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Decision 84 07 107 JUL 18 1984

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ORIGINAL

Application of Pacific Gas and Electric Company for authority to increase its electric and gas rates and charges effective January 1, 1984 in accordance with the Conservation Financing Adjustment (CFA) authorized in Application Nos. 59537, 60701, and 82-09-17 for operation of a Zero Interest Program (ZIP) of conservation financing, including a weatherization rebate component and a direct weatherization component.

(Electric and Gas)

Application 83-08-65
(Filed August 26, 1983)

Application of Pacific Gas and Electric Company to decrease its electric rates and charges and increase its gas rates and charges effective January 1, 1984, for operation of a Residential Conservation Services (RCS) Program as authorized in Application Nos. 60700 and 82-09-18.

(Electric and Gas)

Application 83-08-66
(Filed August 26, 1983)

(Appearances are listed in Appendix A.)

I N D E X

O P I N I O N

I. INTRODUCTION

This proceeding includes two applications by Pacific Gas and Electric Company (PG&E). Application (A.) 83-08-65 concerns proposed revisions to PG&E's conservation financing adjustment (CFA) which supports the utility's Zero Interest Program (ZIP) for home insulation. A.83-08-66 encompasses revisions to rates and charges for the Residential Conservation Services (RCS) balancing account. Adjustments to RCS are placed in a separate application because we have previously ordered that RCS costs be accounted for separate from ZIP.

Summary of Decision

This decision authorizes PG&E to continue its ZIP and RCS programs with several modifications. Although our decision finds PG&E's 1983 program accomplishments reasonable we are concerned with PG&E's high administrative expenses. We expect PG&E to meet its 1984 goals within the approved budget. We will closely scrutinize PG&E's performance in its next application. Strict limitations on program expenditures are set forth in this decision.

In 1984 PG&E is authorized to spend $48,641,119 to insulate 203,000 units. This will include Direct Weatherization (DW) of 33,000 units, 127,500 loans and 42,500 rebates. The rebate is a new component of the ZIP program authorized in the decision in an effort to reduce program costs. This decision expands the DW component of ZIP to include residents of mobile homes and renters of single dwelling units.

Our decision also authorizes PG&E to spend $10,735,800 to conduct 90,000 Class A audits, 10,000 Class B audits, and 2,400 Multi-Unit Dwelling (MUD) complex audits. This decision sets a specific cap on the cost of each type of audit.

This decision authorizes the following increases or decreases in the CFA, as compared to our previous authorization:

Category	D.83-04-015 (4/6/83) Factor	Estimated Sales	This decision Factor	Estimated Sales
ZIP Electric	$0.00007/kWh	$5.16 million	0.00006/kWh	$3.58 million
Gas	$0.00349/th.	$34.55 million	0.00615/th.	$46.68 "
RCS Electric	0.00006/kWh	3.26 million	0.00004/kWh	2.32 "
Gas	0.00166/th.	12.29 million	0.00145/th.	10.97 "

This produces the following estimated average annual changes based on average annual usage of 750 therms or 6,400 kWh per residential customer:

ZIP	Electric	$0.06/year decrease
	Gas	1.19/year increase
RCS	Electric	0.13/year decrease
	Gas	0.16/year decrease

History of Proceeding

We have issued two interim orders on these applications. Decision (D.) 83-11-060 (November 22, 1983) ordered PG&E to continue to maintain its CFA expense rate balancing accounts and to collect the CFA expense rates and RCS rates at 1983 levels, and to fund and operate programs financed by those rates, including Community Service and the Stockton Training Center.

Full public and evidentiary hearings were then held before an Administrative Law Judge (ALJ) in San Francisco on nine dates in February and March 1984. Certain associations, community groups, and public witnesses participated as well as PG&E and the Commission staff.

During the hearings PG&E requested another interim order which (as was true with D.83-11-060) was not opposed by any participant. A second interim decision (D.84-03-057),issued on March 21, 1984 made certain changes to our treatment of floor and wall insulation to parallel recently enacted state law, and interpreted our first interim order not to require equal monthly expenditures under the Direct Weatherization (DW) program.

II. Expenses Generally

Introduction

Because RCS is a federally mandated program we have chosen to require RCS to be the subject of a separate application, but it is well to view the entire expenditures in connection with ZIP and RCS as a whole.

ZIP

The total increases requested by PG&E have provoked sharp controversy from a policy standpoint between PG&E (with support from some interested parties) on the one hand, and the staff and Toward Utility Rate Normalization (TURN) on the other hand.

D.83-04-015 authorized PG&E to spend $39.71 million, of which $36.72 million was for administrative expenses, to weatherize 180,000 homes in 1983. Of the 180,000 homes, 26,400 were to be insulated through the Direct Weatherization (DW) component of ZIP and the remaining 153,600 were to be financed through ZIP loans.

PG&E fell short of its goals, weatherizing 25,384 homes through DW and issuing 113,000 loans covering 143,165 units, a total of 168,552 units. PG&E exceeded its budget by approximately $5 million, spending $42,750,935 in 1983.

The following table (from Exhibit 39) shows ZIP administrative expense levels as recommended by the staff and PG&E, compared to the 1983 levels. The total adopted for 1984 is the same as Column "E."

PACIFIC GAS AND ELECTRIC COMPANY
A.83-08-65
TABLE OF ZIP ADMINISTRATIVE EXPENSES

	A CPUC 1983 Authorized Expenses 1/	B PG&E 1983 Projected Expenses	C ECB 1983 Recommended Expenses 2/	D PG&E 1984 Requested Expenses	E ECB 1984 Recommended Expenses
LABOR					
1. Loan Processing		3,159,504	2,801,123	3,909,000	3,510,996
2. Inspections		1,649,693	1,462,569	2,425,000	2,181,564
3. Promotion		1,007,071	892,839	651,000	651,000
4. ZIP Outreach		267,023	236,735	254,000	254,000
5. Other (Add'l. Personnel Cost, etc.)		2,374,731	2,105,366	3,254,000	2,886,843
6. SubTotal	6,328,000	8,458,022	7,498,632	10,493,000	9,484,403
MATERIALS AND SUPPLIES					
7. Promotion		62,430	55,349	672,000	575,690
8. Other (Inspection Mat'ls etc)		391,408	347,001	1,126,000	674,698
9. SubTotal		453,838	402,360	1,798,000	1,250,388
CONTRACTS AND OUTSIDE SERVICES					
10. Advertising		274,063	242,976	2,837,000	1,765,227
11. Measurement and Evaluation		69,217	61,366	230,000	144,309
12. Inspections		300,263	266,204	225,000	396,316
13. Loan Processing		1,526,547	1,353,391	2,444,000	1,687,244
14. Direct Weatherization Contracts	19,219,000	17,727,610	17,727,610	20,000,000	21,500,000
15. Outreach Contracts		117,607	104,267	1,409,000	1,409,000
16. Other (Collection Agency Fees)		550,575	488,124	181,000	181,000
17. SubTotal		20,565,882	20,243,928	27,326,000	27,083,196
OTHER DIRECT COSTS					
18. Rebate Payments		-	-	6,084,000	6,084,000
19. Advertising		1,541,446	1,366,601	0	0
20. Promotion		90,155	79,929	118,000	92,958
21. Other (eg. Carrying Costs etc.)		5,530,587	4,903,255	496,000	496,000
22. SubTotal		7,162,188	6,349,735	6,698,000	6,672,958
23. OVERHEADS (Personal Expenses etc.)	2,598,000	548,062	548,062	5,740,000	3,698,459
24. TOTAL, ADMINISTRATIVE EXPENSES	36,472,000	37,187,992	35,042,777	52,055,000	47,799,119
ZIP CARRYING COSTS					
25. Carrying Cost	-	5,806,679	-	400,000	394,000
26. Bad Debt Cost	-	1,673,441	-	400,000	96,000
27. Collection Agency Fees	-	0	-	809,000	352,000
28. Subtotal	-	7,480,120	-	1,609,000	842,000
29. GRAND TOTAL, ADMINISTRATIVE EXPENSES	36,472,000	44,668,112	-	53,664,000	48,641,119

1/ Per D.83-04-015, Column A is not fully filled out because the categories in the adopted 1983 budget do not match those in A.83-08-65

2/ ECB: Energy Conservation Branch of the CPUC

PG&E's Overview

PG&E contends that in spite of the fact that ZIP funding was not authorized until April 1983, the program proved successful. The target was 180,000 dwellings; during 1983 113,000 loans were issued covering 143,165 units, and an additional 25,387 homes were weatherized through the DW component.

PG&E's Exhibit 1, sponsored by Allen W. Flock, Director of Residential Conservation Services, states that in addition to PG&E's total commitment, the company has attempted to weatherize units in specific target groups. The following table from Exhibit 1 summarizes the results:

Units Weatherized in 1983

	Goals	Accomplishments
ZIP	153,600	143,165
Direct Weatherization	31,400*	25,387****
Total	185,000*	168,552
ZIP Target Groups**		
Senior Citizens	33,743	10,034
Renters	67,643	59,818
Non-English speaking	1,801	1,953
Low Income***	50,106	28,264

* Includes 5,000 units carried-over from 1982.

** ZIP target groups represent subgroups of customers receiving ZIP loans. Some customers belong to more than one subgroup.

*** Includes direct weatherization.

**** This figure represents the number of homes weatherized with invoices paid in 1983. However, the actual number completed is approximately 31,800. The difference is invoiced in 1984 and will be paid from 1983 program funds. A revised direct weatherization summary will be transmitted as soon as all invoices are final.

In connection with the program, Community Outreach accomplished 41,900 contacts, which developed 8,356 ZIP and 6,463 RCS audit leads.

Exhibit 1 contains the table which follows, showing measures installed, including DW, for 1983. The totals are for leads from all sources. The evidence shows that the majority (about 70%) of leads are generated by private contractors. (The totals appear to be higher than recorded data submitted for 1983 reports.)

Without Audit	Single Family	Multifamily	Total
Ceiling Insulation	119,360	23,594	142,954
Caulking	37,965	8,847	46,812
Weatherstripping	78,202	20,550	98,752
Water Heater Blanket	45,838	16,662	62,500
Low-Flow Showerhead	43,664	20,733	64,397
Duct Wrap	15,164	2,694	17,858
Subtotal	340,193	93,080	433,273
With Audit			
Wall Insulation	7,593	1,038	8,631
Floor Insulation	4,488	342	4,830
Storm Windows & Doors	4,528	597	5,125
Clock Thermostat	650	113	763
Lighting Conversion	527	3,866	4,393
Intermittent Ignition	104	7	23,853
Subtotal	17,890	5,963	23,853
Total	358,083	99,043	457,126

The exhibit also details DW expenditures and installations for 1983. A condensation of the table in Exhibit I (pp. 31-32) follows:

Direct Weatherization Expenditures and Installations

Category	Units	Dollars
Total units weatherized	25,387	$15,747,759
(includes 13,627 units for elderly for a total of $8,452,828, and 1,667 for non-English speaking totaling $1,034,040)		
Ceiling insulation	20,138	$6,878,123
Groundwork:		
Caulking	21,596	
Weatherstripping	24,562	
Water heater blankets	13,605	
Low-flow showerheads	19,547	
Total groundwork	79,310	$3,465,680
Structural Improvement	18,852	$1,994,555

The exhibit also shows costs for ZIP through December 31, 1983. This summarization follows:

1983 Administrative Costs for ZIP *

Budget Item	Expense
Direct Weatherization	$16,706,957
Outreach	651,389
Literature	244,838
Advertising	3,054,625
Inspections	2,077,349
Training	162,502
Promotion	1,497,028
ZIP Loan Processing	5,099,699
Measurement and Evaluation	159,576
Quality Control/Assurance	208,076
Other Administrative Costs	393,692
Carrying Costs	5,967,727
Bad Debt Write-off	2,330,551
Overheads	4,196,926
Total, ZIP Administrative Costs	$42,750,935

*The 1983 CFA balancing accounts include these costs and charges for 1982 at 8% loan carrying costs, bad debt write-off costs, and other adjustments totaling $5,043,748, as well as a credit of $910,000 for interest income from 8% loans.

