PG&E's optimism. If Phase I had substantial problems moving forward in only one PG&E division, it is a virtual certainty that PG&E will not be able to expand systemwide without difficulty. In Phase I PG&E had considerable difficulty in delivering 1,132 ZIP loans over a seven-month period, yet PG&E is now telling the Commission that in 1982 it will be able to deliver 182,000 RCS audits and 250,000 ZIP loans. Staff wishes PG&E good luck in meeting these ambitious goals, but, again, ratepayers should not be penalized if PG&E fails to achieve these goals.

For RCS, PG&E is requesting that their full revenue request be granted through an increase in base rates. Consequently, if PG&E does not perform the full number of 182,000 audits in 1982 the excess revenue will merely be kept by PG&E. It is for this reason that staff recommends that whatever amount the Commission decides to grant PG&E for its RCS program, the rates approved in this decision should be made subject to refund to the extent that PG&E does not achieve the full number of audits. This should not merely be an item which is the subject of a reasonableness review at the end of the year, but rather a specific order from this proceeding; it is not an issue of prudency, but rather a matter dealing with program costs and the rates provided for the recovery of those costs.

A similar problem, although clearly not as serious as the one for RCS funding, occurs with PG&E's proposal for the CFA rates for

ZIP. The CFA rates presented by PG&E are designed to provide, on an annualized basis, the full revenue requirement sought of \$33,295,000. Although it is true that the CFA rates will be collected through a balancing account, and thus will avoid the possibility that PG&E will receive a gift at the end of the year from excess revenue collected, there remains the high probability that PG&E will not achieve 250,000 loans in 1982 and, as a result, that there will be substantial overcollections. Again, there is no reason for burdening ratepayers with PG&E's optimistic speculations on 1982 results. The remedy for this would be for the Commission to establish a band of reasonableness for the balancing account—say 20%—and to order PG&E to file an advice letter if it appears that in any quarter the balancing account will be overcollecting more than the band allows. PG&E could be further ordered to reduce rates to eliminate the excessive overcollections.

3. Neither City of Palo Alto Nor Southern California Gas Company Should Be Exempted From the CFA Rate

Essentially, the argument against granting an exemption from the CFA rate for Palo Alto and SoCal is that to do so would be to open the door to any nonparticipant in the ZIP program to make virtually the same appeal to the Commission. Both Palo Alto and SoCal claim that they should be granted the exemption because they each have their own conservation programs, and thus to bill them for PG&E's ZIP program would be to, in effect, charge their customers twice for conservation.

It is staff counsel's view that Palo Alto and SoCal share in the benefits of ZIP and should, therefore, be required to pay for its costs, just as all other PG&E customers are required to do. Testimony indicated that SoCal would benefit from PG&E's conservation programs by being able to obtain more gas at lower prices because by

reducing gas demand, PG&E would reduce the need to purchase expensive new increments of supply.

Although SoCal and Palo Alto should be commended for their conservation efforts, the Commission should not grant either an exemption from the CFA rate as both will benefit from ZIP and should, therefore, be required to contribute to its cost. If SoCal or Palo Alto is granted an exemption, the Commission could not properly refuse to grant nonparticipating residential customers a similar exemption from the CFA rate. The ZIP program can be a success only if the burden as well as the benefits are distributed among all classes of customers.

4. PG&E Should Be Required to Submit Contracts For Outreach Marketing to Competitive Bids

SolarCal expressed the concern that PG&E work effectively with local communities and take advantage of existing community organizations and agencies. To assist the Commission in this respect, SolarCal prepared suggested guidelines for contracted community services. Staff counsel believes that these guidelines have merit and that the Commission should adopt at least the recommendations for a proposal selection process.

Staff counsel does not recommend that the Commission adopt all of the guidelines presented by SolarCal but does recommend that, in addition to the competitive bidding requirement, PG&E should be ordered to develop its own guides, incorporating as many ideas as possible from the SolarCal guidelines, and present these for approval by the Commission. It seems from the record in this proceeding that PG&E cannot be trusted to have complete discretion in forming contracts with community-based organizations. By requiring competitive bids and offering all groups in the community an opportunity to compete for a project, there should be some assurance that PG&E will not be

handing out blank checks to their favorite organizations. This competitive bidding requirement should apply equally to RCS and ZIP program activities.

5. PG&E Should Be Ordered to Submit Detailed Monthly and Quarterly Reports on the RCS and ZIP Programs

PG&E should be required to submit detailed monthly progress reports so that the Commission will be fully informed on a current basis about the performance of the programs.

Minimally the monthly reports should contain the following information:

- a. The total number and dollar amount of the loans issued during the month and cumulatively.
- b. Total number and dollar amount of loans in processing.
- c. Average size of loans issued, and a tabulation of the number of loans made in \$500 increments (e.g., 221 loans at \$500 or less; 334 loans at \$500-1000, etc.)
- d. A breakdown of the number of loans issued to persons in the target groups of low-income, non-English speaking, renters, and the elderly.
- e. The total dollars spent during the month for advertising and promotion of RCS and ZIP and a description of items included.

Additionally, staff recommends that PG&E be ordered to furnish the Commission with a copy of the records and reports that PG&E is required to submit to the CEC for its RCS program. Staff also recommends that PG&E be required to submit detailed quarterly reports to the Commission which give a full accounting of all program costs for ZIP and RCS.

6. The Commission Should Consider Canceling ZIP After the First Year If PG&E Substantially Fails to Achieve Target Marketing Goals for Low-Income and Rental Participation

PG&E filed a marketing plan in which PG&E stated that one of its objectives was to "achieve participation in ZIP by members of target groups equal to or greater than their proportion of PG&E's total customer population." This is a reasonable goal to assure the equitable participation of all classes of customers in ZIP. But this should not be regarded as a mere objective by PG&E; it should rather be a firm requirement of the program. Staff counsel recommends that if at the end of 1982 PG&E substantially fails to achieve the level of participation described for the target groups, the Commission should cancel further funding of ZIP. This is a harsh penalty for conservation but one which ought to be imposed both to act as a strong incentive for PG&E and to prevent the program from inequitably burdening PG&E's customers.

7. PG&E's Rate of Return in the ZIP Balancing Account Should Be Adjusted to Reflect the Quality of its ZIP Program

Zip with its CFA balancing account treatment of administrative and general expenses is a cost-plus program that provides PG&E with a guaranteed rate of return on its equity investment. Consequently, there is virtually no incentive for PG&E to control costs for the ZIP program. This is inconsistent with Commission policy to promote efficient utility management through the provision of reasonable economic incentives. For this reason staff counsel recommends that the Commission adopt a rate of return penalty or bonus for PG&E's performance in the ZIP program.

