

Mailed

AUG 30 1990

Decision 90-08-068 August 29, 1990

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of San Diego Gas & Electric Company (U 902-M) for an Ex Parte Order Granting Authority to Increase Expenditures to Support Demand Side Management Programs; to Implement Balancing Account Treatment for New DSM Program Expenditures; to Recover Increased Expenditures in Future Rates; and to Implement Incentive Mechanisms.

Application 90-04-034 (Filed April 19, 1990)

In the Matter of the Application of Southern California Edison Company (U 338-E) for an Ex Parte Order Authorizing Expenses, Implementation of Incentive and Performance Mechanisms, and Revision of Rates.

Application 90-04-036 (Filed April 24, 1990)

In the Matter of the Application of Southern California Gas Company for authority to expand Demand Side Management Programs. (U 904 G)

Application 90-04-037 (Filed April 25, 1990)

Application of Pacific Gas and Electric Company for Authority to Adjust its Electric and Gas Rates Effective January 1, 1991 to Implement an Expanded Customer Energy Efficiency Program Resulting From the Statewide Collaborative Process. (U 39 M)

Application 90-04-041 (Filed April 25, 1990)

I N D E X

<u>Subject</u>	<u>Page</u>
INTERIM OPINION .....	2
I. Summary .....	2
II. Background and Procedural History .....	2
A. En Banc and Collaborative .....	2
B. Applications and Settlements .....	6
III. Proposed DSM Energy Efficiency Programs .....	8
A. SDG&E .....	8
1. SDG&E's Application .....	8
2. The SDG&E Settlement .....	9
3. Comments on the SDG&E Settlement .....	11
B. SCE .....	12
1. SCE's Application .....	12
2. The SCE Settlement .....	14
3. Comments on the SCE Settlement .....	17
C. SoCal ..	17
1. SoCal's Application .....	17
2. The SoCal Settlement .....	19
3. Comments on the SoCal Settlement .....	21
D. PG&E .....	23
1. PG&E's Application .....	23
2. The PG&E Settlement .....	24
3. Comments on the PG&E Settlement .....	27
IV. Discussion .....	27
A. Approach to Revision of the DSM Energy Efficiency Programs .....	28
B. PG&E's Incentive Proposal .....	33
C. Cost-Effectiveness .....	35
D. Implementation and Annual Review .....	35
1. Program Start-up .....	35
2. Annual Review of Program and Rate Changes .....	37
E. Program Duration and Reevaluation .....	39
F. Conservation Payments Under Special Contracts .....	41
G. Improving Utility Efficiency .....	42
H. Updates and Comments on Settlement Modifications .....	43

I N D E X

<u>Subject</u>	<u>Page</u>
Findings of Fact .....	44
Conclusions of Law .....	45
INTERIM ORDER .....	46
Appendix A	
Appendix B	
Appendix C	



of utility resources, particularly electric utility resources. Demand-side programs focus on the customer side of the utility meter and have included programs for load management and energy efficiency, among others. The focus of the applications before us in these applications is on DSM energy efficiency programs.

The importance of DSM energy efficiency and the need for reconsidering our DSM policies were laid out in D.89-05-06710. It is essential that utilities have enough capacity to meet the needs of their customers. But in recent times, building new generating plants has been fraught with problems, and these problems have highlighted the advantages of avoiding or postponing capacity additions. As we noted in D.88-03-008 (p. 16), adding new generating resources using current technologies is usually more expensive and detrimental to the natural environment than relying on existing resources. . . .

"We have long been aware of the benefits of conservation and load management. Environmental benefits include less air and water pollution and reduced production of hazardous wastes. By lowering the need for generation from plants fired by oil and gas, conservation helps moderate the demand for and prices of these fuels. To the extent that cost-effective demand-side management allows a utility to avoid or defer construction of a new generating plant, there are several associated benefits. As a general matter, avoiding such additions to rate base helps keep rates down. If a utility does not need to build a new generating plant, it also does not need the capital for construction of the plant, and it avoids incurring the increased financing costs associated with issuing new debt or offering new shares of stock. Demand-side management, by reducing the uncertainty associated with demand forecasts, also helps utilities and regulators in making difficult planning decisions.

"In recent years, we have maintained fairly constant budgets for conservation and load management for our utilities, because excess

capacity and low oil and gas prices limited the cost-effective options. But now several circumstances suggest that a more aggressive demand-side management program may be warranted.

(E) Excess generating capacity has diminished. In recent months, environmental problems that are affected by fossil-fueled generation have come to the forefront, including air pollution in the Los Angeles Basin and the 'greenhouse effect,' predicted to result from increased atmospheric levels of carbon dioxide. Conservation can make a contribution toward reducing these problems. In addition, there has been increasing concern about this country's trade deficit with other nations and the underlying problem of the competitiveness of American businesses and industries. Using electricity efficiently lowers costs and helps California industries and businesses compete successfully against foreign and domestic rivals. Load management helps control utilities' costs and rates by using existing generating plants more efficiently.

Furthermore, the conditions that led us to adopt flat demand-side management budgets for the last few years--a policy called "staying the course"--need to be reexamined. Much of the justification for this policy came out of a time of relatively cheap fossil fuel prices; lower fuel prices made it more difficult for demand-side management programs to meet tests of cost-effectiveness. Now, however, the fuel market has gradually tightened. In addition, advances in demand-side management technologies in recent years may have lowered costs. The time is ripe for reconsidering our policy.

We also note that other states have developed some novel and imaginative approaches to demand-side management. We want to evaluate those approaches and see if they are appropriate for California."

In the notice of the en banc hearing, the Commission sought a broad range of comment on the central question of how

demand-side programs should fit into utility resource planning and how regulation can encourage desirable investments in demand-side resources. The notice identified several goals that must be balanced in choosing a course of action on DSM: (1) economic efficiency, (2) minimizing energy bills for all customers, (3) rate stability, (4) maintaining utility financial health, and (5) contributing to societal goals.

The en banc hearing on July 20, 1989, elicited a wide range of opinion and participants from a broad cross-section of interests. At the hearing, the idea took root for a collaborative process in which utilities and other interested parties would work together to find mutually acceptable ways to improve and strengthen demand-side programs for the California energy utilities and bring the results of their work back to the Commission. The collaborative working group, a broad-based group of stakeholders and observers, met over a course of five months. The collaborative group produced and presented at a January 1990 Commission meeting a document entitled An Energy Efficiency Blueprint for California (Blueprint), which reported the results of its labors, including proposals for future action.

The collaborative stakeholders included the four major California energy utilities, the California Energy Commission (CEC) and our Division of Ratepayer Advocates (DRA), as well as participants identified as representing environmentalists, residential ratepayers, commercial ratepayers, low income ratepayers, industrial ratepayers, California State agencies, agriculture, energy service companies, and independent energy producers. The collaborative observers included legislative representatives, the South Coast Air Quality Management District, and several energy consulting firms. The collaborative was also assisted by the Commission's Strategic Planning Division. The collaborative group agreed that PG&E, SDG&E, SCE and SoCal would prepare and file applications in March 1990, for expanded DSM.

conservation programs that conformed with the programs outlined for each individual utility in the Blueprint.

**B. Applications and Settlements**

The applications before us in this consolidated proceeding are those promised by the Blueprint. These four applications for expansion of conservation programs were filed in late April 1990: SDG&E filed its application on April 19, and the application was not protested; PG&E and SoCal filed their applications on April 25. SoCal's application was not protested. A protest to PG&E's application was filed by App-Tech, Inc. on May 31, 1990, and PG&E filed a response to the protest June 13. SCE filed its application on April 24. A protest to SCE's application was filed on May 24 by Transphase Systems, Inc. (Transphase), and a second protest was filed May 25 by the National Association of Energy Service Companies (NAESC). SCE responded to both protests on June 12, 1990. SCE filed an amendment to its application in partial compliance with Rule 23(b) and (c) on August 13, 1990.

A prehearing conference was held on the consolidated applications on June 15, 1990. Appearances from a wide variety of interested parties were entered at that time. At the prehearing conference the Administrative Law Judge (ALJ) ordered the filing of additional information by the applicants and by the Natural Resources Defense Council (NRDC) in order to supplement the record. The information required from the utilities consisted of a side-by-side comparison of the proposals of the four applicants and separate information from each applicant on past DSM expenditures, the currently authorized DSM program, and the impacts of the proposed programs on ratepayers. The information required from NRDC was a report on conservation programs of California utilities that had previously been prepared for the Commission's July 1989 en banc in the 3 Rs proceeding (I.86-10-001). In addition, PG&E filed



at the ALJ's request relevant portions of the collaborative agreement Blueprint. The additional information was filed and served on all parties on June 26, and July 6, with corrections filed on July 11, 1990. Other parties had 10 days to comment on the additional information, but no one did. The additional information has been identified for the record as Exhibits 1 through 9, as set forth in Appendix A to this decision. Exhibit 1, which is the side-by-side comparison of the four proposals, is attached as Appendix B to this decision.

Each of the four applicants announced its intention to seek a settlement of its application at the prehearing conference and held a settlement conference pursuant to Rule 51. Motions to adopt Settlement Agreements were filed on June 27 by SDG&E, SoCal, and PG&E. SCE filed its motion to adopt a Settlement Agreement on July 2. The protests to the application became moot with the filing of the settlements, since each protestant joined in the settlement with the utility whose application it had protested.

Each settlement was accompanied by a motion to shorten the time for filing comments on the settlements, established by Rule 51.4, from 30 days to 15 days and to eliminate reply comments. By ALJ ruling dated July 6, 1990, reply comments were eliminated, but the time for filing comments was kept at 30 days. Comments on the settlements were filed by Toward Utility Rate Normalization (TURN) on July 19, by the Federal Executive Agencies (FEA) on July 25, and by the Department of General Services (DGS) on July 27, 1990.

On August 20, 1990, SoCal filed a motion for leave to submit supplemental comments on the settlement of its application. Supplemental comments were jointly filed by SoCal and TURN on August 20. SoCal filed revised copies of Tables 3-A, 3-B, and 3-C of Exhibit 1, which have been designated as Exhibit 11 and are attached as Appendix C.

A motion to intervene was filed by Reaction Thermal Systems, Inc. on July 17, 1990. No objections to this motion were filed, and we will grant the motion.

### III. Proposed DSM Energy Efficiency Programs

#### A. SDG&E

##### 1. SDG&E's Application

SDG&E proposes to expand its energy efficiency programs in 1990 and 1991 and to spend up to \$25.5 million annually to fund new DSM programs, which are incremental to those authorized in the 1989 general rate case decision for SDG&E (D.88-09-063). The program is expected to cause a rate increase of 2.6% and would increase SDG&E's currently authorized DSM expenditures by nearly 150%. (Table 1, Appendix B.) The new programs focus on residential and small commercial customers, including new construction and efficient appliances, as well as direct assistance for low-income customers.

SDG&E also proposes three new shareholder incentive/penalty mechanisms, which are to be separate from the penalty/reward mechanism already established by D.88-09-063 for DSM expenditures authorized in the GRC. SDG&E intends to propose a unified DSM program and incentive mechanism in its modified attrition application for 1992, to be filed in March 1991.

Under SDG&E's proposal, for resource programs and new construction lighting programs the utility receives an incentive payment of 13.5% of the net savings produced by the program, subject to a penalty for failure to meet minimum performance targets, adjusted by a cost-minimization element. For other commercial new construction programs, the utility incentive would be 9% of the gross program savings. For the direct assistance program, the incentive payment to SDG&E would be 5% of

expenditures, subject to a minimum performance requirement. No incentives are proposed for education, customer awareness, tests, and measurement. The total annual maximum incentive payment would be \$2.5 million in 1990 and \$5 million in 1991 for all new programs. Penalties are assessed for performance that falls below the minimum levels.

SDG&E requests the establishment of Electric and Gas Efficiency Balancing Accounts to record the program expenditures as well as rewards and penalties. The expected rate increases would be requested later, and would be amortized in rates over three years. SDG&E would first request a rate increase for this DSM program in its 1991 ECAC and ACAP applications.

## 2. The SDG&E Settlement

The proposed settlement of SDG&E's application was entered into by SDG&E, CEC, DRA, NRDC, TURN, and DGS. The substantive agreements (listed as items 2 through 8 in the settlement) are as follows:

1. "Generally, [SDG&E's] application presents a consensus view of the programs, funding levels, and incentive mechanisms, reached during the collaborative meetings and subsequent discussions. Since the filing of the application, some parties to this agreement have continued to refine certain features of the 'Measurement Plan' proposed in the application. These refinements are set forth in Appendices 1 and 2. In addition, the parties have agreed upon various other additions, revisions, and clarifications to the application identified in Appendices 3 and 4. Accordingly, the parties to this agreement hereby stipulate and agree that SDG&E's Application No. 90-04-034, as modified by Appendices 1 through 4 should be approved."
2. "The new programs proposed in the application (described in Attachments J and K of the application) and the budgets for these programs (described in Attachment I thereof) are just and reasonable. The

Commission should authorize the implementation of these programs and recovery in rates of the associated expenses up to an annual maximum of \$25,400,000 in 1990 dollars, for the years 1990 and 1991, recovery to occur in the manner described in Sections II, III, and IX of the application. The Electric Efficiency Balancing Account (EEBA) and Gas Efficiency Balancing Account (GEBA) described in the application should be established to track program expenses and to facilitate rate recovery.

3. "The new programs described in the application are intended to be implemented in due course following Commission authorization of the programs and the requested rate recovery, and shall continue in effect through the end of 1991. The effect on minimum performance requirements of a delay in Commission authorization is set forth in Appendix 4."

4. "The incentive mechanisms described in Attachment L of the application are appropriate and reasonable. The Commission should authorize SDG&E to implement the mechanisms and, through the EEBA and GEBA balancing accounts, to reflect in rates all shareholders penalties/rewards resulting from the mechanisms in accordance with the mechanisms' terms."

5. "In the application SDG&E proposes that the EEBA and GEBA balances and forecasted future program expenses be recovered through rates adopted coincident with SDG&E's annual ECAC (for electric rates) and ACAP (for gas rates) decisions beginning with the ECAC decision scheduled to be issued May 1, 1991. In the alternative, SDG&E proposes to reflect in rates the increased revenue requirement requested by the application, coincident with the application's approval. In the interest of rate stability, the parties urge the Commission to adopt SDG&E's primary proposal for rate recovery by authorizing SDG&E to recover the EEBA and GEBA balances, together with forecasted future expenses, through rates adopted

coincident with SDG&E's future ECAO and ACAP decisions. Attachment M to the application describes SDG&E's plan for measuring the performance of its proposed programs. This measurement plan, including its various assumptions, estimates, and procedures (is reasonable and, with the additions and modifications set forth in Appendices 1 and 2, should be adopted by the Commission as the means of measuring the future performance of SDG&E's proposed programs."

The implementation of the new programs and performance criteria specified in the application and this agreement necessitates a change to the present method of funding conservation payments made in connection with special contracts. Currently, the costs of conservation items offered in lieu of a rate discount to customers considering bypass come out of the utility's existing DSM budget, until that budget is exhausted (see D.89-05-[067], p. 7; D.90-05-030, p. 2). This approach is incompatible with the proposed new programs and performance criteria. The parties agree that the Commission, in its decision adopting this agreement, should change this funding method by stating: "No funds authorized in SDG&E's last general rate case shall be used for purposes of funding Conservation Payments in connection with an EAD/Special Contract. Instead, direct costs of the conservation items shall be booked and recovered in the same manner as rate discounts."

### 3. Comments on the SDG&E Settlement

FEA filed comments expressing a general concern that the contemplated programs should be regarded as experimental and as research and that DSM programs not be further expanded without the opportunity for all interested parties to analyze the results of the measurement and evaluation programs. FEA expressed particular concern with the implementation of utility shareholder incentives,

stating that the record contains no argument or evidence to support the need for providing incentives to induce SDG&E to carry out DSM programs and conduct research that is a part of its basic utility obligation. FEA points out that the collaborative simply assumed the need for shareholder incentives and argues that there should be a full and complete airing of the conceptual basis for shareholder incentives and the benefits and drawbacks of each proposed shareholder incentive mechanism. FEA notes that, unlike the other three settlements, SDG&E's does not specifically provide for a review of the shareholder incentive mechanisms at the end of 1992, and recommends that such a review be conducted for SDG&E. FEA does not, however, oppose the adoption of the settlement. Instead FEA seeks assurance from the Commission that full and complete evidentiary hearings will be held prior to extension of any of these mechanisms, or implementation of any new incentive mechanisms. DGS filed comments in support of all four settlements and attributes this support to agreements it has reached with each of the four utilities to work together on enhancing energy efficiency in State facilities. DGS does express concern that the proposed programs for commercial and industrial customers are still insufficient, that the money should be used to fund actual projects and not simply contacts or marketing pitches to customers, that the Commission should require utilities to provide billing data to any interested customer at no cost, and that programs should be developed for non-core gas customers.

