The Public Purpose Energy Efficiency Surcharge:

Trends and Patterns in the Costs and Benefits

Of Utility Administered Energy Efficiency Programs

Office of Ratepayer Advocates

CPUC

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PREFACE

The Public Purpose Energy Efficiency Surcharge: Trends and Patterns in the Costs and Benefits of Utility Administered Energy Efficiency Programs is an updated version of a document produced on a periodic basis by the Office of Ratepayer Advocates since the early 1990s. The last update of the document was performed in February 2001. This version incorporates updated data that has been provided in the past in ORA's *Load Impact/Measurement Cost Report* (last updated August 1998). Consequently, ORA has not developed a separate, updated *Load Impact/Measurement Cost Report.*

The analyses contained in this document are based on data from program year 1994 to program year 2001 provided by Pacific Gas and Electric (PG&E), Southern California Edison (SCE), Southern California Gas, and San Diego Gas and Electric (SDG&E). Any corrections or noted omissions should be directed to Pete Skala at (415) 703-1089 (email: ska@cpuc.ca.gov), Don Smith at (415) 703-1562 (email: dsh@cpuc.ca.gov), or Don Schultz at (916) 327-2409 (email: dks@cpuc.ca.gov).

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Introduction: THE ENERGY EFFICIENCY PUBLIC PURPOSE PROGRAM

The Energy Efficiency Public Purpose Program (EEPPP) is one of four public purpose programs funded from the Public Goods Charge (PGC) established by Assembly Bill (AB) 1890 (the electric industry restructuring legislation), and re-authorized in 2001 by AB 1002 and Senate Bill 995 (through December 31, 2011). Each of these four programs is funded through revenues collected from the customers of the state's large investor-owned utilities.[1]

Public administration responsibilities for these public purpose funds is split between two public agencies: the CPUC and the CEC. The CPUC is the public administrator for the Energy Efficiency Public Purpose and Low Income Energy Efficiency (LIEE) Programs.[2] The CEC is the public administrator for the research and development (Public Interest Energy Research, PIER) and Renewables Programs.

Two features of the EEPPP surcharge element distinguish it from the other three. First, EEPPP revenues are considerably larger than any of the other three; the 2002 funding levels for the public purpose surcharges are: $300 million for energy efficiency, $135 million for renewables, $62.5 million for RD&D, and $22 million for low income energy efficiency. Second, the legislation established a cost-effectiveness standard for energy efficiency, but not for the other three.[3]

The purpose of this ORA report is to provide a summary of identifiable trends and patterns associated with EEPPP expenditures. The document is divided into three sections:

- Section 1: History of the EEPPP
- Section 2: Cost-Effectiveness of Past EEPPP Expenditures

(Note that the term EEPPP is used throughout the document to refer to programs utilizing energy efficiency surcharge funding, even if they occurred prior to AB1890.)

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[1] For the purposes of this report, the term "utilities" refers to California's four large investor owned utilities: PG&E, SCE, Southern California Gas, and SDG&E. AB 1890 also established (Section 385 of the PU Code) a “public goods charge” for municipal utilities, although legislative expectations are somewhat different. Municipal utilities are not expected/required to distinguish between, or separately account for, the four elements of the public goods charge, and there is no sunset provision for the municipal public goods charge.
[2] The CPUC also administers an energy rate discount for low income ratepayers through the CARE program.
[3] This standard is provided in Section 381 (b).

Section 1: HISTORY OF THE EEPPP

This section provides a history of the evolution of the EEPPP. The history of the EEPPP can be divided into three distinct periods: the IRP era ("pre-1998") the restructuring era, ("post-1997"), and the current transition period governed by the ongoing program administration rulemaking (R.01-08-028). General EEPPP practices and expenditure patterns within each of these periods are discussed below.

Pre-1998: EEPPP in the IRP Era

For over twenty years, the CPUC has approved the use of ratepayer funds to promote energy efficiency and conservation activities, and authorized the major investor-owned utilities under its jurisdiction to administer a wide variety of energy efficiency and conservation programs. By the early 1990s, they began to be planned and carried out as part of the biennial resource planning update, an effort conducted jointly by the CPUC and the CEC. During this Integrated Resource Planning (IRP) era, energy efficiency programs and other demand-side management activities were identified by the CPUC and CEC as viable, cost-effective alternatives to supply-side energy generation projects.[4]

A wide variety of programs were authorized by the CPUC and administered and implemented by the utilities in virtually all customer market segments. The programs primarily provided assistance to customers in the form of information services (energy management services, also referred to as audits) or financial assistance to offset high first costs of many energy efficiency measures (typically in the form of rebates or direct payments). A small portion of EEPPP funds was spent on "upstream market transformation" activities (activities focused on product developers and/or suppliers rather than end users), including incentives to manufacturers to design and produce high efficiency products (e.g., high efficiency refrigerators) and to promote and sell high efficiency products at other points in the delivery chain (e.g., incentives to retailers to stock and promote compact fluorescent lighting fixtures).

In response to legislative direction, the CPUC also conducted several "demand-side bidding" experiments from 1992 to 1996.[5] Under this program, each of the utilities set aside a designated amount of EEPPP funds for competitive bidding. The utilities solicited

[4] Demand-side management (DSM) includes more than energy efficiency. DSM is a more general set of activities and programs that includes: load management; fuel substitution; load retention, and load building. During the IRP era, most DSM expenditures by California utilities were for energy efficiency, but the CPUC did authorize funding for utility-administered programs that encouraged customers to change-out gas appliances for electric appliances (and vice versa), provided special contracts for large customers to retain load, and even encouraged increased consumption under certain circumstances (load building).

[5] Public Utility Code Section 747 (1990, amended 1993) required that one or more energy utilities administer pilot programs to test: (1) the ability of DSM bidding to deliver benefits to utility customers, separate from any generation resource bidding system; (2) the feasibility of an integrated bidding system that includes both generation resources and DSM programs; (3) a program of competitive bidding auctions for gas utilities. These efforts were assessed in a report prepared for the CPUC in 1995 ("Evaluation of DSM Bidding Pilot Projects in California, July 15, 1995, Wisconsin Energy Conservation Corporation").

bids from qualified energy efficiency service providers (EESPs) to act as sponsors of energy efficiency projects in designated customer markets (also referred to as "implementers").

More than a dozen EESPs were selected, and these companies established pay-for-performance contracts with customers. The utilities compensated the EESPs if and when they were able to demonstrate that: (1) the prescribed reductions in energy usage occurred, and (2) these reductions persisted for many years after the installation of high efficiency products.

Since the late 1980s, the CPUC also allowed the utilities to recover from ratepayers the costs of "shareholder incentive mechanisms." The terms and conditions under which the utilities were allowed to claim and recover these transfers varied greatly from utility to utility, especially in the 1990-94 timeframe. For the 1995-97 years, statewide consistency was established for the shareholder incentive mechanisms, and more rigorous terms and conditions for the measurement and verification of costs and benefits were established. The costs of data collection and program measurement/evaluation also increased for the 1995-97 years relative to the 1990-94 period.

Summary of EEPPP Expenditures in the IRP Era

From the 1990 to 1997, California utilities spent over $300 million per year in electric and gas revenues collected from ratepayers on EEPPP activities. Average annual EEPPP expenditures during the 1990-97 timeframe were approximately:[6]

- $160 million for financial assistance and program-specific administration, approximately 30% of which was allocated to industrial sector projects;[7]
- $93 million for shareholder incentives;[8]
- $40 million for general administration and information services;
- $7 million for measurement and evaluation of utility performance/program effectiveness.

Approximately $62 million (total, not annual) of the financial assistance and program administration expenditures were set-aside to make "standard performance payments" over

[6] These expenditure estimates are derived and computed from data reported to the CPUC by the utilities on an annual basis.

[7] The amount of revenues contributed by industrial customers for EEPPP activities varies substantial between the utilities and over time; approximately twenty percent of PG&E and SCE's total FY2000 revenues came from "large" customers (over 500 kw), most of which are classified as industrial, but some of which are commercial.

[8] The amounts of shareholder incentive transfers varied substantially over time and across the various utilities. In aggregate, approximately $520 million has been collected or authorized for recovery from ratepayers and transferred to utility shareholders for programs administered during the 1989-97 timeframe. Also, the utilities have additional claims for approximately $175 million pending for the 1994-97 timeframe.

a ten-year period, beginning in 1994. This includes $57 million awarded to the EESPs selected in the DSM bidding experiments—mostly for projects on industrial and large commercial premises—and $5 million in commitments made to three cities and counties to install energy efficiency measures at their facilities.

Figure 1-1 depicts the average annual program expenditures across rate classes from 1994 to 1997, in thousands of dollars. Average annual expenditures were approximately $200 million in the nonresidential sector ($130 million in the commercial sector, $60 million in the industrial sector, and $10 million in the agricultural sector) and $40 million in the residential sector. An additional $60 million were spent on new construction, which is not a rate class, per se, but cuts across all rate classes. (Utility-specific expenditure data are provided in Appendix A.)

Post-1997: EEPPP in the Electric Industry Restructuring Era

Beginning in 1998, the AB1890 Energy Efficiency Public Goods Charge codified the mechanism for collecting and dispersing EEPPP funds.[9] In response to this development, the CPUC created the California Board for Energy Efficiency (CBEE), which acted as a "public advisory board" for EEPPP activities.[10] Several significant program design and implementation changes occurred based on CBEE's recommendations.

First, funding for traditional rebates was reduced and replaced by Standard Performance Contract (SPC) programs. The SPC programs, especially in the nonresidential program area, provided a major boost to the EESP industry that had been supported on a more limited fashion via the IRP era DSM bidding experiments. In program year 1998 (PY 1998), approximately 30 EESPs (including companies that were successful in the IRP era DSM bidding experiments, newly formed utility affiliates and new, non-utility market entrants) established energy efficiency projects and multi-year commitments from the utilities in the amount of about $36 million.

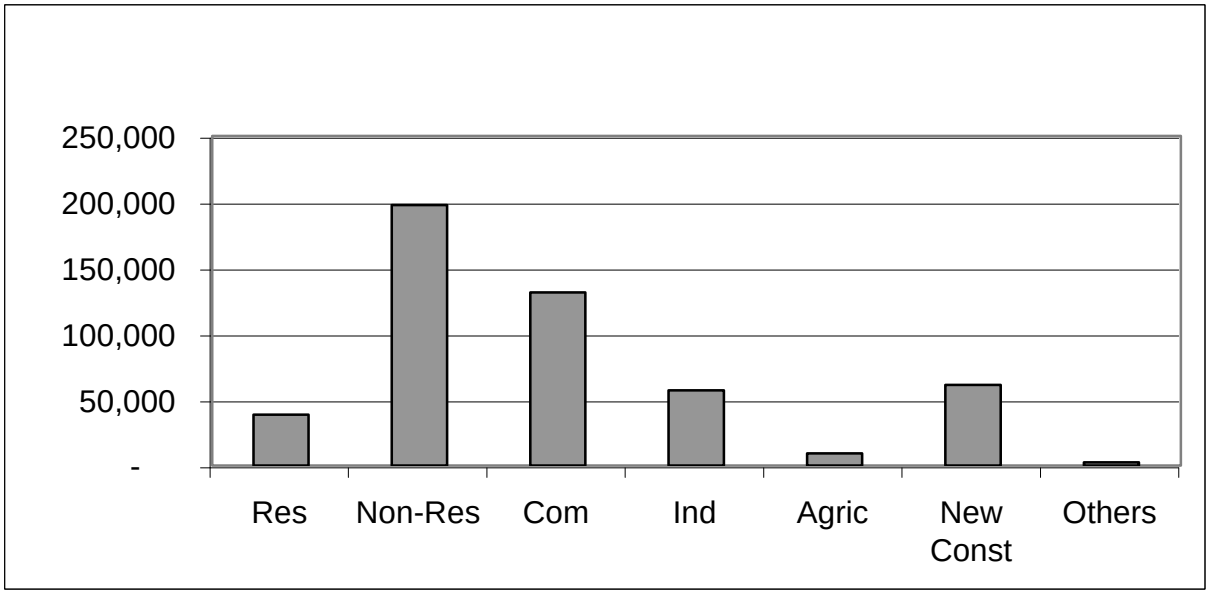
Second, funding for "upstream market transformation" interventions was substantially increased. Annual funding for these efforts was expanded from de minimis levels at their inception during the final years of the IRP era to over $42 million by PY 2001.

Third, utility performance awards were substantially de-linked from cost-effectiveness considerations, and there were reductions in the earnings opportunities for the utilities. However, other energy efficiency earnings opportunities for utilities increased

[9] Prior to AB 1890, the public purpose programs were funded via CPUC proceedings, primarily the utility general rate cases.