Staff counsel recommends that the Commission put PG&E on notice that such an adjustment will be made as a result of a review of the quality and efficiency of the 1982 ZIP program. Ideally, the

rate of return adjustment would be made with reference to specific performance goals. The Commission could simply take PG&E's own goals for 1982 of achieving 250,000 ZIP loans and reaching the appropriate number of targeted customers as the standard for the first year of the program. If PG&E achieves these goals within their proposed budget PG&E should be allowed to earn its full authorized rate of return on its investment in ZIP. But if it fails to achieve its goals, the rate of return should suffer a downward adjustment.

D. Discussion

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. However, due to the innovative nature of the program and its potential demands on the utility's resources, we decided to proceed on a phased basis with systemwide expansion of ZIP. While this deliberate process has allowed PG&E to identify ZIP-related problems and develop solutions, it has occurred in an atmosphere of heightened ratepayer frustration with the ever-increasing costs of gas and electric service. With ratepayer resources strained to their limit, we must, more than ever, carefully balance the benefits of a particular program with the burdens that such a program imposes upon ratepayers.

We recognize that the ratepayers' ability to absorb continuous rate increases is limited. Before authorizing further rate increases to cover implementation of any utility programs, we must not only determine that such a program is cost-effective for ratepayers but we must also ensure that the design of the program is as efficient as possible. It is then our duty to authorize the

minimum rate increase which will allow realization of the program's planned benefits for ratepayers. With this perspective firmly in mind, we will review PG&E's consolidated request to increase its gas and electric rates by \$33,295,000 in 1982 to allow systemwide implementation of ZIP and by \$17,620,000 in 1982 to carry out the RCS program.

1. Zero Interest Program

In implementing Phase I of ZIP in the San Joaquin Division, pG&E was authorized to provide zero interest financing, either with or without an energy audit, for the following measures:

- a. Ceiling insulation,
- b. Weatherstripping,
- c. Waterheater blankets.
- d. Low-flow showerheads,
- e. Caulking, and
- f. Duct wrap. (Hereafter referred to as the "Big 6" items.)

If an energy audit demonstrated their cost-effectiveness,

the following conservation measures were also eligible for ZIP financing:

- a. Wall insulation,
- b. Floor insulation,
- c. Clock thermostat.
- d. Lighting conversion,
- e. Storm or thermal windows/doors, multiglazed windows/doors, or movable insulation such as shutters and thermal drapes, and
- f. IID.

In requesting revenues to allow systemwide expansion of ZIP, PG&E strongly urges that initial Phase II measures and procedures substantially parallel the Phase I measures and procedures. The

evidence of both PG&E and staff indicates that the expansion of ZIP, as proposed by PG&E will be cost-effective from the societal, utility, and participant perspectives. Using the staff's methodology the program is also cost-effective from the nonparticipant or ratepayer perspective. When estimated using PG&E's methodology, the program is slightly noncost-effective from the nonparticipant or ratepayer perspective. However, based on current estimates of energy savings and costs, PG&E's ZIP Phase II program is highly cost-effective on an overall basis.

Although Phase II, as proposed, is already cost-effective, we recognize the need for reducing program costs as much as possible while maintaining its efficacy. Accordingly, we will direct that certain minor modifications be made to ZIP in Phase II. These modifications, while slightly reducing costs, should, if anything, further increase the cost-effectiveness of the program. The following program adjustments will be approved for systemwide expansion of ZIP:

- a. Repayment of PG&E-provided loans will commence immediately after issuance; single-family homeowners will repay such loans in equal installments over a 50-month period while all other participants will be allowed a 100-month payback period;
- b. With respect to utility-provided financing for installation of the "Big 6" measures, a financing limit of \$1,000 will be imposed; zero interest financing will be available for the "Big 6" measures only if all the measures are installed, 1/ and
- c. With respect to utility-provided financing for installation of the remaining ZIP measures, a financing limit of \$2,500 will be imposed; zero interest financing will be available for the remaining ZIP measures only if the program participant installs the "Big 6" measures in his residence.

The financing limits of \$1,000 and \$2,500, respectively, are imposed in an effort to ensure equal allocation of program moneys among potential ZIP participants. It is appropriate, for example, to limit the owner of a large single-family home to \$1,000 in utility provided zero-financing for installation of the "Big 6" measures.

This condition assumes that the remaining "Big 6" measures have not previously been installed and further that it is feasible to install them.

The modifications which we authorize today raise questions concerning the status of loans already offered by PG&E in its San Joaquin Division, as well as 8% ceiling insulation loans previously issued by PG&E throughout its service territory. Phase I decision PG&E was authorized to convert outstanding 8% ceiling insulation loans issued in the San Joaquin Division to zero interest financing. Furthermore, from April 1981 to October 1981, while PG&E was refining its procedures and controls for offering zero interest financing, customers who signed up for 8% ceiling insulation loans were informed that their loans would be entered at 8% interest but would be eligible for conversion to zero interest shortly thereafter. Customers in the San Joaquin Division acted in reliance upon a Commission decision and PG&E's representations in assuming their 8% loans were eligible for conversion. We cannot allow these customers to act on such reliance to their detriment. PG&E will be authorized to permit all customers of PG&E in the San Joaquin Division who entered into 8% loans before the effective date of this order to convert their loans to zero interest. Of course, zero interest loans previously offered to individuals whose eligibility would be terminated by this decision will also be honored as if still authorized.

With respect to customers in PG&E's remaining divisions who have signed up for 8% ceiling insulation loans, their ability to convert their loans will be conditional. PG&E will be authorized to allow conversion of such loans to zero interest conditioned upon the customer's agreement to install the remaining "Big 6" conservation measures in his residence. During the transition to systemwide implementation of ZIP, PG&E will be authorized to continue offering 8% ceiling insulation loans until zero-interest financing becomes available in its respective divisions. Such loans issued during the transitional phase will be eligible for conversion to zero-interest upon the customer's agreement to install the remaining "Big 6" measures.

PG&E has requested increased revenues of \$33,295,000 to meet its projected goal of issuing 250,000 ZIP loans in 1982. The

adjustments to ZIP which this decision authorizes should allow PG&E to meet its goal while slightly reducing the overall cost of Phase II. Modification of the loan repayment requirements revised interest rates will have no perceptible effect on PG&E's requested revenue requirement for 1982 Phase II ZIP.

