

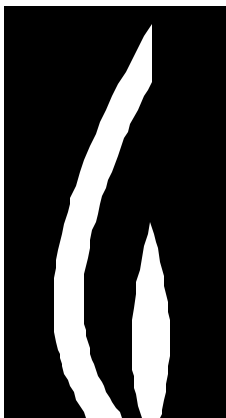
Low Income Energy Efficiency Program

Annual Report

Technical Appendix

Program Year 2001

May 2002



**Southern
California
Gas Company[®]**

A  **Sempra EnergySM** company

Low Income Energy Efficiency Program Program Year 2001 Technical Appendix

May 2002

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General Information

This report presents the Technical Tables for the Southern California Gas Company's 2001 Low Income Energy Efficiency (LIEE) Direct Assistance Program (DAP).

TABLE TA 1
LIEE PROGRAM COST ESTIMATES USED FOR COST –EFFECTIVENESS
SOCALGAS
(\$000)

LIEE	UTILITY COSTS					IMC ¹	
	PROGRAM INCENTIVES (RECORDED)		Admin ²	Shareholder Incentives	Other		Total
	Actual ³	Committed					
Energy Efficiency	\$19,268	\$0	\$3,329	\$0	\$0	\$22,597	\$19,268

Notes:

1. Incremental Measure Cost.
2. Administrative Costs include Training Center, Inspections, Advertising, Program Management, Regulatory Compliance, M&E and Regulatory Oversight.
3. Includes accrual account adjustment of -796,100 from the Revised December RD Report for Recorded Expenses.

TABLE TA 2
LIEE COST ELEMENTS
SOCALGAS
(\$000)

LIEE Programs	2001 Expenditures Recorded by Cost Element			
	Labor	Non-Labor	Contract	TOTAL
Energy Efficiency				
Gas Appliances	\$249	\$0	\$5,312	\$5,561
Electric Appliances	\$0	\$0	\$0	\$0
Weatherization Measures	\$0	\$0	\$11,509	\$11,509
Outreach & Assessment	\$0	\$0	\$1,717	\$1,717
In Home Energy Education	\$0	\$0	\$731	\$731
Education Workshops (see note)	\$0	\$0	\$0	\$0
Energy Efficiency TOTAL	\$249	\$0	\$19,268	\$19,517
Pilots				
Attic Venting	\$0	\$0	\$0	\$0
Pilots TOTAL	\$0	\$0	\$0	\$0
Administration				
Training Center	\$174	\$0	\$34	\$207
Inspections	\$0	\$0	\$434	\$434
Advertising	\$0	\$0	\$125	\$125
M&E Studies	\$0	\$0	\$183	\$183
Regulatory Compliance	\$247	\$0	\$117	\$364
Other Administration	\$479	\$0	\$1,215	\$1,694
Indirect Costs	\$0	\$0	\$44	\$44
Administration TOTAL	\$900	\$0	\$2,152	\$3,052
Oversight Costs				
LIOB Expense	\$0	\$0	\$0	\$0
CPUC Energy Division	\$0	\$0	\$28	\$28
Oversight TOTAL	\$0	\$0	\$28	\$28
Pilots, Administration and Oversight TOTAL	\$900	\$0	\$2,180	\$3,080
TOTAL COSTS	\$1,149	\$0	\$21,448	\$22,597

Notes:

SoCalGas SAP Accounting System reports by Labor and Contract only.

Includes Base, Carry Over, SBX15 Funding.

In-Home Energy Education & EE Workshops shown as combined total.

Includes accrual account adjustment of -796,100 from the Revised December RD Report for Recorded Expenses.

Shareholder Incentives are determined in the AEAP and are not part of the program budget..