**B. SCE**

**1. SCR's Application**

SCE requests authority to increase its DSM conservation expenditures by \$30 million annually in 1990 and 1991 to fund an expansion of existing DSM energy efficiency programs and a new residential DSM program. This would be nearly a 50% increase in DSM expenditures for SCE. With the five-year amortization proposed

by SCE, this translates into a rate increase of about 0.09% for 1990 and 0.14% for 1991 and rate decreases of 0.02% in 1992, 0.01% in 1994, 0.03% in 1995, and 0.08% in 1996 (Exhibit 3, Table 3). SCE also proposes a cost-effectiveness methodology, a performance mechanism, and a shareholder incentive/penalty proposal, based on an amortization approach. Under SCE's proposed incentive/penalty mechanism, some DSM program costs would be amortized in rates over a five-year period. The unamortized balance, termed a "DSM asset," would earn the utility's authorized rate of return. Under SCE's proposal, \$26.1 million of the additional \$30 million in 1990 and 1991 would be subject to this amortization. An additional \$15.0 million of the \$37.2 million of similar conservation expenditures which were authorized in the 1988 SCE general rate case (GRC) would be removed from base rates and amortized over five years. \$17.8 million of the previously authorized \$37.2 million, plus \$3.9 million of the annual additional \$30.0 million would be expensed and would be subject to a cost plus 5% incentive payment. The remaining \$4.4 million of the \$37.2 million previously authorized would continue to be expensed and would not be eligible for an incentive.

SCE's proposed performance mechanism would assess a penalty for failure to achieve a specified performance level through forfeiture of a portion of the earnings that would otherwise be realized on the unamortized DSM balance.

SCE requests a decrease to its Authorized Level of Base Rate Revenue (ALBRR) under the Electric Revenue Adjustment Mechanism (ERAM) of \$1,141,000 effective for service rendered on and after July 1, 1990. The ALBRR under the ERAM would be increased by \$8,539,000 effective for service rendered on or after January 1, 1991. SCE also proposes that the ALBRR under the ERAM be increased effective for service rendered on or after January 1, 1991 to reflect the \$7,398,000 net effect of the July 1, 1990 and January 1, 1991, authorized revenue changes.

2. The SCE Settlement SCE filed a settlement in which DRA, CEC, NRDC, Transphase, NAESC, TURN, DGS, and Cal-Neva joined. The settlement contains no summary or listing of its agreements that can be displayed here, since it consists primarily of voluminous attachments that are referenced but not summarized in the text of the settlement, together with some specific agreements that are contained in the text of the settlement. At the request of the ALJ, SCE produced by letter dated August 13, 1990, an index to the attachments, identifying some as duplicating portions of the application, while other attachments replace portions of the application, and still other attachments provide new information. In order to preserve this information, the index has been identified as Exhibit 10 for the record of this proceeding. However, even with the index the settlement fails to identify or explain each of the specific changes made to the application.

SCE and the other parties to this settlement are put on notice that we expect better than this in the presentation of settlements to this Commission. At a minimum, a settlement should clearly lay out the substance of the agreements reached by the parties and the effect of those agreements on the positions previously taken by parties to the proceeding (which would in this case be the effect of the proposals on the application). The confusion created by the disorganized type of settlement presented to us here unnecessarily increases the time it takes to review the settlement. It also increases the risk that the settlement will be rejected for lack of clarity, misunderstood, or interpreted contrary to the intent of the settling parties, and parties should require no further spur to clearly laying out their agreement. Were this settlement not part of a consolidated proceeding with three other utilities and were we not committed to expeditious action on these applications to revitalize DSM programs, it would have been sent back to the parties for clarification.



The settlement states that SCE's application as clarified, amended or added to by the settlement should be adopted. The chief agreements in the SCE settlement may be summarized as follows:

1. The proposed conservation program and expenditures set forth in the application should be adopted.

2. SCE will expand its low income energy efficiency programs; will work with a Direct Assistance Program committee on these programs; will set low income weatherization program goals for 1991 with the CEC, DRA, and Cal-Neva; and will request an additional \$2 million per year for weatherization and \$43 million per year for low-income appliance rebates in its next general rate case application.

3. The shareholder incentive/penalty mechanism proposed by SCE's application should be revised to include a performance mechanism that penalizes SCE for failure to achieve minimum levels of performance for each energy efficiency program by which SCE would earn a return. The settlement includes goals and minimum levels of performance for each program and illustrative examples of performance penalty calculations. SCE will file an advice letter containing updated program goals within five days of the actual date of a Commission decision on the settlement, if that decision is later than July 1, 1990.

4. The agreed-to expenditure levels and performance targets "shall be revised on a prorated basis to reflect the effective date of the decision" in this proceeding if it becomes effective after July 1, 1990. "The Authorized Level of Base Rate Revenue under the ERAM shall also be revised to reflect [these] revisions...." [The settlement does not specify the relationship between this agreement and the agreement that SCE will file an advice letter containing updated program goals

within five days of the Commission decision, described in the preceding paragraph.]

5. SCE will undertake an expanded measurement plan and fund special statewide research projects on DSM measurement and evaluation in connection with CEC and DRA.

6. The Commission should adopt the following procedures for ratemaking for conservation payments as part of an EAD/Special Contract:

"No. Conservation Load Management funds authorized in Edison's 1988 Test Year General Rate Case, D.87-12-066, or by the Commission's Decision in Application No. 90-04-036 should be used for purposes of funding conservation payments as part of Special Contract Applications related to recorded Conservation-Load Management expenses related to Special Contract Applications shall be recorded in the Electric Revenue Adjustment Mechanism Balancing Account on a monthly basis and shall be reviewed concurrently with the Commission's reasonableness review of the Special Contract Application."

7. "[R]evénue allocation and rate design matters associated with Edison's Application [will] be addressed through the course of currently scheduled proceedings in Edison's Energy Cost Adjustment Clause Application for a January 1, 1991 Revision Date (A.90-06-001)..."

8. "[T]he ratemaking treatment described in the preceding paragraph shall become effective coincident with the effective date of the tariffs filed pursuant to the Commission's order in this proceeding. Such tariffs shall become effective on five days' notice."

### 3. Comments on the SCE Settlement

The comments filed by DGS in support of this settlement are summarized in Section III.A.3 above.

The comments filed by FEA on this settlement are substantially identical to those summarized in Section III.A.3 above.

### C. SoCal

#### 1. SoCal's Application

SoCal proposes several new DSM programs and the expansion and revision of many programs authorized in the decision on the 1990 SoCal general rate case decision, D.90-01-016. The scope of SoCal's DSM energy efficiency proposal is limited to core ratepayers. Some of the individual programs are designed to encourage the achievement of greater energy efficiencies in the construction of new commercial and residential buildings, including single family residences. Other individual programs are intended to encourage the retrofitting of existing buildings and the replacement of existing appliances to achieve greater energy efficiency.

SoCal requests the authority to expand some of the individual DSM programs to 200% of their planned levels, on the condition that the goals of that particular program are being exceeded. This flexibility is intended to help ensure that cost effective conservation opportunities are promptly captured and to prevent the disruption of successful programs by stopping and restarting these programs. At the maximum level of 200% of planned expenses for those programs, SoCal proposes that maximum program expenses of \$14.3 million be authorized for 1990, \$30.1 million be authorized for 1991 and an additional \$30.1 million be authorized for 1992. These programs expenses include the maximum cost of these programs, including the maximum incentive payments. If program expenses are limited to their planned levels, the total program cost, including incentive payments, would be \$7.5 million in 1990, and \$14.6 million for 1991 and \$14.6 million for 1992.

SoCal proposes that program expenses incurred between the date of Commission approval and October 1, 1990 (i.e., prior to the 1990 ACAP period) should be recorded in an interest bearing balancing account. These expenses, together with the program expenses for the 1990 ACAP period would then be recovered through rates established in the 1990 ACAP. SoCal proposes that the level of expenses authorized by the Commission in this proceeding be allocated in the ACAP to all core customer classes on an equal-percents-per-therm basis.

SoCal proposes three separate shareholder incentive/penalty mechanisms that it believes will reward efficient management of these programs and penalize inefficiency or failure to achieve the program goals. For programs categorized as "resource programs," SoCal proposes what it terms a variable rate of return concept, under which it would earn 16.6% of the program cost, provided that actual program cost does not exceed planned program cost and the planned number of units are installed. Under this incentive structure, SoCal will break even for each program if the program reaches 70% to 80% of planned goals, and for every dollar that program costs exceed planned costs, the shareholder incentive is reduced by a dollar. In addition, SoCal would receive 16.6% of the planned unit variable cost for every unit installed over the program planned goal. SoCal seeks a two-way balancing account for resource program funds and authorization to spend up to 200% of planned program expenditures.

The two other shareholder incentive/penalty mechanisms take cost-plus approaches. For new construction programs, SoCal proposes to earn 12% of the cost of the program, provided that two-thirds of planned program goals are met. This program includes some non-cost-effective elements intended to test market acceptance of highly efficient appliances and encourage manufacturers to increase production levels and reduce unit costs and to make these programs cost effective in the long term. SoCal asks for an

incentive of 5% of program costs for discretionary Direct Assistance Program measures and Energy Services Programs, provided that two-thirds (or 70% for certain residential weatherization programs) of the program goals are met. Rate increases are proposed to fund these DSM programs, as well as the shareholder incentives. The projected revenue requirement increase necessitated by SoCal's proposals is 0.17% for 1990, 0.38% for 1991, 0.44% for 1992, and 0.13% for 1993. (Exhibit 5.) The average bill impacts would be similar, well under one-half of one percent for each year. The 1991 program expenditures would represent about an 18% increase over SoCal's currently authorized DSM expenditures.

## 2. The SoCal Settlement

The settlement proposed by SoCal for adoption by the Commission was agreed to by DRA, CEC, NRDC, A&C Enercom, Cal-Neva, and California Energy Coalition. The settlement is conditioned on either Commission approval prior to August 1, 1990 or the granting of an option to SoCal "to proportionately reduce incremental program expenditures and program goals to the extent that attainment of those goals is jeopardized by the delay." The settling parties agree that SoCal's application "should be approved in its entirety." However, the settlement also agrees to changes to the Measurement and Evaluation program set forth in the application. The settlement summarizes the specific points of agreement as follows:

- \*1. Additional annual expenditures of \$7.484 million should be authorized for 1990 [subject to reduction if the application is not decided by August 1, 1990] and \$14.575 million per year (in constant 1990 dollars) should be authorized for both 1991 and 1992;
- \*2. SoCalGas should be authorized to expand certain of the DSM programs up to 200% of their planned size, on the condition that the programs' goals are being exceeded;

\*3. SoCalGas should be permitted an opportunity to earn financial incentives for efficiently managing the DSM programs;

\*4. The mechanisms presented in A.90-04-037 for calculating and awarding financial incentives should be adopted;

\*5. Program expenses incurred prior to October 1, 1990 (i.e., prior to the 1990 ACAP period) should be recorded in an interest bearing balancing account;

\*6. Anticipated program expenses for the 1990 ACAP period (October 1, 1990 through September 30, 1991), any amounts recorded in the balancing account, and an adjustment to account for increased franchise fees and uncollectible expense (F&U) should be recovered in rates established in the 1990 ACAP;

\*7. The Measurement and Evaluation budget presented in the application should be increased by 1% (\$46,080) to account for the funds to be retained to assist the CPUC in developing an independent review capability. These amounts should be charged to the balancing account and should be recovered in rates established in the ACAP;

\*8. The expenses of the DSM projects, including any incentives, payments, interest expenses, or any other expenses resulting from the DSM projects should be allocated in the ACAP to all core customer classes; and

\*9. The achievement of financial incentives will be determined by the Commission in the ACAP on the basis of SoCalGas' annual DSM report which will be submitted as an exhibit in SoCalGas' ACAP. The report will be filed on March 31 and will detail the successes of the DSM programs for the prior year. Any financial incentives which are determined to have been earned in the prior

year will be recorded in the DSM balancing account and will be deemed to have accrued interest since January 1st of that year;

\*10? Those provisions relating to the Measurement Plans that are detailed in Appendix A to this Settlement Agreement.

\*[11. The] specific elements of the proposals presented in A:90-04-037, as detailed in the affidavits of John K. Peterson and George E. Davis, and in the attachments thereto, should be approved and adopted by the Commission;

### 3. Comments on the SoCal Settlement

TURN initially filed comments opposing the settlement of SoCal's application, citing four specific objections to the proposal. First, TURN argued, the shareholder incentive levels of 16.6% are too high for resource programs. TURN argued that the 16.6% return is not a reasonable return to earn on funds provided exclusively by ratepayers, because the rate of return was established to compensate SoCal's shareholders for investment. TURN contrasted SoCal's proposal with SCE's, which also sets the incentive level at the authorized rate of return but would finance the resource programs with shareholder funds rather than ratepayer funds. TURN proposed that SoCal's resource program incentive be reduced to a maximum of 12%.

Second, TURN objected to SoCal's new construction programs incentive, under which SoCal would earn 12% on every dollar of program cost if its performance equals at least 66% of the forecast energy savings. TURN contrasted SoCal's proposed 12% cost-plus incentive with the maximum 5% cost-plus incentives proposed by the other three utilities and proposed that SoCal's new construction incentive be limited to 5%.

Third, SoCal's proposal that it be permitted to earn interest on its incentive payments beginning on January 1 of each year, four months before the request to receive the incentive

payments and proposed calculation of the payments is filed on March 31, drew an objection from TURN. TURN argues that such a proposal is poor regulatory policy and potentially unlawful and that SoCal should not be allowed to earn interest until the Commission has had a reasonable opportunity to review the utility's proposed incentive calculation. TURN contrasted SoCal's proposal with PG&E's, under which PG&E would file its incentive calculation on March 31, but interest would not begin to accrue on the claimed incentive until July 1, giving the Commission three months to review and evaluate the incentive calculation. TURN proposed that SoCal, like PG&E, be allowed to accrue interest from July 1.

Fourth, TURN opposed SoCal's proposal to include a 10% credit for the environmental benefits in evaluating the cost-effectiveness of energy efficiency programs. This proposal was not agreed upon by the collaborative and is not proposed by the other utilities. TURN argues that the proposal properly belongs in the Biennial Resource Plan Update proceeding (BRPU) and in the CEC's Electricity Report 90 process and that deciding the issue here would prejudice the results of the BRPU.

The August 20 Supplemental Comments filed jointly by SoCal and TURN explicitly resolve the first three objections raised by TURN. First, SoCal and TURN agree that the shareholder incentives for resource programs should be reduced from 16.6% to 14%. Second, they agree that the cost-plus shareholder incentive for new construction programs should be reduced from 12% to 10%. Third, SoCal agrees that interest on shareholder incentives should begin to accrue on July 1 of the year following the program expenditures. Without explicitly addressing the environmental adder issue, the supplemental comments state that these revisions eliminate TURN's objections to the settlement and that the original signatories to the settlement have been apprised of these changes and do not object.



The comments filed by DGS in support of this settlement are summarized in Section III.A.3 above.

The comments filed by PEA on this settlement are substantially identical to those summarized in Section III.A.3 above.

D. PG&E

1. PG&E's Application

PG&E proposes an expansion of its DSM conservation programs, which it terms Customer Energy Efficiency (CEE) programs, in 1990 and 1991. No rate increase is sought for 1990, but a \$38.7 million increase in electric base rates and \$0.5 million increase in gas rates is requested to take effect

January 1, 1991. This represents less than a 1% rate increase and approximately a 25% increase in the level of PG&E's DSM spending over 1990.

The shareholder incentive/penalty mechanism proposed by PG&E is a shared savings approach for resource programs. Resource programs are customer energy efficiency programs that produce substantial net avoided capacity, transmission, distribution and energy cost savings, including new construction, residential appliance efficiency, and energy management incentives programs. For these programs, PG&E proposes to split the net present value of the program resource savings, giving 85% of the savings to ratepayers and 15% of the savings to shareholders. Shareholders would be subject to a penalty if the actual and committed accomplishments under a program fall below a minimum performance standard established for each program. The shareholder incentive would be capped at 30% above the expected shareholder incentive.

For nonmandated customer equity and service programs, PG&E proposes that shareholders retain 5% of the actual program expenditures. For new demonstration projects, PG&E does not propose sharing.

PG&E requested authorization to establish a balancing account to track expenditures and incentives under the proposed programs in advance of today's decision. By Resolution (Res.) E-3194, adopted June 20, 1990, PG&E was authorized to establish a tracking account to record expenses incurred in the planning and implementation of the programs proposed in this application. The resolution left open the question of how much of the expenditures could be recovered and whether incentives could be recovered on such expenditures, leaving recovery of those items subject to today's decision.