After careful analysis we have determined that we will reduce PG&E's requested revenue requirement of \$33,295,000 to \$29,000,000. A combination of factors prompts this reduction of \$4,295,000. First, we believe that increased utility efficiencies can serve to reduce the estimated \$13,000,000 in administrative expenses allocated to ZIP. We strongly encourage PG&E to insure that the bulk of ZIP-related dollars are earmarked for installation of conservation measures rather than for administration of the program. Secondly, controversy surrounds the issue of estimated market penetration estimates for ZIP measures. While we reject staff's recommendation that PG&E's requested revenue be reduced by \$4,917,000 to conform to staff's lower market penetration estimates, we find that PG&E's penetration estimates are somewhat optimistic and overstated. Our reduction of PG&E's requested revenue requirement reflects this conclusion.

Our concern with ratepayer-home costs cannot be overemphasized. Checks have been built into the system which will ensure that ZIP-related costs will remain reasonable during the first year of systemwide expansion. In addition to the existence of the CFA balancing account, we will carefully monitor ZIP costs and results on a monthly basis, culminating in an annual review to determine the future reasonableness of PG&E's ZIP.

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We also reject certain recommendations of the staff respecting inclusion and exclusion of ZIP measures. Specifically, we reject staff's proposal that only silicone caulking be financed. In addition to varying with the RCS program, such a limitation raises the potential for anticompetitiveness claims by manufacturers of nonsilicone caulking. We reject staff's recommendation to exclude clock thermostats from the list of ZIP measures. Clock thermostats can save energy, especially when used to avoid all-day heating or cooling of homes while occupants are away. Finally, we do not accept staff's proposal that pipe wrap should be financed for electric waterheating customers without an audit. Currently, pipe wrap is among those measures which can qualify for the 40% state conservation

tax credit only if recommended in the course of an RCS audit. It would be inappropriate and unreasonable for PG&E to encourage its customers, through zero interest financing, to install such a measure and forgo the tax credit. Additionally, adoption of this recommendation would replace a state subsidy customers otherwise could receive with a ratepayer-financed loan.

We are prepared to move forward with Phase II of ZIP, as modified, as soon as practical. However, the application process has served to raise many questions about the details of a Phase II ZIP. Both PG&E and the staff request Commission direction with respect to the various recommendations and proposed adjustments for Phase II. We will now address ourselves to those details by first turning our attention to PG&E's recommendations.

PG&E requests the Commission to incorporate in this decision the project financing structure and procedures as set forth in D.93497, the second interim decision issued in these proceedings. It appears that the prospects for success in achieving the project financing are good. Accordingly, we will reaffirm our commitment to the project financing of ZIP by expressly incorporating into Phase II the essentials of D.93497. We will authorize the use of project letter filings for approval of specific financings and the use of advice letters for notice of rate adjustments to the CFA debt service rate.

We agree with PG&E that Phase II of ZIP should continue to be fully integrated with RCS to achieve maximum economy and efficiency. PG&E's ZIP program is clearly designed to take full advantage of the features of the RCS plan in accomplishing its conservation objectives. We previously recognized in D.92653 that it is necessary for ZIP to conform to RCS requirements and we reaffirm that recognition in our decision authorizing Phase II.

We will adopt PG&E's proposals for targeting and outreach efforts to achieve equitable participation by low-income customers, the elderly, minorities, and renters. Its special marketing plan is reasonable as is its proposal to dedicate up to \$4.5 million of the total estimated \$13 million administrative budget to contracts with community agencies or groups for direct, personalized marketing efforts among the target customer population.

We believe it is critical to the success of Phase II in reaching target markets for PG&E to encourage and actively engage the participation of local community groups and agencies. SolarCal has suggested that guidelines be established to govern PG&E's efforts in contracting with existing community organizations to assist in outreach efforts. Staff counsel recommends that the Commission require PG&E to select such community organizations on the basis of a competitive bidding process. 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. PG&E's efforts and results in this critical area of extending ZIP benefits to the target markets will be carefully scrutinized in the subsequent rate proceedings, and appropriate action can be taken at that time. We will accept the staff's recommendation regarding development of guidelines to govern PG&E's conduct in contracting with outside organizations for ZIP-related services. PG&E will be ordered to develop its own guidelines, incorporating as many ideas as possible from SolarCal's guidelines, and to submit them within 90 days of the effective date of this decision for Commission approval.

Given authorization of Phase II, PG&E proposes to expand the program within 45 days to its Bay Area divisions. Within 90 days after completion of the first expansion, Phase II will be extended to the Coast Valleys, Stockton, and Sacramento divisions. Within 90 days

of the second expansion, Phase II ZIP will be made available in the remaining divisions. This proposed transitional schedule is reasonable and will be adopted.

During the proceeding representatives of the mobilehome industry voiced concerns that their constituents, the approximately 125,000 to 150,000 mobilehome dwellers in PG&E's service area, were excluded from sharing in ZIP benefits. Their concerns are well-taken. To alleviate this inequity, we will adopt PG&E's recommendation for participation of mobilehome dwellers in ZIP. The adopted proposal includes financing up to a \$500 limit for rigid polystyrene foam board insulation suitable for mobilehome installation.

In D.92653 we directed that ZIP loans should be available only for residences constructed and occupied prior to January 28, 1981. This matter was left open for further consideration in the Phase II hearings. The evidence presented indicates that the cutoff date adopted in D.92653 should be continued.

PG&E requests that minor modifications to lien and credit requirements be made to improve cost-effectiveness and control program costs. We will authorize PG&E to increase the dollar ceiling above which ZIP loans must be secured by a lien to \$5,000. Loans in amounts below \$5,000 will be secured by promissory notes. We agree that such security is easier and less costly to obtain and that it will provide ample protection to ensure repayment of the ZIP loans. Although there is a \$3,500 limit on utility-provided zero-interest financing to individual ZIP participants, it is possible for ZIP loans to exceed \$5,000 in the case of MLDS.

PG&E also proposes to apply more liberal credit standards to determine its customers' eligibility for participation in Phase II of ZIP. 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 either (a) one or more "turnoffs," or (b) more than

three 24-hour notices for nonpayment of their bills. We will adopt PG&E's liberalized credit standards as a test of eligibility for ZIP. We will also adopt PG&E's more liberal eligibility standards for mobilehome dwellers.