**TABLE TA 3
PROGRAM DETAIL BY HOUSING TYPE AND HEATING SOURCE
SOCALGAS**

	Energy Saved and Program Costs			Number of Dwellings		
	2001 (mWh)	2001 (mTherm*)	2001 Expenses	2001 (Planned)	2001 (Actual)	2002 (Planned)
Gas Heat – Own						
Single Family	81	155	\$2,344	6,613	6,730	6,660
Multi Family	94	180	\$2,720	7,676	7,811	7,729
Mobile Home	14	28	\$420	1,185	1,206	1,193
Sub Total Dwellings Served	189	363	\$5,484	15,474	15,747	15,582
Gas Heat – Rent						
Single Family	89	170	\$2,575	7,266	7,394	7,317
Multi Family	103	198	\$2,989	8,432	8,581	8,491
Mobile Home	16	31	\$461	1,301	1,324	1,310
Sub Total Dwellings Served	208	399	\$6,025	16,999	17,299	17,118
Electric Heat – Own						
Single Family	0	0	\$0	0	0	0
Multi Family	0	0	\$0	0	0	0
Mobile Home	0	0	\$0	0	0	0
Sub Total Dwellings Served	0	0	\$0	0	0	0
Electric Heat – Rent						
Single Family	0	0	\$0	0	0	0
Multi Family	0	0	\$0	0	0	0
Mobile Home	0	0	\$0	0	0	0
Sub Total Dwellings Served	0	0	\$0	0	0	0
TOTAL DWELLINGS SERVED	397	762	\$11,509	32,473	33,046	32,700

Represents Weatherization Units Only.

All Savings, Costs and Dwellings based on Estimated % allocated by program element.

No Unit Allocation Planned by Owner/Rental (with sub-set of SF/MF/MH).

Energy Savings Based on Annual KhW and Annual Therms Saved.

Costs Represent Reimbursement of Weatherization Measures Only (excluding O&A and EE).

Therm Savings include Water Heaters (not included in Year-End PY2001 Rapid Deployment Report).

**TABLE TA 4
PROGRAM DETAIL BY MEASURE
SOCALGAS**

	Energy Saved and Program Costs			Number of Dwellings Served
	2001			2001
	(mWh)	(mTherm)	Expenses (\$ 000)	Actual Dwellings Served
Furnaces Gas				
Repair	0.0	0.0	\$100	397
Replacement	0.0	0.0	\$3,907	2,962
Total Furnaces Gas	0.0	0.0	\$4,006	3,359
Water Heater Replacement	0.0	16.0	\$1,305	1,549
Infiltration & Space Conditioning				
Caulking	0.0	2.9	\$50	3,413
Door Weatherstripping	0.0	81.8	\$2,871	32,730
Duct Repair	0.0	0.0	\$0	0
Cover Plate Gaskets	0.0	22.9	\$486	28,597
Evaporative Cooler Covers	0.0	3.1	\$54	1,197
Window Replacements	0.0	0.0	\$0	0
Glass Replacements	0.0	0.0	\$0	0
Wall Repair (exterior)	0.0	0.0	\$0	0
Attic Ventilation	0.0	0.0	\$0	0
Attic Insulation	0.0	43.4	\$794	1,856
HVAC Air Filter Replacement	0.0	0.0	\$0	0
Total Infiltration & Space Conditioning	0.0	154.1	\$4,255	67,793
Water Heating Savings				
Water Heater Blanket	0.0	32.3	\$193	4,296
Low Flow Showerhead	0.0	281.4	\$952	29,934
Water Heater Pipe Wrap	0.0	6.2	\$32	2,371
Faucet Aerators	0.0	110.4	\$459	31,544
Total Water Heating Savings	0.0	430.3	\$1,637	68,145
Minor Home Repairs	0.0	162.0	\$4,436	33,046
Miscellaneous Measures	396.6	0.0	\$0	33,046
Evaporative Coolers	0.0	0.0	\$0	0
Refrigerators	0.0	0.0	\$0	0
Compact Fluorescents (includes porch lights)	0.0	0.0	\$0	0
Energy Education				
Outreach & Assessment	0.0	0.0	\$2,898	33,046
In-Home Education	0.0	0.0	\$0	32,869
Education Workshops	0.0	0.0	\$731	17,096
Total Energy Education	0.0	0.0	\$3,628	83,011
PROGRAM TOTALS	396.6	762.3	\$13,956	

* millions of Therms

Expenses shown are direct reimbursement of measure(s) only. No administration included.