ZIP Installation Costs

Measure	Actual Contractor Installed Costs		Do-It-Yourself Installed Costs	
	SF	MF	SF	MF
Without Audit				
Ceiling Insulation	681	244	406	170
Weatherstripping	106	65	31	10
Water Heater Blankets	24	12	12	5
Low-Flow Showerheads	27	17	16	8
Caulking	66	38	21	4
Duct Wrap	85	40	51	12
With Audit				
Wall Insulation	895	501	323	272
Floor Insulation	766	238	301	65
Clock Thermostat	121	100	75	39
Storm Windows	876	286	769	424
Storm Doors	235	71	147	58
Lighting Conversion	192	49	146	67
Intermittent Ignition	265	242	160	0

AnnualEnergy Savings Per ZIP Measure

Measure	Single-Family Dwellings		Multifamily Dwellings	
	Electric (kWh/unit)	Gas (Therms/unit)	Electric (kWh/unit)	Gas (Therms/unit)
Without Audit				
Ceiling Insulation	615	104	413	123
Weatherstripping	65	13	21	8
Water Heater Blankets	494	46	422	48
Low-Flow Showerheads	863	44	525	46
Caulking	113	15	39	18
Duct Wrap	28	12	28	12
With Audit				
Wall Insulation	679	121	575	94
Floor Insulation	460	92	612	75
Clock Thermostat	2,025	182	579	88
Storm Windows	433	62	202	44
Storm Doors	64	5	35	9
Lighting Conversion	247	-	264	-
Intermittent Ignition	-	55	-	53

PG&E's survey shows that market shares for weatherization measures were as follows for 1983:

Actual Market Share of Weatherization Measures
(Installed between January 1 and December 31, 1983)

Measure	Estimated Installation in PG&E Service Area*	ZIP Installations**	ZIP Market Share***
Ceiling Insulation	130,500	122,636	94%
Caulking	54,700	25,163	46
Weatherstripping	96,200	74,039	77
Water Heater Blanket	72,900	48,853	67
Low-Flow Showerhead	75,900	44,803	59
Duct Insulation	69,700	16,733	24
Wall Insulation	107,000	8,559	8
Floor Insulation	119,800	4,790	4
Storm/Thermal Windows and Doors	253,900	5,078	2
Clock Thermostat	75,100	751	1
Lighting Conversion	146,200	4,386	3
Intermittent Ignition		110	0

* Derived by dividing ZIP installations by ZIP market share (not including direct weatherization installations).

** Actual ZIP installations recorded.

*** Estimated percentage of all installations resulting from ZIP, based on 1982 ZIP follow-up survey, released March 1983.

We note that the figures for wall insulation, floor insulation, storm windows, and clock thermostats appear disproportionate to ceiling insulation totals and ZIP-financed measures.

RCS

Flock also reviewed the 1983 RCS programs in Exhibit 2. The program is required under federal law through the end of this year. In California the program operates as the "RCS State Plan" under the California Energy Commission. PG&E considers RCS to be a worthwhile program and states that it is management's present intention to offer the service after 1984 even if federal law no longer requires it. In 1983 PG&E exceeded its RCS goal and provided 106,000 Class A[1] audits. Since 1981, there have been 235,000 Class A audits. For 1984, PG&E plans to audit 226,000 dwellings. Localized promotion will be continued, and PG&E's 1984 plans call for increased funding to continue contracting with community agencies, outside organizations, and local governments to provide audit services.

The witness summarized the workings of the program as follows (Exh. 2, pp. 1-2):

> "The central feature of RCS is a free home energy audit offered to residential customers. A PGandE-trained, state-certified RCS auditor inspects and evaluates the energy efficiency of a customer's home, and recommends

[1] See the section on specific RCS issues for descriptions of the types of audits.

cost-effective conservation measures to be installed and conservation practices to be adopted. The auditor also promotes the Zero Interest Program (ZIP) of conservation financing or other PGandE services which help the customer conserve energy and manage energy costs.

"PGandE works closely with insulation contractors, outreach agencies and other groups in implementing RCS-related activities. Systemwide advertising campaigns are coordinated with locally-based promotional activities tailored to respond to the demographic and geographic differences within PGandE's service area. An innovative Employee Incentive Program also has been developed which encourages PGandE employees to "sign up" friends and relatives for RCS and other services.

"The RCS Advisory Group, composed of individuals representing various community organizations, provides PGandE with unique perspectives and insights relating to RCS Program operation. With the assistance of this group, the Community Outreach Program has been broadened in 1983 through the addition of RCS outreach contracts. Overall, the Community Outreach Program provides the field support needed for both RCS and ZIP to reach the target groups.

"During 1983, RCS audits have become more flexible as a result of changes in the RCS State Plan (which recently were approved by the U.S. Department of Energy). Audits are now tailored to meet customers' interests and needs. Only 11 "core" measures must be evaluated during the audit. The other 17 "optional" measures may be deleted at the customer's request. "Walkthrough" audits also are provided for customers interested exclusively in ZIP."

According to Exhibit 2, PG&E has decentralized its customers activities to local offices, and is working together with local groups to give special attention to seniors, minorities, renters, non-English speaking customers, and other groups with special problems. The following table from PG&E's Exhibit 2 compares 1983 goals and accomplishments.

1983 RCS Goals and Accomplishments

Single-Family Audits*	Objective	Accomplishments
Total Audits	100,000	105,966
Low Income	17,910	13,869
Non-English Speaking	1,163	3,402
Elderly	18,434	16,787
MUD Audits		
Complexes	2,400	2,532
Units	132,000	127,721
Total Units Audited	232,000	233,687
Community Outreach Program Contacts	63,000	142,941

* Includes both RCS and walkthrough audits.

PG&E also developed an auditing format (approved by CEC) under which a participant may either restrict the audit to 11 "core" measures or include other optionals. This flexibility saves audit time as well as tailoring the audit to a customer's problems.

All customers who are participants now receive an audit guidebook with ZIP information, a list of low-cost or no-cost conservation measures.

Other factors of the program which, according to Exhibit 2, have been improved are too numerous to detail in this decision. They include:

1. Streamlined multiple dwelling audits.
2. Improved computer support system.
3. Multimedia promotion of the program.
4. Group meetings to improve relationships with contractors.
5. Formation of an RCS Advisory Group (in compliance with the State RCS Plan) composed of local interest groups, to penetrate target groups.

6. Community Outreach (formerly Community Services) as an "umbrella" for RCS and ZIP activities, administered through 32 division Community Conservation representatives. The purpose is to generate audit leads and ZIP loan applications through personnal contact. Target groups include:

   a. Low income.[2]

   b. Elderly.

   c. Non-English speaking persons.

   d. Renters and landlords.

7. Improved training for auditors.

8. Expanded quality control for RCS services.

9. Follow-up calls to survey how many RCS participants install various measures. According to Exhibit 2, the survey produced the results which appear on the following page. (Note that the results are for six months.)

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[2] Redefined by the Commission as those not exceeding 150% of the federal poverty guidelines.

RCS Callback Report
(Based on 27,479 Callbacks Received for Jan. thru July 1983)

Measures	Percent of Audited Customers Who Install This Measure*
Energy Conservation Measures	
Ceiling Insulation	47%
Wall Insulation	26%
Floor Insulation	21%
Storm or Thermal Windows	22%
Storm or Thermal Doors	20%
Window/Door Shading or Reflective Devices	25%
Caulking Doors/Windows	44%
Weatherstripping Doors/Windows	45%
Water Heater Blanket	40%
Clock Thermostat	17%
Duct Insulation	31%
Insulation for Hot Water Pipes	27%
Load Management Devices	21%
Furnace Flue Dampers	21%
Intermittant Ignition Device	15%
Replacement Furnace	11%
Heat Pump Water Heater	14%
Whole House Fan	14%
Evaporative Cooler	10%
Swimming Pool Cover	23%
Renewable Resource Measures	
Solar Domestic Water Heating System Sized for Maximum Number of Occupants	11%
Solar Domestic Water Heating System Sized for Present Number of Occupants	6%
Solar Replacement Swimming Pool Heater	23%
Active Solar Space Heating	32%
Passive Solar Space Heating - Direct	4%
Passive Solar Heat - Indirect - Trombe Wall	25%
Passive Solar Heat - Indirect - Water Wall	300%
Combination Solar Space and Water Heating	4%
Solaria/Sunspace Heating	8%
Wind Energy System	0%
Additional ZIP Measures	
Low Flow Shower Head	37%
Lighting Conversion	20%
Structural Improvements	15%

*Based on the number of times each measure was recommended.

The exhibit develops costs for the RCS program for 1983 which are shown in the following summaries.

1983 RCS Administrative Costs

Budget Item	Expense
Loan Processing	$ 511,000
RCS Audits	7,432,475
Coordination & Liaison	364,040
Training	222,950
Promotion	461,369
Literature	47,713
Advertising	60,361
Policy, Procedures, & Support	888,733
Measurement & Evaluation	235,100
Quality Control/Assurance	253,221
Financing/Incentives	56,206
MUD (Multiple Unit Dwelling) Audits	1,083,205
Employee Benefits & Payroll Taxes	2,197,923
Total	$13,814,436

The Community Outreach Program uses California/Nevada Community Action Association (Cal/Neva) and community-based organizations to improve ZIP and RCS penetration of target groups, including:

Low-income customers
Elderly (60 and over)
Non-English speaking
Renters and landlords.

Private business also participates. As of June 30, 1983, 40 community organizations were contracted to participate and to solicit 11,070 target group ZIP loans. According to Exhibit 1 (p. 21) through February 1984, 2,791 target group ZIP loans have been generated through these contracts. The exhibit states that in addition to the financing limits of D.83-04-015, the program is monitored through quality assurance audits, a divisional staff review of the audits, and a weekly division mail-in report to track weatherization units installed and inspected in each division.

From Exhibit 1 the total administrative costs associated with Community Outreach are uncertain. (See Exh. 1 pp. 35, 35A, and 35B.) Our analysis shows that PG&E's requested budgetary amounts are $2,829,000 for ZIP and $1,790,000 for RCS.

Community outreach appears to be an area subject to substantial pressure for expansion, because of the desire of many groups for more local involvement. (See later discussion under Section IV.) PG&E plans three pilot projects involving use of community groups in the RCS program.

Cost-effectiveness

Our prior decisions identify four perspectives from which to determine cost-effectiveness: the participant, the utility, society, and the nonparticipating ratepayer. We have not required each program to be cost-effective from all four perspectives.

PG&E's evidence developing cost-effectiveness shows ZIP and RCS are cost-effective except from the view of the nonparticipating ratepayer. Exhibit 26 (Ellen Davis) developed benefit/cost ratios following the methodology of the Joint Standard Practice for Cost-Benefit Analysis of Conservation and Load Management Programs issued in February 1983 by CEC and this Commission.[3] The exhibit also develops "net benefits" for the programs, which equal the differences between present worth of programs benefits and present worth of program costs.

Tables 1 and 2 from Exhibit 26 follow. 1.0 is the break-even point; a number less than 1 means the program is not cost-effective. Table 2 shows effects for the life of the program, not just for 1984.

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[3] The efficacy of the methodology in the Joint Practice was neither the subject of proof nor of disproof on this record.