[10] The CBEE was originally envisioned as a public interest non-profit that would oversee an Independent Program Administrator (IPA) responsible for designing and implementing EEPPP activities. In the fall of 1998, the CPUC suspended its plans for creating an IPA. The CBEE was never established as a public interest non-profit, although it provided recommendations to the CPUC regarding EEPPP activities until a February 17th, 2000, decision to disband the organization.

FIGURE 1-1: Program Expenditures for Pre 1998 Programs (in Thousands)



	Total Cost (in Thousands)							
	Total	**Res**	**Non-Res**	Com	Ind	Agric	**New Const**	**Others**
Admin Costs								
1994	99,300	23,639	55,235	31,780	18,002	5,453	17,492	2,934
1995	59,600	11,373	38,113	23,972	11,176	2,965	10,114	-
1996	63,526	11,575	42,858	25,815	13,382	3,661	9,093	-
1997	74,321	12,025	50,335	30,384	16,550	3,401	11,858	103
1994-97 Averages	74,187	14,653	46,635	27,988	14,778	3,870	12,139	759
MA&E								
1994	4,951	363	3,213	2,205	691	317	1,375	-
1995	4,489	323	3,453	2,019	1,115	319	713	-
1996	13,233	911	10,379	5,304	4,157	918	1,943	-
1997	5,703	186	5,101	2,927	1,740	435	416	-
1994-97 Averages	7,094	446	5,537	3,114	1,926	497	1,112	-
Program Incentives								
1994	139,791	18,265	81,223	52,578	21,971	6,674	35,069	5,234
1995	109,299	14,323	62,769	46,275	13,574	2,920	32,207	-
1996	115,865	21,665	76,567	59,078	16,642	847	17,633	-
1997	137,095	17,699	85,292	52,470	29,244	3,578	34,076	28
1994-97 Averages	125,513	17,988	76,463	52,600	20,358	3,505	29,746	1,316
Shareholder Earnings								
1994	34,743	2,016	26,901	17,888	8,483	530	4,835	991
1995	128,528	8,059	101,862	72,560	27,533	1,769	18,607	-
1996	95,095	7,255	71,561	57,171	13,992	398	16,279	-
1997	114,034	4,790	75,611	42,946	30,250	2,415	33,256	377
1994-97 Averages	93,100	5,530	68,984	47,641	20,065	1,278	18,244	342
Total								
1994	278,784	44,283	166,572	104,451	49,147	12,974	58,771	9,159
1995	301,917	34,078	206,197	144,826	53,398	7,973	61,641	-
1996	287,719	41,407	201,365	147,368	48,173	5,824	44,948	-
1997	331,153	34,700	216,339	128,727	77,784	9,829	79,606	508
1994-97 Averages	299,893	38,617	197,618	131,343	57,125	9,150	61,241	2,417

substantially in the industry restructuring era years, given the ability of the utilities' parent companies to create energy efficiency affiliates that competed with other EESPs for access to the significantly increased SPC program funds and develop profitable energy efficiency arrangements with customers outside of EEPPP activities.

Finally, CBEE recommendations led to significant increases in expenditures on measurement and evaluation studies that attempted to quantify market effects and indirect benefits attributable to the expanded upstream market transformation programs.

Summary of Expenditure Patterns in the Industry Restructuring Era

Since 1998, the utilities have spent approximately $250 million annually in electric and gas revenues collected from their respective ratepayers. Approximately 90% of these funds were collected from electricity customers and were spent, in turn, on products and services intended to reduce the demand for electricity.

Average annual EEPPP expenditures during the first four years of the industry restructuring era (1998-2001) were approximately:

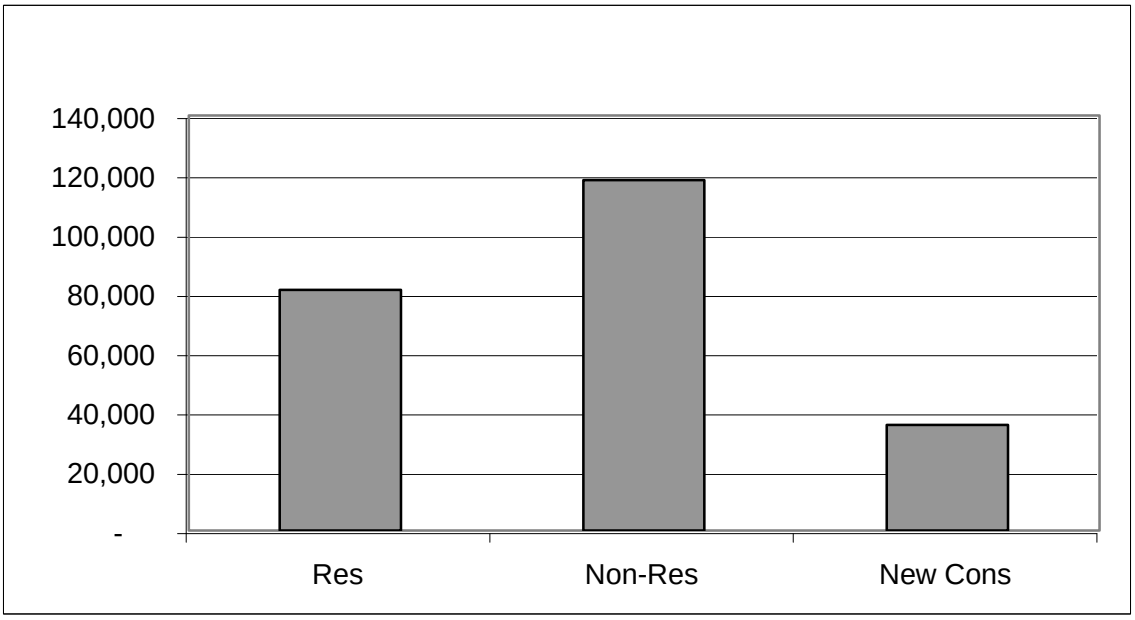
- $159 million for utility-disbursed financial assistance and project-specific administration costs;
- $25 million for "upstream market transformation" intervention efforts;
- $34 million for general utility administration and information services;
- $26 million for shareholder incentives; and
- $12 million for measure and evaluation of utility performance/program effectiveness.

Figure 1-2 depicts the average annual program expenditures from 1998 to 2000 divided into residential, non-residential, and new construction (both residential and non-residential) in the restructuring era, in thousands of dollars. Average annual expenditures were approximately $120 million in the non-residential sectors and $80 million in the residential sector, with an additional $40 million spent on new construction. (Utility-specific expenditure data are provided in Appendix A.)

Post-2001: CPUC Rulemaking 01-08-028

The CPUC is currently re-examining its approach to administering EEPPP funds via Order Instituting Rulemaking (OIR) R.01-08-028. An Interim Opinion Adopting Energy Efficiency Policy Rules that directed the administration of 2002 funds and a portion of 2003 funds has already been approved by the Commissioners (D.01-11-066 on 11/29/01). A final opinion on future program administration (beyond the two-year cycle being governed by D.01-11-066 and the subsequent interim opinions discussed below) is anticipated in the Fall of 2002.

Figure 1-2: Program Expenditures for Post 1997 Programs (in Thousands)



	Total Cost (in Thousands)			
	Total	**Res**	**Non-Res**	**New Cons**
Admin Costs				
1998	69,316	22,081	36,885	10,350
1999	121,539	46,975	49,232	25,331
2000	160,659	65,897	63,854	30,908
1998-00 Averages	117,171	44,984	49,990	22,196
MA&E*				
1998	5,150	-	-	-
1999	10,632	-	-	-
2000	9,800	-	-	-
1998-00 Averages	8,528	-	-	-
Program Incentives				
1998	86,639	27,660	52,934	6,045
1999	85,069	28,028	47,549	9,492
2000	113,693	31,194	71,063	11,435
1998-00 Averages	95,134	28,961	57,182	8,991
Shareholder Earnings				
1998	26,296	5,759	14,828	5,710
1999	23,418	8,903	10,321	4,194
2000	18,172	6,904	8,019	3,248
1998-00 Averages	22,629	7,189	11,056	4,384
Total				
1998	182,251	55,500	104,647	22,105
1999	230,025	83,906	107,102	39,017
2000	292,523	103,996	142,937	45,591
1998-00 Averages	234,933	81,134	118,229	35,571

* MA&E expenditure values provided by IOUs for 1998-00 include Low Income Energy Efficiency program costs and were not broken out into separate categories.

Interim Opinion D.01-11-066 proposed that approximately 80% of 2002 EEPPP funds would be provided for utility-administered energy efficiency programs, and it set aside 20% of 2002 funds, and at least 20% of 2003 funds for third party proposals (this year's third party proposers will be awarded 20% of 2002 and 2003 program funds, but the door is left open for additional third party funding in 2003). The opinion included an Energy Efficiency Policy Manual that provided guidelines for statewide and local program proposals, as well as a scoring system on which program selection will be based.

An Interim Opinion Selecting 2002 Statewide Energy Efficiency Programs was approved by the Commission on March 21, 2002 (D.02-03-056). In addition to the utilities, two third parties (the Department of Consumer Affairs and Univision Television Group) were awarded funding for statewide programs in the opinion (both for marketing programs).

Several hundred proposals were received by third parties for local program funds. An Interim Opinion Selecting 2002-2003 Local Energy Efficiency Programs was approved by the Commission on May 16, 2002. In this decision, the Commission selected approximately forty 3rd parties (private for profit and non-profit and public entities) to administer approximately $90 million in funds for local 2002 and 2003 energy efficiency programs (the Commission withheld about $15 million that was to be awarded to companies based outside the state after it was learned that one out-of-state entity was actually a subsidiary of Enron Corporation; alternative opinions that shift all of this funding to in-state firms or shift only the Enron subsidiaries portion of the funds have been drafted, but the Commission had not voted on the two alternatives at the time this report was produced). The utilities were also awarded $20 million in funds for local 2002 programs, in addition to their 2002 statewide program funding.

Summary of Proposed EEPPP Expenditures under R.01-08-028 Interim Opinions

Between the private parties and the utilities, approximately $118 million in local program funding has been allocated for 2002 and 2003. The funding breaks down as follows: approximately $33 million (28%) will be spent on exclusively residential programs, $59 million (50%), on exclusively nonresidential programs, and the remaining $26 million (22%) on cross-cutting programs that address both residential and non-residential market segments.

Between the private parties and the utilities, approximately $160 million in statewide program funding has been allocated for 2002. Statewide program funding for 2002 breaks down as follows: approximately $56 million (35%) will be spent on exclusively nonresidential programs, $74 million (46%), on exclusively non-residential programs, and the remaining $30 million (19%) on cross-cutting programs that address both residential and non-residential market segments.

Section 2: COST-EFFECTIVENESS OF PAST EEPPP EXPENDITURES

A legislative expectation for cost-effectiveness for the EEPPP element of the public goods charges was established in the early 1990's as part of the IRP era, and re-stated in AB 1890 and AB 1.[11] Consequently, the CPUC has required the utilities to report cost-effectiveness prior to authorizing funds for the upcoming year, and as part of their annual reporting.

There are a variety of methods of measuring cost-effectiveness, each with its own inherent attributes and drawbacks. This section makes use of levelized cost analysis, which provides the relative cost-effectiveness of measures for comparison purposes.[12]

The levelized cost methodology consists of dividing the utility reported total incremental costs of the measures (that is, the customers' out of pocket costs plus the EEPPP contribution towards purchase of the EE measure that were above what a non-energy efficient product would have cost) by the energy reductions associated with the installed EEPPP measures across their effective useful lives (EULs) to obtain an estimate of the cost of EEPPP measures per kWh saved. While not a measure of absolute cost effectiveness, levelized cost methodology permits the comparison of the relative unit costs of the measures, absent any potentially disputable assumptions (such as the long-term avoided energy costs or the different technologies' load shapes).

Figure 2-1 provides the cumulative and annual load impacts associated (verified per commission-adopted protocols) with EEPPP measures implemented from 1994 through 2001, unadjusted for individuals who would have acquired the measures without the program incentives (i.e., "free riders"). Figure 2-2 provides verified, utility-reported costs for implementing these measures.

Figure 2-3 calculates the levelized costs for the various EEPPP measures (i.e., verified costs provided in Figure 2-2 divided by the verified energy savings provided in Figure 2-1), divided by an estimated EUL for each end use (EULs commonly used by the utilities in their annual reports were utilized: a nine-year EUL was assumed for lighting end uses, and a 15-year EUL was assumed for refrigeration, HVAC, and industrial processes and motors). Figure 2-3 indicates that the average cost of all measures installed by the utilities during this timeframe was approximately 1.6 cents per kWh saved.

