

Application of San Diego Gas & Electric
Company (U-902-M) for Approval of
Electric and Natural Gas Energy Efficiency
Programs and Budgets for Years 2006
through 2008.

Application 05-06-____

CHAPTER II
PREPARED DIRECT TESTIMONY
OF
ATHENA M. BESA

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

JUNE 1, 2005

1 **CHAPTER II**

2 **PREPARED DIRECT TESTIMONY OF**
3 **ATHENA M. BESA**

4 **San Diego Gas & Electric Company**

5 **I. Purpose**

6 The purpose of my testimony is to present San Diego Gas & Electric Company's
7 ("SDG&E") proposed 2006-2008 Energy Efficiency Program portfolio and provide the
8 technical basis and explanation to support the cost effective energy savings and demand
9 reduction estimates that are presented in the portfolio. This testimony will demonstrate
10 SDG&E's compliance with Commission Energy Efficiency Policy Rules adopted in
11 Decision (D.) 05-04-051, the revised avoided cost methodology and values adopted in
12 D.05-04-024 and SDG&E's participation plans in the development of Evaluation,
13 Measurement and Verification ("EM&V") Protocols as described in the April 4, 2005
14 Administrative Law Judge's Ruling Adopting Implementation Roadmap for Evaluation,
15 Measurement and Verification.

16 **II. SDG&E Portfolio Goals, Budgets and Cost Effectiveness**

17 **A. Portfolio Goals**

18 SDG&E's portfolio goals presented below by program are designed to meet or
19 exceed the Commission's energy savings targets and demand reductions adopted in D.04-
20 09-060:

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1. Total Net Savings By Programs for 2006:

Table 1: 2006 Energy Savings and Demand Reductions

Program	Net KWH	Net MMTherms	Net KW
Lighting Exchange and Education	2,223,337	0.00	426
Home Energy Efficiency Survey			
Limited Income Refrigerator Replacement	1,998,100	0.00	283
Multi-Family Rebate Program	4,316,705	0.37	1,037
Single Family Rebate Program	10,608,568	0.17	9,531
Advanced Home Program	1,842,839	0.07	2,020
Sustainable Communities Program	381,916	0.01	84
IOU/Community College Partnership	4,046,926	0.16	618
CA Department of Corrections Partnership	1,192,956	0.01	192
Energy Savings Bids	40,792,320	0.14	8,400
Express Efficiency Rebate Program	15,440,451	0.21	2,112
Small Business Super Saver	48,789,541	0.30	6,839
Standard Performance Program	11,284,415	0.15	1,406
IOU/UC/CSU Partnership	4,046,926	0.16	652
Savings By Design	2,951,502	0.05	649
Third Party Programs	56,100,000	0.54	10,920
City of Chula Vista Partnership	1,277,626	0.04	133
Codes & Standards Program			
City of San Diego Partnership	1,277,626	0.04	133
Evaluation Measurement & Verification			
SDREO Energy Resource Center Partnership			
Emerging Tech Program			
Flex Your Power			
Upstream Lighting Program	92,182,167	0.00	16,899
On-Bill Financing for Energy Efficiency Equipment			
County of San Diego Partnership			
San Diego Co. Water Authority Partnership	0	0.20	0
LIEE	6,000,000	0.16	1,000
Totals	306,753,921	2.8	63,335
CPUC GOALS	280,500,000	2.7	54,600

1 **2. Total Net Savings By Programs for 2007:**

2 **Table 2: 2007 Energy Savings and Demand Reductions**

Program	Net KWH	Net MMTherms	Net KW
Lighting Exchange and Education	2,223,337	0.00	426
Home Energy Efficiency Survey			
Limited Income Refrigerator Replacement	1,998,100	0.00	283
Multi-Family Rebate Program	4,535,580	0.39	1,092
Single Family Rebate Program	11,690,158	0.20	10,349
Advanced Home Program	1,842,839	0.07	2,020
Sustainable Communities Program	542,387	0.01	135
IOU/Community College Partnership	4,046,926	0.16	618
CA Department of Corrections Partnership	1,192,956	0.01	192
Energy Savings Bids	54,844,800	0.19	11,297
Express Efficiency Rebate Program	16,641,354	0.27	2,380
Small Business Super Saver	52,029,425	0.36	7,446
Standard Performance Program	12,130,746	0.18	1,511
IOU/UC/CSU Partnership	4,046,926	0.16	652
Savings By Design	5,903,003	0.10	1,299
Third Party Programs	56,100,000	0.54	10,920
City of Chula Vista Partnership	1,277,626	0.04	133
Codes & Standards Program			
City of San Diego Partnership	1,277,626	0.04	133
Evaluation Measurement & Verification			
SDREO Energy Resource Center Partnership			
Emerging Tech Program			
Flex Your Power			
Upstream Lighting Program	98,934,369	0.00	18,180
On-Bill Financing for Energy Efficiency Equipment			
County of San Diego Partnership			
San Diego Co. Water Authority Partnership	0	0.20	0
LIEE	6,000,000	0.16	1,000
Totals	337,258,158	3.1	70,066
CPUC GOALS	285,100,000	3.1	54,200

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1 **3. Total Net Savings By Programs for 2008:**

2 **Table 3: 2008 Energy Savings and Demand Reductions**

Program	Net KWH	Net MMTherms	Net KW
Lighting Exchange and Education	2,223,337	0.00	426
Home Energy Efficiency Survey			
Limited Income Refrigerator Replacement	1,998,100	0.00	283
Multi-Family Rebate Program	4,535,580	0.41	1,092
Single Family Rebate Program	11,690,158	0.19	10,349
Advanced Home Program	1,842,839	0.06	2,020
Sustainable Communities Program	542,387	0.02	135
IOU/Community College Partnership	4,046,926	0.16	618
CA Department of Corrections Partnership	1,192,956	0.01	192
Energy Savings Bids	54,844,800	0.26	11,297
Express Efficiency Rebate Program	16,641,354	0.44	2,380
Small Business Super Saver	52,029,425	0.65	7,446
Standard Performance Program	12,130,746	0.18	1,511
IOU/UC/CSU Partnership	4,046,926	0.16	652
Savings By Design	5,903,003	0.20	1,299
Third Party Programs	56,100,000	0.54	10,920
City of Chula Vista Partnership	1,277,626	0.04	133
Codes & Standards Program			
City of San Diego Partnership	1,277,626	0.04	133
Evaluation Measurement & Verification			
SDREO Energy Resource Center Partnership			
Emerging Tech Program			
Flex Your Power			
Upstream Lighting Program	98,934,369	0.00	18,180
On-Bill Financing for Energy Efficiency Equipment			
County of San Diego Partnership			
San Diego Co. Water Authority Partnership	0	0.20	0
LIEE	6,000,000	0.16	1,000
Totals	337,258,158	3.7	70,066
CPUC GOALS	285,100,000	3.7	54,200

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4 The savings for these programs are derived from savings estimates for each of the

5 measures that the program is proposing to promote. The individual measure savings and

6 other load impact estimates (e.g., kWh, kW and therm savings per unit, program net-to-

7 gross ratios, incremental measure costs and useful lives) are primarily derived from the

1 Database for Energy Efficiency Resources (“DEER”).¹ If the measure is not documented
2 in DEER, SDG&E provides documentation in its workpapers to support its estimates of
3 the measure’s load impacts. Documentation includes, but is not limited to, load impact
4 evaluations of past programs, market data, engineering model outputs, or manufacturer
5 test data, etc. This is consistent with Policy Rule IV.11.

6 **B. Proposed Funding by Year**

7 In order to meet the adopted savings and demand reduction goals, SDG&E is
8 proposing the following total program budgets: \$81,146,329 for 2006, \$91,438,242 for
9 2007 and \$105,559,239 for 2008. These budgets are further divided into the electric and
10 natural gas budget requirements for each year. The electric and gas budgets were
11 determined based on the program designs and the targeted measures. For electric
12 measures, the incentive program budgets for these measures determines for the most part
13 the electric incentive budget. For gas measures, the incentive program budgets for these
14 gas measures determines for the most part the gas incentive budget. There are measures,
15 however, that have both gas and electric benefits. For these measures the incentives are
16 allocated between the electric and gas budget by using the electric and gas percentage
17 allocations of the program benefits (using the total avoided cost benefits in dollars). With
18 the exception of lighting programs, the program administration costs were also allocated
19 between gas and electric budgets using the same avoided costs percentages. The
20 following section presents the electric and natural gas funding proposals.

21 SDG&E is proposing an electric budget of \$75,466,086, \$85,037,565, and
22 \$98,170,092 for years 2006 through 2008, respectively which will be funded through a

¹ Based on DEER, 2005.

1 combination of Public Goods Charge (“PGC”) funds, authorized by Assembly Bill
2 (“AB”) 995, and Procurement funds,² originally authorized in D.03-12-062 for 2004
3 through 2005 only.³ SDG&E also proposes to fund the electric budget requirements first
4 through the identification of unspent and uncommitted PGC program dollars from
5 previous years, PGC overcollections related to sales, and the interest that has accrued in
6 the Post-1997 Energy Efficiency Balancing Account plus current year PGC collection.
7 SDG&E is proposing to continue the collection of Procurement funds as authorized in
8 D.03-12-062, which will be used to fund the remainder of the electric budget
9 requirements.

10 During the 3-year program cycle, SDG&E’s authorized PGC funds, including
11 unspent and uncommitted and annual escalations due to inflation; Procurement funds at
12 the current authorized level of approximately \$25 million, and balancing account interest
13 will not be sufficient to meet the budget proposed in this application. Pursuant to Public
14 Utilities Code Section 399.8, the non-low income component of the Public Purpose
15 Program (“PPP”) rate may not exceed the level of the rate components effective on
16 January 1, 2000. Therefore, SDG&E proposes to fund any “shortfall” through the
17 continuation of the Energy Efficiency Procurement charge at a rate level necessary to
18 recover the overall electric efficiency “shortfall.”

19 SDG&E seeks authorization of its projected gas budget requirements of
20 \$5,680,243, \$6,400,677, and \$7,389,147, for years 2006 through 2008, respectively. For
21 its natural gas budget, SDG&E is proposing to use the PPP Gas surcharge funds

² The terms “Public Goods Charge” and “Public Purpose Program” are used interchangeably.

³ D.03-12-062 at page 67.

1 authorized through AB 1002 and D.04-08-010. Currently SDG&E is authorized to
2 collect \$5 million. Any “shortfall” will be addressed by increasing the level of PPP funds
3 collected through the Gas PPP Surcharge. The Gas Surcharge is update at least annually,
4 usually through an advice letter request filed in October to establish the PPP surcharge
5 rates effective January 1 of the subsequent year.

6 The following tables show the annual budget requirements, the available funds in
7 each of the balancing accounts, the current levels of authorized PGC and Procurement
8 funding, and the budget allocations across customer class.

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Table 4: Available Funds or Shortfalls for 2006 through Programs

	2006		2007		2008		TOTAL
	81,146,329		91,438,242		105,559,239		
	Electric	Gas	Electric	Gas	Electric	Gas	
Total Program Budget	75,466,086	5,680,243	85,037,565	6,400,677	98,170,092	7,389,147	19,470,067
Electric PGC Budget	50,673,086	5,680,243	37,786,819	6,400,677	35,026,018	7,389,147	19,470,067
Electric Procurement Budget	24,793,000		47,250,746		63,144,075		
PGC Balancing Account							
Authorized Public Goods Charge (PGC) Collections ¹	33,600,000	5,000,000	34,305,600	5,000,000	35,026,018	5,000,000	15,000,000
Unspent/Uncommitted PGC Energy Efficiency Budget (1998-2003)	4,027,502						
Estimated Interest for Electric PGC Funds/Gas PPP Funds ²	689,183		68,259				4,027,502
Other Available Funds From PGC Balancing Account	15,769,361		3,412,960				19,182,321
Total Available PGC Balancing Account Funds	54,086,046	5,000,000	37,786,819	5,000,000	35,026,018	5,000,000	15,000,000
Procurement Balancing Account							
Current Authorized Collection ³	24,793,000		24,793,000		24,793,000		74,379,000
Total Available Procurement Balancing Account Funds	24,793,000		24,793,000		24,793,000		74,379,000
Total Available Funding	78,879,046	5,000,000	62,579,819	5,000,000	59,819,018	5,000,000	15,000,000
PGC (Shortfall) Excess ²	3,412,960	(680,243)		(1,400,677)		(2,389,147)	(4,470,067)
Procurement (Shortfall) Excess		NA	(22,457,746)	NA	(38,351,075)	NA	(60,808,820)

1 Assumptions:

- 2 (1) Assumed an escalation rate of Electric PGC of 2.1% annually based on the 2004 Gross Domestic Product Deflator for years 2007 and 2008.
 3 (2) Assumed that excess electric PGC funds from previous year (Line 25) is carried over to the next year with an assumed annual interest rate (Line 14) of 2%.(3)
 4 Assume that we would collect at least \$24,793,000 from Procurement since we are already authorized to collect this minimum amount.
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6 Table 5: Customer Class Allocations:

Customer Class Allocation	2006-2008		
	Total	Electric	Gas
Total Program Budget:	278,143,810	258,673,743	19,470,067
Residential:			
Residential Budget	94,552,988	89,287,775	5,265,213
Residential Budget Percentage		34.5%	27.0%
Small Commercial:			
Core C/I Budget	42,948,498	40,695,110	2,253,389
Core C/I Budget Percentage		15.7%	11.6%
Medium and Large Commercial:			
Non-Core C/I Budget	46,312,251	41,245,764	5,066,487
Non-Core C/I Budget Percentage		15.9%	26.0%
Medium and Large Commercial:			
Non-Core C/I Budget	94,330,072	87,445,095	6,884,977
Non-Core C/I Budget Percentage		33.8%	35.4%
Total	278,143,810	258,673,743	19,470,067

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1 The testimonies of Ms. Davidson (Chapter IV) and Mr. Chen (Chapter V) provide
2 detailed discussions on the rate impacts and revenue requirements.

3 **C. Cost Effectiveness Tests**

4 SDG&E, together with Pacific Gas & Electric Company (“PG&E”), Southern
5 California Edison Company (“SCE”) and Southern California Gas Company
6 (“SoCalGas”), with the concurrence of the Energy Division contracted with E3 to
7 develop the avoided cost calculator that was used to determine the various cost
8 effectiveness outputs required in this application. See Attachment B for the cost
9 effectiveness parameters.

10 **1. Total Resource Cost Test**

11 The Commission in D.05-04-051 (Policy Rule IV. 1) directs the utilities to use the
12 Total Resource Cost Test (“TRC”) as the primary indicator of energy efficiency program
13 cost effectiveness, which is consistent with the Commission’s intent that ratepayer-
14 funded energy efficiency should focus on programs that serve as resource alternatives to
15 supply-side options. The TRC test measures the net resource benefits from the
16 perspective of all ratepayers by combining the net benefits of the program to participants
17 and non-participants. The benefits are the avoided costs of the supply-side resources
18 avoided or deferred as adopted in D.05-04-024. TRC costs, on the other hand, include
19 the incremental cost to install the energy efficient measures/equipment relative to the
20 standard case and the costs incurred by the program administrator. The discount rate

1 used should be the utilities' weighted average cost of capital as adopted in D.05-04-051.
2 The discount rate adopted for this application is 7.49 percent.⁴

3 In addition to the TRC test, the utilities are also required to consider in evaluating
4 program and portfolio cost effectiveness the Program Administrator Cost ("PAC") test
5 (Policy Rule IV.3.). The PAC benefits are the same as the TRC test but costs are defined
6 to include the costs incurred by the program administrator (including financial incentives
7 or rebates paid to participants), but not the costs incurred by the participating customer.
8 The discount rate used for the PAC test is the same as that of the TRC test.

9 Applying both the TRC and PAC cost effectiveness test is referred to as the
10 "Dual-Test". Policy Rule IV.6. requires a prospective showing of cost effectiveness
11 using the Dual-Test at the portfolio level to qualify for program funding.

12 The estimated TRC and PAC ratios of SDG&E's 2006-2008 portfolio are as
13 follows:

14 Table 6: Portfolio Cost Effectiveness

Cost Effectiveness	
Total Resource Cost Test	
Costs	\$299,443,761
Electric Benefits	\$542,536,981
Gas Benefits	\$37,082,982
Net Benefits (NPV)	\$346,123,712
BC Ratio	1.94
Program Administrator Cost Test	

⁴ In an email dated May 5, 2005, Energy Division staff directed all utilities to use 7.49 percent after analyzing the individual utility's adopted cost of capital rates.

Costs	\$266,000,587
Electric Benefits	\$542,536,981
Gas Benefits	\$37,082,982
Net Benefits (NPV)	\$410,471,754
BC Ratio	2.18

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2. Environmental Benefits

D.05-04-024 adopted the various costs used to value a select group of environmental adders. These adders include NOx, PM-10 and CO₂. These environmental adders are incorporated into the E3 calculator.

III. 2006-2008 Energy Efficiency Budget Details & Definitions

D.05-01-055 directs the utilities to propose program budgets to fund energy efficiency programs that will achieve the Commission’s energy savings and demand reduction targets. In addition, to providing program budgets, the Commission requires that a minimum of 20 percent of the entire portfolio of programs be allocated for the competitive bid solicitation.⁵ SDG&E interprets this to be 20 percent of the total budget allocated for implementing all programs, excluding the EM&V budget. SDG&E has budgeted a minimum of 20 percent of the total program budget for its competitive bid solicitation. Depending on the program bids received during the solicitation process, SDG&E’s allocation for third party or non-utility programs may increase from the minimum allocation.⁶

D.05-10-055 Ordering Paragraph 7 directs the utilities to include EM&V plans,

⁵ D. 05-01-051 at page 94 and Policy Rule VI.3.
⁶ “Third party” and “non-utility” are used interchangeably to refer to those entities who will participate in the competitive bid solicitation.

1 funding levels and budget allocations across study categories. Additionally, the
2 Commission requires that a funding level be identified as a separate line item for the
3 Energy Efficiency Groupware Application (“EEGA”). D.05-04-051 further clarifies that
4 each utility is to allocate 8 percent of program funding for EM&V activities.⁷ SDG&E
5 interprets this to be 8 percent of the total program funding, which includes both the utility
6 core programs and the budget for the competitive bid solicitation. With regards to the
7 separate line item for EEGA, SDG&E will coordinate with the Energy Division as to the
8 appropriate budget through the EM&V process described in Section VII.

9 SDG&E provides its budget detail by category in Attachment B. The following
10 budget categories and definitions were used to breakdown the program budget.

11 **A. Administrative Costs**

12 Administrative Costs are costs that are incurred by the program administrator and
13 implementer required to manage the programs. These includes the following
14 subcategories:

- 15 • Other Administrative Costs include managerial and clerical labor, human
16 resources support and development, travel and conference fees. These
17 include administrative costs incurred by any subcontractor to the program.
- 18 • Overhead and General and Administration Costs include facilities costs and
19 materials used in the management of the programs.

20 **B. Marketing and Outreach Costs**

21 Marketing and Outreach Costs are costs incurred by the program to provide and
22 promote the program and energy efficiency, in general. This also includes items such as

⁷ D.05-04-051 at page 69. SDG&E believes this includes the budget for EEGA.

1 advertising, brochures, program collateral, seminars and the labor incurred in the
2 marketing of the program.

3 **C. Direct Implementation Costs**

4 Direct Implementation Costs include rebates, incentives paid to customers,
5 installation and services, including labor, any hardware and materials required for
6 installation, and the labor and material costs incurred for rebate processing and
7 inspections.

8 **D. EM&V Costs**

9 EM&V costs are the labor and material costs incurred to conduct process and
10 measurement studies required to evaluate the program. SDG&E only provides the
11 EM&V budget at the portfolio level and not at the program level pending further
12 direction from the Commission after the Commission adopts the final EM&V Protocols
13 and the EM&V studies are determined.

14 **IV. 2006-2008 Program Overview**

15 The following sections provide a brief overview of SDG&E's proposed portfolio
16 of programs. SDG&E's portfolio consists of continuing successful statewide and local
17 programs from the 2004-2005 program cycle, the incorporation of 2004-2005 successful
18 non-utility programs, new and innovative programs and partnerships. A more detailed
19 discussion of the programs is presented in Attachment A.

20 **A. Residential Programs**

21 SDG&E provides service to approximately 1.2 million customers, which are
22 primarily comprised of single family homes, condominiums, multifamily units, and
23 mobile homes. The programs proposed for 2006-2008 are designed to address the needs

1 of the single family, multifamily and hard-to-reach customer. For each of the customer
2 segments, the program offerings take into consideration SDG&E's adopted overarching
3 objectives and valuable input received through the program advisory group and public
4 process.

5 The following are SDG&E's long term goals and objectives for the various
6 residential market segments and end uses:

7 **1. Residential Lighting**

- 8 • Increase compact fluorescent lamps ("CFL") product availability to non-
9 traditional retailers by 20%. Currently, 50% of all incandescent light bulbs are
10 purchased in Grocery/Drug stores of which less than 1% of those are CFLS.
- 11 • Increase availability and sales of new CFL products (globe, A lamps, dimmable
12 lamps and reflectors) throughout the service territory by 2007.
- 13 • Increase the amount of rebates available for pin-based fixtures by 10% starting in
14 2006.
- 15 • Introduce LED lighting and cold cathode lighting rebates starting in 2006 with the
16 goal of increasing product availability in the market by the end 2008. Work with
17 manufacturers, Construction for Energy Efficiency ("CEE") and Energy Star© to
18 ensure that product quality is acceptable to consumers to increase customer
19 acceptance.

20 **2. Multifamily Family Sector**

- 21 • Increase the number of multifamily common area retrofits that impact peak
22 demand (lighting, laundry rooms, hallway lighting, pools, refrigerators, vending
23 machines, heating, ventilation and air conditioning ("HVAC") systems) by 20%
24 by 2008.
- 25 • Encourage comprehensive retrofits in individual units such that 30% of projects
26 impact three or more end uses by 2008. To accomplish this goal, SDG&E will
27 work with various stakeholders to overcome the "split-incentive" barriers between
28 the property owners and tenants.

29 **3. Residential Appliances**

- 30 • Work with manufacturers and retailers to convert 80% of appliance floor stock to
31 Energy Star© standards by the end of 2008 through manufacturer buy-downs and
32 point-of-purchase rebates.

- 1 • Continue to explore ways to make solar heating a cost effective alternative to
2 gas/electric water heating.
- 3 • Continue close coordination with local water agencies to align the energy
4 efficiency and water conservation goals by leveraging each other's resources.

5 **4. Residential HVAC**

- 6 • Standardize and promote quality installations of HVAC systems (includes duct
7 testing, duct sealing, refrigerant charging, etc.) such that 50 percent of contractors
8 and vendors are trained and are qualified.
- 9 • Work with various stakeholders to develop a certification and reference registry to
10 facilitate customer selection of qualified contractors.
- 11 • Work with manufacturers and distributors to convert 25 percent of stock to be
12 above code by the end of 2008 through upstream/midstream incentives.

13 **5. Home Electronics**

- 14 • Seek continuous improvements in the Energy Star© standard for home electronic
15 products (e.g., televisions, CD players, cell phone chargers, home computers,
16 computer monitors, etc.) to minimize stand by power losses. This effort will be
17 coordinated through the Emerging Technology and Codes & Standards Programs.

18 **6. Pool Pump Motors**

- 19 • Work with manufacturers and retailers to convert 25 percent of stock to be above
20 Title 24 or Title 20 codes or industry standards by the end of 2008 through
21 upstream/midstream incentives and/or point-of-purchase rebates.
- 22 • Coordinate with pool maintenance contractors to identify and encourage
23 customers who are not replacing pool pumps to install a control device to cycle
24 the pool motor off during critical peak times (as part of the integration efforts of
25 energy efficiency and demand response programs).

26 The following is a summary of the proposed 2006-2008 Residential portfolio:

27 **1. Lighting Exchange Program**

28 This mobile program provides energy efficient lighting through lighting exchange
29 events (incandescent bulbs and halogen torchieres for CFLs. Cutomers will be able to
30 make the exchanges at local events in their neighborhoods. This approach has proven to
31 be very successful in the past. SDG&E plans to continue past methods while
32 incorporating new cost effective promotional announcements and research new ideas.

1 The program will also continue to participate in larger “turn-in” events coordinated with
2 local governments; SDG&E plans to work through employers in traditionally low paying
3 industries, bringing the lighting exchange right to the workplace. SDG&E also plans to
4 work with service clubs and smaller agencies educating them on EE and other customer
5 assistance programs and offering lighting events at their club/agency activities.

6 **2. Limited Income Refrigerator Replacement**

7 This program provides refrigerator replacements at no cost to limited income
8 customers who are marginally above the Low-Income Energy Efficiency (“LIEE”)
9 Program income guidelines but do not exceed 250% or Federal poverty guidelines.
10 Outreach to these customers will continue to be coordinated with the LIEE program. An
11 assessment of the customer’s refrigerator will be performed for those customers who
12 qualify under the guidelines established for the proposed program. If the existing unit
13 qualifies for replacement, the customer will be offered a new energy efficient unit and
14 removal recycling of the older, in-efficient unit.

15 **3. Residential Customer Education and Information**

16 The Residential Customer Education and Information Program provides education
17 and information through several program components: Home Energy Efficiency Survey
18 (“HEES”) a statewide education and information based program; Home Energy
19 Comparison Tool (“HECT”); and the PEAK Student Energy Action Program (“PEAK”) a
20 partnership program with the Energy Coalition. HEES provides a comprehensive multi-
21 lingual program designed to reach a wide range of residential customers by offering
22 audits online, by telephone or by mail. HECT gives customers the ability to compare
23 their home energy usage with similar households in their neighborhood. PEAK is a

1 comprehensive learning experience intended to teach schoolchildren the value of smart
2 energy management.

3 **4. Residential Incentive Program**

4 The Residential Incentive Program targets owners and renters of single-family
5 homes, condominiums, mobile homes, and attached homes up to a four-plex. by offering
6 point-of purchase (“POP”) or downstream appliance rebates for clothes washers
7 (coordinated through the San Diego County Water Authority Partnership), pool pumps,
8 room air conditioners, and water heaters. All other qualified measures that do not have
9 the POP option will be available to the customer via the standard hardcopy application
10 submitted by mail to SDG&E for rebate payment.

11 **5. Multifamily Rebate Program**

12 The Multifamily Rebate Program offers incentives for a variety of energy
13 efficiency measures (e.g., lighting, water heaters, boilers, etc.) to property owners and
14 managers that install energy-efficient products in individual tenant units and common
15 areas of residential apartments, mobile home parks and condominium complexes. In
16 addition, this program will be coordinated with the upstream program that will provide
17 upstream incentives to retailers, distributors and manufacturers of energy efficient
18 equipment such as water heaters, boilers, lighting, etc.

19 **6. Upstream Lighting Program**

20 This program provides rebates at the point of purchase or manufacture buy-down
21 discounts through home improvement stores. Small commercial customers may also
22 participate in this program.

1 **B. Commercial and Industrial Programs**

2 SDG&E provides service to approximately 138,000 commercial and industrial
3 customers. The Commercial/Industrial market segment includes over 138,000 electric
4 meters and close to 30,000 gas meters. Approximately 20% of the market consists of
5 “large” customers whose monthly kW demand is above 500kW or annual gas
6 consumption is above 240,000 therms. The remaining 80% of the market consists of
7 small and medium sized businesses whose monthly demand is 500kW or less or annual
8 consumption is below 240,000 therms. Ninety percent (90%) of the small and medium
9 sized business customer segment have a monthly demand of under 20 kW and can be
10 further classified as “Hard-To-Reach” customers.⁸

11 Industries that are part of the Commercial/Industrial market segment are varied
12 and include food service, property management, manufacturing, lodging, grocers,
13 growers and more. Interesting and relevant facts about these customer segments are:

- 14 • The **Food Service** segment is a significant electric and gas user. Their top energy
15 end uses are cooling, cooking, refrigeration and lighting processes.
- 16 • Refrigeration represents over 50% of the energy used by the **Grocery Store**
17 segment
- 18 • Nearly half of the energy used by **Office Buildings** (commercial segment) is used
19 for space cooling.
- 20 • The **Manufacturing** segment includes a number of subgroups including
21 fabricated metal products, industrial machinery, transportation, and primary
22 metals industries. These customers tend to be highly energy intensive (electric and
23 gas use) due to heating, cooling and motor driven related processes.
- 24 • The **Agricultural** segment includes over 6,000 farm businesses involved in dairy,
25 egg, orchid, fruit, and livestock production processes. Key energy drivers include
26 motor and pumping processes.

⁸ “Hard-to-Reach” business customers are defined as customers who rent or lease space, English is their second language, have less than ten employees, are not located in urban San Diego, and have annual electric demand of less than 20kW or annual gas consumption of less than 10,000 therms.

- 1 • The **Biotech** community is one the fastest growing sectors in San Diego and is
2 representative of its highly diverse high-tech economy (biotech, communication,
3 software, electronics and computer industries). Lighting, heating and cooling are
4 the main drivers of energy use.
- 5 • The **Educational** segment (schools and colleges), whose primary end uses are
6 lighting and HVAC, is under tremendous pressure to reduce utility costs in light
7 of the current state budget deficit.
- 8 • The **Military** segment, the single largest SDG&E customer, whose primary end
9 uses are lighting, HVAC and other process.

10 The following are SDG&E's long term goals and objectives for the various
11 commercial/industrial market segments and end uses:

12 **Commercial/Industrial Goals & Objectives:**

- 13 • Approach customers with "holistic" or comprehensive energy solutions by
14 providing energy efficiency, demand response and renewable options.
- 15 • Increase by 100 percent participation levels of the small commercial customer
16 segment by 2008.
- 17 • Provide assistance to customers to meet the Governor's goals (10 percent
18 reduction of grid based purchases by 2010 and 20 percent by 2015) stated in the
19 Green Building Executive Order (e.g., LEED certification, Energy Star© building
20 rating system, reduction in energy use per square foot).
- 21 • Support the California Climate Registry through education & outreach efforts that
22 would encourage customers to register as members of the Registry.
- 23 • Encourage recycling efforts in the commercial sector by offering recycling
24 programs for commercial refrigeration cases.
- 25 • Encourage innovation through demonstration projects such as alternative piping
26 designs that are more energy efficient.
- 27 • Work with HVAC manufacturers and distributors to convert 25 percent of stock
28 to be above Title 24 or Title 20 codes or industry standards by the end of 2008
29 through upstream/midstream incentives.
- 30 • Work with motor manufacturers and distributors to convert 25 percent of stock to
31 be above Title 24 or Title 20 codes or industry standards by the end of 2008
32 through upstream/midstream incentives and/or point-of-purchase rebates.
- 33 • Seek continuous improvements or develop Energy Star© standards for office
34 equipment (e.g., copy machines, fax machines, computers, computer monitors,
35 etc.) and software plug load sensors to minimize stand by power losses. This
36 effort will be coordinated through Emerging Technology and Codes & Standards
37 programs.

- 1 • Introduce LED lighting and cold cathode lighting rebates starting in 2006 with the
2 goal of increasing product availability in the market by the end 2008. Work with
3 manufacturers, CEE and Energy Star© to ensure that product quality is acceptable
4 to consumers to increase customer acceptance.

5 The following is a summary of the proposed 2006-2008 Commercial/Industrial
6 Portfolio:

7 **1. Energy Savings Bid Program**

8 The Energy Savings Bid Program (“ESBP”) is an existing local incentive program
9 designed for large commercial or industrial energy-efficiency projects including military
10 and governmental facilities. Projects may include large individual sites or an aggregation
11 of smaller sites. Incentives will also provided for design and audit assistance. As part of
12 improvements to the program, it has been expanded to include several of San Diego
13 Regional Energy Office’s (“SDREO”) and the San Diego Regional Energy Partnership
14 (“SDREP”) successful 2004-2005 non-utility programs: SDREP-Local Government
15 Energy Efficiency Program (Program No. 1300-04), SDREP-San Diego Green Building
16 Education and Technical Assistance (Program No. 1299-04), SDREP-Technical
17 Assistance Program (Program No. 1304-04) and SDREO-San Diego Local Government
18 Energy Efficiency Program (Program 1301-04).

19 **2. Standard Performance Contract (“SPC”) Program**

20 The SPC Program offers financial incentives for energy-efficient retrofits of
21 existing equipment or systems with high-efficiency end-use equipment in lieu of standard
22 efficiency equipment. The SPC Program targets mid to large-sized customers but will
23 accommodate small non-residential customers that cannot be served by other programs.

24 **3. Express Efficiency Program**

25 The Express Efficiency Program provides rebates to customers (greater than 100

1 kW or 20,800 therms) who install prescribed energy-efficient measures such as energy-
2 efficient lighting, refrigeration, HVAC, food service, other technologies and natural gas.

3 **4. Small Business Super Saver**

4 The Small Business Super Saver Program is a rebate program for small
5 nonresidential customers (less than 100 kW or 20,800 therms) who install prescribed
6 energy-efficient measures. The program shall offer significant rebates on an expanded
7 and comprehensive list of measures. In addition a turnkey incentive will be offered to
8 installation contractors for the very small and small customer, where needed, to overcome
9 any additional financial barriers.

10 **5. On-Bill Financing**

11 On-bill financing provides financing options to customers with billing and
12 payments handled through the utility bill. On-bill financing will leverage existing energy
13 efficiency rebate programs (e.g., Small Business Super Saver and Multi-family Energy
14 Efficiency Program) and demand response programs. Through provision of a reduced
15 rebate level in conjunction with financing, programs will be able to optimize their rebate
16 budgets and offer more rebates to more customers.

17 For a more detailed discussion on the On-Bill Financing program, refer to Mr.
18 Spasaro's testimony (Chapter III).

19 **C. Commercial New Construction Programs**

20 SDG&E estimates that approximately 13.4 million sq. ft. of additional building
21 area is forecasted to be completed in 2006. The following market segments, Office,
22 Retail, and Miscellaneous Service are the fastest growing areas in the territory. Although
23 SDG&E expects a continued increase in new construction projects, the implementation of

1 the new Title 24 building standards presents a new challenge to the building industry - -
2 implementing and understanding the new standards. The following are the goals and
3 objectives for the Commercial New Construction market.

4 **Commercial New Construction Goals & Objectives:**

- 5 • Emphasize integrated design by continued expansion of the Whole Building
6 Approach; increase savings modeled through performance approach by 2008;
7 increase the greater than 50 percent of incentive attributed to Whole Building
8 Approach to greater than 55 percent.
- 9 • Expand energy efficiency baselines and encourage higher performance
10 technologies in Industrial and Process Loads not addressed by Title 24.
- 11 • Increase percentage of state's square footage participating in program by 5% per
12 year by 2008, through a study of completed new construction in adjacent years.
- 13 • Introduce Demand Response and Renewables technologies to 10 demonstration
14 projects through the Sustainable Communities Program.
- 15 • Increase number of multifamily projects participating in the Sustainable
16 Communities Program.

17 **1. Savings By Design**

18 The Savings By Design Program promotes integrated design and emphasizes
19 early design involvement by offering building owners and design teams a wide range of
20 services including education, design assistance and owner incentives, as well as design
21 team incentives for buildings that exceed Title 24 building standards. With the change in
22 Title 24 Code, effective October 2005, SDG&E will be offering training and assistance to
23 building owners, engineers, architects, contractors, building officials, and other
24 stakeholders to assist them with the transition in the code changes.

25 **2. Sustainable Communities Program**

26 The program offers a higher tier incentive for sustainable building projects that
27 exceed Title 24 standards and exceed the Savings By Design program in addition to non-
28 energy efficiency requirements. Qualified projects will incorporate high performance

1 energy efficiency and demand reduction technologies, along with clean on-site
2 generation, water conservation, transportation efficiencies and waste reduction strategies.
3 Multifamily homes can also participate in this program.

4 **D. Residential New Construction**

5 According to the San Diego Association of Governments (“SANDAG”), it is
6 forecasted that the total number of housing units in the County of San Diego will increase
7 by 12 percent from the year 2000 to 2010, equating to approximately 125,000 additional
8 housing units. There is projected to be a higher concentration of new home
9 developments in the eastern portion of the county that could lead to cooling load growth.
10 Similar to the commercial new construction building sector, the residential new
11 construction building industry will also be challenged by the increase in energy efficiency
12 requirements in new Title 24 building standards. In order to support the residential new
13 construction market, SDG&E proposes an innovative approach in addition to the
14 traditional builder performance-based incentives to exceed Title 24. SDG&E is
15 proposing to “push the envelope” in new construction by working with builders to
16 identify demonstration home sites that will feature emerging technologies such as
17 tankless water heaters, cool roofs, alternative building construction materials, explore
18 alternatives to central air conditioning such as night ventilation/passive cooling, and other
19 technologies identified through the Emerging Technologies Program, incorporation of
20 renewable energy alternatives, indoor quality improvements and water efficiency.
21 SDG&E will also coordinate its activities with other initiatives such as the One Million
22 Solar Roof Initiative and CEC Zero Energy New Homes Program. The following are the
23 goals and objectives for the residential new construction market.

1 **Residential New Construction Program Goals & Objectives**

- 2 • Build five Advanced Home demonstration projects (projects may be housing
3 developments with multiple housing units) by 2008.
- 4 • Collaborate with progressive builders to incorporate emerging technologies and
5 sustainable building/green building characteristics as standard features in their
6 homes.
- 7 • Introduce Demand Response technologies and programs to the new home
8 building industry as they become available with a dedicated focus on the growing
9 multi family market.
- 10 • Increase participation of multi family projects in design and construction
11 exceeding Title 24 to 10,000 dwelling units by 2008.
- 12 • Improve the overall efficiency of 10,000 HVAC systems in new single family
13 homes through a combination of measures including: improved design, tight
14 ducts, right sizing, thermostatic expansion valve (“TXV,”) etc. by 2008.
- 15

16 **Advanced Home Program**

17 The Advanced Home Program showcases home demonstration projects
18 incorporating measures from emerging technologies, sustainable design concepts, and
19 green building practices. (photovoltaic technologies, solar water heating, passive cooling,
20 etc.). The program will also include training for the new Title 24 code, design and
21 technical assistance, HVAC training (duct sealing, duct testing, proper installation, right
22 sizing, etc.) and incentives for several prescribed measures.

23 **E. Emerging Technology Program**

24 Emerging Technologies are defined as new energy efficiency technologies,
25 systems, or practices that have significant energy savings potential but have not yet
26 achieved sufficient market share (for a variety of reasons) to be considered self-sustaining
27 or commercially viable. Emerging Technologies include early prototypes of hardware,
28 software, design tools or energy services that if implemented will result in energy

1 savings.⁹

2 SDG&E will continue to be an active member of the Emerging Technologies
3 Coordinating Council, which is a group of representatives from the CEC, PG&E, SCE,
4 SoCalGas, and SDG&E, charged with administrating California utility ratepayer funded
5 programs for energy related research and energy efficient emerging technologies.

6 **F. Codes & Standards**

7 The statewide Codes and Standards (“C&S”) Program is an information-only
8 program that advocates upgrades and enhancements in energy efficiency standards and
9 codes. Program activities are conducted over long-term code upgrade cycles. Support of
10 building code cycles, for example, may require four years of continuous support. Codes
11 and Standards Enhancement (“CASE”) studies for energy efficiency improvements are
12 performed for promising design practices and technologies and are presented to standards
13 and code-setting bodies. The Codes and Standards Program supports the State with
14 technical expertise to promote standards that approach best practices in energy efficiency,
15 which becomes critically important as stakeholders voice opposition to improvements to
16 building and appliance standards throughout the public workshops and hearings process.
17 Additionally, SDG&E works with national organizations like the CEE and Energy Star©
18 to establish energy efficiency standards for appliances and equipment. The program
19 supports implementation of energy efficiency standards through strategic initiatives
20 and/or training.

21 **G. Statewide Marketing and Outreach Programs**

22 The Marketing and Outreach Programs not only provide the critical link between

⁹ Energy Efficiency Policy Manual for Post-2005 Programs Appendix B adopted in D.05-04-051.

1 program incentives and customer participation but also serve as a key link between
2 government, the utilities and the massive potential for energy efficiency in the private
3 sector. These programs provide information to customers and propose ways to reduce
4 consumption permanently using messages that are consistent statewide.

5 SDG&E, together with PG&E, SCE and SoCalGas, propose to continue and build
6 upon the success of the existing statewide programs through the Efficiency Partnership,
7 Univision and Runyon Saltzman & Einhorn. These statewide campaigns provide high
8 level awareness about energy efficiency and energy and water conservation.

9 Continuation of these statewide programs will build upon their strengths, particularly in
10 the various ethnic communities they serve, allow development of other ethnic group
11 outreach (besides Spanish-speaking) efforts and ensure strong coordination between the
12 statewide marketing outreach efforts and the utility program efforts. In addition, the
13 statewide campaign can serve as another vehicle to promote and co-brand with the
14 California Climate Registry.

15 In addition, the IOUs are proposing to collaborate with the Energy Coalition on
16 the integrated energy efficiency and demand response PEAK Student Energy Action
17 program. This program is a comprehensive student learning experience intended to teach
18 school children the value of smart energy management.

19 **H. SDG&E Program Partnerships**

20 As the Commission points out in its decision, partnerships between utilities and
21 local governments can take advantage of their unique strengths to deliver cost effective
22 energy efficiency services. SDG&E recognizes that local governments can support
23 effective implementation of existing energy efficiency Title 24 building codes and

1 standards and support local government policies that may require higher than Title 24
2 building codes and standards. Examples of local governmental support include activities
3 such as expedited permit processing for construction projects (new and retrofit) that
4 exceed Title 24 standards as an alternative to providing incentives to contractors and
5 builders. In addition, local governments can adopt local Energy Policies that would
6 require implementation of energy efficiency measures beyond the state's Title 24
7 standards. These governments can also serve as a model of energy efficiency by
8 adopting best practices and upgrading their facilities to be state-of-the-art buildings and
9 facilities. These bodies also have established channels within their communities by
10 which they can partner with their utility to disseminate energy efficiency, demand
11 response and renewable technologies information. SDG&E also has several partnerships
12 with other institutions that promote training and education, the creation of best practices,
13 and retrofit projects. These partnership programs will provide assistance to the
14 participating entities to meet the Governor's goals (10% reduction of grid based
15 purchases by 2010 and 20% by 2015) stated in the Green Building Executive Order (e.g.,
16 LEED certification, Energy Star® building rating system, reduction in energy use per
17 square foot).

18 Policy Rule VI.6 requires the program administrators to submit standard language
19 that addresses information sharing, intellectual property ownership, reimbursement turn-
20 around, dispute resolution and other issues for future partnership programs together with
21 the PY 2006-2008 program plans.¹⁰ Furthermore, the Energy Division and Legal
22 Division should work with the Program Administrators, interested local governments and

¹⁰ D.05-04-051 Attachment 3—Energy Efficiency Policy Manual for Post-2005 Programs at page2 12-13.

1 other parties to develop the standard language. SDG&E, as part of the ongoing program
2 planning activities beyond June 1 (see Ms. Wagner’s Testimony Chapter I) will continue
3 to refine the program details for these proposed partnerships. SD&GE, therefore,
4 proposes to submit the contract language together with utility submittal of the full portfolio
5 including non-utility selection as described in the “Proposed Schedule for the Competitive
6 Bid Process” section below. This would allow all parties involved in the collaboration,
7 the Energy Division and Legal Division to develop the appropriate language for these
8 partnerships.

9 **1. Local Government and Agency Partnerships**

10 **a. City of San Diego, City of Chula Vista and County of**
11 **San Diego**

12 SDG&E proposes the following partnerships with the City of San Diego, the City
13 of Chula Vista and the County of San Diego. One of the innovative approaches that these
14 partnerships will be testing is expedited permit processing for construction projects (new
15 and retrofit) that exceed Title 24 standards as an alternative to providing incentives to
16 contractors and builders. Program participants will forego receiving utility incentive
17 payments in exchange for expedited approval of their requested building permits or land
18 use. SDG&E and these local governments will continue to work with interested
19 stakeholders to develop program guidelines and identify resources needed for this
20 innovative approach to be implemented effectively.

21 Another component of the partnership is to link community resources to form
22 self-sustaining education and outreach channels between the local governments and their
23 constituents and also between local governments. Proposals range from utilizing
24 community centers, community-organized events and other local institutions such as the

1 City of San Diego's Ridgehaven facility to provide education and outreach to their
2 residents.

3 These three local governments will also serve as catalysts to encourage other local
4 governments, through peer-to-peer interaction, by sharing lessons learned and best
5 practices to develop their own strategic plan to achieve energy efficiency at their facilities
6 and reduce their environmental impact.

7 Local governments can also serve as a model of energy efficiency by adopting
8 best practices and upgrading their facilities to be state-of-the-art buildings. To support
9 this endeavor, cities will have committed staff resources to ensure that energy efficiency
10 projects are identified, completed and installed.

11 **b. San Diego County Water Authority and City of San**
12 **Diego Water Resources**

13 The objective of this partnership is to align the water conservation regional goals
14 and energy efficiency goals. SDG&E is committed to support energy efficiency clothes
15 washers (residential and commercial) that also meet water efficiency standards set by
16 these water agencies. SDG&E will leverage the existing voucher system that these water
17 agencies use in providing rebates to customers. This collaboration will also explore other
18 applications that reduce energy consumption and promote water conservation such as
19 pre-rinse spray heads.

20 Water conservation efforts can also result in significant energy savings from less
21 water pumping and filtration at water pumping stations. SDG&E will collaborate with
22 these agencies, the CEC and other statewide entities to quantify these savings.

1 **2. State Institutional Partnerships**

2 SDG&E, together with PG&E, SCE and SoCalGas, propose three partner
3 programs with the University of California System/California State University System,
4 Community Colleges and the Department of Corrections, respectively. These programs
5 will focus on energy efficient retrofit and/or new construction projects, retro-
6 commissioning, facility manager training that will include best practices for identifying
7 and implementing energy efficiency projects. Other potential collaboration opportunities
8 may include development of procurement policies that will require purchases of energy
9 efficiency equipment and energy efficiency education curriculum for students at
10 educational institutions.

11 **3. Education & Training Partnership Program**

12 The Education & Training Partnership is a collaborative effort between two
13 existing successful programs—the SDREO Energy Resource Center (“ERC”) and
14 SDG&E’s statewide Education and Training Program. To maximize outreach
15 opportunities, SDG&E and SDREO will develop a comprehensive training portfolio,
16 which will include workshops, training seminars and promotional events. The training
17 portfolio will provide information on state-of-the-art energy efficiency practices and
18 equipment and leverage resources from the other utility ERCs. This program is an
19 integral component of SDG&E’s energy efficiency portfolio because it serves as a
20 catalyst for meeting SDG&E long-term energy savings goals. Customers will tend to
21 implement energy efficiency projects as a result of participating in these workshops and
22 seminars and will continue to favor energy efficiency options when faced with decisions
23 involving their energy usage.

1 **V. Fund-Shifting and Portfolio Flexibility Proposal**

2 D.05-04-051 directs the utilities and their Program Advisory Groups (“PAG”) to
3 develop fund-shifting rules and submit them as part of the utilities’ 2006-2008
4 applications for Commission consideration. The Commission challenged utilities to
5 develop fund shifting guidelines that (1) balance the need to provide the IOUs with
6 sufficient flexibility so that they can effectively manage their portfolio during the
7 program cycle to meet the Commission-adopted savings goals with a cost effective
8 portfolio of programs: and (2) allow the Commission to adopt program plans that are
9 meaningful in its funding decision in order to commit such a large amount of ratepayer
10 funding to the IOUs and to inform the resource planning process.¹¹ With this in mind,
11 SDG&E discussed its preliminary proposal with its PAG at the May 9, 2005 PAG
12 meeting. There was lively debate and several recommendations emerged regarding the
13 fund shifting rules proposal. After further consultation with its Peer Review Group
14 (“PRG”), SDG&E revised its proposal.

15 SDG&E proposes to extend some of the Commission authorized fund shifting
16 guidelines governing the 2004-2005 procurement-funded energy efficiency programs to
17 the 2006-2008 energy efficiency programs, both PGC- and procurement-funded. The
18 current procurement fund shifting rules provide the utilities with the necessary flexibility
19 to manage the portfolio and optimize its resource potential. The current rules, which we
20 propose to extend, require notification to the Commission of all funding shifts including
21 shifts: (1) among programs, (2) between programs and (3) between budget categories
22 within a program. SDG&E proposes to continue these notifications to the Commission at

¹¹ D.05-04-051 at pages 27–28.

1 regular reporting requirement intervals (e.g., monthly). Additionally, SDG&E proposes
2 to make specific allowances for three programs (i.e., Emerging Technologies, Codes and
3 Standards and Statewide Marketing and Outreach), which would require pre-Commission
4 approval before funds could be shifted away from these programs.

5 The proposal to extend the current flexibility will allow the IOUs to respond
6 accordingly to programs that are under-achieving as well as allowing for increases in the
7 funding for programs that are clearly producing cost effective energy savings and demand
8 reductions. The flexibility, in combination with the IOUs proposed competitive bid
9 process, will allow the IOUs to identify and incorporate new programs that will produce
10 cost effective energy and demand savings. The IOUs proposal also addresses the concern
11 of the Commission to reduce the number of rulings for such things as program extensions
12 and fund shifts while at the same time providing the Commission current information on
13 program changes, which occur during the three-year program cycle.¹² The following are
14 the specifics of the fund shifting proposal:

15 If any of the thresholds listed below are reached, SDG&E should consult with the
16 PRG at least 15 days prior to its proposed action. If a simple majority of the PRG is in
17 agreement with the utility regarding the action, then no formal PUC process is needed
18 (other than complying with the Commission's reporting requirements). If no agreement
19 is reached, then the utility should file an advice letter and the Commission should make
20 every effort to act on the advice letter within 30 days. Prompt action is absolutely
21 essential to ensure that

¹² D.05-04-051 at p. 28.

1 SDG&E is able to use its best judgment as portfolio administrator to meet the savings
2 goals for which the Commission will hold SDG&E accountable and upon which
3 SDG&E's resource portfolio managers are relying. This process would be triggered if
4 SDG&E's proposed action would trigger the following thresholds:

- 5 • Administrative costs exceed 105% of the approved costs at the portfolio level.¹³
- 6 • Fund shifting among programs exceeds 25% OR \$3 million, whichever is less, on
7 an annual basis.
- 8 • Fund shifting among programs exceeds 50% on a cumulative basis.
- 9 • Funding for codes and standards, emerging technologies, statewide marketing and
10 outreach, or EM&V is reduced.
- 11 • The percent of portfolio funding allocated to non-utility implementers falls below
12 20%.
- 13 • Implementing a new program outside of the competitive solicitation process.

14 As much as possible, the utility's consultations with the PRG should occur at
15 quarterly meetings, but SDG&E should not be precluded from bringing items to the PRG
16 at other times using various means of communication such as e-mail, conference calls, or
17 meetings. At the quarterly PRG meetings, SDG&E should review the status of the
18 programs and the portfolio with the PAG, and discuss any funds shifted within that
19 period. In addition, SDG&E will also present any program fund shifting activities to the
20 PAG at its quarterly meetings.

21 **VI. Competitive Bid Process**

22 Competitive solicitations can help identify new and innovative approaches or
23 technologies for meeting the energy savings goals with improved performance that may
24 not otherwise be identified during the program planning cycle. D.05-01-055 directs the

¹³ By "administrative costs" we refer to true administrative costs, rather than the definition of administrative costs used in the TRC test.

1 utilities to identify a minimum of 20 percent of funding for the entire portfolio that will
2 be put out to competitive bid to third parties or non-utility parties, identify the portions of
3 the portfolio to put out to bid, and develop a proposed bid evaluation criteria. The
4 portions to be put out to bid could encompass programs currently designed and delivered
5 by a combination of utility and non-utility program implementers. SDG&E, in
6 consultation with its PAG and its PRG, proposes a competitive bidding approach and
7 bidding criteria to be implemented for this program cycle. The competitive bid process
8 proposed by SDG&E is a comprehensive and multi-faceted approach that draws from the
9 skill, experience, and creativity of the energy efficiency community. SDG&E's
10 competitive bid proposal will help to enhance current program design as well as identify
11 newer approaches to capturing cost effective energy savings.

12 **A Targeted Solicitation**

13 SDG&E has identified the following specific areas that it believes through a
14 competitive solicitation process will yield innovative and cost effective approaches:

15 Multi-family Affordable Housing Retrofit Program: Targets customers living in
16 multi-family homes in CEC climate zones 14 and 15 (inland and desert, respectively) that
17 have air conditioning systems. The program will provide incentives for contractors to
18 perform comprehensive retrofits of: the thermal shell (windows, insulation, radiant
19 barriers), HVAC system, water heating system, lighting fixtures, refrigerator, and
20 dishwasher

21 Advanced Home Renovations Program: Promotes residential comprehensive
22 retrofit approaches with a cross cutting focus to emerging technologies, sustainable
23 design, green construction practices and increasing the effectiveness and awareness of

1 code and standards while reducing nonrenewable energy consumption that includes
2 ecological site design, waste reduction and efficient use of material, renewable energy
3 and indoor environmental quality.

4 Appliance Recycling: Recycles refrigerators, freezers, commercial refrigeration
5 units, and air conditioners in an environmentally safe manner.

6 Nonresidential Technology Demonstration Program: Identify and target new
7 technologies, and innovative designs and work with host customers to demonstrate the
8 achievable energy savings from the energy efficiency measure/design.

9 HVAC Training, Sizing, Duct Services: Provide proper training, equipment, or
10 verification methods to ensure proper installation of HVAC systems; commissioning
11 existing and new HVAC systems (ducts and economizers included), duct testing and
12 sealing services in residential and commercial market segments.

13 Upstream Distributor Program: Provide and manage an incentive program for
14 distributors to stock high efficiency motors and HVAC systems.

15 School Education Programs: Provide a comprehensive approach to the largest
16 number of students/schools in the most cost effective manner by introducing an energy
17 efficiency curriculum to students, provide training to teachers and offer opportunities for
18 students to implement lessons learned.

19 **B. Innovative Program Idea Solicitation**

20 In addition to the targeted solicitation, SDG&E proposes to conduct a general
21 solicitation to seek new program designs that may include commercialization/
22 demonstration projects for emerging technologies that have a potential for cost effective

1 energy savings. The winning bidders will be allowed up to two years to implement and
2 complete their programs. This will allow sufficient time to test and verify the program's
3 design and potential for delivering savings. Based on program implementation
4 experience, some programs that promote emerging technologies are costly to implement
5 and/or do not show immediate cost effective energy and demand savings, hence are not
6 cost effective. SDG&E is proposing to provide such programs an opportunity to test the
7 market feasibility for newer energy efficiency emerging technologies and different
8 market approaches for a limited time. Although they may not yield immediate cost
9 effective energy savings they do have potential for longer term energy savings. This
10 approach is also consistent with the Commission's 2006 energy efficiency policy to
11 encourage innovation from promising new technologies over the longer-term.¹⁴ SDG&E
12 has patterned this portion of the competitive bid after SCE's IDEEA program.

13 **C. Bid Process**

14 The competitive bid process involves multiple steps with several review loops by
15 SDG&E that allow for process checks and to ensure the solicitation process moves
16 forward and for best portfolio fit that meets SDG&E's long term energy efficiency plan.
17 The following identifies and describes the bid process and steps proposed by SDG&E.

18 **1. Pre-announcement**

19 A pre-announcement will be sent to all energy efficiency providers, engineering
20 firms, consultants, government organizations, and non-profit organizations. This widely
21 distributed announcement shall notify Parties of the programs subject to the competitive
22 bid solicitation process. These organization contacts shall be encouraged to share and

¹⁴ D.05-04-051, p.54.

1 forward program information to ensure the widest coverage. SDG&E understands that
2 through time, key decision makers and contacts for these organizations change. This pre-
3 announcement allows for potential bidder information to be updated and a list of new e-
4 mail notification addresses for the forthcoming solicitation announcement to be
5 developed. In addition SDG&E's Website shall link to an announcement page for
6 prospective bidders for the Targeted and Innovative Program Idea Solicitation. This link
7 will also be posted on the CPUC website and other energy efficiency forums.

8 **2. Solicitation**

9 The beginning of this sealed bid process starts with an official notification. This
10 two-stage process includes an abstract submission ("Stage I") and a full proposal
11 submission ("Stage II"). This process allows SDG&E as part of Stage I to solicit and
12 receive as many program abstracts or concept papers from potential bidders without
13 having to burden them with the preparation of a full proposal.

14 The solicitation list shall be from the original pre-announcement and additions to
15 that list as a result of the mass notification. An announcement and registration to be
16 included in this sealed bid process shall be available in www.sdge.com. The full version
17 of the RFP will be available for download. However, to be able to respond to this RFP.,
18 the prospective bidder must register and receive a confirmation E-mail from SDG&E. As
19 an official sealed bid process, non-registered RFP respondents shall be asked to register
20 first or be rejected if the deadline for registration is missed.

21 **3. Abstract Submission (Stage I)**

22 Due to the expected large volume of abstracts, the evaluation shall be fairly
23 subjective with a high level review of program concepts. SDG&E Supply Management

1 and Energy Efficiency staff (program managers, analysts, and engineers) will review the
 2 submitted abstracts. Abstracts proposing resource programs shall receive technical
 3 energy savings review from SDG&E's Engineering staff (technical documentation that
 4 substantiates energy savings is a required attachment to the abstract). Recommendations
 5 from these reviewers will be submitted to energy efficiency portfolio managers for final
 6 review and approval. Selected Stage I bidders will be notified of selection and will be
 7 asked to develop a full proposal based on the concepts of the abstract. The abstract will
 8 be limited to no more than ten pages (excluding technical documentation). The following
 9 criteria will be used to screen the abstracts.

10 For Resource Programs:

Criteria	Weights
Proposal Responsiveness	pass/fail
kWh and kW Savings Requires technical documentation substantiating energy savings.	40%
Program Concept Description of program strategy, description on how it fits into the portfolio	35%
Program Innovation Sound program logic/theory demonstrating how program design and objectives are innovative and consistent with CPUC objectives	25%

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1 For Non-Resource Programs:

Criteria	Weights
Proposal Responsiveness	pass/fail
Program Strategy Description of program strategy, description of how it fits into the portfolio	60%
Program Innovation Sound program logic/theory demonstrating how program design and objectives are innovative and consistent with CPUC objectives	40%

2

3 **4. Proposal Submission (Stage II)**

4 The proposal submission for all programs is aided by a web-based submission of
5 the soft copies of the proposals and its attachments. Hard copies of the proposal will be
6 required to be submitted to SDG&E, but the soft copies will be uploaded into a system
7 that provides content validation documentation completeness. This central repository
8 allows SDG&E to model a certain portfolio program mix that meets the utility needs and
9 delivers cost-effective customer-based programs.

10 The proposal review process involves a complete evaluation of each proposal
11 with the proposed evaluation criteria listed in the next section. Evaluation teams are
12 organized with each team comprised of program management, marketing, and
13 engineering members. The proposal review process ensures that an evaluation of all
14 aspects of the program is completed. In addition, a cost effectiveness and budget
15 evaluation is done as part of the process. The proposals are ranked from high to low and
16 certain evaluation categories such as energy savings realization is taken into
17 consideration. This ranking is presented to management (“portfolio managers”) for
18 determination of program suitability.

1 **5. Program Portfolio**

2 It is the task of the portfolio managers to ensure that the contractors, program
3 designs, and technologies all fit into SDG&E’s overall energy efficiency portfolio. To
4 that end, the portfolio managers evaluate the reviewed program proposals and hold an
5 open discussion with the review teams. This forum is designed to discuss the strengths
6 and weaknesses of each program design and how it may or may not coordinate with the
7 overall portfolio. Any proposal discrepancy, changes, and suggested improvements are
8 noted and if the program is selected for implementation, these suggested changes are
9 incorporated by the winning bidder into the program design.

10 **D. Bid Evaluation Criteria**

11 Each of SDG&E’s two solicitations will have a unique set of criteria (i.e., targeted
12 and innovative). The following criteria categories, listed below, will include sub-criteria
13 which will assist in the scoring of the responsive proposals.

14 **Targeted Program Solicitation: Resource Programs**

Criteria	Weights
Proposal Responsiveness Includes financial stability, proof of applicable licenses	pass/fail
kWh and kW Savings	30%
Cost Effectiveness (Levelized Costs, TRC/PAC Tests) Budgets: administration, direct implementation, marketing, and outreach	25%
Program Implementation Description of program strategy, description on how it fits into the portfolio, address final PRG priorities, includes skills and experience, qualifications, delivery track record, etc.	25%
Program Innovation Sound program logic/theory demonstrating how program design and objectives are innovative and consistent with CPUC objectives	15%
Minimizing Lost Opportunities	5%

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Targeted Program Solicitation: Non-Resource Programs

Criteria	Weights
Proposal Responsiveness Includes financial stability, proof of applicable licenses	pass/fail
Budgets Administration, direct implementation, marketing and outreach	30%
Program Implementation Description of program strategy, description on how it fits into the portfolio, address final PRG priorities, includes skills and experience, qualifications, delivery track record, etc.	35%
Program Innovation Sound program logic/theory demonstrating how program design and objectives are innovative and consistent with CPUC objectives	25%
Minimizing Lost Opportunities	10%

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Innovative Program Solicitation: Resource Programs

Criteria	Weights
Proposal Responsiveness Includes financial stability, proof of applicable licenses	pass/fail
kWh and kW Savings	20%
Cost Effectiveness (Levelized Costs, TRC/PAC Tests) Budgets: administration, direct implementation, marketing & outreach	20%
Program Implementation Description of program strategy, description on how it fits into the portfolio, address final PRG priorities, includes skills and experience, qualifications, delivery track record, etc.	20%
Program Innovation Sound program logic/theory demonstrating how program design and objectives are innovative and consistent with CPUC objectives	35%
Minimizing Lost Opportunities	5%

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Innovative Program Solicitation: Non-Resource Programs

Criteria	Weights
Proposal Responsiveness Includes financial stability, proof of applicable licenses	pass/fail
Budgets Administration, direct implementation, marketing and outreach	25%
Program Implementation Description of program strategy, description on how it fits into the portfolio, address final PRG priorities, includes skills and experience, qualifications, delivery track record, etc.	25%
Program Innovation Sound program logic/theory demonstrating how program design and objectives are innovative consistent with CPUC objectives	45%
Minimizing Lost Opportunities	5%

Emerging Technology Commercialization Solicitation: Resource Programs

Criteria	Weights
Proposal Responsiveness Includes financial stability, proof of applicable licenses	pass/fail
kWh and kW Savings	20%
Cost Effectiveness (Levelized Costs, TRC/PAC Tests) Budgets: administration, direct implementation, marketing & outreach	20%
Program Implementation Description of program strategy, description on how it fits into the portfolio, address final PRG priorities, includes skills and experience, qualifications, delivery track record, etc.	20%
Program Innovation Sound program logic/theory demonstrating how program design and objectives are innovative consistent with CPUC objectives	35%
Minimizing Lost Opportunities	5%

E. Proposed Schedule for the Competitive Bid Process

The following is the proposed schedule for the Competitive Solicitation process.

This proposed schedule is aggressive and assumes the following: (1) no hearings are

1 required; and (2) SDG&E and its PRG will not be in disagreement with the final
 2 selection(s) which will require an Advice Letter rather than application filing with the
 3 CPUC. SDG&E proposes this schedule in order to allow selected non-utilities to
 4 implement their programs as early as possible to the start of date of the new program
 5 cycle.

Year	Month	Task	Duration (Days)	Start Date	Finish Date
2005	June	Utilities submit 2006-2008 Energy Efficiency Application	1	1-Jun-05	1-Jun-05
	July	Comment/Reply Period on Utility Applications	45	1-Jun-05	15-Jul-05
	August	Commission issues Draft Decision; Comments/Reply comments	25	1-Aug-05	25-Aug-05
	September	Commission issues Final Decision adopting Solicitation Criteria and Bid Process	1		
		RFP Pre-notification	1	1-Sep-05	1-Sep-05
		RFP Release Date	12	5-Sep-05	16-Sep-05
		Stage 1--Pre screening of Abstracts	12	19-Sep-05	30-Sep-05
		Notice to Submit Full Proposal	1	30-Sep-05	30-Sep-05
	October	RFP Questions Due	7	30-Sep-05	6-Oct-05
		RFP Question Replies	1	10-Oct-05	10-Oct-05
		Proposals Due	1	21-Oct-05	21-Oct-05
		Total no. of days to prepare proposals excluding Abstract Stage	33	19-Sep-05	21-Oct-05
		Review of final proposals	12	24-Oct-05	4-Nov-05
	November	Presentation to PRG of Final Selection	1	7-Nov-05	7-Nov-05
		Preparation of Utility Submittal Incorporating Final Selection of Non-utility programs with PRG Input	11	8-Nov-05	18-Nov-05
		Utility submittal of Full Portfolio including Non-utility selection	1	18-Nov-05	18-Nov-05
	December	Commission Approves Final Portfolio including Non-utility selection	1	31-Dec-05	31-Dec-05
	January	Final contract Discussion and signing with Non-utility implementers	31	1-Jan-06	31-Jan-06

1 **VII. Evaluation, Measurement and Verification**

2 D.05-01-055, also created a new EM&V Administrative Structure. The EM&V
3 function is responsible for (1) developing EM&V policies, protocols and reporting
4 requirements for Commission consideration; (2) contracting for EM&V studies, and (3)
5 assessing the results of these studies. Given these responsibilities, the Commission has
6 determined that the Energy Division will assume management and contracting
7 responsibilities for all EM&V studies that are program and portfolio impacts-related.
8 The Decision, however, authorizes the IOU Portfolio Managers to manage a limited
9 subset of evaluation studies that provide information to improve program delivery (e.g.,
10 process evaluations) and for as long as there is not potential for conflict due to the nature
11 of the study. Although the utilities may manage these types of studies, the Energy
12 Division shall retain a lead role in the selection of contractors.

13 Additional direction for development of EM&V Protocols, identification of
14 required studies and roles in the future implementation of EM&V studies is provided in
15 D.05-04-051 and the April 20, 2005 Administrative Law Judge's Ruling Adopting
16 Implementation Roadmap for Evaluation, Measurement and Verification. SDG&E will
17 actively participate in the public workshops and the public comment process since the
18 Commission expects that the Joint Staff (CEC and the Energy Division) will utilize the
19 experts of the Energy Division's EM&V consultants, utility technical experts and other
20 experts as necessary to develop EM&V protocols. SDG&E also expects that once the
21 EM&V Protocols are developed and the necessary studies are identified, it will be
22 possible to determine the actual level of EM&V funding required for the program cycle
23 and specific budgets for the various projects will be developed. At that time, SDG&E

1 expects the Commission to direct the utilities to augment their June 1 applications or
2 submit a compliance filing detailing EM&V plans, funding levels and budget allocations
3 across study categories that are jointly developed by the utilities and Energy Division to
4 comply with D.05-01-055 Ordering Paragraph 7.

5 This concludes my prepared direct testimony.

1 **QUALIFICATIONS**

2 My name is Athena M. Besa. My business address is 8335 Century Park Court,
3 Suite 1200, San Diego, California 92123-1257. I am employed by San Diego Gas &
4 Electric Company as the Energy Efficiency Administration and Policy Manager in the
5 Mass Markets Department for SDG&E and SoCalGas. In my current position, I am
6 responsible for the measurement of energy efficiency and customer assistance programs
7 and the measurement and analysis of demand-side management ("DSM") programs,
8 regulatory reporting requirements, energy efficiency forecasting and the financial
9 management of my department. I also serve as the SDG&E and SoCalGas'
10 representative to the California Demand Side Management Measurement Advisory
11 Committee ("CADMAC") and the California Measurement Advisory Council
12 ("CALMAC").

13 I attended the University of the Philippines in Quezon City, Philippines. I gradu-
14 ated with a Bachelor of Science degree in Statistics in 1983, and a Master of Science
15 degree in Statistics in 1986. I have completed coursework at University of California,
16 Davis towards a Doctorate degree in Statistics.

17 I was hired by SDG&E in 1990 in the Load Research Section of the Marketing
18 Department. Since that time I have held positions of increasing responsibility in the
19 Department. I have been in my present position for two years. I have previously testified
20 before this Commission in numerous AEAPs and the PY2000/2001 Energy Efficiency
21 Program Application Proceeding.

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2 Attachment A--Attachment 1 of ED DR workbook

3 Attachment B--Attachment 2 of ED DR workbook

4 Attachment C—Program Concept Papers

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6

Attachment A

Besa Testimony

San Diego Gas & Electric Company

Attachment I of ED DR workbook

Attachment I. Summary Table for Executive Summary

Projected Program Impacts By Year

	2006		2007		2008	
	Total	% of 2006 Goal	Total	% of 2007 Goal	Total	% of 2008 Goal
Energy Savings – Electricity						
Annual Net Electricity Savings (GWh/yr)	307	109%	337	118%	378	133%
CPUC Electricity Target (GWh/yr)	281	0%	285	0%	284	0%
Annual Net Peak Demand Savings (MW)	63	116%	70	130%	80	147%
CPUC Peak Demand Target (MW)	55	0%	54	0%	54	0%
Annual Net Therm Savings (MTh/yr)	2,775	103%	3,069	99%	3,693	100%
CPUC Therm Target (MTh/yr)	2,700	0%	3,100	0%	3,700	0%

Portfolio Cost Effectiveness

Costs and Benefits*	
Total costs to billpayers (TRC)	\$ 299,443,761
Total savings to billpayers (TRC)	\$ 579,619,963
Net benefits to billpayers (TRC)	\$ 346,123,712
TRC Ratio	1.94
PAC Ratio	2.18
Cost per kWh saved (cents / kWh) (PAC)	0.03443
Cost per therm saved (\$ / therm) (PAC)	0.18617

*Note: Does not include costs or benefits associated with the low-income energy efficiency programs.

Environmental Benefits	
Lifecycle CO2 Emission Reductions (tons)	
Lifecycle NOx Emission Reductions (tons)	
Lifecycle SO2 Emission Reductions (tons)	

*Note: Energy savings include savings from the low-income energy efficiency programs, whereas the costs and benefits are only for the standard energy efficiency programs.

Attachment B

Besa Testimony

San Diego Gas & Electric Company

Attachment II of ED DR workbook

Attachment II. Tables for Sections 3.2 and 3.3

Projected Program Impacts By Year

	2006		2007		2008	
	Total	% of 2006 Goal	Total	% of 2007 Goal	Total	% of 2008 Goal
Energy Savings – Electricity						
Annual Net Electricity Savings (GWh/yr)	307	105%	337	118%	373	133%
LIEE (GWh/yr)	6		6		6	
EE (GWh/yr)	301		331		372	
Annual Net Electricity Goal (GWh/yr)	281		285		284	
Lifecycle Net Electricity Savings (GWh)						
LIEE (GWh)	86		86		86	
EE (GWh)	2,412		2,730		3,168	
Cumulative Net Electricity Savings (GWh/yr)						
LIEE (GWh/yr)	6		12		18	
EE (GWh/yr)	301		632		1,004	
Cumulative Net Electricity Goal (GWh/yr)	281		566		850	
Annual Net Peak Demand Savings (MW)						
LIEE (MW)	1		1		1	
EE (MW)	62		69		78	
Annual Net Peak Demand Goal (MW)	55		54		54	
Cumulative Net Peak Savings (MW)						
LIEE (MW)	1		2		3	
EE (MW)	62		131		210	
Cumulative Net Peak Goal (MW)	55		109		163	
Energy Savings – Natural Gas						
Annual Net Therm Savings (MTh/yr)	2,775	103%	3,069	99%	3,693	100%
LIEE (MTh/yr)	157		156		156	
EE (MTh/yr)	2,618		2,913		3,537	
Annual Net Therm Goal (MTh/yr)	2,700		3,100		3,700	
Lifecycle Net Therm Savings (MTh)						
LIEE (MTh)	1,581		1,571		1,571	
EE (MTh)	24,316		28,092		34,501	
Cumulative Net Therm Savings (MTh/yr)						
LIEE (MTh/yr)	157		313		469	
EE (MTh/yr)	2,618		5,531		9,068	
Cumulative Net Therm Goal (MTh/yr)	2,700		5,800		9,500	
Environmental Benefits						
Annual CO2 Emission Reductions (tons)						
Lifecycle CO2 Emission Reductions (tons)						
Annual NOx Emission Reductions (tons)						
Lifecycle NOx Emission Reductions (tons)						
Annual SO2 Emission Reductions (tons)						
Lifecycle SO2 Emission Reductions (tons)						

Projected Funding By Year

	2006		2007		2008		Total
	Total	% of Total	Total	% of Total	Total	% of Total	
Total EE Program budget*	\$81,146,329	29%	\$81,438,242	32.87%	\$106,666,239	38%	\$278,143,810
PGC Budget	\$56,353,329		\$44,187,496		\$42,415,164		\$142,955,989
Procurement Budget	\$24,793,000		\$47,250,746		\$63,144,075		\$135,187,821

Portfolio Cost Effectiveness

Costs and Benefits*	
Total costs to billpayers (TRC)	\$ 299,443,761
Total savings to billpayers (TRC)	\$ 579,619,963
Net benefits to billpayers (TRC)	\$ 346,123,712
TRC Ratio	1.94
PAC Ratio	2.18
Cost per kWh saved (cents / kWh) (PAC)	\$0.0344
Cost per therm saved (\$ / therm) (PAC)	\$0.1852

* Note: Does not include costs or benefits associated with the low-income energy efficiency programs.