PACIFIC GAS AND ELECTRIC COMPANY
TABLE 1
SUMMARY OF COST-EFFECTIVENESS RESULTS FOR
1984 ZIP AND RCS PROGRAMS

Measure Name	Electric Utility (A)	Electric Society (B)	Electric Participant (C)	Electric Ratepayer (D)	Gas Utility (E)	Gas Society (F)	Gas Participant (G)	Gas Ratepayer (H)
Single Family Loans	2.45	1.08	2.13	0.66	2.50	1.20	1.72	0.64
Multi-Family Loans	1.45	1.12	8.38	0.55	3.03	2.33	8.39	0.67
Single Family Rebates	2.35	1.12	2.21	0.65	2.40	1.24	1.78	0.63
Multi-Family Rebates	1.54	1.23	8.13	0.56	3.38	2.52	6.49	0.68
Direct Weatherization	1.21	1.20	-	0.46	1.30	1.42	-	0.52
TOTAL	1.83	1.12	3.98	0.59	2.15	1.35	3.37	0.61
RCS	17.76	7.53	13.17	0.87	2.66	1.24	2.10	0.66

PACIFIC GAS AND ELECTRIC COMPANY
TABLE 2
SUMMARY OF COST-EFFECTIVENESS RESULTS FOR
1984 ZIP AND RCS PROGRAMS
NET BENEFITS ($000)

Measure Name	Electric Utility (A)	Electric Society (B)	Electric Participant (C)	Electric Ratepayer (D)	Gas Utility (E)	Gas Society (F)	Gas Participant (G)	Gas Ratepayer (H)
Single Family Loans	4,796.6	605.2	2,602.4	(4,217.7)	39,708.0	12,127.2	13,302.0	(37,295.3)
Multi-Family Loans	1,035.9	361.4	2,348.8	(2,762.5)	11,351.8	10,777.0	8,173.3	(8,408.7)
Single Family Rebates	1,553.8	293.4	894.2	(1,464.4)	12,891.2	4,702.8	4,630.1	(12,919.3)
Multi-Family Rebates	389.3	209.8	777.2	(880.0)	3,977.0	3,806.1	2,613.2	(2,607.0)
Direct Weatherization	569.0	553.0	3,703.7	(3,083.0)	6,680.0	9,148.0	33,031.8	(26,508.0)
TOTAL	8,344.6	2,022.8	10,326.3	(12,400.5)	74,608.0	40,561.1	61,750.4	(87,738.3)
RCS	29,917.0	27,550.0	31,823.0	(4,545.0)	24,139.0	7,962.0	22,914.0	(20,158.0)

The exhibit develops other tables showing cost-effectiveness of the programs from different perspectives. Discounted payback periods for ZIP and RCS programs are short, according to the exhibit, and participants' benefits will exceed their costs no later than four years after installation of conservation measures.

On cross-examination, Davis conceded that she did not consider further tax liability which could be occasioned by operation of the ZIP program, and that she therefore had not analyzed that effect on programs which are marginally cost-effective.

Staff's Overview

The staff did not rebut PG&E's recorded information, nor (except for the point about taxation mentioned above) challenge the methodology of PG&E's cost-effectiveness analysis. Rather, the staff raises what it terms "fundamental policy issues" at the heart of the programs, which, in the staff's opinion, are no different from other conservation programs. In PG&E's most recent general rate decision (D.83-12-068, dated December 22, 1983), we took the position of holding the line on conservation expenses. The staff brief comments:

> "This policy recognizes that the economics of conservation programs in the latter half of the 1980's appear to be fundamentally different than those of the 1970's. Utility reserve margins are more than adequate; marginal costs are in decline, reversing a trend of more than a decade; there seems to be a broad awareness of conservation among the general public; and there has been significant penetration of a large number of conservation measures. There does not appear to be any reason to distinguish ZIP and RCS from other conservation programs offered by PG&E. Accordingly, Staff would propose that sound and consistent ratemaking policy demands that the substantial increases requested by PG&E for ZIP and RCS in 1984 be rejected."

In this connection the staff urges us to examine PG&E's past performance in administering the ZIP program to determine the appropriate funding level for 1984.

> "In 1983, PG&E came as close as it has ever come to achieving its ZIP goals (see Exh. 1. Table ZIP-83-2 (revised)). The fact remains, however, that PG&E did not achieve its goals in 1983, and never has achieved the goals which its sets for itself when it comes before the Commission in a ZIP rate case. Furthermore, although PG&E failed to accomplish all it promised to do in 1983, the company spent more money than it was authorized in rates for that year. Clearly, this situation cannot be allowed to continue. Ratepayers cannot be expected to continue to pay more for less. And the Commission should insure that they are not required to." (Emphasis by the author; footnote omitted.)

Staff stresses the failure of any of the programs to benefit the nonparticipating ratepayers. Over the life of the ZIP and RCS programs proposed, the net cost is $125 million (Exh. 26, table 2; tr. 630-632), and, as the brief points out, these costs could be understated because energy savings estimates are derived from forecasts.

Impacts on nonparticipating ratepayers must be better controlled, the staff argues, because:

> "...as often as not, these are the very groups of ratepayers - low income renters - upon whom rate impacts are most severe."

In this connection, staff points to the fact that PG&E was overexpended for 1983. The following table compares expenditure levels authorized with actual expenses.

Category	Authorized in D.83-04-015	Actual
ZIP Electric	$ 5.16 million	$ 8,638,380
Gas	34.55 million	39,352,620
RCS Electric	3.26 million	3,572,010
Gas	12.29 million	10,242,427

Finally, staff is alarmed at the attitudes exhibited by some interested parties that programs should be liberalized and controls loosened.

> "Opinions were offered by representatives of that community about the effects of current and proposed financing limits of ZIP measures upon insulation contractors and manufacturers. While opinions about the validity and propriety of financing limits varied, there seemed to be a general attitude that financing limits were detrimental to the interests of the private insulation industry. Invocations of "the marketplace," "competition," and "free enterprise" - the nominal tutelary deities of commerce - were common. Conspicuous by its absence was acknowledgement of the role of ZIP (and other conservation programs undertaken by California utilities under the aegis of this Commission) in making the market for weatherization products and services. This Commission and the private insulation industry would do well to remember that ZIP has not always been with us, and has not been created in perpetuity."
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> * * *
>
> "With so much money at stake, it is little wonder that self-interest occasionally overwhelms judgment. Nowhere was this more evident than in the serious allegations of fraudulent bidding practices that were made in connection with the Direct Weatherization component of ZIP. The substance of these allegations (which is not at issue in these proceedings) is almost less important than the fact that the allegations were made. Allegations like these speak loudly and eloquently to the fact that there may be just too much money out there - ratepayer money - and too few controls on it to prevent any unseemly and undignified scramble for a piece of the pie..." (Footnote omitted.)

On the basis of the "scramble" which was evident on this record,[4] staff suggests that the Commission "may have to rethink its commitment to utility sponsored and ratepayer funded conservation financing programs."

TURN did not present evidence but its representative made an opening statement in which he expressed concern about increasing rates of the nonparticipant. He said that for ZIP loans, some interest, though less than the market rate, should be charged, which possibly could defray expenses and therefore increase cost-effectiveness. PG&E and Pacific Power and Light (PP&L) are the only utilities with a zero interest loan plan. Southern California Gas Company (SoCalGas), Southern California Edison, San Diego Gas & Electric Company (SDG&E), Southwest Gas, and Sierra Pacific Power offer 8% loans. In the current PP&L application, staff and PP&L propose replacing zero interest with 8% interest financing.

Discussion

We view the ZIP and RCS programs as temporary and not to be institutionalized. In one of our earlier PG&E decisions on the subject, we selected a termination date for ZIP of December 31, 1986. (D.92653 dated January 28, 1981 mimeo. p. 99.) We have selected no date for RCS because at present the program is federally mandated and CEC, not this Commission, manages the California State Plan. However, we ask parties to address a termination date for the

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4 In addition to various complaints by insulation industry representatives and contractors, there is the issue of whether local organizations should be given the primary function of penetrating "target" groups for RCS audits (discussed in more detail subsequently). The Commission attributes no improper motive to those advocating such a change; nevertheless, staff correctly points out that contracts, and therefore financial support for such groups, is involved.

RCS program in the next offset proceeding. In addition, we ask parties to explore in the next RCS proceeding the most cost-effective audit for use in the remaining years of the program. We expect PG&E to develop the Class B "do-it-yourself" type audit to reduce program costs.

We agree with staff that during the lives of the programs, it is imperative to maintain proper fiscal controls and keep administrative costs to a minimum. After 1984, for example, the incremental and per capita administrative costs of reaching the remainder of those who could benefit from the programs, and convincing them that they should participate, could accelerate. While PG&E's cost-effectiveness development is appropriate for this record, it is not (and does not purport to be) a prediction that the same results will be obtained for 1985 or 1986.

Therefore, our focus in this decision is to control rather than to expand programs. Balancing cost-effectiveness to the utility and society against non-cost-effectiveness to nonparticipants requires this.

The funding levels found reasonable in this decision are the maximum levels to be authorized for 1984. PG&E may propose transfer of funds between programs, to maximize efficient use of available funds, or discontinuance or curtailment of programs and reductions in funding. (There is a possible exception because of contingent income tax liability. See subsequent discussion.)

Further in an effort to understand the effect of the programs more fully, we will require future applications to be filed containing information in consistent content and form. Much difficulty was encountered during hearings because in some instances recorded information was not presented in a form allowing it to be readily compared with estimates for the same subject, or the same program. Community Outreach, for example, was presented in different financial contexts on different exhibit pages with apparently conflicting information.

We will make the order in this decision effective through June 30, 1985. This was proposed during the hearings by the ALJ, to avoid the problem of processing another decision on this subject during the end of the calendar year, when Commission agendas are heavy. No party objected, although PG&E noted in its brief that if such a period is used (the period is 18 months counting from the beginning of 1984, the test year) it should be allowed to file an advice letter for the final six months. We will permit such a filing; however, the advice letter should address only the most essential items.

III. ZIP EXPENDITURES AND PROGRAMS

Introduction

The following changes have been proposed for ZIP in 1984:

1. Add a rebate option to the existing loan program.
2. Set specific limits for financing and rebates for each ZIP measure.
3. "Decouple" the Big Six conservation measures.
4. Expand eligibility criteria and increase the minor home repair limit for DW.
5. Modify procedures for ZIP loans over $5,000 for multiunit dwellings.
6. Create a method to add or delete ZIP measures based on cost-effectiveness criteria.

The rebate option is the most significant addition in dollars.

Expenses and Carrying Costs

PG&E wishes to raise ZIP administrative expenses from its authorized 1983 level of $36,472,000 to $53,664,000.[5] Staff's various recommended adjustments lead it to recommend $48,641,119. PG&E wishes to accomplish 203,000 installations in 1984, including 42,500 rebates (a new category), 127,500 loans, and 33,000 direct weatherizations. Staff witness Morse said that this is a "moderate" increase in projected goals over 1983's 180,000, but it "carries a large proposed increase in cost." (Exh. 37, p. 9.)

The staff witness recommended that PG&E's ZIP budget for 1984 should be based largely on 1983 recorded expenses, adjusted for inflation at 5.5% for labor and 5.3% for nonlabor expenses. The escalation rates are taken from PG&E's 1984 general rate increase application.

PG&E asserts that its overall administrative expenses were reasonable, and while some items ran over budget, others were below budgeted figures. The company criticizes staff's recommendations for proposing disallowances of administrative expenses in the overexpended areas while giving no credit for items under budget. At the same time, PG&E points out, staff recommends allowing PG&E to transfer funds among programs where expense levels warrant.

Staff notes that we adopted PG&E's own proposed 1983 goals and budget in D.83-04-015 and warned PG&E to meet its goals within budget. Specific staff recommendations for trimming expenses include:

1. No funding increase for the employee incentive program on the ground that the rebate program (discussed hereafter) will eliminate the need to expand advertising of ZIP.

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5 As previously indicated, the <u>actual</u> 1983 expenditure exceeded what was authorized. For brevity we will compare the 1983 authorized amounts with the requested funding, except as noted. See Exh. 39, reprinted earlier in this decision, for a breakdown of administrative cost categories.

2. Increase funds for Stockton Training Center only to account for 1984 inflation.

3. Reduce debt service estimate from $18.1 million to $17.5 million.

4. Decrease the rebate program by $400,000.

PG&E is critical of these proposed cuts on the basis that staff made no detailed budgetary analysis, and regarding the list of specifics, comments:

1. For 1983 the employee incentive program was only in effect for six months. There is actually no expansion in funding.

2. Stockton Training Center will be used in 1984 not only to train RCS and ZIP inspectors but also DW contractors, outreach personnel, and personnel for multiunit dwelling audits and weatherization.

3. Staff's rebate program decrease occurred during testimony with an inadequate explanation of it.

4. Staff's recommendation regarding reduction of debt service concerns PG&E's announced intention to adopt a new data processing system and reduce personnel but the system is not in place yet and there will likely be no cost reduction during changeover.

Our overall objective is to closely control growth in total expenditures during the remaining life of ZIP while achieving maximum energy conservation. Our goal, based on this record, is to establish a maximum ZIP budget. It is, therefore, appropriate to select a ceiling for the ZIP budget. We will adopt the staff's total of $48,641,119 as a reasonable ceiling, allowing for current inflation for 1984 and we expect PG&E to meet if not exceed its program goals.

