

## PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

COMMISSION ADVISORY  
AND COMPLIANCE DIVISION  
Energy Branch

RESOLUTION G-2992  
June 17, 1992

## R E S O L U T I O N

RESOLUTION G-2992. SOUTHERN CALIFORNIA GAS COMPANY  
REQUESTS COMMISSION AUTHORIZATION TO MAKE CERTAIN  
CHANGES TO ITS RESIDENTIAL DEMAND-SIDE MANAGEMENT  
PROGRAMS EFFECTIVE JANUARY 1, 1991.

BY ADVICE LETTER 2095 AND 2095-A, FILED ON  
JANUARY 23, 1992 AND FEBRUARY 13, 1992.

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SUMMARY

1. In this advice letter and supplement, Southern California Gas Company (SoCal) requests Commission authorization to make certain changes to its residential Demand-Side Management programs to be effective January 1, 1991. The changes requested are:

1) revise the Appliance Efficiency Incentive and High Efficiency New Home programs to reflect new rebate qualification criteria;

2) revise the High Efficiency New Home program to reflect new program goals;

3) grant authority to transfer under-spending from the 1990 residential programs into SoCal's Resource program to offset additional Resource program rebate expenditures in 1991;

4) and grant authority to use the additional Resource program accomplishments to help ensure that the previously established utility incentive cap of \$6.4 million approved by Decision (D.) 90-08-068 is achieved.

2. This Resolution approves parts (1), (2), and (3) of the utility's request, but denies part (4).

BACKGROUND

1. SoCal Gas received Commission authorization for its expanded DSM programs through D.90-08-068, as part of the Collaborative process. SoCal now claims that changes in the marketplace and lessons learned during the 1990 and early 1991 program implementation make it necessary for SoCal to seek modification

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of certain elements in its DSM programs. The primary reasons for the changes include a downturn in construction activity, new appliance efficiency standards and a lack of equipment availability.

2. SoCal Gas seeks revision to furnace efficiencies in the Appliance Efficiency Incentive program and the High Efficiency New Home program in order to conform with federal energy efficiency standards, specifically those mandated by the National Appliance Energy Conservation Act of 1987 (NAECA). NAECA standards for furnaces have been adopted by the California Energy Commission (CEC) as of January 1, 1992. These standards require that furnace efficiencies be expressed in terms of Annual Fuel Utilization Efficiency (AFUE) instead of Seasonal Efficiency (SE).

3. The CEC adopted the NAECA standards for water heaters on January 1, 1990. As of January 1, 1992, water heater efficiencies are stated in terms of Energy Factor (EF) instead of Recovery Efficiency (RE). The proposed change is to reflect the federal standards and to provide a better representation of available equipment. The minimum EF is approximately 0.54. According to the CEC Directory of Certified Appliances, the next significant water heater efficiency step above the minimum EF is approximately 0.60.

4. SoCal Gas states that the goals and savings levels established for central water heaters in the High Efficiency New Home and Appliance Efficiency Incentive programs must be revised. These revisions are necessary to reflect changes in the multi-family new construction market, lack of specific equipment availability, and underestimated equipment costs in the original Collaborative work papers.

5. SoCal also requests to transfer underspent funds from its 1990 Residential Conservation programs into its 1991 Appliance Efficiency Incentive program to offset the additional rebate expenditures incurred. 1990 underspending occurred because of late implementation of the new construction program and the general decline in new housing starts originally forecast in the Collaborative process. Unspent 1990 residential conservation funds total approximately \$4.9 million. SoCal Gas proposes to transfer \$4.1 million of this amount to its 1991 Appliance Efficiency Incentive program.

6. SoCal states that since the 1991 Appliance Efficiency Incentive program was so successful, particularly the water heater element, the program exceeded its pre-authorized spending flexibility. The goal for residential high-efficiency water heaters was 1,700 jobs. This program element was closed in May, 1991 after 16,933 rebates were processed. High efficiency furnace goals were also exceeded.

#### NOTICE

1. Advice Letter No. 2095, and its supplement, No. 2095-A, were noticed by publication in the Commission Calendar and were sent

to members of SoCal's DSM Advisory Committees, the members of the California Collaborative Group, and the parties listed on an attachment to the Advice Letter, in accordance with Section III.G. of General Order 96-A.