Projected Funding and Energy Savings by Sector

	Funding	% of Total	Savings (Net kWh)	% of Total	Savings (Net Therms)	% of Total
Residential	\$ 21,487,200	8%	62,771,872	6%	1,732,676	19%
Residential New Construction	\$ 8,334,580	3%	6,853,433	1%	249,143	3%
Non-Residential	\$ 115,976,066	42%	441,110,531	44%	4,301,654	47%
Non-Residential New Construction	\$ 13,599,939	5%	20,660,512	2%	351,503	4%
Other	\$ 118,746,025	43%	472,475,346	47%	2,432,971	27%
Total Funding	\$ 278,143,810		1,003,871,693		9,067,946	

Projected Funding and Energy Savings by Implementer

	Funding	% of Total	Savings (Net kWh)	% of Total	Savings (Net Therms)	% of Total
Utility	\$ 192,717,893	69%	800,045,513	80%	5,667,057	62%
Partnership	\$ 25,534,574	9%	35,526,180	4%	1,780,889	20%
Third Party	\$ 59,891,343	22%	168,300,000	17%	1,620,000	18%
Total Funding	\$ 278,143,810		1,003,871,693		9,067,946	

Projected Funding and Savings by Geographical Scope

	Funding	% of Total	Savings (Net kWh)	% of Total	Savings (Net Therms)	% of Total
Statewide	\$ 119,946,475	43%	486,709,700	48%	4,684,779	52%
Local	\$ 158,197,335	57%	517,161,993	52%	4,383,167	48%
Total Funding	\$ 278,143,810		1,003,871,693		9,067,946	

Projected Savings by End-use

	MW	% of Total	GWh	% of Total	MTh	% of Total
Total	209,394,373		1,903,371,693		80,679,461,129	
Space Cooling/Heating	15,786,868	8%	84,413,296	8%	15,513,446	17%
Lighting	112,111,686	53%	548,060,485	55%	0	0%
Refrigeration	7,546,368	4%	80,819,729	8%	0	0%
Water Heating	0,867,194	0%	3,196,555	0%	1820,805	20%
Other	73,452,046	35%	287,381,909	29%	5,695,297	63%
Residential	93,051,904	44%	339,281,464	36%	173,267,565	19%
Space Cooling/Heating	0,778,309	0%	0,757,081	0%	436,436	5%
Lighting	58,997,125	28%	316,548,427	32%	0	0%
Refrigeration	0,924,291	0%	6,439,800	1%	0	0%
Water Heating	0,997,194	0%	3,196,555	0%	1,296,239	14%
Other	31,354,452	15%	32,339	3%	0	0%
Nonresidential	106,231,231	51%	617,076,284	61%	67,342,462	74%
Space Cooling/Heating	4,396,842	2%	56,142,269	6%	554,020	6%
Lighting	53,114,564	25%	231,511,729	23%	0	0%
Refrigeration	6,622,241	3%	74,379,821	7%	0	0%
Water Heating	0	0%	0	0%	524,566	6%
Other	42,097,632	20%	255,042,309	25%	5,656,031	62%
Residential New Construction	6,065,832	3%	6,853,432	1%	249,142	3%
Space Cooling/Heating	0	0%	0	0%	0	0%
Lighting	0	0%	0	0%	0	0%
Refrigeration	0	0%	0	0%	0	0%
Water Heating	0	0%	0	0%	0	0%
Other	0	0%	0	0%	39,257	0%
Nonresidential New Construction	4,545,312	2%	20,660,511	2%	3,613,031	4%
Space Cooling/Heating	0	0%	0	0%	0	0%
Lighting	0	0%	0	0%	0	0%
Refrigeration	0	0%	0	0%	0	0%
Water Heating	0	0%	0	0%	0	0%
Other	0	0%	0	0%	0	0%

Attachment C

Besa Testimony

San Diego Gas & Electric Company

Program Concept Papers

San Diego Gas & Electric Company

2006-2008 Energy Efficiency Programs

Program Concept Papers

June 1, 2005

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RESIDENTIAL PROGRAMS

2006-2008 Energy Efficiency Concept Paper Limited Income Refrigerator Replacement Program

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 10,620	\$ 10,544	\$ 10,464
Overhead	\$ 51,930	\$ 51,930	\$ 51,930
Direct Implementation			
Financial Incentives	\$ 1,020,905	\$ 1,020,905	\$ 1,020,905
Activity	\$ -	\$ -	\$ -
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ -	\$ -	\$ -
Rebate Processing and Inspection	\$ 2,565	\$ 2,642	\$ 2,721
Marketing			
Program Specific Marketing	\$ 4,500	\$ 4,500	\$ 4,500
Statewide Marketing			
Total Program Budget	\$ 1,090,520	\$ 1,090,520	\$ 1,090,519

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
283	1,998,100	-	283	1,998,100	-	283	1,998,100	-

3. Program Cost Effectiveness – Attached

4. Program Descriptors

The Limited Income Refrigerator Replacement Program provides refrigerator replacement to limited income customers at no cost. To qualify, customers must be marginally above the Low Income Energy Efficiency (LIEE) program income guidelines but under 250% of the Federal Poverty Guidelines. Program income eligibility, removal of existing unit and delivery of new, efficient refrigerator will be subcontracted to LIEE contractor for program a more streamlined enrollment process.

5. Program Statement

This program provides no-cost refrigerator replacement to limited income customers targeted by the LIEE Program who do not have funds immediately available to pay for energy efficient refrigerators. Participation will be limited to customers who have a refrigerator that is at least 10 years old, between 10 and 19 cubic feet, and can supply income verification and property owner permission (*renters*).

What's New for 2006-08

- “No customers left behind!”- Exciting “Integrated” program approach – Customers who do not qualify for LIEE will be immediately qualified “on site for LIRR by an energy specialist.
- Maximize coordination efforts with the Hard to Reach Lighting Turn-in and Family Electric Rate Assistance for qualified customers

6. Program Rationale

The 2004-05 LIRRL program has been successful at reaching limited income customers who do not income-qualify for LIEE but do need assistance with the purchase of higher-cost energy-efficient appliances. Lost opportunities are minimized because the LIEE Outreach specialists will be able to offer program measures to customers who income-qualify and have older, in-efficient refrigerators.

7. Program Outcomes

The program objective is to produce cost-effective long-term coincident peak demand reduction and long-term annual energy savings by encouraging customers who may not have the financial means to invest in one of the major appliances.

8. Program Strategy

Program coordination with LIEE will be seamless for the customer. When recruiting customers for possible participation in LIEE, contractor will determine income status. If the customer does not income qualify for LIEE, but is within the LIRR Program income guidelines, an assessment of the refrigerator will be performed. If the existing unit qualifies for replacement, the customer will be offered a new energy efficient unit and removal recycling of the older, in-efficient unit. In the case where a landlord owns the existing appliance and pays the energy bill, a refrigerator replacement will be offered to the landlord for a 50% co-pay.

9. Program Objectives

Based on LIEE historical data of the number of customers approached who do not income-qualify; the LIRR Program plans to replace approximately 1500 refrigerators each year.

10. Program Implementation

Customers respond to SDG&E marketing or LIEE Contractor-canvassing in target areas or any customer that might learn about the program from other sources:

- LIEE Contractor schedules appointment for income verification and assessment of existing refrigerator (*retrofit only, existing unit ten years or older*). Customers will receive similar size to replace existing unit. Assessment entered into tracking system with income verification status.
- In home energy specialist provides additional program information including FERA and Lighting Turn-in & Education.
- Contractor sets appointment for refrigerator replacement and removal of old unit.
- SDG&E receives invoices and signed customer acceptance for new refrigerator.

11. Customer Description

The LIRR Program will target limited income customers who are marginally above the income qualification in LIEE but within 250% of Federal Poverty Guidelines. Marketing will be coordinated with the LIEE Program.

12. Customer Interface

Program coordination with LIEE will be seamless for the customer. If they are approached for possible participation in the LIEE program and do not income qualify, but *are* within the LIRR Program income guidelines, an assessment of the refrigerator will be performed. If the existing unit qualifies for replacement, the customer will be offered a new energy efficient unit. The customer will also receive program information on the Family Electric Rate Assistance Program and the Local Lighting Turn-in & Education Program.

13. Energy Measures and Program Activities

13.1. **Prescriptive Measures** See SDG&E June 1, 2005 Filing Workbook

13.2. **kWh Level Data** See SDG&E June 1, 2005 Filing Workbook

13.3. **Non-energy Activities** - None

13.4. **Subcontractor Activities**

The subcontractor for the LIEE program will also be responsible for the delivery of the LIRR Program. The LIEE Outreach Specialist will approach the targeted limited-income customers and enroll the customers for one of the two programs, depending on income guidelines and existing refrigerator age. The subcontractor will be responsible for removal and recycling of old unit and delivery of new, energy-efficient unit.

13.5. **Quality Assurance and Evaluation Activities**

- SDGE performs inspection and customer follow-up on 10% of installations.
- An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs

13.6. **Marketing Activities**

Direct Mail coordination with LIEE, marketing at events, telemarketing to customers that do not respond to direct mail approach.

14. Conclusion

The 2006-2008 Limited Income Refrigerator Replacement Program will offer program coordination to low and limited-income customers through in-home outreach. Income-qualified customers will fall into either LIEE or LIRR and will be offered program measures based on existing units. Program delivery will be performed by the LIEE contractor.

	SDGE3015 LIR-Limited Income Refrigerator Replacement
BUDGET	
Administrative Costs	\$ 187,416
Overhead and G&A	\$ 155,789
Other Administrative Costs	\$ 31,627
Marketing/Outreach	\$ 13,500
Direct Implementation	\$ 3,070,643
Total Incentives and Rebates	
User Input Incentive	\$ -
Direct Install Rebate	\$ 3,062,715
Direct Install Labor	\$ -
Direct Install Materials	\$ -
Activity	\$ -
Installation	\$ -
Hardware & Materials	\$ -
Rebate Processing & Inspection	\$ 7,928
EM&V Costs	\$ -
Budget	\$ 3,271,559
Costs recovered from other sources	\$ -
Budget (plus other costs)	\$ 3,271,559

PROGRAM IMPACTS	
DEER kW (kW)	849
Net NCP (kW)	816
Net CEC (kW)	1,301
Annual Net kWh	5,994,300
Lifecycle Net kWh	59,943,000
Annual Net Therms	-
Lifecycle Net Therms	-
Cost Effectiveness	
TRC	
Costs	\$ 2,425,884
Electric Benefits	\$ 3,614,012
Gas Benefits	\$ -
Net Benefits (NPV)	\$ 1,188,127
BC Ratio	1.49
PAC	
Costs	\$ 2,980,144
Electric Benefits	\$ 3,614,012
Gas Benefits	\$ -
Net Benefits (NPV)	\$ 633,867
BC Ratio	1.21
Levelized Cost	
Levelized Cost TRC (\$/kWh)	
Discounted kWh	40,037,245
Cost	\$ 0.0606
Benefits	\$ 0.0903
Benefit-Cost	\$ 0.0297
Levelized Cost PAC (\$/kWh)	
Discounted kWh	40,037,245
Cost	\$ 0.0744
Benefits	\$ 0.0903
Benefit-Cost	\$ 0.0158
Levelized Cost TRC (\$/therm)	
Discounted Therms	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -
Levelized Cost PAC (\$/therm)	
Discounted Therms	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -

SDGE Limited Income Refrigerator Replacement

Year	Total Budget	Total Incentives	Admin Budget	Net kWh	Net Therms	Net kW
2006	\$ 1,090,520	\$ 1,020,905	\$ 69,615	1,998,100	-	283
2007	\$ 1,090,520	\$ 1,020,905	\$ 69,615	1,998,100	-	283
2008	\$ 1,090,520	\$ 1,020,905	\$ 69,615	1,998,100	-	283

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	216001	13 Watt CFL Interior	21	-	0.00	0.89	Bulb	9.3	-	\$ 3.00	\$ 9.86	-	-	-
2006	216002	20 Watt CFL Interior	42	-	0.01	0.89	Bulb	9.3	-	\$ 3.00	\$ 9.86	-	-	-
2006	216003	13 Watt CFL Exterior	42	-	-	0.89	Lamp	8	-	\$ 3.00	\$ 9.86	-	-	-
2006	216004	13 Watt Porchlight (fixture)	42	-	-	0.89	Unit	16	-	\$ 41.69	\$ 41.69	-	-	-
2006	216005	Torchiere Lamp	184	-	0.04	0.89	Bulb	16	-	\$ 67.88	\$ 22.63	-	-	-
2006	216006	Ceiling Fixture (30 Watt)	69	-	0.01	0.89	Bulb	16	-	\$ 55.45	\$ 55.45	-	-	-
2006	216007	Refrigerator - Early Replacement (15 cubic ft)	1,537	-	0.22	0.8	Unit	10	500	\$560.90	\$560.90	87	614,800	-
2006	216008	Refrigerator - Early Replacement (17 cubic ft)	1,537	-	0.22	0.8	Unit	10	625	\$622.20	\$622.20	109	768,500	-
2006	216009	Refrigerator - Early Replacement (19 cubic ft)	1,537	-	0.22	0.8	Unit	10	400	\$697.70	\$697.70	70	491,840	-
2006	216010	Refrigerator - Early Replacement (21 cubic ft)	1,537	-	0.22	0.8	Unit	10	100	\$725.00	\$725.00	17	122,960	-
2006	216011	23 Watt Integral CFL	59	-	0.01	0.89	Bulb	9.3	-	\$ 9.86	\$ 9.86	-	-	-
2007	216001	13 Watt CFL Interior	21	-	0.00	0.89	Bulb	9.3	-	\$ 3.00	\$ 9.86	-	-	-
2007	216002	20 Watt CFL Interior	42	-	0.01	0.89	Bulb	9	-	\$ 3.00	\$ 9.86	-	-	-
2007	216003	13 Watt CFL Exterior	41,880,687,92	0	0	0.89	Lamp	8	0	\$ 3.00	\$ 9.86	-	-	-
2007	216004	13 Watt Porchlight (fixture)	41,880,687,92	0	0	0.89	Unit	16	-	\$ 41.69	\$ 41.69	-	-	-
2007	216005	Torchiere Lamp	183,5001	0	0.0351918	0.89	Bulb	16	-	\$ 67.88	\$ 22.63	-	-	-
2007	216006	Ceiling Fixture (30 Watt)	69,1821	0	0.0132678	0.89	Bulb	16	-	\$ 55.45	\$ 55.45	-	-	-
2007	216007	Refrigerator - Early Replacement (15 cubic ft)	1537	0	0.21758	0.8	Unit	10	500	\$560.90	\$560.90	87	614,800	-
2007	216008	Refrigerator - Early Replacement (17 cubic ft)	1537	0	0.21758	0.8	Unit	10	625	\$622.20	\$622.20	109	768,500	-

2007	216009	Refrigerator - Early Replacement (19 cubic ft)	1537	0	0.21758	0.8 Unit	10	400	\$697.70	\$697.70	70	491,840	-
2007	216010	Refrigerator - Early Replacement (21 cubic ft)	1537	0	0.21758	0.8 Unit	10	100	\$725.00	\$725.00	17	122,960	-
2007	216011	23 Watt Intergral CFL	59.18913	0	0.01135134	0.89 Bulb	9.3	0	\$ 9.86	\$ 9.86	-	-	-
2008	216001	13 Watt CFL Interior	20.75463	0	0.00398034	0.89 Bulb	9.3	0	\$ 3.00	\$ 9.86	-	-	-
2008	216002	20 Watt CFL Interior	42.27795	0	0.0081081	0.89 Bulb	9.3	0	\$ 3.00	\$ 9.86	-	-	-
2008	216003	13 Watt CFL Exterior	41.88068792	0	0	0.89 Lamp	8	0	\$ 3.00	\$ 9.86	-	-	-
2008	216004	13 Watt Porchlight (fixture)	41.88068792	0	0	0.89 Unit	16		\$ 41.69	\$ 41.69	-	-	-
2008	216005	Torchiere Lamp	183.5001	0	0.0351918	0.89 Bulb	16		\$ 67.88	\$ 22.63	-	-	-
2008	216006	Ceiling Fixture (30 Watt)	69.1821	0	0.0132678	0.89 Bulb	16		\$ 55.45	\$ 55.45	-	-	-
2008	216007	Refrigerator - Early Replacement (15 cubic ft)	1537	0	0.21758	0.8 Unit	10	500	\$560.90	\$560.90	87	614,800	-
2008	216008	Refrigerator - Early Replacement (17 cubic ft)	1537	0	0.21758	0.8 Unit	10	625	\$622.20	\$622.20	109	768,500	-
2008	216009	Refrigerator - Early Replacement (19 cubic ft)	1,537	\$ -	0.22	0.8 Unit	10	400	\$697.70	\$697.70	70	491,840	-
2008	216010	Refrigerator - Early Replacement (21 cubic ft)	1,537	\$ -	0.22	0.8 Unit	10	100	\$725.00	\$725.00	17	122,960	-
2008	216011	23 Watt Intergral CFL	59	\$ -	0.01	0.89 Bulb	9.3		\$ 9.86	\$ 9.86	-	-	-

2006-2008 Energy Efficiency Concept Paper Lighting Exchange Program

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 98,615	\$ 101,632	\$ 104,783
Overhead	\$ 23,810	\$ 24,606	\$ 25,410
Direct Implementation			
Financial Incentives	\$ 192,120	\$ 195,241	\$ 199,242
Activity	\$ 84,455	\$ 93,232	\$ 93,166
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ -	\$ -	\$ -
Rebate Processing and Inspection	\$ -	\$ -	\$ -
Marketing			
Program Specific Marketing	\$ 101,000	\$ 102,018	\$ 111,000
Statewide Marketing			
Total Program Budget	\$ 500,000	\$ 516,730	\$ 533,600

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
426	2,223,337	-	426	2,223,337	-	400	2,086,280	-

3. Program Cost Effectiveness – Attached

4. Program Descriptors

Hard To Reach Lighting and Turn In, is a targeted lighting exchange program, which provides residential customers with the opportunity to exchange inefficient incandescent lighting for energy efficient compact fluorescent lighting at no cost. This residential program targets hard to reach customers who may otherwise not participate in energy efficiency programs. In 2006, the program will continue to offer various compact florescent lighting applications and torchieres as well as explore opportunities to introduce new measures for distribution.

5. Program Statement

This program will provide peak demand reduction and annual energy savings by replacing incandescent and halogen lighting with CFL's in hard-to-reach areas.

Whats new for 2006-2008?

Innovation:

- Introduce “new” and “innovative” measures
- Workplace exchange events to maximize employee participation

Integration:

- Link events to residential and multi-family rebates
- Promote demand response program
- Promote low-income programs CARE and DAP
- School outreach solicitation

Other Program Improvements:

- New “On-line” event application

6. Program Rationale

Conversion to CFL's in the hard to reach market segment continues to lag behind the general residential market. Because CFL's are typically priced higher than incandescent or halogen lighting; the no cost aspect to the customer is both necessary and effective. The program is designed to help these residential customers achieve long-term annual energy savings and peak demand reductions by replacing lighting applications. Hard-to-reach customers often have limited resources to dedicate to increasing their energy efficiency, and often need help in overcoming barriers such as costs and the need for credible educational information and advice in English and other languages. The program provides the necessary education, and availability for energy efficient lighting.

7. Program Outcomes

The program reduces energy use in the residential market while helping customers that normally would not be able to install energy efficiency lighting. The program will encourage hard to reach residential customers to exchange their incandescent lighting for energy efficient CFL's at no cost to the customer. The overall program outcome will contribute toward the annual and cumulative savings goals, over the short and long term.

8. Program Strategy

The single most critical aspect of the lighting exchange program is the promotion of events. Promotion will consist of the following:

- Event flyers will be distributed to schools, churches, senior centers, CBO's, faith based organizations and local governments.
- Direct mailings will be sent out to customers that live within zip codes surrounding the event location
- Local radio spots to promote the event
- Events will be posted on the SDG&E website

Through partnerships with local communities, agencies, city and county governments, the program can provide customers a more complete portfolio of programs as opposed to a single lighting turn in program. Education on other SDG&E programs such as the CARE, DAP, residential rebates and demand response programs offers a one stop shop for customers.

9. Program Objectives

The primary objective is to deliver a highly cost-effective program and incorporate "lessons learned" from prior years and look for new opportunities in the process. In addition, SDG&E will seek new measures these could include holiday lighting, CFL desk and table lamps and space heaters for implementation as new technologies become available.

10. Program Implementation

To accomplish a greater level of program participation by providing a no up front cost program by exchanging incandescent lighting for energy efficient CFL's to customers in hard to reach zip codes. New approaches will be implemented:

- Develop and on-line application form that customers can print and fill out prior to the turn in event.
- Focus on employers in traditionally lower paying industries to participate in workplace lighting exchanges.
- Work with service club organizations (Elks, Rotary, etc) to educate them on the program and encourage them to reach out to their communities.
- Participate with local school activities and PTA events to incorporate lighting exchanges

11. Customer Description

Homeowners and renters in lower income/underserved areas in SDG&E service territory.

12. Customer Interface

The program is designed to provide maximum ease for customers to participate in exchanging their incandescent bulbs and torchieres for compact florescent lighting at convenient neighborhood locations. These events will be held in conjunction with local community agencies. The program manager and community facilitation will coordinate site locations.

13. Energy Measures and Program Activities

13.1. **Prescriptive Measures** See SDG&E June 1, 2005 Filing Workbook

13.2. **kWh Level Data** See SDG&E June 1, 2005 Filing Workbook

13.3. **Non-energy Activities** - None

13.4. **Subcontractor Activities** – None

13.5. **Quality Assurance and Evaluation Activities**

Random event surveys will be conducted to determine the overall satisfaction of participating customers. A program review committee will respond to survey results as necessary to improve customer service and program effectiveness.

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs

13.6. **Marketing Activities** –

When asked, customers frequently indicate learning of the lighting Turn-in Program, through a direct mailing or through an insert in their SDG&E bill. These marketing approaches along with partnerships with cities, counties, and community based organizations help to promote the program to customers. Specific marketing activities will include the following:

- Targeted direct mailings to surrounding lighting event zip codes.
- Distribution of flyers by outreach specialists to event area agencies, government offices, schools, churches,

- SDG&E branch offices and retail stores.
- Low or no cost ads
- SDG&E website.

14. Conclusion

The 2006-2008 program will continue to participate in larger turn-in events coordinated with local governments, but will also work through employers in traditionally low paying industries to bringing the lighting exchange to the workplace. SDG&E will also work with service clubs and smaller agencies to educate them on programs and offering lighting events at their organized activities. Using these combined approaches, SDG&E will target 19,500 households in 2006-2008

	SDGE3006 DLP-Lighting Exchange and Education	
BUDGET		
Administrative Costs	\$	378,855
Overhead and G&A	\$	73,825
Other Administrative Costs	\$	305,030
Marketing/Outreach	\$	314,018
Direct Implementation	\$	857,457
Total Incentives and Rebates		
User Input Incentive	\$	-
Direct Install Rebate	\$	586,603
Direct Install Labor	\$	-
Direct Install Materials	\$	-
Activity	\$	270,853
Installation	\$	-
Hardware & Materials	\$	-
Rebate Processing & Inspection	\$	-
EM&V Costs	\$	-
Budget	\$	1,550,330
Costs recovered from other sources	\$	-
Budget (plus other costs)	\$	1,550,330

PROGRAM IMPACTS		
DEER kW (kW)		1,253
Net NCP (kW)		889
Net CEC (kW)		1,418
Annual Net kWh		6,532,953
Lifecycle Net kWh		72,056,330
Annual Net Therms		-
Lifecycle Net Therms		-
Cost Effectiveness		
TRC		
Costs	\$	1,549,503
Electric Benefits	\$	4,224,494
Gas Benefits	\$	-
Net Benefits (NPV)	\$	2,674,991
BC Ratio		2.73
PAC		
Costs	\$	1,494,038
Electric Benefits	\$	4,224,494
Gas Benefits	\$	-
Net Benefits (NPV)	\$	2,730,456
BC Ratio		2.83
Levelized Cost		
Levelized Cost TRC (\$/kWh)		
Discounted kWh		45,864,995
Cost	\$	0.0338
Benefits	\$	0.0921
Benefit-Cost	\$	0.0583
Levelized Cost PAC (\$/kWh)		
Discounted kWh		45,864,995
Cost	\$	0.0326
Benefits	\$	0.0921
Benefit-Cost	\$	0.0595
Levelized Cost TRC (\$/therm)		
Discounted Therms		-
Cost	\$	-
Benefits	\$	-
Benefit-Cost	\$	-
Levelized Cost PAC (\$/therm)		
Discounted Therms		-
Cost	\$	-
Benefits	\$	-
Benefit-Cost	\$	-

SDGE Lighting Exchange and Education

Year	Total Budget	Total Incentives	Admin Budget	Net kWh	Net Therm	Net kW
2006	\$ 500,000	\$ 192,120	\$ 307,880	2,223,337	-	426
2007	\$ 516,730	\$ 195,241	\$ 321,489	2,223,337	-	426
2008	\$ 533,600	\$ 199,242	\$ 334,358	2,086,280	-	400

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross kW	NTG	Unit Type	Meas. Life	Units	IMC	Total Net kW	Total Net kWh
2006	211001	Lighting - CFL Bulb (14 watt)	35	0.0068	0.8 Bulb	9.3	-	-	\$ 4.34	-	-
2006	211003	Lighting - Torchiere - Energy Star (70 watt) Turn-in	172	0.0330	0.8 Fixture	16	4,219	\$ 22.63	112	581,430	
2006	211004	23 Watt Intergral CFL	59	0.0114	0.8 Bulb	9.3	34,675	\$ 5.19	315	1,641,906	
2007	211001	Lighting - CFL Bulb (14 watt)	35	0.0068	0.8 Bulb	9.3	-	\$ 4.34	-	-	
2007	211003	Lighting - Torchiere - Energy Star (70 watt) Turn-in	172	0.0330	0.8 Fixture	16	4,219	\$ 22.63	112	581,430	
2007	211004	23 Watt Intergral CFL	59	0.0114	0.8 Bulb	9.3	34,675	\$ 5.19	315	1,641,906	
2008	211001	Lighting - CFL Bulb (14 watt)	35	0.0068	0.8 Bulb	9.3	-	\$ 4.34	-	-	
2008	211003	Lighting - Torchiere - Energy Star (70 watt) Turn-in	172	0.0330	0.8 Fixture	16	3,800	\$ 22.63	100	523,687	
2008	211004	23 Watt Intergral CFL	59	0.0114	0.8 Bulb	9.3	33,000	\$ 5.19	300	1,562,593	

2006-2008 Energy Efficiency Concept Paper Residential Customer Education and Information

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 52,965	\$ 54,039	\$ 51,395
Overhead	\$ 37,681	\$ 34,519	\$ 32,476
Direct Implementation			
Financial Incentives	\$ -	\$ -	\$ -
Activity	\$ 448,378	\$ 320,073	\$ 317,588
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ -	\$ -	\$ -
Rebate Processing and Inspection	\$ -	\$ -	\$ -
Marketing			
Program Specific Marketing	\$ 252,284	\$ 316,269	\$ 280,540
Statewide Marketing			
Total Program Budget	\$ 791,308	\$ 724,900	\$ 682,000

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
-	-	-	-	-	-	-	-	-

3. Program Cost Effectiveness

Attached

4. Program Descriptors

Residential Customer Education and Information program provides education and information through several program components: Home Energy Efficiency Survey (HEES) a statewide education and information based program; Home Energy Comparison Tool (HECT); and the PEAK Student Energy Action Program (PEAK) a partnership program with the Energy Coalition. HEES provides a comprehensive multi-lingual program designed to reach a wide range of residential customers by offering audits online, by telephone or by mail. HECT gives customers the ability to compare their home energy usage with similar households in their

What's New for 2006-2008?

- **Innovation**
 - Provide energy use comparison with similar households
 - Provide information on renewable technologies
- **Integration**
 - Collaborate with the PEAK Student Energy Actions Program
 - Incorporate demand response recommendations in survey results
 - Incorporate water-savings components with survey results
 - Emphasize energy education through brochures and fact sheets

neighborhood. PEAK is a comprehensive learning experience intended to teach schoolchildren the value of smart energy management.

5. Program Statement

Residential customers are often unaware of practices and retrofit opportunities that will help them understand, manage, and reduce their energy use. The energy surveys provide accurate and comprehensive information about such practices and opportunities, and make specific energy-efficient recommendations that are tailored to each participant's energy habits, appliance mix, and billing history. In addition, surveys have proven to be an effective tool to reach customers who otherwise have limited access to reliable efficiency information, including non-English speaking customers.

HECT will offer residential customers an interactive and comprehensive online comparison of the energy usage of their home with similar households in their area. Once the customer completes the analysis, the HECT will provide a printable summary of the analysis. Customers without internet access can still utilize the tool by calling SDG&E's Energy Information Center.

The overall goal of the PEAK program is to instill an efficiency ethic in students through standards-based lessons, hands-on activities, and real world application in their homes, schools, and communities.

6. Program Rationale

The Residential Customer Education and Information program addresses a lack of customer information about energy efficiency benefits by providing a comprehensive online survey and comparison tool that requires customer participation and ownership for energy usage and behavioral patterns and by educating schoolchildren about energy efficiency, conservation, and demand response.

The program increases consumer awareness of the benefits of energy efficiency opportunities, encourages adoption of energy-efficient practices and induces a permanent change in attitudes and behaviors toward energy-efficient products and services. The program will also promote demand response programs and services such as residential incentives and the 20/20 program. These efforts will fill the gap between awareness and adoption of energy efficiency measures.

The program minimizes lost opportunities by communicating information in multiple languages to Southern California's diverse population. The HEES program serves a tool to bring energy efficiency, demand response, and water conservation to all customer groups.

The program also helps overcome the barrier of customers not willing to make energy efficiency investments by providing no-cost and low-cost energy savings recommendations to customers.

7. Program Outcomes

The program increases consumer awareness of the benefits of energy efficiency and help customers:

- Better manage their home energy cost to save energy and money
- Make informed decisions about energy efficiency technologies, e.g., appliances, lighting, and other equipment.
- Identify which appliances or equipment is consuming the most energy allowing for changes to be made that will reduce their energy costs
- Learn more about demand response programs and role customers can take
- Learn about additional resources and programs available to help reduce energy use
- Learn about renewable energy opportunities for the home
- Provide a meaningful way to engage students living in San Diego County as advocates of smart energy managements in their homes, schools, and communities.

8. Program Strategy

The HEES component of the program provides comprehensive multilingual on-line energy surveys at no cost to SDG&E residential customers. For customers with no access to computers, the online can be converted into a mail-in audit. SDG&E will coordinate with the City Of San Diego and the San Diego County Water Authority to leverage existing water audits now being offered, and to incorporate energy conservation elements where practical.

The energy surveys will offer information on incentives, energy-savings tips, programs, and links to other energy-related resources.

Customers will be able to compare their home energy usage with similar households in their neighborhood with the HECT. The tool will utilize data from the US Census Bureau at the block group level (approximately 500 household segments) merged with real estate market data, weather data, and SDG&E billing data.

SDG&E will coordinate its efforts with the PEAK Student Energy Action Program, operated by the Energy Coalition. The PEAK program teaches students about energy efficiency, conservation, and demand response. PEAK is dedicated to the concept that the individual actions taken by students produce significant reduction in overall energy use, save money for the families and schools, and instill an ethic of energy consciousness in our youth and their families.

Coordination with the City of San Diego and the San Diego Count Water Authority to leverage existing water audits now being offered, and to incorporate energy conservation elements where practical will also take place.

Additional efforts for educating students will be provided through the third party bid.

9. Program Objectives

Provide education and information to residential customers to inform them of comprehensive approaches to improve their energy usage that incorporates energy

efficiency, demand response and renewable opportunities. Additionally, SDG&E seeks to provide customers with new developments in technologies and appliances that will allow them to continue improving their energy usage.

10. Program Implementation

Our online survey, available on SDG&E's website, provides customers with direct access to obtain information on energy efficiency programs and services. The interactive English and Spanish audit takes minutes to complete and allows customers to obtain immediate results by answering specific questions regarding their home energy use. The data that is entered in the profile is saved so that customers can update or review the results in the future. The interactive audits are available in both the short and extensive version, both taking only minutes to complete. Vietnamese, Chinese and Korean forms can be downloaded, completed and mailed to vendor for processing. Customers without internet access can complete an audit by telephone and for those speaking the Asian languages a survey can be mailed to customers upon request.

The comparison tool, also available on SDG&E's website, gives customers the ability to compare their energy usages and make informed decisions.

In collaboration with the Energy Coalition, students will receive a comprehensive learning experience teaching them about energy efficiency, conservation and demand response.

11. Customer Description

The program targets residential customers looking for ways to reduce their gas and electric bill.

12. Customer Interface

The program provides ease for residential customers to participate. The surveys will be offered in multiple languages to provide easy access to survey information.

The on-line survey will require a very small investment in time and will produce instant results for customers looking to improve their homes energy efficiency.

For customers with limited online access, the written version of the survey can be requested.

The non-English speaking and hard-to-reach (HTR) customers can request written versions of the survey, which will be available in four additional languages other than English. They are Spanish, Vietnamese, Chinese and Korean.

San Diego students will be given instruction on energy efficiency, conservation, and demand response in coordination with the PEAK program.

13. Energy Measures and Program Activities

13.1. Prescriptive Measures.

Not applicable.

13.2. **kWh Level Data**

Not applicable.

13.3. **Non-energy Activities**

Non-energy activities include customer access to an online audit survey. For those without internet access, on request, SDG&E will provide a mail-in survey.

Customers will also have access to an online home energy comparison tool allowing them to compare their energy use with other homes with similar characteristics.

Education and training will be provided to school children within the SDG&E service territory.

13.4. **Subcontractor Activities**

For the online audit, a subcontractor is responsible for maintaining and updating the survey.

For the mail-in audit, a subcontractor will be responsible for printing and processing audit and mailing the report back to customer.

13.5. **Quality Assurance and Evaluation Activities**

Quality assurance and evaluation activities will be conducted on a regular basis to ensure that customers are receiving pertinent and beneficial information in reducing their energy consumption at home.

The unique hits to the web survey will be monitored and reported on a monthly basis.

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs.

13.6. **Marketing Activities**

The program will incorporate a variety of marketing activities to promote the survey. Activities will include, but are not limited to, online marketing, Interactive Voice Response (IVR), community events, bill inserts and coordination with statewide marketing agencies' outreach efforts.

14. Conclusion

The Residential Customer Education and Information program provides comprehensive multi-lingual energy efficiency information to a wide range of residential customers by offering online, mail and telephone energy surveys and student education. Demand response and renewable technology elements will be incorporated into the recommendations. In addition, SDG&E will coordinate with the City of San Diego and the

San Diego Count Water Authority to leverage existing water audits now being offered, and to incorporate energy conservation elements where practical.

	SDGE3014 HEC-Res Customer Education & Information
BUDGET	
Administrative Costs	\$ 263,075
Overhead and G&A	\$ 104,677
Other Administrative Costs	\$ 158,399
Marketing/Outreach	\$ 849,093
Direct Implementation	\$ 1,086,040
Total Incentives and Rebates	
User Input Incentive	\$ -
Direct Install Rebate	\$ -
Direct Install Labor	\$ -
Direct Install Materials	\$ -
Activity	\$ 1,086,040
Installation	\$ -
Hardware & Materials	\$ -
Rebate Processing & Inspection	\$ -
EM&V Costs	\$ -
Budget	\$ 2,198,208
Costs recovered from other sources	\$ -
Budget (plus other costs)	\$ 2,198,208
PROGRAM IMPACTS	
DEER kW (kW)	-
Net NCP (kW)	-
Net CEC (kW)	-
Annual Net kWh	-
Lifecycle Net kWh	-
Annual Net Therms	-
Lifecycle Net Therms	-
Cost Effectiveness	
TRC	
Costs	\$ 2,198,208
Electric Benefits	\$ -
Gas Benefits	\$ -
Net Benefits (NPV)	\$ -
BC Ratio	-
PAC	
Costs	\$ 2,198,208
Electric Benefits	\$ -
Gas Benefits	\$ -
Net Benefits (NPV)	\$ -
BC Ratio	-
Levelized Cost	
Levelized Cost TRC (\$/kWh)	
Discounted kWh	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -
Levelized Cost PAC (\$/kWh)	
Discounted kWh	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -
Levelized Cost TRC (\$/therm)	
Discounted Therms	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -
Levelized Cost PAC (\$/therm)	
Discounted Therms	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -

2006-2008 Energy Efficiency Concept Paper Residential Incentive Program

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 366,186	\$ 377,363	\$ 389,151
Overhead	\$ 117,471	\$ 122,944	\$ 125,726
Direct Implementation			
Financial Incentives	\$ 1,193,250	\$ 1,383,250	\$ 1,622,250
Activity	\$ -	\$ -	\$ -
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ 65,500	\$ 69,500	\$ 74,000
Rebate Processing and Inspection	\$ 303,395	\$ 233,353	\$ 172,639
Marketing			
Program Specific Marketing	\$ 421,089	\$ 395,409	\$ 256,483
Statewide Marketing			
Total Program Budget	\$ 2,466,891	\$ 2,581,818	\$ 2,640,248

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
9,531	10,608,568	174,803	10,349	11,690,158	201,246	13,301	14,340,522	190,483

3. Program Cost Effectiveness - Attached

4. Program Descriptors

The Residential Incentive program (RIP) targets owners and renters of single-family homes, condominiums, mobile homes, and attached homes up to four-plex. The program is comprised of contains three core components: (1) traditional customer incentives; (2) Point of Purchase rebates, 3) customer information and education; and (4) marketing and outreach to trade allies including manufacturers, retailers and distributors. The 2006 –2008 program will continue to offer financial incentives for ENERGY STAR® appliances, home improvement, heating, ventilation and air conditioning (HVAC) and pools.

5. Program Statement

In 2006, SDG&E will continue working with retailers to offer discounts at the register to make it easier for customers to take advantage of the incentives available, and to encourage customers to consider energy efficient products. While most energy-efficiency measures and products are applicable to all potential program participants, some are targeted as a subset of the customers. One significant sub-market is customers with swimming pools. In 2006, SDG&E will continue to rebate energy efficient single speed pool pumps, and promote shifting single speed use to off peak and to reduce filtering hours. According to a recent study performed for the California Energy Commission 12% of the population have pool pumps. The rebate for single-speed pool pumps has helped to make energy efficient

models more available. In fact, some manufacturers are moving to producing primarily energy efficient single-speed pool pumps.

The Statewide Residential Appliance Market Share Tracking Study shows a growing trend of appliance purchases throughout California. Over the past five years, appliances such as refrigerators have seen an average growth of 24%, while room air conditioner sales have risen by 85%. This level of growth indicates an ever increasing potential to achieve energy savings through customer purchases of energy efficient appliances. Because an energy efficient product is typically priced higher than a standard efficiency product, financial incentives have proven both necessary and effective.

Over the years, program incentive levels have been adjusted to arrive at that level which most cost-effectively inspires customers to take action.

<p>What's New for 2006-08?</p> <ul style="list-style-type: none">• Innovation Expand and maximize marketing of Point-of-purchase (POP) rebates! Introduce new & exciting technologies!• Integration Maximize efficiencies by linking appliance incentives to recycling opportunities!• Other Program Improvements New Interactive on-line application

6. Program Rationale

The RIP is designed to provide rebates or point of purchase (POP) discounts to eligible customers who purchase and install a variety of qualifying energy-efficient products and measures. Currently, SDG&E offers POP discounts for programmable thermostats. In this case, the customer has the product discounted at the register, with no application required. For 2006 and beyond, SDG&E, together with the other utilities statewide, will be expanding POP discounts to other measures such as pool pumps and motors, water heaters, and room air conditioners. Measures that do not have the POP option will be available to the customer via the standard hardcopy application submitted by mail to SDG&E for rebate payment.

The program will coordinate efforts with SDG&E's education and outreach programs to inform customers on the best practices for energy efficiency in the home. Financial incentives encourage customers to install energy efficient appliances, and equipment. By offering information and incentives, retailers are more inclined to stock energy efficient products. During seasonal promotions, many retailers elect to augment the IOU's incentive by offering incentives of their own thereby influencing the customer's decision to purchase the energy efficient product.

The program finds its promotional complement in the Home Energy Consumption Tool and the Home Energy Efficiency Survey, which provides customers with specific energy recommendations tailored to the customer's home. The Residential and Small Commercial 20/20 demand response program, encourages customers to reduce their energy consumption by 20% by providing an additional 20% billing reduction, and the demand response program further complement RIP.

2006 – 2008 Program Enhancements:

- All HVAC equipment, with the exception of room air conditioners, will be moved to an integrated residential and non-residential upstream and midstream HVAC program that will include an emphasis on quality installations and system maintenance.
- Point-of-purchase (POP) delivery method will be maximized. This method offers instant incentive discounts for selected energy efficient products. The customer participates without having to complete and mail a rebate application. When retailers offer the rebate at the register, SDG&E subsequently reimburses them.
- Collaborative marketing and implementation efforts will be made to link program rebates with rebates from SDG&E's Appliance Recycling Program when customers purchase ENERGY STAR[®] refrigerators and room air conditioners. The program simultaneously provides a convenient means of properly and permanently retiring the replaced units. Increased retailer interest is expected as a result.
- Coordinate rebates for clothes washers through the County Water Authority Partnership

7. Program Outcomes

The RIP seeks to motivate customers to consider energy-efficient measures when planning home improvements, and appliance replacements/equipment or both. Plans are to continue to promote measures that will aide with peak reduction such as pool pumps. For instance, the program will continue to rebate single-speed based on horsepower reduction, reduction in operating hours and off-peak usage. The program will also seek to increase the efficiency of products such as dishwashers where the market share is at 80% statewide for ENERGY STAR qualifying units.

8. Program Strategy

The rebate or POP discount, offered to the customer through this program, seeks to offset the incremental cost of purchasing a more energy efficient appliance/equipment and encourage customers to install higher efficient measures during home improvements. Also, the program seeks to make energy efficient products more available via the manufacturer and retailer, and at a reasonable cost to the customer.

To accomplish a greater level of RIP program participation, several new approaches will be implemented:

Point-of-purchase (POP) rebate delivery method will be expanded to include more measures. Even with cash rebates, retailers are a key market actor in moving the energy-efficient appliance market. Retailers historically dispensed the rebate applications to nearly three of four program participants. Beginning in 2006, SDG&E will collaboratively integrate marketing and implementation efforts to link program rebates for ENERGY STAR[®] refrigerators and room air conditioners with rebates from SDG&E's Appliance Recycling Program. Integrated collaboration seeks to accelerate the increase in the market share by facilitating consumer purchase and use of energy efficient units, while simultaneously providing a convenient means of properly and permanently retiring the replaced units.

Together, the two programs offer customers:

- A combined \$85 incentive/rebate to purchase a new ENERGY STAR[®] refrigerator and turn in their old, working inefficient refrigerator (\$50 for the purchase of new and \$35 for turn in of old)

- A combined \$75 incentive/rebate to purchase a new ENERGY STAR® room air conditioner and turn in their old, working inefficient room air conditioner (\$50 for purchase of new and \$25 for turn in of old) at “Room A/C Turn-In Events” that SDG&E will sponsor or co-sponsor.

9. Program Objectives

The primary objective is to meet California Public Utilities Commission criteria for delivering a highly cost-effective coordinated statewide program among the IOUs incorporating recognized “best available practices”, while capturing otherwise lost opportunities in the process. To produce cost-effective long-term coincident peak demand reduction and long-term annual energy and natural gas savings by encouraging customers to invest in energy-efficient equipment, which exceeds the minimum standards.

Efforts will be concentrated to increase the pool pump and motors purchases by 12% in the next three years. Coordinate with pool maintenance contractors to identify and encourage customers who are not replacing pool pumps to install a control device to cycle the pool motor off during critical peak times (as part of the integration efforts of energy efficiency and demand response programs).

10. Program Implementation

All rebates or discounts will be based on eligible customers purchasing and installing qualifying products and meeting measure criteria specified in the program guidelines.

SDG&E will coordinate with other IOUs to maintain statewide consistency of rebate programs while attempting to simplify customer requirements and procedures internally.

11. Customer Description

The RIP targets owners and renters of single-family homes, condominiums, mobile homes, and attached homes up to a four-plex.

12. Customer Interface

SDG&E will implement marketing strategies that will increase consumer awareness – including hard-to-reach markets – of the energy efficiency opportunities available through the residential rebate programs. The program is designed to provide maximum ease for customers to participate, thus the expansion of the point-of-purchase delivery method. With POP, customers can participate in the program without the need to complete an application.

13. Energy Measures and Program Activities

13.1. **Prescriptive Measures** -See SDG&E June 1, 2005 Filing Workbook.

13.2. **kWh Level Data** -See SDG&E June 1, 2005 Filing Workbook.

13.3. **Non-energy Activities**

Direct non-energy activities involve education on residential energy efficiency measures and practices. In addition, SDG&E’s field personnel work with retailers to stock program information in stores and educate sales personnel about program details.

13.4. **Subcontractor Activities**

Subcontractor activities are limited to translations of program information into Spanish and Vietnamese.

13.5. **Quality Assurance and Evaluation Activities**

The RIP operates under a statewide agreement that the inspection rate will be 2% to 10% of the applications. The results reveal the extent of program compliance and provide insight into ways of making the program more effective.

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs

13.6. **Marketing Activities**

The RIP will coordinate marketing efforts with manufacturers, distributors, retailers, contractors, and other energy efficiency and demand response programs (as appropriate) to achieve the desired levels of customer awareness and participation within the program. Marketing activities may include, but are not limited to:

- Point of sale signs – at participating retail locations
- Bill inserts
- Community outreach
- Direct mail (ie. postcards, letters, etc.)
- Statewide outreach campaign (ie. Flex Your Power, Univision, RS&E)
- Coordinate with ENERGY STAR marketing promotions

14. Conclusion

The RIP will contribute to reducing energy use per capita in California while helping to achieve both the objectives of the State's Energy Action Plan and the emphases of the CPUC. It accomplishes this by affecting a greatly increased level of participation in energy efficiency practices.

The program expands the proportion of installed energy efficient equipment in homes wider and faster than would take place otherwise. The installation of energy efficient end-uses in the home saves money for customers, improves the economy, and reduces greenhouse gas emissions to the environment. It also defrays the cost of power plants, electricity purchases, and utility infrastructure in accordance with the CPUC's effort to meet 55% to 59% of the incremental electric energy needs between 2004 and 2013 through energy efficiency.

		SDGE3024 SFR-Single Family Rebate Program
BUDGET		
Administrative Costs	\$	1,498,840
Overhead and G&A	\$	366,141
Other Administrative Costs	\$	1,132,699
Marketing/Outreach	\$	1,072,980
Direct Implementation	\$	5,117,137
Total Incentives and Rebates		
User Input Incentive	\$	-
Direct Install Rebate	\$	4,198,750
Direct Install Labor	\$	-
Direct Install Materials	\$	-
Activity	\$	-
Installation	\$	-
Hardware & Materials	\$	209,000
Rebate Processing & Inspection	\$	709,387
EM&V Costs	\$	-
Budget	\$	7,688,957
Costs recovered from other sources	\$	-
Budget (plus other costs)	\$	7,688,957

PROGRAM IMPACTS		
DEER kW (kW)		33,180
Net NCP (kW)		5,921
Net CEC (kW)		4,931
Annual Net kWh		36,639,248
Lifecycle Net kWh		172,135,956
Annual Net Therms		566,532
Lifecycle Net Therms		9,401,472
Cost Effectiveness		
TRC		
Costs	\$	10,744,398
Electric Benefits	\$	11,681,634
Gas Benefits	\$	3,800,869
Net Benefits (NPV)	\$	4,738,105
BC Ratio		1.44
PAC		
Costs	\$	7,260,710
Electric Benefits	\$	11,681,634
Gas Benefits	\$	3,800,869
Net Benefits (NPV)	\$	8,221,793
BC Ratio		2.13
Levelized Cost		
Levelized Cost TRC (\$/kWh)		
Discounted kWh		116,240,391
Cost	\$	0.0622
Benefits	\$	0.1005
Benefit-Cost	\$	0.0383
Levelized Cost PAC (\$/kWh)		
Discounted kWh		116,240,391
Cost	\$	0.0486
Benefits	\$	0.1005
Benefit-Cost	\$	0.0519
Levelized Cost TRC (\$/therm)		
Discounted Therms		4,845,282
Cost	\$	0.7252
Benefits	\$	0.7844
Benefit-Cost	\$	0.0592
Levelized Cost PAC (\$/therm)		
Discounted Therms		4,845,282
Cost	\$	0.3318
Benefits	\$	0.7844
Benefit-Cost	\$	0.4526

SDGE Single Family Rebate Program

Year	Total Budget	Total Incentives	Admin Budget	Net kWh	Net Therms	Net kW
2006	\$ 2,466,891	\$ 1,193,250	\$ 1,273,641	10,608,568	174,803	9,531
2007	\$ 2,581,818	\$ 1,383,250	\$ 1,198,568	11,690,158	201,246	10,349
2008	\$ 2,640,249	\$ 1,622,250	\$ 1,017,999	14,340,522	190,483	13,301

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	229005	A/C - Room unit - Energy Star	127	-	0.10	0.8	Unit	15	600	\$ 50.00	\$ 106.00	47	60,960	-
2006	229006	A/C - Whole-House Fan	50	(1)	0.02	0.89	1,000 sqft house	15	100	\$ 100.00	\$ 512.89	2	4,410	(66)
2006	229012	Ducted Evaporative Cooler	454	(36)	0.68	0.89	1,000 sqft house	15	-	\$ 300.00	\$ 1,290.00	-	-	-
2006	229013	Attic Insulation	0	0	0.00	0.89	Square Foot	20	1,100,000	\$ 0.15	\$ 0.52	38	48,656	70,390
2006	229014	Double Pane Clear Windows to Double Pane, Med Low-E	1	-	0.00	0.89	Square Foot	20	-	\$ 0.50	\$ 1.68	-	-	-
2006	229015	HE Electric Water Heater (EF=0.93)	126	-	0.03	0.89	Hot Water Tank	15	100	\$ 30.00	\$ 53.90	2	11,197	-
2006	229016	Heating - Gas 90% AFUE	-	0	-	0.89	kBtu heating	20	-	\$ 1.00	\$ 7.83	-	-	-
2006	229017	Motor - High Efficiency Pool Pump and Motor Single Speed	650	-	0.10	0.89	Swimming Pool Pump	15	1,700	\$ 30.00	\$ 33.94	157	983,450	-
2006	229046	Motor - Pool Pump (two-speed)	1,400	-	0.54	0.89	Swimming Pool Pump	15	600	\$ 300.00	\$ 48.79	288	747,600	-
2006	229047	Water Heating - Clothes Washer - Tier I	40	7	0.02	0.8	Clothes Washer	10	-	\$ 35.00	\$ 175.00	-	-	-
2006	229048	Wall R-0 to R-13 Insulation	0	0	0.00	0.89	sqft	20	500,000	\$ 0.15	\$ 1.12	153	122,059	68,214
2006	229049	Water Heating - Dishwasher - Energy Star	97	4	0.03	0.8	Dishwasher	5	11,000	\$ 30.00	\$ 92.62	271	853,600	35,200
2006	229050	Water Heating -High Energy Factor Unit - Gas Storage	-	5	-	0.89	Hot Water Tank	15	225	\$ 30.00	\$ 117.10	-	-	1,065
2006	229053	Water Heating - Clothes Washer - Tier II	44.2	7.503504016	0.0184314	0.8	Clothes Washer	10	0	\$ 75.00	\$ 413.00	-	-	-
2006	229087	25 Watt Modular CFL - >=1,600 Lumens - pin based	57.65175	0	0.0110565	0.8	Bulb	16	0		\$ 22.90	-	-	-
2006	229088	Refrigerator - Energy Star(Retail)	60.53	0	0.0102901	0.8	Refrigerator	18	1500	\$ 50.00	\$ 136.86	12	72,636	-
2006	229089	Pool Pump Timeclock Reset Agreement	900		1	0.8	Time Clock	2	10700	\$ 25.00	\$ 10.00	8,560	7,704,000	-
2007	229005	A/C - Room unit - Energy Star	127	0	0.0987044	0.8	Unit	15	500	\$ 50.00	\$ 106.00	39	50,800	-
2007	229006	A/C - Whole-House Fan	49.546549	-0.73901894	0.01723004	0.89	1,000 sqft house	15	100	\$ 100.00	\$ 512.89	2	4,410	(66)

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	229012	Ducted Evaporative Cooler	453.59391	-35.7168206	0.68307629	0.89	1,000 sqft house	15	0	\$ 300.00	\$ 1,290.00	-	-	-
2007	229013	Attic Insulation	0.0497	0.0719	0.00003886	0.89	Square Foot	20	1100000	\$ 0.15	\$ 0.52	38	48,656	70,390
2007	229014	Double Pane Clear Windows to Double Pane, Med Low-E	1.397944075	0	0.00147241	0.89	Square Foot	20	0	\$ 0.50	\$ 1.68	-	-	-
2007	229015	HE Electric Water Heater (EF=0.93)	125.806452	0	0.02767742	0.89	Hot Water Tank kBTu	15	0	\$ 30.00	\$ 53.90	-	-	-
2007	229016	Heating - Gas 90% AFUE	0	0.193427914	0	0.89	heating	20	0	\$ 1.00	\$ 7.83	-	-	-
2007	229017	Motor - High Efficiency Pool Pump and Motor Single Speed	650	0	0.104	0.89	Swimming Pool Pump	15	1800	\$ 30.00	\$ 33.94	167	1,041,300	-
2007	229046	Motor - Pool Pump (two-speed)	1400	0	0.54	0.89	Swimming Pool Pump	15	700	\$ 300.00	\$ 48.79	336	872,200	-
2007	229047	Water Heating - Clothes Washer - Tier I	39.8	6.756548864	0.0165966	0.8	Clothes Washer	10	0	\$ 35.00	\$ 175.00	-	-	-
2007	229048	Wall R-0 to R-13 Insulation	0.2742904	0.1532893	0.00034359	0.89	sqft	20	600000	\$ 0.15	\$ 1.12	183	146,471	81,856
2007	229049	Water Heating - Dishwasher - Energy Star	97	4	0.030749	0.8	Dishwasher	5	15000	\$ 30.00	\$ 92.62	369	1,164,000	48,000
2007	229050	Water Heating -High Energy Factor Unit - Gas Storage	0	5.319	0	0.89	Hot Water Tank	15	225	\$ 30.00	\$ 117.10	-	-	1,065
2007	229053	Water Heating - Clothes Washer - Tier II	44	\$ 7.50	\$ 0.02	0.8	Clothes Washer	10	0	\$ 75.00	\$ 413.00	-	-	-
2007	229087	25 Watt Modular CFL - >=1,600 Lumens - pin based Refrigerator - Energy Star(Retail)	58	\$ -	\$ 0.01	0.8	Bulb	16			\$ 22.90	-	-	-
2007	229088	Pool Pump Timeclock Reset	61	\$ -	\$ 0.01	0.8	Refrigerator	18	1700	\$ 50.00	\$ 136.86	14	82,321	-
2007	229089	Agreement	900		\$ 1.00	0.8	Time Clock	2	11500	\$ 25.00	\$ 10.00	9,200	8,280,000	-
2008	229005	A/C - Room unit - Energy Star	127	\$ -	\$ 0.10	0.8	Unit	15	500	\$ 50.00	\$ 106.00	39	50,800	-
2008	229006	A/C - Whole-House Fan	50	\$ (0.74)	\$ 0.02	0.89	1,000 sqft house	15	250	\$ 100.00	\$ 512.89	4	11,024	(164)
2008	229012	Ducted Evaporative Cooler	454	\$ (35.72)	\$ 0.68	0.89	1,000 sqft house	15	0	\$ 300.00	\$ 1,290.00	-	-	-
2008	229013	Attic Insulation	0	\$ 0.07	\$ 0.00	0.89	Square Foot	20	1000000	\$ 0.15	\$ 0.52	35	44,233	63,991
2008	229014	Double Pane Clear Windows to Double Pane, Med Low-E	1	\$ -	\$ 0.00	0.89	Square Foot	20	0	\$ 0.50	\$ 1.68	-	-	-
2008	229015	HE Electric Water Heater (EF=0.93)	126	\$ -	\$ 0.03	0.89	Hot Water Tank kBTu	15	0	\$ 30.00	\$ 53.90	-	-	-
2008	229016	Heating - Gas 90% AFUE	-	\$ 0.19	\$ -	0.89	heating	20	0	\$ 1.00	\$ 7.83	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	229017	Motor - High Efficiency Pool Pump and Motor Single Speed	650	\$ -	\$ 0.10	0.89	Swimming Pool Pump	15	1700	\$ 30.00	\$ 33.94	157	983,450	-
2008	229046	Motor - Pool Pump (two-speed)	1,400	\$ -	\$ 0.54	0.89	Swimming Pool Pump	15	600	\$ 300.00	\$ 48.79	288	747,600	-
2008	229047	Water Heating - Clothes Washer - Tier I	40	\$ 6.76	\$ 0.02	0.8	Clothes Washer	10	0	\$ 35.00	\$ 175.00	-	-	-
2008	229048	Wall R-0 to R-13 Insulation	0	\$ 0.15	\$ 0.00	0.89	sqft	20	600000	\$ 0.15	\$ 1.12	183	146,471	81,856
2008	229049	Water Heating - Dishwasher - Energy Star	97	\$ 4.00	\$ 0.03	0.8	Dishwasher	5	14000	\$ 30.00	\$ 92.62	344	1,086,400	44,800
2008	229050	Water Heating -High Energy Factor Unit - Gas Storage	-	\$ 5.32	\$ -	0.89	Hot Water Tank	15	0	\$ 30.00	\$ 117.10	-	-	-
2008	229053	Water Heating - Clothes Washer - Tier II	44	\$ 7.50	\$ 0.02	0.8	Clothes Washer	10	0	\$ 75.00	\$ 413.00	-	-	-
2008	229087	25 Watt Modular CFL - >=1,600 Lumens - pin based	58	\$ -	\$ 0.01	0.8	Bulb	16			\$ 22.90	-	-	-
2008	229088	Refrigerator - Energy Star(Retail)	61	\$ -	\$ 0.01	0.8	Refrigerator	18	6000	\$ 50.00	\$ 136.86	49	290,544	-
2008	229089	Pool Pump Timeclock Reset Agreement	900		\$ 1.00	0.8	Time Clock	2	15250	\$ 25.00	\$ 10.00	12,200	10,980,000	-

2006-2008 Energy Efficiency Concept Paper Multifamily Rebate Program

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 137,988	\$ 142,535	\$ 146,194
Overhead	\$ 102,627	\$ 107,550	\$ 112,592
Direct Implementation			
Financial Incentives	\$ 1,720,057	\$ 1,806,741	\$ 1,894,273
Activity	\$ -	\$ -	\$ -
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ 66,625	\$ 70,769	\$ 73,667
Rebate Processing and Inspection	\$ 31,518	\$ 34,007	\$ 39,119
Marketing			
Program Specific Marketing	\$ 96,344	\$ 96,954	\$ 98,583
Statewide Marketing			
Total Program Budget	\$ 2,155,159	\$ 2,258,557	\$ 2,364,428

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
1,037	4,316,705	370,663	1,092	4,535,580	389,622	1,144	4,753,085	405,859

3. Program Cost Effectiveness – Attached

4. Program Descriptors

The Multifamily Rebate program (MFRP) is designed specifically to motivate the multifamily property owner/manager toward installing energy efficient products. With product offerings suitable for the multifamily complex and incentive levels that help alleviate the split incentive dilemma. The MFRP is in the unique position to serve two distinct beneficiaries of energy savings, the multifamily property owner/manager and the tenant.

5. Program Statement

Multifamily property owners and managers are a historically unresponsive market to energy efficiency efforts. As one of California's largest industries, this unique customer segment warrants additional attention and effort to motivate property owners/managers to actively participate in energy efficiency programs. Having received only modest participation in utility programs to date, the multifamily segment holds tremendous savings potential.

According to Census 2000 there are approximately 290,000 dwelling units in structures containing 5 or more units. The Multifamily Rebate Program (MFRP) is designed to induce property owners and managers to install energy-efficient products in individual tenant units and common areas of residential apartments, mobile home parks and

condominium complexes. Since the tenants generally pay the energy bill, there is this issue of *split incentives* –the customer does not own the equipment and the building owner does not pay the operating cost. Given this problem, neither party has an incentive to adopt energy efficient technologies. Through program design, SDG&E seeks to motivate both market players to take action.

The program has had success in getting energy efficiency products installed in common areas and in dwelling units but in most cases it is only one or two measures. It is more cost effective to be comprehensive when installing measures. In 2006, SDG&E will continue to offer prescriptive rebates for a variety of measures but the program will stress installing three or more measures at a time by offering a bonus to the property manager or contractor installing the measures.

What's New for 2006-08?

- Innovation
 - Introduce new program guidelines to maximize participation by re-defining definition of a MF unit from 5+ to 2+ units!
 - New promotions for early refrigerator and room A/C change out and recycling
 - Introduce rebates for mobile homes common areas!
- Other Program Improvements
 - “Bonus” for property manager or contractor installing three or more measures at a time
 - Introduce on-bill financing for the MF market

6. Program Rationale

Program design provides prescribed rebates motivating the property owner/manager to install energy efficient products in common areas, whereby receiving direct energy savings affect. It also motivates the property owner to install energy efficient products inside the tenant’s dwelling unit whereby the tenant will typically receive the direct energy savings affect. In fact, the bulk of rebates paid result from property owners/managers installing product in tenant dwelling units. Proof of this successful program design is demonstrated through program results since its inception over three years ago. In each year since 2002, market demand for MFRP has exceeded previous program budgets and savings.

SDG&E will provide a 5% “Comprehensive Approach Incentive” to those program participants who elect to install 3 or more products (at least one interior but not a CFL only and one exterior – for example: exterior porch light, CFL(s) and a dishwasher). SDG&E will coordinate with the Energy Division and other utilities on the evaluation requirements.

7. Program Outcomes

Long-term energy savings through the installation of energy efficient products in multifamily and condominium complexes, and mobile home parks. Under this program, multi-family property owners and residents will reduce their electric and gas energy usage through the installation of a comprehensive selection of energy-efficient products inside the dwelling units as well as in common areas.

8. Program Strategy

The statewide MFRP has been delivered successfully for the past three years utilizing the same proven design and implementation plans as for the upcoming 2006 – 2008 funding period. SDG&E’s program will be promoted through marketing strategies such as, direct mail, presentations at community housing workshops, local multi-family association

meetings, and online at www.sdge.com. Traditionally, electric measures are quickly installed by SDG&E's multi-family customer base. To improve installment of gas measures SDG&E will focus on educating and expanding alliances with property managers/owners, gas product distributors, plumbers and other gas product contractors

9. Program Objectives

In the past, most of the complexes participating in the program have been 20 dwelling units and larger. In 2006, SDG&E will be introducing an additional program, directed specifically to the affordable housing and complexes of fifteen (15) units or less, which represents approximately 50% of the dwelling units in SDG&E's territory (part of the competitive bid program). The objective of the MFRP will be to increase the comprehensiveness of the program by encouraging property owners and property managers to install more than one measure per complex and to install measures in the dwelling units. Also, encourage them to consider energy efficient gas measures. By encouraging a more comprehensive approach, SDG&E would increase to 5% the penetration of the multifamily market per year through 2008.

An additional objective in this funding cycle is the inclusion of multifamily property owners who own complexes of less than five dwelling units. There are property owners of duplexes, triplexes and four-plexes who do not meet the current program requirement, that complexes of five or more units.

10. Program Implementation

Due to ongoing high demand, the primary implementation factor is generating program announcements alerting property owners/managers and market actors of program offerings and requirements and funding availability. This will be accomplished through a direct mailing to SDG&E multifamily property owner/managers, updating the www.sdge.com website with current funding availability and current application, direct mailing to previously participating multifamily customers, and by email notification to an existing database of market actors. Concurrent with program announcements, SDG&E will implement the print advertising campaign with the apartment associations' monthly trade journals completing the traditional launching of the MFRP. Property owners or managers of residential multifamily properties with two, or more units may qualify for MFRP incentives. Measures for energy efficiency improvements must be installed in existing apartment dwelling units or in common areas of apartment and condominium complexes, and common areas of mobile home parks.

11. Customer Description

Existing multifamily residential property owners or managers of residential multifamily properties with two or more units would be the main program focus. According to Census 2000 there are approximately 350,000 dwelling units in structures containing 2 or more units. The customer segment targeted by the MFRP is the property owner or manager of multifamily complexes of two or more dwelling units. Prescribed rebates are available to this customer for the installation of qualified energy efficient products installed in the dwelling units of apartment complexes or the common areas of apartment and condominium complexes or mobile home parks. SDG&E plans to lower the minimum number of dwelling units from five to two. In addition, the MFRP is considering adopting a

policy whereby mobile homes may be included for rebate eligibility on the condition that the mobile home park property owner/manager is participating in program through common area installations.

12. Customer Interface

SDG&E plans to enhance its current contacts with property managers via the San Diego Apartment Association. It also anticipates continuing to use the current 45-day reservation system assuring the customer has incentive dollars while installations are completed.

13. Energy Measures and Program Activities

13.1. **Prescriptive Measures** - See SDG&E June 1, 2005 Filing Workbook.

13.2. **kWh Level Data** - See SDG&E June 1, 2005 Filing Workbook

13.3. **Non-energy Activities** - None

13.4. **Subcontractor Activities** -None

13.5. **Quality Assurance and Evaluation Activities**

SDG&E anticipates following its' current MFRP inspection practices – 100% inspection of all approved projects with a random sampling inspection for measures applied for.

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs

13.6. **Marketing Activities**

SDG&E's program will be promoted through targeted marketing strategies such as, direct mail, presentations at community housing organization workshops, local multi-family association meetings, and online at www.sdge.com.

14. Conclusion

The program substantially reduces energy use per capita in California while helping to achieve both the objectives of the State's Energy Action Plan and the emphases of the CPUC. It accomplishes this by affecting a greatly increased level of participation in energy efficiency practices.

The program expands the proportion of installed energy efficient equipment in apartments and condominium wider and faster than would take place otherwise. The installation of energy efficient end-uses in these MF residences saves money for customers, improves the economy, and reduces greenhouse gas emissions to the environment. It also defrays the cost of power plants, electricity purchases, and utility infrastructure in accordance with the CPUC's effort to meet 55% to 59% of the incremental electric energy needs between 2004 and 2013 through energy efficiency.