PG&E recommends that the Commission adopt standards for monitoring and reporting on Phase II ZIP progress. We agree with staff that the Commission cannot simply await the 1982 ZIP reasonableness review for information regarding the progress and efficacy of Phase II. Staff recommends the filing of detailed monthly and quarterly reports indicating the status of both ZIP and RCS. The staff recommendation is reasonable and will be adopted. However, we will not require PG&E to file certain cost-effectiveness analyses by July 1, 1981. Such a requirement is premature and would be unreasonable in view of the limited information which will be available by that date. We will be in a better position to evaluate cost-effectiveness in the annual ZIP reasonableness review.

We have previously indicated that we will authorize CFA rates which will generate revenues of \$29,000,000 for implementation of Phase II. Such rates are reasonable. In the interests of rate stability, PG&E recommends that overall rate design for both the CFA and RCS rate increases should be accomplished in conjunction with PG&E's test year 1982 general rate case. This can be accomplished by authorizing recovery of revenue requirements through rates in these proceedings. This suggestion is reasonable and will be adopted.

Further it is necessary to resolve the issue of which customers should share in ZIP costs. No party challenges the proposal to exempt the DWR and the Experimental Schedule A-20 from CFA electric rates; such an exemption will be authorized.

Considerably more controversy surrounds the issue of whether palo Alto and SoCal, as resale customers of PG&E, should bear any costs associated with ZIP. There are substantial equities on both sides of the issues; yet, on balance, we find that equity dictates an exemption for Palo Alto and SoCal from PG&E's CFA rates. While we desire to maintain consistency with our prior exemption for resale customers granted in the solar financing case, we also do not think it is appropriate to impose a double burden on the customers of Palo Alto and SoCal with no corresponding opportunity to share in the direct benefits of PG&E's ZIP. Furthermore, in weighing the minimal financial effect that the exemption would have upon PG&E's other customers against the detrimental impact upon Palo Alto's conservation efforts occasioned by denial of the exemption requested. we are persuaded that the exemption for the resale customers is appropriate. Given these exemptions, the following CFA rates will be approved to generate the authorized revenue requirement of \$29,000,000.

CFA Rate \$0.0029/therm \$0.00014/kWh

Staff has also made several recommendations designed to protect the ratepayer in the event that Phase II of ZIP fails to achieve its projected market penetration levels. Given the existence of a CFA balancing account, staff contends that there is a high probability that PG&E will fail to issue 250,000 loans in 1982, with a resulting substantial overcollection of rates. Staff recommends that the Commission avoid this potential pitfall by establishing a band of reasonableness—on the order of 20%—for the balancing account. If in any quarter the balancing account were overcollected by 20%, staff would have PG&E file an advice letter to reduce CFA rates and eliminate the excessive overcollections. We will reject the staff's recommendation.

- 2. The record supports PG&E's projection of 250,000 losns issued in 1982, although PG&E's market penetration estimates are somewhat overstated.
- b. The very existence of a balancing account in conjunction with scheduled annual reviews of ZIP expenditures amply protects both ratepayer and utility alike.
- c. Mandatory quarterly adjustments might well adversely affect the willingness of prospective lenders to advance funds to the ZIP subsidiary.
- d. Finally, there is no compelling need to increase the frequency of rate changes, a frequency which is already alarmingly high.

Staff also recommends Commission consideration of ZIP cancellation if PG&E substantially fails to achieve target marketing goals for low-income and rental participation. We have previously indicated our interest in ensuring that all of PG&E's residential customers have access to the ZIP. Equitable participation of all classes of residential customers in ZIP is fundamental. If such equitable participation is not achieved, cancellation of ZIP will certainly be an option which we will consider.

Staff's last recommendation suggests that the Commission adjust PG&E's rate of return in the ZIP balancing account to reflect the quality of its ZIP. If PG&E achieves its goal of issuing 250,000 ZIP loans in 1982, staff feels that PG&E should be allowed to earn its full authorized rate of return on its investment in ZIP. Conversely, staff recommends a downward adjustment in the rate of return if PG&E fails to achieve its goal. We will reject this staff recommendation. ZIP represents a challenging and innovative undertaking. It is inappropriate to burden a fledgling program with such exotic ratemaking procedures as suggested by the staff. Staff's

proposal would require a seemingly endless round of hearings to determine at a minimum whether PG&E had legitimate grounds for failing to meet its estimated goals. The annual ZIP reasonableness review is designed, among other things, to serve this function. If proper cause appears, staff may make any recommendation regarding an adjustment to rate of return during the annual review.

Finally, we will address the issue of whether ZIP as designed will have an unacceptable anticompetitive effect on conventional lenders. No conventional lending institution, despite widespread notice of the ZIP proposal, appeared to oppose the program. Furthermore, the uncontested evidence indicates that (1) ZIP will supplement rather than compete with lending opportunities for conventional institutions, and (2) conventional lenders can participate in ZIP through the project financing structure. We therefore conclude that ZIP will not have any anticompetitive effect on conventional lenders, much less an unacceptable anticompetitive effect.

Other than as modified by this decision, Phase II of ZIP, in all other essentials, will mirror the measures and procedures authorized for Phase I by D.92653.

2. Residential Conservation Service

PG&E designed its 1982 RCS program to comply with federal and state law. In order to meet the federal and state law mandate to implement an RCS program, PG&E now requests Commission authority to increase base rates to generate additional revenues of \$17,620,000 necessary to carry out the RCS program in 1982. Such an increase would presumably allow the utility to attain its stated objective of performing 182,000 RCS audits in 1982.

The evidence of record, in conjunction with PG&E's cumulative experience with home energy audits, demonstrates that audits are an effective means to achieve actual energy conservation. PG&E has been providing home energy audits since 1978. Its experience has demonstrated, among other things, that:

- a. Actual energy savings achieved through audits have proven statistically the same as prior engineering estimates;
- b. High-implementation rates for conservation measures and practices recommended by PG&E auditors have been achieved; and
- c. Average savings achieved in space and waterheating due to energy conservation resulting from audits conducted under PG&E's pre-RCS program were 74 therms per year for natural gas and 1,359 kWh per year for electric systems.

Furthermore, credible evidence was presented showing that RCS is cost-effective. It was demonstrated that from a societal perspective PG&E's 1982 RCS program will provide benefits on the electric side which are three times greater than the costs. On the gas side, estimated benefits will exceed costs by a factor of 1.4. From the utility perspective, estimated electric benefits exceed costs by a factor of about 17, while estimated gas benefits are approximately 7.3 times costs.