Energy Education Workshops reached 17,096 participants in 884 workshops.

Energy Education Workshops and In-Home Expenses are shown as a combined total.

Therms and Expenses allocated as % of installation.

**TABLE TA 5
INSTALLATION COSTS OF LIEE PROGRAM INSTALLATION CONTRACTORS
SOCALGAS**

	Unit of Measure	CBO/MDVBE			Non-CBO/MDVBE			Total				
		Units Installed	Dwellings	Costs	Units Installed	Dwellings	Costs	Units Installed	Dwellings	Costs	Cost/ Unit	Cost/ Dwelling
Dwellings	Each	35,520	35,520	\$16,292,328	2,434	2,434	\$2,975,964	37,954	37,954	\$19,268,291	\$507.67	\$507.67
Furnaces												
Repair - Gas	Each	113	397	\$16,345	284	284	\$83,401	397	397	\$99,746	\$251.25	\$251.25
Replacement - Gas	Each	812	2,962	\$1,014,138	2,150	2,150	2,892,562	2,962	2,962	\$3,906,700	\$1,318.94	\$1,318.94
Water Heater - Replacement - Gas	Each	1,549	1,549	\$1,305,373	0	0	0	1,549	1,549	\$1,305,373	\$842.72	\$842.72
Repair - Electric	Each	0	0	0	0	0	0	0	0	\$0	\$0.00	\$0.00
Replacement - Electric	Each	0	0	\$0	0	0	0	0	0	\$0	\$0.00	\$0.00
Infiltration & Space Conditioning												
Caulking	Linear Ft.	179,212	3,413	\$50,179	0	0	0	179,212	3,413	\$50,179	\$0.28	\$14.70
Door Weatherstripping	Each	84,466	32,730	\$2,871,016	0	0	0	84,466	32,730	\$2,871,016	\$33.99	\$87.72
Duct Repair	Home	0	0	\$0	0	0	0	0	0	\$0	\$0.00	\$0.00
Cover Plates/Gaskets	Home	28,597	28,597	\$486,149	0	0	0	28,597	28,597	\$486,149	\$17.00	\$17.00
Evaporative Cooler/Air Cond. Covers	Each	1,687	1,197	\$53,737	0	0	0	1,687	1,197	\$53,737	\$31.85	\$44.89
Window Replacements	Each	0	0	\$0	0	0	0	0	0	\$0	\$0.00	\$0.00
Glass Replacements	Sq. Ft.	0	0	\$0	0	0	0	0	0	\$0	\$0.00	\$0.00
Wall Repair (exterior)	Home	0	0	\$0	0	0	0	0	0	\$0	\$0.00	\$0.00
Door Repair	Each	0	0	\$0	0	0	0	0	0	\$0	\$0.00	\$0.00
Door Replacement	Each	0	0	\$0	0	0	0	0	0	\$0	\$0.00	\$0.00
Threshold Installed	Each	0	0	\$0	0	0	0	0	0	\$0	\$0.00	\$0.00
Attic Ventilation	Home	0	0	\$0	0	0	0	0	0	\$0	\$0.00	\$0.00
Attic Insulation	Sq. Ft.	1,856	1,856	\$794,346	0	0	0	1,856	1,856	\$794,346	\$427.99	\$427.99
Attic Access Weatherstripping	Each	0	0	\$0	0	0	0	0	0	\$0	\$0.00	\$0.00
HVAC Air Filter Replacement	Each	0	0	\$0	0	0	0	0	0	\$0	\$0.00	\$0.00
Water Heating Savings												
Water Heater Blanket	Each	5,683	4,296	\$193,283	0	0	0	5,683	4,296	\$193,283	\$34.01	\$44.99
Low Flow Showerhead	Each	66,415	29,934	\$952,390	0	0	0	66,415	29,934	\$952,390	\$14.34	\$31.82
Water Heater Pipe Wrap	Home	2,371	2,371	\$31,843	0	0	0	2,371	2,371	\$31,843	\$13.43	\$13.43
Faucet Aerators	Each	102,742	31,544	\$459,256	0	0	0	102,742	31,544	\$459,256	\$4.47	\$14.56
Minor Home Repairs (other than above)	Home	29,291	29,291	\$4,435,832	0	0	0	29,291	29,291	\$4,435,832	\$151.44	\$151.44
Miscellaneous Measures		33,046	33,046	\$0	0	0	0	33,046	33,046	\$0	\$0.00	\$0.00
Evaporative Coolers	Each	0	0	\$0	0	0	0	0	0	\$0	\$0.00	\$0.00
Refrigerators	Each	0	0	\$0	0	0	0	0	0	\$0	\$0.00	\$0.00
Compact Fluorescents (inc. porchlights)	Each	0	0	\$0	0	0	0	0	0	\$0	\$0.00	\$0.00
Outreach/Education/Administration	Home	49,965	32,869	\$3,628,442	0	0	0	49,965	32,869	\$3,628,442	\$72.62	\$110.39