		SDGE3017 MFR-Multi-Family Rebate Program
BUDGET		
Administrative Costs	\$	749,486
Overhead and G&A	\$	322,769
Other Administrative Costs	\$	426,717
Marketing/Outreach	\$	291,881
Direct Implementation	\$	5,736,776
Total Incentives and Rebates		
User Input Incentive	\$	-
Direct Install Rebate	\$	5,421,071
Direct Install Labor	\$	-
Direct Install Materials	\$	-
Activity	\$	-
Installation	\$	-
Hardware & Materials	\$	211,062
Rebate Processing & Inspection	\$	104,644
EM&V Costs	\$	-
Budget	\$	6,778,143
Costs recovered from other sources	\$	-
Budget (plus other costs)	\$	6,778,143

PROGRAM IMPACTS		
DEER kW (kW)		3,273
Net NCP (kW)		1,721
Net CEC (kW)		2,662
Annual Net kWh		13,605,371
Lifecycle Net kWh		126,999,305
Annual Net Therms		1,166,144
Lifecycle Net Therms		17,487,692
Cost Effectiveness		
TRC		
Costs	\$	6,345,508
Electric Benefits	\$	7,526,064
Gas Benefits	\$	6,644,185
Net Benefits (NPV)	\$	7,824,741
BC Ratio		2.23
PAC		
Costs	\$	6,250,645
Electric Benefits	\$	7,526,064
Gas Benefits	\$	6,644,185
Net Benefits (NPV)	\$	7,919,603
BC Ratio		2.27
Levelized Cost		
Levelized Cost TRC (\$/kWh)		
Discounted kWh		81,464,210
Cost	\$	0.0379
Benefits	\$	0.0924
Benefit-Cost	\$	0.0545
Levelized Cost PAC (\$/kWh)		
Discounted kWh		81,464,210
Cost	\$	0.0553
Benefits	\$	0.0924
Benefit-Cost	\$	0.0370
Levelized Cost TRC (\$/therm)		
Discounted Therms		9,974,562
Cost	\$	0.3268
Benefits	\$	0.6661
Benefit-Cost	\$	0.3393
Levelized Cost PAC (\$/therm)		
Discounted Therms		9,974,562
Cost	\$	0.1747
Benefits	\$	0.6661
Benefit-Cost	\$	0.4914

SDGE Multi-Family Rebate Program

Year	Total Budget	Total Incentives	Admin Budget	Net kWh	Net Therms	Net kW
2006	\$ 2,155,159	\$ 1,720,057	\$ 435,102	4,316,705	370,663	1,037
2007	\$ 2,258,557	\$ 1,806,741	\$ 451,817	4,535,580	389,622	1,092
2008	\$ 2,364,428	\$ 1,894,273	\$ 470,155	4,753,085	405,859	1,144

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	218001	A/C & Heating - Programmable Thermostat - Energy Star	219	13	0.04	0.89	Unit	11		\$ 40.00	\$ 58.00	-	-	-
2006	218002	A/C - Central Air Conditioner Tier II	201	-	0.31	0.89	Unit	15		\$ 200.00	\$ 505.92	-	-	-
2006	218003	A/C - Packaged Terminal Air Conditioners	282	-	0.24	0.89	Unit	15		\$ 100.00	\$ 97.50	-	-	-
2006	218004	A/C - Packaged Terminal Heat Pumps	282	-	0.24	0.89	Unit	15		\$ 100.00	\$ 97.50	-	-	-
2006	218005	A/C - Room unit - Energy Star	127	-	0.10	0.8	Unit	15	25	\$ 50.00	\$ 106.00	2	2,540	-
2006	218006	Heating & A/C - Forced Air Furnace 90% AFUE Split System	-	11	-	0.89	Unit	15		\$ 200.00	\$ 616.00	-	-	-
2006	218007	Heating & A/C - Insulation - Attic (attic area per SqFt.)	0	0	0.00	0.89	SqFt	20	600	\$ 0.15	\$ 0.52	0	11	11
2006	218008	Lighting - Ceiling Fan Energy Star w/ CFL	33	-	0.00	0.89	Unit	16	3	\$ 20.00	\$ 50.00	0	87	-
2006	218009	Lighting - Common Area - Exit Signs (New)	351	-	0.04	0.89	Exit Sign	16	10	\$ 35.00	\$ 83.65	0	3,127	-
2006	218010	Lighting - Common Area - Occupancy Sensors	214	-	0.18	0.89	Occupancy Sensor	8	-	\$ 10.00	\$ 42.28	-	-	-
2006	218011	Lighting - Common Area - Photocells	106	-	-	0.89	Photo cell	8	1	\$ 10.00	\$ 59.81	-	95	-
2006	218012	Lighting -Ext. Hardwired Fluorescent Porch Light (13-18 Watts)	131	-	0.05	0.89	Bulb	16	-	\$ 30.00	\$ 18.77	-	-	-
2006	218013	Water Heating - Clothes Washer - Tier I	40	7	0.02	0.8	Washer	10	1	\$ 75.00	\$ 175.00	0	32	5
2006	218014	Gas Wtr Htr and/or Boiler Controller (21 units or more Non-digital)	0	1500	0	0.89	Unit	15	38	\$ 750.00	\$ 3,500.00	-	-	50,730
2006	218015	Water Heating - Common Area - Gas Space Heating Boilers	0	1430	0	0.89	Unit	20	8	\$ 1,500.00	\$ 2,845.00	-	-	10,182

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	218016	Water Heating - Common Area - Gas Water Heater	0	257	0	0.89	Unit	15	11	\$ 500.00	\$ 1,701.00	-	-	2,516
2006	218017	Water Heating - Common Area - Gas Water Boilers	0	750	0	0.89	Unit	20		\$ 1,500.00	\$ 1,671.00	-	-	-
2006	218018	Gas Wtr Htr and/or Boiler Controller (21 units or more Digital)	0	1500	0	0.89	Unit	15	210	\$ 1,500.00	\$ 3,500.00	-	-	280,350
2006	218019	Water Heating - Natural Gas Storage Water Heater	0	4,9545	0	0.89	Hot Water Tank	15		\$ 30.00	\$ 117.10	-	-	-
2006	218020	Water Heating - Dishwasher - Energy Star	72	3	0.022824	0.89	Dishwasher	5	146	\$ 40.00	\$ 92.62	3	8,410	350
2006	218021	Water Heating - Faucet Aerator - Low Flow	57.894	2.9727	0.01273668	0.89	Household Showerhead	9	61	\$ 1.25	\$ 1.14	1	3,143	161
2006	218022	Water Heating - Showerhead - Low Flow Windows - Energy Star	77.192	3.9636	0.01698224	0.89	Showerhead	9	3	\$ 5.00	\$ 20.49	0	206	11
2006	218023	Lighting CFL R30 Reflector (window area per SqFt.)	2,192,099,554	0	0.00219043	0.89	SqFt	20		\$ 1.00	\$ 1.68	-	-	-
2006	218024	Lighting CFL R40 Reflector (13-23 Watts)	183,1582368	0	0.0348432	0.89	Bulb	2.1	4207	\$ 8.00	\$ 4.98	130	685,787	-
2006	218025	Lighting CFL R40 Reflector (13-23 Watts)	183,1582368	0	0.0348432	0.89	Bulb	2.1	1182	\$ 10.00	\$ 4.98	37	192,679	-
2006	218026	Electric Water Heater - high efficiency	103,752,6879	0	0.02282559	0.89	Hot Water Tank	15		\$ 30.00	\$ 53.90	-	-	-
2006	218027	Gas Wtr Htr and/or Boiler Controller (20 units or less)	0	540	0	0.89	Unit	15	35	\$ 750.00	\$ 3,500.00	-	-	16,821
2006	218028	ES Clothes Washer (In Coin-Op Laundry Area)	120	81	0.00003285	0.8	Unit	10	147	\$ 150.00	\$ 659.00	0	14,112	9,526
2006	218029	Split System A/C - Tier I (ES) with TXV	213.9	0	0.299088	0.89	Unit	15		\$ 225.00	\$ 363.00	-	-	-
2006	218030	Packaged A/C - Tier I (ES) with TXV	213.9	0	0.299088	0.89	Unit	15		\$ 275.00	\$ 363.00	-	-	-
2006	218031	Split System Heat Pump - Tier I (ES) with TXV	298	\$ -	\$ 0.26	0.89	Unit	20		\$ 300.00	\$ 228.00	-	-	-
2006	218032	Packaged Heat Pump - Tier I (ES) with TXV	298	\$ -	\$ 0.26	0.89	Unit	20		\$ 300.00	\$ 228.00	-	-	-
2006	218033	T-8 or T-5 Lamp and Electronic, 2-foot lamp installed 1st lamp	47	\$ -	\$ 0.01	0.89	Lamp	11	86	\$ 32.00	\$ 21.00	1	3,620	-
2006	218034	T-8 or T-5 Lamp and Electronic, 2-foot lamp installed 2nd lamp	47	\$ -	\$ 0.01	0.89	Lamp	11	2	\$ 2.00	\$ 21.00	0	84	-
2006	218035	T-8 or T-5 Lamp and Electronic, 2-foot lamp installed 3rd lamp	47	\$ -	\$ 0.01	0.89	Lamp	11		\$ 4.00	\$ 21.00	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	218036	T-8 or T-5 Lamp and Electronic, 2-foot lamp installed 4th lamp	47	\$ -	\$ 0.01	0.89	Lamp	11		\$ 7.00	\$ 10.50	-	-	-
2006	218037	T-8 or T-5 Lamp and Electronic, 2-foot lamp removed	144	\$ -	\$ 0.02	0.89	Lamp	11		\$ 6.00	\$ 19.00	-	-	-
2006	218038	T-8 or T-5 Lamp and Electronic, 3-foot lamp installed 1st lamp	59	\$ -	\$ 0.01	0.89	Lamp	11		\$ 32.00	\$ 21.00	-	-	-
2006	218039	T-8 or T-5 Lamp and Electronic, 3-foot lamp installed 2nd lamp	59	\$ -	\$ 0.01	0.89	Lamp	11		\$ 2.00	\$ 21.00	-	-	-
2006	218040	T-8 or T-5 Lamp and Electronic, 3-foot lamp installed 3rd lamp	59	\$ -	\$ 0.01	0.89	Lamp	11		\$ 4.00	\$ 21.00	-	-	-
2006	218041	T-8 or T-5 Lamp and Electronic, 3-foot lamp installed 4th lamp	59	\$ -	\$ 0.01	0.89	Lamp	11		\$ 7.00	\$ 21.00	-	-	-
2006	218042	T-8 or T-5 Lamp and Electronic, 3-foot lamp removed	198	\$ -	\$ 0.03	0.89	Lamp	11		\$ 6.00	\$ 19.00	-	-	-
2006	218043	T-8 or T-5 Premium Lamp and Electronic, 4-foot lamp installed 1st lamp	16	\$ -	\$ 0.05	0.89	Fixture	11	2405	\$ 32.00	\$ 1.62	108	35,161	-
2006	218044	T-8 or T-5 Premium Lamp and Electronic, 4-foot lamp installed 2nd lamp	16	\$ -	\$ 0.05	0.89	Fixture	11	2332	\$ 2.00	\$ 1.62	105	34,094	-
2006	218045	T-8 or T-5 Premium Lamp and Electronic, 4-foot lamp installed 3rd lamp	16	\$ -	\$ 0.05	0.89	Fixture	11	104	\$ 4.00	\$ 1.62	5	1,520	-
2006	218046	T-8 or T-5 Premium Lamp and Electronic, 4-foot lamp installed 4th lamp	16	\$ -	\$ 0.05	0.89	Fixture	11	104	\$ 7.00	\$ 1.62	5	1,520	-
2006	218047	T-8 or T-5 Lamp and Electronic, 4-foot lamp removed	79	\$ -	\$ 0.02	0.89	Fixture	11		\$ 6.00	\$ 26.41	-	-	-
2006	218048	T-8 or T-5 Lamp and Electronic, 8-foot lamp installed 1st lamp	45	\$ -	\$ 0.01	0.89	Lamp	11		\$ 32.00	\$ 32.50	-	-	-
2006	218049	T-8 or T-5 Lamp and Electronic, 8-foot lamp installed 2nd lamp	45	\$ -	\$ 0.01	0.89	Lamp	11	130	\$ 2.00	\$ 32.50	1	5,207	-
2006	218050	T-8 or T-5 Lamp and Electronic, 8-foot lamp installed 3rd lamp	45	\$ -	\$ 0.01	0.89	Lamp	11		\$ 4.00	\$ 32.50	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	218051	T-8 or T-5 Lamp and Electronic, 8-foot lamp installed 4th lamp	45	\$ -	\$ 0.01	0.89	Lamp	11		\$ 7.00	\$ 32.50	-	-	-
2006	218052	T-8 or T-5 Lamp and Electronic, 8-foot lamp removed	171	\$ -	\$ 0.05	0.89	Fixture	11	40	\$ 6.00	\$ 26.81	2	6,082	-
2006	218053	Lighting - CFL Interior (5 - 13 Watt) - < 800 Lumens	21	\$ -	\$ 0.00	0.89	Bulb	9.3	154	\$ 4.00	\$ 4.17	1	2,845	-
2006	218054	Lighting - CFL Interior (14 - 20 Watt)	34	\$ -	\$ 0.01	0.89	Bulb	9.3	69147	\$ 5.00	\$ 4.36	399	2,081,456	-
2006	218055	Lighting - CFL Interior (21 - 30 Watt) - < 1,600 Lumens	38	\$ -	\$ 0.01	0.89	Bulb	9.3	8600	\$ 6.50	\$ 5.03	56	294,178	-
2006	218056	Lighting - CFL Exterior (5 - 13 Watt) - < 800 Lumens	21	\$ -	\$ 0.00	0.89	Bulb	9.3		\$ 4.00	\$ 3.60	-	-	-
2006	218057	Lighting - CFL Exterior (14 - 20 Watt)	34	\$ -	\$ 0.01	0.89	Bulb	9.3		\$ 5.00	\$ 4.36	-	-	-
2006	218058	Lighting - CFL Exterior (21 - 30 Watt)	74	\$ -	\$ -	0.89	Unit	8		\$ 6.50	\$ 4.28	-	-	-
2006	218059	A/C - Central Heat Pumps - Energy Star Tier I	298	\$ -	\$ 0.26	0.89	Unit	20	12	\$ 275.00	\$ 228.00	3	3,181	-
2006	218060	Water Heating - Clothes Washer - Tier II	44	\$ 7.50	\$ 0.02	0.8	Washer	10		\$ 125.00	\$ 413.00	-	-	-
2006	218061	Int. Hardwired Fluorescent Fixture >= 30 watts	64	\$ -	\$ 0.01	0.89	Bulb	16	12416	\$ 50.00	\$ 27.53	135	705,019	-
2006	218062	Int. Hardwired Fluorescent Fixture 22-29 watts - <1,600 Lumens - (25 Watt)	38	\$ -	\$ 0.01	0.89	Bulb	16	417	\$ 50.00	\$ 27.38	3	14,264	-
2006	218063	Lighting -Ext. Hardwired Fluorescent Porch Light (19-27 Watts)	59	\$ -	\$ 0.01	0.89	Bulb	16	4143	\$ 30.00	\$ 21.96	42	218,246	-
2007	218001	A/C & Heating - Programmable Thermostat - Energy Star	219	\$ 13.00	\$ 0.04	0.89	Unit	11		\$ 40.00	\$ 58.00	-	-	-
2007	218002	A/C - Central Air Conditioner Tier II	201	\$ -	\$ 0.31	0.89	Unit	15		\$ 200.00	\$ 505.92	-	-	-
2007	218003	A/C - Packaged Terminal Air Conditioners	282	\$ -	\$ 0.24	0.89	Unit	15		\$ 100.00	\$ 97.50	-	-	-
2007	218004	A/C - Packaged Terminal Heat Pumps	282	\$ -	\$ 0.24	0.89	Unit	15		\$ 100.00	\$ 97.50	-	-	-
2007	218005	A/C - Room unit - Energy Star	127	\$ -	\$ 0.10	0.8	Unit	15	26	\$ 50.00	\$ 106.00	2	2,642	-
2007	218006	Heating & A/C - Forced Air Furnace 90% AFUE Split System	-	\$ 11.00	\$ -	0.89	Unit	15		\$ 200.00	\$ 616.00	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	218007	Heating & A/C - Insulation - Attic (attic area per SqFt.)	0	\$ 0.02	\$ 0.00	0.89	SqFt	20	630	\$ 0.15	\$ 0.52	0	11	11
2007	218008	Lighting - Ceiling Fan Energy Star w/ CFL	33	\$ -	\$ 0.00	0.89	Unit	16	3	\$ 20.00	\$ 50.00	0	87	-
2007	218009	Lighting - Common Area - Exit Signs (New)	351	\$ -	\$ 0.04	0.89	Exit Sign	16	11	\$ 35.00	\$ 83.65	0	3,439	-
2007	218010	Lighting - Common Area - Occupancy Sensors	214	\$ -	\$ 0.18	0.89	Occupancy Sensor	8	16	\$ 10.00	\$ 42.28	3	3,044	-
2007	218011	Lighting - Common Area - Photocells	106	\$ -	\$ -	0.89	Photo cell	8	1	\$ 10.00	\$ 59.81	-	95	-
2007	218012	Lighting -Ext. Hardwired Fluorescent Porch Light (13-18 Watts)	131	\$ -	\$ 0.05	0.89	Bulb	16		\$ 30.00	\$ 18.77	-	-	-
2007	218013	Water Heating - Clothes Washer - Tier I	40	\$ 6.76	\$ 0.02	0.8	Washer	10	1	\$ 75.00	\$ 175.00	0	32	5
2007	218014	Gas Wtr Htr and/or Boiler Controller (21 units or more Non-digital)	-	\$ 1,500.00	\$ -	0.89	Unit	15	40	\$ 750.00	\$ 3,500.00	-	-	53,400
2007	218015	Water Heating - Common Area - Gas Space Heating Boilers	-	\$ 1,430.00	\$ -	0.89	Unit	20	8	\$ 1,500.00	\$ 2,845.00	-	-	10,182
2007	218016	Water Heating - Common Area - Gas Water Heater	-	\$ 257.00	\$ -	0.89	Unit	15	12	\$ 500.00	\$ 1,701.00	-	-	2,745
2007	218017	Water Heating - Common Area - Gas Water Boilers	-	\$ 750.00	\$ -	0.89	Unit	20		\$ 1,500.00	\$ 1,671.00	-	-	-
2007	218018	Gas Wtr Htr and/or Boiler Controller (21 units or more Digital)	-	\$ 1,500.00	\$ -	0.89	Unit	15	221	\$ 1,500.00	\$ 3,500.00	-	-	295,035
2007	218019	Water Heating - Natural Gas Storage Water Heater	-	\$ 4.95	\$ -	0.89	Hot Water Tank	15		\$ 30.00	\$ 117.10	-	-	-
2007	218020	Water Heating - Dishwasher - Energy Star	72	\$ 3.00	\$ 0.02	0.8	Dishwasher	5	153	\$ 40.00	\$ 92.62	3	8,813	367
2007	218021	Water Heating - Faucet Aerator - Low Flow	58	\$ 2.97	\$ 0.01	0.89	Household Showerhead	9	64	\$ 1.25	\$ 1.14	1	3,298	169
2007	218022	Water Heating - Low Flow Showerhead - Energy Star	77	\$ 3.96	\$ 0.02	0.89	Showerhead	9	3	\$ 5.00	\$ 20.49	0	206	11
2007	218023	Windows - Energy Star (window area per SqFt.)	2	\$ -	\$ 0.00	0.89	SqFt	20		\$ 1.00	\$ 1.68	-	-	-
2007	218024	Lighting CFL R30 Reflector (13-23 Watts)	183	\$ -	\$ 0.03	0.89	Bulb	2.1	4417	\$ 8.00	\$ 4.98	137	720,019	-
2007	218025	Lighting CFL R40 Reflector (13-23 Watts)	183	\$ -	\$ 0.03	0.89	Bulb	2.1	1241	\$ 10.00	\$ 4.98	38	202,296	-
2007	218026	Electric Water Heater - high efficiency	104	\$ -	\$ 0.02	0.89	Hot Water Tank	15		\$ 30.00	\$ 53.90	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	218027	Gas Wtr Htr and/or Boiler Controller (20 units or less)	-	\$ 540.00	\$ -	0.89	Unit	15	37	\$ 750.00	\$ 3,500.00	-	-	17,782
2007	218028	ES Clothes Washer (In Coin-Op Laundry Area)	120	\$ 81.00	\$ 0.00	0.8	Unit	10	153	\$ 150.00	\$ 659.00	0	14,688	9,914
2007	218029	Split System A/C - Tier I (ES) with TXV	214	\$ -	\$ 0.30	0.89	Unit	15		\$ 225.00	\$ 363.00	-	-	-
2007	218030	Packaged A/C - Tier I (ES) with TXV	214	\$ -	\$ 0.30	0.89	Unit	15		\$ 275.00	\$ 363.00	-	-	-
2007	218031	Split System Heat Pump - Tier I (ES) with TXV	298	\$ -	\$ 0.26	0.89	Unit	20		\$ 300.00	\$ 228.00	-	-	-
2007	218032	Packaged Heat Pump - Tier I (ES) with TXV	298	\$ -	\$ 0.26	0.89	Unit	20		\$ 300.00	\$ 228.00	-	-	-
2007	218033	T-8 or T-5 Lamp and Electronic, 2-foot lamp installed 1st lamp	47	\$ -	\$ 0.01	0.89	Lamp	11	90	\$ 32.00	\$ 21.00	1	3,789	-
2007	218034	T-8 or T-5 Lamp and Electronic, 2-foot lamp installed 2nd lamp	47	\$ -	\$ 0.01	0.89	Lamp	11	2	\$ 2.00	\$ 21.00	0	84	-
2007	218035	T-8 or T-5 Lamp and Electronic, 2-foot lamp installed 3rd lamp	47	\$ -	\$ 0.01	0.89	Lamp	11		\$ 4.00	\$ 21.00	-	-	-
2007	218036	T-8 or T-5 Lamp and Electronic, 2-foot lamp installed 4th lamp	47	\$ -	\$ 0.01	0.89	Lamp	11		\$ 7.00	\$ 10.50	-	-	-
2007	218037	T-8 or T-5 Lamp and Electronic, 2-foot lamp removed	144	\$ -	\$ 0.02	0.89	Lamp	11		\$ 6.00	\$ 19.00	-	-	-
2007	218038	T-8 or T-5 Lamp and Electronic, 3-foot lamp installed 1st lamp	59	\$ -	\$ 0.01	0.89	Lamp	11		\$ 32.00	\$ 21.00	-	-	-
2007	218039	T-8 or T-5 Lamp and Electronic, 3-foot lamp installed 2nd lamp	59	\$ -	\$ 0.01	0.89	Lamp	11		\$ 2.00	\$ 21.00	-	-	-
2007	218040	T-8 or T-5 Lamp and Electronic, 3-foot lamp installed 3rd lamp	59	\$ -	\$ 0.01	0.89	Lamp	11		\$ 4.00	\$ 21.00	-	-	-
2007	218041	T-8 or T-5 Lamp and Electronic, 3-foot lamp installed 4th lamp	59	\$ -	\$ 0.01	0.89	Lamp	11		\$ 7.00	\$ 21.00	-	-	-
2007	218042	T-8 or T-5 Lamp and Electronic, 3-foot lamp removed	198	\$ -	\$ 0.03	0.89	Lamp	11	0	\$ 6.00	\$ 19.00	-	-	-
2007	218043	T-8 or T-5 Premium Lamp and Electronic, 4-foot lamp installed 1st lamp	16	\$ -	\$ 0.05	0.89	Fixture	11	2525	\$ 32.00	\$ 1.62	113	36,916	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	218044	T-8 or T-5 Premium Lamp and Electronic, 4-foot lamp installed 2nd lamp	16	\$ -	\$ 0.05	0.89	Fixture	11	2449	\$ 2.00	\$ 1.62	110	35,804	-
2007	218045	T-8 or T-5 Premium Lamp and Electronic, 4-foot lamp installed 3rd lamp	16	\$ -	\$ 0.05	0.89	Fixture	11	109	\$ 4.00	\$ 1.62	5	1,594	-
2007	218046	T-8 or T-5 Premium Lamp and Electronic, 4-foot lamp installed 4th lamp	16	\$ -	\$ 0.05	0.89	Fixture	11	109	\$ 7.00	\$ 1.62	5	1,594	-
2007	218047	T-8 or T-5 Lamp and Electronic, 4-foot lamp removed	79	\$ -	\$ 0.02	0.89	Fixture	11		\$ 6.00	\$ 26.41	-	-	-
2007	218048	T-8 or T-5 Lamp and Electronic, 8-foot lamp installed 1st lamp	45	\$ -	\$ 0.01	0.89	Lamp	11		\$ 32.00	\$ 32.50	-	-	-
2007	218049	T-8 or T-5 Lamp and Electronic, 8-foot lamp installed 2nd lamp	45	\$ -	\$ 0.01	0.89	Lamp	11	137	\$ 2.00	\$ 32.50	1	5,487	-
2007	218050	T-8 or T-5 Lamp and Electronic, 8-foot lamp installed 3rd lamp	45	\$ -	\$ 0.01	0.89	Lamp	11		\$ 4.00	\$ 32.50	-	-	-
2007	218051	T-8 or T-5 Lamp and Electronic, 8-foot lamp installed 4th lamp	45	\$ -	\$ 0.01	0.89	Lamp	11		\$ 7.00	\$ 32.50	-	-	-
2007	218052	T-8 or T-5 Lamp and Electronic, 8-foot lamp removed	171	\$ -	\$ 0.05	0.89	Fixture	11	42	\$ 6.00	\$ 26.81	2	6,386	-
2007	218053	Lighting - CFL Interior (5 - 13 Watt) - < 800 Lumens	21	\$ -	\$ 0.00	0.89	Bulb	9.3	162	\$ 4.00	\$ 4.17	1	2,992	-
2007	218054	Lighting - CFL Interior (14 - 20 Watt)	34	\$ -	\$ 0.01	0.89	Bulb	9.3	72604	\$ 5.00	\$ 4.36	419	2,185,518	-
2007	218055	Lighting - CFL Interior (21 - 30 Watt) - < 1,600 Lumens	38	\$ -	\$ 0.01	0.89	Bulb	9.3	9030	\$ 6.50	\$ 5.03	59	308,887	-
2007	218056	Lighting - CFL Exterior (5 - 13 Watt) - < 800 Lumens	21	\$ -	\$ 0.00	0.89	Bulb	9.3		\$ 4.00	\$ 3.60	-	-	-
2007	218057	Lighting - CFL Exterior (14 - 20 Watt)	34	\$ -	\$ 0.01	0.89	Bulb	9.3		\$ 5.00	\$ 4.36	-	-	-
2007	218058	Lighting - CFL Exterior (21 - 30 Watt)	74	\$ -	\$ -	0.89	Unit	8		\$ 6.50	\$ 4.28	-	-	-
2007	218059	A/C - Central Heat Pumps - Energy Star Tier I	298	\$ -	\$ 0.26	0.89	Unit	20	13	\$ 275.00	\$ 228.00	3	3,446	-
2007	218060	Water Heating - Clothes Washer - Tier II	44	\$ 7.50	\$ 0.02	0.8	Washer	10		\$ 125.00	\$ 413.00	-	-	-
2007	218061	Int. Hardwired Fluorescent Fixture >= 30 watts	64	\$ -	\$ 0.01	0.89	Bulb	16	13037	\$ 50.00	\$ 27.53	142	740,282	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	218062	Int. Hardwired Fluorescent Fixture 22-29 watts - <1,600 Lumens - (25 Watt)	38 \$	-	\$ 0.01	0.89	Bulb	16	438	\$ 50.00	\$ 27.38	3	14,983	-
2007	218063	Lighting -Ext. Hardwired Fluorescent Porch Light (19-27 Watts)	59 \$	-	\$ 0.01	0.89	Bulb	16	4350	\$ 30.00	\$ 21.96	44	229,151	-
2008	218001	A/C & Heating - Programmable Thermostat - Energy Star	219 \$	13.00	\$ 0.04	0.89	Unit	11	0	\$ 40.00	\$ 58.00	-	-	-
2008	218002	A/C - Central Air Conditioner Tier II	201 \$	-	\$ 0.31	0.89	Unit	15	0	\$ 200.00	\$ 505.92	-	-	-
2008	218003	A/C - Packaged Terminal Air Conditioners	282 \$	-	\$ 0.24	0.89	Unit	15	-	\$ 100.00	\$ 97.50	-	-	-
2008	218004	A/C - Packaged Terminal Heat Pumps	282 \$	-	\$ 0.24	0.89	Unit	15	-	\$ 100.00	\$ 97.50	-	-	-
2008	218005	A/C - Room unit - Energy Star	127 \$	-	\$ 0.10	0.8	Unit	15	28	\$ 50.00	\$ 106.00	2	2,845	-
2008	218006	Heating & A/C - Forced Air Furnace 90% AFUE Split System	- \$	11.00	\$ -	0.89	Unit	15	-	\$ 200.00	\$ 616.00	-	-	-
2008	218007	Heating & A/C - Insulation - Attic (attic area per SqFt.)	0 \$	0.02	\$ 0.00	0.89	SqFt	20	660	\$ 0.15	\$ 0.52	0	12	12
2008	218008	Lighting - Ceiling Fan Energy Star w/ CFL	33 \$	-	\$ 0.00	0.89	Unit	16	3	\$ 20.00	\$ 50.00	0	87	-
2008	218009	Lighting - Common Area - Exit Signs (New)	351 \$	-	\$ 0.04	0.89	Exit Sign	16	11	\$ 35.00	\$ 83.65	0	3,439	-
2008	218010	Lighting - Common Area - Occupancy Sensors	214 \$	-	\$ 0.18	0.89	Occupancy Sensor	8	17	\$ 10.00	\$ 42.28	3	3,234	-
2008	218011	Lighting - Common Area - Photocells	106 \$	-	\$ -	0.89	Photo cell	8	1	\$ 10.00	\$ 59.81	-	95	-
2008	218012	Lighting -Ext. Hardwired Fluorescent Porch Light (13-18 Watts)	131 \$	-	\$ 0.05	0.89	Bulb	16	-	\$ 30.00	\$ 18.77	-	-	-
2008	218013	Water Heating - Clothes Washer - Tier I	40 \$	6.76	\$ 0.02	0.8	Washer	10	1	\$ 75.00	\$ 175.00	0	32	5
2008	218014	Gas Wtr Htr and/or Boiler Controller (21 units or more Non-digital)	- \$	1,500.00	\$ -	0.89	Unit	15	39	\$ 750.00	\$ 3,500.00	-	-	52,065
2008	218015	Water Heating - Common Area - Gas Space Heating Boilers	- \$	1,430.00	\$ -	0.89	Unit	20	9	\$ 1,500.00	\$ 2,845.00	-	-	11,454
2008	218016	Water Heating - Common Area - Gas Water Heater	- \$	257.00	\$ -	0.89	Unit	15	12	\$ 500.00	\$ 1,701.00	-	-	2,745
2008	218017	Water Heating - Common Area - Gas Water Boilers	- \$	750.00	\$ -	0.89	Unit	20	-	\$ 1,500.00	\$ 1,671.00	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	218018	Gas Wtr Htr and/or Boiler Controller (21 units or more Digital)	-	\$ 1,500.00	\$ -	0.89	Unit	15	231	\$ 1,500.00	\$ 3,500.00	-	-	308,385
2008	218019	Water Heating - Natural Gas Storage Water Heater	-	\$ 4.95	\$ -	0.89	Hot Water Tank	15		\$ 30.00	\$ 117.10	-	-	-
2008	218020	Water Heating - Dishwasher - Energy Star	72	\$ 3.00	\$ 0.02	0.89	Dishwasher	5	161	\$ 40.00	\$ 92.62	3	9,274	386
2008	218021	Water Heating - Faucet Aerator - Low Flow	58	\$ 2.97	\$ 0.01	0.89	Household Showerhead	9	67	\$ 1.25	\$ 1.14	1	3,452	177
2008	218022	Water Heating - Showerhead - Low Flow	77	\$ 3.96	\$ 0.02	0.89	Showerhead	9	3	\$ 5.00	\$ 20.49	0	206	11
2008	218023	Windows - Energy Star (window area per SqFt.)	2	\$ -	\$ 0.00	0.89	SqFt	20		\$ 1.00	\$ 1.68	-	-	-
2008	218024	Lighting CFL R30 Reflector (13-23 Watts)	183	\$ -	\$ 0.03	0.89	Bulb	2.1	4628	\$ 8.00	\$ 4.98	144	754,414	-
2008	218025	Lighting CFL R40 Reflector (13-23 Watts)	183	\$ -	\$ 0.03	0.89	Bulb	2.1	1300	\$ 10.00	\$ 4.98	40	211,914	-
2008	218026	Electric Water Heater - high efficiency	104	\$ -	\$ 0.02	0.89	Hot Water Tank	15		\$ 30.00	\$ 53.90	-	-	-
2008	218027	Gas Wtr Htr and/or Boiler Controller (20 units or less)	-	\$ 540.00	\$ -	0.89	Unit	15	42	\$ 750.00	\$ 3,500.00	-	-	20,185
2008	218028	ES Clothes Washer (In Coin-Op Laundry Area)	120	\$ 81.00	\$ 0.00	0.8	Unit	10	161	\$ 150.00	\$ 659.00	0	15,456	10,433
2008	218029	Split System A/C - Tier I (ES) with TXV	214	\$ -	\$ 0.30	0.89	Unit	15		\$ 225.00	\$ 363.00	-	-	-
2008	218030	Packaged A/C - Tier I (ES) with TXV	214	\$ -	\$ 0.30	0.89	Unit	15		\$ 275.00	\$ 363.00	-	-	-
2008	218031	Split System Heat Pump - Tier I (ES) with TXV	298	\$ -	\$ 0.26	0.89	Unit	20		\$ 300.00	\$ 228.00	-	-	-
2008	218032	Packaged Heat Pump - Tier I (ES) with TXV	298	\$ -	\$ 0.26	0.89	Unit	20		\$ 300.00	\$ 228.00	-	-	-
2008	218033	T-8 or T-5 Lamp and Electronic, 2-foot lamp installed 1st lamp	47	\$ -	\$ 0.01	0.89	Lamp	11	95	\$ 32.00	\$ 21.00	1	3,999	-
2008	218034	T-8 or T-5 Lamp and Electronic, 2-foot lamp installed 2nd lamp	47	\$ -	\$ 0.01	0.89	Lamp	11	2	\$ 2.00	\$ 21.00	0	84	-
2008	218035	T-8 or T-5 Lamp and Electronic, 2-foot lamp installed 3rd lamp	47	\$ -	\$ 0.01	0.89	Lamp	11		\$ 4.00	\$ 21.00	-	-	-
2008	218036	T-8 or T-5 Lamp and Electronic, 2-foot lamp installed 4th lamp	47	\$ -	\$ 0.01	0.89	Lamp	11		\$ 7.00	\$ 10.50	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	218037	T-8 or T-5 Lamp and Electronic, 2-foot lamp removed	144	\$ -	\$ 0.02	0.89	Lamp	11		\$ 6.00	\$ 19.00	-	-	-
2008	218038	T-8 or T-5 Lamp and Electronic, 3-foot lamp installed 1st lamp	59	\$ -	\$ 0.01	0.89	Lamp	11		\$ 32.00	\$ 21.00	-	-	-
2008	218039	T-8 or T-5 Lamp and Electronic, 3-foot lamp installed 2nd lamp	59	\$ -	\$ 0.01	0.89	Lamp	11		\$ 2.00	\$ 21.00	-	-	-
2008	218040	T-8 or T-5 Lamp and Electronic, 3-foot lamp installed 3rd lamp	59	\$ -	\$ 0.01	0.89	Lamp	11		\$ 4.00	\$ 21.00	-	-	-
2008	218041	T-8 or T-5 Lamp and Electronic, 3-foot lamp installed 4th lamp	59	\$ -	\$ 0.01	0.89	Lamp	11		\$ 7.00	\$ 21.00	-	-	-
2008	218042	T-8 or T-5 Lamp and Electronic, 3-foot lamp removed	198	\$ -	\$ 0.03	0.89	Lamp	11		\$ 6.00	\$ 19.00	-	-	-
2008	218043	T-8 or T-5 Premium Lamp and Electronic, 4-foot lamp installed 1st lamp	16	\$ -	\$ 0.05	0.89	Fixture	11	2646	\$ 32.00	\$ 1.62	119	38,685	-
2008	218044	T-8 or T-5 Premium Lamp and Electronic, 4-foot lamp installed 2nd lamp	16	\$ -	\$ 0.05	0.89	Fixture	11	2565	\$ 2.00	\$ 1.62	115	37,500	-
2008	218045	T-8 or T-5 Premium Lamp and Electronic, 4-foot lamp installed 3rd lamp	16	\$ -	\$ 0.05	0.89	Fixture	11	114	\$ 4.00	\$ 1.62	5	1,667	-
2008	218046	T-8 or T-5 Premium Lamp and Electronic, 4-foot lamp installed 4th lamp	16	\$ -	\$ 0.05	0.89	Fixture	11	114	\$ 7.00	\$ 1.62	5	1,667	-
2008	218047	T-8 or T-5 Lamp and Electronic, 4-foot lamp removed	79	\$ -	\$ 0.02	0.89	Fixture	11		\$ 6.00	\$ 26.41	-	-	-
2008	218048	T-8 or T-5 Lamp and Electronic, 8-foot lamp installed 1st lamp	45	\$ -	\$ 0.01	0.89	Lamp	11		\$ 32.00	\$ 32.50	-	-	-
2008	218049	T-8 or T-5 Lamp and Electronic, 8-foot lamp installed 2nd lamp	45	\$ -	\$ 0.01	0.89	Lamp	11	143	\$ 2.00	\$ 32.50	1	5,727	-
2008	218050	T-8 or T-5 Lamp and Electronic, 8-foot lamp installed 3rd lamp	45	\$ -	\$ 0.01	0.89	Lamp	11		\$ 4.00	\$ 32.50	-	-	-
2008	218051	T-8 or T-5 Lamp and Electronic, 8-foot lamp installed 4th lamp	45	\$ -	\$ 0.01	0.89	Lamp	11		\$ 7.00	\$ 32.50	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	218052	T-8 or T-5 Lamp and Electronic, 8-foot lamp removed	171	\$ -	\$ 0.05	0.89	Fixture	11	44	\$ 6.00	\$ 26.81	2	6,690	-
2008	218053	Lighting - CFL Interior (5-13 Watt) - < 800 Lumens	21	\$ -	\$ 0.00	0.89	Bulb	9.3	169	\$ 4.00	\$ 4.17	1	3,122	-
2008	218054	Lighting - CFL Interior (14-20 Watt)	34	\$ -	\$ 0.01	0.89	Bulb	9.3	76062	\$ 5.00	\$ 4.36	439	2,289,611	-
2008	218055	Lighting - CFL Interior (21-30 Watt) - < 1,600 Lumens	38	\$ -	\$ 0.01	0.89	Bulb	9.3	9460	\$ 6.50	\$ 5.03	62	323,595	-
2008	218056	Lighting - CFL Exterior (5-13 Watt) - < 800 Lumens	21	\$ -	\$ 0.00	0.89	Bulb	9.3		\$ 4.00	\$ 3.60	-	-	-
2008	218057	Lighting - CFL Exterior (14-20 Watt)	34	\$ -	\$ 0.01	0.89	Bulb	9.3		\$ 5.00	\$ 4.36	-	-	-
2008	218058	Lighting - CFL Exterior (21-30 Watt)	74	\$ -	\$ -	0.89	Unit	8		\$ 6.50	\$ 4.28	-	-	-
2008	218059	A/C - Central Heat Pumps - Energy Star Tier I	298	\$ -	\$ 0.26	0.89	Unit	20	13	\$ 275.00	\$ 228.00	3	3,446	-
2008	218060	Water Heating - Clothes Washer - Tier II	44	\$ 7.50	\$ 0.02	0.8	Washer	10		\$ 125.00	\$ 413.00	-	-	-
2008	218061	Int. Hardwired Fluorescent Fixture >= 30 watts	64	\$ -	\$ 0.01	0.89	Bulb	16	13685	\$ 50.00	\$ 27.53	149	777,077	-
2008	218062	Int. Hardwired Fluorescent Fixture 22-29 watts - <1,600 Lumens - (25 Watt)	38	\$ -	\$ 0.01	0.89	Bulb	16	459	\$ 50.00	\$ 27.38	3	15,701	-
2008	218063	Lighting -Ext. Hardwired Fluorescent Porch Light (19-27 Watts)	59	\$ -	\$ 0.01	0.89	Bulb	16	4557	\$ 30.00	\$ 21.96	46	240,055	-

NONRESIDENTIAL PROGRAMS

2006-2008 Energy Efficiency Concept Paper Statewide Nonresidential Express Efficiency Program

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 321,747	\$ 308,312	\$ 339,074
Overhead	\$ 146,786	\$ 157,795	\$ 169,629
Direct Implementation			
Financial Incentives	\$ 1,517,871	\$ 1,770,002	\$ 1,826,989
Activity	\$ 451,432	\$ 461,225	\$ 471,312
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ 132,387	\$ 90,132	\$ 140,944
Rebate Processing and Inspection	\$ 46,995	\$ 48,375	\$ 48,796
Marketing			
Program Specific Marketing	\$ 465,281	\$ 477,845	\$ 565,468
Statewide Marketing			
Total Program Budget	\$ 3,082,498	\$ 3,313,685	\$ 3,562,212

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2,112	15,440,451	211,357	2,380	16,641,354	273,869	2,598	17,742,976	441,490

3. Program Cost Effectiveness – Attached

4. Program Descriptors

Express Efficiency is a statewide prescriptive rebate program that encourages nonresidential customers to retrofit existing equipment with high efficiency equipment. Rebates are intended to cover a portion of the incremental cost associated with installing higher efficiency equipment. The program is designed to be relatively simple and straightforward in order to ensure that a customer has a hassle-free experience and begins to save energy and money quickly.

In the past, Express Efficiency has focused on customers who are defined as hard-to-reach (HTR). These customers traditionally are less likely to install energy efficient technologies due to financial constraints and market barriers. For the 2006-2008 program years, the San Diego Gas & Electric Express Efficiency program will operate a modified version of the statewide Express Efficiency program that will better meet the needs of our customer base.

The San Diego Gas & Electric Express Efficiency program will be designed to assist nonresidential customers who have a monthly demand above 100 kW and/or an average monthly gas usage of 20,800 therms or above. In addition, the 500 kW monthly demand barrier between the statewide Express Efficiency programs and the Statewide Standard

Performance Contract programs will be removed to ensure that the Investor-Owned Utilities (IOUs) nonresidential customers have a seamless approach to participate in an energy efficient program that best suits their retrofit project needs.

To ensure that the needs of the small and very-small nonresidential customers in our service territory, the Small Business Super Saver program will be offered in the San Diego Gas & Electric service territory.

In addition, the SDG&E Express Efficiency will have a local program component specific to the needs of the customers in our territory.

5. Program Statement

The San Diego Gas & Electric Express Efficiency program will continue their successful customer service approach with the nonresidential customers by promoting awareness of energy efficient measures and best practices through such channels as education and training seminars, integrated energy audits, project implementation support and design assistance. The San Diego Gas & Electric Express Efficiency program will promote comprehensive projects by structuring financial incentives to incorporate an integrated demand side management approach to energy efficiency. The use of financial incentives will address the many barriers existing in the market. Design program processes, gaps and overlaps that existed between programs can be resolved, resulting in a much more effective and efficient approach in targeted information, design assistance, and financial incentives.

Overlapping of program measures and market segments has been confusing to the customer and has created competing energy efficiency programs. This modified Express Efficiency program will address these barriers.

What's New for 2006-08?

- Innovation
 - Incentives for Comprehensive Projects
 - Incorporates On-Bill Financing for customers
 - Promotion of Demand Response programs
- Integration
 - Demand Side Management Integration and Coordination
- Other Program Improvements
 - Removal of 500 kW monthly demand barrier
 - Statewide and Local program offerings for customers
 - Audits for New Businesses

SDG&E leverages the Express Efficiency program in a strategy that encourages program delivery by outside organizations of value-added services to their constituents. Outreach has been, and will continue to be, expanded to include coordination with Community Based Organizations (CBOs), Faith Based Organizations (FBOs), ethnic organizations, and other stakeholders. The Express Efficiency program will continue its track record of success in delivering cost-effective energy savings and demand reduction.

There is a need to address the barrier with corporate chains, schools, and government agencies because of program requirements regarding procurement and installation. Currently these industries may not have the ability to install qualifying equipment until months after the purchase, thus putting them at risk for receiving a rebate. The statewide

Express team will continue to look at this issue for improved customer service, and for new energy efficient technologies to adopt in the program.

The SDG&E Express Efficiency local program will offer new energy efficient measures such as griddles, fryers, copiers, and plug load software. Also, to continue our successful partnership with the San Diego County Water Authority, we will continue to include Low-Flow Pre Rinse Spray Valves and Connectionless Steamers. SDG&E also hopes to work with the water agency to offer new measures such as faucet aerators and low-flow showerheads. SDG&E Express Efficiency will also continue to pursue measures and anticipate the flexibility to add measures to the program upon completion of the DEER database and/or deemed energy savings workpapers.

6. Program Rationale

For the 2006–2008 program years, SDG&E is proposing to target customers over 100kW of monthly demand to avoid overlapping with other energy efficiency programs such as Small Business Super Saver (formerly known as Small Business Energy Efficiency). In addition, the 500 kW monthly demand participation limit has been removed. This will allow qualifying customers to participate in a quick and easy prescribed rebate program without conflicting with other energy efficiency programs. Express Efficiency will continue to involve customers, vendors, third party sponsors, SDG&E Account Executives, and community organizations to promote energy efficiency outreach, education, and rebates to increase the adoption of energy efficient technologies.

SDG&E Express Efficiency will continue to work with the programs and services teams to integrate demand reduction either through the SDG&E Demand Response programs and/or through behavioral changes such as a hotel shifting its laundry work load to an off-peak time to reduce demand during a critical peak period.

7. Program Outcomes

The desired results of the program are to increase the installation of high-efficiency, energy saving equipment that will result in long-term energy savings and peak reductions. The SDG&E Express Efficiency program will promote comprehensive retrofits by supporting Integrated Demand Side Management Audits and comprehensive project designs.

8. Program Strategy

Express Efficiency is a statewide prescriptive rebate program that encourages nonresidential customers to retrofit existing equipment with high-efficiency equipment. It is designed to be simple and straightforward so that customers can save energy and money quickly. The program will use multiple marketing channels to increase awareness and participation in the program. Financial incentives may be awarded on comprehensive projects that include more than one measure or that participate in demand response programs.

In addition, when a business customer contacts SDG&E to establish a new account, a lead will be generated to the energy efficiency group. The account will be reviewed and, if appropriate, referred to the SDG&E audit team. The audit team will contact the customer

to inform them about the energy efficiency and information programs. After the audit team informs the customer about SDG&E's Energy Efficiency programs, the customer has the opportunity to participate in an audit. Upon completion of the audit and the discovery of energy efficiency opportunities, the customer may elect to participate in an energy efficiency program.

The SDG&E Express Efficiency program will continue to work with the energy audit team to assist the customer each step of the process. Customers will be directed to the SDG&E Express Efficiency website to locate participating contractors and vendors. SDG&E will also incorporate facilitators in to the program. The facilitator will be in the field to assist customers with questions, help to locate a contractor from the participating vendor list, and aid in the completion of rebate forms. The facilitator will also be able to assist the customer with the On-Bill Financing option, which will allow the customer to participate in a comprehensive retrofit without the burden of the upfront capital cost associated with some measures such as refrigeration and food service equipment. The facilitator will be able to be a representative for the customer.

Furthermore, the SDG&E Express Efficiency program will take a focused approach on industry specific segments such as restaurants and food service. The SDG&E Express Efficiency team will work with the SDG&E Standard Performance Contract team and the Energy Savings Bid program team to target energy efficiency retrofits for buildings. Customers will be encouraged to work towards the energy reduction goal as outlined by the December 2004 Governors Executive Order.

9. Program Objectives

The main objective of this program is to achieve cost-effective energy and demand savings through program participation by our nonresidential customers.

10. Program Implementation

The Express Efficiency program clearly lists the energy efficiency measures a customer may install in an easy to understand rebate form, which is available in a printed hard copy rebate form or online. Customers simply make a reservation to hold funding for their project, then purchase and install the qualifying equipment, and submit a completed rebate form with proof of purchase. Projects may be subject to inspection after installation and prior to rebate payment.

The Express Efficiency program group will incorporate a cross-marketing approach that encourages customers to have an audit, complete an energy efficient retrofit and then participate in a Demand Response program (DRP). Additionally, the SDG&E energy efficiency team will continue to provide to the SDG&E Demand Response team a database of customer names that have previously participated in energy efficiency programs. For the 2006-2008 program years, an added incentive for customers to segue into DRP would reduce lost opportunities for the demand response programs. This approach can be incorporated into the rebate program by offering customers an added incentive for subscribing to one of the DRP programs.

11. Customer Description

All nonresidential customers over 100kW of monthly demand and/or a monthly average natural gas usage of 20,800 therms or above.

12. Customer Interface

Since the program concept has been in existence for several years and is familiar to customers and vendors, many will be able to anticipate participation early in 2006. SDG&E will continue timely contractor kick-off meetings, which point out changes to the programs, new programs, and rebate and incentive dollars. SDG&E will also highlight at the start of the program year and include in the program documentation, the additional financial incentives allowed for comprehensive projects and demand response participation. Information will be delivered through direct presentations, a website, and direct customer contact. Applications and program information is available through the website. Direct assistance will be provided through telephone support and on-site support as required. Customers simply make a reservation to hold funding for their purchase, install the qualifying equipment, and then submit a completed rebate form with proof of purchase. Projects may be subject to inspection after installation and prior to rebate payment.

13. Energy Measures and Program Activities - see worksheet

13.1. Prescriptive Measures

See SDG&E June 1, 2005 Filing Workbook

13.2. kWh Level Data

See SDG&E June 1, 2005 Filing Workbook

13.3. Non-energy Activities

SDG&E Express Efficiency will continue to support the outreach and education done through an energy audit. The energy audit team will continue to gather detailed information from the customer and the recommended energy efficient retrofit project. Additionally, the audit team will leverage the financial incentives for comprehensive projects and demand response participation. If needed, the audit team will also encourage participation in the new SDG&E On-Bill Financing program.

Onsite audits may be conducted, or information may be provided through direct mail, email, telephone or other means through the Education, Training and Outreach program. Detailed information will be recorded in our tracking system, including equipment inventories and project recommendations. Recommendations will be followed up periodically to determine implementation status, and whether additional assistance will be required to cause a project to be implemented. If a project is implemented without design or financial assistance, energy savings will be logged into the tracking system, and claimed toward program goals.

Also, in 2006, SDG&E will begin developing an integrated demand side management (IDSM) audit that supports both energy efficiency and demand reduction. Audits have proven to be an important tool for educating customers about energy management opportunities in their facility, and encouraging their participation in programs. The purpose for an IDSM audit will be to provide a single coordinated audit service for the customer, and eliminate what may

appear to be confusing or competing energy options between the two types of programs.

The IDSM audit would operate under the umbrella of the Technical Assistance Program and have the following characteristics:

- Subcontractors will be utilized to provide the audit service;
- The results will be reviewed by both the energy efficiency and demand response staff;
- The results will provide the customer with a clear action plan;
- A follow-up meeting with the customer will encourage them to implement the plan and participate in available programs.

Express Efficiency will continue to coordinate seminars that show the process from start to finish. The *Energy Solutions for Business Customers* seminar instructed customers on how to flow from an audit, to energy efficiency and then to demand reduction. This seminar, which was held in October 2004, was very successful and will be incorporated into the regular training schedule.

13.4. **Subcontractor Activities**

Subcontractor activities are expected to include:

- Energy savings research and documentation
- Industry specific marketing efforts

13.5. **Quality Assurance and Evaluation Activities**

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E/SoCalGas looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs.

13.5.1. Expected number/percent of inspections:

Express Efficiency will continue to keep the bar raised and will do 100% inspection in the Express Efficiency program. This allows SDG&E to maintain an exceptional level of integrity with our contractors and customers. Pre-inspections may be required for lighting measure applications.

13.6. **Marketing Activities**

SDG&E will continue to market the Express Efficiency program in several ways.

- Direct delivery by SDG&E Energy Program Representatives, Special Investigators, Facilitators and Account Executives.
- Direct delivery from an integrated audit program
- Direct delivery by Community Based Organizations, Faith-Based Organizations, and ethnic organizations.
- Direct delivery by vendors, contractors, and equipment dealers.
- Direct delivery by education and training seminars.

- Direct mail, including bill inserts and targeted mailers.

14. Conclusion

Express Efficiency is a comprehensive statewide program designed to implement prescribed energy efficiency measures that will produce energy savings and reduce peak demand within SDG&E's service area. It also avoids lost opportunities by expanding its measure offerings and broadening its targeted customers to over 500kW of monthly demand. The Express program will continue to improve upon its application process and best practices to make it both easy and user-friendly while maintaining exceptional customer service.

		SDGE3012 EXP-Express Efficiency Rebate Program
BUDGET		
Administrative Costs	\$	1,443,343
Overhead and G&A	\$	474,209
Other Administrative Costs	\$	969,133
Marketing/Outreach	\$	1,508,593
Direct Implementation	\$	7,006,459
Total Incentives and Rebates		
User Input Incentive	\$	-
Direct Install Rebate	\$	5,114,861
Direct Install Labor	\$	-
Direct Install Materials	\$	-
Activity	\$	1,383,969
Installation	\$	-
Hardware & Materials	\$	363,463
Rebate Processing & Inspection	\$	144,166
EM&V Costs	\$	-
Budget	\$	9,958,395
Costs recovered from other sources	\$	-
Budget (plus other costs)	\$	9,958,395

PROGRAM IMPACTS		
DEER kW (kW)		7,090
Net NCP (kW)		6,831
Net CEC (kW)		7,659
Annual Net kWh		49,824,780
Lifecycle Net kWh		293,308,664
Annual Net Therms		926,715
Lifecycle Net Therms		6,611,656
Cost Effectiveness		
TRC		
Costs	\$	13,688,597
Electric Benefits	\$	19,824,075
Gas Benefits	\$	3,003,279
Net Benefits (NPV)	\$	9,138,757
BC Ratio		1.67
PAC		
Costs	\$	9,450,820
Electric Benefits	\$	19,824,075
Gas Benefits	\$	3,003,279
Net Benefits (NPV)	\$	13,376,534
BC Ratio		2.42
Levelized Cost		
Levelized Cost TRC (\$/kWh)		
Discounted kWh		202,318,181
Cost	\$	0.0588
Benefits	\$	0.0980
Benefit-Cost	\$	0.0392
Levelized Cost PAC (\$/kWh)		
Discounted kWh		202,318,181
Cost	\$	0.0407
Benefits	\$	0.0980
Benefit-Cost	\$	0.0573
Levelized Cost TRC (\$/therm)		
Discounted Therms		4,397,519
Cost	\$	0.4129
Benefits	\$	0.7143
Benefit-Cost	\$	0.3014
Levelized Cost PAC (\$/therm)		
Discounted Therms		4,397,519
Cost	\$	0.2777
Benefits	\$	0.7143
Benefit-Cost	\$	0.4366

SDGE Express Efficiency Rebate Program

Year	Total Budget	Total Incentives	Admin Budget	Net kWh	Net Therms	Net kW
2006	\$ 3,082,498	\$ 1,517,871	\$ 1,564,628	15,440,451	211,357	2,112
2007	\$ 3,313,685	\$ 1,770,002	\$ 1,543,683	16,641,354	273,869	2,380
2008	\$ 3,562,212	\$ 1,826,989	\$ 1,735,223	17,742,976	441,490	2,598

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	213105	Heating - Infrared Film for Greenhouse Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling Evap-Cooled	-	0	-	0.96	SqFt	5	200,000	\$ 0.03	\$ 0.03	-	-	9,408
2006	213075	A/C - Package Terminal Air Conditioners / Heat Pump less	4,016	-	0.97	0.96	Ton	12	-	\$ 300.00	\$ 3,446.00	-	-	-
2006	213001	Cooking - Insulated Holding Cabinets, 3/4 size, .4 kW or less	110	-	0.12	0.96	Ton	15	100	\$ 100.00	\$ 65.00	12	10,512	-
2006	213099	Cooking - Insulated Holding Cabinets, half size, .4 kW or less	3,850	-	0.70	0.96	Unit	12	1	\$ 550.00	\$ 800.00	1	3,696	-
2006	213100	Cooking - Insulated Holding Cabinets, half size, .3 kW or less	1,950	-	0.35	0.96	Unit	12	1	\$ 275.00	\$ 600.00	0	1,872	-
2006	213101	Cooling - Insulated Holding Cabinets, half size, .3 kW or less	2,750	-	0.45	0.96	Unit	12	1	\$ 387.00	\$ 600.00	0	2,640	-
2006	213102	Cool Roofs Roof	0	-	0.00	0.96	SqFt	15	-	\$ 0.10	\$ 0.32	-	-	-
2006	213095	Lighting - Ceramic Metal Halide Fixture	485	-	0.10	0.96	Bulb	16	15	\$ 150.00	\$ 255.41	2	6,982	-
2006	213104	Water Heating - Pre-rinse Spray Valves	-	570	-	0.96	Unit	5	50	\$ 30.00	\$ 60.00	-	-	27,360
2006	213094	Water Heating - Commercial Horizontal Axis Washer	22	149	-	0.96	Unit	10	-	\$ 150.00	\$ 407.00	-	-	-
2006	213106	Advanced Evaporative Coolers	547	-	0.83	0.96	Ton	15	1	\$ 123.00	\$ 126.90	1	525	-
2006	213107	Connectionless Steamers Full load efficiency 50% or greater	6,620	-	0.20	0.96	Unit	12	1	\$ 750.00	\$ -	0	6,355	-
2006	213108	Connectionless Steamers Full load efficiency 70% or greater	7,780	-	0.40	0.96	Unit	12	1	\$ 900.00	\$ (500.00)	0	7,469	-
2006	213109	Lighting - Screw in 14-26 Watt Reflector Lamp	304,612	0	0.047124	0.96	Bulb	1,75	8000	6	5,2713	362	2,339,420	-
2006	213110	Lighting - 4 Ft Premium T-8 with Elec. Ballast	32,8536	0	0.010125	0.96	Fixture	11	50000	6	19.01	486	1,576,973	-
2006	213111	Heating - Setback Programmable Thermostats	250	0	0	0.96	Unit	11	0	12	58	-	-	-
2006	213112	A/C - Reflective Window Film Desert	16.1	0	0.0023	0.96	SqFt	10	1000	3	3.12	2	15,456	-
2006	213103	Refrigeration - Food Service-Auto Closers for Reach-In Cooler Doors	243	0	0.034	0.96	Closer	8	1000	40	300	33	233,280	-
2006	213084	Refrigeration -Cooler/Freezer Door Gaskets - Solid Doors: Cooler	104.55	0	0.01195	0.96	LinearFt	4	500	4	4	6	50,184	-
2006	213076	Refrigeration - New Refrigeration Case w/Doors-Low Temperature Case	1208	0	0.118	0.96	LinearFt	16	5	200	100	1	5,798	-
2006	213077	Refrigeration - New Refrigeration Case w/Doors-Medium Temperature Case	581	0	0.058	0.96	LinearFt	16	10	150	100	1	5,578	-
2006	213078	Refrigeration - New Refrigeration Case w/Doors-Special doors Low Temp	1208	0	0.218	0.96	LinearFt	16	5	200	700	1	5,798	-
2006	213079	Refrigeration - New Refrigeration Case w/Doors-Special doors with low/no ASH	749	0	0.015	0.96	LinearFt	16	20	50	77	0	14,381	-
2006	213080	Refrigeration - Night Covers for Display Cases Low Temp	59	0	0	0.96	LinearFt	5	15	9	9.25	-	850	-
2006	213081	Refrigeration - Suction Line Insulation	18.4	0	0	0.96	LinearFt	11	200	1	1.72	-	3,533	-
2006	213097	Cooking - Insulated Holding Cabinets, full size, .5 kW or less	5500	0	1	0.96	Unit	12	1	733	1000	1	5,280	-
2006	213083	Refrigeration -Cooler/Freezer Door Gaskets - Glass Doors	104.55	0	0.01195	0.96	LinearFt	4	500	4	4	6	50,184	-
2006	213115	Refrigeration - Night Covers for Display Cases Med Temp	148	0	0	0.96	LinearFt	5	500	9	9.25	-	71,040	-
2006	213085	Refrigeration -Strip Curtains for Walk-ins	465	0	0.053	0.96	SqFt	4	150	3	3.05	8	66,960	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	213086	Water Heating - Gas Storage Water Heater (per MBtuh)	0	1.752988048	0	0.96	Mbtuh	15	25	2	6,7769	-	-	42
2006	213089	Water Heating - Instantaneous - Gas (per MBtuh)	-	\$ 1.41	-	0.96	Mbtuh	20	60	2	-7.77	-	-	81
2006	213090	Water Heating - Commercial Boiler	-	\$ 3.01	-	0.96	Mbtuh	20	1.5	1.5	1.71	-	-	-
2006	213091	Water Heating - Direct Contact Water Heater	-	\$ 2.29	-	0.96	Mbtuh	20	100	2	2.17	-	-	220
2006	213092	Water Heating - Process Boiler, Steam	-	\$ 2.29	-	0.96	Mbtuh	20	100	2	2.17	-	-	220
2006	213093	Water Heating - Process Boiler, Water	-	\$ 2.29	-	0.96	Mbtuh	20	100	2	2.17	-	-	-
2006	213082	Refrigeration - Vending Machine Controller	1,612	\$ -	\$ -	0.96	Machine	10	150	90	215.5	-	232,128	-
2006	213150	Tank Insulation - Low Temperature Applic. (LF) 2 in	-	\$ 3.70	-	0.96	SquareFT	20	150	3	3.41	-	-	533
2006	213136	High Efficiency Copier	324	\$ -	\$ 0.04	0.96	Machine	6	500	100	119	20	155,424	-
2006	213137	High Efficiency Electric Fryer	1,752	\$ -	\$ 0.00	0.96	Fryer	12	25	4000	6185.6594	0	42,048	-
2006	213138	Vending Machine Controller	387	\$ -	\$ -	0.96	Machine	10	500	75	97.2	-	185,760	-
2006	213139	Residential Energy Star Clothes Washer in Commercial Application	-	\$ 45.60	\$ -	0.96	Washer	10	0	75	581	-	-	-
2006	213140	Low Flow Showerhead	78	\$ 3.89	\$ 0.02	0.96	Showerhead	9	100	20	20.49	2	7,450	373
2006	213146	Application	-	\$ 13.30	\$ -	0.96	Tank	15	-	-	117.1	-	-	-
2006	213113	Cool Roofs HVAC Ducts	0	\$ -	\$ 0.00	0.96	SqFt	15	0	0.1	0.32	-	-	-
2006	213148	Premium T8 with T12 40 Watt Baseline	75	\$ -	\$ 0.01	0.96	Lamp	11	100	10	12.7	1	7,171	-
2006	213131	High Efficiency Gas Fryer	-	\$ 438.00	\$ -	0.96	Fryer	12	10	1500	2555.36	-	-	4,205
2006	213151	Tank Insulation - High Temperature Applic. (LF) 2 in	-	\$ 10.40	\$ -	0.96	SquareFT	20	150	4	3.41	-	-	1,498
2006	213152	Pipe Insulation - Hot Water Applic. (sq ft) 2 in	-	\$ 2.90	\$ -	0.96	LinearFt	20	100	3	9.22	-	-	1,373
2006	213153	Pipe Insulation - Low Pressure Steam Applic. (LF) 2 in	-	\$ 14.30	\$ -	0.96	LinearFt	20	100	4	9.22	-	-	326
2006	213154	Tank Insulation - Low Temperature Applic. (LF) 1 in	-	\$ 3.40	\$ -	0.96	SquareFT	20	100	2	2.58	-	-	931
2006	213155	Tank Insulation - High Temperature Applic. (LF) 1 in	-	\$ 9.70	\$ -	0.96	SquareFT	20	100	3	2.58	-	-	250
2006	213156	Pipe Insulation - Hot Water Applic. (sq ft) 1 in	-	\$ 2.60	\$ -	0.96	LinearFt	20	100	2	5.67	-	-	1,286
2006	213157	Pipe Insulation - Low Pressure Steam Applic. (LF) 1 in	50	\$ -	\$ 0.01	0.96	LinearFt	20	100	3	5.67	-	-	-
2006	213147	Premium T8 with T12 34Watt Baseline	4,027	\$ -	\$ 0.54	0.96	Ton	12	-	300	3446	-	-	-
2006	213124	Refrigeration - High Efficiency Multiplex Compressor System & Eff. Condenser Air-Cooled	3,900	\$ -	\$ 0.70	0.96	Unit	12	1	458	1000	1	3,744	-
2006	213096	Cooking - Insulated Holding Cabinets, full size, .8 kW or less	105	\$ -	\$ 0.01	0.96	LinearFt	4	-	4	-	-	-	-
2006	213116	Refrigeration - Cooler/Freezer Door Gaskets - Solid Doors: Freezer	1,297	\$ -	\$ 0.18	0.96	Closer	8	50	50	300	9	62,256	-
2006	213117	Refrigeration - Food Service -Auto Closer for Reach-In Freezer Doors	1,598	\$ -	\$ 0.05	0.96	Ton	16	-	75	702	-	-	-
2006	213118	Refrigeration - Efficient Condenser-Evap-Cooled-CZ10 Lighting - High Output 4 or 6 Lamp T5 or T8 Fixture (High bay applications)	989	\$ -	\$ 0.18	0.96	Fixture	11	1700	150	250	289	1,613,722	-
2006	213120	Lighting - Occupancy Sensor - High-Bay Sensor	1,661	\$ -	\$ 0.39	0.96	Sensor	8	10	44	141	4	15,949	-
2006	213121	Water Heating - Commercial Pool Heater	-	\$ 2.41	\$ -	0.96	Mbtuh	5	100	2	-	-	-	231
2006	213134	Faucet Aerators	58	\$ 2.92	\$ 0.01	0.96	Site	9	500	1	1.14	6	27,936	1,400
2006	213123	Refrigeration - High Efficiency Multiplex Compressor System Evap-Cooled	4,016	\$ -	\$ 0.97	0.96	Ton	12	-	300	3446	-	-	-
2006	213133	High Efficiency Gas Griddle	-	\$ 219.00	\$ -	0.96	Griddle	12	10	1000	1989.3	-	-	2,102
2006	213125	Refrigeration - High Efficiency Multiplex Compressor System & Eff. Condenser Evap-Cooled	4,027	\$ -	\$ 0.43	0.96	Ton	12	-	300	3446	-	-	-
2006	213126	Refrigeration - Efficient Evap Fan Motor Electronically Commutated Motor (ECM)	673	\$ -	\$ -	0.96	Motor	16	1000	150	161	-	646,080	-
2006	213127	Refrigeration - Efficient Evap Fan Motor Permanent-Split Capacitor (PSC) Motor	336	\$ -	\$ -	0.96	Motor	16	250	100	161	-	80,640	-
2006	213128	Refrigerator - Early Replacement	1,041	\$ -	\$ 0.14	0.96	Unit	6	200	275	272	26	199,791	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	213129	Software Plug Load Sensors	227 \$	-	-	0.96	Unit	5	7500	15	5	-	1,634,407	-
2006	213130	Torchiere	464 \$	-	0.09	0.96	Unit	16	50	15	22.63	4	22,291	-
2006	213114	Other - Occupancy Sensor - Plug Load	258 \$	-	0.09	0.96	Sensor	8		15	76.17	-	-	-
2006	213122	Refrigeration - High Efficiency Multiplex Compressor System Air-Cooled	7,480 \$	-	0.54	0.96	Ton	12	2	300	3446	0	1,462	-
2006	213035	Lighting - Interior 176-250w Mer Vap Base HID	761 \$	-	0.14	0.96	Fixture	16	2	38	287	0	-	-
2006	213025	Lighting - Hardwire Merc Vap Base 66-90 watt Fluorescent Fixture	532 \$	-	0.09	0.96	Fixture	16	2	17	116	0	1,022	-
2006	213026	Lighting - Hardwired 14-26 watt CF Fixture	305 \$	-	0.05	0.96	Bulb	16	10	11	20,7609	0	2,924	-
2006	213027	Lighting - Hardwired 5-13 watt CF Fixture	112 \$	-	0.03	0.96	Bulb	16	10	11	17,974	0	1,071	-
2006	213028	Lighting - Induction Fixture >100 watts	884 \$	-	0.13	0.96	Lamp	16	5	150	290	1	4,245	-
2006	213029	Lighting - Induction Fixture 55-100 watts	1,197 \$	-	0.18	0.96	Lamp	16	5	150	295	1	5,746	-
2006	213030	Lighting - Interior 0-35w Incan Base HID	228 \$	-	0.04	0.96	Fixture	16	2	18	133	0	438	-
2006	213031	Lighting - Interior 0-35w Merc Vap Base HID	120 \$	-	0.02	0.96	Fixture	16	2	12.5	60	0	231	-
2006	213032	Lighting - Interior 101-175w Incan Base HID	1,355 \$	-	0.24	0.96	Fixture	16	2	40	287	0	2,601	-
2006	213045	Lighting - LED Channel Signage Replacement-Indoor Red <=2 feet high	45 \$	-	0.01	0.96	LinearFt	16	20	4	18	0	854	-
2006	213034	Lighting - Interior 176-250w Incan Base HID	1,933 \$	-	0.36	0.96	Fixture	16	2	40	287	1	3,711	-
2006	213022	Lighting - Hardwire Incan Base 66-90 watt Fluorescent Fixture	991 \$	-	0.16	0.96	Fixture	12	2	18	137	0	1,904	-
2006	213036	Lighting - Interior 251-400w Incan Base HID	2,799 \$	-	0.50	0.96	Fixture	16	2	50	287	1	5,373	-
2006	213037	Lighting - Interior 251-400w Merc Vap Base	2,132 \$	-	0.38	0.96	Fixture	16	2	48	287	1	4,094	-
2006	213038	Lighting - Interior 36-70w Incan Base HID (50 Watt halide)	444 \$	-	0.10	0.96	Bulb	16	2	25	255,414	0	853	-
2006	213039	Lighting - Interior 36-70w Merc Vap Base	145 \$	-	0.02	0.96	Fixture	16	2	18	287	0	279	-
2006	213040	Lighting - Interior 71-100w Incan Base HID	793 \$	-	0.14	0.96	Fixture	16	2	40	287	0	1,523	-
2006	213041	Lighting - Interior 71-100w Merc Vap Base	149 \$	-	0.05	0.96	Bulb	16	2	38	266,8499	0	286	-
2006	213042	Lighting - Interior Pulse Start Metal Halide Fixtures	490 \$	-	0.09	0.96	Lamp	16	163	250	287	14	76,673	-
2006	213043	Lighting - Lamps controlled by Dimming Elec Ballasts	155 \$	-	0.02	0.96	Fixture	11	200	20	45.45	4	29,834	-
2006	213044	Lighting - Lamps controlled by Non-Dimming Elec Ballasts	29 \$	-	0.00	0.96	Lamp	16	500	5	7	2	13,944	-
2006	213033	Lighting - Interior 101-175w Merc Vap Base	375 \$	-	0.07	0.96	Fixture	16	2	38	287	0	719	-
2006	213013	Lighting - 8 Ft T-8 with Elec. Ballast	44 \$	-	0.01	0.96	Lamp	11	300	9	32.5	2	12,708	-
2006	213002	A/C - Reflective Window Film Coastal	12 \$	-	0.00	0.96	SqFt	10	200	3	3.12	0	2,388	-
2006	213003	A/C - Reflective Window Film Inland	15 \$	-	0.00	0.96	SqFt	10	250	3	3.12	1	3,665	-
2006	213004	A/C Setback Programmable Thermostats	1,146 \$	20.50	0.24	0.96	unit	11	200	12	193,5557	(47)	220,032	3,937
2006	213005	Agriculture - Low Pressure Sprinkler Nozzles (per nozzle)	12 \$	-	0.01	0.96	Nozzle	8	10	1.15	1.2	0	115	-
2006	213006	Agriculture - Sprinkler to Drip Irrigation (per acre)	579 \$	-	0.33	0.96	Acre	20	0	44	300	-	-	-
2006	213007	Heating - Greenhouse Heat Curtain	-	0.39	-	0.96	SqFt	5	400000	0.2	0.49	-	-	149,760
2006	213008	Heating - Space Heating Boilers - Hot Water	-	0.64	-	0.96	Mbtuh	20	3000	1	2,2419	-	-	1,847
2006	213009	Heating - Space Heating Boilers - Large	-	0.64	-	0.96	Mbtuh	20	3000	1	2,2419	-	-	1,847
2006	213010	Heating - Space Heating Boilers - Steam	-	0.64	-	0.96	Mbtuh	20	3000	1	2,2419	-	-	1,847
2006	213024	Fluorescent Fixture	308 \$	-	0.05	0.96	Fixture	16	2	11.5	56	0	590	-
2006	213012	Lighting - 3 Ft 2nd Gen. T-8 with Elec. Ballast	54 \$	-	0.01	0.96	Lamp	11	150	5	21	1	7,769	-
2006	213023	Lighting - Hardwire Merc Vap Base >90 watt Fluorescent Fixture	776 \$	-	0.13	0.96	Fixture	16	3	21.5	137	0	2,234	-
2006	213014	Lighting - Exterior >176w Incan Base HID	2,000 \$	-	-	0.96	Fixture	16	5	100	144	-	9,601	-
2006	213015	Lighting - Exterior >176w Mer Vap Base HID	652 \$	-	-	0.96	Bulb	16	5	48	227,661	-	3,129	-
2006	213016	Lighting - Exterior 0-100w Incan Base HID	830 \$	-	-	0.96	Fixture	16	5	36	144	-	3,983	-
2006	213098	Cooking - Insulated Holding Cabinets, 3/4 size, 6 kW or less	2,790 \$	-	0.50	0.96	Unit	12	1	367	800	0	2,678	-
2006	213018	Lighting - Exterior 101-175w Incan Base HID	1,189 \$	-	-	0.96	Bulb	16	5	64	35,746	-	5,707	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	213074	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling Air-Cooled	7,480 \$	-	\$ 0.54	0.96	Ton	12	0	300	3446	-	-	-
2006	213020	Lighting - Hardwire Incan Base >90 watt Fluorescent Fixture	1,763 \$	-	\$ 0.29	0.96	Fixture	12	0	22.5	173	-	-	-
2006	213021	Lighting - Hardwire Incan Base 27-65 watt Fluorescent Fixture	558 \$	-	\$ 0.14	0.96	Bulb	12	0	12.5	38,6763	-	-	-
2006	213019	Lighting - Exterior, 101-175W Merc. Vap Base	477 \$	-	\$ -	0.96	Fixture	16	5	30	144	-	2,291	-
2006	213011	Lighting - 2 Ft 2nd Gen. T-8 with Elec. Ballast	44 \$	-	\$ 0.01	0.96	Lamp	11	150	5	21	1	6,336	-
2006	213067	Refrigeration - Food Service -Auto Closer for Main Cooler Doors	2,091 \$	-	\$ 0.24	0.96	Closer	8	100	40	125	23	200,736	-
2006	213073	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling & Eff. Condenser Evap-Cooled	4,016 \$	-	\$ 0.97	0.96	Ton	12	0	300	3446	-	-	-
2006	213072	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling & Eff. Condenser Air-Cooled	7,480 \$	-	\$ 0.54	0.96	Ton	12	0	300	3446	-	-	-
2006	213071	Refrigeration - Glass or Acrylic Doors-Medium Temperature Case	1,155 \$	-	\$ 0.13	0.96	Door	12	10	75	197	1	11,088	-
2006	213070	Refrigeration - Glass or Acrylic Doors-Low Temperature Case	2,812 \$	-	\$ 0.29	0.96	Door	12	10	150	197	3	26,995	-
2006	213069	Refrigeration - Food Service -Evaporator Fan Controller for Walk-In	1,109 \$	-	\$ -	0.96	Controller	5	10	75	265	-	10,646	-
2006	213046	Lighting - LED Channel Signage Replacement-Indoor Red >2 feet high	89 \$	-	\$ 0.02	0.96	LinearFt	16	15	6	33	0	1,282	-
2006	213017	Lighting - Exterior 0-100w Merc Vap Base HID	388 \$	-	\$ -	0.96	Fixture	16	5	22	144	-	1,865	-
2006	213068	Refrigeration - Food Service -Auto Closer for Main Freezer Doors	2,091 \$	-	\$ 0.24	0.96	Closer	8	100	50	125	23	200,736	-
2006	213066	Refrigeration - Food Service - Air Cooled to Evap Cooled Condenser Multiplex	743 \$	-	\$ 1.07	0.96	Ton	16	0	195	781	-	-	-
2006	213065	Refrigeration - Food Service - Air Cooled to Evap Cooled Condenser Conventional	743 \$	-	\$ 1.07	0.96	Ton	16	0	195	781	-	-	-
2006	213064	Refrigeration - Efficient Condenser-Air-Cooled-CZ10	1,536 \$	-	\$ 0.07	0.96	Ton	16	10	175	702	-	-	-
2006	213063	Refrigeration - Anti-Sweat Heater Controls	343 \$	-	\$ 0.02	0.96	LinearFt	12	10	14	56	0	3,293	-
2006	213062	Lighting - Occupancy Sensor - Wallbox Lighting Sensor	214 \$	-	\$ 0.18	0.96	Sensor	8	25	16.5	42,2833	4	5,130	-
2006	213061	Lighting - Occupancy Sensor - Wall/Ceiling Mounted	214 \$	-	\$ 0.18	0.96	Sensor	8	25	44	42,2833	4	5,130	-
2006	213054	Lighting - Remove 8 Ft T-8 (De-Lamp)	252 \$	-	\$ 0.05	0.96	Fixture	11	340	18	26,8054	18	82,292	-
2006	213052	Lighting - Remove 3 Ft T-8 (De-Lamp)	183 \$	-	\$ 0.03	0.96	Lamp	11	200	4	19	6	35,059	-
2006	213060	Lighting - Occupancy Sensor - Plug Load	258 \$	-	\$ 0.09	0.96	Sensor	8		15	76.17	-	-	-
2006	213051	Lighting - Remove 2 Ft T-8 (De-Lamp)	128 \$	-	\$ 0.03	0.96	Lamp	11	200	4	19	5	24,576	-
2006	213053	Lighting - Remove 4 Ft T-8 (De-Lamp)	79 \$	-	\$ 0.02	0.96	Fixture	11	500	9	26,4054	12	37,847	-
2006	213049	Lighting - LED Exit Sign New Sign	351 \$	-	\$ 0.04	0.96	Exit Sign	16	200	27	81,2609	8	67,452	-
2006	213048	Lighting - LED Channel Signage Replacement-Outdoor Red >2 feet high	83 \$	-	\$ 0.01	0.96	LinearFt	16	15	3	33	0	1,195	-
2006	213047	Lighting - LED Channel Signage Replacement-Outdoor Red <=2 feet high	42 \$	-	\$ 0.01	0.96	LinearFt	16	15	2	18	0	598	-
2006	213055	Lighting - Screw in >27 Watt Lamp	367 \$	-	\$ 0.06	0.96	Bulb	1.75	5500	4.25	6,3152	300	1,937,040	-
2006	213056	Lighting - Screw in 14-26 Watt Lamp	280 \$	-	\$ 0.04	0.96	Bulb	1.75	10000	3.5	5,2713	416	2,690,333	-
2006	213057	Lighting - Screw in 5- 13 Watt Lamp	138 \$	-	\$ 0.02	0.96	Bulb	1.75	850	3.5	4,1704	17	112,260	-
2006	213058	Lighting - Time Clocks	474 \$	-	\$ -	0.96	Time Clock	8	10	36	242.1	-	4,553	-
2006	213059	Motors - VFD - HVAC Fans (per Hp)	753 \$	-	\$ -	0.96	HP	15	150	80	202	-	108,432	-
2006	213050	Lighting - Photocell	106 \$	-	\$ -	0.96	Photo cell	8	25	7	59.81	-	2,554	-
2007	213045	Lighting - LED Channel Signage Replacement-Indoor Red <=2 feet high	45 \$	-	\$ 0.01	0.96	LinearFt	16	22	4	18	0	940	-
2007	213053	Lighting - Remove 4 Ft T-8 (De-Lamp)	79 \$	-	\$ 0.02	0.96	Fixture	11	2000	9	26,4054	47	151,389	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	213052	Lighting - Remove 3 Ft T-8 (De-Lamp)	183 \$	-	\$ 0.03	0.96	Lamp	11	200	4	19	6	35,059	-
2007	213051	Lighting - Remove 2 Ft T-8 (De-Lamp)	128 \$	-	\$ 0.03	0.96	Lamp	11	200	4	19	5	24,576	-
2007	213050	Lighting - Photocell	106 \$	-	\$ -	0.96	Photo cell	8	27	7	59.81	-	2,758	-
2007	213049	Lighting - LED Exit Sign New Sign	351 \$	-	\$ 0.04	0.96	Exit Sign	16	269	27	81.2609	11	90,723	-
2007	213048	Lighting - LED Channel Signage Replacement-Outdoor	83 \$	-	\$ 0.01	0.96	LinearFt	16	16	3	33	0	1,275	-
2007	213040	Lighting - Interior 71-100w Incan Base HID	793 \$	-	\$ 0.14	0.96	Fixture	16	2	40	287	0	1,523	-
2007	213046	Lighting - LED Channel Signage Replacement-Indoor Red	89 \$	-	\$ 0.02	0.96	LinearFt	16	16	6	33	0	1,367	-
2007	213044	Lighting - Lamps controlled by Non-Dimming Elec Ballasts	29 \$	-	\$ 0.00	0.96	Lamp	16	538	5	7	3	15,004	-
2007	213043	Lighting - Lamps controlled by Dimming Elec Ballasts	155 \$	-	\$ 0.02	0.96	Fixture	11	215	20	45.45	5	32,071	-
2007	213042	Lighting - Interior Pulse Start Metal Halide Fixtures	490 \$	-	\$ 0.09	0.96	Lamp	16	100	200	287	8	47,039	-
2007	213041	Lighting - Interior 71-100w Merc Vap Base	149 \$	-	\$ 0.05	0.96	Bulb	16	2	38	266.8499	0	286	-
2007	213054	Lighting - Remove 8 Ft T-8 (De-Lamp)	252 \$	-	\$ 0.05	0.96	Fixture	11	1000	18	26.8054	52	242,036	-
2007	213064	Refrigeration - Efficient Condenser-Air-Cooled-CZ10	1,536 \$	-	\$ 0.07	0.96	Ton	16	0	175	702	-	-	-
2007	213039	Lighting - Interior 36-70w Merc Vap Base	145 \$	-	\$ 0.02	0.96	Fixture	16	2	18	287	0	279	-
2007	213047	Lighting - LED Channel Signage Replacement-Outdoor	42 \$	-	\$ 0.01	0.96	LinearFt	16	16	2	18	0	637	-
2007	213063	Refrigeration - Anti-Sweat Heater Controls	343 \$	-	\$ 0.02	0.96	LinearFt	12	11	14	56	0	3,622	-
2007	213072	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling & Eff. Condenser Air-Cooled	7,480 \$	-	\$ 0.54	0.96	Ton	12	0	300	3446	-	-	-
2007	213071	Refrigeration - Glass or Acrylic Doors-Medium Temperature Case	1,155 \$	-	\$ 0.13	0.96	Door	12	11	75	197	1	12,197	-
2007	213070	Refrigeration - Glass or Acrylic Doors-Low Temperature Case	2,812 \$	-	\$ 0.29	0.96	Door	12	11	150	197	3	29,695	-
2007	213069	Refrigeration - Food Service -Evaporator Fan Controller for Walk-In	1,109 \$	-	\$ -	0.96	Controller	5	11	75	265	-	11,711	-
2007	213068	Refrigeration - Food Service -Auto Closer for Main Cooler	2,091 \$	-	\$ 0.24	0.96	Closer	8	108	50	125	25	216,795	-
2007	213067	Refrigeration - Food Service -Auto Closer for Main Cooler	2,091 \$	-	\$ 0.24	0.96	Closer	8	108	40	125	25	216,795	-
2007	213066	Refrigeration - Food Service - Air Cooled to Evap Cooled Condenser Multiplex	743 \$	-	\$ 1.07	0.96	Ton	16	0	195	781	-	-	-
2007	213062	Lighting - Occupancy Sensor - Wallbox Lighting Sensor	214 \$	-	\$ 0.18	0.96	Sensor	8	27	16.5	42.2833	5	5,541	-
2007	213022	Lighting - Hardwire Incan Base 66-90 watt Fluorescent Fixture	991 \$	-	\$ 0.16	0.96	Fixture	12	3	18	137	0	2,855	-
2007	213055	Lighting - Screw in >27 Watt Lamp	367 \$	-	\$ 0.06	0.96	Bulb	1.75	5000	4.25	6.3152	272	1,760,945	-
2007	213056	Lighting - Interior 36-70w Incan Base HID (50 Watt metal halide)	444 \$	-	\$ 0.10	0.96	Bulb	16	2	25	255.414	0	853	-
2007	213061	Lighting - Occupancy Sensor - Wall/Ceiling Mounted Lighting Sensor	214 \$	-	\$ 0.18	0.96	Sensor	8	27	44	42.2833	5	5,541	-
2007	213060	Lighting - Occupancy Sensor - Plug Load	258 \$	-	\$ 0.09	0.96	Sensor	8	50	15	76.17	4	12,383	-
2007	213059	Motors - VFD - HVAC Fans (per Hp)	753 \$	-	\$ -	0.96	HP	15	100	80	202	-	72,288	-
2007	213058	Lighting - Time Clocks	474 \$	-	\$ -	0.96	Time Clock	8	11	36	242.1	-	5,008	-
2007	213057	Lighting - Screw in 5- 13 Watt Lamp	138 \$	-	\$ 0.02	0.96	Bulb	1.75	914	3.5	4.1704	19	120,713	-
2007	213056	Lighting - Screw in 14-26 Watt Lamp	280 \$	-	\$ 0.04	0.96	Bulb	1.75	12000	3.5	5.2713	499	3,228,400	-
2007	213065	Refrigeration - Food Service - Air Cooled to Evap Cooled Condenser Conventional	743 \$	-	\$ 1.07	0.96	Ton	16	0	195	781	-	-	-
2007	213015	Lighting - Exterior >176w Merc Vap Base HID	652 \$	-	\$ -	0.96	Bulb	16	3	48	227.661	-	1,877	-
2007	213007	Heating - Greenhouse Heat Curtain	-	\$ 0.39	\$ -	0.96	SqFt	5	536000	0.2	0.49	-	200,678	-
2007	213008	Heating - Space Heating Boilers - Hot Water	-	\$ 0.64	\$ -	0.96	Mbtuh	20	3500	1	2.2419	-	2,155	-
2007	213009	Heating - Space Heating Boilers - Large	-	\$ 0.64	\$ -	0.96	Mbtuh	20	3500	1	2.2419	-	2,155	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	213010	Heating - Space Heating Boilers - Steam	-	\$ 0.64	-	0.96	Mbtuh	20	3500	1	2,2419	-	-	2,155
2007	213011	Lighting - 2 Ft 2nd Gen. T-8 with Elec. Ballast	44	\$ -	\$ 0.01	0.96	Lamp	11	200	5	21	2	8,448	-
2007	213012	Lighting - 3 Ft 2nd Gen. T-8 with Elec. Ballast	54	\$ -	\$ 0.01	0.96	Lamp	11	200	5	21	2	10,358	-
2007	213024	Fluorescent Fixture	308	\$ -	\$ 0.05	0.96	Fixture	16	2	11.5	56	0	590	-
2007	213014	Lighting - Exterior >176w Incan Base HID	2,000	\$ -	\$ -	0.96	Fixture	16	3	100	144	-	5,761	-
2007	213002	A/C - Reflective Window Film Coastal	12	\$ -	\$ 0.00	0.96	SqFt	10	200	3	3.12	0	2,388	-
2007	213016	Lighting - Exterior 0-100w Incan Base HID	830	\$ -	\$ -	0.96	Fixture	16	3	36	144	-	2,390	-
2007	213017	Lighting - Exterior 0-100w Merc Vap Base HID	388	\$ -	\$ -	0.96	Fixture	16	3	22	144	-	1,119	-
2007	213018	Lighting - Exterior 101-175w Incan Base HID	1,189	\$ -	\$ -	0.96	Bulb	16	3	64	35,746	-	3,424	-
2007	213019	Lighting - Exterior 101-175w Merc Vap Base	477	\$ -	\$ -	0.96	Fixture	16	3	30	144	-	1,374	-
2007	213020	Lighting - Hardwire Incan Base >90 watt Fluorescent Fixture	1,763	\$ -	\$ 0.29	0.96	Fixture	12	3	22.5	173	1	5,076	-
2007	213021	Lighting - Hardwire Incan Base 27-65 watt Fluorescent Fixture	558	\$ -	\$ 0.14	0.96	Bulb	12	2	12.5	38,6763	0	1,071	-
2007	213075	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling Evap-Cooled	4,016	\$ -	\$ 0.97	0.96	Ton	12	0	300	3446	-	-	-
2007	213013	Lighting - 8 Ft T-8 with Elec. Ballast	44	\$ -	\$ 0.01	0.96	Lamp	11	200	9	32.5	2	8,472	-
2007	213027	Lighting - Hardwired 5-13 watt CF Fixture	112	\$ -	\$ 0.03	0.96	Bulb	16	11	11	17,974	0	1,179	-
2007	213036	Lighting - Interior 251-400w Incan Base HID	2,799	\$ -	\$ 0.50	0.96	Fixture	16	2	50	287	1	5,373	-
2007	213035	Lighting - Interior 176-250w Merc Vap Base HID	761	\$ -	\$ 0.14	0.96	Fixture	16	2	38	287	0	1,462	-
2007	213034	Lighting - Interior 176-250w Incan Base HID	1,933	\$ -	\$ 0.36	0.96	Fixture	16	2	40	287	1	3,711	-
2007	213033	Lighting - Interior 101-175w Merc Vap Base	1,355	\$ -	\$ 0.07	0.96	Fixture	16	2	38	287	0	719	-
2007	213032	Lighting - Interior 101-175w Incan Base HID	1,355	\$ -	\$ 0.24	0.96	Fixture	16	2	40	287	0	2,601	-
2007	213031	Lighting - Interior 0-35w Merc Vap Base HID	120	\$ -	\$ 0.02	0.96	Fixture	16	2	12.5	60	0	231	-
2007	213030	Lighting - Interior 0-35w Incan Base HID	228	\$ -	\$ 0.04	0.96	Fixture	16	2	18	133	0	438	-
2007	213006	Agriculture - Sprinkler to Drip Irrigation (per acre)	579	\$ -	\$ 0.33	0.96	Acre	20	0	44	300	-	-	-
2007	213028	Lighting - Induction Fixture >100 watts	884	\$ -	\$ 0.13	0.96	Lamp	16	10	200	290	1	8,491	-
2007	213001	A/C - Package Terminal Air Conditioners / Heat Pump	110	\$ -	\$ 0.12	0.96	Ton	15	50	100	65	6	5,256	-
2007	213026	Lighting - Hardwired 14-26 watt CF Fixture	305	\$ -	\$ 0.05	0.96	Bulb	16	11	11	20,7609	0	3,217	-
2007	213025	Lighting - Hardwire Merc Vap Base 66-90 watt Fluorescent Fixture	532	\$ -	\$ 0.09	0.96	Fixture	16	2	17	116	0	1,022	-
2007	213023	Lighting - Hardwire Merc Vap Base >90 watt Fluorescent Fixture	776	\$ -	\$ 0.13	0.96	Fixture	16	2	21.5	137	0	1,489	-
2007	213005	Agriculture - Low Pressure Sprinkler Nozzles (per nozzle)	12	\$ -	\$ 0.01	0.96	Nozzle	8	11	1.15	1.2	0	127	-
2007	213004	A/C Setback Programmable Thermostats	1,146	\$ 20.50	\$ (0.24)	0.96	Unit	11	200	12	193,5557	(47)	220,032	3,937
2007	213003	A/C - Reflective Window Film Inland	15	\$ -	\$ 0.00	0.96	SqFt	10	200	3	3.12	0	2,932	-
2007	213037	Lighting - Interior 251-400w Merc Vap Base	2,132	\$ -	\$ 0.38	0.96	Fixture	16	2	48	287	1	4,094	-
2007	213029	Lighting - Induction Fixture 55-100 watts	1,197	\$ -	\$ 0.18	0.96	Lamp	16	10	200	295	2	11,491	-
2007	213122	Refrigeration - High Efficiency Multiplex Compressor System Air-Cooled	7,480	\$ -	\$ 0.54	0.96	Ton	12	0	300	3446	-	-	-
2007	213114	Other - Occupancy Sensor - Plug Load	258	\$ -	\$ 0.09	0.96	Sensor	8	50	15	76.17	4	12,383	-
2007	213130	Torchiere	464	\$ -	\$ 0.09	0.96	Unit	16	54	30	22.63	5	24,074	-
2007	213129	Software Plug Load Sensors	227	\$ -	\$ -	0.96	Unit	5	8063	15	5	-	1,757,097	-
2007	213128	Refrigerator - Early Replacement	1,041	\$ -	\$ 0.14	0.96	Unit	6	215	275	272	28	214,775	-
2007	213127	Refrigeration - Efficient Evap Fan Motor Permanent-Split Capacitor (PSC) Motor	336	\$ -	\$ -	0.96	Motor	16	269	100	161	-	86,769	-
2007	213126	Refrigeration - Efficient Evap Fan Motor Electronically Commutated Motor (ECM)	673	\$ -	\$ -	0.96	Motor	16	1075	150	161	-	694,536	-
2007	213125	Refrigeration - High Efficiency Multiplex Compressor System & Eff. Condenser Evap-Cooled	4,027	\$ -	\$ 0.43	0.96	Ton	12	0	300	3446	-	-	-
2007	213133	High Efficiency Gas Griddle	-	\$ 219.00	\$ -	0.96	Griddle	12	11	1000	1989.3	-	-	2,313