We expect PG&E to adopt cost control measures which will obviate, or at least minimize, program curtailments. Our staff is directed to monitor PG&E's activities in this effort through the required monthly reports.

Within the approved budget, PG&E will be given some freedom to transfer funds from one category to the other (within ZIP, not between ZIP and RCS) without an advice letter filing or any order of the Commission. However, PG&E's own estimated 1984 budgets for Community Outreach and the Stockton Training Center shall be the maximums permitted without an advice letter filing fully justifying such increases and setting forth in detail from what program areas (or administrative cost areas) funds are to be transferred.[6] These maximums are necessary because the record indicates considerable public pressure on PG&E to expand these areas continually.

We will apply the same stricture to the rebate program, which is new and which should be tested under the limit of PG&E's own proposed budget before expansion is permitted, and to loan costs, which should be carefully controlled.

We will establish our only "floor," for DW, at the level of PG&E's own estimate for 1984 ($23.1 million). This is a vital program that should continue at its present pace because for those low-income persons eligible, there is no commercial alternative.

Rebates

PG&E recommends the addition of a rebate component to the ZIP program. The purpose of the program is to allow customers who install specified energy conservation measures for cash to seek rebates under a specified schedule, thus equalizing benefits between cash and loan customers.

Staff agrees with the concept because it could reduce loan costs (assuming fewer people apply for loans because some can now select cash payment and still benefit under the program).

[6] The schedule for the advice letter filing is discussed later in this decision.

There is minor disagreement over the rebate schedule, and staff has added some conditions. PG&E states its limits are based on cost-effectiveness while staff's are not the result of a study. Staff stresses simplicity for inspectors and as much uniformity as possible between PG&E, SoCalGas, and SDG&E.

We agree with the staff development and adopt its version, with the exception of the requirement that customers must submit original receipts to receive the rebate, since this requirement appears to be in conflict with energy tax credit regulations.

The rebate amounts and conditions adopted appear in Table 11, Exh. 37, which is reprinted on the following page. Adoption of this table also disposes of the minor problem raised by the staff of how to deal with pre-existing insulation levels. The table incorporates a "diminishing incentive" concept for adding to existing R-11 insulation, and no additional incentive for any addition over R-15.

TABLE II

STAFF PROPOSED REBATE AMOUNTS

MEASURE	REBATE LEVELS Single-Family	REBATE LEVELS Multi-Family Per Unit	MINIMUM REQUIREMENTS[1/] SF	MINIMUM REQUIREMENTS[1/] MF
No Audit Required				
Attic Insulation[2/]			600 Sq.Ft.[2/]	400 Sq.Ft.[2/]
For attics with:				
R-0 (No Insulation)	$ 300	$ 125	Add R-19 or Greater	Same
R-1 to R-11	200	100	Add R-19 or Greater	Same
Over R-11 to R-15	100	50	Add R-11 or Greater	Same
Over R-15	50	25	Add R-11 or Greater	Same
Caulking	15	10	30 Lin Ft.	20 Lin Ft.
Weatherstripping	15	10	30 Lin Ft.	20 Lin Ft.
Water Heater Wrap (each)	10[4/]	10[4/]	R-6 or Greater Water	Same
Duct Wrap	50	25	25 Lin Ft.	20 Lin Ft.
Low-Flow Showerheads (each)	10[4/] ($15 total for 2 or more)	10[4/]	Utility Approved	Same
Wall Insulation	300	100	R-11 400 Sq.Ft.	R-11 150 Sq.Ft.
Audit Required				
Floor Insulation[5/]	200	100	R-11 600 Sq.Ft.[2/]	R-11 400 Sq.Ft.[2/]
Storm Windows (per sq. ft.)[3/]	$2.50/sq.ft. up to $600 limit	$2.00 sq.ft. to $400 limit		
Storm Doors (per door)	15	15		
Clock Thermostats	30	30		
Lighting Conversions	20	10.		
TID Retrofit	70	70		

FOOTNOTES:

1/ All products must have a three year materials warranty - one year warranty on all labor, wall insulation which must include a three year labor warranty as well.

2/ Customer must add minimum required R-value to the existing insulation in order to receive the rebate. Only multi-family units under the attic are eligible for the attic insulation rebate. Only the ground floor units are eligible for the floor insulation rebate. On single-family homes under 600 sq.ft. a prorated rebate will be given (i.e., a customer with 400 sq.ft. of existing R-0 would receive $200 (400/600 Sq.ft. x $300).

3/ Must meet minimum standards set by the utility which include R-value, type of materials allowed and warranty requirements. For all installations one-half the actual cost (verified by original receipt) up to a limit of $2.50 per square foot will be allowed for single-family or $2.00 per square foot for multi-family windows. The $600 and $400 financing limits for rebates are reasonable.

4/ No rebate allowed where measures were already provided free of charge by the utility.

5/ No audit required where electric resistance heat is used.

"Decoupling the Big Six"

The Big Six conservation measures are the following: attic insulation, caulking, weatherstripping, duct insulation, water heater blanket, and low-flow showerheads. At present, under D.93891, a customer must have all six measures installed to be eligible for a ZIP loan to insure maximum cost-effectiveness to participants, the utility, and society.

PG&E's witness Dickenson took the position that decoupling is equitable because in some instances, audits have shown some measures, most frequently caulking and weatherstripping, to have paybacks greater than their natural lives, and "Auditors then must explain why customers are required to install some non-cost-effective measures to obtain a ZIP loan." The result is that some customers choose to do nothing. Dickenson therefore proposed:

1. Financing each ZIP measure independently, subject to a $150 minimum loan amount ($60 for rebates).
2. Financing each ZIP measure only up to the generic financing limits adopted by the Commission.
3. Continuing the current preaudit requirement for "Second Six" measures[7] consistent with state tax credit requirement.

Staff supports the present Commission position, challenging PG&E's cost-effectiveness data as inherently improbable because they are based on assumptions from a model.

It should be noted that the audit situation described by Dickenson occurs only upon a request for a PG&E audit. If a customer simply called for a contractor to come to the house and estimate a

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[7] "Second Six" measures were: storm windows and doors, clock thermostats, lighting conversions, intermittent ignition devices, wall insulation, and floor insulation. Now, however, wall insulation requires no RCS audit and floor insulation does not require an audit for electrically heated dwellings.

ceiling insulation job, the contractor would have to inform the customer that the Big Six installation must be made to qualify for the installation under ZIP. If the Big Six are installed, the contractor need only wait for a PG&E audit when the customer seeks ZIP financing for one or more "Second Six" measures.

In D.83-03-039 dated March 16, 1983 (SoCalGas's A.82-09-19) we ruled that there would be no decoupling for the loan program but that partial decoupling would be allowed for rebates. We noted the concerns of Insulation Contractors Association (ICA) that while loans may be carried for 100 months, rebates require that the consumer undertake an up-front cash transaction in anticipation of a credit, and that a full Big Six restriction on the rebate program would likely reduce customer response by requiring more cash at one time. We also noted the effectiveness of attic insulation compared to other measures. The result of our analysis was adoption of a rebate program requirement that attic insulation plus any two of the other Big Six measures must be installed to establish eligibility.

We believe the approach adopted in that decision leads to reasonable flexibility and recognizes the differences between a loan program and a rebate program, and will adopt it here.[8] The Big Six requirement should remain for loans, to discourage multiple loan applications and associated upward pressure on administrative costs of the loan program. Partial decoupling for rebates may also result in a preference for rebates among some customers, which we believe desirable since total loan costs may be reduced.

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[8] The same decoupling will be authorized for mobile homes. See discussion under that heading. Our ordering paragraph recognizes roof construction differences and eliminates the attic insulation requirement in some cases. The order also recognizes that R-11 insulation was often used as a standard through 1977.

Financing Limits for Loans

In D.92978, we required PG&E to monitor bids submitted to it for financing and to require that an additional bid be obtained by a customer when a bid is not within the reasonable range known to PG&E at the time. Both PG&E and the staff favor replacing the procedure with generic financing limits.

PG&E derived its limits from cost-effectiveness calculations performed in over 10,000 audits and the average market price per measure. Staff witness Grove testified he believes PG&E's limits to be for the most part appropriate but made changes to effectuate compatibility with the SoCal Gas program.

PG&E is critical of the changes as being empirical and on the ground that there is no purpose to statewide uniformity.

Contractors generally oppose generic limits.

There is no substantial difference between the limits suggested. We adopt the staff's proposed limits because they are easier to apply and we agree with the staff on simplicity as a goal.

Regarding the contractors' objections, we recognize that generic limits decrease flexibility, but we are quite concerned about growing administrative costs, and the impact on cost-effectiveness (and, therefore, on our willingness to continue the programs). We believe adoption of generic limits is a step toward lowering those costs.

The staff's analysis and recommendations, which we adopt, are printed on the page which follows.

TABLE 8

STAFF PROPOSED LOAN LIMITS

MEASURE	LOAN LIMITS		MINIMUM REQUIREMENTS 1/	
No Audit Required	Single-Family	Multi-Family Per Unit	SF	MF
Attic Insulation 2/			600 Sq.Ft. 2/	400 Sq.Ft. 2/
For attics with:				
R-0 (No Insulation)	$ 900	$ 375	Add R-19 or Greater	Same
R-1 to R-11	700	300	Add R-19 or Greater	Same
Over R-11 to R-15	300	150	Add R-11 or Greater	Same
Over R-15	150	75	Add R-11 or Greater	Same
Caulking	60	45	30 Lin Ft.	20 Lin Ft.
Weatherstripping	50	30	30 Lin Ft.	20 Lin Ft.
Water Heater Wrap (each)	25 4/	25 4/	R-6 or Greater	Same
Duct Wrap	100	50	25 Lin Ft.	Same
Low-Flow Showerheads (each)	10 4/	10 4/	Utility Approved	Same
Wall Insulation	900	300	R-11 400 Sq.Ft.	R-11 150 Sq.Ft.
Audit Required For Tax Credit				
Floor Insulation 5/	600	300	R-11 600 Sq.Ft. 2/	R-11 400 Sq.Ft. 2/
Storm Windows (per sq. ft.) 3/	$5.00/sq.ft. up to $1000 limit	$4.00 sq.ft. up to $400 limit		
Storm Doors (per door)	35	30		
Clock Thermostats	100	100		
Lighting Conversions	60	25		
IID Retrofit	250	250		

FOOTNOTES:

1/ All products must have a three year materials warranty - one year warranty on all labor, wall insulation must include a three year labor warranty as well.

2/ Attic insulation must meet existing financing limits for R-value (i.e. 48 cents - 52 cents/Sq. Ft. for R-19); Wall insulation limit is 80 cents/Sq. Ft. for R-11 or greater Floor insulation limit is 50 cents/Sq. Ft. for R-11 or greater. Customer must add minimum required R-value to the existing insulation in order to receive the loan. Only multi-family units under the attic are eligible for the attic insulation rebate. Only the ground floor units are eligible for the floor insulation rebate. On single-family homes under 600 Sq.Ft. prorated loan will be given (i.e., a customer with 400 sq.ft. of existing R-0 would receive a $600 loan 400/600 Sq.ft. x $900).

3/ Must meet minimum standards set by the utility which include R-value, type of materials allowed and warranty requirements. For all installations the actual cost (verified by original receipt) up to a limit of $5.00 per square foot will be allowed for single-family or $4.00 per square foot for multi-family windows. The $1000 and $400 financing limits for loans are reasonable.

4/ No loan allowed where measures were already provided free of charge by the utility.

5/ No audit required where electric resistance heat is used.

Deletion or Addition of Measures

PG&E proposes to add or discontinue ZIP conservation measures as cost-effectiveness is examined. Staff agrees, provided six-month intervals are allowed. The advice letter filing provided by this decision shall be used for this purpose. We agree that ZIP should be flexible yet recognize our own staffing limitations and potential for confusion among program participants.

If, however, an existing ZIP measure proves obviously non-cost-effective and should be curtailed, PG&E may request a change through an advice letter filing.

Inspection of Work

Currently PG&E inspects all DW installations and 20% of ZIP installations, except for those contractors who have more than 10% of their jobs found unsatisfactory, in which case the inspection rate is increased until the 90% pass rate is achieved.