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[11] Section 701.1 (b) of the PU Code states: "The Legislature further finds and declares that, in addition to any appropriate investments in energy production, electrical and natural gas utilities should seek to exploit all practicable and cost-effective conservation and improvements in the efficiency of energy use and distribution that offer equivalent or better system reliability, and which are not being exploited by any other entity." This section also describes the broader expectations of how the cost-effectiveness of demand-side efforts are to be measured, including an expectation that the CEC develop a valuation of environmental benefits.

[12] Since shareholder incentives were tied to energy savings determined via standardized, ex poste analyses for measures approved in PY 94 through PY 97, the cost-effectiveness analyses performed in this section are limited to measures associated with this time period. The technologies utilized have not changed substantially since this timeframe, and the ex poste analysis of these measures (in the form of persistence studies) continue to be performed; the most recent ex poste analysis results (through 2001) are included in this updated report.

FIGURE 2-1: ANNUAL LOAD IMPACTS (MWH)
BY MAJOR END USE: 1994-97 PROGRAMS

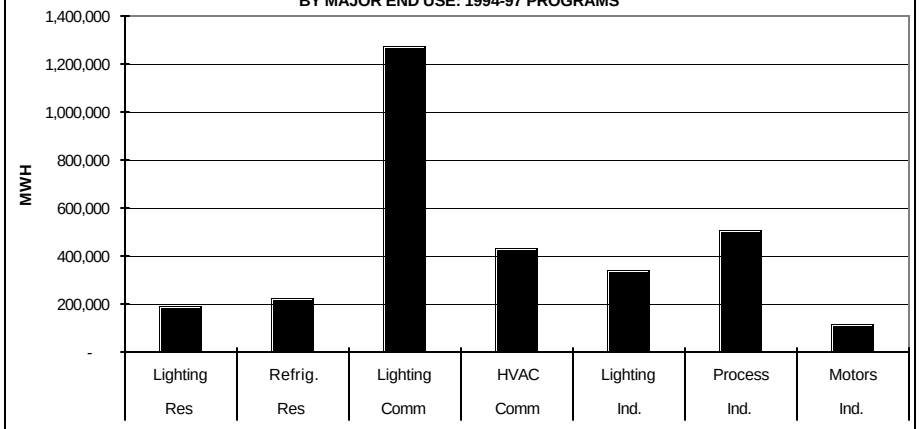


FIGURE 2-2: TOTAL INCREMENTAL MEASURE COSTS (IN THOUSANDS)
BY MAJOR END USE: 1994-97 PROGRAMS

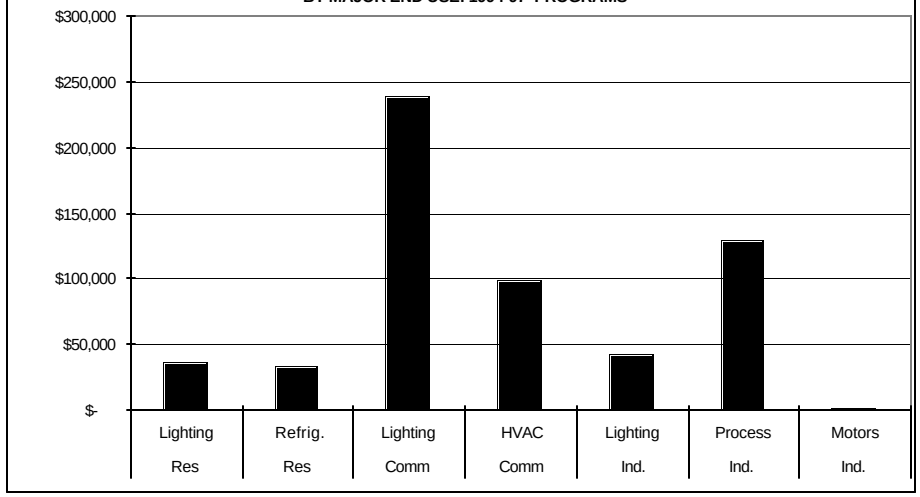
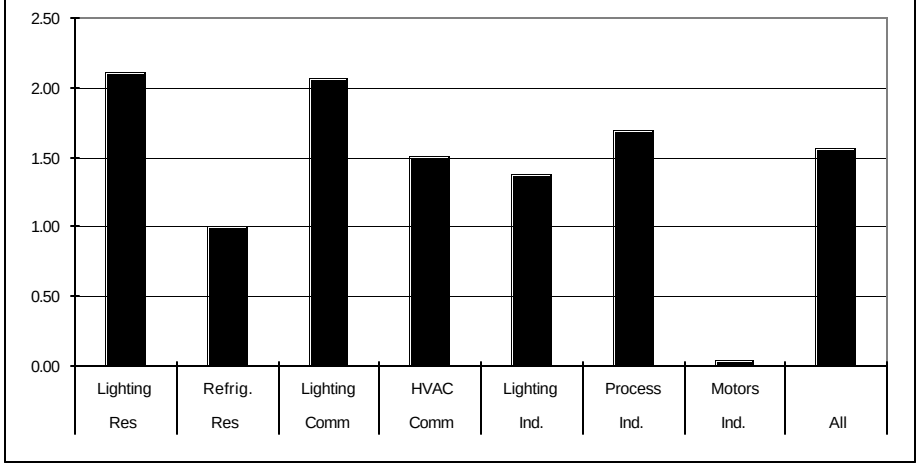


Figure 2-3: ESTIMATED LEVELIZED COSTS (cents/kwh)
BY MAJOR END USE: 1994-97 PROGRAMS



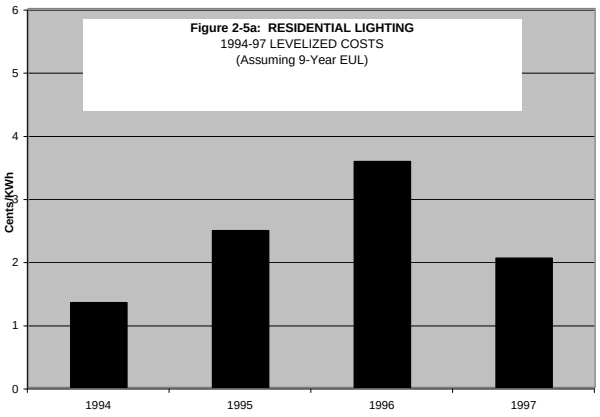
As indicated by Figure 2-3, substantial differences occur between the major end uses, ranging from the most cost effective (industrial motors, well below one cent per kWh) to the least cost effective (residential and commercial lighting, averaging over 2 cents per kWh). In rank order, the relative cost-effectiveness of the seven end uses is:

1. Industrial Motor Retrofits (<$0.01)
2. Residential Refrigerators ($0.01)
3. Industrial Lighting ($0.014)
4. Commercial HVAC ($0.015)
5. Industrial Process Retrofits ($0.017)
6. Commercial Lighting ($0.021)
7. Residential Lighting ($0.0215)

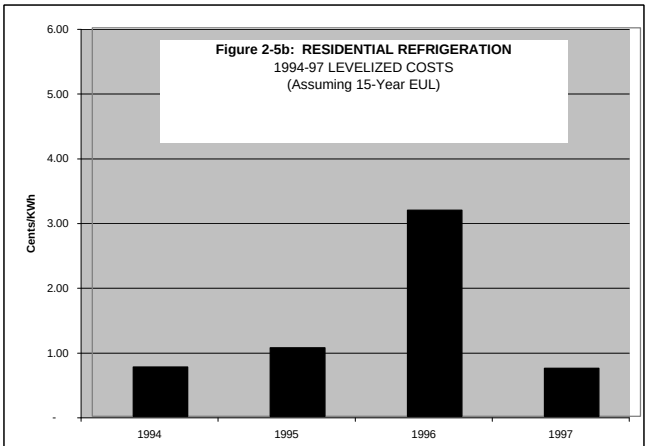
Tables B-1 through B-3 in Appendix B provide the supporting data used to generate Figures 2-1 through 2-3. Additional tables provided in Appendix B provide utility-specific load impact, measure cost, and levelized cost data for the various end uses.

Changes in Levelized Costs of End Uses over Time

Figures 2-4a through 2-4h provide estimated levelized costs over time for each of the seven end uses from 1994 through 1997, and for all of the programs combined. The levelized costs of each end use vary across time, and do not display consistent patterns. Collectively, though, Figure 2-4h indicates that measures became more expensive in the final year of this period, suggesting that the technologies involved may have become less cost-effective as the "lower hanging fruit" opportunities were exhausted.



Note: 1997 includes payments made in subsequent years.



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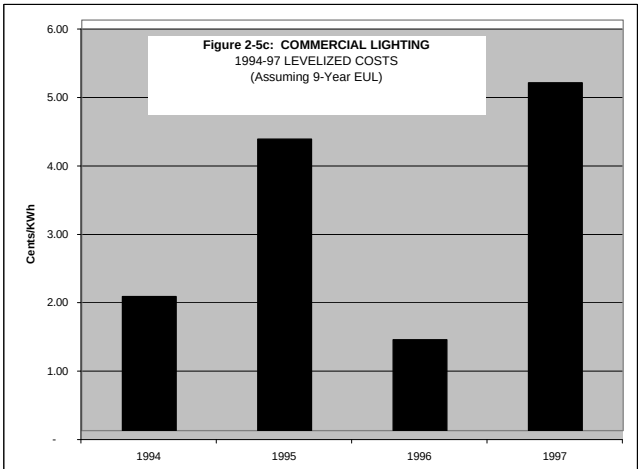

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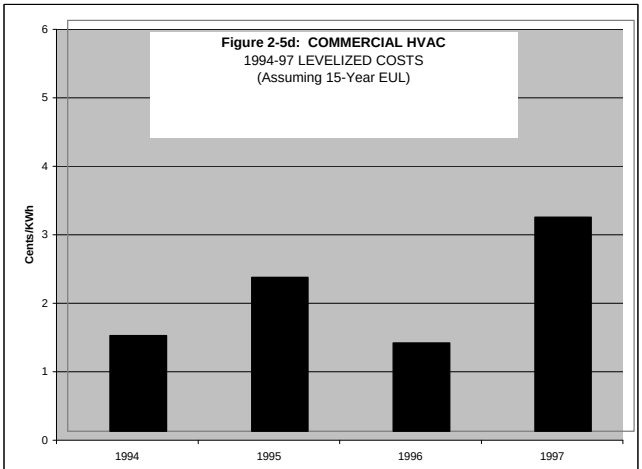

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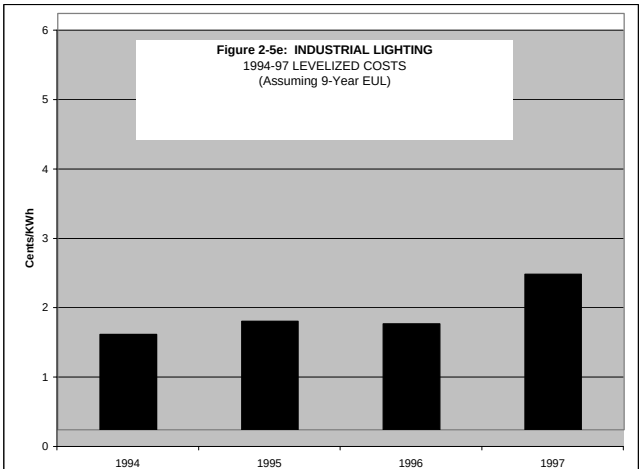
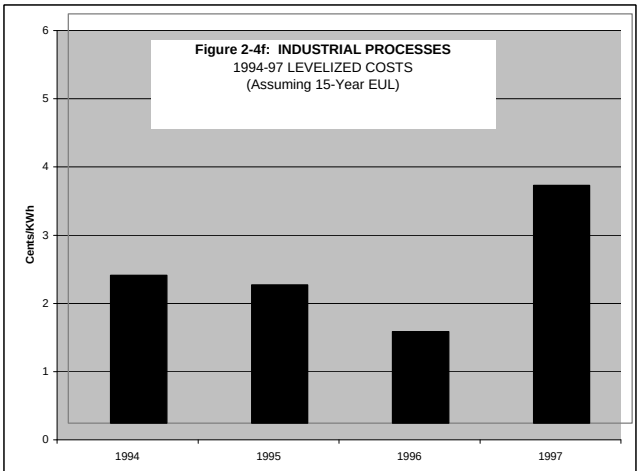


Note: 1997 includes payments made in subsequent years.