The RCS program, as designed by PG&E appears to represent a valid, cost-effective conservation investment for PG&E ratepayers. However, as previously noted, before we authorize any program which will result in increased rate burdens for the utility customer, we must carefully scrutinize the program to determine the minimum expenditures necessary to allow the program to provide benefits to those who are paying for it.

Staff has recommended that the requested RCS funding be reduced by \$3,722,000. The staff adjustment is based upon a downward revision in the program's estimated labor costs. The record does not support the staff recommendation. Staff failed to accurately assess the amount of time and labor required for MUD audits, as well as the personnel required to meet PG&E's RCS program goals. Accordingly, the staff adjustment will be denied.

While we reject the cost-cutting proposed by staff, there is ample reason for reducing PGGE's \$17,620,000 request for RCS. At a minimum, the status of RCS on both the federal and state level is one of dynamic flux. Changes to RCS requirements appear very likely. Federal authorities, in recognition of the cumbersome burdens imposed upon the states by the federal RCS mandate, seem prepared to reduce and simplify many of the current requirements. At the state level the CEC is considering amendments to the RCS State Plan. The first set of changes are scheduled to take effect on January 1, 1982 with additional changes on July 1, 1982. It is highly likely that these prospective amendments will simplify required RCS procedures and reduce the costs of providing audits. We could authorize the entire rate request and refund the excess in the event that actual costs for RCS during 1982 prove to be less than those estimated in A.60700. Or, we could defer the requested increase in anticipation of likely cost-reducing modifications to RCS. Our awareness of the financial uncertainties facing the utility customer and of his limited capacity to absorb further rate increases compels us to choose the latter course. Accordingly, we will authorize PG&E to increase its base rates to generate \$12,000,000 for implementation of RCS in 1982. 1 If the amount granted precludes PG&E from reaching its objective of 182,000 RCS audits in 1982, then it must be so. However, given the likelihood that the costs of RCS audits will be reduced, we will

carefully scrutinize PG&E's performance to ensure that it is doing everything within its power to meet its original objective.

The \$12,000,000 funding for PG&E's 1982 RCS program will be authorized by this decision. However, the adjustment to base rates which will produce such a revenue requirement will be authorized in PG&E's general rate decision which will issue today. The manner in which the \$12,000,000 is spread among the various customer classes should be done on a uniform cents per therm and kWh basis. As previously noted, Palo Alto and SoCal shall be exempted from any increase in base rates associated with PG&E's RCS program.

We have made the generic decision to authorize funds for PG&E's 1982 RCS program. Now we must address more specific issues. Various recommendations were made respecting details of PG&E's RCS program, and we will now weigh their relative merits.

Staff has recommended imposition of a \$15 charge on ratepayers who receive RCS audits. Irrespective of whether we possess legal authority to order such a charge, we find that the factual record does not support the charge. Staff's proposal lacks adequate consideration of the customer's ability to pay and the likely levels of participation in the RCS program which would result from such a charge. A mandated \$15 charge would also contradict RCS program announcements previously mailed to all PG&E customers and its collection would add to total RCS administrative expenses. Furthermore, the audit fee would impose a burden on low-income customers. Staff had no reasonable suggestion for identifying low-income customers who would be exempt from the \$15 charge. Finally, nothing more than speculation supports staff's rationale that such a charge will be useful in discouraging audits for those customers who are really not serious about installing

conservation measures in their homes. Therefore, the \$15 audit charge recommendation will be rejected.

PG&E requests the Commission to authorize the continued use of the ENERCOM computer system in producing the energy savings information which it must provide customers as part of its RCS audits. Given our overriding concern with costs, we have serious questions about the need for such a complex and costly system to produce the required information. However, we also recognize that currently PG&E has no viable alternative to the ENERCOM system. Since we have a strong interest in immediate implementation of PG&E's 1982 RCS program, we will authorize the continued use of the ENERCOM system. We will require PG&E, within 90 days of the effective date of this order, to file a report with the Commission analyzing the availability of effective and less costly alternatives to ENERCOM.

PG&E requests the Commission to authorize, rather than mandate, the use of outside agencies to perform RCS services under contract. We will authorize PG&E to engage outside agencies, governmental entities, or contractors to furnish energy audits if necessary to reduce backlogs of audit requests to develop and assist participation among target customer groups, and to perform any other necessary services in connection with RCS. As we previously noted in discussing contracts with outside agencies for ZIP outreach, we believe that PG&E should be provided flexibility in responding to circumstances arising from institution of two innovative programs, such as ZIP and RCS. We will not unnecessarily restrict PG&E's ability to respond to contingencies by ordering them to enter into contracts with outside agencies for, as yet, undefined purposes.

PG&E also recommends that the Commission refrain from requiring PG&E to provide inspections called for under mandatory

retrofit ordinances enacted by local communities. Several local governmental entities within PG&E's service territory have passed ordinances which require installation of certain basic conservation measures in homes upon the change of ownership. While they vary in specifics, all the ordinances require an inspection, upon the sale of property, to determine that the measures have indeed been installed. SolarCal requests that PG&E, at ratepayer expense, provide the required inspections. It is apparent that the mandated retrofit inspections are significantly less than an RCS audit. Any customer receiving such an inspection would still be eligible for a full RCS audit. Since mandatory retrofit ordinance inspections are different than RCS audits, ratepayers would bear the added cost of funding the activities of local government while paying the costs of the RCS program. While we applaud the initiative of local government in encouraging conservation, we must note that an overriding theme in today's decision has been our concern with costs. It would be inconsistent to reduce RCS funding to a bare minimum of \$12,000,000 while imposing additional cost burdens on ratepayers that a requirement that PG&E provide mandatory retrofit ordinance inspections would entail. We strongly encourage PG&E to cooperate voluntarily with local governmental entities to assist them in implementing successful conservation programs. At a minimum PG&E can provide inspection services required by the ordinances to the extent that personnel and resources are available and not otherwise committed.

PG&E asks the Commission to approve its audit procedures for MUDs as reasonable. We will do so. Penetration of the rental market is fundamental to the success of both ZIP and RCS. PG&E's MUD audit program ambitiously commits about \$3 million in administrative expenses as part of its effort to achieve conservation in the rental

market. The MUD audit program, its procedures, and attendant costs are a reasonable response to the challenge of extending ZIP and RCS benefits to renters and will be adopted as such.