## 2. The PG&E Settlement

The proposed settlement of PG&E's application was entered into by PG&E, CEC, DRA, NRDC, TURN, A&C Enercom, and App-Tech, Inc. The settling parties agree to PG&E's application with some changes. The major substantive agreements (listed as items 2 through 8 and a modification attachment in the settlement) are as follows:

1. "Generally, [PG&E's] application presents a consensus view of the programs, funding levels, and incentive mechanisms, reached during the collaborative meetings and subsequent discussions. Since the filing of the application, some parties have continued to refine certain features of the programs and plans proposed in the application. These refinements and clarifications are set forth in...Appendix 1."
2. "The proposed new and expanded programs and the budgets for these programs (described in Exhibit 2 of the Application) are just and reasonable. The Commission should authorize the implementation of these programs and recovery in rates of the associated expenses \$137,700,000, \$146,900,000 and \$152,800,000, in 1990 dollars, for the years 1990, 1991, and 1992, respectively. These amounts will require expenses, in addition to those amounts authorized in PG&E's 1990 General

Rate Case (Decision 89-12-057) and Resolution E-3174, of \$37 million in 1991 and \$35.1 million in 1992. Recovery of the additional amounts will occur in the manner described in Exhibit 1 to the application. The new Electric and Gas Balancing Accounts established in the application will be used to track resource program expenses, any conservation expenses associated with special electric contracts to avoid customer bypass and to facilitate rate recovery."

3. "The new and expanded programs described in the application are intended to be implemented in due course following Commission authorization of the programs and the requested rate recovery, and shall continue in effect through the end of 1992. Any proposals to continue or change the incentive mechanism at the end of 1992 will be included in PG&E's 1993 test year general rate case."

4. "The incentive mechanisms described in Exhibit 1 of the application are appropriate and reasonable. The Commission should authorize PG&E to implement the mechanisms and, through the CEE Incentive Balancing Subaccounts with the Electric and Gas Departments' Conservation Financing Adjustment (CFA), to reflect in rates all shareholder penalties/rewards resulting from the mechanisms in accordance with the mechanisms' terms."

5. "In the application and appendix, PG&E proposes that the (Customer Energy Efficiency (CEE)) incentive balances be recovered through rates adopted coincident with PG&E's annual ECAC (for electric rates) and ACAP (for gas rates) decisions beginning with the ECAC decision scheduled to be issued November 1, 1991. For the increased CEE resource program expenses, PG&E proposes to reflect in rates, as proposed in the application, the increased revenue requirement requested by the

Jan application coincident with the annual  
Attrition Adjustment for implementation on  
January 1, 1991 and 1992, respectively."

6. "Exhibit 3 to the application describes  
PG&E's plan for measuring the performance  
of its proposed programs. This measurement  
plan, including its various assumptions,  
estimates, and procedures, is reasonable  
and, with the additions and modifications  
set forth in Appendix 1, should be adopted  
by the Commission as the means of measuring  
the future performance of PG&E's proposed  
programs."

7. "In Resolution E-3194, dated June 20, 1990,  
the Commission authorized PG&E to establish  
a tracking account to record expenses  
incurred in the planning and implementation  
of the programs set forth in the  
application, including incentive payments.  
The parties agree that PG&E shall be  
authorized to collect the expenses incurred  
in planning and implementing the programs,  
including incentive payments, as of  
June 20, 1990, subject to the verification  
and reasonableness procedures generally  
applicable to the programs."

8. "The following procedures in cost accounting  
and cost recovery for Conservation Payments  
as part of an EAD/Special Contract will  
apply:

No funds authorized in PG&E's 1990  
General Rate Case should be used for  
purposes of funding Conservation  
Payments as part of a Special Contract.  
Direct costs of the conservation items  
including the conservation payments and  
associated marketing expenses should be  
booked separately.

Upon the CPUC's approval of individual  
contracts, direct costs shall be recorded  
and recovered through the two-way  
conservation balancing account, which PG&E  
has requested in this Application. These  
costs shall not be used to offset  
authorized expenses for energy efficiency

programs, nor shall they be counted against the 30 percent expansion limit of the resource programs budget.

**3. Comments on the PG&E Settlement**

The comments filed by DGS in support of this settlement are summarized in Section III.A.3 above.

The comments filed by PEA on this settlement are substantially identical to those summarized in Section III.A.3 above.

**IV. Discussion**

We appreciate the hard work and dedication of the many participants in the collaborative process, the settlement process, and in this consolidated proceeding that led to the settlements before us. The accommodation of the many diverse interests of the parties and the pressure to produce a workable, mutually agreeable, and innovative program in a relatively short time presented them with a tremendous challenge and they rose to the occasion. These settlements represent creative and largely reasonable solutions to the problem of how to reinvigorate the DSM energy efficiency programs at the four biggest energy utilities in California. In this decision the task now falls to us to determine the reasonableness of the settlement proposals and determine whether these proposals should be put into action.

While the programs set forth in these settlements offer a way to quickly revitalize the DSM energy efficiency programs at the four largest California energy utilities, the trade-off for this is our acceptance of the judgment of the settling parties on the appropriateness of some details of the settlement in the absence of evidentiary hearings or specific substantiation of those details. This trade-off is inherent in many of the settlements brought to the Commission for consideration. In judging such settlements the

Commission retains the obligation to independently assess and to protect the public interest. Parties to a settlement may chafe at what they perceive as intrusion on bargained-for deals and may believe that this Commission should simply take their word that the settlements serve the interest of the public in addition to the interests of the settling parties. However, settlements brought to this Commission for review are not simply the resolution of private disputes, such as those that may be taken to a civil court. The public interest and the interests of ratepayers must also be taken into account, and the Commission's duty is to protect those interests. In evaluating settlements, one factor we consider is the range of interests represented by the parties to the settlements and any opposition to the settlements, as well as the settlement itself. The DSM settlements and the collaborative process in which they had their genesis represent agreement by a broad range of interests. In each case the utility, regulators, ratepayer representatives, environmental advocates, and companies active in the DSM/energy efficiency field have joined in the settlement. There is no formal opposition to the settlements, with the exception of TURN's protest to the SoCal settlement. The broad range of support and limited opposition lend considerable credibility to the settlements.

**A. Approach to Revision of the DSM Energy Efficiency Programs**

The implementation of cost-effective DSM energy efficiency programs provides long term benefits to ratepayers and to society, including conserving valuable energy resources, delaying or reducing the need for new utility plant and energy resources, and reducing the adverse environmental effects of energy use. The Commission has long recognized these benefits and authorized, encouraged, and sometimes required California's energy utilities to pursue energy efficiency programs.

Nevertheless, DSM energy efficiency (or conservation) expenditures have declined markedly in the past few years. Table 1

of Exhibits 2 through 5 sets forth the historical DSM expenditures for each utility. SDG&E's DSM conservation spending plummeted from a high of \$24.7 million in 1983 to a low of \$3.3 million in 1989, declining swiftly from year to year. SDG&E spent far less than its authorized DSM expenditure level in every year since 1984. SCE's spending on DSM conservation dropped from \$69.4 million in 1983 to \$39.3 million in 1989, although SCE spent close to its authorized level in most years. SoCal's conservation spending has dropped every year from 1985 through 1989, beginning with a high of \$138.4 million down to \$36 million by 1989. On average SoCal has spent 93% of its authorized DSM conservation expenditures in those years. PG&E's DSM conservation spending has varied considerably since 1983, in which it was \$113.2 million. PG&E's conservation spending went up to a high of \$151.2 million in 1985, then dropped to a low of \$62.1 million in 1987, rising to \$93.1 million in 1989. PG&E has overspent its authorized DSM conservation level in four years and underspent it in three years between 1983 and 1989.

The settlements before us take two basic approaches to reversing the trend of declining DSM expenditures. First, they propose a dramatic increase in the funding for DSM energy efficiency, which translates into a rate increase for each utility, at least in the short term. Second, they would institute mechanisms whereby shareholders are financially rewarded or penalized, based on the results achieved in the utility's DSM energy efficiency programs.

The programs presented in the settlements couple increased funding levels with detailed program descriptions for spending the money, cost-effectiveness controls, and improved measurement programs. Thus the funding levels for each utility even with the dramatic increases, appear to be well thought out and reasonable.

Increasing funding levels alone is not likely to be sufficient to bring the benefits of energy utility DSM programs to California in a cost-effective and vigorous way. Unlike energy

efficiency improvements that a utility makes to its own plant, or demand-side energy efficiency improvements, which are made on the customer side of the meter, are not an investment in utility plant and do not earn a return for the utility shareholders. Thus, as the NRDC's report "Decline of Conservation at California Utilities" points out, the utilities lack a positive, financial incentive to pursue DSM energy efficiency. (Exhibit 6).

The Commission adopted the Electric Revenue Adjustment Mechanism (ERAM) for electric utilities and the Core Fixed Cost Account (formerly the Sales Adjustment Mechanism) for gas utilities. These mechanisms compensate utilities for sales fluctuations resulting from increased energy efficiency, as well as some other changes in conditions. Thus, utilities do not have a disincentive to promote energy efficiency. However, the lack of a disincentive has not been sufficient to encourage vigorous DSM energy efficiency programs.

The general decline in energy efficiency spending since 1983 tells us that the current approach is not effective enough and a new approach is needed. The settlements before us present an innovative approach that we believe has great promise: providing financial incentives to utility shareholders for expenditures on DSM energy efficiency measures. The profit motive has proven a powerful motivator over the years, and we expect it will prove itself again in this situation.

The case in favor of incentives is most strongly made in the NRDC report (Exhibit 6). NRDC points out that utilities are "strongly oriented toward balance sheets and shareholder profits. Scarce management and staff resources flow toward potential profit centers..." NRDC argues that utilities must be paid "extra" to induce them to pursue programs like DSM energy efficiency, even though these are cost-minimizing strategies, because "an incentive system offers the only practical assurance of sustained and successful managerial emphasis on improved efficiencies." We are



persuaded that the time has come to try this incentive-based approach.

The money spent on the programs proposed for the incentive/penalty mechanisms will yield significant benefits in the added resource value. Table 3-A of Appendix B shows the net resource value expected to be created by 1991 expenditures under the Utility Cost Test, which takes the lifecycle value (i.e., load reductions times avoided costs) and subtracts all utility program costs other than the cost of the incentive payments. The projected value created relative to program costs ranges from the high of SCE's \$244 million net resource value based on \$41.2 million in expenditures (and \$3.6 million in after-tax incentive payments) to the low of SDG&E's projected \$19.6 million net resource value based on \$12.3 million in expenditures (and \$3.3 million in incentive payments). The net resource value produced under the Total Resource Cost Test, which accounts for participant costs as well as utility costs, yields a somewhat different comparison. Under this measure, the highest projected benefits relative to program cost are still SCE's projected \$217.4 million net resource value from \$41.2 million in expenditures (and \$3.3 million in after-tax incentive payments), while the lowest ratio is SoCal's projected \$20.7 million net resource value from \$12.3 million in expenditures (and \$2.2 million in incentive payments). (Appendices B and C.) Under each measure, the resource value created substantially exceeds the program cost, even after the expected cost of incentives is subtracted. Thus, ratepayers will still receive substantial benefits from these DSM programs with the incentive programs in place.

Because of the small rate increases involved in these applications, the incentive payments will have a relatively small impact on rates. For SDG&E, no rate increase due to incentive payments is projected until 1992 and 1993, when a 0.1% rate increase due to incentives is expected. (Exhibit 2). For SoCal, a 0.1% rate increase due to shareholder incentive payments is projected in 1991,

average has approximately 10 percent of total of total of utilities in 1992, and 1993. (Exhibit 3.) The highest level of rate increases due to incentive payments is projected by PG&E. For PG&E, at the incentive level specified in the settlement, rates are projected to increase 0.1% in 1992, 0.2% in 1993, 0.4% in 1994, 0.3% in 1995, and 0.2% in 1996 due to the incentive payments. (Exhibit 5.) SCE did not provide figures showing the separate rate effect of incentive payments.

While we believe that incentives should be put in place, we approach the implementation of these incentive mechanisms with caution, because the need for incentive mechanisms, the level of incentive and penalty most appropriate for producing cost-effective DSM energy efficiency programs, and the efficacy and administrability of the wide variety of incentive and penalty mechanisms presented to us in these settlements have yet to be fully tested through hearings or experience. We concur with the comments of DGS and FEA that these mechanisms should be considered experimental only and not necessarily the blueprint for the next generation of DSM programs.

We find these settlements reasonable and approve them as experimental programs, with the modifications discussed below, for several reasons. First, there is a need to provide a relatively quick and effective boost to DSM energy efficiency programs now to capture opportunities that would otherwise be lost, without waiting for what may be inconclusive results from prolonged evidentiary hearings. Second, there is broad and unanimous support for these proposals, and this reflects the bargaining and balancing that occurred in the collaborative process and in the settlement discussions on the applications. Third, implementing these innovative shareholder incentive/penalty mechanisms as experiments provides an invaluable opportunity to gather data and improve the next generation of DSM energy efficiency programs based on the actual cost savings and energy efficiency achievements of four different mechanisms. By comparing the results of the four

utilities, we expect to bring some degree of uniformity and proven effectiveness to that next generation of programs.

We recognize, as the settlements point out to us, that these settlements resulted from a good deal of give and take among the parties and reflect interrelated trade-offs that may not be apparent to a reviewer who did not participate in the settlement discussions. For that reason, we do not delve deeply into the details of the settlements and attempt to second-guess and reevaluate each aspect of the settlement, so long as the settlements as a whole are reasonable and in the public interest. However, unlike the collaborative participants and the settling parties, we have the benefit of viewing all four complete proposals side by side, and we would be remiss if we did not use this vantage point to compare the proposals and ensure that the ratepayers of each utility achieve at least rough parity with those of the other utilities. We also seek to ensure some uniformity in the implementation and review of the programs, to maintain comparability among the utilities. With that discussion of our general approach in reviewing the settlements, we discuss the specific issues raised by the various settlements.

#### B. PG&E's Incentive Proposal

We have compared the proposals of the four utilities as set forth in Exhibit 1 (attached as Appendix B to this decision) in order to determine whether the programs proposed for the four utilities produce roughly comparable benefits and costs. This comparative information was not prepared and served until after the settlements were filed, so it provides us with information that the collaborative participants and settling parties may not have had before them as they negotiated the separate deals for each utility.

We find in comparing PG&E's incentive proposal to those of the other three utilities that if we approved the settlement without modification, PG&E's ratepayers would be expected to pay more than double the relative incentive as a percentage of expenditures, compared to the other utilities. (Appendix B, Table 3-B.) This

results from the fact that, while PG&E's shared savings incentive is set at 15% of the net resource value of the savings produced through DSM energy efficiency programs, this translates into 66% of the program expenditures. While the savings created are great enough that the program remains cost-effective, this incentive dwarfs the comparable incentives paid by SDG&E's ratepayers (26%), SoCal's ratepayers (14%) and SCE's ratepayers (9%).<sup>1</sup> (Appendices B and C, Table 3-A). Even when the effects of the cost-plus programs are taken into account, PG&E's ratepayers would still be paying 37% of program expenditures as incentive payments, while under the next highest cost incentive program, SDG&E's ratepayers would pay only 18% of program expenditures as incentive payments. (Appendix B, Table 3-B). However, a side-by-side comparison of the costs and benefits of each of the four utilities' programs provides us with only a limited view of the programs. What the comparison does not enable us to assess, to any degree, is the certainty of realistically achieving expected net resource values and/or cost and unit implementation levels. Because the four utility programs vary greatly, both in their incentive mechanisms and specific program structure and implementation, adjusting any one element of the programs' structure could adversely impact the overall effectiveness of the programs' success at this time. The Commission will be in a better position to evaluate program performance levels as they are monitored over their short life-span. This type of evaluation

<sup>1</sup> This 9% figure for SCE appears to be understated relative to the other utilities' figures, because it is based on post-tax incentive payments to shareholders while the others appear to be based on pre-tax earnings. (Appendix B, Table 3-A, Footnote 2.) However, this distortion is not sufficient to bring SCE's proportionate incentive close to the PG&E 66.2% level.

certainly conforms to the experimental nature of the proposed programs.

**C. Cost-Effectiveness**

Each settlement proposal includes the cost-effectiveness methodology used for that utility. TURN's original comments point out an area in which SoCal's proposal significantly deviates from the other three utilities, although TURN subsequently withdrew its objection. SoCal proposed and the settling parties agreed to the inclusion of a 10% environmental adder to be used in evaluating the cost-effectiveness of SoCal's programs. The inclusion of adders was something reported in the collaborative Blueprint as an item on which the participants could not reach consensus. The inclusion of the adder for SoCal and not for the other utilities inflates the reported cost-effectiveness of SoCal's programs by 10% relative to the programs of the other three utilities. This impedes our ability to cross-compare the programs of each utility, and it is also premature in light of our intention to consider this issue in our biennial resource plan update proceeding (BRPU). We will therefore modify SoCal's settlement to eliminate the use of the environmental adder. Since SoCal's incentive payment methodology is based on planned program costs rather than on cost-effectiveness, this should not change SoCal's proposed incentive/penalty payment.