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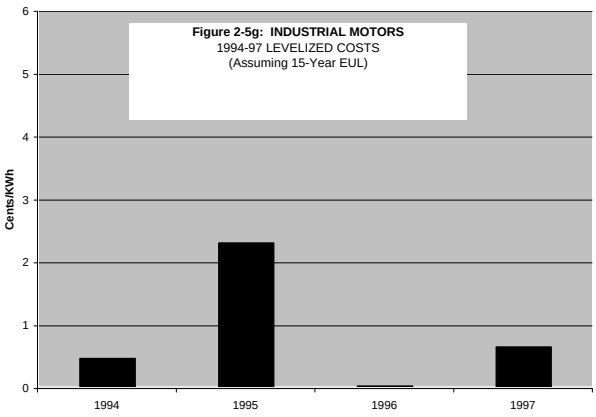
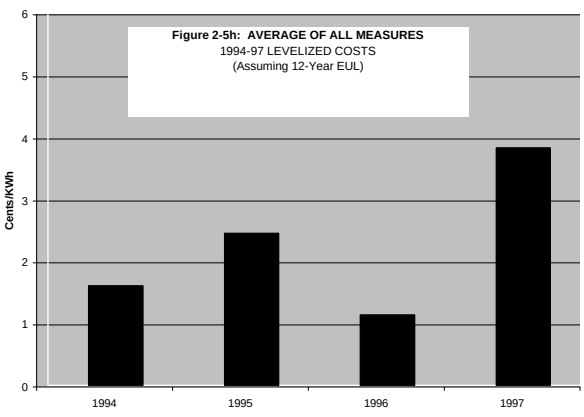


Note: 1997 includes payments made in subsequent years.



Note: 1997 includes payments made in subsequent years.

Section 3: EEPPP TRENDS

Several trends can be identified with respect to past EEPPP activities (in addition to the trends associated with the cost-effectiveness of EE measures discussed in Section 2). Coupled with recent legislative and CPUC- mandated initiatives, these trends provide insights regarding the direction in which the program appears to be headed.

These trends include a dramatic increase in the number of EESPs, shifts in EEPPP expenditures, changes in measurement, assessment and evaluation, and the increasing amount of EE-related information provided by utilities on their respective web sites.

Trends in EEPPP Expenditures

A variety of trends can be identified in EEPPP expenditures over the past ten years in the areas of upstream market transformation, shareholder incentives, and administrative costs. Trends in EEPPP expenditures in each of these categories are discussed below.

Program Incentives

Program incentives include all of the direct program expenditures on EE measures. As indicated in Tables 3-1 and 3-2, program incentives represented an average of 42% of all EEPPP expenditures from 1994 to 1997 and 40% from 1998 to 2000. Note, though, that utility EEPPP accounting procedures categorize subcontractor costs as administrative costs. Consequently, much of the SPC program costs are included in the administrative cost category, including SPC program incentive costs. In addition, marketing and education costs are also included in administrative costs, and while these efforts are not direct program incentives, they are also not true administrative costs associated with running the EEPPP programs.

Another apparent trend in program incentive expenditures is that during each of the two periods, program incentives were highest in the first year of the period and decreased in the ensuing years.

Upstream Market Transformation

Upstream market transformation efforts provide incentives and/or information to manufacturers to encourage the development of more energy efficient products. EEPPP funding for upstream programs have increased dramatically in the recent past, increasing from $10 million in PY 98 to over $42 million in PY 2001.

It is difficult to measure the true impact of upstream market transformation efforts, given that a significant component of program costs represent dissemination of information and the potential for "double counting" energy savings resulting from the purchase of these products through EEPPP programs occurring at the retail level.

Table 3-1: EEPPP PERCENT EXPENDITURES (1994-97)

	Percent of Total Cost							
	Total	**Res**	**Non-Res**	Com	Ind	Agric	**New Const**	**Others**
Admin Costs								
1994	36%	53%	36%	30%	37%	42%	30%	32%
1995	20%	33%	25%	17%	21%	37%	16%	0%
1996	22%	28%	36%	18%	28%	63%	20%	0%
1997	22%	35%	26%	24%	21%	35%	15%	0%
1994-97 Averages	25%	38%	30%	21%	26%	42%	20%	31%
MA&E								
1994	2%	1%	2%	2%	1%	2%	2%	0%
1995	1%	1%	2%	1%	2%	4%	1%	0%
1996	5%	2%	9%	4%	9%	16%	4%	0%
1997	2%	1%	3%	2%	2%	4%	1%	0%
1994-97 Averages	2%	1%	4%	2%	3%	5%	2%	0%
Program Incentives								
1994	50%	41%	49%	50%	45%	51%	60%	57%
1995	36%	42%	31%	32%	25%	37%	52%	0%
1996	40%	52%	30%	40%	35%	15%	39%	0%
1997	41%	51%	38%	41%	38%	36%	43%	0%
1994-97 Averages	42%	47%	38%	40%	36%	38%	49%	54%
Shareholder Earnings								
1994	12%	5%	13%	17%	17%	4%	8%	11%
1995	43%	24%	41%	50%	52%	22%	30%	0%
1996	33%	18%	25%	39%	29%	7%	36%	0%
1997	34%	14%	32%	33%	39%	25%	42%	0%
1994-97 Averages	31%	14%	28%	36%	35%	14%	30%	14%
Total								
1994	100%	100%	100%	100%	100%	100%	100%	100%
1995	100%	100%	100%	100%	100%	100%	100%	0%
1996	100%	100%	100%	100%	100%	100%	100%	0%
1997	100%	100%	100%	100%	100%	100%	100%	100%
1994-97 Averages	100%	100%	100%	100%	100%	100%	100%	100%

Table 3-2: EEPPP PERCENT EXPENDITURES (1998-2000)

	Percent of Total Cost			
	Total	**Res**	**Non-Res**	**New Cons**
Admin Costs				
1998	38%	40%	35%	47%
1999	53%	56%	46%	65%
2000	55%	63%	45%	68%
1998-00 Averages	50%	55%	42%	62%
MA&E*				
1998	3%			
1999	5%			
2000	3%			
1998-00 Averages	4%			
Program Incentives				
1998	48%	50%	51%	27%
1999	37%	33%	44%	24%
2000	39%	30%	50%	25%
1998-00 Averages	40%	36%	48%	25%
Shareholder Earnings				
1998	14%	10%	14%	26%
1999	10%	11%	10%	11%
2000	6%	7%	6%	7%
1998-00 Averages	10%	9%	9%	12%
Total				
1998	100%	100%	100%	100%
1999	100%	100%	100%	100%
2000	100%	100%	100%	100%
1998-00 Averages	100%	100%	100%	100%

* MA&E expenditure values provided by IOUs for 1998-00 include Lo
Income Energy Efficiency program costs and were not broken out
into separate categories.

Shareholder Incentives

As discussed in Section 1, the industry restructuring era included reductions in the earnings opportunities for the utilities. As indicated in Tables 3-1 and 3-2, average annual shareholder incentive expenditures, as a percentage of total program budgets, were reduced from in the thirty percent range in the 1994-1997 time frame to the ten percent range from 1998 to 2000.

Based on the CPUC's current energy efficiency rulemaking, it appears that this trend will continue. The previously discussed Energy Efficiency Policy Manual that was provided in the Interim Opinion on Energy Efficiency Policy Rules explicitly excludes shareholder earnings opportunities, stating that:

> "In the past, the Commission has offered shareholder incentives to large IOUs for successful program delivery, in lieu of a profit margin. The Commission will no longer make a special provision for shareholder earnings."

Subsequently, and over the utilities' objections, the Commission approved the Interim Opinion Selecting 2002 Statewide Energy Efficiency Program, which removed 7% in shareholder incentives proposed by the utilities in their statewide program budgets.

Administrative Costs

In the 1994 to 1997 era, the utilities had a high incentive to reduce administrative costs (they essentially received thirty cents for every dollar of administrative costs they cut). As indicated in Table 3-1, administrative costs averaged 25% during this time period. (Note that utility accounting practices include contracts with third parties as administrative costs; consequently some incentive costs are included in utility-reported administrative costs.)

As shown in Table 3-2, after this incentive was removed average annual administrative costs increased to 48% from 1998 through 2000. During this period, marketing costs were included in administrative costs, so these values are not entirely comparable to the 1994 to 1997 values. However, marketing costs represent a fairly small portion—well below five percent—of total program costs, so a substantial portion of the 23% increase appear to be attributable to increases in administrative costs after the incentive to reduce these costs was removed. (As noted above, utility accounting practices include contracts with third parties as administrative costs; consequently some incentive costs are included in utility-reported administrative costs.)

Trends in EESP Market Share

Since the inception of the demand side bidding experiments in the early 1990s, there has been a dramatic increase in the number of EESPs.

In 1992, twelve EESPs secured EEPPP funds for their activities. This number grew to a peak of over 350 in 2000; in 2001, the total number of EESPs dipped to slightly over 250.

Figure 3-1 depicts the dramatic increase in EESP participation in EEPPP activities from 1998 to 2001. (Table C-1 in Appendix C contains the names of all EESPs that participated in Program Year 2001.) The CPUC's current rulemaking that is addressing the future program administration of EEPPP funds (discussed further in the following subsection) is likely to further foster increases in the number of EESPs involved in EEPPP activities.

Another trend that has become apparent in recent years is the concentration of EESP market share, particularly within the PG&E service area. Thus, while the total number of EESPs has increase dramatically, the industry has been characterized by a large number of EESPs receiving small contracts, while a relatively small number of firms secure the bulk of available funding. As depicted in Figure 3-2, between 1998 and 2001, the top ten EESPs received approximately 50% to 70% of the EESP funding. (Table C-2 in Appendix C contains the names and percent market share of all EESPs that received one percent or greater of the EESP market share from 1998 through 2001.)

This phenomenon is particularly evident in the PG&E service area. As depicted in Figure 3-3, the top 3 EESPs in PG&E's service area obtained an increasing portion of the market share in each year from 1998 and 2001, culminating 2001, a year in which these three firms (Onsite Syscom, Duke Solutions, and Enron Energy Services) received nearly 100% of all of PG&E's EESP funding.

Table C-3 in Appendix C provides the market share and payments to the top ten EESPs (both overall and utility-specific) from 1998 through 2001.

Trends in Measurement, Assessment, and Evaluation

The methodologies employed in the measurement, assessment, and evaluation (MA&E) of EEPPP measures have changed over time to fit the needs of the programs as they have evolved. Generally, MA&E efforts have consisted of installation verification surveys to confirm the amount of measures installed as reported by the program administers (historically, the IOUs) and retention studies to assess how long and how well energy efficiency measures persist over time. Trends in EEPPP MA&E efforts over time, and the reasons for the changes in MA&E focus, are discussed below.

In the 1994-97 period, MA&E studies were conducted under the guidance and mandates of the California DSM Measurement and Assessment Committee (CADMAC). Since shareholder incentives were tied to actual energy savings achieved, the studies emphasized retention and persistence studies.

From 1998 to 2001, MA&E studies were conducted under the guidance of the California Measurement and Assessment Committee (CALMAC). During this period, shareholder incentives were tied to the number of EE measures performed or installed (referred to as milestones) rather than actual energy savings achieved. Consequently, MA&E efforts during this period focused on verification of the number of EE measures performed or installed as reported by the IOUs, and the measurement of actual energy savings achieved was de-emphasized.