Since RCS costs will be recovered in base rates and are not subject to balancing account treatment, staff fears that PC&E will unduly benefit if program costs in 1982 are less than the authorized revenues. In response to this perceived problem, staff recommends that RCS-related rates be collected subject to refund. In the event of overcollection, excess revenues could then be returned to the ratepayer. Our determination to drastically reduce RCS funding to \$10,000,000 renders the staff's concerns somewhat academic in nature. Given the bare-bones RCS budget which we authorize today, the likelihood of RG&E receiving revenues in excess of 1982 program costs is indeed slim. We find that there is no need to order collection of RCS-related rates subject to refund.

The rates which we authorize today for PG&E's 1982 RCS program will generate revenues of \$12,000,000 and will be authorized as V reasonable and necessary for PG&E to discharge its mandatory RCS obligations. Other than as modified by this decision, PG&E's application to increase rates to fund its 1982 RCS program is approved in all respects.

Findings of Fact

- 1. By accelerating the pace of residential conservation through an aggressive program of utility-provided ZIP, PG&E can achieve significant energy savings which can reduce its need for costly new energy supplies and production facilities.
- 2. In D.92653 the Commission authorized PG&E to conduct a test of its ZIP program in its San Joaquin Division.
- 3. Results from Phase I testing show that ZIP can stimulate customers to take cost-effective conservation actions.

- 4. Phase I participation levels demonstrate that substantial opportunities exist for highly cost-effective investments in conservation by public utilities.
- 5. As described in D.92653 the relevant tests of costeffectiveness of a conservation program such as ZIP are from the perspectives of the participating customer, the utility, and society.
- 6. PG&E's proposed ZIP Phase II program is cost-effective to program participants, the utility, and society.
- 7. Rate impacts of ZIP will be experienced by participating as well as nonparticipating ratepayers.
- 8. The program measures specified in D.92653 are appropriate for initial implementation of Phase II of ZIP.
- 9. Except as noted previously, the procedures outlined in D.92653 are appropriate and necessary for initial application in Phase II of ZIP.
- 10. With respect to installation of the "Big 6" measures, it is appropriate to impose a financing limit of \$1,000; with respect to installation of the remaining conservation measures, it is appropriate to impose a financing limit of \$2,500.
- 11. It is appropriate to require repayment of PG&E-provided conservation loans immediately; it is appropriate to require single-family homeowners participating in the program to repay such loans in equal installments over a 50-month period while all other participants will be allowed a 100-month payback period.
- 12. It is appropriate to require installation of all "Big 6" measures as a condition for receiving utility-provided zero interest conservation financing; it is also appropriate to require installation of the "Big 6" measures as a condition for receiving utility-provided zero interest conservation financing for the remaining ZIP measures.

- 13. It is appropriate to allow customers in PG&E's San Joaquin Division who have received 8% conservation financing from the utility before the effective date of this order to convert their loans to 0%.
- 14. It is appropriate for all customers in all PG&E's other divisions who have received 8% ceiling insulation financing from the utility before the effective date of this order to convert their loans to 0% upon their agreement to install all of the "Big 6" measures in their residences.
- 15. During the transition to systemwide implementation of ZIP, it is appropriate to authorize PG&E to continue offering convertible 8% ceiling insulation loans in those divisions which are awaiting availability of ZIP.
- 16. Project financing provides a means to finance ZIP beneficial both to the utility and its ratepayers. It is appropriate for PG&E to project finance Phase II of ZIP in accordance with the policies and procedures specified in D.93497.
- 17. Loans for conservation purposes such as PG&E will be offering in Phase II of ZIP represent a small fraction of the lending activities of conventional lending institutions.
- 18. ZIP loans will supplement rather than compete with lending opportunities for conventional lending institutions.
- 19. Conventional lending institutions will have an opportunity to participate in ZIP through its project financing structure.
- 20. PG&E's Phase II ZIP program is closely integrated with the federally mandated RCS program, and ZIP depends upon RCS audits for determining eligibility for financing of certain ZIP measures, and for numerous procedures.
- 21. As described in D.92653, special efforts are necessary to gain the participation in ZIP of elderly, non-English speaking, low-income persons, and renters.

- 22. PG&E's plans to achieve satisfactory levels of participation in Phase II by low-income, elderly, non-English speaking persons, and renters through special outreach efforts and coordination with communities, schools, churches, neighborhood organizations, and other groups, are reasonable and appropriate.
- 23. PG&E's plans to achieve satisfactory levels of participation in Phase II of ZIP through contracts, where necessary, with community organizations or local governmental entities are reasonable and appropriate.
- 24. PG&E's proposed schedule for transition from Phase I to Phase II of ZIP in three increments is reasonable.
- 25. There are a substantial number of persons who reside in mobilehomes in PG&E's service area who can achieve significant energy savings through ZIP loans.
- 26. ZIP financing up to a cost-effectiveness limit of \$500 for rigid polystyrene foam board insulation applied to the outside of a mobilehome roof and covered with reflective aluminum is reasonable.
- 27. Because of physical limitations, it is not reasonable to require R-19 levels of insulation to be achieved in connection with ZIP-financed mobilehome loans.
- 28. To protect ratepayers' investment in ZIP loans in connection with financing of measures for mobilehomes, it is reasonable and necessary to require three conditions for ZIP financing:
 - a. A pre-loan inspection to ensure that the dwelling is mounted on piers and equipped with skirting;
 - b. Proof of ownership; and
 - c. Repayment of the loan in 50 equal installments.
- 29. For renter-occupied mobilehomes, to provide adequate security for a ZIP loan it is reasonable to require the owner's signature on the agreement as a cosigner.

- 30. For master-metered mobilehomes, to provide adequate security for ZIP loans it is reasonable to require either that the mobilehome park owner act as cosigner with the owner of the individual mobilehome, or that a standard credit check be made on the prospective ZIP participant.
- 31. For individually metered mobilehomes, it is reasonable for ZIP participants to meet the same credit-worthiness requirements as owners of single-family fixed dwellings.
- 32. To qualify for a ZIP loan, it is reasonable to require that participants have been a customer of record of PG&E for 12 months with no shutoffs or no more than three 24-hour notices for nonpayment during that time.
- 33. It is reasonable that potential ZIP participants who fail to meet credit-worthiness standards can reapply and qualify for ZIP loans if they thereafter establish a payment record as a PG&E customer over an ll-month period which does comply with the standards.
- 34. It will improve cost-effectiveness, reduce administrative costs, facilitate ZIP participation, and provide for more flexible utility response in the event of nonpayment to adjust the requirement for recording liens on ZIP loans described in D.92653 so that liens will be required only for loans in excess of \$5,000.
- 35. In order to obtain maximum conservation from all segments of the residential housing market, it is appropriate that ZIP loans should be available for all dwellings constructed and occupied prior to January 28, 1981.
 - 36. Palo Alto and SoCal administer their own ZIP and RCS programs.
- 37. It is inappropriate to require customers of Palo Alto and SoCal to bear a double burden by funding the ZIP and RCS programs of their utility as well as the ZIP and RCS programs of PG&E.
- 38. The increase in revenues of \$29,000,000 authorized for Phase : II of ZIP is fair and reasonable.