**D. Implementation and Annual Review**

**1. Program Start-up**

The four utilities propose to take different paths to starting up these programs in 1990. The settlements for SoCal and SCE provide for a reduction in the 1990 program goals and targets, to be filed after this decision is issued, due to the fact that their 1990 programs were initially designed with a July 1 implementation date in mind. Their programs would start up after the Commission decision is issued.

SDG&E has in place a tracking account authorized by Res. E-3191 (May 4, 1990) to track its expenditures. Attachment I to its

application indicates SDG&E's intent to track expenses, (including incentives) for approved programs between the date of the settlement establishment of the tracking account and the date of this decision, but SDG&E indicates in Exhibit 2, Table 6, that it does not expect to begin incremental expenditures or the incentive/penalty mechanism until after this decision is issued. The statement in the settlement that new programs described in the application are intended to be implemented in due course following Commission authorization of the programs, appears to confirm this intention.

PG&E also has a tracking account in place, authorized by Res. E-3194. PG&E does not propose any incremental 1990 DSM expenditures but does propose to have the shareholder incentive/penalty mechanism take effect as of the date of the resolution, June 20, 1990, as agreed by the settling parties. PG&E's request for retroactive award of shareholder incentives for expenditures between June 20 and today's decision appears to be unique among the four utilities.

The tracking account was established with the primary purpose of providing PG&E with the incentive to begin an aggressive implementation of their proposed energy efficiency program in light of our recognition that PG&E was suitably postured to proceed with their programs on June 20. However, although the settling parties agreed on expense and incentive recovery from the period of June 20 to the date of Commission authorization, PG&E's tracking account did not take effect until June 27, 1990.

Res. E-3194 authorized a tracking account to take effect upon the filing of a revised advice letter. (Ordering Paragraph 3.) PG&E did not file the required advice letter, A.L. 1600-G/1304-E, until June 27, thus no recovery of expenditures or incentives before that date may be permitted.

Therefore, we will modify the settlement so that PG&E's incentive/penalty mechanism takes effect on June 27, 1990. Recovery

in rates may be requested for any other appropriate expenditures incurred under the revised DSM programs since June 27, 1990, to the extent that such expenditures are contemplated by the settlements. While we are not certain what SDG&E intends with its tracking (and account), SDG&E may request rate recovery of incremental program expenditures after the establishment of the tracking account to the extent such expenditures are contemplated by the settlements.

2. Annual Review of Program and Rate Changes

As we understand the applications and the modifications made to those applications by the settlements, there are differences in the way the four utilities would have the Commission administer and review the revised DSM programs. Many of the differences grow out of the differences in the proposed mechanisms. However, some of the differences appear to be primarily administrative choices and likely to cause undue complication and confusion down the line as our staff and interested parties review the programs, and some modifications or clarifications to provide parallel review processes are needed.

Each utility proposes to include in its annual March 31 DSM report its proposed calculation of the incentive and or penalty earned in the preceding year. From this point on, the proposed review processes appear to diverge on three items: (1) the date interest begins to accrue on the incentive/penalty payments, (2) the process by which the incentive/penalty is reviewed and verified, and (3) the forum in which the incentive/penalty and changes in program costs are reflected in rates. Again, some of the differences here, particularly those with SCE's proposal appear to be a necessary recognition of the unique incentive/penalty mechanism proposed, and we do not intend to torture the different programs to fit paths they cannot comfortably travel. However, we believe some clarifications or modifications are needed.

First, for SDG&E, PG&E, and SoCal there should be a uniform approach to the accrual of interest on the incentive/penalty

payments earned. SoCal has agreed to follow the same approach as PG&E under which interest accrues beginning on July 1 after the March DSM report laying out the basis for the requested incentive payment is filed. SDG&E's proposal is ambiguous in this regard, but it refers to a July 1 date for completion of the compliance review of the March DSM report and to interest accruing on the approved penalty/rewards. This may be consistent with the SoCal and PG&E method, but to ensure consistency we will modify SDG&E's settlement to expressly state that, as for PG&E and SoCal, interest on the incentive/penalty payments will be permitted to accrue between the July 1 after the DSM report has been filed and the date the incentive/penalty payments appear in rates. It appears that the amortization approach taken in SCE's proposal eliminates this issue for SCE. Second, the process by which the incentive/penalty payments are reviewed here at the Commission should be uniform across the four utilities. We have found in this consolidated proceeding that the ability to compare the proposals for the four utilities has been extremely valuable in our review, and we intend to ensure that procedural differences in the review processes proposed in the individual settlements do not hamper our ability or our staff's ability to track and compare the effectiveness of these experimental programs. The proposals appear to be uniform in their reliance on the March 31 DSM report as the place in which each utility will annually report the results of the prior calendar year's program accomplishments, including expenditures, cost-effectiveness of results, and incentive/penalty payments that the utility believes were earned in that year, as well as projected rate or revenue requirement changes needed to reflect the incentive/penalty payments and changes in program costs. The CPUC staff is expected to review and verify those results, by July 1 in most if not all the settlements. We are concerned that this review would either duplicate work done for the subsequent rate recovery



proceeding or would itself become an issue in that proceeding, or by adding an unnecessary layer of controversy. We will rely on the litigation process to review the utilities' March 31 filings, and we note that we retain the ability to request an independent staff analysis by our Advisory and Compliance Division should we consider that necessary.

Third, we find three conflicting proposals as to the forum in which rate recovery for program cost adjustments and the incentive/penalty payments will be requested. SoCal and SCE would have the rate adjustments made in the Annual Cost Adjustment Proceedings (ACAP) and Energy Cost Adjustment Clause (ECAC) proceedings, respectively. Although there is some ambiguity in the SDG&E proposal, as we understand it SDG&E would request rate recovery for program cost changes in the ACAP and ECAC but would seek recovery of incentive/penalty payments in its attrition advice letter filings. (A.90-04-034, Attach. L, p. A-14 and Attach. I, p. YAW-6.) PG&E proposes the opposite approach to SDG&E, with rate recovery for incentive/penalty payments occurring in the ECAC and ACAP and rate changes to reflect program cost changes to occur through its attrition filing. We will require all the rate changes for these DSM programs to be sought in the ECAC and ACAP proceedings. Due to the experimental nature of these incentive/penalty mechanisms, we want these requests to be filed through applications and in comparable proceedings to ease the complexity of administering these diverse programs and to assist in comparing the results achieved by the four utilities. While we do not anticipate that these requests will prove controversial, we want to ensure a forum in which they will be fully open to scrutiny and evidentiary hearing, on the same basis for each utility.

**B. Program Duration and Reevaluation**

The programs before us would last through 1991 for SCE and SDG&E and through 1992 for PG&E and SoCal. As envisioned by parties to the settlement, each utility's entire DSM energy efficiency

program would be re-evaluated, separately, in the utility's next general rate case, except for SDG&E, for which the review would occur in its modified attrition filing for 1992, which is to be filed in March 1991. At that time, we expect all aspects of these programs, from program design to funding level to the basis for any incentive mechanisms, to be thoroughly reviewed. This is in accord with the traditional way the Commission has reviewed and established DSM programs, and we do not propose to change this part of the settlements. However, the programs proposed for the four utilities vary widely in many respects, from relative spending levels, to program design, to shareholder incentive/penalty levels and design. While we are pleased with the degree of diversity and creativity when we consider these as experimental programs from which we expect to learn valuable lessons, in the long run as we apply those lessons we expect to see the convergence of much of this variety into a uniform, proven DSM energy efficiency program.

The comparative exhibits filed in this proceeding and this decision represent only the first step in the process of devising the next generation of DSM energy efficiency programs. We expect the utilities, and intervenors to take advantage of the measurement and evaluation programs set up in these settlements and the experience with each utility's program as it accumulates, to continue to compare the effectiveness of the various programs and begin devising a more uniform and even more effective approach for that next generation of energy efficiency programs.

In order to formalize this process and provide us with an independent assessment of the incentive programs we adopt today, we will direct our Advisory and Compliance Division to prepare and submit, by December 31, 1992, a report on the effectiveness of the procedures we are adopting, together with recommendations for improvements. We anticipate that this report may require a process similar to the one we have become familiar with in our management

audits, whereby CACD coordinates and directs an independent margin consultant funded by the ratepayers.

**F. Conservation Payments Under Special Contracts**

The settlements raise the issue of the appropriate means of funding and accounting for conservation payments made under expedited application docket/special contracts. The current method was established by D.89-05-067 and D.90-05-030, and requires these conservation payments to be made out of existing DSM budgets. The settlements of SDG&E, SCE, and PG&E agree that this method of funding conservation payments is incompatible with the expanded DSM programs agreed upon in the settlements. Each settlement proposes a related but different modification of the D.89-05-067 and D.90-05-030 method. For example, each settlement would prohibit the use of DSM funds authorized in the last GRC to fund special contract payments, but only SCE's application would also exclude funds authorized under its expanded DSM program application. SDG&E's settlement calls for these payments to be booked as rate discounts; PG&E's settlement would book these payments separately and record them in the two-way balancing account established in PG&E's DSM application; and the SCE settlement specifies that the payments would be recorded monthly in its Electric Revenue Adjustment Mechanism Balancing Account and be reviewed concurrently with the reasonableness review of the special contract application.

We do not want three different approaches to funding and accounting for conservation payments made under special contracts, without a persuasive showing of the needs for the differences. In keeping with the apparent purpose of the proposed modifications, we will modify the PG&E and SDG&E settlements to provide, as SCE's settlement does, that neither DSM funds authorized in the last GRC nor funds authorized in these DSM applications may be used to fund conservation payments under special contracts. We will also require the payments to be accounted for separately. The parties are encouraged to address this issue in their comments on this decision,

as discussed below, comparing the three different utility proposals and indicating if possible a uniform way to fund and account for these conservation payments that is in harmony with each of the three settlements.

**G. Improving Utility Efficiency**

One remaining concern we have with the aforementioned utility efforts is insuring a balance between efforts to improve customer efficiency, the focus of the utility applications, and improving utility operational efficiency. We are concerned that utility efforts will focus on the customers side of the meter, at the expense of efforts that can be made on the utility side of the meter. We are aware of vast improvements being made in the efficiency of equipment used in the transmission and distribution of electricity and do not wish utility efforts to become overly focused on demand-side programs. We are concerned that, similar to the circumstances leading to the documented decline in utility DSM expenditures, current ratemaking methods may impede the ability of utilities to invest in state-of-the-art efficiency equipment for their facilities.

We would like the utilities and other interested parties to explore methods, both utility and regulatory, that can insure that the efficiency on the utility side of the meter is maintained and improved. We will require SDG&E, SCE, SoCal, and PG&E to meet and report back to the Commission in 120 days on the issue of efficiency improvements on the utility side of the meter. This report should include a discussion of the impediments, either operational, financial or regulatory, that utilities believe exist for these types of efficiency investments as well as an outline of steps they believe are necessary to foster these investments. While we will put no structure on this effort, it is clear that the collaborative process was a successful one and might similarly be used to explore this additional efficiency arena.

H. Updates and Comments on Settlement Modifications

We issue this decision as an interim order to permit these DSM programs to be put into place immediately and still provide the parties the opportunity to respond to the settlement modifications made by this decision, in accordance with our Rule 51.7. The changes we propose here should have no impact on the short-term administration of these revised energy efficiency programs, and we expect each utility to implement its approved program without delay.

We invite parties to review the modifications to the settlements. Parties will have 20 days from the date of this decision to file comments on these modifications. We will expect parties to explain in their comments whether they can accept these changes to the settlements and if not why not. Any party objecting to these modifications will also be expected to propose alternative solutions to the problems that the modifications we adopt here are designed to solve. Parties will have five days to file replies to the comments.

To the extent that the settlement agreements provide for SoCal and SCE to modify their program goals and expenditures or make similar changes based on the date of this decision and specify no time period for filing those changes, SoCal and SCE shall file such modifications within 15 days of the date of this decision.

Finally, we remind parties that these applications are not the only forum for reviewing and implementing the recommendations of the Collaborative Process. We plan to issue an Order Instituting Rulemaking on other topics related to improving the efforts of the utilities' demand-side management programs.

The planned OIR will also provide a forum to compare the different DSM models which are the subject of this order, and to assess the relative success of the different approaches. The OIR may lead eventually to the development of statewide standards and benchmarks by which to measure energy efficiency and to measure the appropriate levels of incentives. Over time, monitoring the results

of these programs will help determine which of these near-term investments is most effective in the long term. This rulemaking is now in the formative stages but will be issued later this year.

**Findings of Fact**

1. DSM energy efficiency programs provide long-term benefits, including conserving energy resources, delaying or reducing the need for new utility plant and energy resources, and reducing the adverse environmental effects of energy use.

2. There is no opposition to the proposed settlements of SDG&E's A.90-04-034, SCE's A.90-04-036, SoCal's A.90-04-037, and PG&E's A.90-04-041.

3. No opposition was filed to the motion of Reaction Thermal Systems, Inc. for leave to intervene.

4. The incentive/penalty mechanisms proposed in the various settlements present a valuable opportunity to test the efficacy of such mechanisms on an experimental basis.

5. SoCal and TURN agreed that the SoCal settlement should be changed to reduce to 14% from 16.6% the shareholder incentive for resource programs and to reduce to 10% from 12% the incentive for new construction programs. The settling parties do not object to the change, and it is reasonable.

6. SoCal's proposed 10% environmental adder inflates the cost-effectiveness of SoCal's programs relative to the other three utilities and would hamper our ability to compare cost-effectiveness of the four utilities' DSM programs.

7. It is reasonable to require SDG&E, SoCal, and PG&E to follow the same procedures for accruing interest on incentive/penalty payments, and interest should begin to accrue on July 1 following the filing of the annual DSM report explaining the basis for claimed incentive/penalty payment.

8. It is reasonable to require the Commission Advisory and Compliance Division to submit by December 31, 1992 a report on the

effectiveness of the procedures we adopt today, together with the recommendations for improvements.

9. It is reasonable to require SDG&E, SCE, SoCal, and PG&E to file requests for rate recovery under these expanded DSM programs in the same forums, specifically the ECAC for electric rate recovery and the ACAP for gas rate recovery.

10. SDG&E's settlement sets forth two alternatives for implementation of the rate changes associated with the balancing accounts and forecasted future program expenses--either at the time of this decision or in the 1991 ECAC and ACAP--and recommends recovery through the 1991 proceedings. This recommended method of implementing the rate changes is reasonable.

11. The SDG&E, SCE and PG&E Settlement Agreements propose somewhat different modifications to the current method of funding and accounting for conservation payments made in connection with electric rate special contracts. It is reasonable to establish a uniform method to fund these contracts and to require separate accounting for the payments.

12. With the modifications and clarifications identified in Findings 5 through 13, the settlements of A.90-04-034, A.90-04-036, A.90-04-037, and A.90-04-041 are reasonable.

13. The parties should be afforded an opportunity to comment on the modifications to the settlements before the modifications become final.

#### Conclusions of Law

1. No hearings are necessary on these applications or settlements.

2. The motion of Reaction Thermal Systems, Inc. for leave to intervene should be granted.

3. The settlements should be approved with the modifications identified in Findings of Fact 5 through 13.

4. Approval of the Settlement Agreements entails a modification of the conservation method established in D.89-05-067

and affirmed in D.90-05-030 for funding and accounting for conservation payments made under electric rate special contracts.

**INTERIM ORDER**

**IT IS ORDERED that:**

1. The Settlement Agreement in SDG&E's A.90-04-034, filed June 27, 1990, the Settlement Agreement in SCE's A.90-04-036, filed July 2, 1990, the Settlement Agreement in SoCal's A.90-04-037, filed June 27, 1990, and the Settlement Agreement in PG&E's A.90-04-041 are adopted, with the following clarifications and modifications:

a. SoCal's incentive for resource programs shall be changed from 16.6% to 14%, and its incentive for new construction programs shall be changed from 12% to 10%.

b. SoCal's 10% environmental adder shall be eliminated.

c. PG&E shall be eligible to receive incentive/penalty payments for expenditures incurred between the establishment of their tracking accounts pursuant to Resolution E-3194 (effective June 27, 1990) and the date of this decision.

d. Interest on incentive/penalty payments shall accrue in the same manner for SDG&E, SoCal, and PG&E and shall begin to accrue on July 1 following the filing of the annual DSM report explaining the basis for the claimed incentive/penalty and shall continue to accrue until the payments are reflected in rates.

e. SDG&E, SCE, SoCal, and PG&E shall file any requests for rate recovery under these expanded DSM programs in the ECAC proceeding for electric rate recovery and the ACAP proceeding for gas rate recovery.



f) SDG&E may reflect these rate changes in its utility bills beginning with the 1991 ACAP and ECAC applications, as the settling parties recommended.

g. We will rely on the litigation process in the rate recovery proceedings to evaluate the March 31 utility filings.

h. The Commission Advisory and Compliance Division shall submit by December 31, 1992, a report on the effectiveness of the procedures we adopt today, together with recommendations for improvements.

i. The method of funding and accounting for conservation payments made under electric rate special contracts established by D.89-05-067 and affirmed in D.90-05-030 shall be modified to exclude the use of DSM funds authorized in the utilities' most recent GRC and these expanded DSM program applications to fund the conservation payments and to require that such conservation payments be accounted for separately.