Staff is not satisfied with a 90% pass rate on safety related failures (for example, covering a recessed light fixture with insulation or packing insulation against a furnace flue). Staff proposes an increase from 20% to 100% for ZIP installations when there are such safety related failures. At the same time, staff also recommends a reduction in DW inspections to the same level as for ZIP.

PG&E believes the program change will raise administrative costs out of proportion to any public benefit. In PG&E's opinion, there are insufficient failures to require the change.

Apparently PG&E misunderstood the staff recommendation as requiring the higher level for safety related failures without the tradeoff in a lower DW inspection level. This tradeoff should obviate any pronounced change in costs. A higher level of safety related inspections was adopted for SDG&E in Resolution EC-29, issued April 18, 1984. We believe safety problems should receive priority and will adopt the requirements of that program for PG&E.

Staff also proposed that contractors be required to complete and post a tag certifying their work. PG&E, on brief, states it has no objection but notes that staff did not review its proposal with any contractors.

There is insufficient evidence on the record to conclude that this proposal will provide additional protection for the buyer. At this time we reject the recommendation. Staff may renew this idea in the future upon a more complete presentation that there is a public benefit and it will not add to program costs.

Credit Standards

PG&E originally raised the issue of how to account for bad debts by proposing to change the formula to account for them. This led to a complex dispute between PG&E and the staff, the result of which was withdrawal of the request.

Staff also injected the issue of whether credit standards should be toughened to reduce bad debt losses. The bad debt chargeoff ratio runs at about 4 1/2%. (See "ZIP Carrying Costs" in table of administrative expenses on page 4.)

D.92653 required PG&E to adopt liberal credit standards, to penetrate such population segments as retirement-age persons and non-English speaking persons. The requirements are that an applicant must have been a customer of PG&E for the preceding 12 months and during those months shall not have received more than three 24-hour notices or have been shut off. These requisites were approved in D.93981.

PG&E points out on brief that without adopting a whole new system or raising administrative costs, the Commission could simply reduce the number of 24-hour notices permissible during the preceding year. (PG&E did not advocate this but presented it as a method should the Commission wish slightly higher standards.)

We believe it advisable to achieve some reduction in carrying costs and will order PG&E to reduce from three to one the maximum number of 24-hour notices acceptable for the preceding year. A 24-hour notice is the last resort before shutoff, and is preceded by overdue bill notices.

We believe this change in credit requirements disposes of the "bad debt write-off" issue raised by the staff and no separate discussion is necessary.

Collection Agency Fees

Also related to control of loan costs is staff's recommendation that PG&E reduce the fees paid to collection agencies. We see no need for a specific order at this time, although we expect PG&E to keep these costs to a minimum.

Two-Loan Limit

PG&E proposes the elimination of a requirement from D.92653 limiting a participant to two loans. The company states that its purpose has been to minimize loan processing costs, and to conform to "Big Six" and "Second Six" groupings, and asserts that the rebate program (which we are adopting) and decoupling (which we are partially adopting) will eliminate the value of the two-loan limit. PG&E proposes a $150 million loan limit instead, which it believes will assure cost-effectiveness.

Staff opposes the move and argues PG&E's admitted purpose of dropping the limit is to make marketing of ZIP loans easier, which would occur since PG&E's own studies show that the easiest persons to whom conservation services can be sold are those who have already committed themselves to conservation programs and ideas. The staff brief summarizes:

> "...the problem with eliminating the two loan limit: it might diminish the breadth of ZIP penetration. [Emphasis added.] As staff has indicated, the purpose of the two

> loan limit is to encourage people to install as many cost-effective conservation measures as possible for each ZIP loan. In addition, if the rebate program is approved as expected, customers who have already taken out two ZIP loans would still be eligible for a utility rebate. Moreover, there is the danger that elimination of the two loan limit would make program evaluation more difficult: there could be significant double counting in ZIP-related reports if the two loan limit was abandoned."

While we believe PG&E could probably devise procedures to control double-counting, we agree with the staff's point about program "breadth." Since the funds for the various programs originate with millions of ratepayers, those programs should be designed to allow the greatest number of ratepayers to take adantage of them. PG&E's proposal is rejected.

Assumability of Loans Over $5,000

PG&E recommends that ZIP loans over $5,000 be made assumable by a new owner when property is sold, to increase market ability of multiunit ZIP loans. PG&E's brief summarizes staff arguments against the recommendation as follows:

1. No guarantees for renters.
2. More administrative costs for PG&E.
3. The Commission may have differing policies on solar and ZIP.
4. Customers with loans under $5,000 would feel discriminated against.

The brief answers these arguments as follows:

1. There are no guarantees for renters in any event.
2. There have been only 261 ZIP loans issued for over $5,000, so that any additional administrative costs will be small.
3. A similar recommendation is pending in the solar program.

4. Customers with loans less than $5,000 are currently advantaged in that they have no security or lien requirement.

Actually, staff's arguments, aside from administrative costs, go deeper than that. Staff's brief reviews the problem as follows:

> "Under current practice, ZIP indebtedness is expected to be repaid from the proceeds of the sale when property is transferred. It may be that multi-unit dwelling (MUD) owners would find it easier to sell or transfer property with the assumable feature. But a ZIP weatherized building should be its own selling point. The goal is to produce weatherized dwelling units, not attractively leveraged debt structures which might enhance an apartment building's attractiveness to investors. What's more, keeping the existing procedures as they are permits the repaid principal of the ZIP loan to be used for other ZIP participants." (Emphasis added.)

We agree with the staff and reject the proposal.

Blower Door Test Program

Staff witness Grove proposed that PG&E test blower door technology to determine if identifying sources of air infiltration in homes can be cost-effective. On cross-examination, PG&E introduced a study by Lawrence Berkeley Laboratory (Exh. 41) which concluded this testing did not lead to any significant difference in energy saving.

There is insufficient positive information for us to adopt the staff recommendation. We also note that the cost of the program is roughly estimated by PG&E at $750,000 but that staff did not augment its recommended budget by any amount for it. If staff (or any party) proposes new programs, their cost should be estimated and allowed for, and their impact on cost-effectiveness should be evaluated.

We would be interested in the benefits of blower door technology for mobile homes, therefore, we ask parties to explore this measure in greater detail in the next proceeding.

Direct Weatherization Goals

PGandE proposes to weatherize 33,000 dwelling units in 1984 at a cost of $23,107,000 through the DW component. Staff agrees with PGandE's goals and budget, but argues that some budget items should be reallocated. PGandE requests flexibility to make changes it deems necessary to meet the overall goal within the overall budget. PGandE accepts staff's proposed reallocations on the condition that the Commission grants PG&E flexibility to reallocate dollars within budgets in order to meet the overall goals. Staff argued in this proceeding that PGandE should have flexibility to shift dollars between programs if necessary to meet goals.

We agree and our order will provide for this flexibility.

Mobile Home and Single Family Rental Participation in DW

PG&E proposed in Application 83-08-65 to expand eligibility for the DW component of ZIP to include low income occupants of mobile homes and low income renters of single family dwellings.

North Coast Energy Services (North Coast) presented testimony from mobile home owners concerning the value of DW. North Coast, Cal/Neva, staff and PG&E all support this recommendation. We agree and will order that mobile homes be eligible for DW.

We will also approve the inclusion of renters of single family dwellings in the DW program. No protest was received regarding this recommendation. However, we will not include renters of multi-unit dwellings in the DW component of ZIP at this time. PG&E presented concerns that program participants would not benefit from participation in DW since the landlord of a multi-unit building could recognize the units's increased value by raising the rent after installation, thus forcing the participating tenant to "pay" for the improvements, or to vacate the unit and make way for another (nonparticipating) tenant at the higher rent.

PG&E also foresees landlords of multi-family dwellings with eligible tenants, motivated by the goal of increasing the value of their properties at no cost to themselves, rushing to sign tenants up for the program and exhausting it.

Staff requests a study and report on the subject 60 days after this decision, for possible additions to the 1985 program. We believe extending the DW to include multi-family buildings is unadvisable due to potential program abuses. We will not, therefore, require PG&E to submit the report requested by staff.

Mobile Homes and ZIP

The proposal discussed above was limited to DW. PG&E currently has placed a moratorium on financing of mobile home roof insulation. Staff witness Grove reviews the problem as follows:

> "Currently there are two basic methods of insulating mobile homes. The first is to cover the roof with a rigid polystyrene board covered with a skin of aluminum. This method often costs $1.50 or more per square foot for a typical mobile home. This method of insulating a mobile home roof is expensive because it is labor intensive.
>
> "The second method of insulating a mobile home roof is to attempt to fill the spaces between the ceiling and the roof with a blown material such as cellulose or fiberglass. This technique is also labor intensive because it requires lifting the roof, or drilling holes in the roof or around its perimeter somewhat as is done in installing wall insulation. It is often difficult to verify whether the blown material has been properly installed to cover all of the "attic", because mobile home roofs contain cross-members which may block the flow of the insulation material being blown in. The problem of inspecting blown insulation, as well as complaints of material leaking into the interior [and] deforming the ceiling, have contributed to PG&E's decision to place a moratorium on the financing of mobile home roof insulation."

PG&E did not propose lifting the moratorium. Staff agrees that current insulating methods are not cost-effective and concurs with PG&E's position. Staff's Exhibit 37 (p. 48) states that PG&E and the staff will continue to investigate new methods and report to the Commission on any safe, reliable, and cost-effective innovation.

We agree that the moratorium should remain and certainly encourage PG&E and the staff to keep us up to date on developments. PG&E should continue to investigate the most cost-effective methods of weatherizing mobile homes.

Minor Home Repair Limit

PG&E wishes to raise the maximum allowance for minor home repairs associated with weatherization from $200 to $400. PG&E's evidence showed that from 10% to 15% of targeted low-income homes could not be weatherized because needed repair work exceeded the $200 limit. Approximately 5% to 7% of eligible customers need such repairs.

Staff witness Grove opposed the change because his discussion with contractors convinced him problems would result. However, he also raised the issue of whether the program should subsidize home repairs, even if the customers are low income.

Cal/Neva opposes the raise because apparently PG&E did not include any augmentation of funds for it in its budget for weatherization contracts, and therefore the increase would reduce the number of units that can be weatherized.

We agree that the $200 limit should remain for the reason mentioned by Cal/Neva. Additionally, while we are anxious to encourage low-income persons to take adantage of the program, there should be a strict limit on the additional subsidy necessary to perform minor home repairs as a prerequisite to installing conservation measures. After that limit, the owner or occupant should share the cost.

Also, as we commented regarding the staff's analysis of the proposed blower-door test, the proponent of a new program should present a budgetary analysis of it. This was not done.

Three-Bid Requirement

This issue engendered much discussion from various parties and vigorous opposition from interested-party contractors and contractor associations.

PG&E proposes (with staff support) a three-bid requirement for multi-unit ZIP loan applications of over $5,000. The owner would be required to choose between the two lowest bids.

PG&E cited "abuses" without being specific. The ALJ asked PG&E's witness Dickenson to elaborate. Dickenson cited a newspaper advertisement placed by a contractor offering to split the profit with multi-unit landlords. He also said that a search of PG&E records had turned up some out-of-line costs on jobs performed. (Tr. 564-566.)

Insulation Contractors Association (ICA) representative Skip Daum asked why such matters could not be taken care of by suspending such contractors from the program. Dickenson replied that it might lead to "subjective" decisions. (Tr. 567.)

At one point in the proceeding, ICA suggested "banding" limits but that proposal was withdrawn. In this regard, PG&E points out that there is no workable alternative now before us, and, in any event, Dickenson testified that the number of contracts affected would be small. As of October 5, 1983, there were 261 contracts of $5,000 or over. (Tr. 558.)

ICA maintains that no widespread abuses are a matter of record, and that a disincentive is created. Contractors testified concerning this latter point, which amounts to the following problem: contractor A spends time and effort soliciting insulation work under the program, lines up a customer, spends further time and energy, and puts a bid together. Then because of the three-bid requirement, another contractor (or two contractors) whose overhead is lower because of less inclination to do the spadework of selling the program, undercuts the bid. Thus the contractors who have been most conscientiously promoting the program do not get the work, and give up.