Expenses shown are direct reimbursement of measure(s) only - no administration included.
Expenses allocated on a % of average installation.

**TABLE TA 6
PERCENTAGE OF DWELLINGS SERVED BY CONTRACTOR CLASSIFICATION
SOCALGAS**

Program	Contractor Classification	Vendor Number	% Dwellings Completed	WMDVBE Certified (Yes or No)
Program A - Weatherization				
Contractor A	CBO Participants	1	0.89%	No
Contractor B	CBO Participants	2	1.13%	No
Contractor C	CBO Participants	3	21.09%	Yes
Contractor D	CBO Participants	4	4.34%	No
Contractor E	CBO Participants	5	0.32%	No
Contractor F	CBO Participants	6	0.81%	No
Contractor G	CBO Participants	7	0.85%	No
Contractor H	CBO Participants	8	3.82%	No
Contractor I	CBO Participants	9	2.81%	No
Contractor J	CBO Participants	10	3.65%	No
Contractor K	CBO Participants	11	23.29%	Yes
Contractor L	CBO Participants	12	1.63%	No
Contractor M	CBO Participants	13	3.20%	No
Contractor N	CBO Participants	14	2.01%	Yes
		Subtotal	69.83%	
Contractor O	Non-CBO Participants	1	30.17%	Yes
		Subtotal	30.17%	
Program B - Appliances				
Contractor Y	CBO Participants	1	6.66%	Yes
Contractor EE	CBO Participants	2	2.97%	No
Contractor FF	CBO Participants	3	2.30%	No
Contractor GG	CBO Participants	4	4.26%	No
Contractor HH	CBO Participants	5	0.08%	No
Contractor II	CBO Participants	6	5.15%	Yes
Contractor KK	CBO Participants	7	0.26%	Yes
Contractor LL	CBO Participants	8	0.00%	No
		Subtotal	21.70%	
Contractor P	Non-CBO Participants	1	2.63%	Yes
Contractor Q	Non-CBO Participants	2	12.12%	Yes
Contractor R	Non-CBO Participants	3	7.07%	No
Contractor S	Non-CBO Participants	4	1.49%	No
Contractor T	Non-CBO Participants	5	1.28%	No
Contractor U	Non-CBO Participants	6	13.94%	No
Contractor V	Non-CBO Participants	7	0.02%	No
Contractor W	Non-CBO Participants	8	4.83%	No
Contractor X	Non-CBO Participants	9	0.26%	No
Contractor Z	Non-CBO Participants	10	7.15%	No
Contractor AA	Non-CBO Participants	11	1.87%	No
Contractor BB	Non-CBO Participants	12	0.59%	No
Contractor CC	Non-CBO Participants	13	3.52%	No
Contractor DD	Non-CBO Participants	14	4.99%	No
Contractor JJ	Non-CBO Participants	15	16.52%	Yes
		Subtotal	78.30%	