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	213123	Refrigeration - High Efficiency Multiplex Compressor System Evap-Cooled	4,016 \$	-	\$ 0.97	0.96	Ton	12	0	300	3446	-	-	-
2007	213134	Faucet Aerators	58 \$	2.92 \$	\$ 0.01	0.96	Site	9	1000	1	1.14	12	55,872	2,799
2007	213121	Water Heating - Commercial Pool Heater	- \$	2.41 \$	-	0.96	Mbtuh	5	108	2	2	-	-	250
2007	213120	Lighting - Occupancy Sensor - High-Bay Sensor Lighting - High Output 4 or 6 Lamp T5 or T8 Fixture (High bay applications)	1,661 \$	-	\$ 0.39	0.96	Sensor	8	11	44	141	4	17,544	-
2007	213119	Refrigeration - Efficient Condenser-Evap-Cooled-CZ10	989 \$	-	\$ 0.18	0.96	Fixture	11	1828	150	250	311	1,735,225	-
2007	213118	Refrigeration - Food Service -Auto Closer for Reach-In Freezer Doors	1,598 \$	-	\$ 0.05	0.96	Ton	16	0	75	702	-	-	-
2007	213117	Refrigeration - Cooler/Freezer Door Gaskets - Solid Doors: Freezer	1,297 \$	-	\$ 0.18	0.96	Closer	8	54	50	300	9	67,236	-
2007	213116	Refrigeration - Night Covers for Display Cases Med Temp System & Eff. Condenser Air-Cooled	105 \$	-	\$ 0.01	0.96	LinearFt	4	0	4	4	-	-	-
2007	213115	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling & Eff. Condenser Evap-Cooled	148 \$	-	\$ -	0.96	LinearFt	5	538	9	9.25	-	76,439	-
2007	213124	Pipe Insulation - Low Pressure Steam Applic. (LF) 1 in	4,027 \$	-	\$ 0.54	0.96	Ton	12	0	300	3446	-	-	-
2007	213148	Premium T8 with T12 40 Watt Baseline	75 \$	-	\$ 0.01	0.96	Lamp	11	100	10	12.7	1	7,171	-
2007	213073	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling & Eff. Condenser Evap-Cooled	4,016 \$	-	\$ 0.97	0.96	Ton	12	0	300	3446	-	-	-
2007	213074	Sub Cooling Air-Cooled	7,480 \$	-	\$ 0.54	0.96	Ton	12	0	300	3446	-	-	-
2007	213157	Pipe Insulation - Low Pressure Steam Applic. (LF) 1 in	- \$	13.40	-	0.96	LinearFt	20	200	3	5.67	-	-	2,573
2007	213155	Tank Insulation - High Temperature Applic. (LF) 1 in	- \$	9.70	-	0.96	SquareFt	20	200	3	2.58	-	-	1,862
2007	213154	Tank Insulation - Low Temperature Applic. (LF) 1 in	- \$	3.40	-	0.96	SquareFt	20	200	2	2.58	-	-	653
2007	213153	Pipe Insulation - Low Pressure Steam Applic. (LF) 2 in	- \$	14.30	-	0.96	LinearFt	20	200	4	9.22	-	-	2,746
2007	213152	Pipe Insulation - Hot Water Applic. (sq ft) 2 in	- \$	2.90	-	0.96	LinearFt	20	200	3	9.22	-	-	557
2007	213131	High Efficiency Gas Fryer	- \$	438.00	-	0.96	Fryer	12	11	1500	2555.36	-	-	4,625
2007	213150	Tank Insulation - Low Temperature Applic. (LF) 2 in	- \$	3.70	-	0.96	SquareFt	20	200	3	3.41	-	-	710
2007	213156	Pipe Insulation - Hot Water Applic. (sq ft) 1 in	- \$	2.60	-	0.96	LinearFt	20	200	2	5.67	-	-	499
2007	213147	Premium T8 with T12 34Watt Baseline	50 \$	-	\$ 0.01	0.96	Lamp	11	100	8	12.7	1	4,781	-
2007	213146	Residential High Efficiency Water Heater in Commercial Application	- \$	13.30	-	0.96	Tank	15	0		117.1	-	-	-
2007	213140	Low Flow Showerhead	78 \$	3.89	\$ 0.02	0.96	Showerhead	9	250	20	20.49	4	18,624	933
2007	213139	Residential Energy Star Clothes Washer in Commercial Application	- \$	45.60	-	0.96	Washer	10	0	75	581	-	-	-
2007	213138	Vending Machine Controller	387 \$	-	\$ -	0.96	Machine	10	538	75	97.2	-	199,878	-
2007	213137	High Efficiency Electric Fryer	1,752 \$	-	\$ 0.00	0.96	Fryer	12	54	4000	6185.6594	0	90,824	-
2007	213136	High Efficiency Copier	324 \$	-	\$ 0.04	0.96	Machine	6	538	100	119	21	167,236	-
2007	213151	Tank Insulation - High Temperature Applic. (LF) 2 in	\$	10.40	-	0.96	SquareFt	20	200	4	3.41	-	-	1,997
2007	213113	Cool Roofs HVAC Ducts	0 \$	-	\$ 0.00	0.96	SqFt	15	0	0.1	0.32	-	-	-
2007	213094	Water Heating - Commercial Horizontal Axis Washer	22 \$	148.92	-	0.96	Unit	10	0	150	407	-	-	-
2007	213093	Water Heating - Process Boiler, Water	- \$	2.29	-	0.96	Mbtuh	20	0	2	2.17	-	-	-
2007	213092	Water Heating - Process Boiler, Steam	- \$	2.29	-	0.96	Mbtuh	20	108	2	2.17	-	-	237
2007	213091	Water Heating - Direct Contact Water Heater	- \$	2.29	-	0.96	Mbtuh	20	108	2	2.17	-	-	237
2007	213090	Water Heating - Commercial Boiler	- \$	3.01	-	0.96	Mbtuh	20	0	1.5	1.71	-	-	-
2007	213089	Water Heating - Instantaneous - Gas (per MBtuh)	- \$	1.41	-	0.96	Mbtuh	20	65	2	-7.77	-	-	88
2007	213095	Lighting - Ceramic Metal Halide Fixture	485 \$	-	\$ 0.10	0.96	Bulb	16	16	150	255.414	2	7,447	-
2007	213085	Refrigeration - Strip Curtains for Walk-ins	465 \$	-	\$ 0.05	0.96	SqFt	4	161	3	3.05	8	71,870	-
2007	213086	Water Heating - Gas Storage Water Heater (per MBtuh)	- \$	1.75	-	0.96	Mbtuh	15	27	2	6.7769	-	-	45
2007	213083	Refrigeration - Cooler/Freezer Door Gaskets - Glass Doors	105 \$	-	\$ 0.01	0.96	LinearFt	4	538	4	4	6	53,998	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	213082	Refrigeration - Vending Machine Controller	1,612 \$	-	\$	0.96	Vending Machine	10	50	90	215.5	-	77,376	-
2007	213081	Refrigeration - Suction Line Insulation	18 \$	-	\$	0.96	LinearFt	11	215	1	1.72	-	3,798	-
2007	213080	Refrigeration - Night Covers for Display Cases Low Temp Refrigeration - New Refrigeration Case w/Doors-Special doors with low/no ASH	59 \$	-	\$	0.96	LinearFt	5	16	9	9.25	-	906	-
2007	213079	Refrigeration - New Refrigeration Case w/Doors-Special doors Low Temp	749 \$	-	\$	0.96	LinearFt	16	10	50	77	0	7,190	-
2007	213078	Refrigeration - New Refrigeration Case w/Doors-Low Temperature Case	1,208 \$	-	\$	0.96	LinearFt	16	3	200	700	1	3,479	-
2007	213077	Refrigeration - New Refrigeration Case w/Doors-Medium Temperature Case	1,208 \$	-	\$	0.96	LinearFt	16	3	200	100	0	3,479	-
2007	213076	Refrigeration - New Refrigeration Case w/Doors-Special doors Full load efficiency 70% or greater	581 \$	-	\$	0.96	LinearFt	16	3	150	100	0	1,673	-
2007	213108	A/C - Reflective Window Film Desert	7,780 \$	-	\$	0.96	Unit	12	1	900	-500	0	7,469	-
2007	213112	Refrigeration - Cooler/Freezer Door Gaskets - Solid Doors: Cooler	16 \$	-	\$	0.96	SqFt	10	500	3	3.12	1	7,728	-
2007	213084	Cooking - Insulated Holding Cabinets, full size, .8 kW or less	105 \$	-	\$	0.96	LinearFt	4	538	4	4	6	53,998	-
2007	213096	Heating - Setback Programmable Thermostats	3,900 \$	-	\$	0.96	Unit	12	1	458	1000	1	3,744	-
2007	213111	Lighting - Screw in 14-26 Watt Reflector Lamp	250 \$	-	\$	0.96	Bulb	11	0	12	58	-	-	-
2007	213109	Connectionless Steamers Full load efficiency 50% or greater	305 \$	-	\$	0.96	Unit	1.75	8000	6	5.2713	362	2,339,420	-
2007	213107	Advanced Evaporative Coolers	6,620 \$	-	\$	0.96	Unit	12	1	750	0	0	6,355	-
2007	213106	Heating - Infrared Film for Greenhouse	547 \$	-	\$	0.96	Ton	15	1	123	126.9	1	525	-
2007	213105	Cooking - Insulated Holding Cabinets, 3/4 size, .4 kW or less	-	0.05 \$	\$	0.96	SqFt	5	215000	0.03	0.03	-	-	10,114
2007	213099	Cooking - Insulated Holding Cabinets, full size, .5 kW or less	3,850 \$	-	\$	0.96	Unit	12	1	550	800	1	3,696	-
2007	213097	Lighting - 4 Ft Premium T-8 with Elec. Ballast	5,500 \$	-	\$	0.96	Unit	12	1	733	1000	1	5,280	-
2007	213110	Cooking - Insulated Holding Cabinets, 3/4 size, .6 kW or less	33 \$	-	\$	0.96	Fixture	11	61799	6	19.01	601	1,949,107	-
2007	213098	Water Heating - Pre-rinse Spray Valves	2,790 \$	-	\$	0.96	Unit	12	1	367	800	0	2,678	-
2007	213104	Cooking - Insulated Holding Cabinets, half size, .4 kW or less	-	570.00 \$	\$	0.96	Unit	5	54	30	60	-	-	29,549
2007	213100	Cooking - Insulated Holding Cabinets, half size, .3 kW or less	1,950 \$	-	\$	0.96	Unit	12	1	275	600	0	1,872	-
2007	213101	Cool Roofs Roof	2,750 \$	-	\$	0.96	Unit	12	1	367	600	0	2,640	-
2007	213102	Refrigeration - Food Service-Auto Closers for Reach-In Cooler Doors	0 \$	-	\$	0.96	SqFt	15	0	0.1	0.32	-	-	-
2007	213103	Cool Roofs Roof	243 \$	-	\$	0.96	Closer	8	500	40	300	16	116,640	-
2008	213102	Pipe Insulation - Hot Water Applic. (sq ft) 1 in	0 \$	-	\$	0.96	SqFt	15	0	0.1	0.32	-	-	-
2008	213156	Cooking - Insulated Holding Cabinets, full size, .5 kW or less	2.60 \$	-	\$	0.96	LinearFt	20	1000	2	5.67	-	-	2,496
2008	213097	Cooking - Insulated Holding Cabinets, 3/4 size, .6 kW or less	5,500 \$	-	\$	0.96	Unit	12	1	733	1000	1	5,280	-
2008	213098	Cooking - Insulated Holding Cabinets, 3/4 size, .4 kW or less	2,790 \$	-	\$	0.96	Unit	12	1	367	800	0	2,678	-
2008	213099	Cooking - Insulated Holding Cabinets, 3/4 size, .4 kW or less	3,850 \$	-	\$	0.96	Unit	12	1	550	800	1	3,696	-
2008	213100	Cooking - Insulated Holding Cabinets, half size, .3 kW or less	1,950 \$	-	\$	0.96	Unit	12	1	275	600	0	1,872	-
2008	213101	Cooking - Insulated Holding Cabinets, full size, .8 kW or less	2,750 \$	-	\$	0.96	Unit	12	1	367	600	0	2,640	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	213103	Refrigeration - Food Service-Auto Closers for Reach-In Cooler Doors	243 \$	-	\$ 0.03	0.96	Closer	8	500	40	300	16	116,640	-
2008	213104	Water Heating - Pre-rinse Spray Valves	-	\$ 570.00	\$ -	0.96	Unit	5	58	30	60	-	-	31,738
2008	213105	Heating - Infrared Film for Greenhouse	-	\$ 0.05	\$ -	0.96	SqFt	5	231125	0.03	0.03	-	-	10,872
2008	213106	Advanced Evaporative Coolers	547 \$	-	\$ 0.83	0.96	Ton	15	1	123	126.9	1	525	-
2008	213107	Connectionless Steamers Full load efficiency 50% or greater	6,620 \$	-	\$ 0.20	0.96	Unit	12	1	750	0	0	6,355	-
2008	213108	Connectionless Steamers Full load efficiency 70% or greater	7,780 \$	-	\$ 0.40	0.96	Unit	12	1	900	-500	0	7,469	-
2008	213109	Lighting - Screw in 14-26 Watt Reflector Lamp	305 \$	-	\$ 0.05	0.96	Bulb	1.75	10000	6	5,271.3	452	2,924,275	-
2008	213111	Heating - Setback Programmable Thermostats	250 \$	-	\$ -	0.96	Unit	11	0	12	58	-	-	-
2008	213110	Lighting - 4 Ft Premium T-8 with Elec. Ballast	33 \$	-	\$ 0.01	0.96	Fixture	11	75000	6	19.01	729	2,365,459	-
2008	213085	Refrigeration - Strip Curtains for Walk-ins	465 \$	-	\$ 0.05	0.96	SqFt	4	173	3	3.05	9	77,227	-
2008	213076	Refrigeration - New Refrigeration Case w/Doors-Low Temperature Case	1,208 \$	-	\$ 0.12	0.96	LinearFt	16	3	200	100	0	3,479	-
2008	213130	Torchiere	464 \$	-	\$ 0.09	0.96	Unit	16	58	15	22.63	5	25,858	-
2008	213077	Refrigeration - New Refrigeration Case w/Doors-Medium Temperature Case	581 \$	-	\$ 0.06	0.96	LinearFt	16	3	150	100	0	1,673	-
2008	213079	Refrigeration - New Refrigeration Case w/Doors-Special doors with low/no ASH	749 \$	-	\$ 0.02	0.96	LinearFt	16	6	50	77	0	4,314	-
2008	213080	Refrigeration - Night Covers for Display Cases Low Temp	59 \$	-	\$ -	0.96	LinearFt	5	17	9	9.25	-	963	-
2008	213081	Refrigeration - Suction Line Insulation	18 \$	-	\$ -	0.96	LinearFt	11	231	1	1.72	-	4,080	-
2008	213082	Refrigeration - Vending Machine Controller	1,612 \$	-	\$ -	0.96	Machine	10	100	90	215.5	-	154,752	-
2008	213078	Refrigeration - New Refrigeration Case w/Doors-Special doors Low Temp	1,208 \$	-	\$ 0.22	0.96	LinearFt	16	3	200	700	1	3,479	-
2008	213084	Refrigeration -Cooler/Freezer Door Gaskets - Solid Doors: Cooler	105 \$	-	\$ 0.01	0.96	LinearFt	4	578	4	4	7	58,013	-
2008	213095	Lighting- Ceramic Metal Halide Fixture	485 \$	-	\$ 0.10	0.96	Bulb	16	5	150	255.414	1	2,327	-
2008	213086	Water Heating - Gas Storage Water Heater (per MBtuh)	-	\$ 1.75	\$ -	0.96	Mbtuh	15	29	2	6.7769	-	-	49
2008	213089	Water Heating -Instantaneous - Gas (per MBtuh)	-	\$ 1.41	\$ -	0.96	Mbtuh	20	69	2	-7.77	-	-	93
2008	213090	Water Heating -Commercial Boiler	-	\$ 3.01	\$ -	0.96	Mbtuh	20	-	1.5	1.71	-	-	-
2008	213091	Water Heating -Direct Contact Water Heater	-	\$ 2.29	\$ -	0.96	Mbtuh	20	116	2	2.17	-	-	255
2008	213092	Water Heating -Process Boiler, Steam	-	\$ 2.29	\$ -	0.96	Mbtuh	20	116	2	2.17	-	-	255
2008	213093	Water Heating -Process Boiler, Water	-	\$ 2.29	\$ -	0.96	Mbtuh	20	116	2	2.17	-	-	-
2008	213094	Water Heating - Commercial Horizontal Axis Washer	22 \$	148.92	\$ -	0.96	Unit	10	0	150	407	-	-	-
2008	213083	Refrigeration -Cooler/Freezer Door Gaskets - Glass Doors	105 \$	-	\$ 0.01	0.96	LinearFt	4	578	4	4	7	58,013	-
2008	213148	Premium T8 with T12 40 Watt Baseline	75 \$	-	\$ 0.01	0.96	Lamp	11	100	10	12.7	1	7,171	-
2008	213134	Faucet Aerators	58 \$	2.92	\$ 0.01	0.96	Site	9	578	1	1.14	7	32,294	1,618
2008	213136	High Efficiency Copier	324 \$	-	\$ 0.04	0.96	Machine	6	578	100	119	23	179,670	-
2008	213137	High Efficiency Electric Fryer	1,752 \$	-	\$ 0.00	0.96	Fryer	12	58	4000	6185.6594	0	97,551	-
2008	213138	Vending Machine Controller	387 \$	-	\$ -	0.96	Machine	10	578	75	97.2	-	214,739	-
2008	213139	Residential Energy Star Clothes Washer in Commercial Application	-	\$ 45.60	\$ -	0.96	Washer	10	0	75	581	-	-	-
2008	213140	Low Flow Showerhead	78 \$	3.89	\$ 0.02	0.96	Showerhead	9	116	20	20.49	2	8,642	433
2008	213128	Refrigerator - Early Replacement	1,041 \$	-	\$ 0.14	0.96	Unit	6	231	275	272	30	230,758	-
2008	213147	Premium T8 with T12 34Watt Baseline	50 \$	-	\$ 0.01	0.96	Lamp	11	100	8	12.7	1	4,781	-
2008	213129	Software Plug Load Sensors	227 \$	-	\$ -	0.96	Unit	5	10000	15	5	-	2,179,210	-
2008	213150	Tank Insulation - Low Temperature Applic. (LF) 2 in	227 \$	3.70	\$ -	0.96	SquareFt	20	3000	3	3.41	-	-	10,656
2008	213151	Tank Insulation - High Temperature Applic. (LF) 2 in	10.40	\$ -	\$ -	0.96	SquareFt	20	2000	4	3.41	-	-	19,968

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	213152	Pipe Insulation - Hot Water Applic. (sq ft) 2 in		\$ 2.90		0.96	LinearFt	20	1000	3	9.22	-	-	2,784
2008	213153	Pipe Insulation - Low Pressure Steam Applic. (LF) 2 in		\$ 14.30		0.96	LinearFt	20	1000	4	9.22	-	-	13,728
2008	213154	Tank Insulation - Low Temperature Applic. (LF) 1 in		\$ 3.40		0.96	SquareFt	20	1000	2	2.58	-	-	3,264
2008	213075	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling Evap-Cooled	4,016	\$ -	\$ 0.97	0.96	Ton	12	0	300	3446	-	-	-
2008	213036	Lighting - Interior 251-400w Incan Base HID Residential High Efficiency Water Heater in Commercial Application	2,799	\$ -	\$ 0.50	0.96	Fixture	16	2	50	287	1	5,373	-
2008	213146	Refrigeration - High Efficiency Multiplex Compressor	-	\$ 13.30	\$ -	0.96	Tank	15	0	0	117.1	-	-	-
2008	213122	System Air-Cooled	7,480	\$ -	\$ 0.54	0.96	Ton	12	0	300	3446	-	-	-
2008	213113	Cool Roofs HVAC Ducts	0	\$ -	\$ 0.00	0.96	SqFt	15	0	0.1	0.32	-	-	-
2008	213114	Other - Occupancy Sensor - Plug Load	258	\$ -	\$ 0.09	0.96	Sensor	8	0	15	76.17	-	-	-
2008	213115	Refrigeration - Night Covers for Display Cases Med Temp	148	\$ -	\$ -	0.96	LinearFt	5	17	9	9.25	-	2,415	-
2008	213116	Refrigeration - Cooler/Freezer Door Gaskets - Solid Doors; Freezer	105	\$ -	\$ 0.01	0.96	LinearFt	4	1000	4	4	11	100,368	-
2008	213117	Refrigeration - Food Service -Auto Closer for Reach-In	1,297	\$ -	\$ 0.18	0.96	Closer	8	1000	50	300	173	1,245,120	-
2008	213118	Refrigeration - Efficient Condenser-Evap-Cooled-CZ10	1,598	\$ -	\$ 0.05	0.96	Ton	16	0	75	702	-	-	-
2008	213119	Lighting - High Output 4 or 6 Lamp T5 or T8 Fixture (High bay applications)	989	\$ -	\$ 0.18	0.96	Fixture	11	1000	150	250	170	949,248	-
2008	213133	High Efficiency Gas Griddle	-	\$ 219.00	\$ -	0.96	Griddle	12	20	1000	1989.3	-	-	4,205
2008	213121	Water Heating - Commercial Pool Heater	-	\$ 2.41	\$ -	0.96	Mbtuh	5	116	2	2	-	-	288
2008	213131	High Efficiency Gas Fryer	-	\$ 438.00	\$ -	0.96	Fryer	12	100	1500	2555.36	-	-	42,048
2008	213123	Refrigeration - High Efficiency Multiplex Compressor System Evap-Cooled	4,016	\$ -	\$ 0.97	0.96	Ton	12	0	300	3446	-	-	-
2008	213124	Refrigeration - High Efficiency Multiplex Compressor System & Eff. Condenser Air-Cooled	4,027	\$ -	\$ 0.54	0.96	Ton	12	0	300	3446	-	-	-
2008	213125	Refrigeration - High Efficiency Multiplex Compressor System & Eff. Condenser Evap-Cooled	4,027	\$ -	\$ 0.43	0.96	Ton	12	0	300	3446	-	-	-
2008	213126	Refrigeration - Efficient Evap Fan Motor Electronically Commutated Motor (ECM)	673	\$ -	\$ -	0.96	Motor	16	0	150	161	-	-	-
2008	213127	Refrigeration - Efficient Evap Fan Motor Permanent-Split Capacitor (PSC) Motor	336	\$ -	\$ -	0.96	Motor	16	0	100	161	-	-	-
2008	213155	Tank Insulation - High Temperature Applic. (LF) 1 in		\$ 9.70		0.96	SquareFt	20	1000	3	2.58	-	-	9,312
2008	213112	A/C - Reflective Window Film Desert	16	\$ -	\$ 0.00	0.96	SqFt	10	300	3	3.12	1	4,637	-
2008	213120	Lighting - Occupancy Sensor - High-Bay Sensor	1,661	\$ -	\$ 0.39	0.96	Sensor	8	12	44	141	5	19,139	-
2008	213027	Lighting - Hardwired 5-13 watt CF Fixture	112	\$ -	\$ 0.03	0.96	Bulb	16	12	11	17,974	0	1,286	-
2008	213019	Lighting - Exterior 101-175W Merc Vap Base	477	\$ -	\$ -	0.96	Fixture	16	3	30	144	-	1,374	-
2008	213020	Lighting - Hardwire Incan Base >90 watt Fluorescent Fixture	1,763	\$ -	\$ 0.29	0.96	Fixture	12	3	22.5	173	1	5,076	-
2008	213021	Lighting - Hardwire Incan Base 27-65 watt Fluorescent Fixture	558	\$ -	\$ 0.14	0.96	Bulb	12	2	12.5	38,6763	0	1,071	-
2008	213022	Lighting - Hardwire Incan Base 66-90 watt Fluorescent Fixture	991	\$ -	\$ 0.16	0.96	Fixture	12	3	18	137	0	2,855	-
2008	213023	Lighting - Hardwire Merc Vap Base >90 watt Fluorescent Fixture	776	\$ -	\$ 0.13	0.96	Fixture	16	2	21.5	137	0	1,489	-
2008	213024	Lighting - Hardwire Merc Vap Base 27-65 watt Fluorescent Fixture	308	\$ -	\$ 0.05	0.96	Fixture	16	2	11.5	56	0	590	-
2008	213035	Lighting - Interior 176-250w Mer Vap Base HID	761	\$ -	\$ 0.14	0.96	Fixture	16	2	38	287	0	1,462	-
2008	213026	Lighting - Hardwired 14-26 watt CF Fixture	305	\$ -	\$ 0.05	0.96	Bulb	16	12	11	20,7609	1	3,509	-
2008	213016	Lighting - Exterior 0-100w Incan Base HID	830	\$ -	\$ -	0.96	Fixture	16	3	36	144	-	2,390	-
2008	213028	Lighting - Induction Fixture >100 watts	884	\$ -	\$ 0.13	0.96	Lamp	16	6	200	290	1	5,094	-
2008	213029	Lighting - Induction Fixture 55-100 watts	1,197	\$ -	\$ 0.18	0.96	Lamp	16	6	200	295	1	6,895	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	213030	Lighting - Interior 0-35w Incan Base HID	228 \$	-	\$ 0.04	0.96	Fixture	16	2	18	133	0	438	-
2008	213031	Lighting - Interior 0-35w Merc Vap Base HID	120 \$	-	\$ 0.02	0.96	Fixture	16	2	12.5	60	0	231	-
2008	213032	Lighting - Interior 101-175w Incan Base HID	1,355 \$	-	\$ 0.24	0.96	Fixture	16	2	40	287	0	2,601	-
2008	213033	Lighting - Interior 101-175w Merc Vap Base	375 \$	-	\$ 0.07	0.96	Fixture	16	2	38	287	0	719	-
2008	213038	Lighting - Interior 35-70w Incan Base HID (50 Watt metal halide)	444 \$	-	\$ 0.10	0.96	Bulb	16	2	25	255,414	0	853	-
2008	213025	Fluorescent Fixture	532 \$	-	\$ 0.09	0.96	Fixture	16	2	17	116	0	1,022	-
2008	213009	Heating - Space Heating Boilers - Large	-	\$ 0.64	-	0.96	Mbtuh	20	2000	1	2,249	-	-	1,232
2008	213157	Pipe Insulation - Low Pressure Steam Applic. (LF) 1 in	-	\$ 13.40	-	0.96	LinearFt	20	0	3	5.67	-	-	-
2008	213001	A/C - Package Terminal Air Conditioners / Heat Pump	110 \$	-	\$ 0.12	0.96	Ton	15	50	100	65	6	5,256	-
2008	213002	A/C - Reflective Window Film Coastal	12 \$	-	\$ 0.00	0.96	SqFt	10	150	3	3.12	0	1,791	-
2008	213003	A/C - Reflective Window Film Inland	15 \$	-	\$ 0.00	0.96	SqFt	10	150	3	3.12	0	2,199	-
2008	213004	A/C Setback Programmable Thermostats	1,146 \$	20.50	\$ (0.24)	0.96	unit	11	150	12	193,5557	(35)	165,024	2,953
2008	213005	Agriculture - Low Pressure Sprinkler Nozzles (per nozzle)	12 \$	-	\$ 0.01	0.96	Nozzle	8	12	1.15	1.2	0	138	-
2008	213006	Agriculture - Sprinkler to Drip Irrigation (per acre)	579 \$	-	\$ 0.33	0.96	Acre	20	0	44	300	-	-	-
2008	213018	Lighting - Exterior 101-175w Incan Base HID	1,189 \$	-	-	0.96	Bulb	16	3	64	35,746	-	3,424	-
2008	213008	Heating - Space Heating Boilers - Hot Water	-	\$ 0.64	-	0.96	Mbtuh	20	2000	1	2,249	-	-	1,232
2008	213017	Lighting - Exterior 0-100w Merc Vap Base HID	388 \$	-	-	0.96	Fixture	16	3	22	144	-	1,119	-
2008	213010	Heating - Space Heating Boilers - Steam	-	\$ 0.64	-	0.96	Mbtuh	20	2000	1	2,249	-	-	1,232
2008	213011	Lighting - 2 Ft 2nd Gen. T-8 with Elec. Ballast	44 \$	-	\$ 0.01	0.96	Lamp	11	100	5	21	1	4,224	-
2008	213012	Lighting - 3 Ft 2nd Gen. T-8 with Elec. Ballast	54 \$	-	\$ 0.01	0.96	Lamp	11	100	5	21	1	5,179	-
2008	213013	Lighting - 8 Ft T-8 with Elec. Ballast	44 \$	-	\$ 0.01	0.96	Lamp	11	300	9	32.5	2	12,708	-
2008	213014	Lighting - Exterior >176w Incan Base HID	2,000 \$	-	-	0.96	Fixture	16	3	100	144	-	5,761	-
2008	213015	Lighting - Exterior >176w Merc Vap Base HID	652 \$	-	-	0.96	Bulb	16	3	48	227,661	-	1,877	-
2008	213037	Lighting - Interior 251-400w Merc Vap Base	2,132 \$	-	\$ 0.38	0.96	Fixture	16	2	48	287	1	4,094	-
2008	213007	Heating - Greenhouse Heat Curtain	-	\$ 0.39	-	0.96	SqFt	5	750000	0.2	0.49	-	-	280,800
2008	213066	Refrigeration - Food Service - Air Cooled to Evap Cooled Condenser Multiplex	743 \$	-	\$ 1.07	0.96	Ton	16	0	195	781	-	-	-
2008	213058	Lighting - Time Clocks	474 \$	-	-	0.96	Time Clock	8	12	36	242.1	-	5,463	-
2008	213059	Motors - VFD - HVAC Fans (per Hp)	753 \$	-	-	0.96	HP	15	173	80	202	-	125,058	-
2008	213060	Lighting - Occupancy Sensor - Plug Load	258 \$	-	\$ 0.09	0.96	Occupancy Sensor	8		15	76.17	-	-	-
2008	213061	Lighting - Occupancy Sensor - Wall/Ceiling Mounted	214 \$	-	\$ 0.18	0.96	Sensor	8	29	44	42,2833	5	5,951	-
2008	213062	Lighting - Occupancy Sensor - Wallbox Lighting Sensor	214 \$	-	\$ 0.18	0.96	Sensor	8	29	16.5	42,2833	5	5,951	-
2008	213063	Refrigeration - Anti-Sweat Heater Controls	343 \$	-	\$ 0.02	0.96	LinearFt	12	12	14	56	0	3,951	-
2008	213034	Lighting - Interior 176-250w Incan Base HID	1,933 \$	-	\$ 0.36	0.96	Fixture	16	2	40	287	1	3,711	-
2008	213065	Refrigeration - Food Service - Air Cooled to Evap Cooled Condenser Conventional	743 \$	-	\$ 1.07	0.96	Ton	16	0	195	781	-	-	-
2008	213055	Lighting - Screw in >27 Watt Lamp	367 \$	-	\$ 0.06	0.96	Bulb	1.75	6356	4.25	6,3152	346	2,238,514	-
2008	213067	Refrigeration - Food Service - Auto Closer for Main Cooler Doors	2,091 \$	-	\$ 0.24	0.96	Closer	8	100	40	125	23	200,736	-
2008	213068	Refrigeration - Food Service - Auto Closer for Main Freezer Doors	2,091 \$	-	\$ 0.24	0.96	Closer	8	100	50	125	23	200,736	-
2008	213069	Refrigeration - Food Service - Evaporator Fan Controller for Walk-in	1,109 \$	-	-	0.96	Controller	5	12	75	265	-	12,776	-
2008	213070	Refrigeration - Glass or Acrylic Doors - Low Temperature Case	2,812 \$	-	\$ 0.29	0.96	Door	12	12	150	197	3	32,394	-
2008	213071	Refrigeration - Glass or Acrylic Doors - Medium Temperature Case	1,155 \$	-	\$ 0.13	0.96	Door	12	12	75	197	1	13,306	-
2008	213072	Sub Cooling & Eff. Condenser Air-Cooled	7,480 \$	-	\$ 0.54	0.96	Ton	12	0	300	3446	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	213073	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling & Eff. Condenser Evap-Cooled	4,016 \$	-	\$ 0.97	0.96 Ton	12	0	300	0	3446	-	-	-
2008	213064	Refrigeration - Efficient Condenser-Air-Cooled-CZ10 Lighting - LED Channel Signage Replacement-Outdoor Red >2 feet high	1,536 \$	-	\$ 0.07	0.96 Ton	16	0	175	0	702	-	-	-
2008	213048	Lighting - Interior 36-70w Merc Vap Base	83 \$	-	\$ 0.01	0.96 LinearFt	16	17	3	33	0	1,355	-	-
2008	213039	Lighting - Interior 71-100w Incan Base HID	145 \$	-	\$ 0.02	0.96 Fixture	16	2	18	287	0	279	-	-
2008	213040	Lighting - Interior 71-100w Merc Vap Base	793 \$	-	\$ 0.14	0.96 Fixture	16	2	40	287	0	1,523	-	-
2008	213041	Lighting - Interior 71-100w Merc Vap Base	149 \$	-	\$ 0.05	0.96 Bulb	16	2	38	266,8499	0	286	-	-
2008	213042	Lighting - Interior Pulse Start Metal Halide Fixtures	490 \$	-	\$ 0.09	0.96 Lamp	16	75	200	287	6	35,279	-	-
2008	213043	Lighting - Lamps controlled by Dimming Elec Ballasts	155 \$	-	\$ 0.02	0.96 Fixture	11	231	20	45,45	5	34,458	-	-
2008	213044	Lighting - Lamps controlled by Non-Dimming Elec Ballasts	29 \$	-	\$ 0.00	0.96 Lamp	16	578	5	7	3	16,119	-	-
2008	213045	Lighting - LED Channel Signage Replacement-Indoor Red <=2 feet high	45 \$	-	\$ 0.01	0.96 LinearFt	16	23	4	18	0	983	-	-
2008	213057	Lighting - Screw in 5- 13 Watt Lamp	138 \$	-	\$ 0.02	0.96 Bulb	1.75	981	3.5	4,1704	20	129,562	-	-
2008	213047	Lighting - LED Channel Signage Replacement-Outdoor Red <=2 feet high	42 \$	-	\$ 0.01	0.96 LinearFt	16	17	2	18	0	677	-	-
2008	213056	Lighting - Screw in 14-26 Watt Lamp	280 \$	-	\$ 0.04	0.96 Bulb	1.75	11556	3.5	5,2713	481	3,108,949	-	-
2008	213049	Lighting - LED Exit Sign New Sign	351 \$	-	\$ 0.04	0.96 Exit Sign	16	150	27	81,2609	6	50,589	-	-
2008	213050	Lighting - Photocell	106 \$	-	\$ -	0.96 Photo cell	8	29	7	59,81	-	2,962	-	-
2008	213051	Lighting - Remove 2 Ft T-8 (De-Lamp)	128 \$	-	\$ 0.03	0.96 Lamp	11	231	4	19	6	28,385	-	-
2008	213052	Lighting - Remove 3 Ft T-8 (De-Lamp)	183 \$	-	\$ 0.03	0.96 Lamp	11	231	4	19	7	40,493	-	-
2008	213053	Lighting - Remove 4 Ft T-8 (De-Lamp)	79 \$	-	\$ 0.02	0.96 Fixture	11	231	9	26,4054	5	17,485	-	-
2008	213054	Lighting - Remove 8 Ft T-8 (De-Lamp)	252 \$	-	\$ 0.05	0.96 Fixture	11	231	18	26,8054	12	55,910	-	-
2008	213074	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling Air-Cooled	7,480 \$	-	\$ 0.54	0.96 Ton	12	0	300	3446	-	-	-	-
2008	213046	Lighting - LED Channel Signage Replacement-Indoor Red >2 feet high	89 \$	-	\$ 0.02	0.96 LinearFt	16	17	6	33	0	1,452	-	-

2006-2008 Energy Efficiency Concept Paper

Small Business Super Saver

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 365,854	\$ 434,973	\$ 443,658
Overhead	\$ 456,147	\$ 490,358	\$ 527,135
Direct Implementation			
Financial Incentives	\$ 6,259,877	\$ 6,647,605	\$ 7,322,473
Activity	\$ 1,428,868	\$ 1,506,350	\$ 1,500,850
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ 200,000	\$ 200,000	\$ 200,000
Rebate Processing and Inspection	\$ 219,750	\$ 228,343	\$ 235,133
Marketing			
Program Specific Marketing	\$ 648,589	\$ 789,887	\$ 840,582
Statewide Marketing			
Total Program Budget	\$ 9,579,085	\$ 10,297,516	\$ 11,069,830

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
6,839	48,789,541	303,401	7,446	52,029,425	358,240	7,468	56,691,145	649,741

3. Program Cost Effectiveness

Attached

4. Program Descriptors

The Small Business Super Saver (SBSS) is an existing local program targeting nonresidential customers under 100kW of monthly demand and/or under an average monthly of 20,800 therms. It is a prescriptive rebate program that encourages nonresidential customers to retrofit existing equipment with high efficiency equipment. Rebates are intended to cover a significant portion of the incremental cost associated with installing higher efficiency equipment. The program integrates contractor incentives creating a no cost approach for the very small customer, and On-Bill Financing opportunities for the small customers to adopt energy efficient practices.

5. Program Statement

The Small Business Super Saver (SBSS) is designed to increase the adoption of energy-efficient measures to the hard to reach, very small and small customers who typically rent, have limited capital resources, and lack acceptance of the magnitude of the personal financial benefits of energy efficiency improvements. In addition, there has been a program overlap between the Small Business Super Saver and Express Efficiency with this market segment. The re-design of the Small Business Energy Efficiency (SBEE) program, re-named Small Business Super Saver, overcomes these barriers by offering opportunities to participate with little or no out of pocket expense. Program conflicts are addressed by offering higher rebates and additional measures for customers under 100kW in SBSS, directing the Express Efficiency program to target customers over 100kW of monthly demand.

What's New for 2006 - 2008?

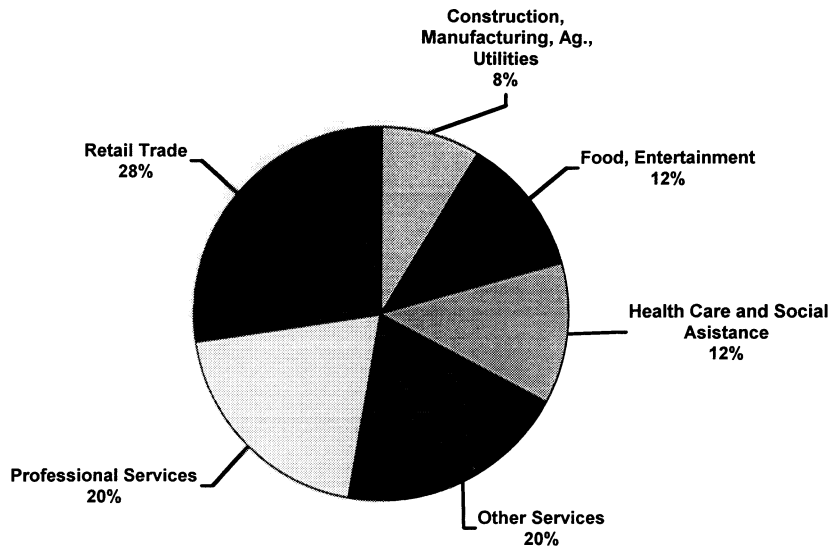
- Innovation
 - Project Incentive adder for very small customers
 - Incorporates On-Bill Financing for small customers
 - Promotion of Demand Response programs
- Integration
 - Demand Side Management Integration and Coordination
- Other Program Improvements
 - Eligibility for up to 100 kW monthly demand customers
 - Increased number of eligible energy efficiency measures

6. Program Rationale

The Small Business Super Saver program has been successful with the direct install approach for the very-small, under 20kW, customer outperforming its established incentive budget by delivering savings at a lower incentive cost. With approximately 138,000 commercial meters under 100kW in SDG&E territory, 72% fall under 20kW and 20% are up to 100kW. Clearly the greatest potential for program participation is with the very small customer who will continue to receive the benefits of a no cost program through substantial rebates, and the turnkey incentive to program contractors. For customers over 20kW of monthly demand, the On-Bill Financing (see On-Bill Financing – OBF Program) is an option to address the capital resource barrier. Participants will receive a reduced rebate but with 100% of the balance of project costs, including installation, financed through the OBF program.

In a recent program evaluation published by ECONorthwest dated February 18, 2005, barriers for very small customer were overcome by the 2004-2005 Small Business Energy Efficiency program. Participating customers are diverse and comprise 85% of the SBEE participants which is much higher than that observed for 2003 Express Efficiency. Common barriers such as concern over bill savings, availability of financing are being overcome and indicate that the program effectively addresses these issues. Different industry segments include:

Figure 1: Business Sectors Participating in 2004 SBEE Program



However, the Express program has experienced a steady decline of participation by the customers between 20 kW to 100 kW of monthly demand. In 2004, less than 10% of Express Efficiency participants were in the range of 20 kW to 100 kW of monthly demand. Clearly this market is better served under the SBSS program.

7. Program Outcomes

The local Small Business Super Saver is designed to produce cost-effective, long-term annual demand and energy savings by providing no-cost and low-cost energy efficient equipment retrofits to very small and small commercial customers in San Diego Gas & Electric's service territory.

8. Program Strategy

The Small Business Super Saver program is a rebate program for nonresidential customers who install prescribed energy-efficient measures. The program offers significant rebates on an expanded, comprehensive list of measures and participation in Demand Response Programs, where applicable. A customer between 20kW and 100kW of monthly demand may also be eligible to take advantage of the On-Bill Financing option. Once qualified under the OBF option (see OBF Program for details), the participating customer would receive a reduced rebate and finance the balance of the cost of a qualified energy efficiency package through the utility. Demand Response measures may also qualify for financing where included as part of the energy efficiency upgrade. Monthly payment on a term loan would be billed as part of the participating customer's monthly utility bill. With this option the customer should not experience an out of pocket expense for the prescribed measures. In addition a financial incentive may be offered to subcontractors where needed to overcome any additional barriers. This approach has three potential advantages:

- Increased energy savings potential by spreading dollars further

- Financial participation by customers fosters greater investment in the efficient operation of equipment
- Allows the program to fund more expensive equipment replacements, which brings larger customers and more energy intensive equipment into the range of possible measures.

In addition, the Small Business Super Saver will work with the energy audit team to assist the customer each step of the process. Customers will be directed to the SDG&E website to locate participating contractors and vendors. SDG&E will also incorporate facilitators into the program. The facilitator will be in the field to assist customers with questions, help to locate a contractor from the participating vendor list. The facilitator will also be able to assist the customer with the On-Bill Financing option, which will allow the customer to participate in a comprehensive retrofit without the burden of the upfront capital cost associated with some measures such as refrigeration and food service equipment. The facilitator will be able to be a representative for the customer.

Furthermore, the SBSS will take a focused approach on industry specific segments such as restaurants and mini markets. An additional focus will be placed on specific measures as well, such as the smart thermostat technology included in the Demand Response portfolio.

9. Program Objectives

The objectives are to strategically address the barriers that exist for the small business customer and provide them options to implement cost-effective energy saving measures and demand reductions with little or no out of pocket expense.

10. Program Implementation

In 2006, SDG&E is proposing to enhance the Small Business Energy Efficiency program, now named Small Business Super Saver, from program awarded contractors to a program that offers all qualified installation contractors the opportunity to participate. The Small Business Super Saver will work in conjunction with other programs to cross train contractors on the new programs and services available to customers. Appropriate collateral will be created and distributed including a list of measures available in the program. This is a combination of best practices from Express Efficiency and the Small Business Energy Efficiency programs.

Customers will be contacted and educated through face-to-face contact by SDG&E Energy Program Representatives, Community Based Organizations (CBOs), local governments, Chamber of Commerce, and other selected organizations. Once informed, customers will be given a list of participating contractors/vendors to contact for participation. Contractors will market directly to customers as well, and will be trained on program information accordingly. A financial incentive will be paid to contractors in conjunction with the customer rebate that will allow a no-cost installation to customers under 20kW monthly demand. Financial incentives are not offered to contractors for CFL installations as a stand-alone measure.

The Small Business Super Saver will work closely with Demand Response programs to cross-market where applicable. One area of potential cross marketing is with the newly

designed Integrated Demand Side Management audit. In 2006, SDG&E will begin developing an Integrated Demand Side Management (IDSM) audit that supports both energy efficiency and demand reduction. The purpose for an IDSM audit will be to provide a single coordinated audit service for the customer, and eliminate what may appear to be confusing or competing energy options between the two types of programs. The IDSM audit would operate under the umbrella of the Technical Assistance Program.

11. Customer Description

The customers targeted by this program are nonresidential customers under 100kW of monthly demand and/or under an average monthly usage of 20,800 therms in the SDG&E service territory.

12. Customer Interface

The program shall be presented to the customer by face-to-face contact using various installation contractors, SDG&E Energy Program Representatives, CBOs, local governments and other selected organizations. Marketing materials and program contracts will be developed offering all prescriptive measures and recommendations. Efforts will include the development and design of program literature, application forms, promotional items, direct mailers, bill inserts, and other appropriate program literature as needed.

13. Energy Measures and Program Activities

13.1. Prescriptive Measures

See SDG&E June 1, 2005 Filing Workbook

13.2. kWh Level Data.

See SDG&E June 1, 2005 Filing Workbook

13.3. Non-energy Activities

The Small Business Super Saver will support the outreach and education done through an energy audit program. The energy audit program will continue to gather detailed information from the customer and the recommended energy efficient retrofit project. Additionally, the audit team may leverage the financial incentives for comprehensive projects and demand response participation. If needed, the audit team will also encourage participation in the on-bill financing program offered by SDG&E.

Onsite audits may be conducted, or information may be provided through direct mail, email, telephone or other means through the Education, Training and Outreach program. Detailed information will be recorded in our tracking system, including equipment inventories and project recommendations.

Recommendations will be followed up periodically to determine implementation status, and whether additional assistance will be required to cause a project to be implemented. If a project is implemented without design or financial assistance, energy savings will be logged into the tracking system, and claimed toward program goals.

Also, in 2006, SDG&E will begin developing an integrated demand side management (IDSM) audit that supports both energy efficiency and demand reduction. Audits have proven to be an important tool for educating customers

about energy management opportunities in their facility, and encouraging their participation in programs. The purpose for an IDSM audit will be to provide a single coordinated audit service for the customer, and eliminate what may appear to be confusing or competing energy options between the two types of programs.

The IDSM audit would operate under the umbrella of the Technical Assistance Program and have the following characteristics:

- Subcontractors will be utilized to provide the audit service;
- The results will be reviewed by both the energy efficiency and demand response staff;
- The results will provide the customer with a clear action plan;
- A follow-up meeting with the customer will encourage them to implement the plan and participate in available programs.

13.4. **Subcontractor Activities**

Subcontractor activities are expected to include:

- Energy savings research and documentation
- Industry specific marketing efforts

13.5. **Quality Assurance and Evaluation Activities**

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs.

13.5.1. Expected number/percent of inspections

This program will perform 100% inspection on approved applications. Pre-inspections may be required for lighting measure applications.

13.6. **Marketing Activities.**

The Small Business Super Saver will market in several ways.

- Direct delivery by SDG&E Energy Program Representatives, Special Investigators, Facilitators and Account Executives.
- Direct delivery from an integrated audit program
- Direct delivery by Community Based Organizations, Faith-Based Organizations, and ethnic organizations.
- Direct delivery by vendors, contractors, and equipment dealers.
- Direct delivery by education and training seminars.

14. **Conclusion**

The Small Business Super Saver is a comprehensive local program designed to implement prescribed energy efficiency measures at a no-cost or low cost opportunity for the very small and small customer. The program is designed to cost-effectively produce energy savings and reduce peak demand within SDG&E's service area. It also avoids lost opportunities by expanding its measure offerings and broadening its targeted customers to

under 100kW of monthly demand. The Small Business Super Saver program will continue to improve upon its application process and best practices to make it both easy and user-friendly while maintaining exceptional customer service.