### PROTESTS

1. No protests were filed.

### DISCUSSION

1. Currently, the furnace elements of both the Appliance Efficiency Incentive program and the High Efficiency New Home program are expressed in SE levels of 77%, 84%, and 94%. The revised rebate qualification tiers are proposed to be 78-87% AFUE and 88%+ AFUE. These changes do not impact program goals, although energy savings levels are slightly increased, and will provide greater consistency with state and Federal standards.
2. SoCal Gas requests that the primary water heater rebate criteria be expressed as 0.60 EF rather than strictly expressed in terms of recovery efficiency. This change will not impact program goals or expected energy savings levels.
3. There has been a significant downturn in new construction activity, particularly in the residential multi-family housing sector, according to SoCal's Management Information Systems data. The decline in residential new construction dates from the first quarter of 1989 through the third quarter of 1991.
4. SoCal Gas claims that only 34.2% of new multi-family dwellings had gas-fired central water heaters according to a 1984 survey. This percentage has dropped due to the increasing trend to install individual water heaters instead of central water heaters.
5. SoCal's goal for this element of its High Efficiency New Home program, as established in the settlement agreement adopted in D.90-08-068, was to install 500 central water heaters. SoCal now requests a revised goal of 30 central water heaters installed. The goal of 200 central water heater installations for the Appliance Efficiency program remains unchanged.
6. The marketing forecasts used in the Collaborative erred in predicting the central water heater price and the corresponding customer incentive. The original program design for the customer incentive was based on a 96% Thermal Efficiency (TE) water heater, which was obtained from the CEC's appliance database. Estimated average annual savings per unit were 1785 therms compared to the standard efficiency. The first cost for this equipment has proven to be much higher than originally estimated. The cost is \$3000 and the equipment is virtually unobtainable in California due to the lack of a sales and service distribution network. The base case minimum efficiency (75% TE) water heater cost was assumed to be \$840 in the program design. SoCal's adopted rebate of \$294 provided inadequate customer incentive to purchase a water heater which cost \$3000.

7. The proposed revised central water heater goals are based on a TE of not less than 80%. This results in average annual savings of 510 therms for each central water heater installed as compared to a standard efficiency (75% TE) water heater. The cost of the 80% TE water heater is estimated to be \$1500 compared to the cost of the standard heater of \$840. SoCal proposes to modify the goals in both the High Efficiency New Home Program and the Appliance Efficiency program to reflect the 80% TE efficiency standard. The rebate level of \$294 will not change.

8. As a result of adjusting goals for the High Efficiency New Home program, SoCal also proposes to reduce its request for shareholder incentives related to the program. SoCal proposes a one-time adjustment of 20% of the design earnings for the High Efficiency New Home program, as described in Application (A.) 90-04-037 and as modified by D.90-08-068.

9. The Commission Advisory and Compliance Division (CACD) recognizes that flexibility is an important and necessary component of DSM programs, but cautions SoCal that such requests should be made in a more timely fashion. By this Resolution, the Commission is allowing SoCal to decrease its performance targets and the corresponding energy savings in order to become eligible for shareholder incentives in this aspect of the New Construction program. By agreeing to accept a 20% decrease in the shareholder earnings attributable to New Construction, SoCal has acknowledged the problems inherent in this late request.

10. According to D.90-08-068, SoCal has pre-authorized flexibility to exceed its planned Resource program budgets by 100% to pay additional customer rebates. Therefore, the 1991 budget of \$1.7 million for the Appliance Efficiency Incentive program can be increased to \$3.4 million without additional authorization.

11. SoCal Gas estimates that a total of \$7.5 million was spent on rebates in this program, which leaves the program underfunded by \$4.1 million. SoCal therefore requests that \$4.1 million of the 1990 underspent funds be transferred to the Appliance Efficiency Incentive program.

12. According to SoCal, \$0.9 million would be applied to rebates for jobs installed and counted in late 1990, but paid from the 1991 budget. The balance of \$3.2 million would be applied to jobs completed and paid in 1991.

13. The transfer of 1990 dollars will not increase the utility incentive cap of \$6.4 million established in D.90-08-068. The funds are being transferred to a Resource program which is eligible for its shareholder incentive mechanism. SoCal therefore requests that it be allowed to earn a shareholder incentive on the transferred funds. The maximum potential increase in shareholder earnings associated with the 1991 achievements is estimated to be \$450,000.

14. Continuity in DSM programs is essential; therefore, the transfer of unspent 1990 funds to a high-demand program is appropriate. Shareholder incentive mechanisms for DSM programs were designed to encourage utilities to re-focus their efforts in the area of conservation and remove the bias inherent in supply-side investments, which earn an authorized rate of return. Incentives are appropriate to reward the time, effort and resources devoted by the utility to energy efficiency programs, as well as to compensate the utility for the risks inherent in meeting pre-established minimum performance requirements. The reward mechanism and performance targets were negotiated in the Collaborative process using a specific set of assumptions regarding program cost, market penetration, energy savings per measure, etc. Because of these assumptions, the utility was at risk for the success of DSM programs. If a program is clearly successful and the budget is not only increased, but allowed to contribute to additional shareholder earnings, these earnings then accrue without utility risk.