2. The motion of Reaction Thermal Systems, Inc. for leave to intervene is granted.

3. Parties shall have 20 days to file comments and 5 days to file reply comments on the modifications and clarifications to the settlements set forth in Ordering Paragraph 1.

4. SoCal and SCE shall file within 15 days any modifications to DSM program goals and expenditures or similar changes due to the date of this decision, to the extent that the settlements provide for such changes and specify no time period for filing the changes.

5. PG&E, SCE, SoCal and SDG&E shall file within 120 days a report outlining any problems, either operational, financial or regulatory, they now face when evaluating and considering investments to improve the efficiency on their side of customer meters, as well as steps they plan on taking to improve their performance in this area.

This order is effective today.

Dated August 29, 1990, at San Francisco, California.

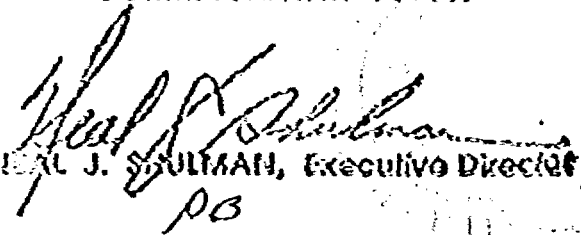
G. MITCHELL WILK  
President  
FREDERICK R. DUDA  
STANLEY W. HULETT  
PATRICIA M. ECKERT  
Commissioners

Commissioner John B. Ohanian,  
being necessarily absent, did  
not participate.

I will file a written concurring opinion.

/s/ G. MITCHELL WILK  
President

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

  
NEAL J. SULMAN, Executive Director  
PB

## APPENDIX A

## Exhibit List

A.90-04-034, A.90-04-036,  
A.90-04-037, A.90-04-041

<u>Exhibit Number</u>	<u>Sponsor</u>	<u>Description</u>	<u>File Date</u>
1	PG&E	A Side-by-Side Comparison of the applications of SDG&E, SCE, SoCal, and PG&E -- as corrected by revision dated 7/11/90	7/6/90
2	SDG&E	Response to ALJ's Request for Information	7/6/90
3	SCE	Individual Response to ALJ's Ruling	7/6/90
4	SoCal	Response to ALJ's Ruling for Additional Information -- as corrected by revision dated 8/22/90	7/6/90
5	PG&E	Information on DSM Program Requested by ALJ	7/6/90
6	NRDC	Decline of Conservation at California Utilities	6/26/90
7	PG&E	An Energy Efficiency Blueprint for California: Report of the Statewide Collaborative Process	7/6/90
8	PG&E	Appendix A to Energy Efficiency Blueprint	7/6/90
9	PG&E	Appendix C to Energy Efficiency Blueprint	7/6/90
10	SCE	Index to SCE Settlement	8/13/90 (mailed)
11	SoCal	Revised Tables 3-A, 3-B, & 3-C of Exhibit 1	8/22/90

(END OF APPENDIX A)

EXHIBIT 1  
 (C) EXHIBIT 1  
 (C) EXHIBIT 1  
 (C) EXHIBIT 1  
 (C) EXHIBIT 1

**A SIDE-BY-SIDE COMPARISON OF THE APPLICATIONS**

**OF SAN DIEGO GAS & ELECTRIC COMPANY (NO. 90-04-034)**

**SOUTHERN CALIFORNIA EDISON COMPANY (NO. 90-04-036)**

**SOUTHERN CALIFORNIA GAS COMPANY (NO. 90-04-037)**

**AND**

**PACIFIC GAS & ELECTRIC COMPANY (NO. 90-04-041)**

APPENDIX B  
 Page 11

Exhibit	1
Case Proceedings	A. 90-04-034 et al.
Sponsor/Attorney	P&EE
Date Ident.	Recd.
	Carol Marjett
	Administrative Law Judge



(2) ...  
(5) ...  
SUBJECT AREA #2: PROGRAM FLEXIBILITY

TABLE 2  
PROGRAM EXPENDITURE FLEXIBILITY (FOR 1991 PROGRAMS)  
MAXIMUM INCREMENTAL INCREASE IN EXPENDITURES %

	1990 1991	AVG SOUTHERN CALIF EDISON (3) (ELECT.)	1990 SOUTHERN CALIF EDISON (3) GAS (GAS)	1990 SDG&E (ELECT. AND GAS)
MAXIMUM INCREASE (millions of 1990 dollars)	16.1 (1)	N/A	13.3	3.5 (2)
MAXIMUM INCREASE (Percent, relative to TOTAL DSM)	8.6% (1)	N/A	19.7%	16.0% (2)
MAXIMUM INCREASE (Percent, relative to programs subject to Earnings/Penalty)	15.7% (1)	N/A	34.2%	18.0% (2)
OTHER NOTES:				

- NOTES: "Total DSM" which refers to all DSM program expenditures, currently authorized plus incremental, and "programs subject to earnings/penalty" are from Table 1.
- (1) The maximum dollar increase in expenditures is 30% of the total expenditures for resource programs (page A-2 of Application 90-04-041, Utility Incentive Proposal and Rate-making Implementation).
- (2) For incremental programs only. SDG&E does not have flexibility to increase expenditures for current programs authorized in 0.88-09-063.
- (3) Southern California Edison Company does not have flexibility to increase program expenditures above the levels established in Edison's application 90-04-036 for the 1991 performance period.

TABLE 3-A  
PROPOSED SHAREHOLDER INCENTIVES AND PENALTIES  
(EXCLUDING COST PLUS PROGRAMS)

	PG&E (ELECT. AND GAS)	SOUTHERN CALIF EDISON (ELECT.)	SOUTHERN CALIF GAS (GAS)	PG&E (ELECT.)
	SHARED SAVINGS	AMORTIZED	VARIABLE RATE OF RETURN CONCEPT	SHARED SAVINGS (1)
TOTAL 1991 EXPENDITURES SUBJECT TO EARNINGS/PENALTY (Millions of 1990 dollars)	53.5	41.2	15.4	12.3
TOTAL RESOURCE VALUE (Lifecycle, millions of 1990 dollars)	289.3	285.2	45.5	32.6
NET RESOURCE VALUE, TRC (Lifecycle, millions of 1990 dollars)	179.8	217.4	20.7	24.1
NET RESOURCE VALUE, UC (Lifecycle, millions of 1990 dollars)	235.8	244.0	32.1	19.6
EXPECTED EARNINGS (Lifecycle): Millions of 1990 Dollars	35.4	3.6 (2)	2.6	3.3
% of Total Expenditures	66.2	8.7	16.9	26
% of Total Resource Value	12.2	1.3 (1)	5.7	10
% of Net Resource Value, TRC	19.7	1.7	12.6	13.5
% of Net Resource Value, UC	15.0	1.5	8.1	17
MAXIMUM EARNINGS (Lifecycle), EXCLUDING FLEXIBILITY TO INCREASE: Millions of 1990 Dollars	35.4	3.6 (2)	2.6	3 (3)
% of Total Expenditures	66.2	8.7	16.9	41
% of Total Resource Value	12.2	1.3	5.7	15
% of Net Resource Value, TRC	19.7	1.7	12.6	21
% of Net Resource Value, UC	15.0	1.5	8.1	26
MAXIMUM EARNINGS (Lifecycle), INCLUDING FLEXIBILITY TO INCREASE: Millions of 1990 Dollars	46.0	N/A	4.8	5 (3)
% of Total Expenditures	86.2	N/A	31.2	32
% of Total Resource Value	12.2	N/A	10.5	15
% of Net Resource Value, TRC	19.7	N/A	23.2	21
% of Net Resource Value, UC	15.0	N/A	15.0	26
MAXIMUM PENALTY FROM 1991 PROGRAMS (Millions of 1990 Dollars)	15.8	4.9	6.9	4.5
Penalty as % of expenditures	29.5	11.9	44.8	36.6

NOTES: "Total Resource Value" refers to the lifecycle value (load reductions times avoided costs), without subtracting costs, if implemented as expected (i.e. expected expenditure levels and expected participation).  
 "Net Resource Value, TRC" refers to net program savings based on the Total Resource Cost test (total resource value minus total costs, utility and participant); shareholder earnings excluded.  
 "Net Resource Value, UC" refers to net program savings based on the Utility Cost test (total resource value minus utility program costs); shareholder earnings excluded.  
 OTHER NOTES: (1) Includes lighting portion of non-residential new construction program, which is subject to same incentive mechanism as retrofit resource programs. Does not include other new construction programs.  
 (2) Post tax earnings.  
 (3) Maximum reward allowed for 1991 is \$5 million, regardless of expenditure level.

A.90-04-034 et al. ALJ/CLM/ES  
APPENDIX B  
Page 4

TOLSA

SUBJECT AREA #3: SHAREHOLDER INCENTIVES AND PENALTIES

PAGE 4 OF 18

TABLE 3-B  
SUMMARY COMPARISON OF SHAREHOLDER EARNINGS/PENALTIES FOR ALL PROGRAMS  
(BASED ON PROPOSED EXPENDITURES FOR 1991 PROGRAMS)

	PG&E (ELECT. AND GAS)	SOUTHERN CALIF EDISON (ELECT.)	SOUTHERN CALIF GAS (GAS)	SDG&E (ELECT. AND GAS)
<b>SHARED SAVINGS PROGRAMS:</b>				
Total Expenditures (millions of 1990 dollars)	53.5 (1)	N/A	N/A	16.5 (1)
Expected Earnings (lifecycle) (millions of 1990 dollars)	35.4	N/A	N/A	3.41
Earnings as % of Expenditures	66.2%	N/A	N/A	23.5%
<b>AMORTIZATION PROGRAMS:</b>				
Total Expenditures (millions of 1990 dollars)	N/A	41.2	N/A	N/A
Expected Earnings (lifecycle) (millions of 1990 dollars)	N/A	6.0 (2)	N/A	N/A
Earnings as % of Expenditures	N/A	14.6%	N/A	N/A
<b>VARIABLE RATE OF RETURN CONCEPT PROGRAMS:</b>				
Total Expenditures (millions of 1990 dollars)	N/A	N/A	15.4	N/A
Expected Earnings (lifecycle) (millions of 1990 dollars)	N/A	N/A	2.6	N/A
Earnings as % of Expenditures	N/A	N/A	16.6%	N/A
<b>COST PLUS PROGRAMS:</b>				
Total Expenditures (millions of 1990 dollars)	49.3	21.6	23.6	5.0
Expected Earnings (lifecycle) (millions of 1990 dollars)	2.5	1.1 (2)	1.7	0.1
Earnings as % of Expenditures	5.0%	5.0%	7.0%	2.0%
<b>ALL PROGRAMS:</b>				
Total Expenditures (millions of 1990 dollars)	102.8	62.8	39.0	19.5
Expected Earnings (lifecycle) (millions of 1990 dollars)	37.9	7.1 (2)	4.2	3.51
Earnings as % of Expenditures	36.9%	11.3%	10.8%	18.0%

NOTES:

- (1) INCLUDES RETROFIT AND NEW CONSTRUCTION PROGRAMS.
- (2) EXPRESSED IN NOMINAL DOLLARS.

A.90-04-034 et al. AID/CLM/ES

APPENDIX B  
Page 5



TBL3C (S) SHARED SAVINGS  
SUBJECT AREA 3: SHAREHOLDER INCENTIVES AND PENALTIES  
(1) PROFIT OR BENEFIT AND NON-QUALIFIED SAVINGS

TABLE 3-C  
SHAREHOLDER INCENTIVES CALCULATIONS

PG&E (ELECT. AND GAS)

RESOURCE PROGRAMS (SHARED SAVINGS): INCENTIVES = 0.15 x (NET LIFECYCLE BENEFITS). REFERENCED IN APPENDIX A, PG&E-1 OF THE APPLICATION (90-04-041).

MINIMUM PERFORMANCE STANDARDS (MPS) MUST BE MET FOR EACH PROGRAM TO BE ELIGIBLE FOR INCENTIVES. THE MPS FOR RETROFIT PROGRAMS IS A DEADBAND OF 50% TO 75% OF EXPECTED NET BENEFITS WHILE THE MPS FOR THE RESIDENTIAL AND COMMERCIAL NEW CONSTRUCTION PROGRAMS ARE 30% AND 25% RESPECTIVELY. IF THE MPS IS ACHIEVED (THE UPPER RANGE OF THE DEADBAND FOR THE RETROFIT PROGRAMS), THE INCENTIVES ARE CALCULATED USING ABOVE EQUATION.

EQUITY/SERVICE PROGRAMS (COST PLUS): INCENTIVES = 0.05 x (DOLLARS SPENT). REFERENCED IN APPENDIX A, PG&E-1 OF THE THE APPLICATION (90-04-041).

MPS MUST ALSO BE MET FOR EQUITY/SERVICE PROGRAMS TO RECEIVE INCENTIVES. THESE MPSs RANGE FROM 70% TO 80% OF EXPECTED TRANSACTIONAL GOALS, SUCH AS NUMBER OF AUDITS, PUMP TESTS, DIRECT WEATHERIZATION UNITS, ETC.. IF THE MPS IS MET THE INCENTIVE IS CALCULATED AS ABOVE.

SOUTHERN CALIF EDISON (ELECT.)

AMORTIZATION INCENTIVES:

AMORTIZATION WITH 5-YEAR LIFE AND TAX NORMALIZATION. REFERENCED IN CHAPTER 3, SUBSECTION III, AND IN CHAPTER 6, SUBSECTION IV, OF THE APPLICATION (90-04-036).

MODIFIED EXPENSE (COST PLUS) INCENTIVES:

FIVE PERCENT OF RECORDED EXPENSES. REFERENCED IN CHAPTER 4, SUBSECTION III, OF THE APPLICATION (90-04-036).

A.90-04-034 et al.

ALJ/CIM/FS

APPENDIX B  
Page 6

TD13C-1  
 SUBJECT AREA 3: SHAREHOLDER INCENTIVES AND PENALTIES

TABLE 3-C (CONTINUED)  
 SHAREHOLDER INCENTIVES CALCULATIONS

SOUTHERN CALIF GAS (GAS) - REFERS TO APPENDIX A, B, AND C (PAGES 11-7 TO 11-13)

RESOURCE PROGRAMS: INCENTIVE WILL BE 16.6% OF PLANNED PROGRAM COSTS, PROVIDED THAT 100% OF PROGRAM GOALS ARE ACHIEVED AND ACTUAL COSTS EQUAL PLANNED COSTS. IF 100% OF PROGRAM GOALS ARE ACHIEVED AT LESS THAN PLANNED COSTS, SOCALGAS WILL CONTINUE TO EARN 16.6% ON ACTUAL VARIABLE COST FOR EACH ADDITIONAL UNIT INSTALLED.

NEW CONSTRUCTION: UTILITY INCENTIVE EARNINGS WILL BE EQUAL TO 12% OF PROGRAM COSTS.

DIRECT ASSISTANCE AND ENERGY SERVICES: INCENTIVE EARNINGS WILL BE EQUAL TO 5% OF PROGRAM COSTS WITH THE EXCEPTION OF NONDISCRETIONARY DIRECT ASSISTANCE PROGRAM ELEMENTS.

PLANNED UTILITY INCENTIVE & PROGRAM DESIGN COST:

THE PLANNED UTILITY INCENTIVE (PINC) IS 16.6% OF THE TOTAL FIXED & VARIABLE COST (IFV COST):  $PINC = 0.166 * IFV COST$   
 WHERE: IFV COST = THE SUM OF PLANNED FIXED AND VARIABLE COSTS NECESSARY TO ACHIEVE THE PLANNED UNIT GOAL. THEREFORE, PROGRAM DESIGN COST (DCOST) IS EQUAL TO 1.166 TIMES TOTAL FIXED & VARIABLE COSTS (IFV COST):  $DCOST = 1.166 * IFV COST$

ACTUAL UTILITY INCENTIVE:

THE ACTUAL UTILITY INCENTIVE (AINC) RECEIVED BY SOCALGAS IS A FUNCTION OF THE ACTUAL DSM UNITS ACHIEVED (UNITS) AND ACTUAL COSTS (ACOST). THIS RELATIONSHIP CAN BE EXPRESSED AS FOLLOWS:  $AINC = (UPYMT * UNITS) - ACOST$  WHERE: UPYMT = THE PAYMENT RECEIVED BY SOCALGAS FOR EACH DSM UNIT ACHIEVED, INCLUDING FIXED AND VARIABLE PROGRAM COSTS AND UTILITY INCENTIVE. AND:  $UPYMT = DCOST / GOAL$  GOAL = PROGRAM GOAL IN NUMBER OF DSM UNITS. SUCH THAT:  $AINC < OR = PINC$

INCREMENTAL EARNINGS LIMITATION:

ONCE THE ACTUAL UTILITY INCENTIVE (AINC) IS EQUAL TO THE PLANNED UTILITY INCENTIVE (PINC), ANY INCREMENTAL UTILITY INCENTIVE EARNINGS (IINC) AND THE INCREMENTAL UTILITY PAYMENT (IUPYMT) RECEIVED BY SOCALGAS FOR EACH ADDITIONAL DSM UNIT ACHIEVED ARE BASED ON THE PLANNED PROGRAM VARIABLE COST (PYCOST):  
 WHEN:  $AINC = PINC$  THEN:  $IINC = UNITS * PYCOST * 0.166$ ; AND, WHERE: UNITS = INCREMENTAL DSM UNITS ACHIEVED AFTER THE PLANNED UTILITY INCENTIVE HAS BEEN EARNED. THIS FEATURE SIGNIFICANTLY REDUCES THE POTENTIAL FINANCIAL BENEFIT THE UTILITY CAN GAIN BY EXCEEDING PROGRAM GOALS OR BY UNDER-SPENDING.