Figure 3-1: Number of EESPs Participating in EE Programs

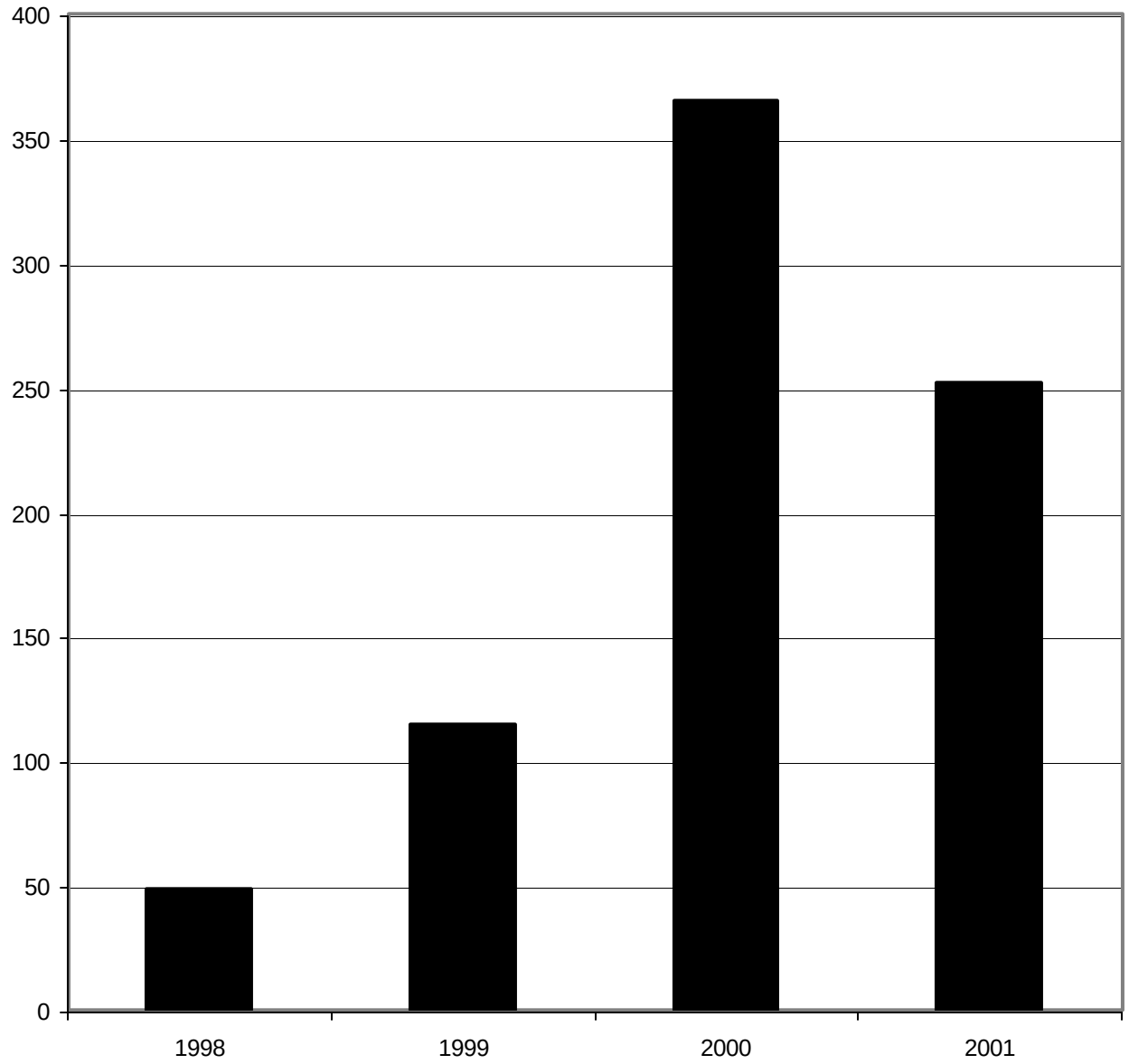
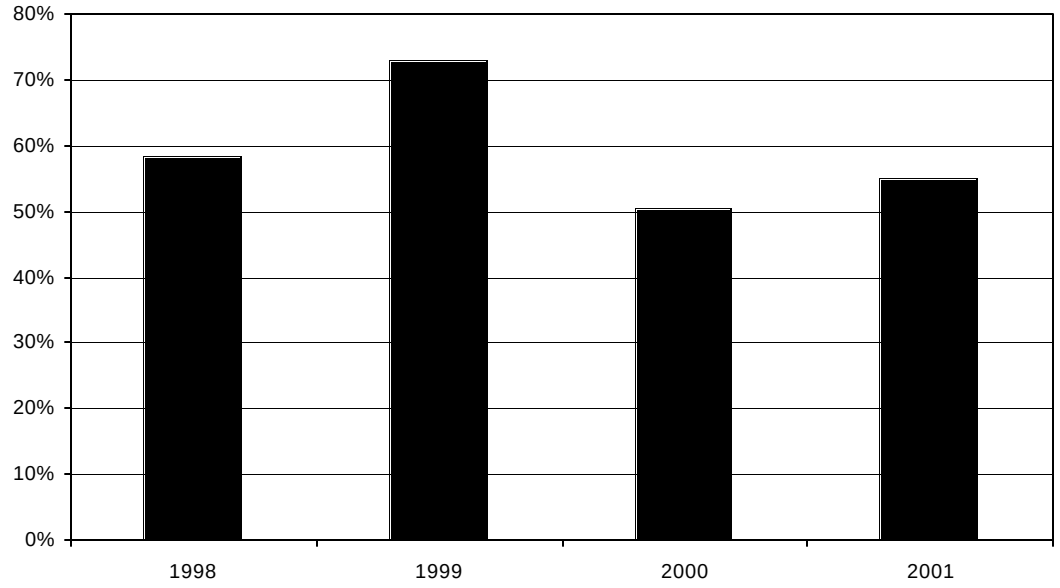


Figure 3-2: Market Share of Top 10 EESPs (Statewide)



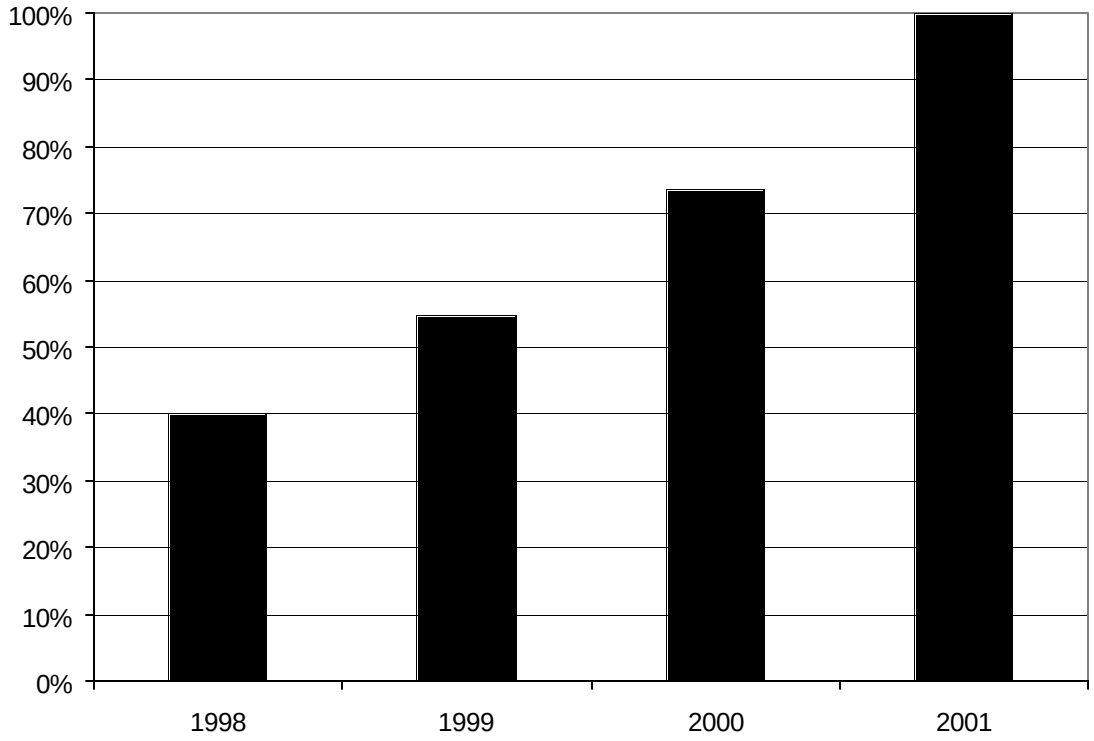
1998	Payment	%
Onsite Sycom Energy Corporatior	$4,923,000	14%
Edison Source	$4,333,000	12%
Noresco	$1,912,000	5%
Viron Energy Services	$1,616,000	5%
American Power Products	$1,610,000	4%
Planergy	$1,604,000	4%
AM Conservation	$1,330,000	4%
Cal-Ucons	$1,200,000	3%
Honeywell, Inc	$1,200,000	3%
Sempra	$1,176,000	3%
Category Total	$35,848,000	
Top 10 Share of Total	$20,904,000	58%

1999	Payment	%
Onsite Sycom Energy Corporation	$4,410,421	31%
Edison Source	$2,395,722	17%
American Synergy	$715,818	5%
Honeywell, Inc	$485,752	3%
Planergy	$440,000	3%
Parke Industries	$416,397	3%
Bonneville Power Administration	$400,000	3%
Siemens	$395,434	3%
Bruce R. Blau & Associates	$335,093	2%
PG&E Energy Services	$329,190	2%
Category Total	$14,155,760	
Top 10 Share of Total	$10,323,827	73%

2000	Payment	%
Onsite Sycom Energy Corporatior	$6,033,999	20%
ETI	$2,708,527	9%
American Synergy	$1,103,807	4%
Chevron Energy Solutions	$1,095,953	4%
Planergy	$1,043,750	4%
Bruce R. Blau & Associates	$770,008	3%
Kuhn & Kuhn	$606,833	2%
Enron Energy Services	$594,280	2%
NA	$560,078	2%
Griffin Group	$503,500	2%
Category Total	$29,694,502	
Top 10 Share of Total	$15,020,736	51%

2001	Payment	%
American Lighting & Distribution	$1,239,881	11%
Onsite Sycom Energy Corporation	$1,188,964	11%
American Lighting Supply	$785,656	7%
American Synergy	$542,788	5%
Ecogate, Inc	$456,936	4%
Tetra Tech Em, Inc.	$440,990	4%
Utility Refunds	$378,437	4%
Bruce R. Blau & Associates	$340,788	3%
Pacific Utility Partners&Investments	$315,011	3%
U.S. Energy Technologies	$254,316	2%
Category Total	$10,792,869	
Top 10 Share of Total	$5,943,766	55%

Figure 3-3: Market Share of Top 3 PG&E EESPS



1998		
EESP NAME	**Payment**	**%**
Onsite Sycom	$2,000,000	17%
Edison Source	$1,596,000	13%
Planergy	$1,200,000	10%

1999		
EESP NAME	**Payment**	**%**
Onsite Sycom	$770,417	36%
PG&E Energy Service	$195,236	9%
Amdahl	$193,784	9%

2000		
EESP NAME	**Payment**	**%**
Onsite Sycom E	$4,779,682	44%
ETI	$2,708,527	25%
Chevron Energy	$489,910	5%

2001		
EESP NAME	**Payment**	**%**
Onsite Sycom Energy	$1,188,964	77%
Enron Energy Services	$203,100	13%
Duke Solutions	$142,844	9%

At this point, it is unclear how the manner in which MA&E studies are conducted will change as a result of the ongoing rulemaking on EEPPP program administration. During the current transition period, the Interim Opinion Selecting 2002-03 Local Energy Efficiency Programs requires the utilities to:[13]

> "...hire a team of EM&V experts to coordinate with all utilities and third parties on a statewide basis to:
>
> - Consolidate EM&V activities between similar programs to minimize costs and overlaps associated with these activities. The group of experts should become familiar with the scope of programs being offered on a statewide and local basis, and develop a comprehensive approach for coordinating all EM&V activities associated with local and statewide programs, to be circulated to the service list in this proceeding.
>
> - Help develop the next generation framework for evaluation of program activities. This development should include a thorough analysis of past EM&V practices and recommendations for future, more effective, practices.

The Interim Opinion also directed the selected third parties to subcontract MA&E services from a list of approved contractors to be provided by the CPUC.

Trends in Internet EE Information Delivery

In conjunction with the burgeoning increase in the use of the internet by more and more consumers to obtain information and conduct their business, utility web sites are providing increasingly greater energy efficiency opportunities to ratepayers.

Utility web sites now provide a variety of energy efficiency information for both residential and business customers, including (among others):

- Equipment Rebate Information and Applications
- Energy Efficiency Supplier Information
- Customized Home Energy Profiles (based on the customers' billing data and on-line surveys)
- Energy Saving Tips
- New Construction Program Information

[13] The Commission substitutes the phrase evaluation, measurement, and verification (or EM&V) for measurement, assessment, and evaluation.

- Standard Performance Contracts
- Training/Seminar Calendars

The increased use of this medium to conduct EEPPP delivery activities should decrease administrative costs associated with traditional "brick and mortar" facilities, provide much more user-friendly information, and increase the speed with which programs can be implemented.