- 39. PG&E's estimates of current market penetration of various conservation measures and useful life of conservation measures are reasonable.
- 40. PG&E's estimated penetration levels for each measure to be financed under ZIP are reasonable.
- 41. PG&E's estimated total of ZIP loans in 1982 is a reasonable estimate of the level of interest in ZIP in its first full year of operation.
- 42. The number of ZIP loans processed will be the major determinant in the level of administrative expense.
- 43. PG&E's proposed allocation of expenses between ZIP and RCS is appropriate and reflects a reasonable distribution of costs among these closely related programs.
- 44. 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.
- 45. It is appropriate that contract services for outreach to target customer groups be oriented toward ZIP rather than RCS because actual installation of conservation measures will result whenever ZIP financing is provided.
- 46. It is appropriate that PG&E enter into contracts for outside services only when it first has determined the need for such assistance.
- 47. It is reasonable for PG&E to require minimum standards of financial soundness, liability insurance, and other business factors when contracting for services under ZIP or RCS.
- 48. PG&E's plans for staffing to conduct ZIP and RCS are reasonable as to number, salary levels, organization, and supervision.
- 49. PG&E's cumulative experience with residential energy audits demonstrates that they can effectively promote conservation action by recipients.

- 50. PG&E's 1982 RCS program will be cost-effective to participants, the utility, and society.
- 51. The use of the ENERCOM computer system in PG&E's RCS program is reasonable at this time.
- 52. It would be inequitable and ineffective and would discourage conservation to charge a \$15 fee for RCS audits.
- 53. It would be inequitable to require PG&E to provide inspections under mandatory retrofit ordinances enacted by local governments, although it is reasonable for PG&E voluntarily to perform such inspections on an occasional basis as a service to its customers when manpower is available.
- 54. PG&E's MUD audit program and procedures are reasonable and are an integral portion of its overall ZIP and RCS conservation efforts.
- 55. The increase in revenues of \$12,000,000 authorized for PG&E's 1982 RCS program is fair and reasonable.
- 56. PG&E's 1982 RCS program conforms to the requirements of the California RCS Plan.
- 57. RCS audits are a cost-effective means of providing conservation information and motivation to customers.
- 58. PG&E's general marketing approach to ZIP and RCS is fair and reasonable.

Conclusions of Law

- 1. PG&E should be authorized to implement Phase II of the ZIP program as described in this decision and under the terms and conditions provided.
- 2. \$29,000,000 should be authorized as a reasonable level of PG&E's expenditures for the first year of implementation of Phase II of ZIP consisting of \$21,880,500 for gas and \$7,111,500 for electric.
- 3. \$12,000,000 should be authorized as a reasonable level of PG&E's expenditures for its 1982 RCS program, consisting of \$9,840,000 for gas and \$2,160,000 for electric.

- 4. When PG&E is authorized to increase its electric and gas rates under its test year 1982 rate case filing A.60153, it further should be authorized to increase electric and gas rates to recover the costs of ZIP and RCS as authorized.
- 5. PG&E's RCS program should conform to mandatory features of the RCS State Plan as approved by DOE.
- 6. PG&E's ZIP program should be integrated with and follow RCS procedures wherever appropriate.
- 7. The approved Phase II ZIP program is consistent with the purposes and requirements of the National Energy Conservation Policy . Act of 1978 and the Energy Security Act of 1980.
- 8. PG&E's ZIP program will not be anticompetitive in lending, or any other relevant markets, and will not violate federal or state antitrust laws.
- 9. It is not appropriate to segregate costs of conservation programs such as ZIP and RCS in the rate structure, inasmuch as no such segregation is made with regard to other energy supply costs.
- 10. Since SoCal and Palo Alto customers will fund their own RCS and ZIP programs, they should not contribute to PG&E's ZIP and RCS program funding.
- 11. Advice and project letters filed in accordance with General Order 96-A are appropriate to obtain Commission approval of financial arrangements between PG&E and its financing subsidiary, PCSC, between the subsidiary and lenders, and to approve quarterly rate adjustments associated with CFA debt service rate as authorized in D.93497.
- 12. Increases in CFA balancing account factors for all classes of gas and electric service, except as noted from \$0.00105 per therm to \$0.0029 per therm and from \$0.00002 per kWh to \$0.00014 per kWh, respectively, are just and reasonable and should be applied in accordance with the established CFA tariffs.

- 13. The RCS program is mandated under the National Energy Conservation Policy Act, the Energy Security Act, DOE regulations, and the RCS State Plan promulgated by the CEC.
- 14. PG&E is legally obligated to go forward with RCS as currently required under federal and state law.
- 15. This order should become effective immediately to allow PG&E to extend the benefits of ZIP and RCS to all its customers as quickly as possible.

ORDER

IT IS ORDERED that:

- l. Pacific Gas and Electric Company (PG&E) shall expand its zero interest program (ZIP) of residential conservation financing throughout its service territory subject to the following requirements:
 - a. Measures to be financed initially shall be the same as specified in D.92653, except that PG&E may also finance rigid polystyrene foam board insulation applied to the outside of a mobilehome roof up to a cost-effectiveness limit of \$500;
 - b. Procedures and requirements shall be the same as stated in D.92653 except that:
 - (1) Repayment of PG&E-provided loans will commence immediately after issuance; single-family home owners will repay such loans in equal installments over a 50-month period while all other participants will be allowed a 100-month payback period.
 - (2) With respect to the installation of the "Big 6" measures, a financing limit of \$1,000 per individual dwelling unit will be imposed; with respect to installation of the remaining measures, a financing limit of \$2,500 will be imposed.