SOGL (ELECT. AND GAS)

RESOURCE PROGRAMS AND NONRESIDENTIAL NEW CONSTRUCTION LIGHTING:

INCENTIVE = 13.5% OF NET IRC VALUE + (OR -) COST MINIMIZATION ADJUSTMENT.  
 COST MINIMIZATION ADJUSTMENT = (CHANGE IN \$ UTILITY COSTS/UNIT OF ENERGY SAVED) \* 20% \* (ACTUAL UNITS OF ENERGY SAVED).  
 WHERE: CHANGE IN \$ UTILITY COSTS IS THE NET CHANGE IN ACTUAL PROGRAM COSTS AND CUSTOMER INCENTIVE PAYMENTS PER UNIT OF ENERGY SAVED MINUS THE PRE-SPECIFIED RATIO OF UTILITY COSTS/UNIT OF ENERGY SAVED.

NO INCENTIVE WILL BE PROVIDED UNTIL A MINIMUM PERFORMANCE LEVEL IS MET. THE MINIMUMS ARE CALCULATED AS A PERCENTAGE OF NET IRC VALUE FOR EACH PROGRAM. FOR 1991, THE MINIMUM PERCENTAGE FOR RETROFIT RESOURCE PROGRAMS IS 50%; THE 1991 MINIMUM PERCENTAGE FOR NON-RESIDENTIAL NEW CONSTRUCTION LIGHTING IS 25%.

NEW CONSTRUCTION PROGRAMS: INCENTIVE = 9% OF TOTAL RESOURCE VALUE (PRESENT VALUE OF LIFECYCLE BENEFITS).

DIRECT ASSISTANCE PROGRAM: INCENTIVE = 5% OF EXPENDITURES ON QUALIFYING MEASURES.

NO INCENTIVE WILL BE PROVIDED UNTIL A MINIMUM NUMBER OF UNITS ARE WEATHERIZED. THE MINIMUM FOR 1991 WILL BE DETERMINED AT THE END OF 1990 AND WILL BE BETWEEN 40% AND 70% OF THE 7,000 UNIT TARGET FOR 1991.

19830  
SUBJECT AREA 3: SHAREHOLDER INCENTIVES AND PENALTIES

TABLE 3-D  
SHAREHOLDER PENALTY CALCULATIONS

PG&E (ELECT. AND GAS)

RESOURCE PROGRAMS:

IF MPSs FOR PROGRAMS ARE NOT ACHIEVED (LOWER END OF DEADBAND FOR RETROFIT PROGRAMS) THE PENALTY IS CALCULATED AS FOLLOWS:

PENALTY = 0.15 x (MINIMUM PERFORMANCE STANDARD - ACTUAL AND COMMITTED NET BENEFITS) AS REFERENCED IN APPENDIX A, PG&E-1 OF THE APPLICATION (90-04-061)

EQUITY/SERVICE PROGRAMS:

NO PENALTY IS IMPOSED IF MINIMUM PERFORMANCE STANDARDS ARE NOT ACHIEVED.

SOUTHERN CALIF EDISON (ELECT.)

PERFORMANCE MECHANISM FOR AMORTIZATION PROPOSALS:

PENALTY PERCENTAGE = (0.75 - SUCCESS RATE) / 0.55

PENALTY PERCENTAGE IS APPLIED TO RECORDED EQUITY EARNINGS IN AMORTIZATION ACCOUNT IF SUCCESS RATE IS GREATER THAN 20 PERCENT.

IF SUCCESS RATE IS LESS THAN 20 PERCENT, THEN PENALTY PERCENTAGE IS APPLIED TO GREATER OF RECORDED EQUITY EARNINGS ON AMORTIZATION ASSET OR A PRE-SPECIFIED FLOOR AMOUNT.

IF NO ACTIVITY IS UNDERTAKEN FOR AN AUTHORIZED PROGRAM, THE EQUITY EARNINGS THAT WOULD HAVE BEEN EARNED ARE FORFEITED.

REFERENCE: CHAPTER 4, SUBSECTION II OF THE APPLICATION.

MODIFIED EXPENSE PERFORMANCE MECHANISM:

IF THE SUCCESS RATE FOR A PROGRAM FALLS BELOW 75 PERCENT, THE 5 PERCENT INCENTIVE FOR THE PROGRAM IS FORFEITED.

REFERENCE: CHAPTER 4, SUBSECTION III.

SOUTHERN CALIF GAS (GAS)

REFERS TO APPENDIX A, B, AND C (PAGES 11-7 TO 11-13)

ALSO, SEE ABOVE TABLE 3-C SHAREHOLDER INCENTIVES FORMULAS THAT APPLY TO PENALTY CALCULATIONS TOO.

SOG&E (ELECT. AND GAS)

RESOURCE PROGRAMS AND NON-RESIDENTIAL NEW CONSTRUCTION LIGHTING:

IF THE MINIMUM PERCENTAGE OF NET TRC VALUE IS NOT ACHIEVED IN 1991:

PENALTY = (MINIMUM PERFORMANCE TARGET TRC VALUE - ACTUAL PERFORMANCE TRC VALUE) \* 40%

NEW CONSTRUCTION PROGRAMS: NO PENALTY PROVISIONS

DIRECT ASSISTANCE PROGRAM: NO PENALTY PROVISIONS

A-90-04-034 et al. ALJ/CIM/ES APPENDIX B Page 8

- QUESTIONS: 1. EXTENT TO WHICH INCENTIVE/PENALTY APPLIES TO ALREADY AUTHORIZED?  
2. CAN SHAREHOLDERS RECEIVE INCENTIVE AND PENALTY IN SAME YEAR?  
3. LEVEL OF AUTHORIZED EXPENDITURES AT WHICH INCENTIVE PAYMENTS BEGIN?

PG&E (ELECT. AND GAS)

1. OF THE \$102.8 MILLION SUBJECT TO THE INCENTIVE/PENALTY MECHANISM, \$81.4 MILLION WAS AUTHORIZED IN THE 1990 GRC AND \$21.4 MILLION IS INCREMENTAL.
2. YES, THIS CAN OCCUR, MINIMUM PERFORMANCE STANDARDS ARE SET FOR EACH PROGRAM. THOSE PROGRAMS FOR WHICH THESE STANDARDS ARE ACHIEVED WILL RECEIVE INCENTIVES, THOSE PROGRAMS WHERE THE STANDARDS ARE NOT ACHIEVED WILL BE IMPOSED PENALTIES.
3. INCENTIVE PAYMENTS ARE NOT DEPENDENT ON OVERALL DOLLARS EXPENDED. INCENTIVE PAYMENTS BEGIN WHEN THE ESTABLISHED MINIMUM PERFORMANCE STANDARDS ARE MET. THE MINIMUM PERFORMANCE STANDARD FOR EACH PROGRAM (EXPRESSED IN TERM OF % OF ANNUAL GOALS) IS SHOWN AS FOLLOWS:

1991 PROGRAMS	MINIMUM PERFORMANCE STANDARD FOR INCENTIVE PAYMENTS
CIA ENERGY MGMT INCENTIVES	75%
COMM. NEW CONSTRUCTION	25%
RES. NEW CONSTRUCTION	30%
RES. APPLICANCE EFFICIENCY	75%
CIA ENERGY MGMT SERVICES	70% (75% FOR COMMERCIAL)
RES. ENERGY MGMT SERVICES	80%
SUPER EFFICIENT HOMES	70%
DIRECT ASSISTANCE	70%

SOUTHERN CALIF EDISON (ELECT.)

1. OF THE \$62.8 MILLION SUBJECT TO THE INCENTIVE/PENALTY MECHANISM, \$32.8 MILLION HAS ALREADY BEEN AUTHORIZED IN THE 1988 GRC DECISION AND \$30 MILLION IS INCREMENTAL.
2. A. AMORTIZATION PROPOSAL: AFTER THE INITIAL PERFORMANCE PERIOD, AS DEFINED IN ATTACHMENT 5-A TO THE APPLICATION, IT MAY BE POSSIBLE FOR EDISON TO ACCRUE EARNINGS AND SIMULTANEOUSLY PAY A PENALTY FOR THE REMAINDER OF THE AMORTIZATION PERIOD.  
B. MODIFIED EXPENSE-RELATED PROPOSAL: THE INCENTIVE IS INCLUDED IN RATES, AND ACCRUES DURING THE INITIAL PERFORMANCE PERIOD ONLY. ANY PENALTY WOULD BE ASSESSED AFTER THE INCENTIVE ACCRUALS HAVE CEASED FOR A GIVEN PROGRAM.
3. FOR BOTH THE AMORTIZATION PROPOSAL AND THE MODIFIED EXPENSE-RELATED PROPOSAL, INCENTIVES ACCRUE IMMEDIATELY UPON EXPENDITURE OF ANY AUTHORIZED AMOUNTS.

SOUTHERN CALIF GAS (GAS)

1. OF THE \$39 MILLION SUBJECT TO THE INCENTIVE MECHANISM, \$28.6 MILLION HAS ALREADY BEEN AUTHORIZED IN THE 1990 GRC DECISION AND \$10.4 MILLION IS INCREMENTAL. OF THE \$15.4 MILLION SUBJECT TO A PENALTY, \$8 MILLION HAS ALREADY BEEN AUTHORIZED IN THE 1990 GRC DECISION AND \$7.4 MILLION IS INCREMENTAL.
2. YES. PROGRAMS AND ELEMENTS WITHIN PROGRAMS ARE EVALUATED INDIVIDUALLY.
3. INCENTIVE PAYMENTS BEGIN WHEN THE FOLLOWING BREAK-EVEN POINT IS EXCEEDED.

RESOURCE PROGRAMS	BREAK-EVEN POINT
	JOB\$
RES. APPLICANCE	2,930 80% (EXPRESSED IN TERM OF % OF ANNUAL GOALS)
INCL. HEAT REC.	23 70%
IND. EQUIP. REP.	168 74%
COMM. EQUIP. REP.	3,310 70%
WEATHERIZATION	18,831 71%
NEW CONSTRUCTION	66%
DIRECT ASSISTANCE	70%

SOG&E (ELECT. AND GAS)

1. SOG&E'S PROPOSED INCENTIVE MECHANISM APPLIES ONLY TO THE INCREMENTAL PROGRAMS INCLUDED IN ITS APPLICATION. CURRENTLY AUTHORIZED PROGRAMS ARE INCLUDED IN A SEPARATE INCENTIVE MECHANISM THAT WAS AUTHORIZED IN SOG&E'S 1989 GENERAL RATE CASE (D.88-09-063).
2. INCENTIVES AND PENALTIES ARE CALCULATED SEPARATELY FOR THE VARIOUS PROGRAMS COVERED BY THE MECHANISM. SOME PROGRAMS COULD EARN A REWARD WHILE OTHERS A PENALTY DURING THE SAME YEAR.
3. INCENTIVE PAYMENTS BEGIN WHEN MINIMUM PERFORMANCE LEVELS ARE MET AND ARE NOT DEPENDENT ON EXPENDITURE LEVELS. FOR 1991, MINIMUMS ARE AS FOLLOWS:  
RESOURCE PROGRAMS: 50% OF NET IRC VALUE.  
NON-RESIDENTIAL NEW CONSTRUCTION LIGHTING: 25% OF NET IRC VALUE.  
NEW CONSTRUCTION PROGRAMS: NO MINIMUMS.  
DIRECT ASSISTANCE PROGRAMS: BETWEEN 2,900 AND 4,500 LOW INCOME UNITS WEATHERIZED (EXACT NUMBER TO BE DETERMINED).

A.90-04-034 et al. ALJ/CIM/IS APPENDIX B Page 9

TABLE 4-1  
SUBJECT AREA #4: PROGRAM DESIGN

RESOURCE PROGRAMS:	TYPE OF EXPENDITURES	COMMENTS
1. COMMERCIAL, INDUSTRIAL, AGRICULTURAL REBATES	REBATES ARE PAID FOR RETROFIT ENERGY EFFICIENT EQUIPMENT, ADMINISTRATIVE COSTS ARE ALSO INCLUDED.	AUTHORIZED IN 1990 GRC BUT HAS CHANGED PROGRAM DESIGN TO MEET COLLABORATIVE.
2. COMMERCIAL NEW CONSTRUCTION	REBATES ARE PAID FOR ENERGY EFFICIENT EQUIPMENT IN NEW BUILDINGS; ADMINISTRATIVE COSTS ARE ALSO INCLUDED.	SUBSTANTIALLY EXPANDED BEYOND GRC AUTHORIZED FOR COLLABORATIVE.
3. RESIDENTIAL APPLIANCE EFFICIENCY	REBATES ARE PAID FOR RETROFIT OF ENERGY EFFICIENT APPLIANCES IN HOMES; ADMINISTRATIVE COSTS ARE ALSO INCLUDED.	AUTHORIZED IN 1990 GRC BUT HAS CHANGED PROGRAM DESIGN TO MEET COLLABORATIVE.
4. RESIDENTIAL NEW CONSTRUCTION	REBATES ARE PAID FOR ENERGY EFFICIENT APPLIANCES IN NEW HOMES; ADMINISTRATIVE COSTS ARE ALSO INCLUDED.	SUBSTANTIALLY EXPANDED BEYOND GRC AUTHORIZED FOR COLLABORATIVE.
EQUITY/SERVICES PROGRAMS:		
1. DIRECT ASSISTANCE	COST OF WEATHERIZATION SERVICES AND HIGH EFFICIENCY APPLIANCES PURCHASED FOR LOW INCOME CUSTOMERS. ONLY EXPENDITURES FOR NON-BIG-6 (NON-MANDATED) ITEMS ARE INCLUDED FOR INCENTIVES. ADMINISTRATIVE COSTS ARE INCLUDED.	AUTHORIZED IN 1990 GRC BUT PROGRAM DESIGN HAS BEEN ENHANCED TO MEET COLLABORATIVE.
2. RESIDENTIAL EM SERVICES	EXPENDITURES INCLUDE COSTS OF HOME ENERGY SURVEYS AND OTHER SERVICES PROVIDED; ADMINISTRATIVE COSTS INCLUDED.	AUTHORIZED IN 1990 GRC.
3. COMMERCIAL, INDUSTRIAL, AGRICULTURAL EM SERVICES	EXPENDITURES INCLUDE COSTS OF ENERGY SURVEYS AND OTHER SERVICES PROVIDED; ADMINISTRATIVE COSTS INCLUDED.	AUTHORIZED IN 1990 GRC.
4. SUPER EFFICIENT HOMES	A PILOT PROGRAM WITH EXPENDITURES FOR ADVANCED TECHNOLOGIES INSTALLED IN 28 SHOWCASE HOMES AND INSTALLATION OF EFFICIENT WINDOWS IN 1800 HOMES. ADMINISTRATIVE COSTS INCLUDED.	NEW PROGRAM FOR COLLABORATIVE.

TBL4-2  
SUBJECT AREA #41 PROGRAM DESIGN

TABLE 4-2  
PROGRAM DESIGN

TYPE OF EXPENDITURES

COMMENTS

SOUTHERN CALIF EDISON (ELECT.)