15. Ordering Paragraph No. 2 of D.91-12-010 stated that unless superseded by Commission decisions in Rulemaking 91-08-003, SoCal shall "apply the incentive to accomplishments realized in programs, rather than program elements or the package of DSM programs." D.92-02-075 did not eliminate this requirement. If we were to allow the shifted funds to contribute to shareholder earnings, this would imply that the earnings cap of \$6.4 million was the determining factor, and that the components were less important. This is clearly contrary to D.91-12-010. The movement of funds to augment the expenditures incurred in SoCal's 1991 Appliance Efficiency Incentive program is approved, but the request to earn additional earnings is denied, except to the extent that dollars were shifted from other Resource programs. The shift in funds is described below:

Appliance Incentive (Resource)	\$249,000
Weatherization (Resource)	415,000
Energy Management (cost + 5%)	791,000
Master Meter (cost + 5%)	106,000
Information (expensed)	381,000
New Construction (cost + 10%)	<u>2,158,000</u>
Total	\$4,100,000

Therefore, SoCal may earn additional shareholder funds on \$664,000.

16. It may be necessary for SoCal to file revisions to its 1991 DSM Annual Report, which was filed on April 14, 1992, to reflect modifications to its claimed shareholder incentive earnings.

17. CACD acknowledges the support obtained by SoCal from its Residential DSM Advisory Committee. The analysis of the Collaborative parties is an important input in determining if the utility makes efficient use of its DSM funds, and if the proposed modifications are reasonable.

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FINDINGS

1. SoCal filed Advice Letter No. 2095, and its supplement No. 2095-A, to request permission to revise the Appliance Efficiency Incentive and High Efficiency New Home programs to reflect new rebate qualification criteria; to revise the High Efficiency New Home program to reflect new program goals; to grant authority to transfer unspent 1990 residential DSM funds to offset additional Resource program rebate expenditures in 1991; and to request that those funds be allowed to contribute to shareholder earnings, not to exceed the cap of \$6.4 million established by D.90-08-068.
2. The proposed revisions to furnace and water heater efficiencies reflect the new rebate qualification criteria, which are reasonable and should be approved.
3. The revised goals for the central water heater element of the High Efficiency New Home program are consistent with updated market information and forecasts, and should be approved.
4. SoCal should be allowed to shift the under-spent 1990 funds to 1991 activities, as described above; however SoCal may not accrue additional shareholder earnings on these programs, except to the extent that funds were shifted from other Resource programs.
5. Future advice letter filings requesting program changes and goal revisions should be made on a timely basis.
6. This Advice Letter supports the Commission's goal of promoting demand-side management.
7. SoCal should revise its 1991 DSM Annual Report, which was filed on April 14, 1992, to reflect any modifications required by this Resolution.
8. The Residential DSM Advisory Committee members provide important information and analysis to the utility, and the Commission relies, in part, on their expertise.

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THEREFORE, IT IS ORDERED that:

(1) Southern California Gas Company shall revise its rebate qualification criteria and program goals as discussed in this Resolution.

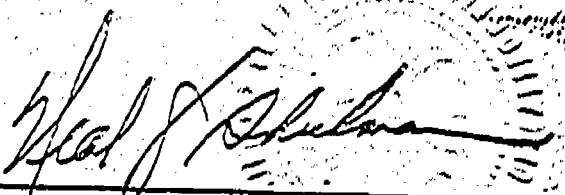
(2) Southern California Gas Company shall shift its unspent 1990 funds to augment the 1991 Appliance Efficiency Incentive rebate expenditures, as described in this Resolution. Except to the extent that those funds were shifted from other Resource programs, Southern California Gas Company may not use the additional funds to contribute to earnings from its shareholder incentive mechanism.

(3) Southern California Gas Company shall revise its 1991 DSM Annual Report filed April 14, 1992, as necessary to reflect any modifications required by this Resolution. The revisions shall be sent to all parties who received the original Report.

(4) Advice Letter 2095-A shall be marked to show that it was approved by Resolution G-2992.

(5) This Resolution is effective today.

I hereby certify that this Resolution was adopted by the Public Utilities Commission at its regular meeting on June 17, 1992. The following Commissioners approved it:

  
NEAL J. SHULMAN  
Executive Director

DANIEL Wm. FESSLER  
President  
JOHN B. OHANIAN  
PATRICIA M. ECKERT  
NORMAN D. SHUMWAY  
Commissioners