- (3) Availability of utility-provided zero interest conservation financing for the "Big 6" measures is conditioned upon installation of all the "Big 6" measures, availability of utility-provided zero interest conservation financing for the remaining ZJP measures is conditioned upon installation of all the "Big 6" measures.
- (4) PG&E shall be required to record a lien only for ZIP loans in excess of \$5,000.
- (5) Participants must have been PG&E customers for 12 months with no shutoff and no more than three 24-hour notices for nonpayment during that time.
- (6) Participants who fail to meet credit-worthiness standards can reapply and qualify for ZIP loans if they thereafter establish a payment record as a PG&E customer over an ll-month period which meets those standards.
- (7) ZIP loans for mobilehomes are authorized provided:
 - (a) They pass a preloan inspection to ensure that the dwelling is mounted on piers and equipped with skirting;
 - (b) Proof of ownership is provided; and
 - (c) Loans are repaid in 50 equal installments.
- (8) For renter-occupied mobilehomes, the owner must agree to be a cosigner for the ZIP loan.
- (9) For master-metered mobilehomes, participants must:
 - (a) Have the mobilehome park owner act as a cosigner on the ZIP loan; or
 - (b) Agree to have a standard credit check performed.
- (10) For individually metered mobilehomes, participants must meet the same standards of credit-worthiness as owners of single-family fixed dwellings.
- (11) All dwellings constructed and occupied prior to January 28, 1981, will be eligible to qualify for ZIP loans.

- c. PG&E is to use its best efforst to promote ZIP and to achieve satisfactory levels of participation in the program for its low-income, elderly, non-English speaking, and renter customers.
- d. PG&E is authorized to contract with outside agencies, entities, or contractors to receive services which further the objectives of the ZIP and RCS programs, including services to facilitate participation by low-income, elderly, non-English speaking, and other target groups, whenever PG&E first has determined that such services are necessary. The following procedures shall be followed by PG&E to maximize the cost-effectiveness of such contracts:
 - (1) PG&E shall reimburse agencies, entities, or contractors for reasonably incurred actual costs of ZIP or RCS services performed, but PG&E shall require that such agencies, entities, or contractors must provide, prior to any payment for any service performed, evidence or documentation to demonstrate full compliance with the contract.
 - (2) PG&E shall apply contracting standards to all agencies, entities, or contractors with whom it contracts for ZIP or RCS services. The standards should, at a minimum, address traditional business considerations such as financial soundness, liability insurance coverage, and performance history in providing the same or comparable services.
 - (3) In the event circumstances warrant use of competitive bids to select agencies, entities, or contractors, PG&E is authorized to contract with the bidder who agrees to provide services complying with all bid specifications at the lowest acceptable cost.
 - e. PG&E's ZIP program shall be integrated with and conform to the RCS program as specified in the RCS State Plan issued by the CEC.
- 2. Under D.93497, PG&E is authorized to project finance the ZIP program and to file project letters and advice letters in accordance with General Order 96-A to obtain Commission approval of financial

arrangements between PG&E and its financing subsidiary, Pacific Conservation Services Company, between the subsidiary and lenders, and to approve quarterly rate adjustments associated with the CFA debt service rate.

- 3. PG&E is authorized to increase gross revenues in the amount of \$29,000,000 for the CFA less the amount that would be collected under present CFA rates. This totals about a \$14,320,000 increase in gas department revenues and about a \$5,848,000 increase in electric revenues.
- 4. PGSE is authorized to increase CFA balancing account factors for all classes of gas and electric service except as noted from \$0.00105 per therm to \$0.0029 per therm and from \$0.00002 per kWh to \$0.00014 per kWh, respectively. For its RCS program PGSE is authorized to increase base rates for all classes of gas and electric service as noted by \$0.0013 per therm and by \$0.0004 per kWh.
- 5. PG&E further is authorized to increase gross revenues in the amount of \$12,000,000 for its 1982 RCS program. Of this amount, \$9,840,000 is for the gas department and \$2,160,000 is for the electric department.
- 6. PGSE is authorized to file tariffs with the Commission in connection with systemwide expansion of ZIP and implementation of its 1982 RCS program to be effective concurrent with rates that are authorized in the general rate decision.
- 7. SoCal and Palo Alto shall be exempt. from rate increases associated with implementation of PG&E's 1982 ZIP and RCS programs.
- 8. PG&E is authorized to carry out as proposed the federally mandated RCS program in 1982.
- 9. Costs of PG&E's ZIP and RCS programs are to be applied to all customers, excluding SoCal and Palo Alto resale customers and except for sales to the Department of Water Resources and sales under Experimental Schedule A-20.

- 10. PG&E shall file annual rate applications for future ZIP and RCS costs, and shall include in its presentations the information specified in Ordering Paragraph 7 of D.92653.
- 11. In conformance with this decision, PG&E shall 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.
- 12. PG&E shall develop its own guidelines for contracting with outside organizations for ZIP-related services and submit them to the Commission within 90 days of the effective date of this order.
- 13. Within 90 days of the effective date of this order, PGSE shall file a report with the Commission analyzing the availability of effective and less costly alternatives to ENERCOM.

This order is effective today.

Dated December 30, 1981 ____, at San Francisco, California.

I will file a dissent.

/s/ RICHARD D. GRAVELLE
Commissioner

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

I CERTIFY THAT THIS DECISION WAS APPROVED BY THE ADOVE-

e. Bodovicz, Execut

RICHARD D. GRAVELLE, Commissioner, Dissenting:

I dissent.

In issuing D.92653 in Phase I of this proceeding we were extremely concerned about the cost effectiveness of the ZIP program and its effect upon the nonparticipating ratepayer. While we did not categorically adopt the nonparticipant test as the only test for cost effectiveness, we did place great reliance upon it and concluded at mimeo page 29f of that decision that:

"In short, the program adopted today will provide benefits to participants, nonparticipants, the utility, and society as a whole."

(See also the entire discussion at pages 22 through 29f and Findings of Fact 7 through 21)

Today's decision, in Findings of Fact 5 through 7, seems to me to shift away from the concern we so painstakingly constructed in D.92653 and to provide a much more flexible standard to be utilized for justification of programs such as ZIP.

I understand and commend my fellow Commissioners for further conditioning the program authorized today. They have acted to try to assure a thoroughly cost effective activity. nevertheless I do not feel confident that the record before us satisfies a nonparticipant cost effectiveness criteria and the decision honestly does not attempt to state such to be the case. Without being able to make that determination I cannot accede to the multimillion dollar expenditure authorized today.

Richard D. Gravelle. Commissioner

San Francisco, California December 30, 1981