	SDGE3020 SBS-Small Business Super Saver
BUDGET	
Administrative Costs	\$ 2,718,125
Overhead and G&A	\$ 1,473,640
Other Administrative Costs	\$ 1,244,485
Marketing/Outreach	\$ 2,279,057
Direct Implementation	\$ 25,949,249
Total Incentives and Rebates	
User Input Incentive	\$ -
Direct Install Rebate	\$ 20,229,955
Direct Install Labor	\$ -
Direct Install Materials	\$ -
Activity	\$ 4,436,068
Installation	\$ -
Hardware & Materials	\$ 600,000
Rebate Processing & Inspection	\$ 683,226
EM&V Costs	\$ -
Budget	\$ 30,946,431
Costs recovered from other sources	\$ -
Budget (plus other costs)	\$ 30,946,431

PROGRAM IMPACTS	
DEER kW (kW)	21,753
Net NCP (kW)	23,660
Net CEC (kW)	29,228
Annual Net kWh	157,510,111
Lifecycle Net kWh	1,444,921,390
Annual Net Therms	1,311,381
Lifecycle Net Therms	10,612,193
Cost Effectiveness	
TRC	
Costs	\$ 32,739,427
Electric Benefits	\$ 88,150,640
Gas Benefits	\$ 4,716,235
Net Benefits (NPV)	\$ 60,127,448
BC Ratio	2.84
PAC	
Costs	\$ 28,950,519
Electric Benefits	\$ 88,150,640
Gas Benefits	\$ 4,716,235
Net Benefits (NPV)	\$ 63,916,357
BC Ratio	3.21
Levelized Cost	
Levelized Cost TRC (\$/kWh)	
Discounted kWh	916,940,495
Cost	\$ 0.0334
Benefits	\$ 0.0961
Benefit-Cost	\$ 0.0627
Levelized Cost PAC (\$/kWh)	
Discounted kWh	916,940,495
Cost	\$ 0.0300
Benefits	\$ 0.0961
Benefit-Cost	\$ 0.0662
Levelized Cost TRC (\$/therm)	
Discounted Therms	6,706,657
Cost	\$ 0.3145
Benefits	\$ 0.7309
Benefit-Cost	\$ 0.4164
Levelized Cost PAC (\$/therm)	
Discounted Therms	6,706,657
Cost	\$ 0.2234
Benefits	\$ 0.7309
Benefit-Cost	\$ 0.5075

SDGE Small Business Super Saver

Year	Total Budget	Total Incentives	Admin Budget	Net kWh	Net Therms	Net kW
2006	\$ 9,579,085	\$ 6,259,877	\$ 3,319,209	48,789,541	303,401	6,839
2007	\$ 10,297,516	\$ 6,647,605	\$ 3,649,911	52,029,425	358,240	7,446
2008	\$ 11,069,830	\$ 7,322,473	\$ 3,747,357	56,691,145	649,741	7,468

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	234001	A/C - Package Terminal Air Conditioners / Heat Pump	110	-	0.12	0.96	Ton	15	200	\$ 100.00	\$ 65.00	23	21,024	-
2006	234002	A/C - Reflective Window Film Coastal	12	-	0.00	0.96	SqFt	10	1,000	\$ 3.00	\$ 3.12	2	11,942	-
2006	234003	A/C - Reflective Window Film Inland	15	-	0.00	0.96	SqFt	10	1,000	\$ 3.00	\$ 3.12	2	14,659	-
2006	234004	A/C Setback Programmable Thermostats	1,146	21	(0.24)	0.96	unit	11	700	\$ 25.00	\$ 193.56	(164)	770,112	13,779
2006	234005	Agriculture - Low Pressure Sprinkler Nozzles (per nozzle)	12	-	0.01	0.96	Nozzle	8	50	\$ 1.15	\$ 1.20	0	576	-
2006	234006	Agriculture - Sprinkler to Drip Irrigation (per acre)	579	-	0.33	0.96	Acre	20	300	\$ 100.00	\$ 300.00	96	166,752	-
2006	234007	Heating - Greenhouse Heat Curtain	-	0	-	0.96	SqFt	5	410,000	\$ 0.30	\$ 0.49	-	-	153,504
2006	234008	Heating - Space Heating Boilers - Hot Water	-	1	-	0.96	Mbtuh	20	500	\$ 1.00	\$ 2.24	-	-	308
2006	234009	Heating - Space Heating Boilers - Large	-	1	-	0.96	Mbtuh	20	500	\$ 1.00	\$ 2.24	-	-	308
2006	234010	Heating - Space Heating Boilers - Steam	-	1	-	0.96	Mbtuh	20	500	\$ 1.00	\$ 2.24	-	-	308
2006	234011	Lighting - 2 Ft 2nd Gen. T-8 with Elec. Ballast	44	-	0.01	0.96	Lamp	11	1,500	\$ 10.00	\$ 21.00	13	63,360	-
2006	234012	Lighting - 3 Ft 2nd Gen. T-8 with Elec. Ballast	54	-	0.01	0.96	Lamp	11	1,500	\$ 10.00	\$ 21.00	13	77,688	-
2006	234013	Lighting - 8 Ft T-8 with Elec. Ballast	44	-	0.01	0.96	Lamp	11	2,500	\$ 20.00	\$ 32.50	19	105,900	-
2006	234014	Lighting - Exterior >176w Incan Base HID	2000.3	0	0	0.96	Fixture	16	200	\$ 120.00	\$ 144.00	-	384,058	-
2006	234015	Lighting - Exterior >176w Mer. Vap Base HID	651.9	0	0	0.96	Bulb	16	200	\$ 120.00	\$ 227.66	-	125,165	-
2006	234016	Lighting - Exterior 0-100w Incan Base HID	829,885,714.3	0	0	0.96	Fixture	16	200	\$ 120.00	\$ 144.00	-	159,338	-
2006	234017	Lighting - Exterior 0-100w Merc Vap Base HID	388,457,142.9	0	0	0.96	Fixture	16	200	\$ 120.00	\$ 144.00	-	74,584	-
2006	234018	Lighting - Exterior 101-175w Incan Base HID	1189	0	0	0.96	Bulb	16	100	\$ 120.00	\$ 35.75	-	114,144	-
2006	234019	Lighting - Exterior 101-175w Merc Vap Base HID	477.25	0	0	0.96	Fixture	16	100	\$ 120.00	\$ 144.00	-	45,816	-
2006	234020	Lighting - Hardwire Incan Base >90 watt Fluorescent Fixture	1762.56	0	0.290304	0.96	Fixture	16	100	\$ 120.00	\$ 173.00	28	169,206	-
2006	234021	Lighting - Hardwire Incan Base 27-65 watt Fluorescent Fixture	558,041.4	0	0.141372	0.96	Bulb	16	100	\$ 90.00	\$ 38.68	14	53,572	-
2006	234022	Lighting - Hardwire Incan Base 66-90 watt Fluorescent Fixture	991.44	0	0.163296	0.96	Fixture	16	100	\$ 125.00	\$ 137.00	16	95,178	-
2006	234023	Lighting - Hardwire Merc Vap Base >90 watt Fluorescent Fixture	775.71	0	0.127764	0.96	Fixture	16	100	\$ 140.00	\$ 137.00	12	74,468	-
2006	234024	Lighting - Hardwire Merc Vap Base 27-65 watt Fluorescent Fixture	307.53	0	0.050652	0.96	Fixture	16	100	\$ 90.00	\$ 56.00	5	29,523	-
2006	234025	Lighting - Hardwire Merc Vap Base 66-90 watt Fluorescent Fixture	532.44	0	0.087696	0.96	Fixture	16	100	\$ 125.00	\$ 116.00	8	51,114	-
2006	234026	Lighting - Hardwired 14-26 watt CF Fixture	304.612	0	0.047124	0.96	Bulb	16	800	\$ 17.50	\$ 20.76	36	233,942	-
2006	234027	Lighting - Hardwired 5-13 watt CF Fixture	111,608.28	0	0.0282744	0.96	Bulb	16	800	\$ 17.50	\$ 17.97	22	85,715	-
2006	234028	Lighting - Induction Fixture >100 watts	884.45	0	0.13167	0.96	Lamp	16	125	\$ 200.00	\$ 290.00	16	106,134	-
2006	234029	Lighting - Induction Fixture 55-100 watts	1197	0	0.1782	0.96	Lamp	16	125	\$ 200.00	\$ 295.00	21	143,640	-
2006	234030	Lighting - Interior 0-35w Incan Base HID	228.25	0	0.03923333	0.96	Fixture	16	291	\$ 60.00	\$ 133.00	11	63,764	-
2006	234031	Lighting - Interior 0-35w Merc Vap Base HID	120	\$ -	\$ 0.02	0.96	Fixture	16	291	\$ 60.00	\$ 60.00	6	33,621	-
2006	234032	Lighting - Interior 101-175w Incan Base HID	1,355	\$ -	\$ 0.24	0.96	Fixture	16	100	\$ 200.00	\$ 287.00	23	130,037	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	234033	Lighting - Interior, 101-175w Merc Vap Base	375 \$	-	\$ 0.07	0.96	Fixture	16	100	\$ 200.00	\$ 287.00	7	35,974	-
2006	234034	Lighting - Interior, 176-250w Incan Base HID	1,933 \$	-	\$ 0.36	0.96	Fixture	16	100	\$ 200.00	\$ 287.00	35	185,539	-
2006	234035	Lighting - Interior, 176-250w Mer Vap Base HID	761 \$	-	\$ 0.14	0.96	Fixture	16	100	\$ 200.00	\$ 287.00	14	73,091	-
2006	234036	Lighting - Interior, 251-400w Incan Base HID	2,799 \$	-	\$ 0.50	0.96	Fixture	16	100	\$ 200.00	\$ 287.00	48	268,671	-
2006	234037	Lighting - Interior, 251-400w Merc Vap Base	2,132 \$	-	\$ 0.38	0.96	Fixture	16	400	\$ 200.00	\$ 287.00	147	818,726	-
2006	234038	Lighting - Interior, 36-70w Incan Base HID	444 \$	-	\$ 0.10	0.96	Bulb	16	200	\$ 200.00	\$ 255.41	20	85,333	-
2006	234039	Lighting - Interior, 36-70w Merc Vap Base	145 \$	-	\$ 0.02	0.96	Fixture	16	150	\$ 200.00	\$ 287.00	4	20,916	-
2006	234040	Lighting - Interior, 71-100w Incan Base HID	793 \$	-	\$ 0.14	0.96	Fixture	16	100	\$ 200.00	\$ 287.00	13	76,152	-
2006	234041	Lighting - Interior, 71-100w Merc Vap Base	149 \$	-	\$ 0.05	0.96	Bulb	16	100	\$ 200.00	\$ 266.85	5	14,277	-
2006	234042	Lighting - Interior Pulse Start Metal Halide Fixtures	490 \$	-	\$ 0.09	0.96	Lamp	16	1000	\$ 200.00	\$ 287.00	84	470,386	-
2006	234043	Lighting - Lamps controlled by Dimming Elec	155 \$	-	\$ 0.02	0.96	Fixture	11	1500	\$ 20.00	\$ 45.45	32	223,753	-
2006	234044	Lighting - Lamps controlled by Non-Dimming Elec Ballasts	29 \$	-	\$ 0.00	0.96	Lamp	11	2000	\$ 7.00	\$ 7.00	10	55,776	-
2006	234045	Lighting - LED Channel Signage	45 \$	-	\$ 0.01	0.96	LinearFt	16	500	\$ 10.00	\$ 18.00	4	21,360	-
2006	234046	Replacement-Indoor Red <=2 feet high	89 \$	-	\$ 0.02	0.96	LinearFt	16	500	\$ 10.00	\$ 33.00	8	42,720	-
2006	234047	Replacement-Indoor Red >2 feet high	42 \$	-	\$ 0.01	0.96	LinearFt	16	200	\$ 10.00	\$ 18.00	1	7,968	-
2006	234048	Replacement-Outdoor Red <=2 feet high	83 \$	-	\$ 0.01	0.96	LinearFt	16	200	\$ 10.00	\$ 33.00	3	15,936	-
2006	234049	Replacement-Outdoor Red >2 feet high	351 \$	-	\$ 0.04	0.96	Exit Sign	16	2000	\$ 45.00	\$ 81.26	82	674,517	-
2006	234050	Lighting - Photocell	106 \$	-	\$ -	0.96	Photo cell	8	20	\$ 30.00	\$ 59.81	-	2,043	-
2006	234051	Lighting - Remove 2 FT-T-8 (De-Lamp)	128 \$	-	\$ 0.03	0.96	Lamp	11	500	\$ 10.00	\$ 19.00	12	61,440	-
2006	234052	Lighting - Remove 3 FT-T-8 (De-Lamp)	183 \$	-	\$ 0.03	0.96	Lamp	11	500	\$ 10.00	\$ 19.00	15	87,648	-
2006	234053	Lighting - Remove 4 FT-T-8 (De-Lamp)	79 \$	-	\$ 0.02	0.96	Fixture	11	10000	\$ 15.00	\$ 26.41	233	756,947	-
2006	234054	Lighting - Remove 8 FT-T-8 (De-Lamp)	252 \$	-	\$ 0.05	0.96	Fixture	11	8000	\$ 25.00	\$ 26.81	418	1,936,989	-
2006	234055	Lighting - Screw in >27 Watt Lamp	367 \$	-	\$ 0.06	0.96	Bulb	1.75	10500	\$ 4.50	\$ 6.32	572	3,697,985	-
2006	234056	Lighting - Screw in 14-26 Watt Lamp	280 \$	-	\$ 0.04	0.96	Bulb	1.75	16000	\$ 4.00	\$ 5.27	666	4,304,533	-
2006	234057	Lighting - Screw in 5- 13 Watt Lamp	138 \$	-	\$ 0.02	0.96	Bulb	1.75	5500	\$ 4.00	\$ 4.17	112	726,390	-
2006	234058	Lighting - Time Clocks	474 \$	-	\$ -	0.96	Clock	8	200	\$ 35.00	\$ 242.10	-	91,054	-
2006	234059	Motors - VFD - HVAC Fans (per Hp)	753 \$	-	\$ -	0.96	HP	15	250	\$ 100.00	\$ 202.00	-	180,720	-
2006	234060	Lighting - Occupancy Sensor - Plug Load	258 \$	-	\$ 0.09	0.96	y Sensor	8	50	\$ 15.00	\$ 76.17	4	12,383	-
2006	234061	Lighting - Occupancy Sensor - Wall/Ceiling Mounted	214 \$	-	\$ 0.18	0.96	y Sensor	8	1000	\$ 40.00	\$ 42.28	169	205,209	-
2006	234062	Lighting - Occupancy Sensor - Wallbox	214 \$	-	\$ 0.18	0.96	y Sensor	8	3500	\$ 40.00	\$ 42.28	592	718,230	-
2006	234063	Refrigeration - Anti-Sweat Heater Controls	343 \$	-	\$ 0.02	0.96	LinearFt	12	2000	\$ 52.00	\$ 56.00	42	658,560	-
2006	234064	Refrigeration - Efficient Condenser-Air-Cooled-CZ10	1,536 \$	-	\$ 0.07	0.96	Ton	16	0	\$ 500.00	\$ 702.00	-	-	-
2006	234065	Refrigeration - Food Service - Air Cooled to Evap Cooled Conventional	743 \$	-	\$ 1.07	0.96	Ton	16	0	\$ 500.00	\$ 781.00	-	-	-
2006	234066	Refrigeration - Food Service - Air Cooled to Evap Cooled Condenser Multiplex	743 \$	-	\$ 1.07	0.96	Ton	16	0	\$ 500.00	\$ 781.00	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kWh	Total Net Therms
2006	234067	Refrigeration - Food Service -Auto Closer for Main Cooler Doors	2,091 \$	-	\$ 0.24	0.96	Closer	8	1500	\$ 125.00	\$ 125.00	344	3,011,040
2006	234068	Refrigeration - Food Service -Auto Closer for Main Freezer Doors	2,091 \$	-	\$ 0.24	0.96	Closer	8	1500	\$ 125.00	\$ 125.00	344	3,011,040
2006	234069	Refrigeration - Food Service -Evaporator Fan Controller for Walk-In	1,109 \$	-	\$ -	0.96	Controller	5	500	\$ 250.00	\$ 265.00	-	532,320
2006	234070	Refrigeration - Glass or Acrylic Doors-Low Temperature Case	2,812 \$	-	\$ 0.29	0.96	Door	12	2000	\$ 190.00	\$ 197.00	549	5,399,040
2006	234071	Refrigeration - Glass or Acrylic Doors-Medium Temperature Case	1,155 \$	-	\$ 0.13	0.96	Door	12	2000	\$ 190.00	\$ 197.00	250	2,217,600
2006	234072	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling & Eff. Condenser Air-Cooled	7,480 \$	-	\$ 0.54	0.96	Ton	12	0	\$ 750.00	\$ 3,446.00	-	-
2006	234073	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling & Eff. Condenser Evap-Cooled	4,016 \$	-	\$ 0.97	0.96	Ton	12	0	\$ 750.00	\$ 3,446.00	-	-
2006	234074	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling Air-Cooled	7,480 \$	-	\$ 0.54	0.96	Ton	12	0	\$ 750.00	\$ 3,446.00	-	-
2006	234075	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling Evap-Cooled	4,016 \$	-	\$ 0.97	0.96	Ton	12	0	\$ 750.00	\$ 3,446.00	-	-
2006	234076	Refrigeration - New Refrigeration Case w/Doors-Low Temperature Case	1,208 \$	-	\$ 0.12	0.96	LinearFt	16	1000	\$ 100.00	\$ 100.00	113	1,159,680
2006	234077	Refrigeration - New Refrigeration Case w/Doors-Medium Temperature Case	581 \$	-	\$ 0.06	0.96	LinearFt	16	500	\$ 100.00	\$ 100.00	28	278,880
2006	234078	Refrigeration - New Refrigeration Case w/Doors-Special doors Low Temp	1,208 \$	-	\$ 0.22	0.96	LinearFt	16	400	\$ 675.00	\$ 700.00	84	463,872
2006	234079	Refrigeration - New Refrigeration Case w/Doors-Special doors with low/no ASH	749 \$	-	\$ 0.02	0.96	LinearFt	16	250	\$ 75.00	\$ 77.00	4	179,760
2006	234080	Refrigeration - Night Covers for Display Cases Low Temp	59 \$	-	\$ -	0.96	LinearFt	5	300	\$ 9.00	\$ 9.25	-	16,992
2006	234081	Refrigeration - Suction Line Insulation	18 \$	-	\$ -	0.96	LinearFt	11	500	\$ 1.60	\$ 1.72	-	8,832
2006	234082	Refrigeration - Vending Machine Controller	1,612 \$	-	\$ -	0.96	Machine	10	1200	\$ 200.00	\$ 215.50	-	1,857,024
2006	234083	Refrigeration - Cooler/Freezer Door Gaskets Glass Doors	105 \$	-	\$ 0.01	0.96	LinearFt	4	300	\$ 4.00	\$ 4.00	3	30,110
2006	234084	Refrigeration - Cooler/Freezer Door Gaskets Solid Doors: Cooler	105 \$	-	\$ 0.01	0.96	LinearFt	4	300	\$ 4.00	\$ 4.00	3	30,110
2006	234085	Refrigeration - Strip Curtains for Walk-ins	465 \$	-	\$ 0.05	0.96	SqFt	4	700	\$ 3.00	\$ 3.05	36	312,480
2006	234086	Water Heating - Gas Storage Water Heater (per MBtuh)	-	1.75	\$ -	0.96	MBtuh	15	4142	\$ 2.00	\$ 6.78	-	6,970
2006	234089	Water Heating - Instantaneous - Gas (per MBtuh)	-	1.41	\$ -	0.96	MBtuh	20	700	\$ 2.00	\$ (7.77)	-	948
2006	234090	Water Heating - Commercial Boiler	-	3.01	\$ -	0.96	MBtuh	20	700	\$ 1.50	\$ 1.71	-	2,023
2006	234091	Water Heating -Direct Contact Water Heater	-	2.29	\$ -	0.96	MBtuh	20	700	\$ 2.00	\$ 2.17	-	1,539
2006	234092	Water Heating -Process Boiler, Steam	-	2.29	\$ -	0.96	MBtuh	20	700	\$ 2.00	\$ 2.17	-	1,539
2006	234093	Water Heating -Process Boiler, Water	-	2.29	\$ -	0.96	MBtuh	20	700	\$ 2.00	\$ 2.17	-	1,539
2006	234094	Water Heating - Commercial Horizontal Axis Washer	22 \$	148.92	\$ -	0.96	Unit	10	0	\$ 150.00	\$ 407.00	-	-
2006	234095	Lighting - Ceramic Metal Halide Fixture	485 \$	-	\$ 0.10	0.96	Bulb	16	50	\$ 250.00	\$ 256.41	5	23,273
2006	234096	Cooking - Insulated Holding Cabinets, full size, .8 kW or less	3,900 \$	-	\$ 0.70	0.96	Unit	12	5	\$ 900.00	\$ 1,000.00	3	18,720
2006	234097	Cooking - Insulated Holding Cabinets, full size, .5 kW or less	5,500 \$	-	\$ 1.00	0.96	Unit	12	5	\$ 900.00	\$ 1,000.00	5	26,400
2006	234098	Cooking - Insulated Holding Cabinets, 3/4 size, .6 kW or less	2,790 \$	-	\$ 0.50	0.96	Unit	12	5	\$ 800.00	\$ 800.00	2	13,392
2006	234099	Cooking - Insulated Holding Cabinets, 3/4 size, .4 kW or less	3,850 \$	-	\$ 0.70	0.96	Unit	12	5	\$ 800.00	\$ 800.00	3	18,480

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	234100	Cooking - Insulated Holding Cabinets, half size, 4 kW or less	1,950 \$	-	\$ 0.35	0.96	Unit	12	5	\$ 600.00	\$ 600.00	2	9,360	-
2006	234101	Cooking - Insulated Holding Cabinets, half size, 3 kW or less	2,750 \$	-	\$ 0.45	0.96	Unit	12	5	\$ 600.00	\$ 600.00	2	13,200	-
2006	234102	Cool Roofs Roof	0 \$	-	\$ 0.00	0.96	SqFt	15	200000	\$ 0.10	\$ 0.32	58	80,688	-
2006	234103	Refrigeration - Food Service-Auto Closers for Reach-In Cooler Doors	243 \$	-	\$ 0.03	0.96	Closer	8	0	\$ 200.00	\$ 300.00	-	-	-
2006	234104	Water Heating - Pre-rinse Spray Valves	-	570.00 \$	-	0.96	Unit	5	100	\$ 30.00	\$ 60.00	-	-	54,720
2006	234105	Heating - Infrared Film for Greenhouse	-	0.05 \$	-	0.96	SqFt	5	755000	\$ 0.03	\$ 0.03	-	-	35,515
2006	234106	Advanced Evaporative Coolers	547 \$	-	\$ 0.83	0.96	Ton	15	5	\$ 123.00	\$ 126.90	4	2,626	-
2006	234107	Connectionless Steamers Full load efficiency 50% or greater.	6,620 \$	-	\$ 0.20	0.96	Unit	12	5	\$ 750.00	\$ -	1	31,776	-
2006	234108	Connectionless Steamers Full load efficiency 70% or greater	7,780 \$	-	\$ 0.40	0.96	Unit	12	5	\$ 900.00	\$ (500.00)	2	37,344	-
2006	234109	Lighting - Screw in 14-26 Watt Reflector Lamp	305 \$	-	\$ 0.05	0.96	Bulb	1.75	6100	\$ 6.00	\$ 5.27	276	1,783,808	-
2006	234110	Lighting - 4 Ft Premium T-8 with Elec. Ballast	33 \$	-	\$ 0.01	0.96	Fixture	11	47200	\$ 19.00	\$ 19.01	459	1,488,662	-
2006	234111	Heating - Seaback Programmable Thermostats	250 \$	-	\$ -	0.96	Unit	11	0	\$ 25.00	\$ 58.00	-	-	-
2006	234112	AC - Reflective Window Film Desert	16 \$	-	\$ 0.00	0.96	SqFt	10	500	\$ 3.00	\$ 3.12	1	7,728	-
2006	234113	Cool Roofs HVAC Ducts	0 \$	-	\$ 0.00	0.96	SqFt	15	0	\$ 0.10	\$ 0.32	-	-	-
2006	234114	Other - Occupancy Sensor - Plug Load Refrigeration - Night Covers for Display Cases Med Temp	258 \$	-	\$ 0.09	0.96	Occupanc y Sensor	8	0	\$ 15.00	\$ 76.17	-	-	-
2006	234115	Refrigeration - Cooler/Freezer Door Gaskets - Solid Doors - Freezer	148 \$	-	\$ -	0.96	LinearFt	5	200	\$ 9.00	\$ 9.25	-	28,416	-
2006	234116	Refrigeration - Food Service - Auto Closer for Reach-In Freezer Doors	105 \$	-	\$ 0.01	0.96	LinearFt	4	600	\$ 4.00	\$ 4.00	7	60,221	-
2006	234117	Refrigeration - Efficient Condenser-Evap-Cooled-CZ10	1,297 \$	-	\$ 0.18	0.96	Closer	8	0	\$ 200.00	\$ 300.00	-	-	-
2006	234118	Lighting - High Output 4 or 6 Lamp T5 or T8 Fixture (High bay applications)	1,598 \$	-	\$ 0.05	0.96	Ton	16	0	\$ 500.00	\$ 702.00	-	-	-
2006	234119	Lighting - Occupancy Sensor - High-Bay Sensor	989 \$	-	\$ 0.18	0.96	Fixture	11	600	\$ 150.00	\$ 250.00	102	569,549	-
2006	234120	Water Heating - Commercial Pool Heater Compressor System Air-Cooled	1,661 \$	-	\$ 0.39	0.96	Sensor	8	70	\$ 75.00	\$ 141.00	26	111,646	-
2006	234121	Refrigeration - High Efficiency Multiplex Compressor System	-	2.41 \$	-	0.96	Mbluh	5	1000	\$ 2.00	\$ 2.00	-	-	2,314
2006	234122	Refrigeration - High Efficiency Multiplex Compressor System & Eff. Condenser Air-Cooled	7,480 \$	-	\$ 0.54	0.96	Ton	12	0	\$ 700.00	\$ 3,446.00	-	-	-
2006	234123	Refrigeration - High Efficiency Multiplex Compressor System & Eff. Condenser Evap-Cooled	4,016 \$	-	\$ 0.97	0.96	Ton	12	0	\$ 700.00	\$ 3,446.00	-	-	-
2006	234124	Refrigeration - High Efficiency Multiplex Compressor System & Eff. Condenser Evap-Cooled	4,027 \$	-	\$ 0.54	0.96	Ton	12	0	\$ 700.00	\$ 3,446.00	-	-	-
2006	234125	Refrigeration - Efficient Evap Fan Motor Electronically Commutated Motor (ECM)	4,027 \$	-	\$ 0.43	0.96	Ton	12	0	\$ 700.00	\$ 3,446.00	-	-	-
2006	234126	Refrigeration - Permanent-Split Capacitor (PSC) Motor	673 \$	-	\$ -	0.96	Motor	16	1500	\$ 160.00	\$ 161.00	-	969,120	-
2006	234127	Refrigerator - Early Replacement Torchiere	336 \$	-	\$ -	0.96	Motor	16	500	\$ 100.00	\$ 161.00	-	161,280	-
2006	234128	Software Plug Load Sensors	1,041 \$	-	\$ 0.14	0.96	Unit	6	700	\$ 275.00	\$ 272.00	91	695,268	-
2006	234129	High Efficiency Gas Fryer	227 \$	-	\$ -	0.96	Unit	5	6500	\$ 15.00	\$ 5.00	-	1,416,486	-
2006	234130	High Efficiency Gas Fryer	464 \$	-	\$ 0.09	0.96	Unit	16	50	\$ 15.00	\$ 22.63	4	22,291	-
2006	234131	High Efficiency Gas Griddle	-	438.00 \$	-	0.96	Flyer	12	10	\$ 2,000.00	\$ 2,555.36	-	-	4,205
2006	234133	High Efficiency Gas Griddle	-	219.00 \$	-	0.96	Griddle	12	10	\$ 1,000.00	\$ 1,969.30	-	-	2,102
2006	234134	Faucet Aerators	58 \$	2.92 \$	\$ 0.01	0.96	Site	9	500	\$ 1.10	\$ 1.14	6	27,936	1,400

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	234136	High Efficiency Copier	324	-	\$ 0.04	0.96	Copy	6	500	\$ 100.00	\$ 119.00	20	155,424	-
2006	234137	High Efficiency Electric Fryer	1,752	-	\$ 0.00	0.96	Machine Fryer	12	15	\$ 5,000.00	\$ 6,185.66	0	25,229	-
2006	234138	Vending Machine Controller	387	-	\$ -	0.96	Machine	10	250	\$ 95.00	\$ 97.20	-	92,880	-
2006	234139	Residential Energy Star Clothes Washer in Commercial Application	-	\$ 45.60	\$ -	0.96	Clothes Washer	10	0	\$ 75.00	\$ 581.00	-	-	-
2006	234140	Low Flow Showerhead	78	\$ 3.89	\$ 0.02	0.96	Showerhe	9	800	\$ 20.00	\$ 20.49	13	59,597	2,986
2006	234146	Residential High Efficiency Water Heater in Commercial Application	-	\$ 13.30	\$ -	0.96	Hot Water Tank	15	-	\$ 117.10	\$ -	-	-	-
2006	234147	Premium T8 with T12 34Watt Baseline	50	-	\$ 0.01	0.96	Lamp	11	20000	\$ 8.00	\$ 12.70	165	956,160	-
2006	234148	Premium T8 with T12 40 Watt Baseline	75	-	\$ 0.01	0.96	Lamp	11	20000	\$ 10.00	\$ 12.70	246	1,434,240	-
2006	234150	Tank Insulation - Low Temperature Applic.	-	\$ 3.70	\$ -	0.96	SquareFT	20	300	\$ 3.00	\$ 3.41	-	-	1,066
2006	234151	Tank Insulation - High Temperature Applic.	-	\$ 10.40	\$ -	0.96	SquareFT	20	300	\$ 4.00	\$ 3.41	-	-	2,995
2006	234152	Pipe Insulation - Hot Water Applic. (sq ft) 2 in	-	\$ 2.90	\$ -	0.96	LinearFt	20	300	\$ 3.00	\$ 9.22	-	-	835
2006	234153	Pipe Insulation - Low Pressure Steam Applic. (LF) 2 in	-	\$ 14.30	\$ -	0.96	LinearFt	20	300	\$ 4.00	\$ 9.22	-	-	4,118
2006	234154	Tank Insulation - Low Temperature Applic.	-	\$ 3.40	\$ -	0.96	SquareFT	20	300	\$ 2.00	\$ 2.58	-	-	979
2006	234155	Tank Insulation - High Temperature Applic.	-	\$ 9.70	\$ -	0.96	SquareFT	20	300	\$ 3.00	\$ 2.58	-	-	2,794
2006	234156	Pipe Insulation - Hot Water Applic. (sq ft) 1 in	-	\$ 2.60	\$ -	0.96	LinearFt	20	300	\$ 2.00	\$ 5.67	-	-	749
2006	234157	Pipe Insulation - Low Pressure Steam Applic. (LF) 1 in	-	\$ 13.40	\$ -	0.96	LinearFt	20	300	\$ 3.00	\$ 5.67	-	-	3,859
2007	234001	A/C - Package Terminal Air Conditioners / Heat Pump	110	\$ -	\$ 0.12	0.96	Ton	15	50	\$ 100.00	\$ 65.00	6	5,256	-
2007	234002	A/C - Reflective Window Film Coastal	12	\$ -	\$ 0.00	0.96	SqFt	10	300	\$ 3.00	\$ 3.12	1	3,583	-
2007	234003	A/C - Reflective Window Film Inland	15	\$ -	\$ 0.00	0.96	SqFt	10	300	\$ 3.00	\$ 3.12	1	4,398	-
2007	234004	A/C Setback Programmable Thermostats	1,146	\$ 20.50	\$ (0.24)	0.96	unit	11	300	\$ 25.00	\$ 193.56	(70)	330,048	5,905
2007	234005	Agriculture - Low Pressure Sprinkler Nozzles (per nozzle)	12	\$ -	\$ 0.01	0.96	Nozzle	8	54	\$ 1.15	\$ 1.20	0	622	-
2007	234006	Agriculture - Sprinkler to Drip Irrigation (per acre)	579	\$ -	\$ 0.33	0.96	Acre	20	323	\$ 100.00	\$ 300.00	104	179,536	-
2007	234007	Heating - Greenhouse Heat Curtain	-	\$ 0.39	\$ -	0.96	SqFt	5	425000	\$ 0.30	\$ 0.49	-	-	159,120
2007	234008	Heating - Space Heating Boilers - Hot Water	-	\$ 0.64	\$ -	0.96	Mbluh	20	25000	\$ 1.00	\$ 2.24	-	-	15,395
2007	234009	Heating - Space Heating Boilers - Large	-	\$ 0.64	\$ -	0.96	Mbluh	20	25000	\$ 1.00	\$ 2.24	-	-	15,395
2007	234010	Heating - Space Heating Boilers - Steam	-	\$ 0.64	\$ -	0.96	Mbluh	20	25000	\$ 1.00	\$ 2.24	-	-	15,395
2007	234011	Lighting - 2 Ft 2nd Gen. T-8 with Elec. Ballast	44	\$ -	\$ 0.01	0.96	Lamp	11	1610	\$ 10.00	\$ 21.00	14	68,006	-
2007	234012	Lighting - 3 Ft 2nd Gen. T-8 with Elec. Ballast	54	\$ -	\$ 0.01	0.96	Lamp	11	1613	\$ 10.00	\$ 21.00	14	83,540	-
2007	234013	Lighting - 8 FT-8 with Elec. Ballast	44	\$ -	\$ 0.01	0.96	Lamp	11	2688	\$ 20.00	\$ 32.50	20	113,864	-
2007	234014	Lighting - Exterior >176w Incan Base HID	2,000	\$ -	\$ -	0.96	Fixture	16	215	\$ 120.00	\$ 144.00	-	412,862	-
2007	234015	Lighting - Exterior >176w Mer Vap Base HID	652	\$ -	\$ -	0.96	Bulb	16	215	\$ 120.00	\$ 227.66	-	134,552	-
2007	234016	Lighting - Exterior 0-100w Incan Base HID	830	\$ -	\$ -	0.96	Fixture	16	215	\$ 120.00	\$ 144.00	-	171,288	-
2007	234017	Lighting - Exterior 0-100w Merc Vap Base HID	388	\$ -	\$ -	0.96	Fixture	16	215	\$ 120.00	\$ 144.00	-	80,178	-
2007	234018	Lighting - Exterior 101-175w Incan Base HID	1,189	\$ -	\$ -	0.96	Bulb	16	108	\$ 120.00	\$ 35.75	-	123,276	-
2007	234019	Lighting - Exterior 101-175W Merc Vap Base	477	\$ -	\$ -	0.96	Fixture	16	108	\$ 120.00	\$ 144.00	-	49,481	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	234020	Lighting - Hardwire Incan Base >90 watt Fluorescent Fixture	1,763	\$ -	\$ 0.29	0.96	Fixture	16	108	\$ 120.00	\$ 173.00	30	182,742	-
2007	234021	Lighting - Hardwire Incan Base 27-65 watt Fluorescent Fixture	558	\$ -	\$ 0.14	0.96	Bulb	16	108	\$ 90.00	\$ 38.68	15	57,858	-
2007	234022	Lighting - Hardwire Incan Base 66-90 watt Fluorescent Fixture	991	\$ -	\$ 0.16	0.96	Fixture	16	108	\$ 125.00	\$ 137.00	17	102,792	-
2007	234023	Lighting - Hardwire Merc Vap Base >90 watt Fluorescent Fixture	776	\$ -	\$ 0.13	0.96	Fixture	16	108	\$ 120.00	\$ 137.00	13	80,426	-
2007	234024	Lighting - Hardwire Merc Vap Base 27-65 watt Fluorescent Fixture	308	\$ -	\$ 0.05	0.96	Fixture	16	108	\$ 90.00	\$ 56.00	5	31,885	-
2007	234025	Lighting - Hardwire Merc Vap Base 66-90 watt Fluorescent Fixture	532	\$ -	\$ 0.09	0.96	Fixture	16	108	\$ 120.00	\$ 116.00	9	55,203	-
2007	234026	Lighting - Hardwired 14-26 watt CF Fixture	305	\$ -	\$ 0.03	0.96	Bulb	16	860	\$ 17.50	\$ 20.76	39	251,488	-
2007	234027	Lighting - Hardwired 5-13 watt CF Fixture	112	\$ -	\$ 0.03	0.96	Bulb	16	860	\$ 17.50	\$ 17.97	23	92,144	-
2007	234028	Lighting - Induction Fixture >100 watts	884	\$ -	\$ 0.13	0.96	Lamp	16	134	\$ 200.00	\$ 290.00	17	113,776	-
2007	234029	Lighting - Induction Fixture 55-100 watts	1,197	\$ -	\$ 0.18	0.96	Lamp	16	134	\$ 200.00	\$ 295.00	23	153,982	-
2007	234030	Lighting - Interior 0-35w Incan Base HID	228	\$ -	\$ 0.04	0.96	Fixture	16	313	\$ 60.00	\$ 133.00	12	68,585	-
2007	234031	Lighting - Interior 0-35w Merc Vap Base HID	120	\$ -	\$ 0.02	0.96	Fixture	16	313	\$ 60.00	\$ 60.00	6	36,163	-
2007	234032	Lighting - Interior 101-175w Incan Base HID	1,355	\$ -	\$ 0.24	0.96	Fixture	16	108	\$ 200.00	\$ 287.00	25	140,440	-
2007	234033	Lighting - Interior 101-175w Merc Vap Base	375	\$ -	\$ 0.07	0.96	Fixture	16	108	\$ 200.00	\$ 287.00	7	38,852	-
2007	234034	Lighting - Interior 176-250w Incan Base HID	1,933	\$ -	\$ 0.36	0.96	Fixture	16	108	\$ 200.00	\$ 287.00	38	200,382	-
2007	234035	Lighting - Interior 176-250w Mer Vap Base HID	761	\$ -	\$ 0.14	0.96	Fixture	16	108	\$ 200.00	\$ 287.00	15	78,938	-
2007	234036	Lighting - Interior 251-400w Incan Base HID	2,799	\$ -	\$ 0.50	0.96	Fixture	16	108	\$ 200.00	\$ 287.00	52	290,165	-
2007	234037	Lighting - Interior 251-400w Merc Vap Base	2,132	\$ -	\$ 0.38	0.96	Fixture	16	430	\$ 200.00	\$ 287.00	158	880,131	-
2007	234038	Lighting - Interior 36-70w Incan Base HID (60 Watt metal halide)	444	\$ -	\$ 0.10	0.96	Bulb	16	215	\$ 200.00	\$ 255.41	22	91,733	-
2007	234039	Lighting - Interior 36-70w Merc Vap Base	145	\$ -	\$ 0.02	0.96	Fixture	16	161	\$ 200.00	\$ 287.00	4	22,450	-
2007	234040	Lighting - Interior 71-100w Incan Base HID	793	\$ -	\$ 0.14	0.96	Fixture	16	108	\$ 200.00	\$ 287.00	14	82,244	-
2007	234041	Lighting - Interior 71-100w Merc Vap Base	149	\$ -	\$ 0.05	0.96	Bulb	16	108	\$ 200.00	\$ 266.85	6	15,419	-
2007	234042	Lighting - Interior Pulse Start Metal Halide Fixtures	490	\$ -	\$ 0.09	0.96	Lamp	16	1500	\$ 200.00	\$ 287.00	127	705,579	-
2007	234043	Lighting - Lamps controlled by Dimming Elec Ballasts	155	\$ -	\$ 0.02	0.96	Fixture	11	1613	\$ 20.00	\$ 45.45	34	240,610	-
2007	234044	Lighting - Lamps controlled by Non-Dimming Elec Ballasts	29	\$ -	\$ 0.00	0.96	Lamp	11	2150	\$ 7.00	\$ 7.00	10	59,959	-
2007	234045	Lighting - LED Channel Signage Replacement-Indoor Red <=2 feet high	45	\$ -	\$ 0.01	0.96	LinearFt	16	538	\$ 10.00	\$ 18.00	5	22,983	-
2007	234046	Lighting - LED Channel Signage Replacement-Indoor Red >2 feet high	89	\$ -	\$ 0.02	0.96	LinearFt	16	538	\$ 10.00	\$ 33.00	9	45,967	-
2007	234047	Lighting - LED Channel Signage Replacement-Outdoor Red <=2 feet high	42	\$ -	\$ 0.01	0.96	LinearFt	16	215	\$ 10.00	\$ 18.00	1	8,566	-
2007	234048	Lighting - LED Channel Signage Replacement-Outdoor Red >2 feet high	83	\$ -	\$ 0.01	0.96	LinearFt	16	215	\$ 10.00	\$ 33.00	3	17,131	-
2007	234049	Lighting - LED Exit Sign New Sign	351	\$ -	\$ 0.04	0.96	Exit Sign	16	1500	\$ 45.00	\$ 81.26	61	505,888	-
2007	234050	Lighting - Photocell	106	\$ -	\$ -	0.96	Photo cell	8	100	\$ 30.00	\$ 59.81	-	10,214	-
2007	234051	Lighting - Remove 2 FT-T-8 (De-Lamp)	128	\$ -	\$ 0.03	0.96	Lamp	11	538	\$ 10.00	\$ 19.00	13	66,109	-
2007	234052	Lighting - Remove 3 FT-T-8 (De-Lamp)	183	\$ -	\$ 0.03	0.96	Lamp	11	538	\$ 10.00	\$ 19.00	16	94,309	-
2007	234053	Lighting - Remove 4 FT-T-8 (De-Lamp)	79	\$ -	\$ 0.02	0.96	Fixture	11	10000	\$ 15.00	\$ 26.41	233	756,947	-
2007	234054	Lighting - Remove 8 FT-T-8 (De-Lamp)	252	\$ -	\$ 0.05	0.96	Fixture	11	7500	\$ 25.00	\$ 26.81	392	1,815,271	-
2007	234055	Lighting - Screw in >27 Watt Lamp	367	\$ -	\$ 0.06	0.96	Bulb	1.75	11288	\$ 4.50	\$ 6.32	615	3,975,510	-
2007	234056	Lighting - Screw in 14-26 Watt Lamp	280	\$ -	\$ 0.04	0.96	Bulb	1.75	17200	\$ 4.00	\$ 5.27	716	4,627,373	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	234057	Lighting - Screw in 5-13 Watt Lamp	138 \$	-	\$ 0.02	0.96	Bulb	1.75	5913	\$ 4.00	\$ 4.17	121	780,935	-
2007	234058	Lighting - Time Clocks	474 \$	-	\$ -	0.96	Clock	8	215	\$ 35.00	\$ 242.10	-	97,883	-
2007	234059	Motors - VFD - HVAC Fans (per Hp)	753 \$	-	\$ -	0.96	HP	15	269	\$ 100.00	\$ 202.00	-	194,455	-
2007	234060	Lighting - Occupancy Sensor - Plug Load	258 \$	-	\$ 0.09	0.96	Occupancy Sensor	8	54	\$ 15.00	\$ 76.17	5	13,374	-
2007	234061	Lighting - Occupancy Sensor - Wall/Ceiling Mounted Lighting Sensor	214 \$	-	\$ 0.18	0.96	Occupancy Sensor	8	1075	\$ 40.00	\$ 42.28	182	220,599	-
2007	234062	Lighting - Occupancy Sensor - Wallbox Lighting Sensor	214 \$	-	\$ 0.18	0.96	Occupancy Sensor	8	3000	\$ 40.00	\$ 42.28	507	615,626	-
2007	234063	Refrigeration - Anti-Sweat Heater Controls	343 \$	-	\$ 0.02	0.96	LinearFt	12	2150	\$ 52.00	\$ 56.00	45	707,952	-
2007	234064	Refrigeration - Efficient Condenser-Air-Cooled-CZ10	1,536 \$	-	\$ 0.07	0.96	Ton	16	0	\$ 500.00	\$ 702.00	-	-	-
2007	234065	Refrigeration - Food Service - Air Cooled to Evap Cooled Condenser Conventional	743 \$	-	\$ 1.07	0.96	Ton	16	0	\$ 500.00	\$ 781.00	-	-	-
2007	234066	Refrigeration - Food Service - Air Cooled to Evap Cooled Condenser Multiplex	743 \$	-	\$ 1.07	0.96	Ton	16	0	\$ 500.00	\$ 781.00	-	-	-
2007	234067	Refrigeration - Food Service - Auto Closer for Main Cooler Doors	2,091 \$	-	\$ 0.24	0.96	Closer	8	1613	\$ 125.00	\$ 125.00	370	3,237,872	-
2007	234068	Refrigeration - Food Service - Auto Closer for Main Freezer Doors	2,091 \$	-	\$ 0.24	0.96	Closer	8	1613	\$ 125.00	\$ 125.00	370	3,237,872	-
2007	234069	Refrigeration - Food Service - Evaporator Fan Controller for Walk-In	1,109 \$	-	\$ -	0.96	Controller	5	538	\$ 250.00	\$ 265.00	-	572,776	-
2007	234070	Refrigeration - Glass or Acrylic Doors - Temperature Case	2,812 \$	-	\$ 0.29	0.96	Door	12	2150	\$ 190.00	\$ 197.00	590	5,803,968	-
2007	234071	Refrigeration - Glass or Acrylic Doors - Medium Temperature Case	1,155 \$	-	\$ 0.13	0.96	Door	12	2150	\$ 190.00	\$ 197.00	268	2,383,920	-
2007	234072	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling & Eff. Condenser Air-Cooled	7,480 \$	-	\$ 0.54	0.96	Ton	12	0	\$ 750.00	\$ 3,446.00	-	-	-
2007	234073	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling & Eff. Condenser Evap-Cooled	4,016 \$	-	\$ 0.97	0.96	Ton	12	0	\$ 750.00	\$ 3,446.00	-	-	-
2007	234074	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling Air-Cooled	7,480 \$	-	\$ 0.54	0.96	Ton	12	0	\$ 750.00	\$ 3,446.00	-	-	-
2007	234075	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling Evap-Cooled	4,016 \$	-	\$ 0.97	0.96	Ton	12	0	\$ 750.00	\$ 3,446.00	-	-	-
2007	234076	Refrigeration - New Refrigeration Case w/Doors-Low Temperature Case	1,208 \$	-	\$ 0.12	0.96	LinearFt	16	800	\$ 100.00	\$ 100.00	91	927,744	-
2007	234077	Refrigeration - New Refrigeration Case w/Doors-Medium Temperature Case	581 \$	-	\$ 0.06	0.96	LinearFt	16	200	\$ 100.00	\$ 100.00	11	111,552	-
2007	234078	Refrigeration - New Refrigeration Case w/Doors-Special doors Low Temp	1,208 \$	-	\$ 0.22	0.96	LinearFt	16	200	\$ 675.00	\$ 700.00	42	231,936	-
2007	234079	Refrigeration - Night Covers for Display w/Doors-Special doors with low/no ASH	749 \$	-	\$ 0.02	0.96	LinearFt	16	200	\$ 75.00	\$ 77.00	3	143,808	-
2007	234080	Refrigeration - Suction Line Insulation Cases Low Temp	59 \$	-	\$ -	0.96	LinearFt	5	323	\$ 9.00	\$ 9.25	-	18,295	-
2007	234081	Refrigeration - Suction Line Insulation	18 \$	-	\$ -	0.96	LinearFt	11	538	\$ 1.60	\$ 1.72	-	9,503	-
2007	234082	Refrigeration - Vending Machine Controller	1,612 \$	-	\$ -	0.96	Machine	10	800	\$ 200.00	\$ 215.50	-	1,238,016	-
2007	234083	Refrigeration - Cooler/Freezer Door Gaskets - Glass Doors	105 \$	-	\$ 0.01	0.96	LinearFt	4	500	\$ 4.00	\$ 4.00	6	50,184	-
2007	234084	Refrigeration - Cooler/Freezer Door Gaskets - Solid Doors - Cooler	105 \$	-	\$ 0.01	0.96	LinearFt	4	500	\$ 4.00	\$ 4.00	6	50,184	-
2007	234085	Refrigeration - Strip Curtains for Walk-ins	465 \$	-	\$ 0.05	0.96	SqFt	4	753	\$ 3.00	\$ 3.05	38	336,139	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	234086	Water Heating - Gas Storage Water Heater (per MBtu)	-	\$ 1.75	\$ -	0.96	Mbtuh	15	4453	\$ 2.00	\$ 6.78	-	-	7,494
2007	234089	Water Heating - Instantaneous - Gas (per MBtu)	-	\$ 1.41	\$ -	0.96	Mbtuh	20	753	\$ 2.00	\$ (7.77)	-	-	1,019
2007	234090	Water Heating - Commercial Boiler	-	\$ 3.01	\$ -	0.96	Mbtuh	20	753	\$ 1.50	\$ 1.71	-	-	2,176
2007	234091	Water Heating - Direct Contact Water Heater	-	\$ 2.29	\$ -	0.96	Mbtuh	20	753	\$ 2.00	\$ 2.17	-	-	1,655
2007	234092	Water Heating - Process Boiler, Steam	-	\$ 2.29	\$ -	0.96	Mbtuh	20	753	\$ 2.00	\$ 2.17	-	-	1,655
2007	234093	Water Heating - Process Boiler, Water	-	\$ 2.29	\$ -	0.96	Mbtuh	20	753	\$ 2.00	\$ 2.17	-	-	1,655
2007	234094	Water Heating - Commercial Horizontal Axis Washer	22	\$ 148.92	\$ -	0.96	Unit	10	0	\$ 150.00	\$ 407.00	-	-	-
2007	234095	Lighting - Ceramic Metal Halide Fixture	485	\$ -	\$ 0.10	0.96	Bulb	16	1000	\$ 250.00	\$ 255.41	101	465,454	-
2007	234096	Cooking - Insulated Holding Cabinets, full size, .8 kW or less	3,900	\$ -	\$ 0.70	0.96	Unit	12	2	\$ 900.00	\$ 1,000.00	1	7,488	-
2007	234097	Cooking - Insulated Holding Cabinets, full size, .5 kW or less	5,500	\$ -	\$ 1.00	0.96	Unit	12	2	\$ 900.00	\$ 1,000.00	2	10,560	-
2007	234098	Cooking - Insulated Holding Cabinets, 3/4 size, .6 kW or less	2,790	\$ -	\$ 0.50	0.96	Unit	12	2	\$ 800.00	\$ 800.00	1	5,357	-
2007	234099	Cooking - Insulated Holding Cabinets, 3/4 size, .4 kW or less	3,850	\$ -	\$ 0.70	0.96	Unit	12	2	\$ 800.00	\$ 800.00	1	7,392	-
2007	234100	Cooking - Insulated Holding Cabinets, half size, .4 kW or less	1,950	\$ -	\$ 0.35	0.96	Unit	12	2	\$ 600.00	\$ 600.00	1	3,744	-
2007	234101	Cooking - Insulated Holding Cabinets, half size, .3 kW or less	2,750	\$ -	\$ 0.45	0.96	Unit	12	2	\$ 600.00	\$ 600.00	1	5,280	-
2007	234102	Cool Roofs Roof	0	\$ -	\$ 0.00	0.96	SqFt	15	150000	\$ 0.10	\$ 0.32	44	60,516	-
2007	234103	Refrigeration - Food Service-Auto Closers for Reach-In Cooler Doors	243	\$ -	\$ 0.03	0.96	Closer	8	0	\$ 200.00	\$ 300.00	-	-	-
2007	234104	Water Heating - Pre-rinse Spray Valves	-	\$ 570.00	\$ -	0.96	Unit	5	108	\$ 30.00	\$ 60.00	-	-	59,098
2007	234105	Heating - Infrared Film for Greenhouse	-	\$ 0.05	\$ -	0.96	SqFt	5	811625	\$ 0.03	\$ 0.03	-	-	38,179
2007	234106	Advanced Evaporative Coolers	547	\$ -	\$ 0.83	0.96	Ton	15	2	\$ 123.00	\$ 126.90	2	1,050	-
2007	234107	Connectionless Steamers Full load efficiency 50% or greater	6,620	\$ -	\$ 0.20	0.96	Unit	12	2	\$ 750.00	\$ -	0	12,710	-
2007	234108	Connectionless Steamers Full load efficiency 70% or greater	7,780	\$ -	\$ 0.40	0.96	Unit	12	2	\$ 900.00	\$ (500.00)	1	14,938	-
2007	234109	Lamp Lighting - Screw in 14-26 Watt Reflector	305	\$ -	\$ 0.05	0.96	Bulb	1.75	10000	\$ 6.00	\$ 5.27	452	2,924,275	-
2007	234110	Lighting - 4 Ft Premium T-8 with Elec. Ballast	33	\$ -	\$ 0.01	0.96	Fixture	11	40740	\$ 19.00	\$ 19.01	396	1,284,917	-
2007	234111	Heating - Seiback Programmable Thermostats	250	\$ -	\$ -	0.96	Unit	11	0	\$ 25.00	\$ 58.00	-	-	-
2007	234112	A/C - Reflective Window Film Desert	16	\$ -	\$ 0.00	0.96	SqFt	10	538	\$ 3.00	\$ 3.12	1	8,315	-
2007	234113	Cool Roofs HVAC Ducts	0	\$ -	\$ 0.00	0.96	SqFt	15	0	\$ 0.10	\$ 0.32	-	-	-
2007	234114	Other - Occupancy Sensor - Plug Load	258	\$ -	\$ 0.09	0.96	Occupanc y Sensor	8	0	\$ 15.00	\$ 76.17	-	-	-
2007	234115	Refrigeration - Night Covers for Display Cases Med Temp	148	\$ -	\$ -	0.96	LinearFt	5	215	\$ 9.00	\$ 9.25	-	30,547	-
2007	234116	Refrigeration - Cooler/Freezer Door Gaskets	105	\$ -	\$ 0.01	0.96	LinearFt	4	1500	\$ 4.00	\$ 4.00	17	150,552	-
2007	234117	Refrigeration - Food Service -Auto Closer for Reach-In Freezer Doors	1,297	\$ -	\$ 0.18	0.96	Closer	8	0	\$ 200.00	\$ 300.00	-	-	-
2007	234118	Refrigeration - Efficient Condenser-Evap-Cooled-CZ10	1,598	\$ -	\$ 0.05	0.96	Ton	16	0	\$ 500.00	\$ 702.00	-	-	-
2007	234119	Lighting - High Output 4 or 6 Lamp T5 or T8 Fixture (High bay applications)	989	\$ -	\$ 0.18	0.96	Fixture	11	645	\$ 150.00	\$ 250.00	110	612,265	-
2007	234120	Lighting - Occupancy Sensor - High-Bay Sensor	1,661	\$ -	\$ 0.39	0.96	Sensor	8	75	\$ 75.00	\$ 141.00	28	119,621	-
2007	234121	Water Heating - Commercial Pool Heater	-	\$ 2.41	\$ -	0.96	Mbtuh	5	1075	\$ 2.00	\$ 2.00	-	-	2,487

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	234122	Refrigeration - High Efficiency Multiplex Compressor System Air-Cooled	7,480	\$ -	\$ 0.54	0.96	Ton	12	0	\$ 700.00	\$3,446.00	-	-	-
2007	234123	Refrigeration - High Efficiency Multiplex Compressor System Evap-Cooled	4,016	\$ -	\$ 0.97	0.96	Ton	12	0	\$ 700.00	\$3,446.00	-	-	-
2007	234124	Refrigeration - High Efficiency Multiplex Compressor System & Eff. Condenser Air-Cooled	4,027	\$ -	\$ 0.54	0.96	Ton	12	0	\$ 700.00	\$3,446.00	-	-	-
2007	234125	Refrigeration - High Efficiency Multiplex Compressor System & Eff. Condenser Evap-Cooled	4,027	\$ -	\$ 0.43	0.96	Ton	12	0	\$ 700.00	\$3,446.00	-	-	-
2007	234126	Refrigeration - Efficient Evap Fan Motor Electronically Commutated Motor (ECM)	673	\$ -	\$ -	0.96	Motor	16	1613	\$ 160.00	\$ 161.00	-	1,042,127	-
2007	234127	Refrigeration - Efficient Evap Fan Motor Permanent-Split Capacitor (PSC) Motor	336	\$ -	\$ -	0.96	Motor	16	538	\$ 100.00	\$ 161.00	-	173,537	-
2007	234128	Refrigerator - Early Replacement	1,041	\$ -	\$ 0.14	0.96	Unit	6	753	\$ 275.00	\$ 272.00	98	752,212	-
2007	234129	Software Plug Load Sensors	227	\$ -	\$ -	0.96	Unit	5	6988	\$ 15.00	\$ 5.00	-	1,522,832	-
2007	234130	Torchiere	464	\$ -	\$ 0.09	0.96	Unit	16	54	\$ 15.00	\$ 22.63	5	24,074	-
2007	234131	High Efficiency Gas Fryer	-	\$ 438.00	\$ -	0.96	Fryer	12	11	\$2,000.00	\$2,555.36	-	-	4,625
2007	234133	High Efficiency Gas Griddle	-	\$ 219.00	\$ -	0.96	Griddle	12	11	\$1,000.00	\$1,989.30	-	-	2,313
2007	234134	Faucet Aerators	58	\$ 2.92	\$ 0.01	0.96	Site	9	1000	\$ 1.10	\$ 1.14	12	55,872	2,799
2007	234136	High Efficiency Copier	324	\$ -	\$ 0.04	0.96	Machine	6	538	\$ 100.00	\$ 119.00	21	167,236	-
2007	234137	High Efficiency Electric Fryer	1,752	\$ -	\$ 0.00	0.96	Fryer	12	16	\$5,000.00	\$6,185.66	0	26,911	-
2007	234138	Vending Machine Controller	387	\$ -	\$ -	0.96	Machine	10	500	\$ 95.00	\$ 97.20	-	185,760	-
2007	234139	Residential Energy Star Clothes Washer in Commercial Application	-	\$ 45.60	\$ -	0.96	Washer	10	0	\$ 150.00	\$ 581.00	-	-	-
2007	234140	Low Flow Showerhead	78	\$ 3.89	\$ 0.02	0.96	ad	9	1200	\$ 20.00	\$ 20.49	20	89,395	4,479
2007	234146	Residential High Efficiency Water Heater in Commercial Application	-	\$ 13.30	\$ -	0.96	Tank	15	-	\$ 117.10	\$ 117.10	-	-	-
2007	234147	Premium T8 with T12 34Watt Baseline	50	\$ -	\$ 0.01	0.96	Lamp	11	30000	\$ 8.00	\$ 12.70	248	1,434,240	-
2007	234148	Premium T8 with T12 40 Watt Baseline	75	\$ -	\$ 0.01	0.96	Lamp	11	28795	\$ 10.00	\$ 12.70	354	2,064,947	-
2007	234150	Tank Insulation - Low Temperature Applic.	-	\$ 3.70	\$ -	0.96	SquareFt	20	300	\$ 3.00	\$ 3.41	-	-	1,066
2007	234151	Tank Insulation - High Temperature Applic.	-	\$ 10.40	\$ -	0.96	SquareFt	20	300	\$ 4.00	\$ 3.41	-	-	2,995
2007	234152	Pipe Insulation - Hot Water Applic. (sq ft) 2 in	-	\$ 2.90	\$ -	0.96	LinearFt	20	300	\$ 3.00	\$ 9.22	-	-	835
2007	234153	Pipe Insulation - Low Pressure Steam Applic. (LF) 2 in	-	\$ 14.30	\$ -	0.96	LinearFt	20	300	\$ 4.00	\$ 9.22	-	-	4,118
2007	234154	Tank Insulation - Low Temperature Applic.	-	\$ 3.40	\$ -	0.96	SquareFt	20	300	\$ 2.00	\$ 2.58	-	-	979
2007	234155	Tank Insulation - High Temperature Applic.	-	\$ 9.70	\$ -	0.96	SquareFt	20	300	\$ 3.00	\$ 2.58	-	-	2,794
2007	234156	Pipe Insulation - Hot Water Applic. (sq ft) 1 in	-	\$ 2.60	\$ -	0.96	LinearFt	20	300	\$ 2.00	\$ 5.67	-	-	749
2007	234157	Pipe Insulation - Low Pressure Steam Applic. (LF) 1 in	-	\$ 13.40	\$ -	0.96	LinearFt	20	300	\$ 3.00	\$ 5.67	-	-	3,859
2008	234001	A/C - Package Terminal Air Conditioners / Heat Pump	110	\$ -	\$ 0.12	0.96	Ton	15	200	\$ 100.00	\$ 65.00	23	21,024	-
2008	234002	A/C - Reflective Window Film Coastal	12	\$ -	\$ 0.00	0.96	SqFt	10	1000	\$ 3.00	\$ 3.12	2	11,942	-
2008	234003	A/C - Reflective Window Film Inland	15	\$ -	\$ 0.00	0.96	SqFt	10	1000	\$ 3.00	\$ 3.12	2	14,659	-
2008	234004	A/C Setback Programmable Thermostats	1,146	\$ 20.50	\$ (0.24)	0.96	unit	11	1000	\$ 25.00	\$ 193.56	(234)	1,100,160	19,684
2008	234005	Agriculture - Low Pressure Sprinkler Nozzles (per nozzle)	12	\$ -	\$ 0.01	0.96	Nozzle	8	58	\$ 1.15	\$ 1.20	0	668	-
2008	234006	Agriculture - Sprinkler to Drip Irrigation (per acre)	579	\$ -	\$ 0.33	0.96	Acre	20	347	\$ 100.00	\$ 300.00	111	192,876	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	234007	Heating - Greenhouse Heat Curtain	†	\$ 0.39	\$ -	0.96	Sq Ft	5	1000000	\$ 0.30	\$ 0.49	-	-	374,400
2008	234008	Heating - Space Heating Boilers - Hot Water	-	\$ 0.64	\$ -	0.96	Mbluh	20	55000	\$ 1.00	\$ 2.24	-	-	33,869
2008	234009	Heating - Space Heating Boilers - Large	-	\$ 0.64	\$ -	0.96	Mbluh	20	55000	\$ 1.00	\$ 2.24	-	-	33,869
2008	234010	Heating - Space Heating Boilers - Steam	-	\$ 0.64	\$ -	0.96	Mbluh	20	55000	\$ 1.00	\$ 2.24	-	-	33,869
2008	234011	Lighting - 2 Ft 2nd Gen. T-8 with Elec. Ballast	44	\$ -	\$ 0.01	0.96	Lamp	11	1733	\$ 10.00	\$ 21.00	15	73,202	-
2008	234012	Lighting - 3 Ft 2nd Gen. T-8 with Elec. Ballast	54	\$ -	\$ 0.01	0.96	Lamp	11	1733	\$ 10.00	\$ 21.00	15	89,756	-
2008	234013	Lighting - 8 Ft T-8 with Elec. Ballast	44	\$ -	\$ 0.01	0.96	Lamp	11	2889	\$ 20.00	\$ 32.50	22	122,378	-
2008	234014	Lighting - Exterior >176w Incan Base HID	2,000	\$ -	\$ -	0.96	Fixture	16	231	\$ 120.00	\$ 144.00	-	443,587	-
2008	234015	Lighting - Exterior >176w Mer Vap Base HID	652	\$ -	\$ -	0.96	Bulb	16	231	\$ 120.00	\$ 227.66	-	144,565	-
2008	234016	Lighting - Exterior 0-100w Incan Base HID	830	\$ -	\$ -	0.96	Fixture	16	231	\$ 120.00	\$ 144.00	-	184,035	-
2008	234017	Lighting - Exterior 0-100w Mer Vap Base HID	388	\$ -	\$ -	0.96	Fixture	16	231	\$ 120.00	\$ 144.00	-	86,144	-
2008	234018	Lighting - Exterior 101-175w Incan Base HID	1,189	\$ -	\$ -	0.96	Bulb	16	115	\$ 120.00	\$ 35.75	-	131,266	-
2008	234019	Lighting - Exterior 101-175w Mer Vap Base	477	\$ -	\$ -	0.96	Fixture	16	115	\$ 120.00	\$ 144.00	-	52,688	-
2008	234020	Lighting - Hardwire Incan Base >90 watt Fluorescent Fixture	1,763	\$ -	\$ 0.29	0.96	Fixture	16	115	\$ 120.00	\$ 173.00	32	194,587	-
2008	234021	Lighting - Hardwire Incan Base 27-65 watt Fluorescent Fixture	558	\$ -	\$ 0.14	0.96	Bulb	16	115	\$ 90.00	\$ 38.68	16	61,608	-
2008	234022	Lighting - Hardwire Incan Base 66-90 watt Fluorescent Fixture	991	\$ -	\$ 0.16	0.96	Fixture	16	115	\$ 120.00	\$ 137.00	18	109,455	-
2008	234023	Lighting - Hardwire Mer Vap Base >90 watt Fluorescent Fixture	776	\$ -	\$ 0.13	0.96	Fixture	16	115	\$ 120.00	\$ 137.00	14	85,638	-
2008	234024	Lighting - Hardwire Mer Vap Base 27-65 watt Fluorescent Fixture	308	\$ -	\$ 0.05	0.96	Fixture	16	115	\$ 90.00	\$ 56.00	6	33,951	-
2008	234025	Lighting - Hardwire Mer Vap Base 66-90 watt Fluorescent Fixture	532	\$ -	\$ 0.09	0.96	Fixture	16	115	\$ 120.00	\$ 116.00	10	58,781	-
2008	234026	Lighting - Hardwired 14-26 watt CF Fixture	305	\$ -	\$ 0.05	0.96	Bulb	16	925	\$ 17.50	\$ 20.76	42	270,495	-
2008	234027	Lighting - Hardwired 5-13 watt CF Fixture	112	\$ -	\$ 0.03	0.96	Bulb	16	925	\$ 17.50	\$ 17.97	25	99,108	-
2008	234028	Lighting - Induction Fixture >100 watts	884	\$ -	\$ 0.13	0.96	Lamp	16	144	\$ 200.00	\$ 290.00	18	122,266	-
2008	234029	Lighting - Induction Fixture 55-100 watts	1,197	\$ -	\$ 0.18	0.96	Lamp	16	144	\$ 200.00	\$ 295.00	25	165,473	-
2008	234030	Lighting - Interior 0-35w Incan Base HID	228	\$ -	\$ 0.04	0.96	Fixture	16	336	\$ 60.00	\$ 133.00	13	73,624	-
2008	234031	Lighting - Interior 0-35w Mer Vap Base HID	120	\$ -	\$ 0.02	0.96	Fixture	16	336	\$ 60.00	\$ 60.00	7	38,820	-
2008	234032	Lighting - Interior 101-175w Incan Base HID	1,355	\$ -	\$ 0.24	0.96	Fixture	16	116	\$ 200.00	\$ 287.00	27	150,843	-
2008	234033	Lighting - Interior 101-175w Mer Vap Base	375	\$ -	\$ 0.07	0.96	Fixture	16	116	\$ 200.00	\$ 287.00	8	41,730	-
2008	234034	Lighting - Interior 176-250w Incan Base HID	1,933	\$ -	\$ 0.36	0.96	Fixture	16	116	\$ 200.00	\$ 287.00	41	215,225	-
2008	234035	Lighting - Interior 176-250w Mer Vap Base HID	761	\$ -	\$ 0.14	0.96	Fixture	16	116	\$ 200.00	\$ 287.00	16	84,786	-
2008	234036	Lighting - Interior 251-400w Incan Base HID	2,799	\$ -	\$ 0.50	0.96	Fixture	16	116	\$ 200.00	\$ 287.00	56	311,658	-
2008	234037	Lighting - Interior 251-400w Mer Vap Base	2,132	\$ -	\$ 0.38	0.96	Fixture	16	462	\$ 200.00	\$ 287.00	170	945,629	-
2008	234038	Lighting - Interior 36-70w Incan Base HID (60 Watt metal halide)	444	\$ -	\$ 0.10	0.96	Bulb	16	231	\$ 200.00	\$ 255.41	23	98,560	-
2008	234039	Lighting - Interior 36-70w Mer Vap Base	145	\$ -	\$ 0.02	0.96	Fixture	16	173	\$ 200.00	\$ 287.00	4	24,123	-
2008	234040	Lighting - Interior 71-100w Incan Base HID	793	\$ -	\$ 0.14	0.96	Fixture	16	116	\$ 200.00	\$ 287.00	16	88,336	-
2008	234041	Lighting - Interior 71-100w Mer Vap Base	149	\$ -	\$ 0.05	0.96	Bulb	16	116	\$ 200.00	\$ 266.85	6	16,561	-
2008	234042	Lighting - Interior Pulse Start Metal Halide Fixtures	490	\$ -	\$ 0.09	0.96	Lamp	16	2000	\$ 200.00	\$ 287.00	169	940,773	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	234043	Lighting - Lamps controlled by Dimming Elec Ballasts	155	\$ -	\$ 0.02	0.96	Fixture	11	1733	\$ 20.00	\$ 45.45	36	258,510	-
2008	234044	Lighting - Lamps controlled by Non-Dimming Elec Ballasts	29	\$ -	\$ 0.00	0.96	Lamp	11	2311	\$ 7.00	\$ 7.00	11	64,449	-
2008	234045	Lighting - LED Channel Signage Replacement-Indoor Red <=2 feet high	45	\$ -	\$ 0.01	0.96	LinearFl	16	578	\$ 10.00	\$ 18.00	5	24,692	-
2008	234046	Lighting - LED Channel Signage Replacement-Indoor Red >2 feet high	89	\$ -	\$ 0.02	0.96	LinearFl	16	578	\$ 10.00	\$ 33.00	10	49,384	-
2008	234047	Lighting - LED Channel Signage Replacement-Outdoor Red <=2 feet high	42	\$ -	\$ 0.01	0.96	LinearFl	16	231	\$ 10.00	\$ 18.00	2	9,203	-
2008	234048	Lighting - LED Channel Signage Replacement-Outdoor Red >2 feet high	83	\$ -	\$ 0.01	0.96	LinearFl	16	231	\$ 10.00	\$ 33.00	3	18,406	-
2008	234049	Lighting - LED Exit Sign New Sign	351	\$ -	\$ 0.04	0.96	Exit Sign	16	5000	\$ 45.00	\$ 81.26	204	1,686,293	-
2008	234050	Lighting - Photocell	106	\$ -	\$ -	0.96	Photo cell	8	23	\$ 30.00	\$ 59.81	-	2,349	-
2008	234051	Lighting - Remove 2 FT T-8 (De-Lamp)	128	\$ -	\$ 0.03	0.96	Lamp	11	578	\$ 10.00	\$ 19.00	14	71,025	-
2008	234052	Lighting - Remove 3 FT T-8 (De-Lamp)	183	\$ -	\$ 0.03	0.96	Lamp	11	425	\$ 10.00	\$ 19.00	13	74,501	-
2008	234053	Lighting - Remove 4 FT T-8 (De-Lamp)	79	\$ -	\$ 0.02	0.96	Fixture	11	8819	\$ 15.00	\$ 26.41	206	667,552	-
2008	234054	Lighting - Remove 8 FT T-8 (De-Lamp)	252	\$ -	\$ 0.05	0.96	Fixture	11	2373	\$ 25.00	\$ 26.81	124	574,352	-
2008	234055	Lighting - Screw in >27 Watt Lamp	367	\$ -	\$ 0.06	0.96	Bulb	1.75	12134	\$ 4.50	\$ 6.32	661	4,273,462	-
2008	234056	Lighting - Screw in 14-26 Watt Lamp	280	\$ -	\$ 0.04	0.96	Bulb	1.75	18772	\$ 4.00	\$ 5.27	781	5,050,293	-
2008	234057	Lighting - Screw in 5- 13 Watt Lamp	138	\$ -	\$ 0.02	0.96	Bulb	1.75	6356	\$ 4.00	\$ 4.17	130	839,443	-
2008	234058	Lighting - Time Clocks	474	\$ -	\$ -	0.96	Time Clock	8	231	\$ 35.00	\$ 242.10	-	105,167	-
2008	234059	Motors - VFD - HVAC Fans (per Hp)	753	\$ -	\$ -	0.96	HP	15	500	\$ 100.00	\$ 202.00	-	361,440	-
2008	234060	Lighting - Occupancy Sensor - Plug Load	258	\$ -	\$ 0.09	0.96	Occupanc y Sensor	8	58	\$ 15.00	\$ 76.17	5	14,365	-
2008	234061	Lighting - Occupancy Sensor - Wall/Ceiling Mounted Lighting Sensor	214	\$ -	\$ 0.18	0.96	Occupanc y Sensor	8	1156	\$ 40.00	\$ 42.28	196	237,221	-
2008	234062	Lighting - Occupancy Sensor - Wallbox Lighting Sensor	214	\$ -	\$ 0.18	0.96	Occupanc y Sensor	8	2311	\$ 40.00	\$ 42.28	391	474,237	-
2008	234063	Refrigeration - Anti-Sweat Heater Controls	343	\$ -	\$ 0.02	0.96	LinearFl	12	2311	\$ 52.00	\$ 56.00	49	760,966	-
2008	234064	Refrigeration - Efficient Condenser-Air-Cooled-CZ10	1,536	\$ -	\$ 0.07	0.96	Ton	16	0	\$ 500.00	\$ 702.00	-	-	-
2008	234065	Refrigeration - Food Service - Air Cooled to Evap Cooled Condenser Conventional	743	\$ -	\$ 1.07	0.96	Ton	16	0	\$ 500.00	\$ 781.00	-	-	-
2008	234066	Refrigeration - Food Service - Air Cooled to Evap Cooled Condenser Multiplex	743	\$ -	\$ 1.07	0.96	Ton	16	0	\$ 500.00	\$ 781.00	-	-	-
2008	234067	Refrigeration - Food Service -Auto Closer for Main Cooler Doors	2,091	\$ -	\$ 0.24	0.96	Closer	8	1733	\$ 125.00	\$ 125.00	398	3,478,755	-
2008	234068	Refrigeration - Food Service -Auto Closer for Main Freezer Doors	2,091	\$ -	\$ 0.24	0.96	Closer	8	1733	\$ 125.00	\$ 125.00	398	3,478,755	-
2008	234069	Refrigeration - Food Service -Evaporator Fan Controller for Walk-In	1,109	\$ -	\$ -	0.96	Controller	5	578	\$ 250.00	\$ 265.00	-	615,362	-
2008	234070	Refrigeration - Glass or Acrylic Doors-Low Temperature Case	2,812	\$ -	\$ 0.29	0.96	Door	12	2311	\$ 190.00	\$ 197.00	635	6,238,591	-
2008	234071	Refrigeration - Glass or Acrylic Doors-Medium Temperature Case	1,155	\$ -	\$ 0.13	0.96	Door	12	2311	\$ 190.00	\$ 197.00	288	2,562,437	-
2008	234072	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling & Eff. Condenser Air-Cooled	7,480	\$ -	\$ 0.54	0.96	Ton	12	0	\$ 750.00	\$ 3,446.00	-	-	-
2008	234073	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling & Eff. Condenser Evap-Cooled	4,016	\$ -	\$ 0.97	0.96	Ton	12	0	\$ 750.00	\$ 3,446.00	-	-	-
2008	234074	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling Air-Cooled	7,480	\$ -	\$ 0.54	0.96	Ton	12	0	\$ 750.00	\$ 3,446.00	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	234075	Refrigeration - Multiplex Compressor System w/ Mech. Sub Cooling Evap-Cooled	4,016 \$	-	\$ 0.97	0.96	Ton	12	0	\$ 750.00	\$3,446.00	-	-	-
2008	234076	Refrigeration - New Refrigeration Case w/Doors-Low Temperature Case	1,208 \$	-	\$ 0.12	0.96	LinearFt	16	1156	\$ 100.00	\$ 100.00	131	1,340,590	-
2008	234077	Refrigeration - New Refrigeration Case w/Doors-Medium Temperature Case	581 \$	-	\$ 0.06	0.96	LinearFt	16	578	\$ 100.00	\$ 100.00	32	322,385	-
2008	234078	Refrigeration - New Refrigeration Case w/Doors-Special doors Low Temp	1,208 \$	-	\$ 0.22	0.96	LinearFt	16	462	\$ 675.00	\$ 700.00	97	535,772	-
2008	234079	Refrigeration - New Refrigeration Case w/Doors-Special doors with low/no ASH	749 \$	-	\$ 0.02	0.96	LinearFt	16	289	\$ 75.00	\$ 77.00	4	207,803	-
2008	234080	Refrigeration - Night Covers for Display Cases Low Temp	59 \$	-	\$ -	0.96	LinearFt	5	347	\$ 9.00	\$ 9.25	-	19,654	-
2008	234081	Refrigeration - Suction Line Insulation	18 \$	-	\$ -	0.96	LinearFt	11	578	\$ 1.60	\$ 1.72	-	10,210	-
2008	234082	Refrigeration - Vending Machine Controller	1,612 \$	-	\$ -	0.96	Vending Machine	10	1387	\$ 200.00	\$ 215.50	-	2,146,410	-
2008	234083	Refrigeration - Cooler/Freezer Door Gaskets - Glass Doors	105 \$	-	\$ 0.01	0.96	LinearFt	4	347	\$ 4.00	\$ 4.00	4	34,828	-
2008	234084	Refrigeration - Cooler/Freezer Door Gaskets - Solid Doors - Cooler	105 \$	-	\$ 0.01	0.96	LinearFt	4	347	\$ 4.00	\$ 4.00	4	34,828	-
2008	234085	Refrigeration - Strip Curtains for Walk-ins	465 \$	-	\$ 0.05	0.96	SqFt	4	809	\$ 3.00	\$ 3.05	41	361,138	-
2008	234086	Water Heating - Gas Storage Water Heater (per MBtuh)	-	\$ 1.75	\$ -	0.96	Mbtuh	15	4787	\$ 2.00	\$ 6.78	-	-	8,056
2008	234089	Water Heating - Instantaneous - Gas (per MBtuh)	-	\$ 1.41	\$ -	0.96	Mbtuh	20	809	\$ 2.00	\$ (7.77)	-	-	1,095
2008	234090	Water Heating - Commercial Boiler	-	\$ 3.01	\$ -	0.96	Mbtuh	20	809	\$ 1.50	\$ 1.71	-	-	2,338
2008	234091	Water Heating - Direct Contact Water Heater	-	\$ 2.29	\$ -	0.96	Mbtuh	20	809	\$ 2.00	\$ 2.17	-	-	1,779
2008	234092	Water Heating - Process Boiler, Steam	-	\$ 2.29	\$ -	0.96	Mbtuh	20	809	\$ 2.00	\$ 2.17	-	-	1,779
2008	234093	Water Heating - Process Boiler, Water	-	\$ 2.29	\$ -	0.96	Mbtuh	20	809	\$ 2.00	\$ 2.17	-	-	1,779
2008	234094	Water Heating - Commercial Horizontal Axis Washer	22 \$	148.92	\$ -	0.96	Unit	10	0	\$ 150.00	\$ 407.00	-	-	-
2008	234095	Lighting - Ceramic Metal Halide Fixture	485 \$	-	\$ 0.10	0.96	Bulb	16	58	\$ 250.00	\$ 255.41	6	26,996	-
2008	234096	Cooking - Insulated Holding Cabinets, full size, 8 kW or less	3,900 \$	-	\$ -	0.96	Unit	12	6	\$ 900.00	\$1,000.00	4	22,464	-
2008	234097	Cooking - Insulated Holding Cabinets, full size, 5 kW or less	5,500 \$	-	\$ 1.00	0.96	Unit	12	6	\$ 900.00	\$1,000.00	6	31,680	-
2008	234098	Cooking - Insulated Holding Cabinets, 3/4 size, 6 kW or less	2,790 \$	-	\$ 0.50	0.96	Unit	12	6	\$ 800.00	\$ 800.00	3	16,070	-
2008	234099	Cooking - Insulated Holding Cabinets, 3/4 size, 4 kW or less	3,850 \$	-	\$ 0.70	0.96	Unit	12	6	\$ 800.00	\$ 800.00	4	22,176	-
2008	234100	Cooking - Insulated Holding Cabinets, half size, 4 kW or less	1,950 \$	-	\$ 0.35	0.96	Unit	12	6	\$ 600.00	\$ 600.00	2	11,232	-
2008	234101	Cooking - Insulated Holding Cabinets, half size, 3 kW or less	2,750 \$	-	\$ 0.45	0.96	Unit	12	6	\$ 600.00	\$ 600.00	3	15,840	-
2008	234102	Cool Roofs Roof	0 \$	-	\$ 0.00	0.96	SqFt	15	231125	\$ 0.10	\$ 0.32	67	93,245	-
2008	234103	Refrigeration - Food Service-Auto Closers for Reach-In Cooler Doors	243 \$	-	\$ 0.03	0.96	Closer	8	0	\$ 125.00	\$ 300.00	-	-	-
2008	234104	Water Heating - Pre-rinse Spray Valves	-	\$ 570.00	\$ -	0.96	Unit	5	116	\$ 30.00	\$ 60.00	-	-	63,475
2008	234105	Heating - Infrared Film for Greenhouse	-	\$ 0.05	\$ -	0.96	SqFt	5	872497	\$ 0.03	\$ 0.03	-	-	41,042
2008	234106	Advanced Evaporative Coolers	547 \$	-	\$ 0.83	0.96	Ton	15	6	\$ 123.00	\$ 126.90	5	3,151	-
2008	234107	Connectionless Steamers Full load efficiency 50% or greater	6,620 \$	-	\$ 0.20	0.96	Unit	12	6	\$ 750.00	\$ -	1	36,131	-
2008	234108	Connectionless Steamers Full load efficiency 70% or greater	7,780 \$	-	\$ 0.40	0.96	Unit	12	6	\$ 900.00	\$ (500.00)	2	44,813	-
2008	234109	Lighting - Screw in 14-26 Watt Reflector Lamp	305 \$	-	\$ 0.05	0.96	Bulb	1.75	7049	\$ 6.00	\$ 5.27	319	2,061,322	-
2008	234110	Lighting - 4 Ft Premium T-8 with Elec. Ballast	33 \$	-	\$ 0.01	0.96	Fixture	11	54545	\$ 12.00	\$ 19.01	530	1,720,320	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	234111	Heating - Seiback Programmable Thermostats	250 \$	-	-	0.96	Unit	11	0	\$ 25.00	\$ 58.00	-	-	-
2008	234112	AC - Reflective Window Film Desert	16 \$	-	\$ 0.00	0.96	SqFt	10	578	\$ 3.00	\$ 3.12	1	8,934	-
2008	234113	Cool Roofs HVAC Ducts	0 \$	-	\$ 0.00	0.96	SqFt	15	0	\$ 0.10	\$ 0.32	-	-	-
2008	234114	Other - Occupancy Sensor - Plug Load Refrigeration - Night Covers for Display Cases Med Temp	258 \$	-	\$ 0.09	0.96	Occupancy Sensor	8	0	\$ 15.00	\$ 76.17	-	-	-
2008	234115	Refrigeration - Cooler/Freezer Door Gaskets	148 \$	-	\$ -	0.96	LinearFt	5	231	\$ 9.00	\$ 9.25	-	32,820	-
2008	234116	Solid Doors: Freezer	105 \$	-	\$ 0.01	0.96	LinearFt	4	693	\$ 4.00	\$ 4.00	8	69,555	-
2008	234117	Refrigeration - Food Service -Auto Closer for Reach-In Freezer Doors	1,297 \$	-	\$ 0.18	0.96	Closer	8	0	\$ 250.00	\$ 300.00	-	-	-
2008	234118	Refrigeration - Efficient Condenser-Evap-Cooled-CZ10	1,598 \$	-	\$ 0.05	0.96	Ton	16	0	\$ 500.00	\$ 702.00	-	-	-
2008	234119	Lighting - High Output 4 or 6 Lamp T5 or T8 Fixture (High bay applications)	989 \$	-	\$ 0.18	0.96	Fixture	11	693	\$ 150.00	\$ 250.00	118	657,829	-
2008	234120	Lighting - Occupancy Sensor - High-Bay Sensor	1,661 \$	-	\$ 0.39	0.96	Sensor	8	81	\$ 75.00	\$ 141.00	31	129,190	-
2008	234121	Water Heating -Commercial Pool Heater	-	2.41	\$ -	0.96	Mbtuh	5	1156	\$ 2.00	\$ 2.00	-	-	2,675
2008	234122	Refrigeration - High Efficiency Multiplex Compressor System Air-Cooled	7,480 \$	-	\$ 0.54	0.96	Ton	12	0	\$ 700.00	\$ 3,446.00	-	-	-
2008	234123	Refrigeration - High Efficiency Multiplex Compressor System Evap-Cooled	4,016 \$	-	\$ 0.97	0.96	Ton	12	0	\$ 700.00	\$ 3,446.00	-	-	-
2008	234124	Refrigeration - High Efficiency Multiplex Compressor System & Eff. Condenser Air-Cooled	4,027 \$	-	\$ 0.54	0.96	Ton	12	0	\$ 700.00	\$ 3,446.00	-	-	-
2008	234125	Refrigeration - High Efficiency Multiplex Compressor System & Eff. Condenser Evap-Cooled	4,027 \$	-	\$ 0.43	0.96	Ton	12	0	\$ 700.00	\$ 3,446.00	-	-	-
2008	234126	Refrigeration - Efficient Evap Fan Motor Electronically Commutated Motor (ECM)	673 \$	-	\$ -	0.96	Motor	16	1733	\$ 160.00	\$ 161.00	-	1,119,657	-
2008	234127	Refrigeration - Efficient Evap Fan Motor Permanent-Split Capacitor (PSC) Motor	336 \$	-	\$ -	0.96	Motor	16	578	\$ 100.00	\$ 161.00	-	186,440	-
2008	234128	Refrigerator - Early Replacement	1,041 \$	-	\$ 0.14	0.96	Unit	6	809	\$ 275.00	\$ 272.00	106	808,154	-
2008	234129	Software Plug Load Sensors	227 \$	-	\$ -	0.96	Unit	5	7512	\$ 15.00	\$ 5.00	-	1,637,022	-
2008	234130	Torchiere	464 \$	-	\$ 0.09	0.96	Unit	16	58	\$ 15.00	\$ 22.63	5	25,858	-
2008	234131	High Efficiency Gas Fryer	-	438.00	\$ -	0.96	Fryer	12	12	\$ 2,000.00	\$ 2,555.36	-	-	5,046
2008	234133	High Efficiency Gas Griddle	-	219.00	\$ -	0.96	Griddle	12	12	\$ 1,000.00	\$ 1,989.30	-	-	2,523
2008	234134	Faucet Aerators	58 \$	2.92	\$ 0.01	0.96	Site	9	578	\$ 1.10	\$ 1.14	7	32,294	1,618
2008	234136	High Efficiency Copier	324 \$	-	\$ 0.04	0.96	Machine	6	578	\$ 100.00	\$ 119.00	23	179,670	-
2008	234137	High Efficiency Electric Fryer	1,752 \$	-	\$ 0.00	0.96	Fryer	12	17	\$ 5,000.00	\$ 6,185.66	0	28,593	-
2008	234138	Vending Machine Controller	387 \$	-	\$ -	0.96	Vending Machine	10	289	\$ 95.00	\$ 97.20	-	107,369	-
2008	234139	Residential Energy Star Clothes Washer in Commercial Application	-	45.60	\$ -	0.96	Washer	10	0	\$ 75.00	\$ 581.00	-	-	-
2008	234140	Low Flow Showerhead	78 \$	3.89	\$ 0.02	0.96	Showerhead	9	925	\$ 20.00	\$ 20.49	15	68,909	3,453
2008	234146	Residential High Efficiency Water Heater in Commercial Application	-	13.30	\$ -	0.96	Hot Water Tank	15	-	-	\$ 117.10	-	-	-
2008	234147	Premium T8 with T12 34Watt Baseline	50 \$	-	\$ 0.01	0.96	Lamp	11	30000	\$ 8.00	\$ 12.70	248	1,434,240	-
2008	234148	Premium T8 with T12 40 Watt Baseline	75 \$	-	\$ 0.01	0.96	Lamp	11	30000	\$ 10.00	\$ 12.70	369	2,151,360	-
2008	234150	Tank Insulation - Low Temperature Applic. (LF) 2 in	\$	3.70	\$	0.96	SquareFt	20	300	\$ 3.00	\$ 3.41	-	-	1,066
2008	234151	Tank Insulation - High Temperature Applic. (LF) 2 in	\$	10.40	\$	0.96	SquareFt	20	300	\$ 4.00	\$ 3.41	-	-	2,995

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	234152	Pipe Insulation - Hot Water Applic. (sq ft) 2 in		\$ 2.90		0.96	LinearFt	20	300	\$ 3.00	\$ 9.22	-	-	835
2008	234153	Pipe Insulation - Low Pressure Steam Applic. (LF) 2 in		\$ 14.30		0.96	LinearFT	20	300	\$ 4.00	\$ 9.22	-	-	4,118
2008	234154	Tank Insulation - Low Temperature Applic. (LF) 1 in		\$ 3.40		0.96	SquareFT	20	300	\$ 2.00	\$ 2.58	-	-	979
2008	234155	Tank Insulation - High Temperature Applic. (LF) 1 in		\$ 9.70		0.96	SquareFT	20	300	\$ 3.00	\$ 2.58	-	-	2,794
2008	234156	Pipe Insulation - Hot Water Applic. (sq ft) 1 in		\$ 2.60		0.96	LinearFt	20	300	\$ 2.00	\$ 5.67	-	-	749
2008	234157	Pipe Insulation - Low Pressure Steam Applic. (LF) 1 in		\$ 13.40		0.96	LinearFt	20	300	\$ 3.00	\$ 5.67	-	-	3,859

2006-2008 Energy Efficiency Concept Paper Standard Performance Contract (SPC) Program

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 270,612	\$ 269,771	\$ 277,144
Overhead	\$ 161,077	\$ 173,158	\$ 186,144
Direct Implementation			
Financial Incentives	\$ 2,188,484	\$ 2,371,496	\$ 2,530,608
Activity	\$ 603,865	\$ 652,939	\$ 743,748
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ 23,000	\$ 26,000	\$ 26,000
Rebate Processing and Inspection	\$ 25,651	\$ 26,420	\$ 27,213
Marketing			
Program Specific Marketing	\$ 109,923	\$ 116,524	\$ 118,174
Statewide Marketing			
Total Program Budget	\$ 3,382,612	\$ 3,636,307	\$ 3,909,031

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
1,406	11,284,415	150,737	1,511	12,130,746	175,275	1,625	13,040,552	175,275

3. Program Cost Effectiveness

Attached

4. Program Descriptors

The Standard Performance Contract Program is a statewide non-residential energy efficiency incentive program. This concept paper presents a modified version of the existing SPC program. SPC targets mid to large-sized customers but will accommodate small non-residential customers that cannot be served by other programs.