SEE ATTACHED TABLE 4 (PAGE 11) - SOUTHERN CALIFORNIA EDISON COMPANY, STATUS OF CONSERVATION PROGRAMS

SOUTHERN CALIF GAS (GAS)

SEE ATTACHED TABLE 1 (PAGE 12), STATUS OF DSM CONSERVATION PROGRAMS, FROM PAGE 44 OF TAB C FROM SCG'S 4/20/90 APPLICATION

**SOUTHERN CALIFORNIA EDISON COMPANY**  
**STATUS OF CONSERVATION PROGRAMS**

PAGE 11 OF 18

Line No.	Program	Status
1.	<b>Residential</b>	
2.	Category 1 - Resource Programs	Expanded
3.	Appliance Efficiency Incentives (REHIP)	Unchanged
4.	Conservation Loan WS	Unchanged
5.	Conservation Loan App	
6.	Category 2 - New Construction	Expanded
7.	Welcome Home	
8.	Category 3 - Direct Assistance & Energy	
9.	Management Services	Unchanged
10.	Action Line	Expanded
11.	Direct Assistance	Unchanged
12.	Energy Surveys	
13.	Category 4 - Load Management	Unchanged
14.	Res A/C Cycling	
15.	<b>Non-Residential</b>	
16.	Category 1 - Resource Programs	Expanded
17.	Agricultural Incentives	New
18.	Commercial Lighting	New
19.	Non-Res A/C Maintenance	Expanded
20.	Lg. Commercial Energy Management Incentives	Expanded
21.	Lg. Industrial Energy Management Incentives	Expanded
22.	Med/Sm Commercial Energy Management Incentives	Expanded
23.	Med/Sm Industrial Energy Management Incentives	Expanded
24.	Category 2 - New Construction	Expanded
25.	Design for Excellence	
26.	Category 3 - Direct Assistance & Energy Management	
27.	Services	Expanded
28.	Agricultural Services	Unchanged
29.	Hardware Administration	Expanded
30.	Lg. Commercial Energy Management Services	Expanded
31.	Lg. Industrial Energy Management Services	Expanded
32.	Med/Sm Commercial Energy Management Services	Expanded
33.	Med/Sm Industrial Energy Management Services	Unchanged
34.	Pump Test Services	
35.	Category 4 - Load Management	Unchanged
36.	AP-I Interruptible	Unchanged
37.	C/I A/C Cycling	Unchanged
38.	C/I Off-Peak Cooling	Unchanged
39.	Energy Co-ops	Unchanged
40.	Interruptibles	Unchanged

APPENDIX B  
Page 13

Table 1

STATUS OF DSM CONSERVATION PROGRAMS  
SOUTHERN CALIFORNIA GAS COMPANY

<u>PROGRAM</u>	<u>STATUS</u>
<b>RESIDENTIAL</b>	
Category 1 - Resource Programs	
Residential Appliance Incentives Program	Described
Residential Weatherization Program	New
Category 2 - New Construction	
High Efficiency New Home Program	Described
New & Innovative Multi-family Program	New
Category 3 - Direct Assistance & Energy Management Services	
Home Energy Audit Service Program	Described
Information	Unchanged
Direct Assistance	Unchanged
Master Meter	Unchanged
<b>NONRESIDENTIAL</b>	
Category 1 - Resource Programs	
High Efficiency Commercial Equipment Replacement Program	Expanded
High Efficiency Industrial Equipment Replacement Program	Expanded
Industrial Heat Recovery Program	New
Category 2 - New Construction	
High Efficiency New Commercial Building Program	Expanded
Category 3 - Direct Assistance & Energy Management Services	
Commercial Energy Management Services	Unchanged
Industrial Energy Management Services	Unchanged
Information	Unchanged

N = New for Collaborative  
 E = Expanded for Collaborative  
 D = Description of GRC program enhanced  
 U = Unchanged GRC program



TABLE 4-3 PROGRAM DESIGN	RESIDENTIAL	NON-RESIDENTIAL	COMMERCIAL	INDUSTRIAL	UTILITY	TRANSPORTATION	AVIATION	SECTOR

**SDG&E (ELECT. AND GAS)**

ALL PROGRAMS PROPOSED IN SDG&E'S APPLICATION ARE INCREMENTAL TO THOSE CURRENTLY AUTHORIZED AND UNDERWAY. THEY ADDRESS DIFFERENT MARKETS AND ACTIVITIES FROM THOSE IN ONGOING PROGRAMS.

**RESIDENTIAL**

- 1. APPLIANCE EFFICIENCY: PROVIDE FINANCIAL INCENTIVES TO INSTALL ENERGY EFFICIENT EQUIPMENT (REFRIGERATORS AND COMPACT FLUORESCENT LIGHTS).
- 2. NEW CONSTRUCTION: ASSIST ARCHITECTS AND ENGINEERS IN EXCEEDING TITLE 24 BUILDING STANDARDS.
- 3. DIRECT ASSISTANCE: PROVIDE LOW INCOME CUSTOMERS ASSISTANCE BY INSTALLING ENERGY EFFICIENT PRODUCTS AND TECHNOLOGIES.
- 4. CUSTOMER ENERGY AWARENESS: EDUCATE CUSTOMERS ON ENERGY EFFICIENCY THROUGH ADVERTISING, DEMONSTRATIONS, AND EXHIBITS.
- 5. CONCEPT TESTS: TEST COST EFFECTIVENESS AND CUSTOMER ACCEPTANCE OF NEW PRODUCTS/TECHNOLOGIES (AIR CONDITIONERS AND LOW-FLOW SHOWER HEADS).

**NON-RESIDENTIAL**

- 1. ENERGY MANAGEMENT INCENTIVES: PROVIDE FINANCIAL INCENTIVES FOR INSTALLATION OF ENERGY EFFICIENT EQUIPMENT (LIGHTING MEASURES).
- 2. NEW CONSTRUCTION: CONDUCT DESIGN REVIEWS FOR NEW CONSTRUCTION TO EVALUATE AND IMPROVE ENERGY EFFICIENCY.
- 3. ENERGY EDUCATION: CONDUCT SEMINARS TO EDUCATE CUSTOMERS ABOUT ENERGY EFFICIENT EQUIPMENT.

A.90-04-034 et al. AJJ/CIM/FS

**TBL5-1  
SUBJECT AREA #5: VERIFICATION OF PROGRAM EFFECTIVENESS AND EXPENDITURES**

TABLE 5-1

**THE PROPOSED AND VERIFICATION OF PROGRAM COST EFFECTIVENESS, EXPENDITURES, ACCOMPLISHMENTS, AND SHAREHOLDER EARNINGS**

PG&E  
....

**PROCESS**

**FORUM**

**EXPENDITURES:**

PG&E FINANCIAL RECORDS

1991 RESULTS (PROGRAM ACCOMPLISHMENTS, EXPENDITURES, AND SHAREHOLDER INCENTIVES/PENALTIES) WILL BE REPORTED IN ANNUAL SUMMARY REPORT ON DEMAND SIDE MANAGEMENT PROGRAMS (DUE MARCH 31, 1992).

**PROGRAM ACCOMPLISHMENTS:**

PG&E PROGRAM RECORDS

CPUC STAFF WILL REVIEW ANNUAL SUMMARY REPORT BY JULY 1, 1992 FOR 1991 PROGRAMS TO VERIFY RESULTS AND ESTIMATED SHAREHOLDER INCENTIVES.

**COST EFFECTIVENESS:**

CPUC STANDARD COST-EFFECTIVENESS METHODOLOGY WILL BE USED TO CALCULATE PROGRAM COST-EFFECTIVENESS BASED ON ACTUAL AND COMMITTED PROGRAM ACCOMPLISHMENTS AND EXPENDITURES.

RATE RECOVERY WILL BE REQUESTED IN ECAC AND ACAP PROCEEDINGS FILED IN 1992. RATE RECOVERY WILL BEGIN 1993.

**SHAREHOLDER INCENTIVES:**

PG&E WILL DEVELOP ESTIMATES OF INCENTIVES USING THE AGREED UPON METHODOLOGY WITH ACTUAL AND COMMITTED PROGRAM ACCOMPLISHMENTS. THE CPUC STAFF WILL VERIFY THESE ESTIMATES.

**PROGRAM COSTS:**

**NOTES:** THE PROPOSED PROGRAM ACTIVITIES AND SHAREHOLDER INCENTIVE MECHANISM WILL COVER THE FOLLOWING TIME PERIODS:  
PG&E: THROUGH 1992; REVIEW EXPECTED IN 1992, FOR FY 1993 GRC  
SCE: THROUGH 1991; REVIEW EXPECTED IN 1991, FOR FY 1992 GRC  
SCG: THROUGH 1992; REVIEW EXPECTED IN 1992, FOR FY 1993 GRC  
SDGE: THROUGH 1991; REVIEW EXPECTED IN 1991, FOR FY 1992 GRC

APPENDIX B  
Page 15

TBL5-2  
SUBJECT AREA 05: VERIFICATION OF PROGRAM EFFECTIVENESS AND EXPENDITURES  
TABLE 5-2

VERIFICATION OF PROGRAM COST EFFECTIVENESS, EXPENDITURES, ACCOMPLISHMENTS, AND SHAREHOLDER EARNINGS

SOUTHERN CALIF EDISON

PROCESS

FORUM

EXPENDITURES: EDISON FINANCIAL RECORDS

1990 AND 1991 RESULTS WILL BE REPORTED IN THE ANNUAL SUMMARY REPORT OF DEMAND-SIDE MANAGEMENT PROGRAMS (DUE MARCH 31, 1992).

PROGRAM ACCOMPLISHMENTS: EDISON PROGRAM RECORDS

CPUC STAFF WILL REVIEW ANNUAL SUMMARY REPORT BY JULY 1, 1992 FOR 1991 PROGRAMS TO VERIFY RESULTS AND ESTIMATED INCENTIVES.

COST-EFFECTIVENESS: SAVINGS IMPACTS ARE BASED ON PRE-AGREED SAVINGS BY MEASURE.  
AVOIDED COSTS ARE DETERMINED USING CPUC STANDARD COST-EFFECTIVENESS METHODOLOGY WITH EDISON ESTIMATED MARGINAL ENERGY AND CAPACITY COSTS.

COST-EFFECTIVENESS RESULTS ARE PRESENTED INITIALLY IN THE GRC AND UPDATED IN THE ANNUAL MARCH 31 REPORT TO THE CPUC.

SHAREHOLDER INCENTIVES: SHAREHOLDER INCENTIVES AND PENALTIES WILL BE CALCULATED AS SET FORTH IN THE PRELIMINARY STATEMENT SECTION "DEMAND-SIDE MANAGEMENT ADJUSTMENT CLAUSE" OF EDISON'S TARIFFS.

THE APPLICATION OF EDISON'S DSM PERFORMANCE MECHANISM AND THE RESULTANT PERFORMANCE AMOUNT WILL BE SET FORTH IN EDISON'S ANNUAL ENERGY COST ADJUSTMENT CLAUSE APPLICATION.

NOTES: THE PROPOSED PROGRAM ACTIVITIES AND SHAREHOLDER INCENTIVE MECHANISM WILL COVER THE FOLLOWING TIME PERIODS:  
PG&E: THROUGH 1992; REVIEW EXPECTED IN 1992, FOR FY 1993 GRC  
SCE: THROUGH 1991; REVIEW EXPECTED IN 1991, FOR FY 1992 GRC  
SCG: THROUGH 1992; REVIEW EXPECTED IN 1992, FOR FY 1993 GRC  
SD&E: THROUGH 1991; REVIEW EXPECTED IN 1991, FOR FY 1992 GRC

A.90-04-034 et al. ATT/CIM/ES

APPENDIX B  
Page 16

TABLE 5-3  
 SUBJECT AREA #5: VERIFICATION OF PROGRAM EFFECTIVENESS AND EXPENDITURES

VERIFICATION OF PROGRAM COST EFFECTIVENESS, EXPENDITURES, ACCOMPLISHMENTS, AND SHAREHOLDER EARNINGS

SOUTHERN CALIF GAS

PROCESS		FORUM / PROCEEDING
EXPENDITURES:	SO CAL GAS FINANCIAL RECORDS	YEAR-END RESULTS WILL BE PRESENTED IN THE ANNUAL MARCH 31 DSM REPORT TO THE CPUC.
PROGRAM ACCOMPLISHMENTS:	SO CAL GAS PROGRAM RECORDS	CPUC STAFF WILL REVIEW ANNUAL MARCH 31 DSM REPORT TO VERIFY PRIOR YEAR'S RESULTS.
COST-EFFECTIVENESS:	SAVINGS IMPACTS ARE BASED ON PRE-AGREED SAVINGS BY MEASURE. AVOIDED RESOURCE VALUES ARE PRE-DETERMINED USING CPUC COST-EFFECTIVENESS FORMULAS AND SO CAL GAS SUPPLIED AVOIDED ENERGY RATES.	COST-EFFECTIVENESS RESULTS WERE PRESENTED IN THE 4/20/90 DSM APPLICATION AND WILL BE UPDATED IN THE ANNUAL MARCH 31 DSM REPORT TO THE CPUC.
SHAREHOLDER INCENTIVES:	SO CAL GAS WILL APPLY ITS INCENTIVE FORMULAS TO EACH PROGRAM AT THE CONCLUSION OF EACH YEAR TO DETERMINE IF INCENTIVES OR PENALTIES ARE INCURRED.	CPUC STAFF WILL REVIEW THESE CALCULATIONS IN THE ANNUAL MARCH 31 DSM REPORT TO VERIFY ESTIMATED SHAREHOLDER INCENTIVES/PENALTIES. RATE RECOVERY FOR A SHAREHOLDER INCENTIVE OR PENALTY WILL BE REQUESTED IN THE SUBSEQUENT ACAP APPLICATION.

APPENDIX B  
 Page 17

NOTES: THE PROPOSED PROGRAM ACTIVITIES AND SHAREHOLDER INCENTIVE MECHANISM WILL COVER THE FOLLOWING TIME PERIODS:  
 PG&E: THROUGH 1992; REVIEW EXPECTED IN 1992, FOR FY 1993 GRC  
 SCE: THROUGH 1991; REVIEW EXPECTED IN 1991, FOR FY 1992 GRC  
 SGG: THROUGH 1992; REVIEW EXPECTED IN 1992, FOR FY 1993 GRC  
 SOG&E: THROUGH 1991; REVIEW EXPECTED IN 1991, FOR FY 1992 GRC

TABLE 5-4  
SUBJECT AREA #5: VERIFICATION OF PROGRAM EFFECTIVENESS AND EXPENDITURES

TABLE 5-4

VERIFICATION OF PROGRAM COST EFFECTIVENESS, EXPENDITURES, ACCOMPLISHMENTS, AND SHAREHOLDER EARNINGS

SOG&E

PROCESS

FORUM

EXPENDITURES:

SOG&E FINANCIAL RECORDS

YEAR-END RESULTS WILL BE REPORTED IN THE DSM ANNUAL SUMMARY FILED WITH THE CPUC MARCH 31 OF EACH YEAR.

PROGRAM ACCOMPLISHMENTS:

SOG&E PROGRAM RECORDS

YEAR-END RESULTS WILL BE REPORTED IN THE DSM ANNUAL SUMMARY EACH YEAR. CACD, IN CONSULTATION WITH DRA, WILL REVIEW THE REPORT TO VERIFY RESULTS.

COST-EFFECTIVENESS:

SAVINGS VALUES PER MEASURE, AVOIDED COSTS, AND OTHER ASSUMPTIONS ARE PRE-SPECIFIED IN SOG&E'S APPLICATION.

PROGRAM COST-EFFECTIVENESS IS CONTAINED IN SOG&E'S APPLICATION AND IS BASED ON THE PRE-SPECIFIED ASSUMPTIONS. COST-EFFECTIVENESS WILL BE REPORTED IN THE DSM ANNUAL SUMMARY EACH YEAR, BASED ON ACTUAL PROGRAM COSTS.

SHAREHOLDER INCENTIVES:

SHAREHOLDER REWARDS OR PENALTIES WILL BE CALCULATED EACH YEAR BASED ON THE PRE-SPECIFIED ASSUMPTIONS AND ACTUAL PROGRAM RESULTS, USING THE INCENTIVE FORMULAS IN SOG&E'S APPLICATION.

REWARDS OR PENALTIES WILL BE INCLUDED IN THE DSM ANNUAL SUMMARY AND REVIEWED BY CACD, IN CONSULTATION WITH DRA. COMPLIANCE IS TO BE DETERMINED BY CACD BY JULY 1 OF EACH YEAR FOR PRIOR YEAR'S PROGRAMS. RATE RECOVERY WILL BE REQUESTED IN ATRITION FILINGS, AND REWARDS OR PENALTIES WILL BE AMORTIZED IN RATES OVER THREE YEARS.