Daum, cross-examined on this problem, conceded that there could be some evening-out in the long run since the same contractor would not always be first in line (or could even avoid being first in line some of the time). He also stated, "...among landlords themselves, if a landlord is satisfied with the job, he then refers that contractor to a friend of his who may also be a landlord." (Tr. 736.)

On brief, PG&E argues that the very existence of ZIP gives contractors an advantage in the multi-unit market.

Acknowledging the imperfections in any bidding system, we believe adoption of PG&E's recommendation is essential to safeguard ratepayer-generated funds which finance ZIP. While there may be instances of unfair undercutting, landlords also want reasonable quality and freedom from headaches and tenant complaints that result from a poor job. Since either of the two lowest bids may be accepted, quality plays a part in the system and this should minimize unreasonable undercutting.

The Contract with Cal/Neva

Some private contractors are dissatisfied with the DW contract between PG&E and Cal/Neva. They claim that because Cal/Neva's board is comprised of officials appointed by public agencies, these persons unfairly and categorically favor awarding DW performance contracts to public bidders, and private contractors are shut out of the most lucrative bids.

At the outset it is important for the interested parties and witnesses registering such complaints to understand our jurisdiction, which extends to the regulation of PG&E but not to Cal/Neva. We can (if it is in the public interest) require modification of the Cal/Neva-PG&E contract. We cannot adjudicate individual disputes between Cal/Neva and any contractor, nor can we directly regulate the practices of Cal/Neva. The evidence and argument offered should be examined in that light.

Cal/Neva is an association of directors of 45 community agencies in California and Nevada, which provide services to the poor. A community action agency is designated by a county board of supervisors or a city council, under the federal Economic Opportunity Act of 1964. Some community action agencies have operated weatherization programs for low-income persons since 1975.

PG&E contracted with Cal/Neva to provide DW services in 1983 and again in 1984. PG&E considers the contractual arrangement ("primary contract") to be highly successful, because 1983 DW results exceeded goals while finishing under budget. PG&E notes on brief that the staff commented on Cal/Neva's low administration costs, quality controls, and efficient record-keeping.[9]

According to the testimony of Gordon Ryan, Director of Cal/Neva's DW project, Cal/Neva prepared a "request for proposals" for DW work and distributed it to the following on November 1, 1983:

1. Each contractor who had written or otherwise requested to be sent a request for proposals.
2. All existing Cal/Neva contractors.
3. The Contractors State Licensing board.

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[9] Ex. 37, p. 73 (staff ZIP exhibit). On brief, staff took no direct position on the allegations of some parties concerning Cal/Neva's practices, though the brief commented that injection of such issues appears to be self-motivated by those who did not get the majority of business.

4. The Insulation Contractors Association, for distribution to their members.
5. All PG&E divisions for distribution to private, or profit, contractors.
6. All organizations currently under contract with the State Office of Economic Opportunity to perform low income weatherization within PG&E's service area.

(See also generally on Cal/Neva's practices, Tr. 747-756.)

After distribution, two "bidders conferences" were held on November 14 and 15, 1983, in Sacramento, and a third was held later at the request of PG&E and some contractors. These were for the purpose of reviewing the request for proposals and answering questions.

Proposals were evaluated by a team of five members from a consulting organization and two members of the Cal/Neva staff. (No members of the Cal/Neva DW board were included.)[10] A point system weighed equally three factors: organizational capability, marketing plan, and cost. Contracts were then awarded after some negotiation over number of units to be completed, to accommodate certain changes in PG&E's goals. Additionally, some highest-ranked bidders with prices above established maximums were recommended for contracts contingent upon reduction in price.

The testimony concludes with the statement: "Board members abstained from voting on their own or competing proposals." (Exhibits 15 and 16 show that the 1984 Cal/Neva DW board consists of twelve persons, including two PG&E representatives and six whose community organization was awarded DW contracts for 1982-1983.)

Daum of ICA believes that the procedures do not adequately inform losing bidders of the selection process. For example, Ryan testified that while losers were contacted and the selection system

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[10] The weatherization board and Cal/Neva's board of directors are separate. The weatherization board awards DW contracts.

was explained, details of successful bids were not disclosed, in the belief that this would discourage future bidding since some methods of estimating are deemed by the bidders to be proprietary.

Daum also believes that application of the point system has too many variables known only to Cal/Neva insiders, and that it is too easily manipulated in favor of public organizations. The public, in his view, would benefit by greater emphasis on the lowest bid, since the dollars in the program would go farther. Daum cites the fact that while Cal/Neva claims 70% of the contracts go to private contractors, the percentage means little since the largest contracts are usually placed with public organizations.

In this connection, Jim and Michele Sealy, contractors from Oroville, point out that of 44 contracts awarded for 1983, 39 were awarded to community organizatons. (The exact geographical area covered by that statistic is unclear. Ryan testified that 12 of 45 contractors were private.)[11]

On cross-examination it was shown that ICA was given the opportunity to bid on the primary contract which was awarded to Cal/Neva, that ICA has been represented on the Cal/Neva weatherization board, and that in the past, the ICA board representative participated in the bid process and in the award of contracts. It was further brought to our attention that a majority of insulation contractors do not belong to ICA, and after the conclusion of hearings we received numerous letters from persons identifying themselves as private insulation contractors and repudiating Daum's views.

[11] The foregoing review does not include discussion of the charges and countercharges concerning a bid of the Sealys. We have no jurisdiction to rectify the alleged wrongs brought to our attention. Evidence presented on the subject was, on both sides, undocumented hearsay. We affirm the ALJ's rulings limiting the extent of presentations on this matter.

PG&E's brief urges us to remember the history of DW when considering this evidence. It considers the particular request of ICA on how the system should be changed as likely to destroy financial accountability.

> "DW was introduced because ZIP was not reaching the low-income market. (Decision 82-11-019, Finding of Fact 1, p. 16; Tr. 582-583). Initially, community-based organizations (CBO) won the largest share of DW work because they had demonstrated access to the low-income community. (Tr. 762). However, already in 1984, some CBO's have been outbid by and replaced by private contractors. (Tr. 751). The ICA admits that anyone can bid for DW work. (Tr. 988).

> "Basically, the private contractors want authorization to do their own DW work wherever they find an eligible customer (Tr. 90, 724), with a recommendation that PGandE finance any deal a contractor can obtain, with no protection against fraud. (Tr. 989-991). However, the ICA has done no analysis of how their proposal to let private contractors do DW work would be integrated into the present structure. Nor has ICA submitted a proposal to Cal/Neva. (Tr. 979-980).

> "PGandE was authorized to begin the DW program in Decision 82-11-019. Cal/Neva was selected, after competitive bidding, to implement the program because it would get the program going quickly in a cost-effective manner."

Discussion: No competent evidence on this record establishes any impropriety on the part of PG&E or Cal/Neva in administering the DW program under the primary contract. Interested parties apparently contend that even if the members of the DW board refrain from conflict-of-interest voting, there is too great a chance for back-scratching tradeoffs, but offer no competent evidence that this has occurred. We cannot base our actions upon supposition and, in any case, we are convinced from a review of the evidence that private contractors are not denied a reasonable opportunity to participate, and that the system does not waste ratepayer funds.

We agree with PG&E that it must consider target group penetration as well as other factors when selecting a primary contractor. With that fact and Cal/Neva's performance in mind, it is clear that PG&E properly exercised its discretion in awarding the primary contract to Cal/Neva. If a consortium of private interests believes it can do even better, it should make a specific proposal to Cal/Neva or directly to PG&E. The Cal/Neva-PG&E contract is nonexclusive.

It is in the public interest, however, with as much ratepayer money as is involved, to insure that appearances as well as realities are such that confidence in the system is not undermined. In this regard we are concerned about Cal/Neva's practice of not disclosing the winning bid. We consider Ryan's assertion that this would discourage bidding to be questionable, and neither Cal/Neva nor PG&E presented any contractor testimony to show that this would occur. We will order reformation of the primary contract to require such disclosure. This need not include disclosure of a contractor's source of supplies, but only of the complete bid itself, as presented to Cal/Neva, and only after the award is made.

Also, the record in this case is clear that, de facto, there is no conflict-of-interest voting by Cal/Neva's weatherization board. We will expect Cal/Neva to continue its practice of voting appropriately to avoid conflict of interest. We will not, however, require ammendment of the PG&E Cal/Neva contract in this regard.

Potential Income Tax Liabilities

PG&E's financial witness Thomas Bottorff developed in his prepared testimony that up to $29.2 million additional CFA rate relief could be necessary if federal or state taxing authorities impose certain additional tax liabilities on the DW and weatherization rebate components of ZIP. On this basis PG&E requests advice letter filing authority to pass on to ratepayers such additional costs if they arise.

PG&E may place its request for such additional funds in the advice letter authorized by this decision, but this authorization should not be construed as our present decision to grant the relief.

Balancing Account

Bottorff also proposes continuation of the CFA expense rate balancing account because of the addition of the DW program and the new rebate program.

Staff proposes its termination on the basis of our discussion in D.92653 to move eventually to conventional ratemaking treatment of the expenses.

While we disfavor balancing accounts, we will allow the CFA balancing account to continue for the time being for the reasons stated by PG&E's witness. Staff may renew its recommendation in the next proceeding of this type.

IV. RCS ISSUES

Introduction

There were fewer detailed disagreements between PG&E and the staff concerning RCS program costs. Of chief concern to the staff was its belief that "Class A" audits should be streamlined and their costs reduced, and that total RCS audit goals should be reduced because as of January 1, 1984, there was no longer an audit requirement as a precondition to state tax credit for wall insulation installation.

Community Network for Appropriate Technologies (CNAT), a community organization in Santa Rosa, made an extensive presentation to demonstrate that alternatives are needed to the present RCS program to achieve better coverage and better RCS results.

PG&E has stated on brief that it intends to offer "comparable services" to its customers after 1984 regardless of whether federal law is extended to require the program in later years.

Without deciding the issue now, PG&E and other parties must understand that we are not committed to permanent ratepayer funding of a nonmandatory RCS (or substitute) program. Strictly as a common sense measure because of the tie-in between RCS and the marketing of ZIP, the order in this decision will continue RCS financing for 1985. This will allow Congressional intention to be understood and will preclude any necessity for an application for RCS only at the end of this year, and requests for emergency orders.

RCS Program Costs

According to the staff exhibit on RCS, PG&E essentially achieved its RCS audit goals for 1983. However PG&E has failed to develop a low cost simplified audit. For 1984, it forecasts the following demand for audits:

Audits	Units
Walk-through (in conjunction with ZIP)	13,000
RCS Class A	96,000
Multifamily (based on 2,450 complexes)	117,000
Total	226,000
Target Groups	
Low-income	36,800
Seniors	41,100
Non-English speaking	2,700
Rental	82,700
Community Contacts	63,000

Staff's recommended goals are very similar, but staff reduces the Class A audit goal to 90,000 and then adds 10,000 Class B audits.

During a Class A audit, a PG&E specialist inspects a home, reviews billing data, and uses computer-generated estimates to identify conservation mesures are effective if installed. Cost estimates are provided on a contractor-retained and a do-it-yourself basis.[12]

The specialist will perform a walk-through audit instead of a full Class A analysis, if the customer states a preference for it. The customer does not receive a computerized audit in that case.

A Class B audit is a do-it-yourself project. The customer completes entries in a booklet and mails it to PG&E. PG&E returns a computerized analysis to the customer, explaining what measures are cost-effective.

Under federal law, the customer <u>must</u> be furnished a Class A audit if it is requested. PG&E criticizes staff's reduced Class A goal on this basis.

Staff witness Grove pointed out the following factors leading him to conclude that PG&E's 1984 budget for audits should be reduced:

1. Wall insulation no longer requires an RCS audit to qualify for a state tax credit.
2. That is also true of floor insulation for electrically heated homes.
3. Thus, beginning with this year, an RCS audit is only necessary for clock thermostats, intermittent ignition devices, storm windows, storm doors, and floor insulation for gas-heated dwellings.
4. PG&E has already audited over half a million dwellings, with 200,000 dwellings receiving a Class A audit by the end of 1983.

It was therefore the witness's opinion that RCS, and in particular the Class A audit, is a declining program.