APPENDIX A

PROGRAM EXPENDITURES

Table A-1: Program Expenditures by Utility

TABLE A-1: PROGRAM EXPENDITURES BY UTILITY

Admin Costs						Percent of Total Costs				
	Total	PG&E	SCE	SDG&E	SoCalGas	Total	PG&E	SCE	SDG&E	SoCalGas
				Pre-98 Programs						
1994	99,302	44,434	36,123	8,364	10,381	36%	30%	47%	24%	53%
1995	59,201	29,285	14,372	10,906	4,638	20%	15%	70%	14%	42%
1996	63,292	27,173	17,703	14,013	4,403	22%	22%	29%	15%	61%
1997	74,323	39,611	18,174	11,467	5,071	56%	54%	39%	28%	46%
Annual Average (94-97)	74,030	35,126	21,593	11,188	6,123	25%	21%	46%	20%	51%
				Post-97 Programs						
1998	69,316	32,199	19,908	8,657	8,553	37%	46%	28%	27%	60%
1999	121,539	56,087	36,187	14,942	14,323	51%	55%	42%	48%	65%
2000	160,659	87,880	40,008	17,556	15,215	53%	59%	45%	48%	57%
Annual Average (98-00)	117,171	58,722	32,034	13,718	12,697	48%	54%	39%	42%	60%

MA&E						Percent of Total Costs				
	Total	PG&E	SCE	SDG&E	SoCalGas	Total	PG&E	SCE	SDG&E	SoCalGas
				Pre-98 Programs						
1994	4,949	3,709	-	1,240	-	2%	3%	0%	4%	0%
1995	4,488	3,033	-	1,455	-	2%	2%	0%	2%	0%
1996	13,027	4,814	6,574	1,290	349	5%	4%	11%	1%	5%
1997	5,704	2,142	2,642	436	484	3%	2%	9%	1%	6%
1997	5,510	2,142	2,499	436	433	2%	2%	4%	1%	4%
Annual Average (94-97)	7,042	3,424	2,304	1,105	208	2%	2%	5%	2%	3%
				Post-97 Programs						
1998	5,150	3,650	788	37	675	3%	5%	1%	0%	5%
1999	10,632	5,036	3,030	1,540	1,026	4%	5%	4%	5%	5%
2000	9,800	3,040	4,606	1,449	705	3%	2%	5%	4%	3%
Annual Average (98-00)	8,528	3,909	2,808	1,009	802	4%	4%	3%	3%	4%

Note: SCE and SoCal Gas do not report MA&E costs in their E-tables for PY 94 and 95.
PY 98, 99, and 2000 MA&E costs are not separated into the LIEE and Energy Efficiency programs. All MA&E costs for these years are in the Energy Efficiency Programs

Program Incentives						Percent of Total Costs				
	Total	PG&E	SCE	SDG&E	SoCalGas	Total	PG&E	SCE	SDG&E	SoCalGas
				Pre-98 Programs						
1994	139,792	79,803	36,556	16,688	6,745	50%	54%	47%	49%	35%
1995	106,121	71,111	4,967	27,026	3,017	36%	37%	24%	35%	28%
1996	114,097	54,251	24,829	33,607	1,410	40%	44%	40%	36%	20%
1997	137,096	97,472	23,596	11,742	4,286	181%	186%	92%	29%	119%
Annual Average (94-97)	124,277	75,659	22,487	22,266	3,865	42%	45%	51%	37%	50%
				Post-97 Programs						
1998	86,639	25,475	41,382	16,980	2,801	46%	36%	59%	53%	20%
1999	85,069	30,224	37,158	10,996	6,691	35%	29%	44%	36%	30%
2000	113,693	49,444	39,906	15,146	9,197	38%	33%	45%	42%	34%
Annual Average (98-00)	95,134	35,048	39,482	14,374	6,230	39%	33%	48%	44%	30%

TABLE A-1: PROGRAM EXPENDITURES BY UTILITY

Shareholder Earnings						Percent of Total Costs				
	Total	PG&E	SCE	SDG&E	SoCalGas	Total	PG&E	SCE	SDG&E	SoCalGas
				Pre-98 Programs						
1994	34,743	19,320	4,974	8,078	2,371	12%	13%	6%	24%	12%
1995	128,526	86,734	1,277	37,251	3,264	43%	46%	6%	49%	30%
1996	95,061	37,057	12,704	44,265	1,035	33%	30%	21%	48%	14%
1997	112,911	73,647	17,643	17,254	4,367	161%	158%	60%	42%	129%
Annual Average (94-97)	92,810	54,190	9,150	26,712	2,759	31%	32%	23%	40%	46%
				Post-97 Programs						
1998	26,296	9,371	8,374	6,240	2,312	14%	13%	12%	20%	16%
1999	23,418	11,180	8,872	3,366	-	10%	11%	10%	11%	0%
2000	18,172	9,797	4,483	2,103	1,789	6%	7%	5%	6%	7%
Annual Average (98-00)	22,629	10,116	7,243	3,903	1,367	9%	9%	9%	12%	6%

Total						Percent of Total Costs				
	Total	PG&E	SCE	SDG&E	SoCalGas	Total	PG&E	SCE	SDG&E	SoCalGas
				Pre-98 Programs						
1994	278,785	147,266	77,653	34,370	19,497	100%	100%	100%	100%	100%
1995	298,337	190,163	20,616	76,638	10,919	100%	100%	100%	100%	100%
1996	285,477	123,295	61,810	93,175	7,197	100%	100%	100%	100%	100%
1997	330,034	212,872	62,055	40,899	14,208	100%	100%	100%	100%	100%
Annual Average (94-97)	298,158	168,399	55,534	61,271	12,955	100%	100%	100%	100%	100%
				Post-97 Programs						
1998	187,402	70,695	70,453	31,913	14,341	100%	100%	100%	100%	100%
1999	240,658	102,527	85,248	30,844	22,039	100%	100%	100%	100%	100%
2000	302,323	150,161	89,003	36,254	26,906	100%	100%	100%	100%	100%
Annual Average (98-00)	243,461	107,794	81,568	33,004	21,095	100%	100%	100%	100%	100%

APPENDIX B

Load Impact and Measure Cost Data by Utility

Table B-1: Load Impacts by Utility

Table B-2: Measure Costs by Utility

Table B-3: Levelized Costs by Utility

TABLE B-1: ANNUAL LOAD IMPACTS (MWH) FROM UTILITY ENERGY EFFICIENCY RETROFIT PROGRAMS, BY MAJOR END USE: 1994-97 PROGRAMS

	Res Lighting	Res Refrig.	Comm Lighting	Comm HVAC	Ind. Lighting	Ind. Process	Ind. Motors	TOTAL
Statewide:PY94-97	192,030	222,331	1,277,312	437,261	341,754	473,834	115,616	3,060,137
Statewide:PY94	81,409	94,306	525,761	184,762	146,389	221,231	5,582	1,259,440
Statewide:PY95	35,787	56,508	137,839	61,187	34,957	45,547	224	372,050
Statewide:PY96	35,455	16,297	410,105	81,007	86,324	71,525	109,369	810,082
Statewide:PY97	39,379	55,219	188,438	89,631	70,674	113,989	441	557,771
Statewide:PY97 (paid 98)	n/a	n/a	15,168	20,673	3,410	21,508	n/a	60,759
Statewide:PY97 (paid 99)	n/a	n/a	n/a	n/a	n/a	35	n/a	35
Statewide:PY97 (paid 00)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-
PG&E: PY94	17,348	8,322	289,802	57,895	96,929	32,496	-	502,792
Edison: PY94	50,170	81,247	182,088	108,014	49,460	187,857	2,791	661,626
SDG&E: PY94	13,890	4,738	53,872	18,854	-	877	2,791	95,022
PG&E: PY95	6,488	1,036	11,872	40,310	32,899	35,392	-	127,995
Edison: PY95	n/a	49,853	3,067	130	n/a	n/a	n/a	53,049
SDG&E: PY95	29,300	5,619	122,900	20,748	2,058	10,155	224	191,005
PG&E: PY96	639	4,308	136,460	34,254	21,717	23,011	n/a	220,391
Edison: PY96	78	4,735	49,543	22,977	54,629	39,913	107,154	279,030
SDG&E: PY96	34,738	7,254	224,102	23,776	9,978	8,600	2,214	310,662
PG&E: PY97	n/a	3,105	108,407	36,420	15,802	10,322	n/a	174,056
Edison: PY97	11,274	50,653	43,230	34,751	51,044	79,151	n/a	270,102
SDG&E: PY97	28,105	1,462	36,800	18,460	3,829	24,516	441	113,613
PG&E: PY97 (paid 98)	n/a	n/a	15,168	20,673	3,410	21,508	n/a	60,759
Edison: PY97 (paid 98)	n/a	n/a	n/a	n/a	n/a	n/a	-	-
SDG&E: PY97 (paid 98)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-
PG&E: PY97 (paid 99)	n/a	n/a	n/a	n/a	n/a	35	n/a	35
Edison: PY97 (paid 99)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-
SDG&E: PY97 (paid 99)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-

NOTES: PY 94, 95, and 96 values based on measured load impacts (gross) and actual participation;
PY 97 values based on estimated load impacts (gross) and actual participation

TABLE B-2: COSTS ($000) OF ENERGY EFFICIENCY INVESTMENT (TOTAL INCREMENTAL MEASURE COSTS) UTILITY RETROFIT PROGRAMS, BY MAJOR END USE: 1994-97 PROGRAMS

	Res Lighting	Res Refrig.	Comm Lighting	Comm HVAC	Ind. Lighting	Ind. Process	Ind. Motors	TOTAL
Statewide:PY94-97	$ 36,535	$ 33,648	$ 238,597	$ 98,884	$ 42,472	$ 129,093	$ 771	$ 580,000
Statewide:PY94	9,852	10,778	92,638	38,687	18,115	71,979	378	242,427
Statewide:PY95	8,003	8,948	52,873	20,623	4,922	13,849	77	109,295
Statewide:PY96	11,423	7,775	49,038	15,696	11,859	14,390	274	110,455
Statewide:PY97	7,257	6,147	40,359	18,389	7,238	21,654	42	101,086
Statewide: PY97 (paid 98)	n/a	n/a	3,689	5,456	338	7,049	n/a	16,532
Statewide: PY97 (paid 99)	n/a	n/a	n/a	33	n/a	172	n/a	205
Statewide: PY97 (paid 00)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-
PG&E: PY94	3,350	5,138	52,600	14,266	9,165	13,499	-	98,018
Edison: PY94	3,276	2,590	30,622	17,534	8,950	57,785	142	120,899
SDG&E: PY94	3,226	3,050	9,416	6,887	-	695	236	23,510
PG&E: PY95	710	487	28,310	16,528	4,438	12,782	-	63,255
Edison: PY95	n/a	5,193	798	33	n/a	n/a	n/a	6,024
SDG&E: PY95	7,293	3,268	23,765	4,062	484	1,067	77	40,016
PG&E: PY96	149	1,071	31,220	8,336	4,160	5,604	n/a	50,540
Edison: PY96	16	3,137	5,960	3,855	7,087	4,852	127	25,034
SDG&E: PY96	11,258	3,567	11,858	3,505	612	3,934	147	34,881
PG&E: PY97	n/a	1,059	30,977	5,357	3,645	7,606	n/a	48,644
Edison: PY97	1,241	4,335	6,363	10,335	3,438	10,364	n/a	36,076
SDG&E: PY97	6,016	753	3,019	2,697	155	3,684	42	16,366
PG&E: PY97 (paid 98)	n/a	n/a	3,689	5,456	338	7,049	n/a	16,532
Edison: PY97 (paid 98)	n/a	n/a	n/a	n/a	n/a	n/a	-	-
SDG&E: PY97 (paid 98)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-
PG&E: PY97 (paid 99)	n/a	n/a	n/a	33	n/a	172	n/a	205
Edison: PY97 (paid 99)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-
SDG&E: PY97 (paid 99)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	-

NOTES: PY 94, 95, and 96 values based on measured load impacts (gross) and actual participation;
PY 97 values based on estimated load impacts (gross) and actual participation

TABLE B-3: COST-EFFECTIVENESS (cents/kwh) OF ENERGY EFFICIENCY INVESTMENTS UTILITY RETROFIT PROGRAMS
END USE: 1994-97 PROGRAMS