5. Program Statement

High efficiency technology measures often costs more to design, purchase, and install than standard equipment. Add to that, lower end-user understanding of the performance capabilities of high efficiency equipment. These factors lead to the perception of longer paybacks and increased effort required to “go the extra mile” for energy efficiency. They are barriers to the adoption, implementation, and use of high efficiency technology.

What's New for 2006-08?

- Innovation
 - Increased focus on custom customer projects
 - Audit and design assistance for customers
- Integration
 - Demand Response Program integration and coordination
- Other Program Improvements
 - Simplified focus on calculated and measured SPC projects

6. Program Rationale

The SPC Program promotes procurement and installation of high efficiency energy technologies by providing incentive payments, and design/audit assistance in some cases, to partially offset incremental equipment costs. Customers can receive incentives for customized projects by calculating the amount of kWh saved or through a measurement and verification procedure. Providing incentives to shorten payback periods and assistance to quantify equipment performance increases the adoption of new technologies.

The SPC program is a hardware/incentive program. It fulfills an important role in the portfolio of nonresidential energy-efficiency programs. The program incorporates the flexibility required to evaluate and influence the many custom projects initiated by customers throughout the program period. SPC has the capability to accommodate nearly all energy efficiency measures including lighting (daylighting), air conditioning, refrigeration, natural gas end-use equipment, motors, controls, and other unique measures that provide verifiable energy savings. Additionally, measures that do not qualify for consideration under other energy efficiency programs can be considered under the SPC program. Future measures, based on new technologies and equipment as the marketplace evolves, can be addressed. The program promotes use of best practices in end-use applications. It allows customers an option to participate in a program that best meets their needs.

The SPC program is open to an unlimited variety of energy efficiency projects involving commercial, industrial and agricultural customers. Equipment must produce verifiable energy savings and exceed current market standards.

Customers will also be provided with Demand Response options.

7. Program Outcomes

Increase installation of high-efficiency, energy saving equipment in nonresidential buildings.

8. Program Strategy

Many types of projects are eligible in the SPC program. The program focuses on influencing projects during the planning phase by providing incentive payments (rather than rebates) and design/audit assistance, in some cases.

The SPC program will continue its coordination with the statewide IOUS, as well as with the other energy efficiency programs including statewide Education and Training, statewide Nonresidential Express Efficiency, statewide Building Operator Certification, statewide Savings By Design and the local Energy Saving Bid programs to promote the program and provide outreach to customers.

The SPC program will enhance the effectiveness of other demand reduction programs through coordination with those programs and by providing additional incentives focused on peak demand reducing technologies and industry “best practices”.

Additionally, SPC will continue to market the program through the SDG&E Major Markets Account Executives, as well as through education, outreach and marketing activities that will target business customers, energy service providers (ESPs), trade associations, other local business groups and government entities to generate interest and participation in the program.

Efforts will include the development and design of program literature, statewide application forms, updated program CDs, promotional items, direct mailers, bill inserts, and other appropriate program literature as needed. In addition, the statewide SPC and Express teams will continue to coordinate joint efforts at trade shows and conferences.

9. Program Objectives

The objectives and goals for SPC are to achieve persistent, cost-effective energy savings and demand reductions.

10. Program Implementation

Under the SPC program, an applicant follows a multi-step application process using forms supplied specifically for the SPC program. The various forms are submitted to the SDG&E Program Administrator for evaluation and payment. Depending on the nature of the project, the application process may involve one or more site inspections by the SDG&E Program Administrator prior to payment. In all cases, the SDG&E Program Administrator will work closely with the Project Sponsor to facilitate the review and payment process.

Project Sponsors incur all costs associated with preparing and application, installing equipment, conducting measurement and verification (M&V) activities, and otherwise reviewing or executing the SPC Agreement. Receipt of incentive funds depends on careful adherence to program policies. In return, Project Sponsors obtain cash payments (which they may pass on to their customers), while participating customers acquire high-efficiency equipment that will help lower energy costs and reduce energy consumption.

11. Customer Description

Industrial, commercial, and agricultural customers including manufacturing facilities, office buildings, and retail facilities and governmental facilities are the customers targeted by this program.

12. Customer Interface

This program is a modified version of the existing SPC program. Since the program has been in existence for six years it is familiar to customers and vendors. Changes to the program will be highlighted at the start of the program year and included in program documentation. Information will be delivered through direct presentations, a website, and direct customer contact. Applications, program manuals and software are available through the website. Direct assistance will be provided through telephone support and on-site support as required.

13. Energy Measures and Program Activities

13.1. Prescriptive Measures

- 13.2. See SDG&E June 1, 2005 Filing Workbook
kWh Level Data
See SDG&E June 1, 2005 Filing Workbook
- 13.3. **Non-energy Activities** – not applicable
- 13.4. **Subcontractor Activities** –
Subcontractor activities are expected to include:
- Customer project design assistance
 - Audit assistance
 - Support for Statewide SPC software
 - Energy savings research and documentation
 - Industry specific marketing efforts
- 13.5. **Quality Assurance and Evaluation Activities**
An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs.
- 13.5.1. Expected number/percent of inspections (planned percent of projects)
Both pre-installation and post installation inspections are to be performed 100% of the time to assure program quality.
- 13.6. **Marketing Activities.**
The SPC program will be marketed at trade and professional organizations, promotional fairs, and training seminars. In addition direct customer contact by Account Executives, Demand Response Program outreach, phone and e-mail support will be provided.

14. **Conclusion**

SPCP is a comprehensive statewide program designed to promote the implementation of energy efficiency projects to produce significant energy savings and reduced peak demand within SDG&E's service area. It provides accessibility for all technological advances for its target customers and avoids lost opportunities by not excluding any cost effective measure capable of achieving verifiable energy savings and provides options to customers and contractors by accommodating customer needs.

The SDG&E Program Administrator will work closely with Project Sponsor s to ease and facilitate the application, review, and payment processes.

	SDGE3025 SPC-Standard Performance Program	
BUDGET		
Administrative Costs	\$	1,337,906
Overhead and G&A	\$	520,379
Other Administrative Costs	\$	817,527
Marketing/Outreach	\$	344,621
Direct Implementation	\$	9,245,423
Total Incentives and Rebates		
User Input Incentive	\$	-
Direct Install Rebate	\$	7,090,588
Direct Install Labor	\$	-
Direct Install Materials	\$	-
Activity	\$	2,000,552
Installation	\$	-
Hardware & Materials	\$	75,000
Rebate Processing & Inspection	\$	79,284
EM&V Costs	\$	-
Budget	\$	10,927,950
Costs recovered from other sources	\$	-
Budget (plus other costs)	\$	10,927,950

PROGRAM IMPACTS		
DEER kW (kW)		4,542
Net NCP (kW)		5,835
Net CEC (kW)		7,911
Annual Net kWh		36,455,713
Lifecycle Net kWh		406,815,481
Annual Net Therms		501,287
Lifecycle Net Therms		7,519,298
Cost Effectiveness		
TRC		
Costs	\$	11,310,537
Electric Benefits	\$	24,473,067
Gas Benefits	\$	3,207,075
Net Benefits (NPV)	\$	16,369,604
BC Ratio		2.45
PAC		
Costs	\$	10,230,314
Electric Benefits	\$	24,473,067
Gas Benefits	\$	3,207,075
Net Benefits (NPV)	\$	17,449,827
BC Ratio		2.71
Levelized Cost		
Levelized Cost TRC (\$/kWh)		
Discounted kWh		258,190,940
Cost	\$	0.0389
Benefits	\$	0.0948
Benefit-Cost	\$	0.0559
Levelized Cost PAC (\$/kWh)		
Discounted kWh		258,190,940
Cost	\$	0.0354
Benefits	\$	0.0948
Benefit-Cost	\$	0.0594
Levelized Cost TRC (\$/therm)		
Discounted Therms		4,290,631
Cost	\$	0.2932
Benefits	\$	0.7475
Benefit-Cost	\$	0.4542
Levelized Cost PAC (\$/therm)		
Discounted Therms		4,290,631
Cost	\$	0.2539
Benefits	\$	0.7475
Benefit-Cost	\$	0.4936

SDGE Standard Performance Program

Year	Total Budget	Total Incentives	Admin Budget	Net kWh	Net Therms	Net kW
2006	\$ 3,382,612	\$ 2,188,484	\$ 1,194,128	11,284,415	150,737	1,406
2007	\$ 3,636,308	\$ 2,371,496	\$ 1,264,812	12,130,746	175,275	1,511
2008	\$ 3,909,031	\$ 2,530,608	\$ 1,378,423	13,040,552	175,275	1,625

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	232001	Gas	-	1	-	0.7011	Therm	15	215,000	\$ 1.00	\$ 1.80	-	-	150,737
2006	232002	Lighting	1	-	0.00	0.7011	kWh	16	3,109,530	\$ 0.05	\$ 0.13	272	2,180,091	-
2006	232003	HVAC	1	-	0.00	0.7011	kWh	20	-	\$ -	\$ 0.15	-	-	-
2006	232004	Other	1	-	0.00	0.7011	kWh	10	12,985,770	\$ 0.14	\$ 0.22	1,134	9,104,323	-
2007	232001	Gas	-	1	-	0.7011	Therm	15	250,000	\$ 1.00	\$ 1.80	-	-	175,275
2007	232002	Lighting	1	-	0.00	0.7011	kWh	16	3,342,745	\$ 0.05	\$ 0.13	292	2,343,599	-
2007	232003	HVAC	1	-	0.00	0.7011	kWh	20	-	\$ -	\$ 0.15	-	-	-
2007	232004	Other	1	-	0.00	0.7011	kWh	10	13,959,703	\$ 0.14	\$ 0.22	1,219	9,787,148	-
2008	232001	Gas	-	1	-	0.7011	Therm	15	250,000	\$ 1.00	\$ 1.80	-	-	175,275
2008	232002	Lighting	1	-	0.00	0.7011	kWh	16	3,593,451	\$ 0.05	\$ 0.13	314	2,519,368	-
2008	232003	HVAC	1	-	0.00	0.7011	kWh	20	-	\$ -	\$ 0.15	-	-	-
2008	232004	Other	1	-	0.00	0.7011	kWh	10	15,006,680	\$ 0.14	\$ 0.22	1,311	10,521,183	-

2006-2008 Energy Efficiency Concept Paper

Energy Savings Bid Program

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 233,958	\$ 779,397	\$ 324,735
Overhead	\$ 558,718	\$ 325,974	\$ 1,087,756
Direct Implementation			
Financial Incentives	\$ 8,905,473	\$ 11,971,143	\$ 16,113,607
Activity	\$ 1,476,293	\$ 2,485,238	\$ 4,489,279
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ 38,000	\$ 32,500	\$ 32,500
Rebate Processing and Inspection	\$ 158,329	\$ 257,829	\$ 265,564
Marketing			
Program Specific Marketing	\$ 362,300	\$ 515,256	\$ 529,439
Statewide Marketing			
Total Program Budget	\$ 11,733,071	\$ 16,367,338	\$ 22,842,880

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
8,400	40,792,320	143,109	11,297	54,844,800	192,340	15,205	73,822,380	258,903

3. Program Cost Effectiveness

Attached

4. Program Descriptors

The Energy Savings Bid Program (ESBP) is an existing local incentive program designed for large commercial or industrial energy-efficiency projects including the military and public agencies. Projects may include large individual sites or an aggregation of smaller sites. Incentives will be provided for design and audit assistance.

The program will incorporate a new component, the (Local Energy Action Program (LEAP), supported by the San Diego Regional Energy Office (SDREO). The LEAP consolidates and enhances several successful 2004-05 SDREO programs including: San Diego Regional Energy Partnership (SDREP)-Local Government Energy Efficiency Program (Program No. 1300-04), SDREP-San Diego Green Building Education and Technical Assistance (Program No. 1299-04), SDREP-Technical Assistance Program (Program No. 1304-04) and SDREO-San Diego Local Government Energy Efficiency Program (Program 1301-04).

5. Program Statement

ESBP is an incentive program that addresses the market barriers of: (1) higher costs for high energy-efficiency measures, (2) long payback periods for energy-efficiency measures, (3) reluctance to participate in other incentive and rebate programs, (4) unfamiliarity with energy-efficient equipment and technologies, (5) lack of design and audit assistance incentives, and (6) limited flexibility of other programs. Public agencies in particular require a long project approval lead time which presents a time barrier when competing with private industry for incentive funds.

The targeted measure types include Lighting/Daylighting, HVAC/Refrigeration, central plant optimization via variable speed drives, and other technologies. ESBP provides financial incentives for SDG&E customers, contractors, vendors and/or project sponsors who submit unique and innovative nonresidential energy-savings projects and/or programs, and propose an incentive amount (within program guidelines) necessary to implement the project.

What's New for 2006-2008?

- Innovation
 - Application Process has been Simplified
 - Program Flexibility allow for Specialized customer Projects and Measures
 - EM&V options for customers
 - Promotion of Demand Response programs
- Integration
 - LEAP component added to the program
 - Design and Audit Assistance for customers
 - Demand Response incentives
- Other Program Improvements
 - Program is user Friendly and Accommodating to Customer Needs
 - Program Builds on past Successes for future Opportunities

6. Program Rationale

ESBP is designed to meet customer and project sponsor needs, and quickly maximize energy savings and peak load reductions from nonresidential customers. The small customer component allows project sponsors to aggregate different customer sites to create participation from customers who are unable or unwilling to participate in the SDG&E Express Efficiency and Standard Performance Contract (SPC) programs. The LEAP component is designed to focus on the specific and unique needs of individual public agencies and will address the time, staffing, and technical resource barriers facing these organizations. The LEAP component provides targeted assistance to public agencies not in competition with the private sector. LEAP offers technical assistance services that include energy audits and project design/development in order to alleviate pressure on staffing and conquer the technical barrier those blocks many public agency projects from being identified and implemented.

In general, ESBP is an energy efficiency retrofit hardware program designed to address additional barriers due to: (1) budgetary planning horizons (e.g., fiscal year planning versus calendar year planning) that differ from CPUC program funding cycles, (2) longer planning horizons that do not coincide with program funding period, (3) new and innovative technologies, and (4) statewide limitations on the maximum incentive payments to individual customers or project sponsors.

7. Program Outcomes

The desired results of ESBP are to encourage a higher degree of energy-efficiency market penetration by increasing the amount of comprehensive high efficiency measures being installed.

8. Program Strategy

As an innovative incentive program, ESBP focuses on promoting energy efficiency by influencing retrofit projects during the planning phase. The awarding of incentives for energy efficiency projects will be accomplished through an application process by customers, contractors, vendors, project sponsors and a review process by SDG&E. The LEAP component, represented by SDREO, will provide energy audits, comprehensive technical assistance, and incentive/financial documentation support for public agency energy efficiency projects. The incentive payment for each project depends on project costs, defined as the amount of technical assistance services provided and project benefits defined as kWh and kW savings. :

The targeted direct mailing of the program information and application forms will include nonresidential SDG&E customers, but also Energy Service Companies (ESCOs), trade associations, vendors, contractors, and local business groups in a position to create interest and generate additional program participation. Potential participants will receive information and program updates through direct e-mails, utility service representatives, Energy Service Providers, trade organizations and industry associations.

ESBP will continue coordination with other local, statewide, SDREO and other 3rd party programs to promote energy-efficiency, eliminate overlaps, and provide outreach to customers and project sponsors. In addition, the SDG&E ESBP, SPC and Express teams will continue to coordinate joint efforts at seminars, trade shows and conferences using all available resources including the San Diego Energy Resource Center (SDERC) Program.

When a business customer contacts SDG&E to establish a new account, a lead will be generated to the energy efficiency group. The account will be reviewed and if appropriate, referred to the SDG&E audit team. The audit team will contact the customer to inform them about the energy efficiency and information programs.

In 2006, SDG&E will begin developing an integrated demand side management (IDSM) audit that supports both energy efficiency and demand reduction. Audits have proven to be an important tool for educating customers about energy management opportunities in their facility, and encouraging their participation in programs. The purpose for an IDSM audit will be to provide a single coordinated audit service for the customer, and eliminate what may appear to be confusing or competing energy options between the two types of programs.

9. Program Objectives

The major objective of ESBP is to achieve a substantial amount of energy savings and peak demand reductions by motivating customers who would not normally pursue projects to replace older, less-efficient equipment with new high efficiency replacement equipment.

The incentives of the program are designed to motivate customers to improve the efficiency of their equipment and provide comprehensive retrofits. Additional incentives may be awarded to projects with a Demand Reduction/Response element.

The targeted market actors needed to affect the behavioral changes necessary to achieve the energy savings goals include utility service representatives, large nonresidential SDG&E customers, Energy Service Providers, trade associations and allies, vendors, contractors, and local business groups.

10. Program Implementation

Implementation efforts will include any necessary updates to the development and design of program literature, application forms, promotional items, direct mailers, bill inserts, and other appropriate program literature, as needed to effectively implement the Program. Program implementation within the LEAP component consists of technical assistance services which will include, but not be limited to: energy audit consultation, project design assistance, Request for Proposal (RFP) development, funding identification, contractor coordination, facility staff education which may include SDREO case studies based on projects completed, incentive proposal, and coordination with other applicable programs. While this program does not specifically target new construction, initial assistance will be provided to ensure that any supported customer new construction activities are channeled to the SDG&E new construction program. This task will be included as part of the technical assistance provided to the participants.

The application process is both easy and friendly. Once the project has been approved, customers/Project Sponsors can track the progress of projects via a web based Extranet project tracking system. The SDG&E Program Manager will work closely with the Project Sponsor to facilitate the review and payment process.

Another innovative approach is how the project measurement & verification (M&V) is handled. Customers/Project Sponsors have the option of having SDG&E's independent third-party contractor perform the project M&V at no cost or the Project Sponsor can perform the project EM&V themselves. Public Agencies have the option of using SDREO services as part of the technical services provided to complete the project M&V analysis.

11. Customer Description

The ESBP will target large nonresidential customers, including public agencies that customers that can save a minimum of 500,000 kWh annually. Contractors, vendors and/or project sponsors are also targeted because of their involvement with customers and their retrofit projects. Smaller customers can be combined to meet the minimum kWh program criteria.

A project may include a single customer or a combination of customers at multiple sites. Sites can have different measures, operating hours and energy use profiles. Participation is normally limited to projects and programs with annual energy savings of at least 500,000 kWh. Exceptions to the minimum savings amount could include pilot programs, measures that do not meet the qualifications for other SDG&E energy efficiency programs, and the discretion of the SDG&E program manager.

12. Customer Interface

ESBP will be presented to customers and contractors in a variety of formats, including but not limited to: (1) program kick-off meetings, (2) seminars, (3) e-mail, (4) mail, (5) internet web page, (6) direct contact by SDG&E's Account Executives and other representatives.

13. Energy Measures and Program Activities

13.1. Prescriptive Measures

See SDG&E June 1, 2005 Filing Workbook

13.2. kWh Level Data

See SDG&E June 1, 2005 Filing Workbook

13.3. Non-energy Activities

The LEAP component will provide energy audits to all public agency participants. These audits will be used as the tool to achieve the ultimate goal of obtaining energy savings, and will be completed throughout the life of the program. LEAP audits can also include an integrated Demand Response component, with the funding for this activity coordinated with the Demand Response Program.

13.4. Subcontractor Activities

Subcontractor activities are expected to include:

- Project EM&V
- Activities to implement the LEAP component (audits, inspections and project EM&V)

13.5. Quality Assurance and Evaluation Activities

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs.

- 13.5.1. Pre and post inspections will be performed on 100% of the projects. For the public agency projects, SDREO will provide pre- and post- site inspections, energy consumption analysis (comparing pre- and post- installation data), and equipment monitoring/data logging to identify actual savings realized from the public agency participants. This data will be collected throughout the duration of the program and may be used for case studies.

13.6. Marketing Activities

ESBP will continue to market the program through the SDG&E Account Executives, as well as through educational, outreach and other marketing activities targeting business customers, ESCOs, trade associations, other local business groups and government entities to generate interest and participation in the program. As part of the collaboration with SDREO, additional marketing activities will include, but are not limited to, program informational materials, website development and updates, participation in SDREO and other sponsored

events, press releases and general media attention. SDREO will create program materials specifically to identify the LEAP component of ESBP and provide to any public agency as necessary.

14. Conclusion

ESBP is a comprehensive local program designed to implement energy efficiency projects that will produce significant energy savings and reduce peak demand within SDG&E's service area. It also avoids lost opportunities by not excluding any cost effective measure capable of achieving verifiable energy savings and provides options to customers and contractors by accommodating customer needs.

The LEAP component specifically seeks to minimize lost opportunities, maximize customer participation, and streamline the administrative costs in servicing the public agency sector by combining multiple pre-existing SDREO programs into a "one-stop" process. LEAP will address the public agency market barriers of time, technical resources, staffing, and funding. The program will work in an environment where no time competition exists between public and private entities. Customers will not be burdened with the exhaustive application and project design process that is present in current programs. Technical assistance will alleviate the stress of staff dedication to project management and will be customized to the need of each participant. LEAP will provide incentives to help initiate project development at public agencies, ensure participation, and achieve the programs goals.

	SDGE3010 ESB- Energy Savings Bids	
BUDGET		
Administrative Costs	\$	3,310,539
Overhead and G&A	\$	1,972,448
Other Administrative Costs	\$	1,338,091
Marketing/Outreach	\$	1,406,995
Direct Implementation	\$	46,225,755
Total Incentives and Rebates		
User Input Incentive	\$	-
Direct Install Rebate	\$	36,990,224
Direct Install Labor	\$	-
Direct Install Materials	\$	-
Activity	\$	8,450,810
Installation	\$	-
Hardware & Materials	\$	103,000
Rebate Processing & Inspection	\$	681,721
EM&V Costs	\$	-
Budget	\$	50,943,289
Costs recovered from other sources	\$	-
Budget (plus other costs)	\$	50,943,289

PROGRAM IMPACTS		
DEER kW (kW)		34,902
Net NCP (kW)		38,990
Net CEC (kW)		36,773
Annual Net kWh		169,459,500
Lifecycle Net kWh		1,941,816,011
Annual Net Therms		594,353
Lifecycle Net Therms		6,870,869
Cost Effectiveness		
TRC		
Costs	\$	46,615,494
Electric Benefits	\$	128,450,150
Gas Benefits	\$	3,234,490
Net Benefits (NPV)	\$	85,069,147
BC Ratio		2.82
PAC		
Costs	\$	46,941,031
Electric Benefits	\$	128,450,150
Gas Benefits	\$	3,234,490
Net Benefits (NPV)	\$	84,743,610
BC Ratio		2.81
Levelized Cost		
Levelized Cost TRC (\$/kWh)		
Discounted kWh		1,214,507,607
Cost	\$	0.0371
Benefits	\$	0.1058
Benefit-Cost	\$	0.0687
Levelized Cost PAC (\$/kWh)		
Discounted kWh		1,214,507,607
Cost	\$	0.0374
Benefits	\$	0.1058
Benefit-Cost	\$	0.0683
Levelized Cost TRC (\$/therm)		
Discounted Therms		4,262,018
Cost	\$	0.3729
Benefits	\$	0.7589
Benefit-Cost	\$	0.3860
Levelized Cost PAC (\$/therm)		
Discounted Therms		4,262,018
Cost	\$	0.3422
Benefits	\$	0.7589
Benefit-Cost	\$	0.4168

SDGE Energy Savings Bids

Year	Total Budget	Total Incentives	Admin Budget	Net kWh	Net Therms	Net kW
2006	\$ 11,733,071	\$ 8,905,473	\$ 2,827,598	40,792,320	143,109	8,400
2007	\$ 16,367,338	\$ 11,971,143	\$ 4,396,195	54,844,800	192,340	11,297
2008	\$ 22,842,880	\$ 16,113,607	\$ 6,729,273	73,822,380	258,903	15,205

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	212003	Lighting	1	-	0.00	0.8	kWh	11	31,104,144	\$ 0.13	\$0.13	6,793	24,883,315	-
2006	212004	Other	1	0	0.00	0.8	kWh	10	11,217,888	\$ 0.24	\$0.32	1,059	8,974,310	98,394
2006	212005	HVAC	1	0	0.00	0.8	kWh	15	8,668,368	\$ 0.25	\$0.38	548	6,934,694	44,715
2007	212003	Lighting	1	-	0.00	0.8	kWh	11	41,836,900	\$ 0.13	\$0.13	9,137	33,469,520	-
2007	212004	Other	1	0	0.00	0.8	kWh	10	15,088,700	\$ 0.24	\$0.32	1,424	12,070,960	132,346
2007	212005	HVAC	1	0	0.00	0.8	kWh	15	11,630,400	\$ 0.25	\$0.38	735	9,304,320	59,994
2008	212003	Lighting	1	-	0.00	0.8	kWh	11	56,312,000	\$ 0.13	\$0.13	12,299	45,049,600	-
2008	212004	Other	1	0	0.00	0.8	kWh	10	20,310,099	\$ 0.24	\$0.32	1,917	16,248,079	178,144
2008	212005	HVAC	1	0	0.00	0.8	kWh	15	15,655,876	\$ 0.25	\$0.38	989	12,524,701	80,759

NEW CONSTRUCTION PROGRAMS

2006-2008 Energy Efficiency Concept Paper Savings By Design

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 667,743	\$ 673,372	\$ 669,140
Overhead	\$ 158,264	\$ 201,213	\$ 288,140
Direct Implementation			
Financial Incentives	\$ 923,740	\$ 1,847,480	\$ 3,694,959
Activity	\$ 265,356	\$ 273,317	\$ 281,516
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ 574,518	\$ 450,543	\$ 400,518
Rebate Processing and Inspection	\$ 11,618	\$ 9,906	\$ 10,203
Marketing			
Program Specific Marketing	\$ 722,301	\$ 769,636	\$ 706,455
Statewide Marketing			
Total Program Budget	\$ 3,323,540	\$ 4,225,467	\$ 6,050,932

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
649	2,951,502	50,215	1,299	5,903,003	100,429	2,597	11,806,006	200,859

3. Program Cost Effectiveness

Attached

4. Program Descriptors

Nonresidential new construction market sector; available statewide with some overlapping rules and criteria; a modification of the existing Savings By Design program.

Savings By Design (SBD) has been an energy efficiency program for the nonresidential new construction industry, developed and delivered by the investor-owned utilities (IOUs) since 1999, to provide statewide consistency, program stability, and savings persistence to the nonresidential new construction market. The 2006 nonresidential new construction program builds on the best elements of successful new construction programs run by the investor owned utilities since the early 1990's. The program promotes integrated design and emphasizes early design involvement by offering building owners and their design teams a wide range of services including education, design assistance, and owner incentives, as well as design team incentives.

5. Program Statement

The Savings By Design program will continue to provide the nonresidential new construction industry with a broad palette of technical and financial resources to aid them in designing new facilities to the most cost-effective energy efficiency standards. The program is targeted to owners/developers/tenants who are planning new buildings, including expansions, additions, and major remodels, as well as their selected design professionals who are providing building plans and specialty consulting regarding energy or environmental quality. Integrated design is the program's top goal, which is exemplified by all building disciplines working together in the early design phases, to plan and construct a high performance project.

What's New in 2006-2008?

- Innovation
 - New methods for design teams to receive financial incentives
- Integration
 - A revised incentive structure with tiered incentive rates
 - Recognizes the new Title 24 energy standard changes
 - Introduces a role for time-dependent valuation
 - Outreach and assistance in connection with demand response programs
- Other Program Improvements
 - Customer-focused – easily-accessible information
 - Increased emphasis on whole building approach

Though the concept of high performance building has continued to gain prominence over the last several years, still many design teams are only familiar with basic energy efficiency concepts and are often reluctant to incorporate innovative energy-efficient technologies into a particular project due to perceived higher upfront capital costs or the fear that doing so will result in unnecessary project delays. This lack of awareness and reluctance is addressed in the program's design by working with owner/developers and design teams from the ground up, early in the planning process, educating them by offering hands-on training and no-cost analysis resources, guiding them through the participation process with Account Executives who are dedicated program-specialists, and the strategic use of incentives. SDG&E's program can help overcome these market barriers, avoid lost opportunities, and assure that the best in energy efficiency and energy-related technologies are incorporated in each project.

6. Program Rationale

This program delivers cost-effective, permanent, and verifiable energy savings and peak demand reduction with long-term energy savings of between 15 to 20 years. By providing the technical and financial means to influence the basic design of commercial and industrial projects, the program assures that these projects are constructed correctly the first time. Nonresidential new construction interventions preclude demand from ever impacting electrical and gas supply and provide fundamental, if invisible, savings. Further, the program is able to influence decision makers and demonstrate energy savings potential at the time when achieving those savings is most cost effective for the building owner, thereby avoiding lost opportunities. With specific enhancements intended to help the market address the new Title 24 energy code changes being applied in 2006, the program will continue to serve the needs of project owners and design teams.

Since 1999 the statewide Savings By Design (SBD) program has involved thousands of participants and projects and has worked with scores of design teams. The program's innovative educational elements and implementation strategies target market barriers and failures that inhibit adoption of cost-effective energy efficiency measures while providing lead sources for future project involvement. The Savings By Design program has consistently met the California Public Utilities Commission's (CPUC) goals and objectives for energy efficiency programs and will continue to benefit the nonresidential new construction market in 2006 and beyond.

The program relies on three basic elements to avoid lost opportunities across all customer sizes: the Whole Building Approach, the Systems Approach and education and outreach. The core strategy centers on an integrated design approach to optimize energy efficiency, known as the Whole Building Approach, which is appropriate for larger, more complex buildings and for those sophisticated customers with the ability to undertake such an approach. This approach has a tiered incentive structure to help pull projects towards high levels of energy efficiency and keep designers pushing the envelope. For those participants who would not normally consider or cannot use a fully integrated design approach, the Systems Approach provides a simplified, performance-based calculation method that moves owners and design teams far beyond simple prescriptive approaches and minimum code compliance. Delivery strategies utilizing training, education, and outreach, are integral to program design and also crosscut all program elements in order to reach the broadest possible audience. Intervention strategies mix information, technical assistance, and training with financial incentives to increase supply of, and demand for, high-performance buildings, high efficiency equipment and materials, to the broadest possible audience.

7. Program Outcomes

By using indicators such as energy simulation modeling, life cycle cost analysis and long term operating cost reduction goals, the program will educate, demonstrate, and encourage energy efficiency and demand reduction above and beyond California's Energy Code (Title 24). Early involvement with design decision-makers presents the best opportunity to provide influential information and enhance the energy performance of nonresidential new construction buildings with quantified financial incentive offers so that loads are reduced through right-sized equipment, leading to reduced capacity affecting the grid. The program is designed to have interactions with other programs influencing energy codes and education and training for nonresidential design professionals.

SDG&E will work to incorporate other existing offerings, internal and external to the utilities, to assist in realizing a project that reflects a cohesive sense of sustainability that may go beyond the traditional aspects of energy efficiency. Such offerings may include LEED (Leadership in Energy and Environmental Design) Green Building Rating System[®] certification, ENERGY STAR[®] rating, demand response and self-generation programs, and other programs, as applicable.

Savings By Design will:

- Collaborate with the statewide Savings By Design teams to share best practices and other successful tools and resources.

- Motivate customers and the design industry to integrate energy use and efficiency strategies early in the design process.
- Support and work in concert with the Sustainable Communities program goals and initiatives.
- Introduce and support the time-dependent valuation of energy used as the basis of the new Title 24 energy standards.
- Move customers to design their facilities with the goal being long-term energy and cost savings, not just compliance with regulations.
- Promote available resources to market players regarding Title 24 Code changes and how to exceed them cost-effectively and manage the efficient use of on-site training resources.

8. Program Strategy

The program targets key “influencers” in the new construction market segment including: architects and designers, property developers and building owners, industry and trade associations (American Institute of Architects - AIA, American Society of Heating, Refrigeration, and Air-conditioning Engineers - ASHRAE, Building Owners and Managers Association - BOMA, Illuminating Engineers Society - IES, United States Green Building Council - USGBC, etc.), energy consultants and service providers, engineers, building-system contractors, building department inspectors and plan checkers. The program emphasizes intervention with no-cost design assistance and analysis early in the planning and design process and offers a wide range of customized services including education, owner incentives, and design team incentives.

The program influences nonresidential building owners, tenants and design teams to exceed current Title 24 energy efficiency standards (or established standards for industrial and specialty processes) by a significant percentage better than code for their new construction or renovation/remodeling projects. It leverages resources from industry relationships, strategic alliances and other public purpose programs to accomplish the goals of energy savings, peak demand reductions and long-term market change. Such sustained intervention within the nonresidential new construction market impacts market practice and flattens projected procurement demand, while continuing to nurture commercial and industrial project development.

Savings By Design will:

- Continue to build on the existing statewide program that has been validated and proven successful for many years in California.
- Expand available resources to facilitate integrated design practices into a larger number of new construction projects in the design phases.
- Cultivate strong alliances with industry professionals and organizations to continually broadcast the importance of high performance building design and energy conservation efforts.

9. Program Objectives

The objectives of the program are:

- Encourage projects that demonstrate high performance design practices as applicable to different nonresidential buildings types and secure commitments that construction of these buildings will include enhanced energy efficiency strategies.
- Support design and construction practices that reduce long-term operating costs for building owners and operators, while managing peak load, conserving resources, and saving energy beyond the applicable Title 24 energy code.
- Prepare and distribute testimonials, articles, and case studies for selected projects to document and quantify the benefits of high performance design practices to influence current market standard practice.

In 2006-08, the program will also continue efforts to develop new outreach through Energy Design Resources to support the adoption of integrated design techniques, which maximize the efficiency opportunities available in buildings or processes. The element will continue to support the U. S. Green Building Council's LEED program, the Collaborative for High Performance Schools, the California Commissioning Collaborative, and other groups who play a significant role in encouraging high performance building design and construction. This program includes innovative educational components and strategies to target market barriers and failures that inhibit adoption of cost-effective energy efficient design and construction.

10. Program Implementation

A coordinated array of intervention strategies is necessary to overcome the market barriers standing in the way of sizable net benefits available from integrated, comprehensive building design. Program representatives will contact customers who are building new buildings, and utilize relationships with design professionals working in the region, to inform decision makers about program opportunities and benefits. The nonresidential new construction program's approach targets the primary decision makers in new construction projects with an emphasis on customized design assistance offered through dedicated program representatives at the Utility. Design assistance and incentives target owners, architects, and engineers, with information and financial stimulus to encourage maximum effort in pursuit of comprehensive long-term savings.

The Savings By Design program will continue to build on the two successful components that are delivered to the industry via program representatives – the Whole Building Approach and the Systems Approach:

- The Whole Building Approach is the preferred method of estimating energy savings within SBD because it enables a design team to consider integrated, optimized energy efficiency solutions. This approach provides and requires a high level of energy analysis and interactive feedback, which leads to more efficient design decisions. It also includes a progressive, tiered incentive structure to pull projects to perform significantly better than code requirements.
- The Systems Approach is a simplified, performance-based method, utilizing a calculation tool to optimize efficiency choices. It is straightforward and

participants may find it the best available option for certain types of projects. The Systems Approach makes it easy for designers to look at the interaction of systems within their project, rather than individual equipment or measures.

- SBD also offers Design Team Incentives to support the extra effort for integrated energy design and to provide a reward for exceptional design accomplishments within the context of the Whole Building Approach. The program will introduce new opportunities to receive incentives in a phased-manner – bringing payment closer in proximity to when designer’s complete their services - to better address this important decision maker’s needs.

Delivery strategies utilizing program representatives including training, education, and outreach are integral to program design as are alliances with organizations promoting energy efficiency and integrated design for the nonresidential new construction industry. In pursuit of these ends, the program will align itself with numerous organizations and agencies including, but not limited to, the American Institute of Architects, California Council (AIACC); the Collaborative for High Performance Schools (CHPS); the California Commissioning Collaborative (CCC); the Coalition for Adequate Schools Housing (CASH); the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE); the California Energy Commission (CEC); and the Department of the State Architect (DSA), among others.

A core component of the program’s mission is to seek continuous improvement from the new construction industry and keep them aware of the on-going changes to Title 24 energy code. As such, the program will collaborate with the California Energy Commission on educational and program implementation strategies that prepare market actors for successive code changes in advance of code adoption within regularly scheduled update cycles.

11. Customer Description

The program targets distinct links in the new construction decision-making chain, reflecting differences in design activities and priorities between large and small buildings and various occupancies. The program offers services and incentives to owners, developers, design teams, and contractors. All end-uses in buildings are included within program offerings, as are all end uses found in commercial, governmental, institutional, and industrial or agricultural processes.

12. Customer Interface

Both the Whole Building Approach and the System Approach follow the same implementation process. The process begins with an initial contact between the customer (and/or the customer’s design team) and a Savings By Design representative. These program representatives are dedicated to program implementation and trained to understand the dynamics and language of the design and construction industry, focused only on the delivery of the Savings By Design program. Program representatives actively seek out customers with potential new construction projects and generate project leads from diverse sources.

Once the program representative has helped the customer complete the brief Letter of Interest that documents the owner's interest in participating and receiving program benefits, further specifics are gathered regarding the project, such as design team members and construction timeline.

Initial meetings, between all members of the design team, the program representative, and appropriate technical staff, are held to discuss the parameters of the project and determine the best approach for the project. Design assistance, matched to the needs and scope of the project, is offered with the goal of identifying and validating energy savings strategies appropriate to the facility under design.

The program representative and supporting technical staff continue to provide recommendations, feedback, consulting, and energy use analysis, as needed, to the owner and design team as the project proceeds through the various design phases. Such activity can vary in duration from months to years. Culmination of this phase of the process will result in a list of agreed-upon energy efficiency strategies to be incorporated into the constructed project.

At this point, an Incentive Agreement between the owner and SDG&E is executed. The execution of the Agreement generally takes place before the construction of the new building is begun. When applicable, an Incentive Agreement between the design team leader and SDG&E is executed after the Owner Agreement has been finalized.

When the building's construction has been completed, SDG&E will make an on-site visit to each participating project to confirm compliance with the terms of the Agreement. Once the inclusion of all measures/strategies has been confirmed, the owner is paid the agreed-upon incentive amount and energy savings reported. Should the completed construction vary from the Agreement, the available incentive will be recalculated to reflect the modeled energy-efficiency performance of the building as constructed.

For nonresidential new construction projects, the utility representatives will work closely with the owner and their design team to obtain the documents necessary to assess the project's performance, propose customized enhancements, offer financial incentives for quantify energy savings, and follow-through upon construction completion to verify installed energy-efficient systems. In addition, the design team may qualify for partial payment of incentive upon design analysis submission and acceptance, by working closely with the program representative.

13. Energy Measures and Program Activities

13.1. Prescriptive Measures

See SDG&E June 1, 2005 Filing Workbook

13.2. kWh Level Data

See SDG&E June 1, 2005 Filing Workbook

13.3. Non-energy Activities

- Outreach/marketing activities, including an annual energy efficiency recognition awards (co-sponsored with trade allies, to raise awareness

regarding energy-efficient design and construction, within the new construction industry).

- Training and resource enhancements targeted to the nonresidential new construction market and professionals.

13.4. **Subcontractor Activities –**

- Project-specific, energy simulation design assistance and consulting
- Integrated energy design support
- Pilot program delivery in defined industry niches. A Request for Qualifications process will be used to select uniquely qualified contractors to address targeted industrial market segments to assess and implement a limited offering to these specialized segments. Selected contractors will have demonstrated, unique new construction design expertise, and will be tasked with influencing specified segments of the nonresidential new construction market, in an effort to better serve customers designing these types of projects.

13.5. **Quality Assurance and Evaluation Activities)**

The program will conduct inspections on 100% of the projects that complete construction during the program period.

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs.

13.6. **Marketing:**

The primary marketing agent for Savings By Design is the group of program-dedicated Account Executives working to leverage long-standing relationships and continually expand outreach to design professionals, allied organizations, and all customers. Additionally, individual memberships in pertinent local industry organizations such as AIA, ASHRAE, IES, USGBC, and others, are utilized to build a presence in, and an informational/educational resource for members of, these organizations. In addition, the program will:

- develop and distribute program brochures, informational inserts, industry-specific marketing pieces, informational articles, and design guidelines.
- offer technical assistance and project-specific design assistance to building owners, developers, architects, engineers and contractors, to identify and analyze efficiency opportunities, and perform integrated design.
- present market segment-appropriate training and continuing education in integrated design practice (e.g., integrated design best practices, energy simulation modeling and analysis, commissioning, high efficiency lighting systems, daylighting strategies, outperforming energy codes and standards).
- tailor targeted information and design incentives to architects, engineers, and/or building owners/developers to encourage energy efficiency, financial analyses, and building simulation modeling.

- continued expansion of Energy Design Resources, including energy simulation tools, financial analysis tools, and web-based resources, and case studies promoting high performance demonstration projects.
- support allied organizations such as CHPS, CCC, CASH, AIACC, ASHRAE, the CEC, and others, at their meetings, programs, conferences, and activities that promote energy efficiency and integrated design for nonresidential buildings to owners, design professionals, and energy professionals, as well as government agencies, cities, and counties.
- co-sponsor events, trade shows, and publications with the San Diego chapters of allied organizations.
- offer training opportunities, including scheduled sessions and on-site/upon request presentations at architects and engineers offices.

14. Conclusion

Program stability is a paramount concern for nonresidential new construction participants because in-depth energy efficiency analysis leading to innovative and substantive design and construction changes involves risk and the possibility of increased costs. Thus, programs supporting the new construction industry must be tailored to industry needs and timelines, be allowed to provide long-term incentive commitments, and offer assurances of benefits – like incentives - that the market actors can rely on.

The new structure for considering utility program savings only upon installation - where commitments are no longer valued and only installations will be reported – changes the role for the new construction programs and therefore, timelines for documenting influence in the industry become very long. For example, an *expedited* new construction project may take three or more years from concept to build-out, while standard new construction timelines run four to seven years, with institutional and nonstandard projects taking a decade or more. Program allowances to address this extended decision-making cycle inherent in the new construction segment must be made to allow new construction programs, like Savings By Design program, to be effective.

New construction programs are uniquely positioned to influence decision makers, enhance building performance beyond code-required compliance levels, and minimize lost opportunities. By working with decision makers who design new buildings, and influencing them to build it right the first time, new construction programs capitalize on energy efficiency opportunities with influential information at the right time. High-performing, innovative buildings can be more easily achieved with dedicated facilitation from program representatives, early intervention during design (when changes are most easily made, at the least cost), and tailoring of services to specific-project needs. Savings By Design understands the challenges in the nonresidential new construction industry and presents the best opportunity to produce enhanced energy performance buildings, and the perpetuate the additional benefits of reduced loads through right-sized equipment, leading to reduced capacity affecting the grid, and the long-term reduction of energy use by buildings.

	SDGE3018 NEW- Savings By Design
BUDGET	
Administrative Costs	\$ 2,657,872
Overhead and G&A	\$ 647,616
Other Administrative Costs	\$ 2,010,256
Marketing/Outreach	\$ 2,198,392
Direct Implementation	\$ 8,743,674
Total Incentives and Rebates	
User Input Incentive	\$ -
Direct Install Rebate	\$ 6,466,179
Direct Install Labor	\$ -
Direct Install Materials	\$ -
Activity	\$ 820,189
Installation	\$ -
Hardware & Materials	\$ 1,425,579
Rebate Processing & Inspection	\$ 31,727
EM&V Costs	\$ -
Budget	\$ 13,599,939
Costs recovered from other sources	\$ -
Budget (plus other costs)	\$ 13,599,939

PROGRAM IMPACTS	
DEER kW (kW)	4,545
Net NCP (kW)	7,364
Net CEC (kW)	4,483
Annual Net kWh	20,660,512
Lifecycle Net kWh	309,907,675
Annual Net Therms	351,503
Lifecycle Net Therms	5,272,547
Cost Effectiveness	
TRC	
Costs	\$ 10,456,996
Electric Benefits	\$ 21,723,206
Gas Benefits	\$ 2,068,747
Net Benefits (NPV)	\$ 13,334,957
BC Ratio	2.28
PAC	
Costs	\$ 12,799,545
Electric Benefits	\$ 21,723,206
Gas Benefits	\$ 2,068,747
Net Benefits (NPV)	\$ 10,992,408
BC Ratio	1.86
Levelized Cost	
Levelized Cost TRC (\$/kWh)	
Discounted kWh	171,874,043
Cost	\$ 0.0507
Benefits	\$ 0.1264
Benefit-Cost	\$ 0.0756
Levelized Cost PAC (\$/kWh)	
Discounted kWh	171,874,043
Cost	\$ 0.0687
Benefits	\$ 0.1264
Benefit-Cost	\$ 0.0577
Levelized Cost TRC (\$/therm)	
Discounted Therms	2,924,142
Cost	\$ 0.5936
Benefits	\$ 0.7075
Benefit-Cost	\$ 0.1139
Levelized Cost PAC (\$/therm)	
Discounted Therms	2,924,142
Cost	\$ 0.3404
Benefits	\$ 0.7075
Benefit-Cost	\$ 0.3671

SDGE Savings By Design

Year	Total Budget	Total Incentives	Admin Budget	Net kWh	Net Therms	Net kW
2006	\$ 3,323,540	\$ 923,740	\$ 2,399,800	2,951,502	50,215	649
2007	\$ 4,225,467	\$ 1,847,480	\$ 2,377,987	5,903,003	100,429	1,299
2008	\$ 6,050,932	\$ 3,694,959	\$ 2,355,973	11,806,006	200,859	2,597

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	221001	Whole Bldg - Elec	1	-	0.00	0.8212	kWh	15	3,594,133	\$ 0.24	\$0.12	649	2,951,502	-
2006	221002	Whole Bldg - Th	-	1	-	0.8212	Therm	15	61,148	\$ 1.00	\$3.62	-	-	50,215
2006	221003	Daylight+controls	1	-	0.00	0.8212	kWh	15	-	\$ -	\$0.18	-	-	-
2006	221004	Lighting	1	-	0.00	0.8212	kWh	15	-	\$ -	\$0.20	-	-	-
2006	221005	HVAC	1	-	0.00	0.8212	kWh	15	-	\$ -	\$0.26	-	-	-
2006	221006	Water Heating	-	1	-	0.8212	Therm	15	-	\$ -	\$2.83	-	-	-
2006	221007	Other - Elec (incl Refrig)	1	-	0.00	0.8212	kWh	15	-	\$ -	\$0.27	-	-	-
2006	221008	Other - Gas	-	1	-	0.8212	Therm	15	-	\$ -	\$3.09	-	-	-
2006	221009	Daylight+controls (gas)	-	1	-	0.8212	Therm	15	-	\$ -	-	-	-	-
2006	221010	Lighting (gas)	-	1	-	0.8212	Therm	15	-	\$ -	-	-	-	-
2006	221011	HVAC (gas)	-	1	-	0.8212	Therm	15	-	\$ -	-	-	-	-
2007	221001	Whole Bldg - Elec	1	-	0.00	0.8212	kWh	15	7,188,265	\$ 0.24	\$0.12	1,299	5,903,003	-
2007	221002	Whole Bldg - Th	-	1	-	0.8212	Therm	15	122,296	\$ 1.00	\$3.62	-	-	100,429
2007	221003	Daylight+controls	1	0	0.00025	0.8212	kWh	15	0	\$ -	\$0.18	-	-	-
2007	221004	Lighting	1	0	0.00025	0.8212	kWh	15	0	\$ -	\$0.20	-	-	-
2007	221005	HVAC	1	0	0.0002	0.8212	kWh	15	0	\$ -	\$0.26	-	-	-
2007	221006	Water Heating	0	1	0	0.8212	Therm	15	0	\$ -	\$2.83	-	-	-
2007	221007	Other - Elec (incl Refrig)	1	0	0.00014286	0.8212	kWh	15	0	\$ -	\$0.27	-	-	-
2007	221008	Other - Gas	0	1	0	0.8212	Therm	15	0	\$ -	\$3.09	-	-	-
2007	221009	Daylight+controls (gas)	0	1	0	0.8212	Therm	15	0	\$ -	-	-	-	-
2007	221010	Lighting (gas)	0	1	0	0.8212	Therm	15	0	\$ -	-	-	-	-
2007	221011	HVAC (gas)	0	1	0	0.8212	Therm	15	0	\$ -	-	-	-	-
2008	221001	Whole Bldg - Elec	1	0	0.00022	0.8212	kWh	15	14376530	\$ 0.24	\$0.12	2,597	11,806,006	-
2008	221002	Whole Bldg - Th	0	1	0	0.8212	Therm	15	244592	\$ 1.00	\$3.62	-	-	200,859
2008	221003	Daylight+controls	1	0	0.00025	0.8212	kWh	15	0	\$ -	\$0.18	-	-	-
2008	221004	Lighting	1	0	0.00025	0.8212	kWh	15	0	\$ -	\$0.20	-	-	-
2008	221005	HVAC	1	0	0.0002	0.8212	kWh	15	0	\$ -	\$0.26	-	-	-
2008	221006	Water Heating	0	1	0	0.8212	Therm	15	0	\$ -	\$2.83	-	-	-
2008	221007	Other - Elec (incl Refrig)	1	0	0.00014286	0.8212	kWh	15	0	\$ -	\$0.27	-	-	-
2008	221008	Other - Gas	0	1	0	0.8212	Therm	15	0	\$ -	\$3.09	-	-	-
2008	221009	Daylight+controls (gas)	-	1.00	\$ -	0.8212	Therm	15	0	\$ -	-	-	-	-
2008	221010	Lighting (gas)	-	1.00	\$ -	0.8212	Therm	15	0	\$ -	-	-	-	-
2008	221011	HVAC (gas)	-	1.00	\$ -	0.8212	Therm	15	0	\$ -	-	-	-	-

2006-2008 Energy Efficiency Concept Paper Sustainable Communities Program

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 67,896	\$ 84,118	\$ 86,263
Overhead	\$ 18,805	\$ 27,330	\$ 34,571
Direct Implementation			
Financial Incentives	\$ 178,608	\$ 270,680	\$ 392,031
Activity	\$ 54,545	\$ 61,360	\$ 63,200
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ 900	\$ 1,500	\$ 2,000
Rebate Processing and Inspection	\$ 2,565	\$ 2,642	\$ 2,721
Marketing			
Program Specific Marketing	\$ 71,590	\$ 126,306	\$ 145,198
Statewide Marketing			
Total Program Budget	\$ 394,909	\$ 573,936	\$ 725,985

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
84	381,916	7,145	135	542,387	14,615	197	775,072	22,702

3. Program Cost Effectiveness

Attached

4. Program Descriptors

Sustainable Communities Program (SCP) is a local program designed to work in concert with the cities and counties in the SDG&E service territory to promote sustainable development, showcase energy-efficient design and building practices, and encourage local developers to incorporate clean on-site energy generation systems in their multifamily and commercial new construction projects. The goal of this program is to create sustainable energy savings and demand reduction by creating a network of demonstration projects in SDG&E's service territory that incorporate high performance energy efficiency and demand reduction technologies, along with clean on-site generation, water conservation, transportation efficiencies and waste reduction strategies.

5. Program Statement

California is a leader in the construction of green buildings. Many cities have adopted or have begun to adopt green building policies. Additionally, the state of California has adopted LEED (Leadership in Energy and Environmental Design) Green Building Rating System[®] as a standard for its facilities.

Although interest and activity continues to grow, sustainable design is still in the infancy stage particularly in the communities served by SDG&E.

Further emphasis is needed to optimize energy efficiency within sustainable building projects through good design practices beyond the current statewide program limitations. Continued growth can be achieved by demonstrating success on local projects representing good sustainable design and construction practices.

6. Program Rationale

The program responds to the growing interest in sustainable design practices.

It emphasizes LEED due to its significant impact on energy and more holistic approach to building design, construction, performance and site development than the EPA's ENERGY STAR[®] rating system for buildings.

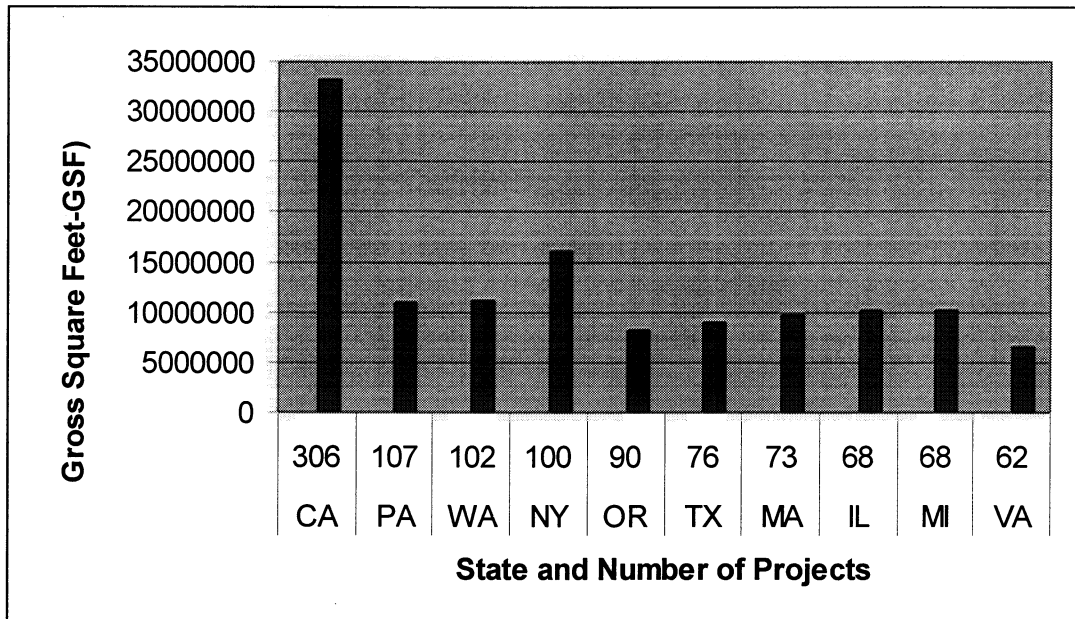
LEED, created by the US Green

Building Council (USGBC), has emerged as the recognized national standard for green building practices. It provides a complete framework for assessing building performance and meeting sustainability goals. LEED emphasizes state-of-the-art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. It recognizes achievements and promotes expertise in green building through a comprehensive system offering project certification, professional accreditation, training and practical resources.

California is the leader in pursuing LEED certified buildings. As of May 2005, there were 306 registered projects in California of the 1921 projects nationally registered for LEED certification. By contrast, San Diego has been slower to pursue green buildings. As of May 2005, there were less than 25 projects registered with four certified buildings. Despite a slower adoption rate, momentum is growing.

What's New for 2006-2008?

- Innovative
 - Higher tier incentives than new construction programs.
 - Supports a holistic approach to building design.
 - Attains additional energy savings not captured in Title 24.
 - Encouraging a higher level of energy efficiency performance.
- Integration
 - Incorporates
 - Renewable generation.
 - Demand response.
 - Water efficiency, and
 - Environmental benefits.
- Program Improvement
 - Administrative improvements eliminate redundancy and confusion with other programs.
 - Streamlined application and contract process.
 - Incentives paid in phases consistent with the non-residential new construction program.
 - Collaboration with SCE and SoCalGas.



Source: USGBC, “An Introduction to the U.S. Green Building Council and the LEED Green Building Rating System®”, May 2005.

An impetus to growth was a project showcased through the Sustainable Communities program. This award-winning project was the first LEED Gold building in the San Diego region. It has drawn widespread attention with several tours of the facility per month for SDG&E customers considering green building projects. The 2006–2008 program will capitalize on this groundwork to expand adoption of sustainable buildings further.

Energy efficient design is strongly encouraged within LEED NC v.2.1 for 10 of the 69 total points available. However, projects can still achieve certification with minimal energy efficiency performance. The SCP program places additional emphasis on energy efficient design to encourage building owners and developers to push the envelope.

To encourage owners and developers to push the envelope, financial incentives and education are needed. Although sustainable building projects should be reviewed from a lifecycle cost standpoint, most building owners and developers are concerned with additional upfront costs. The incremental costs for sustainable buildings vary widely and are project specific. An analysis completed by CTG Energenics, a local engineering consulting firm, estimates a LEED Certified or Silver rating can be achieved for less than a 5% increase in construction costs based upon their experience with dozens of LEED projects in Southern California. A study completed by Greg Kats, “The Costs and Financial benefits of Green Building” for the California Sustainable Building Task Force, found the average premium for green buildings is slightly less than 2%. Another study, “Measurement and Cost of Building Green” by Anthony Bernheim and Scott Lewis’ which looked at four large LEED projects in California, concluded that the incremental cost of achieving LEED was between 0.7 and 2.4 percent. As more projects are completed and the building industry becomes more experienced, the incremental costs will decrease.

The program will also investigate quantifying both upstream and downstream energy savings that are not captured by Title 24. Of the total possible points possible for LEED, 30 points can be associated with energy savings not captured in Title 24. For example, LEED encourages water efficiency and wastewater reduction. Water savings associated with LEED projects directly attribute to less water pumping and therefore less energy use.

Additionally, many local governments in SDG&E's service territory are now considering the adoption of sustainable building policies, but do not have the experience or expertise to move forward. These jurisdictions have the unique ability to adopt and enforce local policies and statutes to facilitate energy efficiency at the local level, and can proactively promote programs through various local community based organizations that provide services to local residents. Further, local agencies administer rebate and incentive programs that can be utilized in areas of waste management, water efficiency, transportation and landscape planning.

7. Program Outcomes

The goal of the Sustainable Communities program (SCP) is to generate sustainable energy and demand savings by creating a network of sustainable/green building projects in SDG&E's service territory. Its longer-term goal is to help mainstream new energy efficient technologies and sustainable design practices by documenting the benefits and lifecycle cost savings achieved by these projects.

- Support sustainable design principles in a growing number of projects.
- Strategic support of raising the level of LEED certification for those participating projects.
- Design and implement a successful collaborative model to affect project sustainability design goals.
- Provide offerings and services that support the Green Buildings Executive Order goals to establish a "...campaign to inform building owners and operators about the compelling economic benefits of energy efficiency measures; improving commercial building efficiency programs to help achieve the 20% goal..."
- Develop materials that highlight and promote successful projects to raise the awareness and viability of the sustainable design process and the technologies used.
- Investigate and incorporate potential electric energy savings from indirect sources such as water conservation strategies. Any verifiable electric energy savings will be reported as part of this program offering.
- Develop a platform for future expansion of program to include neighborhood developments and community master plans.

8. Program Strategy

This local program is a natural extension of the statewide new construction programs that offers a higher tier incentive for sustainable building projects that greatly exceed the state's Energy Code. These projects will incorporate high performance energy efficiency and demand reduction technologies, along with clean on-site generation, water conservation, transportation efficiencies and waste reduction strategies. The program will leverage existing relationships, methodologies, and resources from the statewide new construction

programs. A SDG&E representative will participate in design team meetings to provide expertise in sustainable design and ensure program requirements are met. Case studies and fact sheets will be developed and distributed on completed projects to the target market to increase the sustainable building knowledge base locally. Projects with municipalities will be showcased to provide experience and community examples for developing and adopting sustainable building policies.

9. Program Objectives

The objectives of the program are:

- Create public showcase projects with targeted municipalities to develop sustainable building policies for the communities they serve.
- Publicize individual project results in cooperation with participating cities, and other region stakeholders to increase community awareness and promote widespread local adoption of sustainable design practices.
- Quantify energy savings that are not captured in Title 24.
- Actively target hard-to-reach markets such as multifamily apartments, affordable housing projects or leased properties.
- Collaborate with region stakeholders to increase awareness and education.
- Support the State of California Energy Action Plan goals of increasing the proliferation of renewable energy systems, and promoting customer and utility owned distributed generation.

10. Program Implementation

The SCP is a performance-based program. All projects funded under the SCP will be required to exceed the 2005 Title 24 energy code, consider the installation of on-site renewable generation and include green building design elements outlined in LEED. To participate and qualify for incentives under the SCP, applicants must comply with the program requirements described below.

Program Process and Requirements

- Participants will be required to complete and return a Participation Letter/Letter of Interest to indicate the interest in the program.
- SDG&E's will work with each participant to determine if the project is a good candidate and determine the best strategy to achieve energy performance requirements.
- Participants will sign an Incentive Agreement to reserve funds prior to construction.
- Participants will agree to commit to building and system designs that will improve building or system performance, not apply for or receive any other incentive offered by the statewide residential or non-residential programs, and allow SDG&E to create and publicize the project at SDG&E's discretion.
- SDG&E will provide assistance to the design team to meet the program requirements and coordinate interactions with the utility and other entities.
- Upon commissioning, participants will provide required documentation, including selected construction documents, energy compliance documentation, integrated

design analysis reports, manufacturer specifications, equipment cut sheets, and incremental cost verification, as requested.

- SDG&E will complete an on-site verification and, if desired, create a case study on the project.
- Funds will be provided to owner participants upon successful building commissioning and verification.
- Fifty percent of funds for design teams will be provided upon completion of building design and energy efficiency design verification with the remainder paid upon successful building commissioning and verification.
- Participants will provide proof of registration and certification for LEED projects.

Incentive funding will be offered on a first-come, first-served basis. If the project's completion is delayed beyond the final date, the Agreement is voided, but the project may be eligible under the program guidelines in effect at that time. Subsequent eligibility will be considered on a case-by-case basis and will require SDG&E approval and execution of a new Incentive Agreement. Projects failing to meet the requirements of the program may be considered for other new construction program incentive funding.

11. Customer Description

Building owners, building contractors, architects, engineering firms, municipalities, and land developers.

12. Customer Interface

The SCP will utilize the Account Executives from the new construction statewide programs to explain the program to customers and guide them the best solution for their project. Program literature will be provided explaining the program process and requirements. A Participant Handbook will be provided to explain the details of the program.

13. Energy Measures and Program Activities

13.1. Prescriptive Measures.

See SDG&E June 1, 2005 Filing Workbook

13.2. kWh Level Data

See SDG&E June 1, 2005 Filing Workbook

13.3. Non-energy Activities not applicable

13.4. Subcontractor Activities

Subcontractors may be employed to provide energy compliance and energy efficiency design recommendations. Subcontractors will be employed to develop case studies.

13.5. Quality Assurance and Evaluation Activities

All projects will be inspected for verification of installed measures.

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those

activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs.

13.6. **Marketing Activities**

Informational flyers and case studies will be posted on the Sustainable Communities program webpage and distributed to prospective customers and sponsored events. A mailing with program description literature to all design professionals within SDG&E's service territory will be conducted annually. Sponsorships and presentations for specific local green building events will be provided. Display boards will be provided for select projects with educational aspects. Account Executives will conduct cold calls and face-to-face meetings with customers. Cross-marketing activities will be conducted with 3rd party and municipal green building programs.

14. **Conclusion**

The SCP supports state and local objectives to increase energy efficiency and encourage local renewable generation. It provides a holistic approach to building design and construction with a long-term goal to create sustainable communities through the adoption of new policies and increased market acceptance. The program will achieve significant success by leveraging existing resources, collaborating with region stakeholders, and conducting creative marketing activities.