NOTES: THE PROPOSED PROGRAM ACTIVITIES AND SHAREHOLDER INCENTIVE MECHANISM WILL COVER THE FOLLOWING TIME PERIODS:  
PG&E: THROUGH 1992; REVIEW EXPECTED IN 1992, FOR FY 1993 GRC  
SCE: THROUGH 1991; REVIEW EXPECTED IN 1991, FOR FY 1992 GRC  
SCG: THROUGH 1992; REVIEW EXPECTED IN 1992, FOR FY 1993 GRC  
SOG&E: THROUGH 1991; REVIEW EXPECTED IN 1991, FOR FY 1992 GRC

A-90-04-034 et al. ALJ/CIM/ES

APPENDIX B  
Page 18

TABLE 6

TIMING AND PROCEEDINGS FOR RATE CHANGES DUE TO 1990 PROGRAM EXPENDITURES AND SHAREHOLDER EARNINGS/PENALTIES

	PG&E .....	SOUTHERN CALIF EDISON .....	SOUTHERN CALIF GAS .....	SOG&E .....
EXPECTED START DATE FOR IMPLEMENTING THE INCREMENTAL AUTHORIZED EXPENDITURES	PG&E DOES NOT REQUEST INCREMENTAL DSM EXPENDITURES IN 1990.	FIVE DAYS AFTER THE COMMISSION DECISION ON EDISON'S APPLICATION NO. 90-04-036 IS ISSUED.	ASAP AFTER DECISION ON THE APPLICATION.	AS SOON AS POSSIBLE FOLLOWING ISSUANCE OF A DECISION BY THE CPUC ON SOG&E'S APPLICATION.
EXPECTED START DATE FOR EARNING/PENALTY MECHANISM	ON JUNE 20, 1990, THE CPUC AUTHORIZED AN INTERIM ACCOUNT FOR TRACKING 1990 PROGRAM EXPENDITURES AND ACCOMPLISHMENTS FOR FUTURE SHAREHOLDER INCENTIVES, PENDING CPUC DECISION ON THIS APPLICATION.	FIVE DAYS AFTER THE COMMISSION DECISION ON EDISON'S APPLICATION NO. 90-04-036 IS ISSUED.	ASAP AFTER DECISION ON THE APPLICATION.	DATE OF CPUC DECISION.
EXPECTED DATE (AND PROCEEDING) WHEN RATES WILL BE ADJUSTED TO REFLECT CHANGES IN PROGRAM EXPENDITURES	JAN 1991 (PG&E APPLICATION NO. 90-04-041) FOR CHANGE IN PROGRAM EXPENDITURES.	THE INITIAL RATE CHANGE WILL BE JANUARY 1, 1991 IN CONJUNCTION WITH THE RATE CHANGE IN EDISON'S ECAC APPLICATION FOR A JANUARY 1, 1991 REVISION DATE. SUBSEQUENTLY, RATES WILL BE ADJUSTED FOR CHANGES IN PROGRAM EXPENDITURES IN THE COMPANY'S GRC PROCEEDINGS.	10/1/90 (1990 ACAP)	MAY 1991 (ECAC) OCT/NOV 1991 (ACAP)
EXPECTED DATE (AND PROCEEDING) WHEN RATES WILL BE ADJUSTED TO REFLECT SHAREHOLDER EARNINGS/PENALTY	JAN 1992 (ECAC) AND APRIL 1992 (ACAP) FOR 1990 PROGRAMS' SHAREHOLDER EARNINGS/PENALTY.	RATES WILL BE ADJUSTED TO REFLECT THE APPLICATION OF THE DSM PERFORMANCE MECHANISM IN THE COMPANY'S ANNUAL ECAC APPLICATION.	10/1/91 (1991 ACAP)	JAN 1992 (1992 ATTRITION)

(END OF APPENDIX B)

APPENDIX B  
Page 19

TABLE 3-A  
PROPOSED SHAREHOLDER INCENTIVES AND PENALTIES  
(EXCLUDING COST PLUS PROGRAMS)

	PG&E (ELECT. AND GAS)	SOUTHERN CALIF EDISON (ELECT.)	SOUTHERN CALIF GAS (GAS)	SDG&E (ELECT.)
	SHARED SAVINGS	AMORTIZED	VARIABLE RATE OF RETURN CONCEPT	SHARED SAVINGS (1)
TOTAL 1991 EXPENDITURES SUBJECT TO EARNINGS/PENALTY (Millions of 1990 dollars)	53.5	41.2	15.4	12.3
TOTAL RESOURCE VALUE (Lifecycle, millions of 1990 dollars)	209.3	N/A	45.5	32.6
NET RESOURCE VALUE, TRC (Lifecycle, millions of 1990 dollars)	179.8	N/A	20.7	24.1
NET RESOURCE VALUE, UC (Lifecycle, millions of 1990 dollars)	235.8	N/A	32.1	19.6
EXPECTED EARNINGS (Lifecycle): Millions of 1990 Dollars	35.4	3.6 (2)	2.2	3.3
% of Total Expenditures	66.2	8.7	14.0	26
% of Total Resource Value	12.2	N/A	4.7	10
% of Net Resource Value, TRC	19.7	N/A	10.4	13.5
% of Net Resource Value, UC	15.0	N/A	6.7	17
MAXIMUM EARNINGS (Lifecycle), EXCLUDING FLEXIBILITY TO INCREASE: Millions of 1990 Dollars	35.4	3.6 (2)	2.2	5 (3)
% of Total Expenditures	66.2	8.7	14.0	41
% of Total Resource Value	12.2	N/A	4.7	15
% of Net Resource Value, TRC	19.7	N/A	10.4	21
% of Net Resource Value, UC	15.0	N/A	6.7	26
MAXIMUM EARNINGS (Lifecycle), INCLUDING FLEXIBILITY TO INCREASE: Millions of 1990 Dollars	46.0	N/A	4.0	5 (3)
% of Total Expenditures	66.2	N/A	26.2	32
% of Total Resource Value	12.2	N/A	8.9	15
% of Net Resource Value, TRC	19.7	N/A	19.5	21
% of Net Resource Value, UC	15.0	N/A	26.9	26
MAXIMUM PENALTY FROM 1991 PROGRAMS (Millions of 1990 Dollars)	15.8	4.9	6.9	4.5
Penalty as % of expenditures	29.5	11.9	44.8	36.6

APPENDIX C  
Page 1

A.90-04-034 et al. ALJ/CLM/ES

Exhibit	11
CPUC Proceeding	A.90-04-034 et al.
Scenario/Attachment	5: (a)
Date Ident.	Reed
Administrative Law Judge	Carol Merchant

NOTES: "Total Resource Value" refers to the lifecycle value (load reductions times avoided costs), without subtracting costs, if implemented as expected (i.e. expected expenditure levels and expected participation).  
 "Net Resource Value, TRC" refers to net program savings based on the Total Resource Cost test (total resource value minus total costs, utility and participant); shareholder earnings excluded.  
 "Net Resource Value, UC" refers to net program savings based on the Utility Cost test (total resource value minus utility program costs); shareholder earnings excluded.  
 OTHER NOTES: (1) Includes lighting portion of non-residential new construction program, which is subject to same incentive mechanism as retrofit resource programs. Does not include other new construction programs.  
 (2) Post tax earnings.  
 (3) Maximum reward allowed for 1991 is \$5 million, regardless of expenditure level.

A-90-04-034-et-al-APPENDIX-C

(2) ... (3) ...

**SUBJECT AREA #5: SHAREHOLDER INCENTIVES AND PENALTIES**

**TABLE 3-B  
SUMMARY COMPARISON OF SHAREHOLDER EARNINGS/PENALTIES FOR ALL PROGRAMS  
(BASED ON PROPOSED EXPENDITURES FOR 1991 PROGRAMS)**

	PG&E (ELECT. AND GAS)	SOUTHERN CALIF EDISON (ELECT.)	SOUTHERN CALIF GAS (GAS)	SOGEE (ELECT. AND GAS)
<b>SHARE SAVINGS PROGRAMS:</b>				
Total Expenditures (millions of 1990 dollars)	53.5 (1)	N/A	N/A	16.5 (1)
Expected Earnings (lifecycle) (millions of 1990 dollars)	35.4	N/A	N/A	3.41
Earnings as % of Expenditures	66.2%	N/A	N/A	23.5%
<b>AMORTIZATION PROGRAMS:</b>				
Total Expenditures (millions of 1990 dollars)	N/A	41.2	N/A	N/A
Expected Earnings (lifecycle) (millions of 1990 dollars)	N/A	6.0 (2)	N/A	N/A
Earnings as % of Expenditures	N/A	14.6%	N/A	N/A
<b>VARIABLE RATE OF RETURN CONCEPT PROGRAMS:</b>				
Total Expenditures (millions of 1990 dollars)	N/A	N/A	15.4	N/A
Expected Earnings (lifecycle) (millions of 1990 dollars)	N/A	N/A	2.2	N/A
Earnings as % of Expenditures	N/A	N/A	14.0%	N/A
<b>COST PLUS PROGRAMS:</b>				
Total Expenditures (millions of 1990 dollars)	49.3	21.6	23.6	5.0
Expected Earnings (lifecycle) (millions of 1990 dollars)	2.5	1.1 (2)	1.5	0.1
Earnings as % of Expenditures	5.0%	5.0%	6.4%	2.0%
<b>ALL PROGRAMS:</b>				
Total Expenditures (millions of 1990 dollars)	102.8	62.8	39.0	19.5
Expected Earnings (lifecycle) (millions of 1990 dollars)	37.9	7.1 (2)	3.7	3.51
Earnings as % of Expenditures	36.9%	11.3%	9.4%	18.0%

**NOTES:**  
 (1) INCLUDES RETROFIT AND NEW CONSTRUCTION PROGRAMS.  
 (2) EXPRESSED IN NOMINAL DOLLARS.

APPENDIX-C  
Page 12



TABLE 3-C (CONTINUED)  
SHAREHOLDER INCENTIVES CALCULATIONS

A.90-04-034 et al. AIT/CLM/ES

APPENDIX C  
Page 3

SOUTHERN CALIF GAS (GAS) • REFERS TO APPENDIX A, B, AND C (PAGES 11-7 TO 11-13)

RESOURCE PROGRAMS: INCENTIVE WILL BE 14.0% OF PLANNED PROGRAM COSTS, PROVIDED THAT 100% OF PROGRAM GOALS ARE ACHIEVED AND ACTUAL COSTS EQUAL PLANNED COSTS. IF 100% OF PROGRAM GOALS ARE ACHIEVED AT LESS THAN PLANNED COSTS, SOCALGAS WILL CONTINUE TO EARN 14.0% OF ACTUAL VARIABLE COST FOR EACH ADDITIONAL UNIT INSTALLED.

NEW CONSTRUCTION: UTILITY INCENTIVE EARNINGS WILL BE EQUAL TO 10% OF PROGRAM COSTS.

DIRECT ASSISTANCE AND ENERGY SERVICES: INCENTIVE EARNINGS WILL BE EQUAL TO 5% OF PROGRAM COSTS WITH THE EXCEPTION OF NONDISCRETIONARY DIRECT ASSISTANCE PROGRAM ELEMENTS.

PLANNED UTILITY INCENTIVE & PROGRAM DESIGN COST:

THE PLANNED UTILITY INCENTIVE (PINC) IS 14.0% OF THE TOTAL FIXED & VARIABLE COST (TFVCOST):  $PINC = 0.14 * TFVCOST$   
WHERE: TFVCOST = THE SUM OF PLANNED FIXED AND VARIABLE COSTS NECESSARY TO ACHIEVE THE PLANNED UNIT GOAL. THEREFORE, PROGRAM DESIGN COST (DCOST) IS EQUAL TO 1.14 TIMES TOTAL FIXED & VARIABLE COSTS (TFVCOST):  $DCOST = 1.14 * TFVCOST$

ACTUAL UTILITY INCENTIVE:

THE ACTUAL UTILITY INCENTIVE (AINC) RECEIVED BY SOCALGAS IS A FUNCTION OF THE ACTUAL DSM UNITS ACHIEVED (UNITS) AND ACTUAL COSTS (ACOST). THIS RELATIONSHIP CAN BE EXPRESSED AS FOLLOWS:  $AINC = (UPYMT * UNITS) - ACOST$  WHERE: UPYMT = THE PAYMENT RECEIVED BY SOCALGAS FOR EACH DSM UNIT ACHIEVED, INCLUDING FIXED AND VARIABLE PROGRAM COSTS AND UTILITY INCENTIVE. AND:  $UPYMT = DCOST/GOAL$  GOAL = PROGRAM GOAL IN NUMBER OF DSM UNITS. SUCH THAT:  $AINC < OR = PINC$

INCREMENTAL EARNINGS LIMITATION:

ONCE THE ACTUAL UTILITY INCENTIVE (AINC) IS EQUAL TO THE PLANNED UTILITY INCENTIVE (PINC), ANY INCREMENTAL UTILITY INCENTIVE EARNINGS (IINC) AND THE INCREMENTAL UTILITY PAYMENT (IUPYMT) RECEIVED BY SOCALGAS FOR EACH ADDITIONAL DSM UNIT ACHIEVED ARE BASED ON THE PLANNED PROGRAM VARIABLE COST (PVFCOST):  
WHERE:  $AINC = PINC$  THEN:  $IINC = UNITS * PVFCOST * 0.14$  AND, WHERE: UNITS = INCREMENTAL DSM UNITS ACHIEVED AFTER THE PLANNED UTILITY INCENTIVE HAS BEEN EARNED. THIS FEATURE SIGNIFICANTLY REDUCES THE POTENTIAL FINANCIAL BENEFIT THE UTILITY CAN GAIN BY EXCEEDING PROGRAM GOALS OR BY UNDER-SPENDING.

SDG&E (ELECT. AND GAS)

RESOURCE PROGRAMS AND NONRESIDENTIAL NEW CONSTRUCTION LIGHTING:

INCENTIVE = 15.5% OF NET TRC VALUE + (OR -) COST MINIMIZATION ADJUSTMENT.  
COST MINIMIZATION ADJUSTMENT = (CHANGE IN \$ UTILITY COSTS/UNIT OF ENERGY SAVED) \* 20% \* (ACTUAL UNITS OF ENERGY SAVED).  
WHERE: CHANGE IN \$ UTILITY COSTS IS THE NET CHANGE IN ACTUAL PROGRAM COSTS AND CUSTOMER INCENTIVE PAYMENTS PER UNIT OF ENERGY SAVED MINUS THE PRE-SPECIFIED RATIO OF UTILITY COSTS/UNIT OF ENERGY SAVED.  
NO INCENTIVE WILL BE PROVIDED UNTIL A MINIMUM PERFORMANCE LEVEL IS MET. THE MINIMUMS ARE CALCULATED AS A PERCENTAGE OF NET TRC VALUE FOR EACH PROGRAM. FOR 1991, THE MINIMUM PERCENTAGE FOR RETROFIT RESOURCE PROGRAMS IS 50%; THE 1991 MINIMUM PERCENTAGE FOR NON-RESIDENTIAL NEW CONSTRUCTION LIGHTING IS 25%.

NEW CONSTRUCTION PROGRAMS: INCENTIVE = 9% OF TOTAL RESOURCE VALUE (PRESENT VALUE OF LIFECYCLE BENEFITS).

DIRECT ASSISTANCE PROGRAMS: INCENTIVE = 5% OF EXPENDITURES ON QUALIFYING MEASURES.

NO INCENTIVE WILL BE PROVIDED UNTIL A MINIMUM NUMBER OF UNITS ARE WEATHERIZED. THE MINIMUM FOR 1991 WILL BE DETERMINED AT THE END OF 1990 AND WILL BE BETWEEN 40% AND 70% OF THE 7,000 UNIT TARGET FOR 1991.

(END OF APPENDIX C)

A.90-04-034, et al.  
D.90-08-068

G. MITCHELL WILK, Commissioner, concurring:

We are formally reasserting today, at the timeliest possible moment, our determination to regain California's international leadership in energy efficiency. We take that step because energy efficiency remains our largest, cheapest and cleanest untapped energy resource --and this state and this nation have never needed that resource more.

Today's interim decision is the successful culmination of work begun in July of 1989, just over one year ago, in the Commission En Banc on energy efficiency. Since that day, thanks to the extraordinary efforts of members of the California Collaborative, we are able to reach this decision without an hour of adversarial and expensive litigation. I strongly support the process which brought us today's decision, and I encourage parties before the CPUC to look for ways to adopt this mediation style in resolving differences and establishing programs in the future.

The programs which we are setting in place today are ambitious, aggressive, experimental, and far-sighted. Today we are taking steps away from wasteful energy dependence and toward maximization of our resources. In addition, these programs will enable utilities and consumers to begin to confront the environmental challenges which lie ahead. The near-term dollars committed today are a down payment in an investment which will reinvigorate California's conservation efforts and help us to keep and maintain our clean environment.

Today marks an innovative departure from our traditional philosophy of cost of service regulation, and our reliance on utility profits as a function of energy sales. From this day forward our utilities' profits will be tied in part to their success in promoting energy efficiency. This type of "new" regulation is just good common sense. Part of every company's

A.90-04-034, et al.  
D.90-08-068

success is tied to promoting cost-effective measures which stretch an energy dollar further. Our regulation will now reflect these basic goals.

All five of the Commissioners who preside at the CPUC have supported actively the enhanced role which energy efficiency can and should play in utility planning in the next and future decades. But I wish particularly to commend my colleague Commissioner Eckert, the assigned Commissioner on this case, for her leadership in promoting these programs and assuring that these applications were brought forth and ready to be approved today.

/s/ G. Mitchell Wilk

G. MITCHELL WILK, Commissioner

August 29, 1990  
San Francisco, California