Further, staff points to PG&E's own announced attempts to streamline the audits and reduce per capita expenses. (This simplification process does not include the multi-unit audit, which

[12] Auditors also encourage ZIP participation. Staff has expressed reservations over the use of RCS as a ZIP marketing tool.

requires detailed analysis and a sophisticated computer support program.) In spite of the announced steamlining, PG&E's own estimate for a Class A audit for 1984 is $108.12 against $99.84 for 1983, and its predicted Class A audit total for 1984 is 96,000 compared to its predicted total of 89,000 for 1983.

Because there is a tie-in between RCS and ZIP (see, for example, the Class A audit material in Exh. 32) staff is concerned that as time passes, the RCS Class A audit will be of more benefit as a ZIP promotion tool than for its own sake.

PG&E denies that there is any reduction in demand for Class A audits. It also vigorously opposes a shift to the Class B audit because it is not necessarily accurate and its energy savings are less.

PG&E criticizes staff's proposed $75 as a target for expense of a Class A audit as not based on any actual study, and points out that the staff witness could not identify line items in the audit that he would specifically reduce or eliminate.

Discussion: We will accept the staff's 1984 RCS budget, especially because of the state tax credit law changes previously mentioned, which reduce the incentives to have the audit. We also agree in principle with the staff that PG&E should make every effort to reduce the cost of the audit and have placed a cap on the Class A audit cost of $75. PG&E is expected to develop the simplified or Class B audits. We note that SoCal Gas has developed a Class B audit (certified by the CEC) to reduce program costs.

We will also follow the general principle mentioned in our discussion of ZIP and associated programs: that PG&E may use RCS funding flexibly, but with its own recommended 1984 levels for the Stockton Training Center and for Community Outreach as absolute ceilings. We recognize that in view of overall budget restrictions, PG&E may decide not to fund up to those maximums.

We also adopt staff's recommendation of an estimated 90,000 Class A audits and 10,000 Class B audits. We do not accept PG&E's arguement that the Class B audit cannot compare with the Class A since other utilities have developed simplified or Class B audits which are certified by the CEC and provide satisfactory results and reduce program costs. While these audits may be less accurate, they are cheaper. Staff estimates the cost of a Class B audit as $40, which we adopt.

Staff's analysis and recommended RCS adjustment rate for 1984 are detailed in the table of staff-recommended goals and expenditures and the comparison table which follow.

PACIFIC GAS AND ELECTRIC COMPANY
A. 83-08-06
RESIDENTIAL CONSERVATION SERVICES
TABLE OF STAFF-RECOMMENDED
GOALS AND EXPENDITURES

Line	Item/Type of Audit (A)	Number (B)	Cost/Audit (C)	Total Cost (D)
1	Class "A" Audits	90,000	$75	$6,750,000
2	Class "B" Audits	10,000	$40	400,000
3	MUD Complex Audits	2,400 1/	$1,072.50 2/	
	MUD units	117,000	$22	2,574,000
4	Subtotal	-	-	9,724,000
5	Stockton Training Center Funds transferred from 1984 general rate case			257,000
6	Community Outreach Center Funds transferred from 1984 general rate case			754,800
7	Total Recommended Expenditure for 1984			10,735,800

1/ Represents PG&E's 1983 MUD Complex goals.

2/ An average cost of $22 per unit is the basis for this amount.

PACIFIC GAS AND ELECTRIC COMPANY
A. 83-08-66
RESIDENTIAL CONSERVATION SERVICES
TABLE OF PROPOSED AND RECOMMENDED RATES
12 MONTHS ENDED DECEMBER 31, 1984

Line No.		Pacific Gas & Electric Company Proposed Adjustment Rate			Staff Recommended Adjustment Rate		
		Gas Department	Electric Department	Total	Gas Department	Electric Department	Total
1	Estimated RCS Administrative Audit Costs	$14,669,000	$1,813,000	$16,482,000	$9,554,875	$1,180,925	$10,735,800 3/
2	Estimated RCS Undercollection as of 12/31/83	1,339,000	1,128,000	2,467,000	1,339,000	1,128,000	2,467,000
3	Estimated Revenue Requirement (Line 1 + Line 2)	16,008,000	2,941,000	18,949,000	10,893,875	2,308,925	13,202,800
4	Provision for Franchise Fees and Uncollectibles (Line 3 x rate) rate = .00783 for Gas rate = .00793 for Electric	125,000	23,000	148,000	85,299	18,310	103,339
5	Total Revenue Requirement (Line 3 + Line 4)	16,133,000	2,964,000	19,097,000	10,979,174	2,327,235	13,306,409
6	Present RCS Rate	0.00166/th	0.00006/kWh	---	.00165/th	0.00006/kWh	---
7	Estimated Sales Subject to RCS	7,595,030 Mth 1/	57,145,376 MWh 2/	---	7,595,030 Mth 1/	57,145,376 MWh 2/	---
8	Estimated Revenues at Present RCS Rate (Line 6 x Line 7)	12,608,000	3,429,000	16,037,000	12,608,000	3,429,000	16,037,000
9	Estimated Revenue Increase (Line 5 - Line 8)	3,525,000	(465,000)	3,060,000	(1,628,826)	(1,101,765)	(2,730,591)
10	Proposed RCS Rate (Line 5 ÷ Line 7)	0.00212/th	0.00005/kWh	---	.00145/th	.00004/kWh	---

1/ Excludes sales to the City of Palo Alto, Southern California Gas Company, CP National Corporation and Southwest Gas Corporation.

2/ Excludes sales to the Department of Water Resources.

3/ From Table 4, line 7, Column D.

RCS Balancing Account

As with the accounting treatment for ZIP, the staff recommends elimination of the RCS balancing account. PG&E has proposed indefinite retention of it. PG&E cites the uncertainty in the demand for audits.

> "For example, if the program does terminate, there could be a last-minute rush for audits. Without a balancing account, PG&E could not fund such a last-minute demand. (Tr. 1160.) Similarly, if demand unexpectedly dropped, any overcollection would be returned to the ratepayers, with interest. (Tr. 1162.) Staff's proposal protects the ratepayers against overcollections but leaves PG&E at risk for undercollections in a program over which PG&E has little control on the demand for the programs. A one-sided balancing account, as proposed by staff, is extremely unfair and should be rejected." (Brief, page 63.)

Because under federal law, PG&E must provide Class A audits to those requesting them, we will for the present continue the balancing account. As we stated earlier, we are not committed to permanent ratepayer funding of a nonmandatory program. Therefore we expect parties to address termination of the RCS program in PG&E's next offset proceeding.

The Need for Alternate Programs

CNAT's proposal for involvement of community-based organizations in the RCS program was presented in much detail.

Susan Keller, executive director for CNAT, testified that a survey of Sonoma County showed PG&E did not meet its targeted goals for reaching certain groups, such as renters and low-income persons. She further stated, in part, that:

1. Community organizations could monitor goals better and therefore report results more accurately;
2. The present multi-unit audit is essentially landlord-oriented;

3. PG&E has never established a Class B "do-it-yourself" audit, which has good potential.[13]

4. Educational materials are inadequate, and are monopolized by PG&E and not made available to community organizations. (Examples of educational materials produced by municipal utilities, etc. were cited as improvements.)[14]

5. There is an inadequate tie-in between RCS and DW. Such integration would maximize dollar value and make delivery of services to low-income areas more efficient.

6. The "monopoly" of RCS services by PG&E prevents use of diversified sources to search for low-income participants.

7. PG&E's record-keeping on penetration of target groups is self-serving and inaccurate.

CNAT makes numerous other contentions concerning alleged inadequacies of the programs PG&E operates. Recommendations include the following:

1. Designate a minimum of 50% of the PG&E RCS budget for community-based RCS programs.

2. Establish and fund an RCS technical council composed of Commission, CEC, and local government personnel to support local RCS programs, and order PG&E to provide it with educational material.

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13 See previous discussion. Our 1984 adopted RCS program provides for Class B audits.

14 Some of the PG&E educational material was shown as not actually intended for public distribution but rather as technical training manuals.

3. Order PG&E to develop a "core" audit with generic findings similar to that of SoCal Edison to cut costs.[15]

4. Integrate DW with RCS.

5. Order PG&E to include customer eligibility for ZIP and RCS with monthly utility bills.

The above is not a complete list of the recommendations, but in total they would amount to a major revision of the entire program, with community-based organizations, rather than PG&E, in the forefront.

CNAT asserts that PG&E's "monopoly" of the RCS program is contrary to law, although we are furnished no citations. PG&E states that there is no provision of law requiring utilities to contract RCS work to community organizations, and research discloses no such requirement. PG&E has proposed, in its 1984 budget, an item of $940,000 to contract some RCS audit work to community-based organizations.[16] Three groups were awarded contracts in 1983 but startup costs resulted in higher costs than budgeted.

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15 The PG&E exhibit on 1984 RCS plans mentions development of generic standards to speed audit time. Staff and PG&E did not develop this in detail, nor did CNAT, and there is insufficient competent evidence on it for us to make a specific order. We will order PG&E to investigate the use of such standards as a method of speeding audits, and cutting expenses, and will authorize PG&E to begin using such standards at its discretion.

16 Staff's analysis did not include a specific line item for an adopted sum.

CNAT offered no detailed survey of its own estimated costs versus PG&E's and made no presentation on what methods it would use to staff itself expeditiously and equip itself to keep the RCS program moving at its current level if its proposals were accepted.

CNAT's concern about "target groups" is well-taken, and PG&E's penetration of such groups is not perfect, but it is most likely that inevitable delays and confusion caused by changing systems at this late date would result in poorer results, and at a higher price. We have reviewed PG&E's publicity associated with RCS and find it to be adequate.

To assist community groups such as CNAT, we see nothing wrong with directing PG&E to use some of the community outreach funds to produce and distribute adequate RCS literature for use by community organizations. This will not be an order specifying any particular dollar expenditure nor guarantee unlimited availability of such literature.

Otherwise, CNAT's recommendations are rejected.

V. ADVICE LETTER FILING

The unexpected variety of issues delayed the resolution of this proceeding. Since we are past the midpoint of 1984, we will make the order in this decision effective immediately.

Only about 12 of the 18 months envisioned as the life span of rates set by this decision remain. We will divide this remaining time in half and permit an advice letter filing in late 1984, on the subjects mentioned in the order. As previously discussed, this advice letter will not include a request for greater total relief than granted in this decision, except on the contingent tax liability problem. Its purpose, in essence, will be to allow PG&E to make use of total authorized funds to the best advantage of the programs.

More frequent advice letters are too much of a burden on staff and the Commission's process, and, in any event, this decision itself gives PG&E much flexibility in expending sums.

Findings of Fact

1. Because of the continuing need for conservation of resources, our previously selected termination date for ZIP financing (in D.92653) of December 31, 1986, should remain unchanged.

2. RCS is a federally mandated program through the end of this year. While we are not committed to ratepayer financing of a nonmandatory RCS program, as a practical matter it is in the public interest to continue ratepayer financing of it at least through June 30, 1985.

3. It is appropriate to evaluate termination of the RCS program in PG&E's next offset proceeding.

4. PG&E's 1983 program accomplishments and expenditures are reasonable, however, in the future more emphasis should be placed on budgetary management of ZIP and RCS programs and administrative expenses.

5. Recorded and estimated information should be comparable, and it is reasonable to require such compatibility in any future applications and exhibits on this subject matter.

6. It is reasonable to make the order in this decision effective through June 30, 1985 to avoid processing future decisions near the end of the calendar year, and to avoid requests for emergency orders.

7. Within ZIP and within RCS, PG&E should be given flexibility in shifting sums among administrative categories and programs to make optimum use of funds in meeting programs, subject to certain specific ceilings, and to a "floor" for DW.

8. The staff's total estimated 1984 ZIP budget of $48,641,119 is reasonable for the 1984 year. PG&E should be allowed to reassign funds and rebudget among administrative categories and programs, subject to PG&E's own estimates as ceilings for the rebate program,

which is new and which should be closely controlled at its inception, for total loan costs which need careful regulation, and for Community Outreach and the Stockton Training Center, because of upward pressure in those areas.

9. PG&E's proposal to add a rebate option to allow cash customers to participate is reasonable because it increases availability of the program and it may cut costs by reducing ZIP loan applications.