	SDGE3021 SCP- Sustainable Communities Program	
BUDGET		
Administrative Costs	\$	318,983
Overhead and G&A	\$	80,706
Other Administrative Costs	\$	238,277
Marketing/Outreach	\$	343,094
Direct Implementation	\$	1,032,752
Total Incentives and Rebates		
User Input Incentive	\$	-
Direct Install Rebate	\$	841,319
Direct Install Labor	\$	-
Direct Install Materials	\$	-
Activity	\$	179,105
Installation	\$	-
Hardware & Materials	\$	4,400
Rebate Processing & Inspection	\$	7,928
EM&V Costs	\$	-
Budget	\$	1,694,830
Costs recovered from other sources	\$	-
Budget (plus other costs)	\$	1,694,830

PROGRAM IMPACTS		
DEER kW (kW)		416
Net NCP (kW)		762
Net CEC (kW)		369
Annual Net kWh		1,699,375
Lifecycle Net kWh		25,683,152
Annual Net Therms		44,462
Lifecycle Net Therms		682,542
Cost Effectiveness		
TRC		
Costs	\$	1,227,663
Electric Benefits	\$	1,909,963
Gas Benefits	\$	273,728
Net Benefits (NPV)	\$	956,028
BC Ratio		1.78
PAC		
Costs	\$	1,600,485
Electric Benefits	\$	1,909,963
Gas Benefits	\$	273,728
Net Benefits (NPV)	\$	583,206
BC Ratio		1.36
Levelized Cost		
Levelized Cost TRC (\$/kWh)		
Discounted kWh		14,402,300
Cost	\$	0.0685
Benefits	\$	0.1326
Benefit-Cost	\$	0.0641
Levelized Cost PAC (\$/kWh)		
Discounted kWh		14,402,300
Cost	\$	0.0991
Benefits	\$	0.1326
Benefit-Cost	\$	0.0335
Levelized Cost TRC (\$/therm)		
Discounted Therms		376,370
Cost	\$	0.6407
Benefits	\$	0.7273
Benefit-Cost	\$	0.0866
Levelized Cost PAC (\$/therm)		
Discounted Therms		376,370
Cost	\$	0.4615
Benefits	\$	0.7273
Benefit-Cost	\$	0.2657

SDGE Sustainable Communities Program

Year	Total Budget	Total Incentives	Admin Budget	Net kWh	Net Therms	Net kW
2006	\$ 394,909	\$ 178,608	\$ 216,302	381,916	7,145	84
2007	\$ 573,936	\$ 270,680	\$ 303,256	542,387	14,615	135
2008	\$ 725,985	\$ 392,031	\$ 333,954	775,072	22,702	197

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	227001	Whole Bldg - Elec	1	-	0.00	0.8	kWh	15	469,000	\$ 0.34	\$ 0.12	75	375,200	-
2006	227002	Whole Bldg - Th	-	1	-	0.8	Therm	15	8,250	\$ 1.23	\$ 3.42	-	-	6,600
2006	227003	Multifamily All Zones 15% Above AB970	187	15	0.26	0.8	Home	18	45	\$200.00	\$294.01	9	6,716	545
2007	227001	Whole Bldg - Elec	1	-	0.00	0.8	kWh	15	650,000	\$ 0.34	\$ 0.12	104	520,000	-
2007	227002	Whole Bldg - Th	-	1	-	0.8	Therm	15	16,000	\$ 1.23	\$ 3.42	-	-	12,800
2007	227003	Multifamily All Zones 15% Above AB970	187	15	0.26	0.8	Home	18	150	\$200.00	\$294.01	31	22,387	1,815
2008	227001	Whole Bldg - Elec	1	-	0.00	0.8	kWh	15	925,000	\$ 0.34	\$ 0.12	148	740,000	-
2008	227002	Whole Bldg - Th	-	1	-	0.8	Therm	15	24,822	\$ 1.23	\$ 3.42	-	-	19,858
2008	227003	Multifamily All Zones 15% Above AB970	187	15	0.26	0.8	Home	18	235	\$200.00	\$294.01	49	35,072	2,844

2006-2008 Energy Efficiency Concept Paper Advanced Home Program

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 273,250	\$ 273,250	\$ 277,750
Overhead	\$ 125,000	\$ 125,000	\$ 125,000
Direct Implementation			
Financial Incentives	\$ 615,000	\$ 615,000	\$ 510,500
Activity	\$ 700,000	\$ 700,000	\$ 700,000
Installation	\$ 200,000	\$ 200,000	\$ 300,000
Hardware & Materials	\$ 100,000	\$ 100,000	\$ 100,000
Rebate Processing and Inspection	\$ 100,000	\$ 100,000	\$ 100,000
Marketing			
Program Specific Marketing	\$ 100,000	\$ 100,000	\$ 100,000
Statewide Marketing			
Total Program Budget	\$ 2,213,250	\$ 2,213,250	\$ 2,213,250

Projected Additional Funding Sources

In addition to the funds identified in the budget above funding for Advanced Home direct implementation will come from other programs and/or organization listed below.

Organization/Program	2006	2007	2008
CEC Zero Energy Home Program, Department of Energy Programs, Utility Demand Response Programs, Utility Self Generation Programs, Water Conservation Programs, Emerging Technologies Programs,			
Total Additional Funds	\$ 1,000,000	\$ 2,000,000	\$ 3,000,000
Total Projected Program Budget	\$ 3,213,250	\$ 4,213,250	\$ 5,213,250

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
2,020	1,842,839	73,441	2,020	1,842,839	73,441	1,610	1,468,380	57,799

3. Program Cost Effectiveness

Attached

4. Program Descriptors

The Advanced Home program promotes a comprehensive residential new construction concept with a cross-cutting focus to sustainable design and construction, green building practices and emerging technologies. Through a combination of education, design assistance and financial support, the program works with the building and related industries to exceed compliance with the California Building Energy Efficiency Standards

(Standards), to prepare builders for future changes in the Standards and to create future pathways to go beyond compliance and traditional energy savings objectives. This will be accomplished through demonstration pilot projects, building performance and specific measures.

The program will review energy saving technologies to be incorporated in numerous demonstration projects. These projects will incorporate emerging energy savings technologies and low-impact construction practices. To provide continuity, the program will continue to support the California ENERGY STAR® New Homes Program through a performance-based element. The program will also encourage efficient heating, cooling, water heating system and building envelope design and installation through the support of specific measures. This innovative program will coordinate a variety of market opportunities and explore potentials from other programs to support the program concepts. The program will interact on a statewide basis to share best practices but will be implemented locally by the utility.

5. Program Statement

Residential new construction has been recognized as a rich ground for the promotion of new technologies, experimentation and analysis and has been the spawning ground for numerous technologies now considered mainstream in the vast retrofit market

such as high performance low-e windows, high performance water heaters and heating, ventilation and air conditioning (HVAC) systems. Many builders would like to explore further these and other technologies and innovations in their building designs but require guidance and assistance to prevent lost opportunities. For effective use and maximum performance of many

of these technologies, such as photovoltaic and alternative water and space heating applications, energy efficiency of the dwelling unit must be taken to a higher level requiring building design and construction to incorporate the efficiency measures promoted by the program.

What's New for 2006-2008?

- Innovative
 - Promote Emerging Technologies
 - Encourage a higher level of energy efficiency
- Integration
 - Utilize Sustainable Design and Green Building Practices
- Program Improvement
 - Measures to address HVAC and Envelope Improvements

The program will engage and partner with other programs inside and outside of the utility to help bring emerging technologies to the market place in the most cost effective way to overcome some of the economic barriers associated with pushing the technical envelope in residential new construction. With a multitude of elements available for evaluation, both envelope and mechanical, there are many approaches available for implementation. Once explored, incorporated and exhibited, these elements will demonstrate the potential to become utilized and mainstreamed in residential construction.

6. Program Rationale

There is a need for comprehensive programs that address residential construction by incorporating the best practices of existing new construction programs, mainstream and

emerging technologies and construction techniques. Such programs should place importance on conservation, a high quality urban and suburban life and the enhancement of natural areas. Further, the search for reducing grid and source energy consumption must lead to new approaches in demand side management, such as the coordination with demand response programs, water conservation efforts and the use of construction materials and practices.

The Advanced Home program will address these needs and the needs of the builder for guidance in the incorporation of technology through training and design assistance. Further, through the use of financial support the builder will be able to explore technologies avoided due to any cost barriers. By incorporating products and practices not often seen as mainstream, such as photovoltaics, into single and multi-family new home design, opportunities for product suppliers, architects, designers, builders, contractors and others will surface to increase product awareness, utilization and as a result, lower costs. This more targeted approach to specific design solutions offers an opportunity to focus on technology solutions that are often ignored in performance based programs. Addressing more specific measures allows the builder to focus their attention on systems that may otherwise be ignored. The program implementation period also aligns with the Standard revisions and allows for the opportunity to prepare builders for the next cycle of changes.

7. Program Outcomes

The program will focus on four major activities: demonstration projects, measures that increase the performance of building systems, overall building design that exceeds minimum compliance with the Standards, and industry education. The demonstration projects will focus on emerging technologies some of which will be identified through the statewide Emerging Technologies program. The measures will address HVAC design, installation and verification, proper insulation installation and water heating system design. Industry education will support the changes to the Standards and the program technologies.

8. Program Strategy

The program will target single and multi-family builders whose projects will maximize energy savings and generate significant industry and homebuyer interest. The program will bring a renewed focus to emerging technologies and their incorporation into design and practice in residential new construction. Through site demonstration projects, the program will explore the evaluation and incorporation of these elements.

- Sustainable project sites
- Energy efficiency: efficient thermal envelopes, efficient space cooling, heating and water heating systems, alternatives to central air conditioning such as night ventilation, cool roofs, lighting and appliances
- Increased levels of energy performance above the minimum Standards
- Water efficiency
- Materials and resource, waste reduction and efficient use of materials
- Renewable energy such as photovoltaic systems
- Indoor environmental quality
- Operations and maintenance

The Utility will act as program advisor and provide technical assistance to the design team for their projects. Through direct contact with the market actors, architects, energy analysts and the building industry, the program works to incorporate emerging and innovative technologies in the early stages of product design.

To the extent possible, the program has been designed to include continued participation of projects meeting the California ENERGY STAR[®] New Homes program requirements. This activity will prevent lost opportunities for participation from the building industry. The program intends to continue to provide support to encourage high performance single family and multi-family building design to exceed the 2005 Standards in an overall performance design of 15% or greater.

The program will also address the heating, cooling and water heating design and installation in residential construction. Through direct contact with the building industry and the market actors, greater efficiency in HVAC design and operation will be achieved through the incorporation of the following practices in construction:

Maximum Cooling Capacity

The program will require that air conditioners are sized according to the Alternative Compliance Method (ACM) methodology and the requirements for the combination of adequate air flow, duct sealing and improved refrigerant charge or TXV are met.

Verified Ducting System

The program will require that duct systems are sealed and diagnostic testing is performed to verify that leakage is less than the specified criteria.

Insulation Quality Installation

Insulation installation has been an area of concern and is currently addressed in the 2005 Standards. To support the California Energy Commission, the building industry and the installation trades the program will offer assistance to improve the overall quality of the insulation installation and meet the California Energy Commission protocols for installation and field verification.

Tankless Water Heaters

Tankless water heaters are an emerging technology that currently has been underutilized in the marketplace. To support this technology, the program will encourage its incorporation in residential new construction.

Specific measures to be installed will be driven by the product type, design progress and appropriateness of measures to be incorporated. To allow flexibility in program design and implementation, program measures may be added or removed as changes take place in the industry, new technologies become available or market place demand warrants.

9. Program Objectives

The program objectives are to increase the energy efficiency of residential new construction and offer additional opportunities for builders to explore new solutions to creating an

energy efficient building. The goals of the program are to examine a portfolio of energy saving technologies and low-impact construction practices to be incorporated in various demonstration projects. Optimized energy performance above the prerequisite standards will be incorporated in the building design to reduce environmental impacts associated with excessive energy use. The program energy savings will be evaluated from the diversity of measures utilized by the building industry and the overall energy performance.

This innovative program is intended to coordinate a variety of market opportunities in an extensive venture to make the next leap into residential energy efficiency in new construction. The concept for this program is for the utility to lead builders through a myriad of utility and governmental programs to bring added funding and support to expanding energy efficiency in single and multifamily new home construction in California. The utility plans to request funding for this program well beyond this proceeding. Anticipated additional sources of funding outside of this residential new construction program include:

- One Million Solar Roof Initiative
- California Energy Commission's Zero Energy New Homes Program
- Department of Energy Programs
- Utility Demand Response Programs
- Utility Self Generation Programs

10. Program Implementation

The program is implemented through direct contact with the market actors, architects, mechanical engineers, energy analysts, home energy rating system (HERS) providers, HERS raters and the building industry. The program provides design assistance, education and training to these actors on the changes to the Standards, HVAC system design and methods to meet program requirements. Through design assistance and coordination with the builder and their consultants and contractors, projects will be evaluated for the most suitable approach to increasing energy savings.

The program will seek to collaborate with the California Energy Commission and other agencies in support of statewide goals such as the increased installation of photovoltaic and HVAC quality installation and verification and locally with agencies such as water departments, municipalities, and others to promote water conservation and energy efficiency. To assist the builder in achieving these goals, design assistance, technical and field support and financial support will be offered.

Joining utility program partners, such as Emerging Technology, Codes and Standards and building industry partners, the program will work with the building community to identify potential projects and locations for the incorporation of the program philosophy to create demonstration projects highlighting diverse technologies, not widely accepted or employed. Through the United States Green Building Council (USGBC) the utility will interact to promote the LEED (Leadership in Energy and Environmental Design) Green Building Rating System[®] concept. The USGBC has developed a LEED for Homes program that is currently in the demonstration pilot phase. The utility will work with USGBC to incorporate the LEED concepts into the demonstration projects.

Residential new construction program management has extensive experience in designing and implementing successful offerings to the building industry. Recognized as an outstanding energy efficiency resource, this team has the ability to successfully work closely with other local, regional, statewide and national stakeholders to insure the widest opportunities for potential program participants.

11. Customer Description

The program will target the design and construction team; architects, energy analysts, HERS raters, trade contractors, and residential builders. Market segment is low-rise and high-rise residential new construction with participation is open to all residential new construction including custom homes, single-family production housing, condominiums, town homes and rental apartments

12. Customer Interface

Program participants will be developed through a team of customer representatives, who, working with the builder and his design team, will evaluate each project and its design for participation.

13. Energy Measures and Program Activities

13.1. Prescriptive Measures

See SDG&E June 1, 2005 Filing Workbook

13.2. kWh Level

See SDG&E June 1, 2005 Filing Workbook

13.3. Non-Energy Activities

13.3.1. End Use Load

Not Applicable.

13.3.2. Targeted Sector

All market actors involved in building construction both new and retrofit.

13.3.3. Activity Description

Education and training courses will support the program concepts and will cover a number of construction and design issues, such as the 2005 Energy Efficiency Standards, Proper HVAC sizing, Ducting System Design, Uniform Mechanical Code, and Standards compliance modeling.

13.3.4. Quantitative Activity Goals

The current education and training classes have proven extremely successful and well received with attendance increasing each year. The program will continue this offering with an expanded curriculum focusing on emerging technologies and HVAC systems.

13.3.5. Assigned attributes of the activity (market sector, end use)

Not applicable.

13.3.6. Subcontractor Activities

The program will coordinate many of the program activities with subcontractors. The education and training courses will be prepared under the utility supervision and presented by figures in energy efficiency, HVAC systems and Energy Standards implementation. HERS Raters will

be engaged by the utility to provide field verification of measure installation.

13.3.7. Quality Assurance and Evaluation Activities

Projects receive a detailed review to insure that the as-designed structure is consistent with the program requirements. Field verification will be conducted during the construction process to insure that the as-built corresponds to the as-designed.

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs.

13.3.8. Marketing Activities

The program will be marketed directly to the building industry and the related market actors. Additional marketing activities will be explored through conference presentations and building and other industry meetings.

14. Conclusion

The Advanced Home program offers residential new construction programs an opportunity to evolve to a new level. Supporting technological changes in construction will increase not only energy savings but provide a more comfortable environment for the residential occupant. Through the demonstration projects, supported financial from the utility and other resources, sustainable design and emerging technologies can be explored and exhibited, providing increased educational opportunities to builders.

The program will support overall building performance and encourage proper HVAC design, installation and verification. Additionally, the program will address the proper installation of insulation and promote improved water heating systems through the installation of tank less water heaters. These elements will be supported through a financial incentive to the builder.

	SDGE3007 EED-Advanced Home Program	
BUDGET		
Administrative Costs	\$	1,199,250
Overhead and G&A	\$	375,000
Other Administrative Costs	\$	824,250
Marketing/Outreach	\$	300,000
Direct Implementation	\$	5,140,500
Total Incentives and Rebates		
User Input Incentive	\$	-
Direct Install Rebate	\$	1,740,500
Direct Install Labor	\$	-
Direct Install Materials	\$	-
Activity	\$	2,100,000
Installation	\$	700,000
Hardware & Materials	\$	300,000
Rebate Processing & Inspection	\$	300,000
EM&V Costs	\$	-
Budget	\$	6,639,750
Costs recovered from other sources	\$	-
Budget (plus other costs)	\$	6,639,750

PROGRAM IMPACTS		
DEER kW (kW)		5,650
Net NCP (kW)		14,406
Net CEC (kW)		1,118
Annual Net kWh		5,154,058
Lifecycle Net kWh		83,990,858
Annual Net Therms		204,681
Lifecycle Net Therms		3,453,649
Cost Effectiveness		
TRC		
Costs	\$	6,860,310
Electric Benefits	\$	13,103,740
Gas Benefits	\$	1,521,804
Net Benefits (NPV)	\$	7,765,234
BC Ratio		2.13
PAC		
Costs	\$	6,481,066
Electric Benefits	\$	13,103,740
Gas Benefits	\$	1,521,804
Net Benefits (NPV)	\$	8,144,478
BC Ratio		2.26
Levelized Cost		
Levelized Cost TRC (\$/kWh)		
Discounted kWh		46,301,748
Cost	\$	0.1299
Benefits	\$	0.2830
Benefit-Cost	\$	0.1531
Levelized Cost PAC (\$/kWh)		
Discounted kWh		46,301,748
Cost	\$	0.1231
Benefits	\$	0.2830
Benefit-Cost	\$	0.1599
Levelized Cost TRC (\$/therm)		
Discounted Therms		1,871,208
Cost	\$	0.4530
Benefits	\$	0.8133
Benefit-Cost	\$	0.3603
Levelized Cost PAC (\$/therm)		
Discounted Therms		1,871,208
Cost	\$	0.4168
Benefits	\$	0.8133
Benefit-Cost	\$	0.3965

SDGE Advanced Home Program

Year	Total Budget	Total Incentives	Admin Budget	Net kWh	Net Therms	Net kW
2006	\$ 2,213,250	\$ 615,000	\$ 1,598,250	1,842,839	73,441	2,020
2007	\$ 2,213,250	\$ 615,000	\$ 1,598,250	1,842,839	73,441	2,020
2008	\$ 2,213,250	\$ 510,500	\$ 1,702,750	1,468,380	57,799	1,610

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	220005	Single Family, Maximum Cooling Capacity, CZ 4	98	35	0.11	0.8	Dwelling Unit	15		\$150.00	\$225.00	-	-	-
2006	220006	Single Family, Maximum Cooling Capacity, CZ 5	40	35	0.04	0.8	Dwelling Unit	15		\$150.00	\$225.00	-	-	-
2006	220007	Single Family, Maximum Cooling Capacity, CZ 6	29	14	0.03	0.8	Dwelling Unit	15		\$150.00	\$225.00	-	-	-
2006	220008	Single Family, Maximum Cooling Capacity, CZ 7	59	11	0.06	0.8	Dwelling Unit	15		\$150.00	\$225.00	-	-	-
2006	220009	Single Family, Maximum Cooling Capacity, CZ 8	246	13	0.27	0.8	Dwelling Unit	15	400	\$150.00	\$225.00	86	78,766	4,285
2006	220010	Single Family, Maximum Cooling Capacity, CZ 9	499	15	0.55	0.8	Dwelling Unit	15		\$150.00	\$225.00	-	-	-
2006	220011	Single Family, Maximum Cooling Capacity, CZ 10	938	21	1.03	0.8	Dwelling Unit	15	500	\$150.00	\$225.00	411	375,244	8,246
2006	220012	Single Family, Maximum Cooling Capacity, CZ 13	1,386	37	1.52	0.8	Dwelling Unit	15		\$150.00	\$225.00	-	-	-
2006	220013	Single Family, Maximum Cooling Capacity, CZ 14	1,694	61	1.86	0.8	Dwelling Unit	15		\$150.00	\$225.00	-	-	-
2006	220014	Single Family, Maximum Cooling Capacity, CZ 15	4,364	10	4.78	0.8	Dwelling Unit	15	100	\$150.00	\$225.00	383	349,080	789
2006	220015	Single Family, Verified Ducting System, CZ 4	43	35	0.05	0.8	Dwelling Unit	15		\$100.00	\$125.00	-	-	-
2006	220016	Single Family, Verified Ducting System, CZ 5	19	35	0.02	0.8	Dwelling Unit	15		\$100.00	\$125.00	-	-	-
2006	220017	Single Family, Verified Ducting System, CZ 6	12	14	0.01	0.8	Dwelling Unit	15		\$100.00	\$125.00	-	-	-
2006	220018	Single Family, Verified Ducting System, CZ 7	22,375	10.9	0.02452801	0.8	Dwelling Unit	15		100	125	-	-	-
2006	220019	Single Family, Verified Ducting System, CZ 8	111,885	13.39	0.12265104	0.8	Dwelling Unit	15	750	100	125	74	67,131	8,034
2006	220020	Single Family, Verified Ducting System, CZ 9	271,965	14.975	0.29813459	0.8	Dwelling Unit	15		100	125	-	-	-
2006	220021	Single Family, Verified Ducting System, CZ 10	543,93	20.615	0.59626918	0.8	Dwelling Unit	15	500	100	125	239	217,572	8,246

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	220022	Single Family, Verified Ducting System, CZ 13	824.505	37.18	0.90384227	0.8	Dwelling Unit	15	100	100	125	-	-	-
2006	220023	Single Family, Verified Ducting System, CZ 14	1096.47	60.965	1.20197686	0.8	Dwelling Unit	15	100	100	125	-	-	-
2006	220024	Single Family, Verified Ducting System, CZ 15	2874.58	9.865	3.15118392	0.8	Dwelling Unit	15	100	100	125	-	-	-
2006	220025	Single Family, Quality Insulation Installation, CZ 4	96.39	52.51	0.10566504	0.8	Dwelling Unit	20	175	175	300	-	-	-
2006	220026	Single Family, Quality Insulation Installation, CZ 5	37.87	57.09	0.04151401	0.8	Dwelling Unit	20	175	175	300	-	-	-
2006	220027	Single Family, Quality Insulation Installation, CZ 6	24.1	29.95	0.026419	0.8	Dwelling Unit	20	175	175	300	-	-	-
2006	220028	Single Family, Quality Insulation Installation, CZ 7	65.41	25.73	0.07170402	0.8	Dwelling Unit	20	175	175	300	-	-	-
2006	220029	Single Family, Quality Insulation Installation, CZ 8	182.46	27.84	0.20001705	0.8	Dwelling Unit	20	300	175	300	48	43,790	6,682
2006	220030	Single Family, Quality Insulation Installation, CZ 9	254.75	14.45	0.27926309	0.8	Dwelling Unit	20	175	175	300	-	-	-
2006	220031	Single Family, Quality Insulation Installation, CZ 10	468.19	38.41	0.51324117	0.8	Dwelling Unit	20	500	175	300	205	187,276	15,364
2006	220032	Single Family, Quality Insulation Installation, CZ 13	547.37	52.16	0.60004019	0.8	Dwelling Unit	20	175	175	300	-	-	-
2006	220033	Single Family, Quality Insulation Installation, CZ 14	647.21	73.65	0.70948721	0.8	Dwelling Unit	20	175	175	300	-	-	-
2006	220034	Single Family, Quality Insulation Installation, CZ 15	1270.32	20.79	1.39255542	0.8	Dwelling Unit	20	200	175	300	223	203,251	3,326
2006	220035	Single Family, Tank Less Water Heater, CZ 4	-	\$ 79.99	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-
2006	220036	Single Family, Tank Less Water Heater, CZ 5	-	\$ 81.05	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-
2006	220037	Single Family, Tank Less Water Heater, CZ 6	-	\$ 85.63	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-
2006	220038	Single Family, Tank Less Water Heater, CZ 7	-	\$ 85.28	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross_kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	220039	Single Family, Tank Less Water Heater, CZ 8	-	\$ 84.22	\$ -	0.8	Dwelling Unit	15	100	200	325	-	-	6,738
2006	220040	Single Family, Tank Less Water Heater, CZ 9	-	\$ 83.52	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-
2006	220041	Single Family, Tank Less Water Heater, CZ 10	-	\$ 83.62	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-
2006	220042	Single Family, Tank Less Water Heater, CZ 13	-	\$ 75.41	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-
2006	220043	Single Family, Tank Less Water Heater, CZ 14	-	\$ 85.63	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-
2006	220044	Single Family, Tank Less Water Heater, CZ 15	-	\$ 73.65	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-
2006	220045	Single Family, Air Conditioner EER, CZ 4	22	\$ -	\$ 0.06	0.8	Dwelling Unit	15	200	200	225	-	-	-
2006	220046	Single Family, Air Conditioner EER, CZ 5	2	\$ -	\$ 0.00	0.8	Dwelling Unit	15	200	200	225	-	-	-
2006	220047	Single Family, Air Conditioner EER, CZ 6	-	\$ -	\$ -	0.8	Dwelling Unit	15	200	200	225	-	-	-
2006	220048	Single Family, Air Conditioner EER, CZ 7	3	\$ -	\$ 0.01	0.8	Dwelling Unit	15	200	200	225	-	-	-
2006	220049	Single Family, Air Conditioner EER, CZ 8	74	\$ -	\$ 0.19	0.8	Dwelling Unit	15	200	200	225	-	-	-
2006	220050	Single Family, Air Conditioner EER, CZ 9	198	\$ -	\$ 0.50	0.8	Dwelling Unit	15	200	200	225	-	-	-
2006	220051	Single Family, Air Conditioner EER, CZ 10	460	\$ -	\$ 1.16	0.8	Dwelling Unit	15	200	200	225	-	-	-
2006	220052	Single Family, Air Conditioner EER, CZ 13	790	\$ -	\$ 1.99	0.8	Dwelling Unit	15	200	200	225	-	-	-
2006	220053	Single Family, Air Conditioner EER, CZ 14	878	\$ -	\$ 2.21	0.8	Dwelling Unit	15	200	200	225	-	-	-
2006	220054	Single Family, Air Conditioner EER, CZ 15	2,405	\$ -	\$ 6.03	0.8	Dwelling Unit	15	200	200	225	-	-	-
2006	220055	Multi-family, Maximum Cooling Capacity, CZ 4	44	\$ 13.43	\$ 0.05	0.8	Dwelling Unit	15	100	100	150	-	-	-
2006	220056	Multi-family, Maximum Cooling Capacity, CZ 5	10	\$ 13.73	\$ 0.01	0.8	Dwelling Unit	15	100	100	150	-	-	-
2006	220057	Multi-family, Maximum Cooling Capacity, CZ 6	10	\$ 5.68	\$ 0.01	0.8	Dwelling Unit	15	100	100	150	-	-	-
2006	220058	Multi-family, Maximum Cooling Capacity, CZ 7	29	\$ 4.53	\$ 0.03	0.8	Dwelling Unit	15	100	100	150	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross, kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms	
2006	220059	Multi-family, Maximum Cooling Capacity, CZ 8	123 \$	5.52 \$	0.13 \$	0.8	Dwelling Unit	15	250	100	150	27	24,582	1,104
2006	220060	Multi-family, Maximum Cooling Capacity, CZ 9	243 \$	6.14 \$	0.27 \$	0.8	Dwelling Unit	15	100	100	150	21	19,426	491
2006	220061	Multi-family, Maximum Cooling Capacity, CZ 10	437 \$	8.75 \$	0.48 \$	0.8	Dwelling Unit	15	345	100	150	132	120,593	2,415
2006	220062	Multi-family, Maximum Cooling Capacity, CZ 13	606 \$	14.58 \$	0.66 \$	0.8	Dwelling Unit	15	100	100	150	-	-	-
2006	220063	Multi-family, Maximum Cooling Capacity, CZ 14	745 \$	24.63 \$	0.82 \$	0.8	Dwelling Unit	15	100	100	150	-	-	-
2006	220064	Multi-family, Maximum Cooling Capacity, CZ 15	1,791 \$	4.30 \$	1.96 \$	0.8	Dwelling Unit	15	100	100	150	-	-	-
2006	220065	Multi-family, Verified Ducting System, CZ 4	21 \$	13.43 \$	0.02 \$	0.8	Dwelling Unit	15	60	60	100	-	-	-
2006	220066	Multi-family, Verified Ducting System, CZ 5	5 \$	13.73 \$	0.00 \$	0.8	Dwelling Unit	15	60	60	100	-	-	-
2006	220067	Multi-family, Verified Ducting System, CZ 6	5 \$	5.68 \$	0.00 \$	0.8	Dwelling Unit	15	60	60	100	-	-	-
2006	220068	Multi-family, Verified Ducting System, CZ 7	13 \$	4.53 \$	0.01 \$	0.8	Dwelling Unit	15	60	60	100	-	-	-
2006	220069	Multi-family, Verified Ducting System, CZ 8	60 \$	5.52 \$	0.07 \$	0.8	Dwelling Unit	15	200	60	100	11	9,594	883
2006	220070	Multi-family, Verified Ducting System, CZ 9	137 \$	6.14 \$	0.15 \$	0.8	Dwelling Unit	15	200	60	100	24	21,944	982
2006	220071	Multi-family, Verified Ducting System, CZ 10	259 \$	8.75 \$	0.28 \$	0.8	Dwelling Unit	15	400	60	100	91	82,979	2,800
2006	220072	Multi-family, Verified Ducting System, CZ 13	360 \$	14.58 \$	0.40 \$	0.8	Dwelling Unit	15	60	60	100	-	-	-
2006	220073	Multi-family, Verified Ducting System, CZ 14	483 \$	24.63 \$	0.53 \$	0.8	Dwelling Unit	15	60	60	100	-	-	-
2006	220074	Multi-family, Verified Ducting System, CZ 15	1,164 \$	4.30 \$	1.28 \$	0.8	Dwelling Unit	15	60	60	100	-	-	-
2006	220075	Multi-family, High Quality Insulation Installation, CZ 4	34 \$	11.12 \$	0.04 \$	0.8	Dwelling Unit	20	50	50	100	-	-	-
2006	220076	Multi-family, High Quality Insulation Installation, CZ 5	12 \$	11.89 \$	0.01 \$	0.8	Dwelling Unit	20	50	50	100	-	-	-
2006	220077	Multi-family, High Quality Insulation Installation, CZ 6	10 \$	5.91 \$	0.01 \$	0.8	Dwelling Unit	20	50	50	100	-	-	-
2006	220078	Multi-family, High Quality Insulation Installation, CZ 7	22 \$	5.14 \$	0.02 \$	0.8	Dwelling Unit	20	50	50	100	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross_kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	220079	Multi-family, High Quality Insulation Installation, CZ 8	57	\$ 5.52	\$ 0.06	0.8	Dwelling Unit	20	250	50	100	12	11,392	1,104
2006	220080	Multi-family, High Quality Insulation Installation, CZ 9	95	\$ 6.06	\$ 0.10	0.8	Dwelling Unit	20		50	100	-	-	-
2006	220081	Multi-family, High Quality Insulation Installation, CZ 10	126	\$ 8.13	\$ 0.14	0.8	Dwelling Unit	20	300	50	100	33	30,218	1,951
2006	220082	Multi-family, High Quality Insulation Installation, CZ 13	140	\$ 11.20	\$ 0.15	0.8	Dwelling Unit	20		50	100	-	-	-
2006	220083	Multi-family, High Quality Insulation Installation, CZ 14	160	\$ 15.57	\$ 0.17	0.8	Dwelling Unit	20		50	100	-	-	-
2006	220084	Multi-family, High Quality Insulation Installation, CZ 15	304	\$ 4.22	\$ 0.33	0.8	Dwelling Unit	20		50	100	-	-	-
2006	220085	Multi-family, Tank Less Water Heater, CZ 4	-	\$ 13.89	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-
2006	220086	Multi-family, Tank Less Water Heater, CZ 5	-	\$ 13.96	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-
2006	220087	Multi-family, Tank Less Water Heater, CZ 6	-	\$ 15.34	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-
2006	220088	Multi-family, Tank Less Water Heater, CZ 7	-	\$ 15.50	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-
2006	220089	Multi-family, Tank Less Water Heater, CZ 8	-	\$ 15.34	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-
2006	220090	Multi-family, Tank Less Water Heater, CZ 9	-	\$ 15.27	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-
2006	220091	Multi-family, Tank Less Water Heater, CZ 10	-	\$ 15.34	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-
2006	220092	Multi-family, Tank Less Water Heater, CZ 13	-	\$ 13.81	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-
2006	220093	Multi-family, Tank Less Water Heater, CZ 14	-	\$ 15.34	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-
2006	220094	Multi-family, Tank Less Water Heater, CZ 15	-	\$ 14.81	\$ -	0.8	Dwelling Unit	15	200	200	325	-	-	-
2006	220095	Multi-family, Air Conditioner EER, CZ 4	10	\$ -	\$ 0.01	0.8	Dwelling Unit	15	200	200	225	-	-	-
2006	220096	Multi-family, Air Conditioner EER, CZ 5	1	\$ -	\$ 0.00	0.8	Dwelling Unit	15	200	200	225	-	-	-
2006	220097	Multi-family, Air Conditioner EER, CZ 6	-	\$ -	\$ -	0.8	Dwelling Unit	15	200	200	225	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	220098	Multi-family, Air Conditioner EER, CZ 7	2	\$ -	\$ 0.00	0.8	Dwelling Unit	15	200	225	-	-	-
2006	220099	Multi-family, Air Conditioner EER, CZ 8	42	\$ -	\$ 0.05	0.8	Dwelling Unit	15	200	225	-	-	-
2006	220100	Multi-family, Air Conditioner EER, CZ 9	109	\$ -	\$ 0.14	0.8	Dwelling Unit	15	200	225	-	-	-
2006	220101	Multi-family, Air Conditioner EER, CZ 10	233	\$ -	\$ 0.29	0.8	Dwelling Unit	15	200	225	-	-	-
2006	220102	Multi-family, Air Conditioner EER, CZ 13	363	\$ -	\$ 0.46	0.8	Dwelling Unit	15	200	225	-	-	-
2006	220103	Multi-family, Air Conditioner EER, CZ 14	406	\$ -	\$ 0.51	0.8	Dwelling Unit	15	200	225	-	-	-
2006	220104	Multi-family, Air Conditioner EER, CZ 15	1,036	\$ -	\$ 1.30	0.8	Dwelling Unit	15	200	225	-	-	-
2007	220005	Single Family, Maximum Cooling Capacity, CZ 4	98	\$ 34.54	\$ 0.11	0.8	Dwelling Unit	15	150	225	-	-	-
2007	220006	Single Family, Maximum Cooling Capacity, CZ 5	40	\$ 34.54	\$ 0.04	0.8	Dwelling Unit	15	150	225	-	-	-
2007	220007	Single Family, Maximum Cooling Capacity, CZ 6	29	\$ 13.57	\$ 0.03	0.8	Dwelling Unit	15	150	225	-	-	-
2007	220008	Single Family, Maximum Cooling Capacity, CZ 7	59	\$ 10.93	\$ 0.06	0.8	Dwelling Unit	15	150	225	-	-	-
2007	220009	Single Family, Maximum Cooling Capacity, CZ 8	246	\$ 13.39	\$ 0.27	0.8	Dwelling Unit	15	400	225	86	78,766	4,285
2007	220010	Single Family, Maximum Cooling Capacity, CZ 9	499	\$ 14.98	\$ 0.55	0.8	Dwelling Unit	15	150	225	-	-	-
2007	220011	Single Family, Maximum Cooling Capacity, CZ 10	938	\$ 20.62	\$ 1.03	0.8	Dwelling Unit	15	500	225	411	375,244	8,246
2007	220012	Single Family, Maximum Cooling Capacity, CZ 13	1,386	\$ 37.18	\$ 1.52	0.8	Dwelling Unit	15	150	225	-	-	-
2007	220013	Single Family, Maximum Cooling Capacity, CZ 14	1,694	\$ 60.97	\$ 1.86	0.8	Dwelling Unit	15	150	225	-	-	-
2007	220014	Single Family, Maximum Cooling Capacity, CZ 15	4,364	\$ 9.87	\$ 4.78	0.8	Dwelling Unit	15	100	225	383	349,080	789
2007	220015	Single Family, Verified Ducting System, CZ 4	43	\$ 34.54	\$ 0.05	0.8	Dwelling Unit	15	100	125	-	-	-
2007	220016	Single Family, Verified Ducting System, CZ 5	19	\$ 34.54	\$ 0.02	0.8	Dwelling Unit	15	100	125	-	-	-
2007	220017	Single Family, Verified Ducting System, CZ 6	12	\$ 13.57	\$ 0.01	0.8	Dwelling Unit	15	100	125	-	-	-
2007	220018	Single Family, Verified Ducting System, CZ 7	22	\$ 10.90	\$ 0.02	0.8	Dwelling Unit	15	100	125	-	-	-
2007	220019	Single Family, Verified Ducting System, CZ 8	112	\$ 13.39	\$ 0.12	0.8	Dwelling Unit	15	750	125	74	67,131	8,034

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	220020	Single Family, Verified Ducting System, CZ 9	272	\$ 14.98	\$ 0.30	0.8	Dwelling Unit	15		100	125	-	-	-
2007	220021	Single Family, Verified Ducting System, CZ 10	544	\$ 20.62	\$ 0.60	0.8	Dwelling Unit	15	500	100	125	239	217,572	8,246
2007	220022	Single Family, Verified Ducting System, CZ 13	825	\$ 37.18	\$ 0.90	0.8	Dwelling Unit	15		100	125	-	-	-
2007	220023	Single Family, Verified Ducting System, CZ 14	1,096	\$ 60.97	\$ 1.20	0.8	Dwelling Unit	15		100	125	-	-	-
2007	220024	Single Family, Verified Ducting System, CZ 15	2,875	\$ 9.87	\$ 3.15	0.8	Dwelling Unit	15		100	125	-	-	-
2007	220025	Single Family, Quality Insulation Installation, CZ 4	96	\$ 52.51	\$ 0.11	0.8	Dwelling Unit	20		175	300	-	-	-
2007	220026	Single Family, Quality Insulation Installation, CZ 5	38	\$ 57.09	\$ 0.04	0.8	Dwelling Unit	20		175	300	-	-	-
2007	220027	Single Family, Quality Insulation Installation, CZ 6	24	\$ 29.95	\$ 0.03	0.8	Dwelling Unit	20		175	300	-	-	-
2007	220028	Single Family, Quality Insulation Installation, CZ 7	65	\$ 25.73	\$ 0.07	0.8	Dwelling Unit	20		175	300	-	-	-
2007	220029	Single Family, Quality Insulation Installation, CZ 8	182	\$ 27.84	\$ 0.20	0.8	Dwelling Unit	20	300	175	300	48	43,790	6,682
2007	220030	Single Family, Quality Insulation Installation, CZ 9	255	\$ 14.45	\$ 0.28	0.8	Dwelling Unit	20		175	300	-	-	-
2007	220031	Single Family, Quality Insulation Installation, CZ 10	468	\$ 38.41	\$ 0.51	0.8	Dwelling Unit	20	500	175	300	205	187,276	15,364
2007	220032	Single Family, Quality Insulation Installation, CZ 13	547	\$ 52.16	\$ 0.60	0.8	Dwelling Unit	20		175	300	-	-	-
2007	220033	Single Family, Quality Insulation Installation, CZ 14	647	\$ 73.65	\$ 0.71	0.8	Dwelling Unit	20		175	300	-	-	-
2007	220034	Single Family, Quality Insulation Installation, CZ 15	1,270	\$ 20.79	\$ 1.39	0.8	Dwelling Unit	20	200	175	300	223	203,251	3,326
2007	220035	Single Family, Tank Less Water Heater, CZ 4	-	\$ 79.99	\$ -	0.8	Dwelling Unit	15		200	325	-	-	-
2007	220036	Single Family, Tank Less Water Heater, CZ 5	-	\$ 81.05	\$ -	0.8	Dwelling Unit	15		200	325	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	220037	Single Family, Tank Less Water Heater, CZ 6	-	\$ 85.63	\$ -	0.8	Dwelling Unit	15		200	325	-	-	-
2007	220038	Single Family, Tank Less Water Heater, CZ 7	-	\$ 85.28	\$ -	0.8	Dwelling Unit	15		200	325	-	-	-
2007	220039	Single Family, Tank Less Water Heater, CZ 8	-	\$ 84.22	\$ -	0.8	Dwelling Unit	15	100	200	325	-	-	6,738
2007	220040	Single Family, Tank Less Water Heater, CZ 9	-	\$ 83.52	\$ -	0.8	Dwelling Unit	15		200	325	-	-	-
2007	220041	Single Family, Tank Less Water Heater, CZ 10	-	\$ 83.62	\$ -	0.8	Dwelling Unit	15		200	325	-	-	-
2007	220042	Single Family, Tank Less Water Heater, CZ 13	-	\$ 75.41	\$ -	0.8	Dwelling Unit	15		200	325	-	-	-
2007	220043	Single Family, Tank Less Water Heater, CZ 14	-	\$ 85.63	\$ -	0.8	Dwelling Unit	15		200	325	-	-	-
2007	220044	Single Family, Tank Less Water Heater, CZ 15	-	\$ 73.65	\$ -	0.8	Dwelling Unit	15		200	325	-	-	-
2007	220045	Single Family, Air Conditioner EER, CZ 4	22	\$ -	\$ 0.06	0.8	Dwelling Unit	15		200	225	-	-	-
2007	220046	Single Family, Air Conditioner EER, CZ 5	2	\$ -	\$ 0.00	0.8	Dwelling Unit	15		200	225	-	-	-
2007	220047	Single Family, Air Conditioner EER, CZ 6	-	\$ -	\$ -	0.8	Dwelling Unit	15		200	225	-	-	-
2007	220048	Single Family, Air Conditioner EER, CZ 7	3	\$ -	\$ 0.01	0.8	Dwelling Unit	15		200	225	-	-	-
2007	220049	Single Family, Air Conditioner EER, CZ 8	74	\$ -	\$ 0.19	0.8	Dwelling Unit	15		200	225	-	-	-
2007	220050	Single Family, Air Conditioner EER, CZ 9	198	\$ -	\$ 0.50	0.8	Dwelling Unit	15		200	225	-	-	-
2007	220051	Single Family, Air Conditioner EER, CZ 10	460	\$ -	\$ 1.16	0.8	Dwelling Unit	15		200	225	-	-	-
2007	220052	Single Family, Air Conditioner EER, CZ 13	790	\$ -	\$ 1.99	0.8	Dwelling Unit	15		200	225	-	-	-
2007	220053	Single Family, Air Conditioner EER, CZ 14	878	\$ -	\$ 2.21	0.8	Dwelling Unit	15		200	225	-	-	-
2007	220054	Single Family, Air Conditioner EER, CZ 15	2,405	\$ -	\$ 6.03	0.8	Dwelling Unit	15		200	225	-	-	-
2007	220055	Multi-family, Maximum Cooling Capacity, CZ 4	44	\$ 13.43	\$ 0.05	0.8	Dwelling Unit	15		100	150	-	-	-
2007	220056	Multi-family, Maximum Cooling Capacity, CZ 5	10	\$ 13.73	\$ 0.01	0.8	Dwelling Unit	15		100	150	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	220057	Multi-family, Maximum Cooling Capacity, CZ 6	10	\$ 5.68	\$ 0.01	0.8	Dwelling Unit	15	100	150	-	-	-
2007	220058	Multi-family, Maximum Cooling Capacity, CZ 7	29	\$ 4.53	\$ 0.03	0.8	Dwelling Unit	15	100	150	-	-	-
2007	220059	Multi-family, Maximum Cooling Capacity, CZ 8	123	\$ 5.52	\$ 0.13	0.8	Dwelling Unit	15	250	150	27	24,582	1,104
2007	220060	Multi-family, Maximum Cooling Capacity, CZ 9	243	\$ 6.14	\$ 0.27	0.8	Dwelling Unit	15	100	150	21	19,426	491
2007	220061	Multi-family, Maximum Cooling Capacity, CZ 10	437	\$ 8.75	\$ 0.48	0.8	Dwelling Unit	15	345	150	132	120,593	2,415
2007	220062	Multi-family, Maximum Cooling Capacity, CZ 13	606	\$ 14.58	\$ 0.66	0.8	Dwelling Unit	15	100	150	-	-	-
2007	220063	Multi-family, Maximum Cooling Capacity, CZ 14	745	\$ 24.63	\$ 0.82	0.8	Dwelling Unit	15	100	150	-	-	-
2007	220064	Multi-family, Maximum Cooling Capacity, CZ 15	1,791	\$ 4.30	\$ 1.96	0.8	Dwelling Unit	15	100	150	-	-	-
2007	220065	Multi-family, Verified Ducting System, CZ 4	21	\$ 13.43	\$ 0.02	0.8	Dwelling Unit	15	60	100	-	-	-
2007	220066	Multi-family, Verified Ducting System, CZ 5	5	\$ 13.73	\$ 0.00	0.8	Dwelling Unit	15	60	100	-	-	-
2007	220067	Multi-family, Verified Ducting System, CZ 6	5	\$ 5.68	\$ 0.00	0.8	Dwelling Unit	15	60	100	-	-	-
2007	220068	Multi-family, Verified Ducting System, CZ 7	13	\$ 4.53	\$ 0.01	0.8	Dwelling Unit	15	60	100	-	-	-
2007	220069	Multi-family, Verified Ducting System, CZ 8	60	\$ 5.52	\$ 0.07	0.8	Dwelling Unit	15	200	100	11	9,594	883
2007	220070	Multi-family, Verified Ducting System, CZ 9	137	\$ 6.14	\$ 0.15	0.8	Dwelling Unit	15	200	100	24	21,944	982
2007	220071	Multi-family, Verified Ducting System, CZ 10	259	\$ 8.75	\$ 0.28	0.8	Dwelling Unit	15	400	100	91	82,979	2,800
2007	220072	Multi-family, Verified Ducting System, CZ 13	360	\$ 14.58	\$ 0.40	0.8	Dwelling Unit	15	60	100	-	-	-
2007	220073	Multi-family, Verified Ducting System, CZ 14	483	\$ 24.63	\$ 0.53	0.8	Dwelling Unit	15	60	100	-	-	-
2007	220074	Multi-family, Verified Ducting System, CZ 15	1,164	\$ 4.30	\$ 1.28	0.8	Dwelling Unit	15	60	100	-	-	-
2007	220075	Multi-family, High Quality Insulation Installation, CZ 4	34	\$ 11.12	\$ 0.04	0.8	Dwelling Unit	20	50	100	-	-	-
2007	220076	Multi-family, High Quality Insulation Installation, CZ 5	12	\$ 11.89	\$ 0.01	0.8	Dwelling Unit	20	50	100	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	220077	Multi-family, High Quality Insulation Installation, CZ 6	10	\$ 5.91	\$ 0.01	0.8	Dwelling Unit	20	50	100	100	-	-	-
2007	220078	Multi-family, High Quality Insulation Installation, CZ 7	22	\$ 5.14	\$ 0.02	0.8	Dwelling Unit	20	50	100	100	-	-	-
2007	220079	Multi-family, High Quality Insulation Installation, CZ 8	57	\$ 5.52	\$ 0.06	0.8	Dwelling Unit	20	250	50	100	12	11,392	1,104
2007	220080	Multi-family, High Quality Insulation Installation, CZ 9	95	\$ 6.06	\$ 0.10	0.8	Dwelling Unit	20	50	100	100	-	-	-
2007	220081	Multi-family, High Quality Insulation Installation, CZ 10	126	\$ 8.13	\$ 0.14	0.8	Dwelling Unit	20	300	50	100	33	30,218	1,951
2007	220082	Multi-family, High Quality Insulation Installation, CZ 13	140	\$ 11.20	\$ 0.15	0.8	Dwelling Unit	20	50	100	100	-	-	-
2007	220083	Multi-family, High Quality Insulation Installation, CZ 14	160	\$ 15.57	\$ 0.17	0.8	Dwelling Unit	20	50	100	100	-	-	-
2007	220084	Multi-family, High Quality Insulation Installation, CZ 15	304	\$ 4.22	\$ 0.33	0.8	Dwelling Unit	20	50	100	100	-	-	-
2007	220085	Multi-family, Tank Less Water Heater, CZ 4	-	\$ 13.89	\$ -	0.8	Dwelling Unit	15	200	325	325	-	-	-
2007	220086	Multi-family, Tank Less Water Heater, CZ 5	-	\$ 13.96	\$ -	0.8	Dwelling Unit	15	200	325	325	-	-	-
2007	220087	Multi-family, Tank Less Water Heater, CZ 6	-	\$ 15.34	\$ -	0.8	Dwelling Unit	15	200	325	325	-	-	-
2007	220088	Multi-family, Tank Less Water Heater, CZ 7	-	\$ 15.50	\$ -	0.8	Dwelling Unit	15	200	325	325	-	-	-
2007	220089	Multi-family, Tank Less Water Heater, CZ 8	-	\$ 15.34	\$ -	0.8	Dwelling Unit	15	200	325	325	-	-	-
2007	220090	Multi-family, Tank Less Water Heater, CZ 9	-	\$ 15.27	\$ -	0.8	Dwelling Unit	15	200	325	325	-	-	-
2007	220091	Multi-family, Tank Less Water Heater, CZ 10	-	\$ 15.34	\$ -	0.8	Dwelling Unit	15	200	325	325	-	-	-
2007	220092	Multi-family, Tank Less Water Heater, CZ 13	-	\$ 13.81	\$ -	0.8	Dwelling Unit	15	200	325	325	-	-	-
2007	220093	Multi-family, Tank Less Water Heater, CZ 14	-	\$ 15.34	\$ -	0.8	Dwelling Unit	15	200	325	325	-	-	-
2007	220094	Multi-family, Tank Less Water Heater, CZ 15	-	\$ 14.81	\$ -	0.8	Dwelling Unit	15	200	325	325	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	220095	Multi-family, Air Conditioner EER, CZ 4	10	\$ -	\$ 0.01	0.8	Dwelling Unit	15	200	200	225	-	-	-
2007	220096	Multi-family, Air Conditioner EER, CZ 5	1	\$ -	\$ 0.00	0.8	Dwelling Unit	15	200	200	225	-	-	-
2007	220097	Multi-family, Air Conditioner EER, CZ 6	-	\$ -	\$ -	0.8	Dwelling Unit	15	200	200	225	-	-	-
2007	220098	Multi-family, Air Conditioner EER, CZ 7	2	\$ -	\$ 0.00	0.8	Dwelling Unit	15	200	200	225	-	-	-
2007	220099	Multi-family, Air Conditioner EER, CZ 8	42	\$ -	\$ 0.05	0.8	Dwelling Unit	15	200	200	225	-	-	-
2007	220100	Multi-family, Air Conditioner EER, CZ 9	109	\$ -	\$ 0.14	0.8	Dwelling Unit	15	200	200	225	-	-	-
2007	220101	Multi-family, Air Conditioner EER, CZ 10	233	\$ -	\$ 0.29	0.8	Dwelling Unit	15	200	200	225	-	-	-
2007	220102	Multi-family, Air Conditioner EER, CZ 13	363	\$ -	\$ 0.46	0.8	Dwelling Unit	15	200	200	225	-	-	-
2007	220103	Multi-family, Air Conditioner EER, CZ 14	406	\$ -	\$ 0.51	0.8	Dwelling Unit	15	200	200	225	-	-	-
2007	220104	Multi-family, Air Conditioner EER, CZ 15	1,036	\$ -	\$ 1.30	0.8	Dwelling Unit	15	200	200	225	-	-	-
2008	220005	Single Family, Maximum Cooling Capacity, CZ 4	98	\$ 34.54	\$ 0.11	0.8	Dwelling Unit	15	150	150	225	-	-	-
2008	220006	Single Family, Maximum Cooling Capacity, CZ 5	40	\$ 34.54	\$ 0.04	0.8	Dwelling Unit	15	150	150	225	-	-	-
2008	220007	Single Family, Maximum Cooling Capacity, CZ 6	29	\$ 13.57	\$ 0.03	0.8	Dwelling Unit	15	150	150	225	-	-	-
2008	220008	Single Family, Maximum Cooling Capacity, CZ 7	59	\$ 10.93	\$ 0.06	0.8	Dwelling Unit	15	150	150	225	-	-	-
2008	220009	Single Family, Maximum Cooling Capacity, CZ 8	246	\$ 13.39	\$ 0.27	0.8	Dwelling Unit	15	250	150	225	54	49,229	2,678
2008	220010	Single Family, Maximum Cooling Capacity, CZ 9	499	\$ 14.98	\$ 0.55	0.8	Dwelling Unit	15	150	150	225	-	-	-
2008	220011	Single Family, Maximum Cooling Capacity, CZ 10	938	\$ 20.62	\$ 1.03	0.8	Dwelling Unit	15	400	150	225	329	300,195	6,597
2008	220012	Single Family, Maximum Cooling Capacity, CZ 13	1,386	\$ 37.18	\$ 1.52	0.8	Dwelling Unit	15	150	150	225	-	-	-
2008	220013	Single Family, Maximum Cooling Capacity, CZ 14	1,694	\$ 60.97	\$ 1.86	0.8	Dwelling Unit	15	150	150	225	-	-	-
2008	220014	Single Family, Maximum Cooling Capacity, CZ 15	4,364	\$ 9.87	\$ 4.78	0.8	Dwelling Unit	15	50	150	225	191	174,540	395
2008	220015	Ducting System, CZ 4	43	\$ 34.54	\$ 0.05	0.8	Dwelling Unit	15	100	100	125	-	-	-
2008	220016	Single Family, Verified Ducting System, CZ 5	19	\$ 34.54	\$ 0.02	0.8	Dwelling Unit	15	100	100	125	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	220017	Single Family, Verified Ducting System, CZ 6	12	\$ 13.57	\$ 0.01	0.8	Dwelling Unit	15		100	125	-	-	-
2008	220018	Single Family, Verified Ducting System, CZ 7	22	\$ 10.90	\$ 0.02	0.8	Dwelling Unit	15		100	125	-	-	-
2008	220019	Single Family, Verified Ducting System, CZ 8	112	\$ 13.39	\$ 0.12	0.8	Dwelling Unit	15	600	100	125	59	53,705	6,427
2008	220020	Single Family, Verified Ducting System, CZ 9	272	\$ 14.98	\$ 0.30	0.8	Dwelling Unit	15	100	100	125	24	21,757	1,198
2008	220021	Single Family, Verified Ducting System, CZ 10	544	\$ 20.62	\$ 0.60	0.8	Dwelling Unit	15	400	100	125	191	174,058	6,597
2008	220022	Single Family, Verified Ducting System, CZ 13	825	\$ 37.18	\$ 0.90	0.8	Dwelling Unit	15		100	125	-	-	-
2008	220023	Single Family, Verified Ducting System, CZ 14	1,096	\$ 60.97	\$ 1.20	0.8	Dwelling Unit	15		100	125	-	-	-
2008	220024	Single Family, Verified Ducting System, CZ 15	2,875	\$ 9.87	\$ 3.15	0.8	Dwelling Unit	15		100	125	-	-	-
2008	220025	Single Family, Quality Insulation Installation, CZ 4	96	\$ 52.51	\$ 0.11	0.8	Dwelling Unit	20		175	300	-	-	-
2008	220026	Single Family, Quality Insulation Installation, CZ 5	38	\$ 57.09	\$ 0.04	0.8	Dwelling Unit	20		175	300	-	-	-
2008	220027	Single Family, Quality Insulation Installation, CZ 6	24	\$ 29.95	\$ 0.03	0.8	Dwelling Unit	20		175	300	-	-	-
2008	220028	Single Family, Quality Insulation Installation, CZ 7	65	\$ 25.73	\$ 0.07	0.8	Dwelling Unit	20		175	300	-	-	-
2008	220029	Single Family, Quality Insulation Installation, CZ 8	182	\$ 27.84	\$ 0.20	0.8	Dwelling Unit	20	200	175	300	32	29,194	4,454
2008	220030	Single Family, Quality Insulation Installation, CZ 9	255	\$ 14.45	\$ 0.28	0.8	Dwelling Unit	20		175	300	-	-	-
2008	220031	Single Family, Quality Insulation Installation, CZ 10	468	\$ 38.41	\$ 0.51	0.8	Dwelling Unit	20	300	175	300	123	112,366	9,218
2008	220032	Single Family, Quality Insulation Installation, CZ 13	547	\$ 52.16	\$ 0.60	0.8	Dwelling Unit	20		175	300	-	-	-
2008	220033	Single Family, Quality Insulation Installation, CZ 14	647	\$ 73.65	\$ 0.71	0.8	Dwelling Unit	20		175	300	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	220034	Single Family, Quality Insulation Installation, CZ 15	1,270	\$ 20.79	\$ 1.39	0.8	Dwelling Unit	20	200	175	300	223	203,251	3,326
2008	220035	Single Family, Tank Less Water Heater, CZ 4	-	\$ 79.99	\$ -	0.8	Dwelling Unit	15		200	325	-	-	-
2008	220036	Single Family, Tank Less Water Heater, CZ 5	-	\$ 81.05	\$ -	0.8	Dwelling Unit	15		200	325	-	-	-
2008	220037	Single Family, Tank Less Water Heater, CZ 6	-	\$ 85.63	\$ -	0.8	Dwelling Unit	15		200	325	-	-	-
2008	220038	Single Family, Tank Less Water Heater, CZ 7	-	\$ 85.28	\$ -	0.8	Dwelling Unit	15		200	325	-	-	-
2008	220039	Single Family, Tank Less Water Heater, CZ 8	-	\$ 84.22	\$ -	0.8	Dwelling Unit	15	50	200	325	-	-	3,369
2008	220040	Single Family, Tank Less Water Heater, CZ 9	-	\$ 83.52	\$ -	0.8	Dwelling Unit	15		200	325	-	-	-
2008	220041	Single Family, Tank Less Water Heater, CZ 10	-	\$ 83.62	\$ -	0.8	Dwelling Unit	15		200	325	-	-	-
2008	220042	Single Family, Tank Less Water Heater, CZ 13	-	\$ 75.41	\$ -	0.8	Dwelling Unit	15		200	325	-	-	-
2008	220043	Single Family, Tank Less Water Heater, CZ 14	-	\$ 85.63	\$ -	0.8	Dwelling Unit	15		200	325	-	-	-
2008	220044	Single Family, Tank Less Water Heater, CZ 15	-	\$ 73.65	\$ -	0.8	Dwelling Unit	15		200	325	-	-	-
2008	220045	Single Family, Air Conditioner EER, CZ 4	22	\$ -	\$ 0.06	0.8	Dwelling Unit	15		200	225	-	-	-
2008	220046	Single Family, Air Conditioner EER, CZ 5	2	\$ -	\$ 0.00	0.8	Dwelling Unit	15		200	225	-	-	-
2008	220047	Single Family, Air Conditioner EER, CZ 6	-	\$ -	\$ -	0.8	Dwelling Unit	15		200	225	-	-	-
2008	220048	Single Family, Air Conditioner EER, CZ 7	3	\$ -	\$ 0.01	0.8	Dwelling Unit	15		200	225	-	-	-
2008	220049	Single Family, Air Conditioner EER, CZ 8	74	\$ -	\$ 0.19	0.8	Dwelling Unit	15		200	225	-	-	-
2008	220050	Single Family, Air Conditioner EER, CZ 9	198	\$ -	\$ 0.50	0.8	Dwelling Unit	15		200	225	-	-	-
2008	220051	Single Family, Air Conditioner EER, CZ 10	460	\$ -	\$ 1.16	0.8	Dwelling Unit	15		200	225	-	-	-
2008	220052	Single Family, Air Conditioner EER, CZ 13	790	\$ -	\$ 1.99	0.8	Dwelling Unit	15		200	225	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	220053	Single Family, Air Conditioner EER, CZ 14	878	\$ -	\$ 2.21	0.8	Dwelling Unit	15	200	225	-	-	-
2008	220054	Single Family, Air Conditioner EER, CZ 15	2,405	\$ -	\$ 6.03	0.8	Dwelling Unit	15	200	225	-	-	-
2008	220055	Multi-family, Maximum Cooling Capacity, CZ 4	44	\$ 13.43	\$ 0.05	0.8	Dwelling Unit	15	100	150	-	-	-
2008	220056	Multi-family, Maximum Cooling Capacity, CZ 5	10	\$ 13.73	\$ 0.01	0.8	Dwelling Unit	15	100	150	-	-	-
2008	220057	Multi-family, Maximum Cooling Capacity, CZ 6	10	\$ 5.68	\$ 0.01	0.8	Dwelling Unit	15	100	150	-	-	-
2008	220058	Multi-family, Maximum Cooling Capacity, CZ 7	29	\$ 4.53	\$ 0.03	0.8	Dwelling Unit	15	100	150	-	-	-
2008	220059	Multi-family, Maximum Cooling Capacity, CZ 8	123	\$ 5.52	\$ 0.13	0.8	Dwelling Unit	15	200	150	22	19,666	883
2008	220060	Multi-family, Maximum Cooling Capacity, CZ 9	243	\$ 6.14	\$ 0.27	0.8	Dwelling Unit	15	100	150	21	19,426	491
2008	220061	Multi-family, Maximum Cooling Capacity, CZ 10	437	\$ 8.75	\$ 0.48	0.8	Dwelling Unit	15	300	150	115	104,863	2,100
2008	220062	Multi-family, Maximum Cooling Capacity, CZ 13	606	\$ 14.58	\$ 0.66	0.8	Dwelling Unit	15	100	150	-	-	-
2008	220063	Multi-family, Maximum Cooling Capacity, CZ 14	745	\$ 24.63	\$ 0.82	0.8	Dwelling Unit	15	100	150	-	-	-
2008	220064	Multi-family, Maximum Cooling Capacity, CZ 15	1,791	\$ 4.30	\$ 1.96	0.8	Dwelling Unit	15	100	150	-	-	-
2008	220065	Multi-family, Verified Ducting System, CZ 4	21	\$ 13.43	\$ 0.02	0.8	Dwelling Unit	15	60	100	-	-	-
2008	220066	Multi-family, Verified Ducting System, CZ 5	5	\$ 13.73	\$ 0.00	0.8	Dwelling Unit	15	60	100	-	-	-
2008	220067	Multi-family, Verified Ducting System, CZ 6	5	\$ 5.68	\$ 0.00	0.8	Dwelling Unit	15	60	100	-	-	-
2008	220068	Multi-family, Verified Ducting System, CZ 7	13	\$ 4.53	\$ 0.01	0.8	Dwelling Unit	15	60	100	-	-	-
2008	220069	Multi-family, Verified Ducting System, CZ 8	60	\$ 5.52	\$ 0.07	0.8	Dwelling Unit	15	400	100	21	19,187	1,766
2008	220070	Multi-family, Verified Ducting System, CZ 9	137	\$ 6.14	\$ 0.15	0.8	Dwelling Unit	15	400	100	48	43,888	1,965
2008	220071	Multi-family, Verified Ducting System, CZ 10	259	\$ 8.75	\$ 0.28	0.8	Dwelling Unit	15	500	100	114	103,724	3,500
2008	220072	Multi-family, Verified Ducting System, CZ 13	360	\$ 14.58	\$ 0.40	0.8	Dwelling Unit	15	60	100	-	-	-
2008	220073	Multi-family, Verified Ducting System, CZ 14	483	\$ 24.63	\$ 0.53	0.8	Dwelling Unit	15	60	100	-	-	-
2008	220074	Multi-family, Verified Ducting System, CZ 15	1,164	\$ 4.30	\$ 1.28	0.8	Dwelling Unit	15	60	100	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	220075	Multi-family, High Quality Insulation Installation, CZ 4	34 \$	11.12 \$	0.04	0.8	Dwelling Unit	20	50	50	100	-	-	-
2008	220076	Multi-family, High Quality Insulation Installation, CZ 5	12 \$	11.89 \$	0.01	0.8	Dwelling Unit	20	50	50	100	-	-	-
2008	220077	Multi-family, High Quality Insulation Installation, CZ 6	10 \$	5.91 \$	0.01	0.8	Dwelling Unit	20	50	50	100	-	-	-
2008	220078	Multi-family, High Quality Insulation Installation, CZ 7	22 \$	5.14 \$	0.02	0.8	Dwelling Unit	20	50	50	100	-	-	-
2008	220079	Multi-family, High Quality Insulation Installation, CZ 8	57 \$	5.52 \$	0.06	0.8	Dwelling Unit	20	200	50	100	10	9,114	883
2008	220080	Multi-family, High Quality Insulation Installation, CZ 9	95 \$	6.06 \$	0.10	0.8	Dwelling Unit	20	50	50	100	-	-	-
2008	220081	Multi-family, High Quality Insulation Installation, CZ 10	126 \$	8.13 \$	0.14	0.8	Dwelling Unit	20	300	50	100	33	30,218	1,951
2008	220082	Multi-family, High Quality Insulation Installation, CZ 13	140 \$	11.20 \$	0.15	0.8	Dwelling Unit	20	50	50	100	-	-	-
2008	220083	Multi-family, High Quality Insulation Installation, CZ 14	160 \$	15.57 \$	0.17	0.8	Dwelling Unit	20	50	50	100	-	-	-
2008	220084	Multi-family, High Quality Insulation Installation, CZ 15	304 \$	4.22 \$	0.33	0.8	Dwelling Unit	20	50	50	100	-	-	-
2008	220085	Multi-family, Tank Less Water Heater, CZ 4	- \$	13.89 \$	-	0.8	Dwelling Unit	15	200	200	325	-	-	-
2008	220086	Multi-family, Tank Less Water Heater, CZ 5	- \$	13.96 \$	-	0.8	Dwelling Unit	15	200	200	325	-	-	-
2008	220087	Multi-family, Tank Less Water Heater, CZ 6	- \$	15.34 \$	-	0.8	Dwelling Unit	15	200	200	325	-	-	-
2008	220088	Multi-family, Tank Less Water Heater, CZ 7	- \$	15.50 \$	-	0.8	Dwelling Unit	15	200	200	325	-	-	-
2008	220089	Multi-family, Tank Less Water Heater, CZ 8	- \$	15.34 \$	-	0.8	Dwelling Unit	15	200	200	325	-	-	-
2008	220090	Multi-family, Tank Less Water Heater, CZ 9	- \$	15.27 \$	-	0.8	Dwelling Unit	15	200	200	325	-	-	-
2008	220091	Multi-family, Tank Less Water Heater, CZ 10	- \$	15.34 \$	-	0.8	Dwelling Unit	15	200	200	325	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	220092	Multi-family, Tank Less Water Heater, CZ 13	-	\$ 13.81	\$ -	0.8	Dwelling Unit	15	200	325	-	-	-
2008	220093	Multi-family, Tank Less Water Heater, CZ 14	-	\$ 15.34	\$ -	0.8	Dwelling Unit	15	200	325	-	-	-
2008	220094	Multi-family, Tank Less Water Heater, CZ 15	-	\$ 14.81	\$ -	0.8	Dwelling Unit	15	200	325	-	-	-
2008	220095	Multi-family, Air Conditioner EER, CZ 4	10	\$ -	\$ 0.01	0.8	Dwelling Unit	15	200	225	-	-	-
2008	220096	Multi-family, Air Conditioner EER, CZ 5	1	\$ -	\$ 0.00	0.8	Dwelling Unit	15	200	225	-	-	-
2008	220097	Multi-family, Air Conditioner EER, CZ 6	-	\$ -	\$ -	0.8	Dwelling Unit	15	200	225	-	-	-
2008	220098	Multi-family, Air Conditioner EER, CZ 7	2	\$ -	\$ 0.00	0.8	Dwelling Unit	15	200	225	-	-	-
2008	220099	Multi-family, Air Conditioner EER, CZ 8	42	\$ -	\$ 0.05	0.8	Dwelling Unit	15	200	225	-	-	-
2008	220100	Multi-family, Air Conditioner EER, CZ 9	109	\$ -	\$ 0.14	0.8	Dwelling Unit	15	200	225	-	-	-
2008	220101	Multi-family, Air Conditioner EER, CZ 10	233	\$ -	\$ 0.29	0.8	Dwelling Unit	15	200	225	-	-	-
2008	220102	Multi-family, Air Conditioner EER, CZ 13	363	\$ -	\$ 0.46	0.8	Dwelling Unit	15	200	225	-	-	-
2008	220103	Multi-family, Air Conditioner EER, CZ 14	406	\$ -	\$ 0.51	0.8	Dwelling Unit	15	200	225	-	-	-
2008	220104	Multi-family, Air Conditioner EER, CZ 15	1,036	\$ -	\$ 1.30	0.8	Dwelling Unit	15	200	225	-	-	-

CROSSCUTTING PROGRAMS

2006-2008 Energy Efficiency Concept Paper On-Bill Financing Program

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 434,540	\$ 425,610	\$ 416,411
Overhead	\$ 118,803	\$ 120,004	\$ 127,242
Direct Implementation			
Financial Incentives	\$ -	\$ -	\$ -
Activity	\$ 229,411	\$ 235,994	\$ 242,774
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ -	\$ -	\$ -
Rebate Processing and Inspection	\$ 364,925	\$ 365,901	\$ 366,907
Marketing			
Program Specific Marketing	\$ 102,321	\$ 102,491	\$ 96,666
Statewide Marketing			
Total Program Budget	\$ 1,250,000	\$ 1,250,000	\$ 1,250,000

Notes:

1. Other Administrative includes build-out of IT assets to automate the billing process. The IT costs will be coordinated with Demand Response Programs.
2. Financial Incentives is shown as zero dollars in the budget. Up to \$5 million of loan funds will be made available during 2006 and 2007 by SDG&E from non-PGC funds.

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
-	-	-	-	-	-	-	-	-

Note: Not applicable to the pilot phase of this program. Results of EM&V may indicate whether energy savings can be directly attributed to this program at some time in the future. Energy savings will be credited to the participating rebate programs in the interim.

3. Program Cost Effectiveness - Attached

4. Program Descriptors

The SDG&E On-Bill Financing (OBF) Program is a new local program that provides financing for energy efficiency measures. The OBF program will target the following market sectors:

- Phase I ("pilot"):
 - Residential: Owners of multifamily units who do not live on the premises
 - Nonresidential: Small commercial and industrial customers
 - Local government

- Later Phases: expansion into additional market segments could be warranted and would occur during later phases of the program.

5. Program Statement

Historically, the multifamily and small business segments have been considered hard-to-reach, with limited participation in energy efficiency programs, while representing largely untapped energy efficiency potential. Local government entities have similarly limited participation driven by capital constraints and long budget cycles that have restricted their ability to participate in one-and two-year energy efficiency program cycles.

What's New for 2006-2008?

- Innovation
 - Test on-bill financing option as means to increase energy efficiency program participation and reduce program incentive costs
- Integration
 - Audits, information, rebates and demand response

The On-Bill Financing program would facilitate the purchase and installation of qualified energy efficiency measures by customers who might otherwise not be able to act given capital constraints and administrative and time burdens to participation as well as concerns about or lack of understanding of the benefits of energy efficiency. The participating customer would be eligible to receive a reduced rebate from the participating rebate/incentive program(s) and to finance the balance of comprehensive, qualified energy efficiency and demand response measures in lieu of another available program rebate or incentive. Monthly payment on a term loan would be billed as part of the participating customer's utility bill.

The program will also address utility concerns with the risks and costs of offering this type of program in the State of California. Historically, these concerns have focused on the costs to upgrade customer information and billing systems as well as the imposition of and exposure to additional legal and regulatory requirements on the utility.

6. Program Rationale

On-Bill Financing programs have been offered by other utilities with varying levels of success. SDG&E's On-Bill Financing program is designed to build on the successful programs run by others. Proponents advocating for the inclusion of on-bill financing options in overall utility portfolios argue that the availability of this type of program will allow more customers to participate in energy efficiency programs. Phase I of this program will test whether customers who face market barriers to participation in energy efficiency programs will actually increase their participation level. When customers utilize this program, their previous "lost opportunities" to manage and reduce their energy consumption will be minimized.

7. Program Outcomes

On-Bill Financing will leverage existing energy efficiency rebate programs and new demand response programs. Through provision of a reduced rebate level in conjunction with financing, participating energy efficiency and new demand response rebate programs

will be able to rebate additional units and generate additional energy savings. Desired results of the program are:

- Incremental program participation in the rebate programs targeted in the pilot phase
- Incremental energy savings flowing from increased customer participation and ability to install a more comprehensive package of measures
- Convenience for customers to access financing through energy efficiency programs and ease of repayment through the utility bill
- Demonstration that the utility customer and billing systems can be upgraded at reasonable cost to handle a financing option
- Establish necessary procedures to comply with any additional legal and regulatory requirements imposed on the utility by this program.