	Res Lighting	Res Refrig.	Comm Lighting	Comm HVAC	Ind. Lighting	Ind. Process	Ind. Motors
Statewide:PY94-97	2.11	1.01	2.08	1.51	1.38	1.82	0.04
Statewide:PY94	1.34	0.76	1.96	1.40	1.37	2.17	0.45
Statewide:PY95	2.48	1.06	4.26	2.25	1.56	2.03	2.29
Statewide:PY96	3.58	3.18	1.33	1.29	1.53	1.34	0.02
Statewide:PY97	2.05	0.74	2.38	1.37	1.14	1.27	0.64
Statewide:PY97 (paid 98)	n/a	n/a	2.70	1.76	1.10	2.18	n/a
Statewide:PY97 (paid 99)	n/a	n/a	n/a	n/a	n/a	32.88	n/a
Statewide:PY97 (paid 00)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PG&E: PY94	2.15	4.12	2.02	1.64	1.05	2.77	-
Edison: PY94	0.73	0.21	1.87	1.08	2.01	2.05	0.34
SDG&E: PY94	2.58	4.29	1.94	2.44	-	5.28	0.56
PG&E: PY95	1.22	3.13	26.50	2.73	1.50	2.41	-
Edison: PY95	n/a	0.69	2.89	1.69	n/a	n/a	n/a
SDG&E: PY95	2.77	3.88	2.15	1.31	2.61	0.70	2.29
PG&E: PY96	2.59	1.66	2.54	1.62	2.13	1.62	n/a
Edison: PY96	2.27	4.42	1.34	1.12	1.44	0.81	0.01
SDG&E: PY96	3.60	3.28	0.59	0.98	0.68	3.05	0.44
PG&E: PY97	n/a	2.27	3.17	0.98	2.56	4.91	n/a
Edison: PY97	1.22	0.57	1.64	1.98	0.75	0.87	n/a
SDG&E: PY97	2.38	3.43	0.91	0.97	0.45	1.00	0.64
PG&E: PY97 (paid 98)	n/a	n/a	2.70	1.76	1.10	2.18	n/a
Edison: PY97 (paid 98)	n/a	n/a	n/a	n/a	n/a	n/a	-
SDG&E: PY97 (paid 98)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PG&E: PY97 (paid 99)	n/a	n/a	n/a	n/a	n/a	32.88	n/a
Edison: PY97 (paid 99)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
SDG&E: PY97 (paid 99)	n/a	n/a	n/a	n/a	n/a	n/a	n/a

NOTE: $ PER KWH VALUES ARE BASED ON 9-YEAR EUL FOR LIGHTING AND 15-YEAR EUL FOR OTHER MEASURES
VALUES BASED ON LOAD IMPACTS (FIGURE 1) AND MEASURE COSTS (FIGURE 2)

APPENDIX C

EESP Market Share

TABLE C-1: Program Year 2001 EESP Participants

5 Points Sash & Doors
550 Corp.Center Investment Group
A + Home Improvements
A.V. Air
A/C Care
A-1 Construction & Remodeling
AA-A Express Heating And A/C
Accountable Glass Service
Accurate Air Engineering, Inc.
Ach Services
Action Remodeling And Construction
A-Design Energy Control
Advanced Conservation Systems
Aero-Therm Construction Inc.
Air Plus Mechanical
Air Vista
Aire Doctor
Aireze Of The Desert
Airite Heating and Air Cond
Air-Tro Inc.
Aladdin A/C & Heating
Alert Insulation Co Inc
Allied Plumbing, Heating & A/C
All-Pro Remodeling
Allstate Construction Co
AM Construction
American A/C & Heating Inc
American Air Comp., Inc
American Lighting & Distribution, Inc.
American Lighting Supply
American Synergy
Ameritemp Heating & Air Cond.
Amtech Lighting Services
Anacapa Heating & Air
Andrew D Cooper Co Inc
Ank Quality Exteriors Inc
A-Plus Contracting
Aquatic Quality Assurance
Arnel Compressor Company
Arrow Refrigeration
Artistic Designs
Ashcraft Company
Atlas Aire
Automated Controls Services
Avis Plumbing Heating & A/C
BCM Customer Service
Bear Ventures
Bird Refrigeration Co. Inc
Bonneville Power Administration
Booth Door & Window
Bruce R. Blau & Associates
Brundige Glass
Burgeson's Heating & A/C
California Air Care
California Building Systems
California Energy Contractors
California Galss & Window
California Pacific Mechanical
California Replacement
Cal-State Insulation Inc
Calwest Construction
Captain Construction Co
Carrier Corporation
Catalina Ballast & Bulbs, Inc
Central Air Cond. And Heating
Chuck Cutler Plastering & Insl
Clark Adams Co
Clean Image Property Services
Clearly Windows & More
Coast Aire
Comfort Climate Control
Comfort Systems
Commair Preferred Mechanical Services
Confort Zone
Construction Concern Inc
Continental Maritime
Contractors Disc Glass & Rem
Controlled Motion Solutions
Custom Windows & Remodeling
Cypress Heating & A/C
D.B.R. Premium Roofing
D.P. Door Co.
Day Aire
Dependable Graham Heating
Desert Air Conditioning Inc.
Desert Tech
Designer Sash & Door Systems, Inc
Devco Enterprises, Inc
Devore Insulation Inc
Dial One Ballard Plumbing
Dial One Window Replacement
Dockstader'S Central Air
Doors Of Distrinction
DTE Energy Technologies
Duke Solutions
Ecogate, Inc
Econo - West Inc
Ecos Consulting
EDC Technologies
Efficient Air Systems
Eisenbart & Sons
Elegant Openings
Elite Exteriors
En Tech Systems
Encompass Mechanical Services
Energx Controls, Inc
Energy Efficient Technologies Inc
Energy Gard Windows & Doors
Energy Management Consultants
Energy Mirrors Of America
Energy Optimization
Energy Plus
Energy Professional Consultants
Energy Rebates
Energy Saving Strategies
Energy Technology & Services, Inc.
Energygard
Enertech Systems, Inc
Enron Energy Services
Environmental Solar
Equity Thru Energy
Esser Services
Everguard Home Insulation
Family Air Construction
Federated Department Stores
FHA Services
Fisher Heating & A/C
Fullerton Replacement
Future Air & Windows
Fye A/C & Heating
Galkos Construction, Inc
GAR Energy Management Group
George Haney & Son Inc
Glen Towers
G-Mac Electric Inc
Gr Air Conditioning & Heating
H & L Energy Savers
Hassinger Heating & Air
Henderson Windows
Heritage Door Inc
Honeywell, Inc
Hyde's Appliance & Air Conditioning
Ideal Confort
Ideal Home Imporovements
IEC, Inc.
J & M A/C And Heating
JANMAR Lighting
Jeff Roberts, Inc (J.R. Door & Window)
JFK (Joe F Kuser)
KAC Corporation
Kahn Air Conditioning
Koach'S Windows And Doors
La Canada A/C & Heating
Lights Of America Inc.
Lloyd'S Plumbing Heating & Air
LNR Seaview, Inc.
M & M Enterprises
Mac'S Aire Service
Maley'S Window Products Co
Maruka
Mastercraft Door & Window Center
MCB Camp Pendleton
Meade'S Air Comfort
Mediterranean Heating & A/C
Mesa Energy Systems
Metropolitan Home Improvements
Metz Air Control, Inc.
Mission Valley Marriott
Mojave Mechanical
Montgomery Mechanical Inc.
National Refrigeration Services
Nogcoglass Company
North American Lighting, Inc.
Nstar
Oasis Air Cond. & Heating
On The Outside
Only Doors & Windows
Onsite Sycom Energy Corporation
P& M Mechanical
P.E.M., Evans Inc.
Pacific Utility Partners & Investments
Paloma
Patriot Heating & A/C
Precision Lighting, Inc.
Preferred Glass & Windows
Progressive Insullation & Window
Prop-Serv Inc
Q-Air California
Qualitex
Quality Windows
R & S Glass
R Hall & Sons Heating & A/C
Rapid Product Solutins, Inc.
Reliable Energy Concepts, Inc
Reliable Energy Management
Reliant Energy Solutions, Inc
Renaissance
Resource Efficiency Services
Richard Van Loon Co.
Robert Hall & Sons Heating & A/C
Rohr, Inc.
Ron's Glass And Screen
S.I. Rosati
San Gabriel Insulation
Santa Barbara Insulation
Seaport Sash And Door Inc
Shamrock Windows And Doors
Sola-Lite
Solar Turbines Inc.
South Coast Exteriors
Southern California Trane Service
Southland Envelope Company
Specialty Siding
Spicer Mechanical
Steves Plumbing Heating & A/C
Sumitomo Plastics Machinery Llc
Sunset Home Improvements Inc.
Technic Replacement Window
Technocraft Usa, Inc
Temperatures Unlimited
Tetra Tech Em, Inc.
The Confort Zone
The Door & Window Specialist
The Door & Window Store
The Door Shop
The Glass Shop Inc
The Joseph Company
Therma-Cool, Inc
Thermo View Industries
Thomas Energy Management
Three-D Construction
TMC Enterprises
Tran Quan Electric A/C & Heating
Tri-County Heating & A/C
Troncin Door & Window
Twin Oaks Growers International
U.S. Energy Technologies
Utility Refunds
Vallecitos Water District
Van Can Company
Viplex Industries
W.I.T. Construction
Warner Technologies
West Coast Mechanical
West Coast Sah & Door
Western Equipment
Win-Dor, Inc
Windows Etc
Windows Plus
York International, Inc

Table C-2: 2001 ESCO Market Share

	PG&E	SCE	SDG&E	SOCAL GAS	TOTAL*	% of Total ESCO/ EESP Expenditures
Onsite Sycom Energy Corporation	$ 8.74	$ 5.48	$ 1.44	$ 0.90	$16.56	18%
Edison Source	$ 1.60	$ 3.27	$ 1.87	$ -	$ 6.73	7%
Planergy	$ 1.20	$ 1.48	$ 0.40	$ -	$ 3.09	3%
American Synergy	$ -	$ 2.46	$ 0.28	$ -	$ 2.74	3%
ETI	$ 2.71	$ -	$ -	$ -	$ 2.71	3%
Noresco	$ 0.03	$ 2.11	$ -	$ -	$ 2.14	2%
Honeywell, Inc	$ 1.20	$ 0.49	$ 0.04	$ -	$ 1.73	2%
Viron Energy Services	$ 1.14	$ 0.27	$ 0.24	$ -	$ 1.64	2%
American Power Products	$ 0.80	$ -	$ 0.81	$ -	$ 1.61	2%
Bruce R. Blau & Associates	$ 0.63	$ 0.82	$ -	$ -	$ 1.45	2%
Sempra	$ 0.13	$ 0.90	$ 0.31	$ -	$ 1.34	1%
AM Conservation	$ 0.40	$ -	$ -	$ 0.93	$ 1.33	1%
American Lighting & Distribution, Inc.	$ -	$ 1.24	$ -	$ -	$ 1.24	1%
Equity Thru Energy	$ -	$ 0.92	$ 0.29	$ -	$ 1.21	1%
Cal-Ucons	$ 1.20	$ -	$ -	$ -	$ 1.20	1%
American Lighting Supply	$ -	$ -	$ 1.17	$ -	$ 1.17	1%
Metro Energy Corp	$ -	$ 1.14	$ -	$ -	$ 1.14	1%
Chevron Energy Solutions	$ 0.49	$ 0.61	$ -	$ -	$ 1.10	1%
Capital State First General	$ -	$ -	$ -	$ 0.93	$ 0.93	1%
Free Lighting	$ -	$ -	$ -	$ 0.93	$ 0.93	1%
The Trane Company	$ 0.40	$ 0.50	$ 0.02	$ -	$ 0.92	1%
Portland Energy Conservation	$ -	$ 0.90	$ -	$ -	$ 0.90	1%
Winegard Energy	$ -	$ 0.90	$ -	$ -	$ 0.90	1%
229 entities with less than 1% Market Sh	$ 5.79	$ 22.54	$10.09	$ 0.16	$38.58	41%

*Payments (in millions of dollars) made/committed UDC customers or ESCOs (NR) or EESP (Res) to pay for installation of EE measures on UDC customers' premises

Table C-3: Market Share and Payments to Top 10 EESPs (Overall and by Utility), 1998-2001