10. Staff's development of a rebate schedule is simpler and should be adopted except for the "original receipt" requirement.

11. Big Six conservation measures should be partially decoupled for the rebate program only. Full conservation measures should be required for the loan program to avoid increasing administrative costs.

12. Staff's proposed financing limits for loans should be adopted because of simplicity of application and the conditions in the staff recommendation.

13. No sufficient evidence was presented to warrant an increase in the inspection rate of dwellings, with attendant cost increases.

14. Credit standards for ZIP loans have been, and are, extremely liberal. They should be tightened to a minor extent to reduce bad debt losses and administrative costs associated with loans. It is reasonable to reduce from three per year to one per year (that is, the previous year to the loan application) the maximum number of 24-hour notices an applicant may receive and still be eligible for a ZIP loan.

15. No change in fees paid to collection agencies is necessary.

16. The present two-loan limit should be retained to assure broad application of the ZIP program.

17. For the reasons the staff advocated, it is not reasonable to allow loans over $5,000 to be assumable.

18. Staff's proof that we should order the adoption of a blower door test program is inadequate, and no such program should be required. Parties should evaluate this program in the next proceeding.

19. PG&E's DW goals are reasonable, and PG&E should have the flexibility to make changes within DW budgetary categories. Because this program is vital, PG&E's estimated $23.1 million for the program should be regarded as a "floor" for expenditures.

20. A DW program for renters of multi-unit dwellings is inadvisable because of potential landlord abuses of such a program. No PG&E study of this subject should be required.

21. Mobile homes and single family rental units should be eligible for DW participation within the total DW budget, and with the same requirements for Big Six measures as for other dwellings (cf. Finding 11).

22. PG&E's moratorium on ZIP loans for mobile home roof insulation should remain in place. If new methods of insulating mobile home roofs are invented, PG&E and the staff should make appropriate recommendations in any future proceeding on this subject.

23. Raising the minor home repair limit under DW from $200 to $400 is not advisable because funds thus expended may reduce the scope of the program.

24. The three-bid requirement for ZIP loans over $5,000 is reasonable as an essential safeguard for ratepayer-generated funds and will not unduly impact the ZIP program.

25. PG&E's contract with Cal/Neva is reasonable but should include provisions requiring disclosure of winning bids after the awards.

26. The ZIP balancing account should remain in place until our further order, because of program changes.

27. Recognizing the valuable tie-in between ZIP and RCS, we should allow RCS funding and programs to continue until June 30, 1985 regardless of Congressional action. This will also obviate requests for emergency relief in late 1984.

28. Staff's reduced budget level for RCS is reasonable for 1984.

29. As with ZIP, PG&E should have flexibility to transfer sums among RCS categories, provided that PG&E's budgeted amounts for the Stockton Training Center and for Community Outreach are not exceeded.

30. Staff's recommendation for goals of 90,000 Class A audits and 10,000 Class B audits is reasonable. PG&E should be ordered to institute and promote Class B audits within reasonable budgetary constraints, and should be permitted to experiment with and use generic Class A standards without our further order.

31. PG&E should be ordered to investigate and report on use of generic audit standards as a possible cost-saving measure.

32. CNAT's proposals on changing the system of delivering RCS to the public cannot be adopted at this date without excessive administrative adjustments and expense. Any advantage to the use of community-based organizations as the primary (or co-equal) providers of RCS services is outweighed by the problems of changing, this late in the life of the RCS program, from one basic system to another.

33. The preceding finding should not be interpreted as abridging PG&E's efforts to establish pilot programs with community organizations, within budgetary limits.

34. PG&E should make a reasonable amount of RCS literature available to community organizations.

35. One advice letter filing for program changes should be allowed in late 1984 as set forth in the order. More frequent advice letters are unnecessary and burdensome.

Conclusions of Law

1. The application should be granted to the extent set forth in the order.

2. One advice letter filing, as specified in the order, should be permitted in late 1984.

3. Because we are past the midpoint of the 1984 test year, the order should be effective immediately.

4. If no further order of the Commission on continued funding of CFA or RCS programs issues in either this proceeding or in a subsequent application by June 30, 1985, programs should continue as provided in Ordering Paragraph 19.

O R D E R

IT IS ORDERED that:

1. PG&E shall offer its ZIP program until further order of the Commission at staff-recommended funding levels (annual basis) and under program goals as proposed by PG&E.

2. Without further order from the Commission, PG&E may reallocate sums within the ZIP budget, subject to PG&E's own recommended budgetary amounts as ceilings for rebates, community outreach, total loan costs, and the Stockton Training Center. Reallocations shall be shown in PG&E's monthly reports.

3. Within 30 days of this date, PG&E shall commence its proposed rebate program, under staff's rebate schedules and conditions.

4. PG&E shall continue to require installation of all Big Six measures as condition precedent to a ZIP loan. For the rebate program, the following conditions shall apply:

a. A minimum of three of the six measures, including attic insulation where required, must be installed.

b. Except for mobile homes, flat-roofed homes, and other dwellings with no attic space, a minimum of R-19 attic insulation must be in place at the time of the inspection, provided that R-11 is acceptable if installed before 1978.

5. PG&E is authorized to reduce its level of DW inspections to not less than 20% for contractors maintaining a first-inspection pass rate of 90% or better. For both DW and ZIP (including rebate) installations, the following conditions shall apply:

a. When a job fails for safety reasons, PG&E shall inspect the 100 jobs immediately preceding, or those which were done in the preceding 30 calendar days, whichever is less, and which were not previously inspected.

b. PG&E shall continue inspecting such contractors at a 100% rate until it finds no safety related failures and is satisfied of the contractor's safety and reliability. PG&E may then resume inspecting at a 20% rate.

6. Staff's generic loan limits and conditions are adopted, and PG&E shall place them into effect.

7. PG&E shall revise its ZIP loan credit standards so that a maximum of one 24-hour notice for the year preceding the application is allowed.

8. Within the adopted DW budget, mobile homes and rented single family dwellings shall be eligible for participation. DW expenditures shall be maintained at PG&E's proposed 1984 level. PG&E may include in its advice letter filing justification for change of that level.

9. PG&E shall place into effect its proposed three-bid requirement for loans over $5,000.

10. PG&E shall continue its moratorium on ZIP loans for mobile home roof insulation until our further order.

11. Within 60 days of this date, PG&E shall modify its contract with Cal/Neva as indicated in Finding 25.

12. PG&E shall maintain the ZIP and RCS balancing accounts until our further order.

13. Without further order from the Commission PG&E may reallocate sums within the RCS budget, subject to PG&E's own

recommended budgetary amount as ceilings for community outreach (including "pilot programs") and the Stockton Training Center. Reallocations shall be shown in PG&E's monthly reports.

14. PG&E shall fulfill staff's recommended annual goals of 90,000 Class A audits and 10,000 Class B audits within established cost caps. PG&E shall begin promotion and availability of Class B audits within 30 days of the date of this order, and shall maintain the program within sound budgetary limits.

15. PG&E shall use a reasonable amount of its community outreach budget to make appropriate RCS literature available to community-based organizations.

16. PG&E is authorized to experiment with, and to apply, generic Class A audit standards. Concurrently with the filing of its advice letter, PG&E shall furnish the Commission with a report and any recommendations on use of generic audit standards as a means of expediting audit and reducing audit costs.

17. During late 1984, PG&E is authorized to file an advice letter on programs and expenses which are the subject of these applications. The advice letter may make any recommended changes in program funding levels within the annual totals found reasonable in this decision which are not already authorized by the by the budget flexibility provisions of Ordering Paragraphs 3 and 13. The advice letter may include a request for additional rate relief made necessary by income tax changes.

18. Within ten days of the date of this order, PG&E shall:

a. Change the CFA expense rate balancing account factors for all classes of service to $0.00006 per kWh and $0.00615 per therm, on a uniform cents per kWh and cents per therm basis.

b. Decrease the RCS balancing account factors for all classes of service to $0.00004 per kWh and $0.00145 per therm, on a uniform cents per kWh and cents per therm basis.

19. If there is no further order on the subject between now and June 30, 1985; PG&E shall continue to collect CFA revenues under the expense rate balancing account factors authorized as of June 30, 1985, and shall continue to fund and operate CFA programs pending further order of the Commission.

20. Concurrently with the filing of its advice letter, PG&E shall submit a study on the use of generic standards for Class A audits along with a plan for termination of the RCS program in its next filing.

21. In any future applications on this subject matter, PG&E shall submit its applications and exhibits so that recorded and estimated (test year) financial and program information is directly comparable. On or before October 1, 1984, PG&E shall submit for review a proposed format for future applications which will accomplish this purpose.

22. These applications are granted in part as set forth above and otherwise denied, and this proceeding is closed.

This order is effective today.

Dated JUL 18 1984, at San Francisco, California.

LEONARD M. GRIMES, JR.
President
VICTOR CALVO
PRISCILLA C. GREW
DONALD VIAL
WILLIAM T. BAGLEY
Commissioners

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

Joseph E. Bodovitz, Executive Director

APPENDIX A

List of Appearances

Applicant: Peter W. Hanschen, Merek E. Lipson, and Robert B. McLennan, Attorneys at Law, for Pacific Gas and Electric Company.

Interested Parties: C. Hayden Ames, Attorney at Law, for Chickering & Gregory; W. R. Baldschun, for City of Palo Alto; Juan E. Barrientes, for Casa Raza; Walter H. Hays, Attorney at Law, for South Bay Insulation Contractors Association; James Hodges, for California/Nevada Community Action Association; Susan Keller, for Community Network for Appropriate Technologies; F. E. John, D. K. Porter, and T. D. Clark by J. C. Kohn, Attorney at Law, for Southern California Gas Company; Barbara A. Greene, for North Coast Energy Services; Skip Daum, for South Bay Contractors Association; and Michelle Sealy, George Whitlow, and Felix G. Ortiz for themselves.

Commission Staff: Thomas P. Corr, Attorney at Law, and Sesto Lucchi.

(END OF APPENDIX A)

PACIFIC GAS AND ELECTRIC COMPANY
A. 83-08-66
RESIDENTIAL CONSERVATION SERVICES
TABLE OF PROPOSED AND RECOMMENDED RATES
12 MONTHS ENDED DECEMBER 31, 1984

Line No.		Pacific Gas & Electric Company Proposed Adjustment Rate			Staff Recommended Adjustment Rate		
		Gas Department	Electric Department	Total	Gas Department	Electric Department	Total
1	Estimated RCS Administrative Audit Costs	$14,669,000	$1,813,000	$16,482,000	$9,554,875	$1,180,925	$10,735,800 3/
2	Estimated RCS Undercollection as of 12/31/83	1,339,000	1,128,000	2,467,000	1,339,000	1,128,000	2,467,000
3	Estimated Revenue Requirement (Line 1 + Line 2)	16,008,000	2,941,000	18,949,000	10,893,875	2,308,925	13,202,800
4	Provision for Franchise Fees and Uncollectibles (Line 3 x rate) rate = .00783 for Gas rate = .00793 for Electric	125,000	23,000	148,000	85,299	18,310	103,339
5	Total Revenue Requirement (Line 3 + Line 4)	16,133,000	2,964,000	19,097,000	10,979,174	2,327,235	13,306,409
6	Present RCS Rate	0.00166/th	0.00006/KWh	---	.00166/th	.0006/KWh	---
7	Estimated Sales Subject to RCS	7,595,030 Mth 1/	57,145,376 MWh 2/	---	7,595,030 Mth 1/	57,145,376 MWh 2/	---
8	Estimated Revenues at Present RCS Rate (Line 6 x Line 7)	12,608,000	3,479,000	16,037,000	12,608,000	3,429,000	16,037,000
9	Estimated Revenue Increase (Line 5 - Line 8)	3,525,000	(465,000)	3,060,000	(1,628,826)	(1,101,765)	(2,730,591)
10	Proposed RCS Rate (Line 5 ÷ Line 7)	0.00212/th	0.00005/KWh	---	.00145/th	.00004/KWh	---

1/ Excludes sales to the City of Palo Alto, Southern California Gas Company, CP National Corporation and Southwest Gas Corporation.

2/ Excludes sales to the Department of Water Resources.

3/ From Table 4, line 7, Column D.