**TABLE TA 7
LIFE CYCLE BILL SAVINGS
SOCALGAS**

Measure Description	Number Installed	Per Measure Electric Impact Impact (kWh)	Per Measure Gas Impact (Therms)	Effective Useful Life (EUL)	Total Measure Lifecycle Bill Savings (\$)
Furnaces					
Repair - Gas	397	0	0.0	0	\$0
Replacement - Gas	2,962	0	0.0	0	\$0
Water Heater - Replacement - Gas	1,549	0	16.0	13	\$153,848
Repair - Electric	0	0	0.0	0	\$0
Replacement - Electric	0	0	0.0	0	\$0
Infiltration & Space Conditioning					
Caulking - SF/MH	2,415	0	0.9	5	\$6,218
Caulking - MF	998	0	0.7	5	\$1,999
Door Weatherstripping - SF/MH	16,395	0	2.7	5	\$126,649
Door Weatherstripping - MF	16,335	0	2.3	5	\$107,491
Duct Repair	0	0	0.0	0	\$0
Cover Plates/Gaskets	28,597	0	0.8	15	\$156,922
Evaporative Cooler/Air Cond. Covers	1,197	0	2.6	3	\$5,601
Window Replacements	0	0	0.0	0	\$0
Glass Replacements	0	0	0.0	0	\$0
Wall Repair (exterior)	0	0	0.0	0	\$0
Door Repair	0	0	0.0	0	\$0
Door Replacement	0	0	0.0	0	\$0
Threshold Installed	0	0	0.0	0	\$0
Attic Ventilation	0	0	0.0	0	\$0
Attic Insulation - SF	1,358	0	24.6	25	\$311,141
Attic Insulation - MF	498	0	20.0	25	\$92,764
Attic Access Weatherstripping	0	0	0.0	0	\$0
HVAC Air Filter Replacement	0	0	0	0	\$0
Water Heating Savings					
Water Heater Blanket	2,609	0	7.6	5	\$56,730
Water Heater Blanket	1,687	0	7.4	5	\$35,717
Low Flow Showerhead	29,934	0	9.4	10	\$1,435,810
Water Heater Pipe Wrap	2,371	0	2.6	15	\$42,284
Faucet Aerators	31,544	0	3.5	5	\$315,871
Minor Home Repairs (other than above)-SF	14,129	0	6.1	5	\$439,790
Minor Home Repairs (other than above)-MF	15,162	0	5.0	5	\$386,840
Miscellaneous Measures	33,046	12.0	0.0	20	\$223,160
Evaporative Coolers	0	0	0	0	\$0
Refrigerators	0	0	0	0	\$0
Compact Fluorescents (inc. porchlights)	0	0	0	0	\$0
Totals					\$3,898,835
Total Number of Homes Served by the Program					34,595
Life Cycle Bill Savings Per Home					\$113

Total Savings and Homes Serves includes Water Heater Savings and Units.

TABLE TA 8
ENERGY RATES USED FOR BILL SAVINGS CALCULATIONS
SOCALGAS

Year	\$/kWh	\$/Therm
2001	0.12379	0.62936
2002	0.12751	0.64824
2003	0.13133	0.66769
2004	0.13527	0.68772
2005	0.13933	0.70835
2006	0.14351	0.72960
2007	0.14781	0.75149
2008	0.15225	0.77403
2009	0.15682	0.79725
2010	0.16152	0.82117
2011	0.16637	0.84581
2012	0.17136	0.87118
2013	0.17650	0.89732
2014	0.18179	0.92424
2015	0.18725	0.95196
2016	0.19286	0.98052
2017	0.19865	1.00994
2018	0.20461	1.04024
2019	0.21075	1.07144
2020	0.21707	1.10359
2021	0.22358	1.13669
2022	0.23029	1.17079
2023	0.23720	1.20592
2024	0.24431	1.24210
2025	0.25164	1.27936

TABLE TA 9
BILL SAVINGS
SOCALGAS

Program Year	Program Costs	Program Lifecycle Bill Savings	Program Bill Savings/ Cost Ratio	Per Home Average Lifecycle Bill Savings
1999	\$16,434,199	\$3,094,640	0.19	\$112.55
2000	\$16,411,617	\$2,415,378	0.15	\$106.79
2001	\$22,596,860	\$3,898,834	0.17	\$112.70