1998	Payment		1999	Payment		2000	Payment		2001	Payment	
Onsite Sycom Energy Corporatic	4,923,000	13.73%	Onsite Sycom Energy Corporatic	4,410,421	31.16%	Onsite Sycom Energy Corporatior	6,033,999	20.32%	American Lighting & Distribution, Inc.	1,239,881	11.49%
Edison Source	4,333,000	12.09%	Edison Source	2,395,722	16.92%	ETI	2,708,527	9.12%	Onsite Sycom Energy Corporation	1,188,964	11.02%
Noresco	1,912,000	5.33%	American Synergy	715,818	5.06%	American Synergy	1,103,807	3.72%	American Lighting Supply	785,656	7.28%
Viron Energy Services	1,616,000	4.51%	Honeywell, Inc	485,752	3.43%	Chevron Energy Solutions	1,095,953	3.69%	American Synergy	542,788	5.03%
American Power Products	1,610,000	4.49%	Planergy	440,000	3.11%	Planergy	1,043,750	3.51%	Ecogate, Inc	456,936	4.23%
Planergy	1,604,000	4.47%	Parke Industries	416,397	2.94%	Bruce R. Blau & Associates	770,008	2.59%	Tetra Tech Em, Inc.	440,990	4.09%
AM Conservation	1,330,000	3.71%	Bonneville Power Administration	400,000	2.83%	Kuhn & Kuhn	606,833	2.04%	Utility Refunds	378,437	3.51%
Cal-Ucons	1,200,000	3.35%	Siemens	395,434	2.79%	Enron Energy Services	594,280	2.00%	Bruce R. Blau & Associates	340,788	3.16%
Honeywell, Inc	1,200,000	3.35%	Bruce R. Blau & Associates	335,093	2.37%	NA	560,078	1.89%	Pacific Utility Partners & Investments	315,011	2.92%
Sempra	1,176,000	3.28%	PG&E Energy Services	329,190	2.33%	Griffin Group	503,500	1.70%	U.S. Energy Technologies	254,316	2.36%
Category Total	35,848,000		Category Total	14,155,760		Category Total	29,694,502		Category Total	10,792,869	
Top 10 Share of Total	20,904,000	58.31%	**Top 10 Share of Total**	10,323,827	72.93%	**Top 10 Share of Total**	15,020,736	50.58%	**Top 10 Share of Total**	5,943,766	55.07%
PG&E's Top 10 Share of PG&I	**Payment**			**Payment**			**Payment**			**Payment**	
Onsite Sycom Energy Corporatic	2,000,000	16.74%	Onsite Sycom Energy Corporatic	770,417	36.49%	Onsite Sycom Energy Corporatior	4,779,682	44.05%	Onsite Sycom Energy Corporation	1,188,964	77.46%
Edison Source	1,596,000	13.36%	PG&E Energy Services	195,236	9.25%	ETI	2,708,527	24.96%	Enron Energy Services	203,100	13.23%
Planergy	1,200,000	10.04%	Amdahl	193,784	9.18%	Chevron Energy Solutions	489,910	4.52%	Duke Solutions	142,844	9.31%
Cal-Ucons	1,200,000	10.04%	Bruce R. Blau & Associates	151,475	7.18%	Bruce R. Blau & Associates	474,453	4.37%	American Lighting & Distribution, Inc.	-	0.00%
Honeywell, Inc	1,200,000	10.04%	Sempra	127,119	6.02%	Trane	292,442	2.70%	American Synergy	-	0.00%
Viron Energy Services	1,140,000	9.54%	Siemens	84,328	3.99%	Sysco	179,685	1.66%	Equity Thru Energy	-	0.00%
American Power Products	800,000	6.70%	Chevron Usa Production Compa	63,293	3.00%	Air Dale Compressors	162,156	1.49%	American Lighting Supply	-	0.00%
Cal-Air Inc	656,000	5.49%	Mid-State Surge	58,272	2.76%	Sli Lighting Solutions, Inc.	159,055	1.47%	Ecogate, Inc	-	0.00%
Syska & Hennessy	519,000	4.34%	CMS Viron Corporation	56,971	2.70%	Riviere & Associates P.O. Box 57	113,837	1.05%	Tetra Tech Em, Inc.	-	0.00%
AM Conservation	400,000	3.35%	University Of Calif Davis	54,846	2.60%	Vista Hospital Systems	112,312	1.04%	Utility Refunds	-	0.00%
Category Total	11,948,000		Category Total	2,111,122		Category Total	10,850,691		Category Total	1,534,908	
Top 10 Share of Total	10,711,000	89.65%	**Top 10 Share of Total**	1,755,740	83.17%	**Top 10 Share of Total**	9,472,059	87.29%	**Top 10 Share of Total**	1,534,908	100.00%
SCE's Top 10 Share of SCE E	**Payment**			**Payment**			**Payment**			**Payment**	
Noresco	1,912,000	15.36%	Onsite Sycom Energy Corporatic	3,362,862	33.00%	Planergy	1,043,750	7.24%	American Lighting & Distribution, Inc.	1,239,881	20.01%
Edison Source	1,580,000	12.70%	Edison Source	1,685,830	16.55%	Onsite Sycom Energy Corporatior	902,162	6.26%	American Synergy	542,788	8.76%
Onsite Sycom Energy Corporatic	1,213,000	9.75%	American Synergy	715,818	7.03%	American Synergy	823,207	5.71%	Ecogate, Inc	456,936	7.37%
Metro Energy Corp	1,140,000	9.16%	Honeywell, Inc	485,752	4.77%	Chevron Energy Solutions	606,043	4.21%	Utility Refunds	378,437	6.11%
Sempra	900,000	7.23%	Planergy	440,000	4.32%	Enron Energy Services	594,280	4.13%	Bruce R. Blau & Associates	340,788	5.50%
Portland Energy Conservation	900,000	7.23%	Parke Industries	416,397	4.09%	NA	560,078	3.89%	U.S. Energy Technologies	254,316	4.10%
Winegard Energy	900,000	7.23%	The Trane Company	321,220	3.15%	Griffin Group	503,500	3.49%	Accurate Air Engineering, Inc.	194,987	3.15%
Southland Industries	729,000	5.86%	Siemens	311,106	3.05%	Pacific Utility Partners & Investme	467,718	3.25%	Pacific Utility Partners & Investments	189,881	3.06%
Sesco, Inc	600,000	4.82%	Ucons	223,677	2.20%	Edison Development Corporation	412,815	2.87%	Resource Efficiency Services	127,074	2.05%
Illnova	400,000	3.21%	Bruce R. Blau & Associates	183,618	1.80%	Kuhn & Kuhn	411,597	2.86%	Thomas Energy Management	123,491	1.99%
Category Total	12,445,000		Category Total	10,189,205		Category Total	14,406,613		Category Total	6,195,939	
Top 10 Share of Total	10,274,000	82.56%	**Top 10 Share of Total**	8,146,280	79.95%	**Top 10 Share of Total**	6,325,150	43.90%	**Top 10 Share of Total**	3,848,579	62.11%
SDG&E's Top 10 Share of SD	**Payment**			**Payment**			**Payment**			**Payment**	
Edison Source	1,157,000	15.21%	## Edison Source	709,892	38.26%	Onsite Sycom Energy Corporatior	352,155	7.94%	American Lighting Supply	785,656	25.66%
Onsite Sycom Energy Corporatic	810,000	10.65%	## Bonneville Power Administration	400,000	21.56%	American Lighting Supply	328,888	7.41%	Tetra Tech Em, Inc.	440,990	14.40%
American Power Products	810,000	10.65%	## Onsite Sycom Energy Corporatic	277,142	14.94%	A.S.I. Hasting, Inc.	322,600	7.27%	Continental Maritime	204,279	6.67%
Lakeland Utility Conservation	810,000	10.65%	## Edison Development Corporatior	96,557	5.20%	Equity Thru Energy	290,935	6.56%	KAC Corporation	204,015	6.66%
Maxlite/Sk America	810,000	10.65%	## National Air & Energy	61,376	3.31%	American Synergy	280,600	6.32%	Rohr, Inc.	146,441	4.78%
Monsato	743,000	9.77%	## North American Lighting, Inc.	57,096	3.08%	Kuhn & Kuhn	195,236	4.40%	Bonneville Power Administration	133,689	4.37%
Planergy	404,000	5.31%	## American Lighting Supply	54,188	2.92%	M & I Windows, Inc.	194,412	4.38%	Pacific Utility Partners & Investments	125,130	4.09%
Lighting Efficiency Masters, Inc.	367,000	4.83%	## Park Industries Inc/ Sli Ltg Soluti	51,719	2.79%	The Window Factory	142,908	3.22%	Comfort Systems	73,290	2.39%
San Diego Energy Masters	357,000	4.69%	## Alternative Energy Systems Con	41,443	2.23%	San Diego Chiller Service Inc.	124,369	2.80%	Federated Department Stores	63,006	2.06%
Energy Master International	350,000	4.60%	## San Diego Trane	38,570	2.08%	Viplex Industries	112,280	2.53%	Thomas Energy Management	60,229	1.97%
Category Total	7,605,000		Category Total	1,855,433		Category Total	4,437,198		Category Total	3,062,022	
Top 10 Share of Total	6,618,000	87.02%	## **Top 10 Share of Total**	1,787,983	96.36%	**Top 10 Share of Total**	2,344,384	52.83%	**Top 10 Share of Total**	2,236,726	73.05%

Table C-3: Market Share and Payments to Top 10 EESPs (Overall and by Utility), 1998-2001

Residential Top 10 Share of R	**Payment**				**Payment**			**Payment**			**Payment**	
Onsite Sycom Energy Corporatic	2,610,000	15.73%	##	American Synergy	715,818	55.10%	American Synergy	1,103,807	14.78%	American Lighting & Distribution, Inc.	1,239,881	34.38%
American Power Products	1,610,000	9.70%	##	Ucons	223,677	17.22%	NA	560,078	7.50%	American Synergy	542,788	15.05%
Planergy	1,604,000	9.67%	##	Sli Lighting Solutions, Inc.	113,384	8.73%	Equity Thru Energy	348,023	4.66%	Utility Refunds	378,437	10.49%
AM Conservation	1,330,000	8.01%	##	The Lighting Company	69,693	5.36%	A.S.I. Hasting, Inc.	322,600	4.32%	U.S. Energy Technologies	254,316	7.05%
Cal-Ucons	1,200,000	7.23%	##	Win-Dor, Inc	45,589	3.51%	Win-Dor, Inc	266,100	3.56%	Win-Dor, Inc	112,142	3.11%
Honeywell, Inc	1,200,000	7.23%	##	H & L Energy Savers	15,203	1.17%	Utility Refunds	257,282	3.44%	Ecos Consulting	67,647	1.88%
Capital State First General	930,000	5.60%	##	Air Doc, Inc	10,150	0.78%	U.S. Energy Technologies	231,405	3.10%	Prop-Serv Inc	62,547	1.73%
Free Lighting	930,000	5.60%	##	American Residential Services	9,600	0.74%	Fortix Corporation	195,028	2.61%	Hyde's Appliance & Air Conditioning	59,590	1.65%
Sempra	900,000	5.42%	##	Jim Carlson Construction	7,908	0.61%	M & I Windows, Inc.	194,412	2.60%	Burgeson's Heating & A/C	52,739	1.46%
Portland Energy Conservation	900,000	5.42%	##	Comfort Climate Control	7,560	0.58%	Ucons	178,984	2.40%	H & L Energy Savers	46,589	1.29%
Category Total	16,595,000			Category Total	1,299,227		Category Total	7,470,279		Category Total	3,606,042	
Top 10 Share of Total	13,214,000	79.63%	##	**Top 10 Share of Total**	1,218,582	93.79%	**Top 10 Share of Total**	3,657,719	48.96%	**Top 10 Share of Total**	2,816,676	78.11%

Non-Residential Top 10 Share	**Payment**				**Payment**			**Payment**			**Payment**	
Edison Source	4,333,000	22.51%	##	Onsite Sycom Energy Corporatic	4,410,421	34.30%	Onsite Sycom Energy Corporatior	6,033,999	27.15%	Onsite Sycom Energy Corporation	1,188,964	16.54%
Onsite Sycom Energy Corporatic	2,313,000	12.01%	##	Edison Source	2,395,722	18.63%	ETI	2,708,527	12.19%	American Lighting Supply	785,656	10.93%
Noresco	1,912,000	9.93%	##	Honeywell, Inc	485,752	3.78%	Chevron Energy Solutions	1,095,953	4.93%	Ecogate, Inc	456,936	6.36%
Viron Energy Services	1,616,000	8.39%	##	Planergy	440,000	3.42%	Planergy	1,043,750	4.70%	Tetra Tech Em, Inc.	440,990	6.14%
Metro Energy Corp	1,140,000	5.92%	##	Parke Industries	416,397	3.24%	Bruce R. Blau & Associates	770,008	3.46%	Bruce R. Blau & Associates	340,788	4.74%
Monsato	743,000	3.86%	##	Bonneville Power Administration	400,000	3.11%	Kuhn & Kuhn	606,833	2.73%	Pacific Utility Partners & Investments	315,011	4.38%
Southland Industries	729,000	3.79%	##	Siemens	395,434	3.08%	Enron Energy Services	594,280	2.67%	Continental Maritime	204,279	2.84%
Cal-Air Inc	656,000	3.41%	##	Bruce R. Blau & Associates	335,093	2.61%	Griffin Group	503,500	2.27%	KAC Corporation	204,015	2.84%
Energy Master International	599,000	3.11%	##	PG&E Energy Services	329,190	2.56%	Pacific Utility Partners & Investme	467,718	2.10%	Enron Energy Services	203,100	2.83%
Syska & Hennessy	519,000	2.70%	##	The Trane Company	321,220	2.50%	Siemens	438,402	1.97%	Accurate Air Engineering, Inc.	194,987	2.71%
Category Total	19,253,000			Category Total	12,856,533		Category Total	22,224,222		Category Total	7,186,827	
Top 10 Share of Total	14,560,000	75.62%	##	**Top 10 Share of Total**	9,929,229	77.23%	**Top 10 Share of Total**	14,262,971	64.18%	**Top 10 Share of Total**	4,334,726	60.31%