8. Program Strategy

Methods deployed in order to obtain program outcomes:

- Design and implementation of changes necessary to utility billing and accounting systems to provide on-bill presentment of a loan repayment as a new, single line item on the bill. There are two parts to Phase I implementation of systems changes. Part 1 of the phase will implement a manual billing process, making limited modifications to the billing system in order to allow for manual processing of monthly bills for customers participating in the OBF program. The manual billing process would be available in early 2006. Part 2, occurring concurrently with Part 1, will design and implement an automated billing process, making more extensive modifications to the Customer Information System for Corporate Objectives (CISCO) and billing systems to accommodate OBF program transactions. The automated billing process is expected to be available at the end of 2006.
- Training for contractors to provide information on the participating energy efficiency rebate programs, including the financing option, to customers seeking energy efficiency improvements. It is expected that using contractors will be an important element in the success of this program. Contractors, along with energy program representatives, will recruit customers and initiate the loan application for customer's energy efficiency project with the utility. A list of pre-screened/qualified contractors offering the financing option will be made available to any customer who requests it from the utility.
- Eligible market segments will be provided a reduced rebate for qualified energy efficiency and demand response equipment with zero-percent financing for 100% of the balance of project cost (up to loan maximum), including installation costs. Minimum loan available is \$5,000; maximum loan available is \$25,000. Maximum total loan funds available during the pilot phase are capped at \$5 million for program years 2006 and 2007.
- Utility will complete credit screening on customer application and review payback analysis, reserving loan funds for approved projects. Customers not qualified for financing option will be referred back to the appropriate rebate program.

- Qualified demand response measures may be included as part of the comprehensive energy efficiency project package and would qualify for financing, up to 10% of total loan funds available.

9. Program Objectives

OBF is designed to provide an additional means to facilitate customer participation in energy efficiency and demand response programs that deliver permanent and verifiable energy savings from the targeted market segments. Objectives of the pilot phase are to: 1) establish internal procedures and systems upgrades to provide financing option to customers, 2) evaluate the benefits to customers and contribution to energy savings goals provided by on-bill financing, 3) provide loans using manual processing in PY 2006, 4) provide loans using automated processing in PY 2007, and 5) propose next generation On-Bill Financing program.

Milestone 1: Manual billing systems in place and loans available to customers by end of first quarter 2006.

Milestone 2: Automated billing systems in place and loans available to customers by the beginning of 2007.

Milestone 3: Evaluation and analysis of program processes and contribution to increased customer participation and increased real energy savings to be determined by internal assessment and EM&V plan.

Milestone 4: Utility filing of report on program results and request for next generation program consideration to Commission by the end of 2007.

10. Program Implementation

OBF program will be offered in conjunction with the Multifamily Rebate Program, the Statewide Nonresidential Express Efficiency Program, the Small Business Super Saver Program and the Demand Response Technology Incentive Program. Loans will be offered in program years 2006 and 2007, or until loan funds are spent and/or committed. Marketing efforts for OBF will be coordinated with these programs.

- Utility Perspective
 - SDG&E will need to make a number of modifications to existing systems and procedures to facilitate implementation of OBF. These modifications will be transparent to the customer, involving enhancements to the customer information database, billing system and bill format. Additionally, changes to tariffs and rules will be filed with the Commission and internal procedures and processes updated.

For 2006, a manual billing system will be implemented to include the loan payment as a line item on the customer's utility bill. Concurrently, work will begin to implement changes to the information systems that will enable loan payments to be handled automatically by the systems. Automated systems are expected to be available at the beginning of 2007.

Marketing messages and materials will be developed in conjunction with the participating rebate programs as well as utility information and outreach programs. Program materials such as application forms, loan agreements and disclosure notices will be developed.

A contractor/utility interface will be developed to facilitate communication between participating contractors and the utility. Training materials will be prepared to train utility energy program representatives and contractors on the OBF option and the contractor/utility interface. Contractors will be selected (through OBF and/or in conjunction with participating rebate programs) and training conducted.

Program will officially open for submission of project and loan application. Utility will review applications submitted by contractors and energy program representatives for compliance with credit check criteria and project payback. Utility will notify parties of approved applications and provide loan documents for customer signature; customers failing to meet the credit check criteria will be referred to the appropriate rebate program(s). Upon notification that installation is complete, utility will verify installation and release funds.

Upon release of funds, utility will enter loan payment into the billing system. Utility will begin monitoring remittance activity, track accounts moving into collections and analyze any loans going into default.

- **Contractor Perspective**

Contractors interested in offering the OBF as an option to its customers will be asked to respond to an RFQ/RFP initiated by either the participating rebate program or OBF. Once selected, the contractor will participate in training on the OBF program, including use of the contractor/utility interface and coordination with the participating rebate programs. Upon completion of training, contractors will be able to recruit customers to participate in the OBF program.

Contractor will submit customer project and loan application. Upon notification from utility that customer and project qualify for OBF and loan document has been signed by customer, contractor will install project measures. Upon completion of installation, utility will verify and inspect installation.

- **Customer Perspective**

Customers interested in installing energy efficiency improvements at their facilities may become aware of the utility's energy efficiency programs in a number of ways: on their own or through their contractor or utility energy program representative. A customer who inquires about the OBF option will be referred to their energy program representative or referred to the list of pre-qualified contractors. The customer, working with their energy program representative or contractor, will decide upon the comprehensive package of energy efficiency measures to be installed and assist in the preparation of the program application and loan agreement, including the OBF option. Upon notification of approval to participate in the OBF option, the customer will schedule installation by the contractor and post-installation inspection by the utility. After installation is complete, utility will release the funds for the project's authorized costs and customer's loan repayment will begin appearing on the monthly utility bill.

11. Customer Description

The customers targeted by the OBF program are:

- MF Owner not living on the premises
- Small C&I
 - 20-100 kW (gas measures included)
- Local Government (cities, schools, etc.)
 - Under 500 kW (gas measures included)

12. Customer Interface

The program shall be presented to the customer through face-to-face contact from pre-screened installation contractors and SDG&E Energy Program Representatives. Marketing materials, including coordination with participating rebate/incentive programs and outreach/information programs, and program contracts will be developed detailing the terms and conditions for participation in the financing option. Efforts will include the development and design of program literature, application forms, loan agreement, and other appropriate program literature as needed.

13. Energy Measures and Program Activities

13.1. Prescriptive Measures

13.2. kWh Level Data

13.3. Non-energy Activities

13.3.1. End Use Load (if applicable)

13.3.2. Targeted Sector (if applicable)

13.3.3. Activity Description

Loan funding of up to \$5 million will be provided by SDG&E from non-PGC funds and will be made available in PY 2006 and PY 2007. No loans will be issued during PY 2008, pending assessment of program effectiveness. Zero percent interest rate. Two to three year loan term for multifamily and small business market segments; three to five year loan term for local government segment. No penalty for early repayment. Partial or non-payment of loan could result in shut-off of utility service and turned over for collection. Balance of loan will become payable when customer closes utility account. Loan is not transferable.

13.3.4. Quantitative Activity Goals

- Loan funding will be allocated to the three market segments – 20% to multifamily, 30% to small business, and 50% to local government
- Expected number of loans during each of the 2 loan years is 300 (for a total of 600 loans over the life of the program). Number of loans could be as few as 100 each year (if all for maximum amount) to as many as 500 each year (if all for minimum amount). Average loan is expected to be \$8,000.

13.3.5. Assigned attributes of the activity

13.4. Subcontractor Activities

Subcontractors may conduct training of energy services contractors.

13.5. Quality Assurance and Evaluation Activities

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SoCalGas looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs.

- 13.5.1. Expected number/percent of inspections (planned percent of projects):
One hundred percent of the projects will be verified and inspected. Any failures will need to be corrected before funds are released.

13.6. **Marketing Activities**

Marketing efforts would be coordinated with the participating rebate programs to include a cross reference to the on-bill financing option. These efforts would include development of program forms and applications, brochures and/or program summary sheets and contractor outreach.

14. Conclusion

The availability of on-bill financing at other utilities has allowed more customers to participate in those energy efficiency programs. SDG&E's On-Bill Financing program will facilitate the purchase and installation of qualified energy efficiency and demand response measures by customers who might otherwise not be able to act given capital constraints or other market barriers. The OBF program will help SDG&E meet its aggressive energy savings targets. Leveraging existing energy efficiency rebate and new demand response programs and offering an on-bill financing option will enable SDG&E to increase program participation, rebate additional units and generate additional energy savings while offering customers an easy, convenient means to afford and install the equipment that will enable them to manage and reduce their energy usage.

		SDGE3019 OBF-On-Bill Financing for Energy Efficiency Equipment
BUDGET		
Administrative Costs	\$	1,642,610
Overhead and G&A	\$	366,049
Other Administrative Costs	\$	1,276,561
Marketing/Outreach	\$	301,478
Direct Implementation	\$	1,805,912
Total Incentives and Rebates		
User Input Incentive	\$	-
Direct Install Rebate	\$	-
Direct Install Labor	\$	-
Direct Install Materials	\$	-
Activity	\$	708,179
Installation	\$	-
Hardware & Materials	\$	-
Rebate Processing & Inspection	\$	1,097,733
EM&V Costs	\$	-
Budget	\$	3,750,000
Costs recovered from other sources	\$	-
Budget (plus other costs)	\$	3,750,000
PROGRAM IMPACTS		
DEER kW (kW)		-
Net NCP (kW)		-
Net CEC (kW)		-
Annual Net kWh		-
Lifecycle Net kWh		-
Annual Net Therms		-
Lifecycle Net Therms		-
Cost Effectiveness		
TRC		
Costs	\$	3,750,000
Electric Benefits	\$	-
Gas Benefits	\$	-
Net Benefits (NPV)	\$	-
BC Ratio		-
PAC		
Costs	\$	3,750,000
Electric Benefits	\$	-
Gas Benefits	\$	-
Net Benefits (NPV)	\$	-
BC Ratio		-
Levelized Cost		
Levelized Cost TRC (\$/kWh)		
Discounted kWh		-
Cost	\$	-
Benefits	\$	-
Benefit-Cost	\$	-
Levelized Cost PAC (\$/kWh)		
Discounted kWh		-
Cost	\$	-
Benefits	\$	-
Benefit-Cost	\$	-
Levelized Cost TRC (\$/therm)		
Discounted Therms		-
Cost	\$	-
Benefits	\$	-
Benefit-Cost	\$	-
Levelized Cost PAC (\$/therm)		
Discounted Therms		-
Cost	\$	-
Benefits	\$	-
Benefit-Cost	\$	-

2006-2008 Energy Efficiency Concept Paper - Statewide Crosscutting Codes and Standards

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 161,520	\$ 163,470	\$ 163,470
Overhead	\$ 19,048	\$ 19,048	\$ 19,048
Direct Implementation			
Financial Incentives	\$ -	\$ -	\$ -
Activity	\$ 213,482	\$ 214,532	\$ 214,532
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ -	\$ -	\$ -
Rebate Processing and Inspection	\$ -	\$ -	\$ -
Marketing			
Program Specific Marketing	\$ 5,950	\$ 2,950	\$ 2,950
Statewide Marketing			
Total Program Budget	\$ 400,000	\$ 400,000	\$ 400,000

2. Projected Program

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
-	-	-	-	-	-	-	-	-

3. Program Cost Effectiveness

Attached

4. Program Descriptors

Codes and Standards (C&S) is an existing statewide program that promotes upgrades and enhancements in energy efficiency standards and codes. Codes and Standards Enhancement (CASE) studies are performed for promising design practices and technologies. The studies' results are presented to standards and code-setting bodies to encourage adoption of energy efficiency measures. In addition, C&S develops and conducts training seminars to inform the building community regarding applicable codes and prepare them for upcoming code changes.

5. Program Statement

The C&S program is an information-only program that advocates upgrades and enhancements in energy efficiency standards and codes. Program activities are conducted over long-term code upgrade cycles. Support of building code cycles, for example, may require four years of continuous support. The C&S program offers the state expert testimony to promote standards that approach best practices in energy

What's New for 2006-08?

- Increased funding
- Support implementation of the California Energy Commission's Title 24 Building Energy Efficiency Standards
- Focus on next generation of codes, standards

efficiency, which becomes critically important as stakeholders voice opposition to improvements to building and appliance standards throughout the public workshops and hearings process. It should be noted that SDG&E often works closely with the National Builders Institute (NBI) in developing best practices programs for future energy efficiency programs. Additionally, the program supports implementation of energy efficiency standards through strategic initiatives and/or training. The program targets all market segments.

6. Program Rationale

Saving energy and capturing societal benefits from California's diverse energy efficiency program are the primary reasons behind the Codes and Standards program. These advancements are achieved by assisting the state in modifying existing standards or setting new codes into law. Enhancements to codes and standards lead to significant energy and electric and gas demand savings by advancing the identification and early adoption of innovative technologies. Following this progression, C&S activities create synergies with other programs, such as Emerging Technologies, IOU energy efficiency equipment rebates, and energy audits.

7. Program Outcomes

The C&S program is designed to enhance state and federal appliance and building energy efficiency codes, standards and guidelines. In 2006 through 2008, the C&S program will specifically support implementation of the California Energy Commission's Title 24 Building Energy Efficiency Standards and revisions to Title 20 Appliance Efficiency Standards. CASE initiatives may target enhancements to Title 24 Building Energy Efficiency Standards rulemaking. Additionally, San Diego Gas and Electric has looked beyond Title 24 and Title 20 to urge those industries that are not currently regulated by this code to embrace "baseline" technologies and best management practices until they are formalized into industry-accepted standards.

8. Program Strategy

Program staff will assess technologies that present the strongest opportunities to direct and influence code enhancements with significant energy savings. C&S activities create synergies with other programs, such as Emerging Technologies, energy efficiency equipment rebates and energy audits. C&S program staff will work with the statewide Emerging Technologies program staff as they provide comprehensive analysis of a technology's market potential, market barriers, incremental cost, adoptability, life expectancy, and life cycle costs – all of which determine at which point the technology could drive future code modifications.

9. Program Objectives

Progress will be measured through the following two metrics:

- **SDG&E will initiate twelve (12) CASE studies.** The completion and presentation of a CASE study may take up to four years.
 - SDG&E is participating with the California Commissioning Collaborative for 2008 code enhancements including a potential CASE study on commercial HVAC systems for large buildings.

- A report will be completed that summarizes the status of each CASE study active.
- **SDG&E will conduct a variety training classes for builders and local code officials over the next 3 years.**
 - Classes will address enhancements to the standards or efficiency guidelines that customers may use to construct and install code-compliant buildings and appliances, respectively.

10. Program Implementation

Codes & Standards program managers will work closely with California Energy Commission (CEC) staff, and other codes and standards advocates, since advocacy efforts within the public rulemaking process are more effective if carried out in a coordinated manner. Prioritization of C&S activities will consider the applicable rulemaking proceedings; measure cost effectiveness, potential long-term energy savings, and demand savings of the enhancements. The IOU's C&S program staffs will meet throughout each year to coordinate inter-utility activities so that the limited program funding is leveraged efficiently through all of the IOU codes and standards efforts. Activities will also be coordinated with other IOU programs, as needed.

Pacific Gas & Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), and Southern California Gas Company (SoCalGas) will collectively consider CASE initiatives on various cost effective building and appliance energy efficiency measures. SDG&E will work with the CEC and the other IOU's to explore opportunities to reduce the use of non-energy efficient lighting systems. Implementation activities may include CASE studies, targeted training, or other strategic efforts. Additionally, projects such as scoping studies addressing retrofit residential and nonresidential building code opportunities, or advanced energy codes, may be included.

Reports on presentations to the CEC will be available through transcripts of CEC standards workshops, typically posted on the CEC web site after public hearings. The transcripts include comments made by the IOUs, stakeholders and advocates.

11. Customer Description

Through the statewide C&S program, expert testimony is provided to promote standards that approach best practices in energy efficiency. Key stakeholders impacted by these regulatory changes include equipment manufacturers, standards enforcement agencies, government institutions, agencies responsible for standard enforcement such as building departments, architects, engineers, designers, and building industry associations, among others.

12. Customer Interface

Interface with key stakeholders impacted by regulatory changes include manufacturers, government institutions, standard enforcement agencies of various jurisdictions, architects, engineers, and manufacturing/building associations, among other interested parties. This program is intended to inform the process of modifying existing or developing new energy efficiency measures for utility energy efficiency programs or third party efforts.

13. Energy Measures and Program Activities

The 2006-2008 program will focus on new opportunities to address retrofit residential and nonresidential building codes or advanced energy codes. Projects will share the objectives of informing state and federal agencies, verifying and enhancing the CEC's appliance energy efficiency and building code standards, and, in some cases, enhancing manufacturers' specifications and developing new statewide measures.

13.1. Prescriptive Measures

Not applicable.

13.2. Energy Savings and Demand Reduction Level Data

Not applicable.

13.3. Non-energy Activities (Audits, trainings, etc.)

One of the key goals of the C&S program is to conduct relevant training and/or seminars to help in the dissemination of code changes and enhancements. The target audience is code officials, builders, developers, engineers and equipment specifiers. Trainings are performed by internal labor and subcontracted labor.

13.4. Subcontractor Activities

Although subcontractors may be employed, none are specifically planned at this time.

13.5. Quality Assurance and Evaluation Activities

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs.

13.6. Marketing Activities

As an information-only program, marketing efforts are those conducted for information dissemination and training. SDG&E will deliver studies and reports to code-making bodies or organizations that would benefit from technology information as it relates to the code-making process. As seminars or training are conducted as a part of a C&S program, marketing materials promote the events through e-mail, web site access, newspaper and trade association advertisements and flyers mailings to the appropriate target audiences.

14. Conclusion

The statewide C&S program is an information-only program that advocates upgrades and enhancements in energy efficiency standards and codes. Program activities are conducted over long-term code upgrade cycles. Support of building code cycles, for example, may require four years of continuous support. CASE studies for energy efficiency improvements are performed for promising design practices and technologies and are presented to standards and code-setting bodies. The ultimate result of the C&S program is the actual codification of a variety of energy efficiency measures. These codified energy efficiency programs result in long term, sustainable energy savings written in the law and are applicable to all market segments.

	SDGE3004 CS-Codes & Standards Program
BUDGET	
Administrative Costs	\$ 545,603
Overhead and G&A	\$ 57,143
Other Administrative Costs	\$ 488,460
Marketing/Outreach	\$ 11,850
Direct Implementation	\$ 642,547
Total Incentives and Rebates	
User Input Incentive	\$ -
Direct Install Rebate	\$ -
Direct Install Labor	\$ -
Direct Install Materials	\$ -
Activity	\$ 642,547
Installation	\$ -
Hardware & Materials	\$ -
Rebate Processing & Inspection	\$ -
EM&V Costs	\$ -
Budget	\$ 1,200,000
Costs recovered from other sources	\$ -
Budget (plus other costs)	\$ 1,200,000
PROGRAM IMPACTS	
DEER kW (kW)	-
Net NCP (kW)	-
Net CEC (kW)	-
Annual Net kWh	-
Lifecycle Net kWh	-
Annual Net Therms	-
Lifecycle Net Therms	-
Cost Effectiveness	
TRC	
Costs	\$ 1,200,000
Electric Benefits	\$ -
Gas Benefits	\$ -
Net Benefits (NPV)	\$ -
BC Ratio	-
PAC	
Costs	\$ 1,200,000
Electric Benefits	\$ -
Gas Benefits	\$ -
Net Benefits (NPV)	\$ -
BC Ratio	-
Levelized Cost	
Levelized Cost TRC (\$/kWh)	
Discounted kWh	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -
Levelized Cost PAC (\$/kWh)	
Discounted kWh	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -
Levelized Cost TRC (\$/therm)	
Discounted Therms	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -
Levelized Cost PAC (\$/therm)	
Discounted Therms	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -

2006-2008 Energy Efficiency Concept Paper Statewide Emerging Technologies

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 388,960	\$ 388,960	\$ 388,960
Overhead	\$ 64,905	\$ 64,905	\$ 64,905
Direct Implementation			
Financial Incentives	\$ -	\$ -	\$ -
Activity	\$ 814,136	\$ 814,136	\$ 814,136
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ -	\$ -	\$ -
Rebate Processing and Inspection	\$ -	\$ -	\$ -
Marketing			
Program Specific Marketing	\$ 95,000	\$ 95,000	\$ 95,000
Statewide Marketing			
Total Program Budget	\$ 1,363,000	\$ 1,363,000	\$ 1,363,000

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
-	-	-	-	-	-	-	-	-

3. Program Cost Effectiveness

Attached

4. Program Descriptors

The statewide Emerging Technologies (ET) program is an information-only program that seeks to accelerate the commercial introduction of energy-efficient technologies, applications, and analytical tools that are not widely adopted in California.

5. Program Statement

The ET program is an information-only program that seeks to accelerate the introduction of innovative energy efficient technologies, applications and analytical tools that are not widely adopted in California. Emerging technologies may include hardware, software, design tools, strategies and services. There are a daunting amount of market barriers that must be overcome for a new energy efficient product to gain acceptance. As the typical product life cycle in Figure 1 illustrates, during initial marketing efforts, products accepted by “innovators” may fail to gain wider acceptance with more risk-averse customers, and the product’s adoption rate may fall off

What’s New for 2006-08?

- Increase in funding levels
- Increase focus on emerging technologies for longer term
- Opportunities to engage with CEC Gas-PIER program
- Speed to market will be emphasized

into “the chasm.” The ET program intends to help accelerate a product’s market acceptance through a variety of approaches, but mainly by reducing the performance uncertainties associated with new products and applications. The program targets all market segments. In addition, the program managers may investigate opportunities with industry, the California Energy Commission and others to develop new, innovative and cost effective energy efficient technology enhancements to existing products.

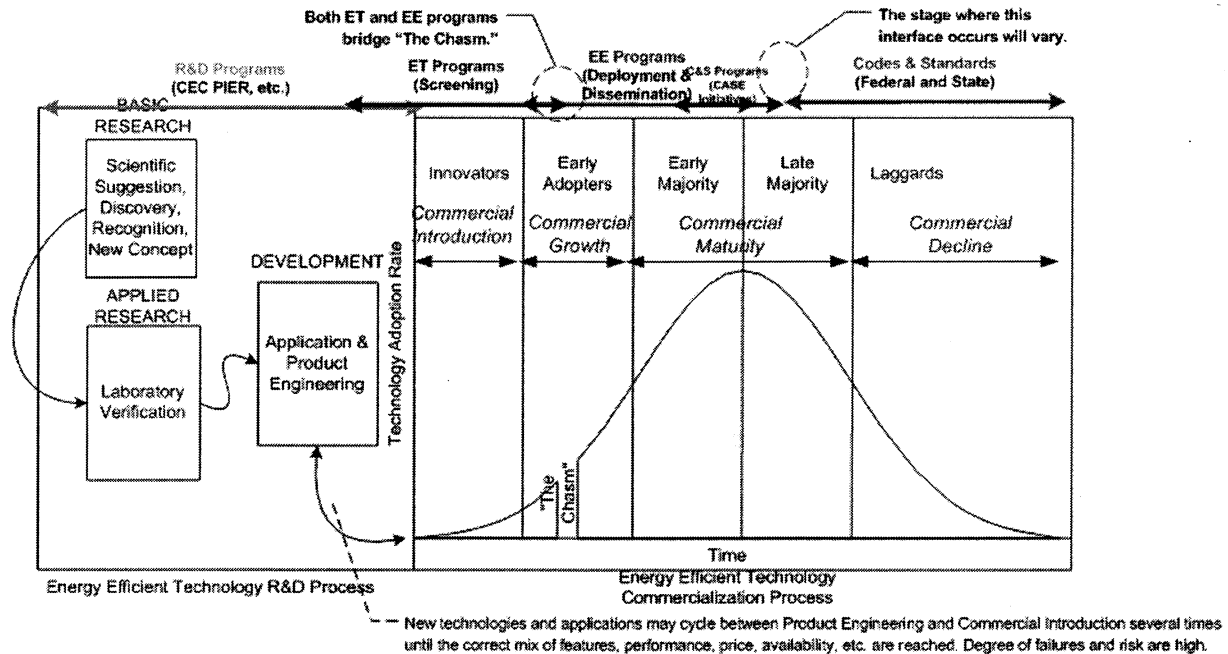


Figure 1. Energy Efficient Technology Commercialization Process

6. Program Rationale

The energy efficiency portfolio cannot remain static in the face of ever tightening energy markets and changing regulations. As the next generation of energy efficient technologies and applications emerge, they face market hurdles that may either delay their introduction or even consign them to failure. The ET program is a statewide Investor Owned Utility (IOU) effort that seeks to clarify and overcome many of those market barriers, and to raise the customer acceptance of innovative energy efficiency options that are not widely adopted in California. As shown in Figure 1, the program forms an important link between new energy efficient technologies and applications emerging from the Research & Development (R&D) cycle and their introduction into the broader marketplace. It also shows the relationship of the ET program, the energy efficiency programs, and the Codes and Standards (C&S) program over the product life of the technology.

The proposed 2006-2008 statewide ET program will be slightly different from the 2004 and 2005 program. In 2004 and 2005, the IOUs and the California Energy Commission’s (CEC) Public Interest Energy Research (PIER) staff met to discuss and coordinate statewide activities through the Emerging Technologies Coordinating Council (ETCC). Through PIER, the CEC helps to develop, test and demonstrate products up to the end of the R&D cycle. During the 2004-05 meetings, the PIER program managers and contractors reviewed

with the IOUs those projects and technologies that have advanced enough to warrant utility ET program consideration. At SDG&E, work is in progress on several ET assessment projects based on PIER technologies that are in their final development stages. In addition, ET program staff briefed and prepared materials for the energy efficiency program planners regarding emerging technology applications that may be considered ready for the 2006 - 2008 energy efficiency programs. The synergy between R&D programs, like PIER, and the utilities ET programs is working well and should continue. However, the overall objective for the energy efficiency programs is to verify the performance of new innovations for the integrated utility portfolio for resource acquisition programs. The success of the energy efficiency program will depend on the types of technologies that can achieve the greatest cost effective demand reduction and energy savings. A modified selection criterion was developed to meet the more challenging energy efficiency program objectives. It is also important that a balance of new innovations for various market segments, including residential, commercial, industrial and agricultural, be achieved.

7. Program Outcomes

The aim of the ET program is to develop all the necessary information required for the energy efficiency Program segment manager to employ the technology to achieve their energy savings goal. That information includes verified energy savings and demand reductions, market potential and market barriers, incremental cost, and the technology's life expectancy.

The outcome of each individual energy technology is very difficult to predict especially for high-risk projects. It is expected that some assessment projects may not turn out to be successful. Even unsuccessful assessments may provide insight so that improvement can be made in the future. The evaluations are critical to inform other EE program measure development and refined estimates and expectations of future energy savings.

8. Program Strategy

The utilities will deliver the program through custom demonstration projects, working with targeted "innovators" and coordinated efforts such as the ETCC ET database. Information transfer efforts disseminate project results through many different outlets, such as the Energy Centers, utility personnel and community organizations and the ETCC web site. These Information transfer activities leverage the utilities' overall energy efficiency communication efforts to disseminate information resources such as reports, fact sheets, design methods and tools developed through the demonstration projects.

9. Program Objectives

The ET program will initiate a variety of new Emerging Technology Application Assessments during 2006 - 2008. New technologies will be developed depending upon the market potential of the innovation, market barriers, incremental cost, life expectancy of the technology, the cost of the assessment, and the time required for the assessment. Since the energy efficiency Program managers are the recipients of those technologies, they will be involved in the project selection process. In order to guarantee a truly integrated portfolio, it is necessary to assess and evaluate technologies for all market segments although some of them may seem to offer less savings than others.

Assessments initiated in prior program years will continue until completion. Project results and information will be made available to targeted markets and the utilities' energy efficiency program planners will be briefed on emerging technology applications that may be considered ready for future efficiency program efforts. Once an assessment project concludes and the results are understood, many of the demonstrated applications become part of the portfolios of mainstream energy efficiency programs, form the basis of future energy-related codes and standards, or are adopted as standard design practice in the marketplace and with industry.

The statewide Emerging Technologies Program progress will be measured through the following three annual metrics:

- SDG&E will initiate 20 new technology assessments over the course of the 3-year period from January 2006 through December 2008.
- SDG&E will collaborate with the other participating utilities to create and maintain a new and more useful database for reporting and transferring information connected with ET program activities. It will succeed that which is currently available on the ETCC website (www.ca-etcc.com) and each IOU as well as the CEC will be responsible for providing the project information to the contractor who will incorporate it into the new database.
- SDG&E will continue to be a working member of the Emerging Technologies Coordinating Council and target participation in 4 quarterly meetings per year to ensure adequate inter-utility communication and cooperation. The ETCC will assess whether energy efficient emerging technology applications have reached a sufficient stage of maturity for the utilities to consider them in the statewide program efforts. In addition, to better monitor PIER progress, utility program staff members will attend PIER project meetings as often as possible. This will allow the utilities to remain current of PIER project changes and developments

After the emerging technologies are assessed, it is important to have the information transferred to the energy efficiency program managers as well as the customers. Information Transfer efforts disseminate project results through many different outlets, including the Energy Centers, utility personnel, community organizations and other entities. These Information Transfer activities leverage the utilities' overall energy efficiency communication efforts to disseminate information resources such as reports, fact sheets, design methods and tools developed through the demonstration projects.

10. Program Implementation

The Emerging Technologies program consists of two parts: Assessment and Information Transfer, and the ETCC. Assessment and Information Transfer focuses on analysis of promising, early prototypes or commercially available technologies which have not yet obtained adequate penetration or acceptance in the marketplace. Emerging Technologies may include hardware, software, design tools, strategies and services. Part of the assessment may include field demonstrations, conducted at either customer sites or in controlled environments, which provide design and performance information, and verify

novel energy efficient systems. Verification helps to reduce market barriers inhibiting wider acceptance of a technology. Demonstration projects help to measure, verify, analyze, and quantify the potential demand and energy savings. Small scale market potential studies will aid in understanding and document customer acceptance of specific applications in different market segments better informing the process to create and prioritize a new EE measure. Information transfer disseminates the results of emerging technology application assessment projects in a way that is customized to reach the most appropriate target markets as we work with the market segment program planners.

The ETCC is a statewide information exchange and coordination effort among San Diego Gas & Electric (SDG&E), Southern California Gas (SCG), Pacific Gas & Electric (PG&E), Southern California Edison (SCE), and the CEC PIER programs. The Public Interest Energy Research (PIER) programs, like other public and private R&D efforts, develops, tests, and demonstrates prototype products. The utilities ET efforts form an important link in the commercialization of emerging energy efficient natural gas and electric technologies and their applications. Program efforts to select technology applications for assessment projects include working with the CEC PIER program, members of the research and design communities, manufacturers, energy efficiency advocates, and public entities such as Electric Power Research Institute (EPRI), Gas Technology Institute (GTI), universities, E-Source, California Institute for Energy Efficiency (CIEE), The Air-Conditioning and Refrigeration Institute (ARI), American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), Illuminating Engineering Society (IES), Institute of Electrical and Electronics Engineers (IEEE), national laboratories, Department of Energy (DOE), Environmental Protection Agency (EPA), NASA, engineering firms, industry and trade groups and customers. Contacts with these groups through both the individual utilities and the CEC PIER program constitute a large part of the public input the ETCC receives concerning energy efficient emerging technologies.

The ETCC will hold quarterly meetings to coordinate project activities, exchange information about specific customer projects and technologies, and discuss ways to enhance the utilities' statewide ET Program efforts and collaboration with the CEC PIER, the ETCC website and the ET database. During ETCC business meetings, discussions concerning ongoing and/or proposed projects at times involve privileged customer information, business strategic and operational details, or privileged manufacturer product details that are too sensitive to discuss in an open forum. These exchanges are necessary to ensure truly effective coordination and collaboration effort between the utilities and the CEC PIER. For this reason, ETCC business meetings will not be open to the general public. At times, the ETCC may invite speakers to a portion of a work meeting to present advances in energy efficient emerging technologies that fit within the context and interests of the existing statewide ET program.

Each utility's program consists of activities that may be coordinated with other utilities' approved ET programs and the CEC, and activities that are unique to each utility service territory and customer base. The efforts that each utility undertakes, as part of the statewide ET program, will be guided and prioritized based on the following criteria: customer needs, coordinated ETCC activities, technology opportunity and readiness, potential cost effective

energy and demand savings, potential market size and likely adoption rate estimate, approved program funding levels, and other relevant objectives.

The program will focus on new energy efficient emerging technology assessment projects in 2006 through 2008. The ET Program efforts form an important link between ongoing R&D efforts on energy efficient technology applications and their commercialization. Applications mature out of the R&D cycle at different times and are not always available for consideration during initial program planning efforts. Thus, program staff works to remain informed on a broad range of emerging technology applications from many information sources, and any of the technologies may prove to be a viable project candidate. Currently, some of the technology areas that SDG&E may assess through the program and coordinate through the ETCC, include, but are not limited to:

- Advanced motor and compressor technologies for HVAC and refrigeration equipment
- Intelligent controls for industrial equipment
- Building system diagnostics that advance toward ‘continuous’ commissioning
- Advanced lighting system designs and controls for many different markets including schools and hotels. This also includes advanced solar pathway lights as a replacement for outdoor lighting.
- New lighting products including integrated solar and LED lighting
- New water heating products and advanced distribution systems
- Emerging technologies connected with cost effective solar energy
- Assessment of “Cool Roof” technologies
- Accelerated efforts to lay the groundwork for ENERGY STAR[®] specifications for televisions and set top boxes. Along with these efforts will come the encouragement for increased energy efficiency and corresponding labeling of these products
- “Key activated” lighting and HVAC systems in hotel rooms

It is important to note that the less mature a technology is, the higher the risk that the technology may fail in an application. The identified risks are among the many factors that the utilities use to select technology applications for demonstration projects and to establish project contingency requirements. Starting in 2006, SDG&E may direct some resources toward market research to achieve a better initial understanding of a technology’s market potential in order to improve the overall selection process. The significant increase in budget requested for program years 2006 through 2008 will be used to improve the ETCC website and ET database, increase assessment goals and information transfer activities, comply with added program tracking requirements and increased risks due to working with less mature products emerging from research. In past program years, the estimated specific costs of projects undertaken are reported in quarterly workbooks once the projects are committed. These costs will continue to be reported as required in the reporting workbooks. Likewise, narratives discussing initiated assessment projects and their progress are provided in past quarterly narrative reports. These narratives will be expanded to include projects initiated in previous program years. As assessment projects are concluded, their results will be summarized in the annual report narratives including which associated products have since been incorporated into the utilities’ energy efficiency program efforts.

11. Customer Description

Customers from all markets segments are eligible to host emerging technology application demonstration projects. In general, the information the program generates through its demonstration activities benefits all customers. One of the aims of an ET program is to explore the extent an application of a new technology has in various market segments, in order to characterize the widest possible deployment. Thus, the utilities seek opportunities to host appropriate demonstration projects at hard-to-reach customer sites.

The IOUs implement the program through custom demonstration projects. For projects that require a customer demonstration site, the program works with customers that are willing to accept the potential risks and expenses associated with relatively new energy efficient technology applications. Residential and non-residential customers from all market segments are potential participants. Figure 2 illustrates the general project and customer selection process. Customer site demonstration projects may come about in one of two ways:

- *Customer "Pull."* A utility account representative may approach the program staff on behalf of a customer interested in pursuing energy efficiency. The ET program staff will help the account representative address the customer's needs, and at the same time, consider a range of potential energy efficient emerging technology applications.

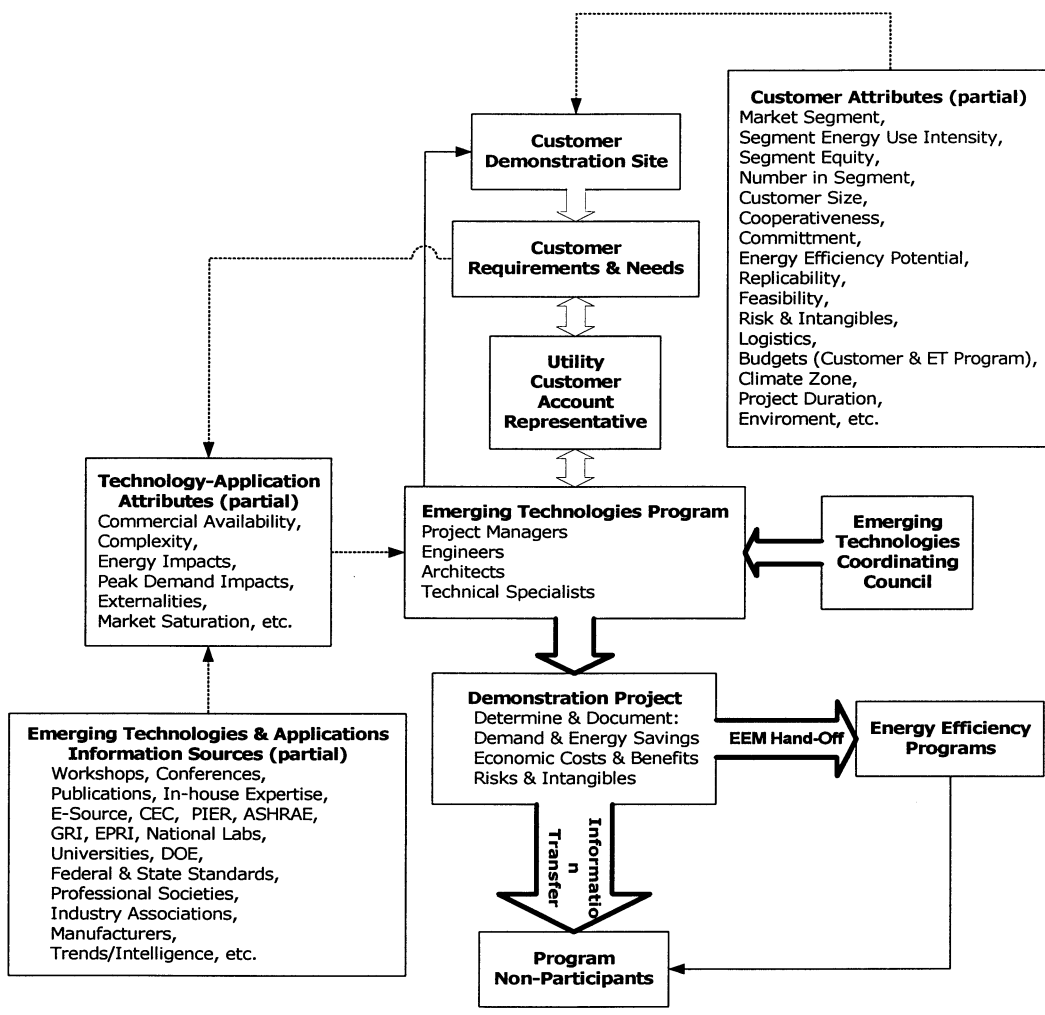


Figure 2. General Emerging Technologies Program Process

Technology "Push." The second manner that a project may come about is when a significant new technology application emerges. ET program staff then approach the utility account representatives for a particular market segment, inform them about the new technology application, and ask them to help identify a potential demonstration site from among their customers. The program follows a targeted marketing approach to work with "innovators." These "innovators" may further influence other customers. Note that the utility's customer account representative plays an important role in the overall process. For those projects that do not require a field demonstration at a customer site, the program staff seeks to frame the project targeting customer's needs and requirements. This helps ensure that project objectives are aligned with customer needs and expectations.

Before a customer site demonstration project can take place, a legal agreement acceptable to both the customer and the utility is developed, negotiated, and signed. These agreements specify the terms of the projects, maximum duration, dispute resolution methods, termination provisions, general liability, etc. It is important to note that some

demonstration projects may require up to four years to complete, commencing on the date an agreement is signed with a customer. The time required to complete a project will vary due to how complex a new technology application is, construction schedules, building and process commissioning, logistics, etc. *Speed to market will be emphasized in this program wherever possible.*

12. Customer Interface

Interaction with customers is unique to this program and typically results from the discovery from researchers, or utility staff that a customer is willing to take a higher level of risk and serve as a test bed for a new or improved product or process control scheme.

Other customers will benefit at a later stage through the different channels for information dissemination (e.g. workshops, training seminars, visits to the demonstrations, literature, etc.). Predominantly, this program is meant to inform the process of modifying existing or developing new energy efficiency measures for utility energy efficiency programs. It is usually by this method that the successes of the ETP will be made known to the residential commercial and industrial energy customers.

13. Energy Measures and Program Activities

13.1. Measures Information

Although this program does not create immediate short-term energy savings, it provides a clear, logical, and verifiable link between program activities and eventual energy savings.

The ET program performs assessments of emerging technologies. The number of emerging technology assessments initiated each year will be reported to the CPUC and can be verified. Some of those assessments may include performance of field demonstrations at customer sites. These field demonstrations may take as long as four years to complete, especially at new customer sites. The progress of the project will be reported throughout the funding cycle.

13.2. kWh Level Data

Not applicable.

13.3. Non-energy Activities

13.4. Subcontractor Activities

Subcontractors may be used to perform the actual construction and installation of the equipment and hardware at customers' demonstration sites. They may also be employed to help develop market potential data

13.5. Quality Assurance and Evaluation Activities

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs.

13.6. Marketing Activities –

ET will be marketed through custom demonstration projects, working with targeted “innovators,” and coordinated efforts like the ETCC ET database.

Information Transfer efforts disseminate project results through many different outlets, including the Energy Centers, utility personnel, community organizations, etc. These Information Transfer activities are typically specific to the utility and the circumstances of the product, manufacturer, market and potential. We leverage the utilities' overall energy efficiency communication efforts to disseminate information resources such as reports, fact sheets, design methods and tools developed through the demonstration projects

14. Conclusion

The statewide ET program is an information-only program that seeks to accelerate the introduction of innovative energy efficient technologies, applications and analytical tools that are not widely adopted in California. Emerging technologies may include hardware, software, design tools, strategies and services. There are a daunting amount of market barriers that must be overcome for a new energy efficient product to gain acceptance. The ET program intends to help accelerate a product's market acceptance through a variety of approaches, but mainly by reducing the performance uncertainties associated with new products and applications; and by informing the process that could include them in new or modified energy efficiency Program measures. This program targets all market segments.

	SDGE3011 ETP-Emerging Tech Program
BUDGET	
Administrative Costs	\$ 1,361,594
Overhead and G&A	\$ 194,714
Other Administrative Costs	\$ 1,166,880
Marketing/Outreach	\$ 285,000
Direct Implementation	\$ 2,442,407
Total Incentives and Rebates	
User Input Incentive	\$ -
Direct Install Rebate	\$ -
Direct Install Labor	\$ -
Direct Install Materials	\$ -
Activity	\$ 2,442,407
Installation	\$ -
Hardware & Materials	\$ -
Rebate Processing & Inspection	\$ -
EM&V Costs	\$ -
Budget	\$ 4,089,001
Costs recovered from other sources	\$ -
Budget (plus other costs)	\$ 4,089,001
PROGRAM IMPACTS	
DEER kW (kW)	-
Net NCP (kW)	-
Net CEC (kW)	-
Annual Net kWh	-
Lifecycle Net kWh	-
Annual Net Therms	-
Lifecycle Net Therms	-
Cost Effectiveness	
TRC	
Costs	\$ 4,089,001
Electric Benefits	\$ -
Gas Benefits	\$ -
Net Benefits (NPV)	\$ -
BC Ratio	-
PAC	
Costs	\$ 4,089,001
Electric Benefits	\$ -
Gas Benefits	\$ -
Net Benefits (NPV)	\$ -
BC Ratio	-
Levelized Cost	
Levelized Cost TRC (\$/kWh)	
Discounted kWh	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -
Levelized Cost PAC (\$/kWh)	
Discounted kWh	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -
Levelized Cost TRC (\$/therm)	
Discounted Therms	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -
Levelized Cost PAC (\$/therm)	
Discounted Therms	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -

2006-2008 Energy Efficiency Concept Paper Upstream Lighting Program

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 125,067	\$ 131,807	\$ 143,361
Overhead	\$ 244,989	\$ 267,877	\$ 290,841
Direct Implementation			
Financial Incentives	\$ 4,657,919	\$ 5,090,200	\$ 5,532,088
Activity	\$ 38,898	\$ 48,353	\$ 49,803
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ -	\$ -	\$ -
Rebate Processing and Inspection	\$ 32,550	\$ 33,527	\$ 34,533
Marketing			
Program Specific Marketing	\$ 45,344	\$ 53,661	\$ 57,045
Statewide Marketing			
Total Program Budget	\$ 5,144,767	\$ 5,625,425	\$ 6,107,671

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
16,899	92,182,167	-	18,180	98,934,369	-	19,418	105,393,056	-

3. Program Cost Effectiveness – Attached

4. Program Descriptors

The Upstream Lighting program provides rebate(s) to consumers via manufacturer-to-retailer discounts or buy-downs to motivate consumers to purchase and install qualifying energy-efficient lighting products. The program targets single-family homeowners, renters and multi-family tenants, and will offer the following in 2006-2008:

Screw-in CFLs Standard	
Specialty CFLs and Fixtures	
Interior and Exterior Fixtures	
Table & Floor Lamps, Torchieres	
Night Lights (including LED)	NEW
Interior LEDs (non Night lights)	NEW
Cold Cathode	NEW

5. Program Statement

Residential customers are often reluctant to purchase energy efficient lights due to the comparatively high initial cost, a steeper learning curve, limited availability, and quality concerns. Lighting incentives and promotions influence customers to purchase energy saving lighting products at retail outlets and install them in homes and small businesses.

Although California continues to be a forerunner in CFL sales outpacing the rest of the nation¹, there is a huge potential to expand market share for energy efficient lighting.

The current CFL market share for Residential Lighting is between 3-4% and CFL specialty bulbs such as globes, dimmable and 3-way bulbs are less than 1%. Even though the energy efficient lighting market is growing with a greater variety of bulbs, smaller size bulbs, dimmable bulbs and covered bulbs as well as more attractive fixtures and lamps, these products are not widely available in the retail market. The demand by retailers and manufacturers lighting program participation far exceeds the supply each year, indicating a continued, strong demand for future CFL programs.

6. Program Rationale

There continues to be a need to provide incentives for energy efficient lighting in order to support technological advances, product availability and to continue to stimulate/create consumer demand. The Upstream program features discounted ENERGY STAR[®] products, and will introduce new and advanced lighting technologies to the market as they become available. For example, 50 % of all light bulbs are purchased in Grocery/Drug stores. Of the 50% purchased, less than 1% of those were CFLs prior to 2004. During 2004 and 2005, the statewide utility programs have increased sales of CFLs in Grocery/Drug to 3-5%. The program reduces customer initial cost, increases product availability at the retail level, and strongly influences manufacturers to improve product quality. This program element provides maximum ease for customers to participate. To continue the success of the Lighting program going forward, a “Whole House” approach will be stressed. Incentives for reflector bulbs, recessed cans, globes, decorative lighting and dimmable bulbs as well as the introduction of LED lights, LED Christmas lights, and Cold Cathode bulbs will help to provide customers energy efficient alternatives to incandescent lighting. The addition of these types of lighting will open up additional areas of the home such as bathrooms and kitchens. It will address accent lighting for such areas as dining rooms, cabinets and outdoor landscaping. SDG&E will also increase the amount of rebates provided for pin-based fixtures, which include fan lighting kits.

What's New for 2006-08?

- Innovation
 - Introduce new technologies to the retail market !
 - Introduce pin-based CFL table lamps, desk lamps, and non-torchiere floor lamps!
 - Increase variety of screw-in lamps –such as dimmable, A-lamp and globes
- Other Program Improvements
 - Capture valuable customer feedback through use of bounce back cards!

¹ The Statewide Residential Market Share Tracking Studies have shown over the years while the share of CFL sales has been rising, in California compared to the rest of the nation, the numbers still hover around 14% - California Lamp Trend 2003

7. Program Outcomes

SDG&E will expand by 20% its lighting program in Grocery/Drug and with non-traditional retail establishments by 2008. In the next three years, SDG&E would also strive to expand the energy efficient lighting market share by 10%. SDG&E will continue to work with retailers to stock specialty CFLs so that customers have access to energy efficient lighting from a variety of uses in their home.

SDG&E will continue to help to increase the quality energy efficient lighting by supporting ENERGY STAR's plans to establish 3rd party testing of products. Also, continue to support new technologies as they are introduced.

8. Program Strategy

The program provides incentives in two ways 1) to the retailer at the wholesale level via the manufacturer discount and 2) to the retailer directly via a discount at the register. The incentives are tiered by product type and lumen range in the form of instant price discounts.

Flexibility for trying new approaches and penetrating new markets will help expand the base for customer participation. Currently, marketing is directed to manufacturers and retailers. Participation in the program is handled through an open RFP to manufacturers and retailers. All proposals are evaluated based on variety of product, areas of distribution, and type of retailer targeted. Additional strategies incorporate marketing methods such as:

- Bill Inserts
- In-store promotional materials
- Direct mailings
- Promotional sales events
- Product competitions

The goal is to achieve a significant increase in the acceptance of energy efficient lighting in lieu of less efficient sources via market penetration activities. The customer can easily participate in the program and receive immediate benefits as soon as the measure is installed.

Alternative inducements will be used, such as customized spiffs or dealer incentives for retailers to: 1) increase in-store promotional messaging, , 2) conduct sales events, and 3) provide sales or customer-level data. Efforts will also be made to apply higher (or in some cases lower) customer discount levels in combination with special promotional activities. One example involves incentive adders for specialty CFL bulbs. The program will also include a multiple retailer requests for enhanced promotional and educational involvement combined with split or redirected incentives. Exchange/Turn-in outreaches for pin-based plug-in fluorescent products such as torchieres and table lamps will feature subsidized full replacement of incandescent products. These new approaches both utilize accepted best practices and pioneer new ones.

In 2006-2008, new products such as pin-based CFL table lamps, desk lamps, and non-torchiere floor lamps will be introduced. These added products are in the early stages of market acceptance.

9. Program Objectives

By maximizing our relationship with CFL/Fixture manufacturers and distributors, SDG&E can continue to transform the CFL residential consumer market place. By the introduction of new products through our program at a reasonable cost, SDG&E plans to increase consumer awareness and work towards increasing sales of CFLs during the next three years. SDG&E intends to aggressively seek new measures for implementation as technologies currently on the horizon become available for incorporation into the program. Some lighting products listed might not be offered in 2006, but could be offered in 2007 or 2008. In addition:

- Increase CFL product availability to non-traditional retailers.
- Increase availability and sales of new CFL products (globe, A lamps dimmable lamps and reflectors) throughout the service territory by 2007.
- Increase the amount of rebates available for pin-based fixtures starting in 2006.
- Introduce LED lighting and cold cathode lighting rebates starting in 2006 with the goal of increasing product availability in the market by the end 2008. Work with manufacturers, CEE and Energy Star to ensure that product quality is acceptable to consumers to increase customer acceptance.

10. Program Implementation

Program is implemented via an RFP promotional announcement to manufacturers and retailers. Funds are allocated to participants based on their proposals in response to the RFP. There will continue be two methods of discounting the products at the time of sale.

1) Wholesale discount to the retailer - In this case the retailer discounts the product by the amount of the incentive but the manufacturer receives the incentive payment. The incentives are paid to manufacturers based on verification of delivery to the stores and product sold.

2) Point of sale discount provided by the retailer - In this case the retailer signs an agreement with the utility to provide a discount at the register. The incentive is paid directly to the retailer based sales information.

Products are displayed with labeling and/or signage indicating discounts are provided through SDG&E. The manufacturer and retailer participate to promote the discounted products through advertising, circulars, and in-store materials. In most cases, the lighting manufacturer reduces the wholesale price to the retailer who passes it on to the customer in the form of a POS discount. Sometimes retailers apply POS discounts directly to products purchased at the normal wholesale price.

The incentive levels are such that products can competitively compete with its inefficient counterpart, while providing retail price points that are attractive to the consumer. The current incentive levels provide for continued growth and sustained momentum in the CFL market during the IOU's promotional periods. Structured incentive levels allows for a diversified measure portfolio.

Specialized promotions will occur at various times and can be customized to locales and market channels. They can be mass customer promotions or could be targeted to manufacturers and retailers of specific kinds of products. Examples include exchange/turn-in events and outreach for torchiere, table, desk, and floor lamps, specialty bulb promotions, targeted bill inserts, direct mailings, up-selling promotions, internet campaigns, and efforts to open new long-term sales channels. All program results will be tracked on an ongoing basis and reported according to the protocols reflected in both the program workbook and supporting work papers.

11. Customer Description

This program is a crosscutting program that targets customers who shop at home improvement stores such as single-family homeowners, renters and multi-family tenants as well as some apartment and small business owners.

12. Customer Interface

SDG&E will continue to provide opportunity to expand manufacturer participation in the program via our request for proposal (RFP) promotion to manufacturers and retailers. We will continue to work with the other IOUs and municipal utilities to maintain program consistency on a statewide basis. The incentives are provided to the customer through a discounted price or a discount at the register so there is no application needed.

For lighting measures participating is as easy as putting a program product in the shopping cart and taking it to the register for check out. In locales where customers cannot find program-discounted product in stores, internet sales will be available as will centralized toll free phone ordering directly from retailers and manufacturers.

In addition, customer bounce back cards will be added to the product packaging to monitor customer behavior and to capture comments regarding the product.

13. Energy Measures and Program Activities

13.1. **Prescriptive Measures** See SDG&E June 1, 2005 Filing Workbook

13.2. **KWh Level Data** See SDG&E June 1, 2005 Filing Workbook

13.3. **Non-energy Activities** - None

13.4. **Subcontractor Activities** - None

13.5. **Quality Assurance and Evaluation Activities**

On site inspections of retailer displays and products will be conducted on a regular basis to ensure program compliance and execution. In addition, customers will receive a bounce-back card attached to the product to fill out and return. In addition, SDG&E serves on quality assurance advisory groups such as those that interface with the DOE and EPA's Third Party Testing program

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs

13.6. **Marketing Activities**

On a national level, SDG&E will continue to support ENERGY STAR products and coordinate with the ENERGY STAR lighting campaign such as, "Change A Light, Change The World", to maximize marketing efforts. On a state level, SDG&E will coordinate statewide promotions with Flex Your Power advertising and the use of their POP materials in retail stores.

SDG&E will continue to participate in ENERGY STAR and CEE sponsored partnership meetings to foster relationships with manufacturers and retailers.

14. Conclusion

The Upstream Lighting program supports the reduction of energy use per capita in California while helping to achieve both the objectives of the State's Energy Action Plan and the emphases of the CPUC. It accomplishes this by affecting a greatly increased level of participation in energy efficiency practices.

The program stimulates the availability of quality energy efficient lighting products and encourages its use at a much faster rate than would otherwise take place. It also accelerates the development of new high efficiency technology by reducing the initial cost. The installation of energy efficient lighting in the home saves money for customers, improves the economy, and reduces greenhouse gas emissions to the environment.

	SDGE3016 LIT-Upstream Lighting Program	
BUDGET		
Administrative Costs	\$	1,203,942
Overhead and G&A	\$	803,708
Other Administrative Costs	\$	400,235
Marketing/Outreach	\$	156,050
Direct Implementation	\$	15,517,871
Total Incentives and Rebates		
User Input Incentive	\$	-
Direct Install Rebate	\$	15,280,206
Direct Install Labor	\$	-
Direct Install Materials	\$	-
Activity	\$	137,054
Installation	\$	-
Hardware & Materials	\$	-
Rebate Processing & Inspection	\$	100,610
EM&V Costs	\$	-
Budget	\$	16,877,863
Costs recovered from other sources	\$	-
Budget (plus other costs)	\$	16,877,863

PROGRAM IMPACTS		
DEER kW (kW)		54,497
Net NCP (kW)		40,209
Net CEC (kW)		64,104
Annual Net kWh		296,509,592
Lifecycle Net kWh		2,903,080,838
Annual Net Therms		-
Lifecycle Net Therms		-
Cost Effectiveness		
TRC		
Costs	\$	33,877,097
Electric Benefits	\$	175,282,417
Gas Benefits	\$	-
Net Benefits (NPV)	\$	141,405,319
BC Ratio		5.17
PAC		
Costs	\$	15,365,326
Electric Benefits	\$	175,282,417
Gas Benefits	\$	-
Net Benefits (NPV)	\$	159,917,090
BC Ratio		11.41
Levelized Cost		
Levelized Cost TRC (\$/kWh)		
Discounted kWh		1,924,413,565
Cost	\$	0.0176
Benefits	\$	0.0911
Benefit-Cost	\$	0.0735
Levelized Cost PAC (\$/kWh)		
Discounted kWh		1,924,413,565
Cost	\$	0.0080
Benefits	\$	0.0911
Benefit-Cost	\$	0.0831
Levelized Cost TRC (\$/therm)		
Discounted Therms		-
Cost	\$	-
Benefits	\$	-
Benefit-Cost	\$	-
Levelized Cost PAC (\$/therm)		
Discounted Therms		-
Cost	\$	-
Benefits	\$	-
Benefit-Cost	\$	-

SDGE Upstream Lighting Program

Year	Total Budget	Total Incentives	Admin Budget	Net kWh	Net Therms	Net kW
2006	\$ 5,144,767	\$ 4,657,919	\$ 486,848	92,182,167	-	16,899
2007	\$ 5,625,425	\$ 5,090,200	\$ 535,225	98,934,369	-	18,180
2008	\$ 6,107,671	\$ 5,532,088	\$ 575,584	105,393,056	-	19,418

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	235019	Lighting - CFL Bulb (14 watt)	35	-	0.01	0.8	Bulb	9	30,000	\$ 1.25	\$ 3.73	163	848,634	-
2006	235021	Lighting - CFL Bulb (15 watt)	35	-	0.01	0.8	Bulb	9	-	\$ 1.25	\$ 4.04	-	-	-
2006	235023	Lighting - CFL Bulb (20 watt)	42	-	0.01	0.8	Bulb	9	208,000	\$ 1.75	\$ 4.66	1,349	7,035,051	-
2006	235025	Lighting - CFL Bulb (25 watt)<1,600 Lumens)	38	-	0.01	0.8	Bulb	9.3	-	\$ 1.75	\$ 5.03	-	-	-
2006	235027	Lighting - CFL Bulb (30 watt)	54	-	0.01	0.8	Bulb	9	22,500	\$ 2.00	\$ 6.61	186	968,549	-
2006	235029	Lighting - CFL Bulb (32 watt)	57	-	0.01	0.8	Unit	8	-	\$ 2.00	\$ 4.28	-	-	-
2006	235031	Lighting - CFL Bulb (<= 12 watt)	13	-	0.00	0.8	Unit	8	-	\$ 2.00	\$ 4.28	-	-	-
2006	235033	Lighting - Hardwired Fluorescent Lighting Fixtures (ext) 13 watt	42	-	-	0.8	Unit	16	-	\$ 5.00	\$ 13.00	-	-	-
2006	235035	Lighting - Hardwired Fluorescent Lighting Fixtures (ext) 27 watt	83	-	-	0.8	Unit	16	-	\$ 10.00	\$ 19.00	-	-	-
2006	235037	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 13	21	-	0.00	0.8	Bulb	16	-	\$ 5.00	\$ 17.97	-	-	-
2006	235039	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 16 W	34	-	0.01	0.8	Bulb	16	-	\$ 5.00	\$ 19.17	-	-	-
2006	235041	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 25 < 1,600 Lumens - pin based	38	-	0.01	0.8	Bulb	16	-	\$ 10.00	\$ 24.27	-	-	-
2006	235043	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 30	69	-	0.01	0.8	Bulb	16	50,000	\$ 10.00	\$ 24.74	531	2,767,284	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Unit Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	235045	Lighting - Torchiere - Energy Star (55/70watt averaged -) Retail	106.1413146	0	0.0255	0.8	Unit	16	0	\$ 10.00	\$ 22.63	-	-	-
2006	235052	Lighting - CFL Bulb (>39 watt)	87.381	0	0.021	0.8	Unit	8	0	\$ 2.50	\$ 4.28	-	-	-
2006	235057	Lighting - CFL Bulb (13 watt >= 800 Lumens)	36.12843	0	0.00692874	0.8	Bulb	9.3	448920	\$ 1.25	\$ 3.42	2,488	12,975,020	-
2006	235061	Lighting - CFL Bulb (18 watt >= 1,100 Lumens)	43.81533	0	0.00840294	0.8	Bulb	9.3	425000	\$ 1.75	\$ 4.14	2,857	14,897,212	-
2006	235063	Lighting - CFL Bulb (23 watt)	59.18913	0	0.01135134	0.8	Bulb	9.3	500000	\$ 1.75	\$ 4.58	4,541	23,675,652	-
2006	235065	Lighting - Hardwired Fluorescent Lighting Fixtures (ext) 18 watt	47.523	0	0	0.8	Unit	16	0	\$ 5.00	\$ 19.00	-	-	-
2006	235067	Lighting - Hardwired Fluorescent Lighting Fixtures (ext) 18 watt >= 1,100 Lumens	64.4955	0	0	0.8	Unit	16	12000	\$ 5.00	\$ 21.63	-	619,157	-
2006	235069	Lighting - Hardwired Fluorescent Lighting Fixtures (ext) 20 watt	62.2325	0	0	0.8	Unit	16	0	\$ 10.00	\$ 19.00	-	-	-
2006	235071	Lighting - Hardwired Fluorescent Lighting Fixtures (ext) 65 watt	152.75	0	0	0.8	Bulb	16	35000	\$ 10.00	\$ 41.26	-	4,277,000	-
2006	235073	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 18 W< 1,100 Lumens	32.28498	0	0.00619164	0.8	Bulb	16	0	\$ 5.00	\$ 19.96	-	-	-
2006	235074	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 18 W >= 1,100 Lumens	43.81533	0	0.00840294	0.8	Bulb	16	0	\$ 10.00	\$ 20.28	-	-	-
2006	235076	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 26 < 1,600 Lumens	37.66581	0	0.00722358	0.8	Bulb	16	0	\$ 5.00	\$ 23.15	-	-	-
2006	235079	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 26 >= 1,600 Lumens	56.88306	0	0.01090908	0.8	Bulb	16	0	\$ 10.00	\$ 23.43	-	-	-
2006	235081	Lighting - CFL Bulb (26 watt < 1,600 Lumens)	37.66581	0	0.00722358	0.8	Bulb	9.3	0	\$ 2.00	\$ 5.26	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	235083	Lighting - CFL Bulb (26 watt>=1,600 Lumens)	56.88306	0	0.01090908	0.8 Bulb	9.3	40000	\$ 2.00	\$ 5.26	349	1,820,258	-	
2006	235085	Lighting - CFL Bulb (25 watt>=1,600 Lumens)	57.65175	0	0.0110565	0.8 Bulb	9.3	375000	\$ 2.00	\$ 5.03	3,317	17,295,525	-	
2006	235086	Lighting - LED Bulbs 3w	24.46	0	0.0067	0.8 Unit	8	100000	\$ 1.25	536	1,956,800	-		
2006	235091	20W CFL Table Lamp	41	\$ -	\$ 0.01	0.8 Bulb	16	8000	\$ 5.00	\$ 104.85	51	263,641	-	
2006	235092	25W CFL Table Lamp	56	\$ -	\$ 0.01	0.8 Bulb	16	8000	\$ 5.00	\$ 72.82	69	359,510	-	
2006	235093	15 Watt Integral CFL (Reflector)	35	\$ -	\$ 0.01	0.8 Bulb	9.3	50000	\$ 1.00	\$ 4.04	265	1,383,642	-	
2006	235094	15 Watt Integral CFL (Dimmable)	35	\$ -	\$ 0.01	0.8 Bulb	9.3	5000	\$ 2.75	\$ 4.04	27	138,364	-	
2006	235095	15 Watt Integral CFL (Globes)	35	\$ -	\$ 0.01	0.8 Bulb	9.3	6000	\$ 2.75	\$ 4.04	32	166,037	-	
2006	235096	18 Watt Integral CFL - (Reflectors)	183	\$ -	\$ 0.03	0.8 Bulb	2.1	5015	\$ 1.25	\$ 4.98	140	734,831	-	
2007	235019	Lighting - CFL Bulb (14 watt)	35	\$ -	\$ 0.01	0.8 Bulb	9	35000	\$ 1.25	\$ 3.73	190	990,073	-	
2007	235021	Lighting - CFL Bulb (15 watt)	35	\$ -	\$ 0.01	0.8 Bulb	9	0	\$ 1.25	\$ 4.04	-	-	-	
2007	235023	Lighting - CFL Bulb (20 watt)	42	\$ -	\$ 0.01	0.8 Bulb	9	250000	\$ 1.75	\$ 4.66	1,622	8,455,590	-	
2007	235025	Lighting - CFL Bulb (25 watt<1,600 Lumens)	38	\$ -	\$ 0.01	0.8 Bulb	9.3	0	\$ 1.75	\$ 5.03	-	-	-	
2007	235027	Lighting - CFL Bulb (30 watt)	54	\$ -	\$ 0.01	0.8 Bulb	9	35000	\$ 2.00	\$ 6.61	289	1,506,632	-	
2007	235029	Lighting - CFL Bulb (32 watt)	57	\$ -	\$ 0.01	0.8 Unit	8	0	\$ 2.00	\$ 4.28	-	-	-	
2007	235031	Lighting - CFL Bulb (<= 12 watt)	13	\$ -	\$ 0.00	0.8 Unit	8	25000	\$ 2.00	\$ 4.28	64	266,304	-	
2007	235033	Fluorescent Lighting Fixtures (ext) 13 watt	42	\$ -	\$ -	0.8 Unit	16	0	\$ 5.00	\$ 13.00	-	-	-	
2007	235035	Fluorescent Lighting Fixtures (ext) 27 watt	83	\$ -	\$ -	0.8 Unit	16	0	\$ 10.00	\$ 19.00	-	-	-	
2007	235037	Fluorescent Lighting Fixtures (int) 13 watt	21	\$ -	\$ 0.00	0.8 Bulb	16	0	\$ 5.00	\$ 17.97	-	-	-	
2007	235039	Fluorescent Lighting Fixtures (int) 16 W	34	\$ -	\$ 0.01	0.8 Bulb	16	0	\$ 5.00	\$ 19.17	-	-	-	

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	235041	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 25 < 1,600 Lumens - pin based	38 \$	-	\$ 0.01	0.8	Bulb	16	0	\$ 10.00	\$ 24.27	-	-	-
2007	235043	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 30	69 \$	-	\$ 0.01	0.8	Bulb	16	50000	\$ 10.00	\$ 24.74	531	2,767,284	-
2007	235045	Lighting - Torchiere - Energy Star (55 /70watt averaged -) Retail	106 \$	-	\$ 0.03	0.8	Unit	16	0	\$ 10.00	\$ 22.63	-	-	-
2007	235052	Lighting - CFL Bulb (>39 watt)	87 \$	-	\$ 0.02	0.8	Unit	8	0	\$ 2.50	\$ 4.28	-	-	-
2007	235057	Lighting - CFL Bulb (13 watt >= 800 Lumens)	36 \$	-	\$ 0.01	0.8	Bulb	9.3	423980	\$ 1.25	\$ 3.42	2,350	12,254,185	-
2007	235061	Lighting - CFL Bulb (18 watt >= 1,100 Lumens)	44 \$	-	\$ 0.01	0.8	Bulb	9.3	450000	\$ 1.75	\$ 4.14	3,025	15,773,519	-
2007	235063	Lighting - CFL Bulb (23 watt)	59 \$	-	\$ 0.01	0.8	Bulb	9.3	530000	\$ 1.75	\$ 4.58	4,813	25,096,191	-
2007	235065	Lighting - Hardwired Fluorescent Lighting Fixtures (ext) 18 watt	48 \$	-	\$ -	0.8	Unit	16	0	\$ 5.00	\$ 19.00	-	-	-
2007	235067	Fluorescent Lighting Fixtures (ext) 18 watt >= 1,100 Lumens	64 \$	-	\$ -	0.8	Unit	16	7295	\$ 5.00	\$ 21.63	-	376,396	-
2007	235069	Lighting - Hardwired Fluorescent Lighting Fixtures (ext) 20 watt	62 \$	-	\$ -	0.8	Unit	16	0	\$ 10.00	\$ 19.00	-	-	-
2007	235071	Lighting - Hardwired Fluorescent Lighting Fixtures (ext) 65 watt	153 \$	-	\$ -	0.8	Bulb	16	45000	\$ 10.00	\$ 41.26	-	5,499,000	-
2007	235073	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 18 W < 1,100 Lumens	32 \$	-	\$ 0.01	0.8	Bulb	16	0	\$ 5.00	\$ 19.96	-	-	-
2007	235074	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 18 W >= 1,100 Lumens	44 \$	-	\$ 0.01	0.8	Bulb	16	0	\$ 10.00	\$ 20.28	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2007	235076	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 26 < 1,600 Lumens	38 \$	-	\$ 0.01	0.8 Bulb	16	0	\$ 5.00	\$ 23.15	-	-	-	
2007	235079	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 26>=1,600 Lumens	57 \$	-	\$ 0.01	0.8 Bulb	16	0	\$ 10.00	\$ 23.43	-	-	-	
2007	235081	Lighting - CFL Bulb (26 watt<1,600 Lumens)	38 \$	-	\$ 0.01	0.8 Bulb	9.3	0	\$ 1.75	\$ 5.26	-	-	-	
2007	235083	Lighting - CFL Bulb (26 watt>=1,600 Lumens)	57 \$	-	\$ 0.01	0.8 Bulb	9.3	0	\$ 2.00	\$ 5.26	-	-	-	
2007	235085	Lighting - CFL Bulb (25 watt>=1,600 Lumens)	58 \$	-	\$ 0.01	0.8 Bulb	9.3	400000	\$ 2.00	\$ 5.03	3,538	18,448,560	-	
2007	235086	Lighting - LED Bulbs 3w	24 \$	-	\$ 0.01	0.8 Unit	8	200000	\$ 1.25	1,072	3,913,600	-		
2007	235091	20W CFL Table Lamp	41 \$	-	\$ 0.01	0.8 Bulb	16	10000	\$ 5.00	\$ 104.85	63	329,551	-	
2007	235092	25W CFL Table Lamp	56 \$	-	\$ 0.01	0.8 Bulb	16	10000	\$ 5.00	\$ 72.82	86	449,388	-	
2007	235093	15 Watt Intergral CFL (Reflector)	35 \$	-	\$ 0.01	0.8 Bulb	9.3	60000	\$ 1.00	\$ 4.04	318	1,660,370	-	
2007	235094	15 Watt Intergral CFL (Dimmable)	35 \$	-	\$ 0.01	0.8 Bulb	9.3	5000	\$ 2.75	\$ 4.04	27	138,364	-	
2007	235095	15 Watt Intergral CFL (Globes)	35 \$	-	\$ 0.01	0.8 Bulb	9.3	10000	\$ 2.75	\$ 4.04	53	276,728	-	
2007	235096	18 Watt Intergral CFL - (Reflectors)	183 \$	-	\$ 0.03	0.8 Bulb	2.1	5000	\$ 1.25	\$ 4.98	139	732,633	-	
2008	235019	Lighting - CFL Bulb (14 watt)	35 \$	-	\$ 0.01	0.8 Bulb	9	35000	\$ 1.25	\$ 3.73	190	990,073	-	
2008	235021	Lighting - CFL Bulb (15 watt)	35 \$	-	\$ 0.01	0.8 Bulb	9	0	\$ 1.25	\$ 4.04	-	-	-	
2008	235023	Lighting - CFL Bulb (20 watt)	42 \$	-	\$ 0.01	0.8 Bulb	9	275000	\$ 1.75	\$ 4.66	1,784	9,301,149	-	
2008	235025	Lighting - CFL Bulb (25 watt<1,600 Lumens)	38 \$	-	\$ 0.01	0.8 Bulb	9.3	0	\$ 1.75	\$ 5.03	-	-	-	
2008	235027	Lighting - CFL Bulb (30 watt)	54 \$	-	\$ 0.01	0.8 Bulb	9	40000	\$ 2.00	\$ 6.61	330	1,721,866	-	
2008	235029	Lighting - CFL Bulb (32 watt)	57 \$	-	\$ 0.01	0.8 Unit	8	0	\$ 2.00	\$ 4.28	-	-	-	
2008	235031	Lighting - CFL Bulb (<= 12 watt)	13 \$	-	\$ 0.00	0.8 Unit	8	40000	\$ 2.00	\$ 4.28	102	426,086	-	

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	235033	Lighting - Hardwired Fluorescent Lighting Fixtures (ext) 13 watt	42 \$	-	\$	0.8	Unit	16	0	\$ 5.00	\$ 13.00	-	-	-
2008	235035	Lighting - Hardwired Fluorescent Lighting Fixtures (ext) 27 watt	83 \$	-	\$	0.8	Unit	16	0	\$ 10.00	\$ 19.00	-	-	-
2008	235037	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 13	21 \$	-	\$ 0.00	0.8	Bulb	16	0	\$ 5.00	\$ 17.97	-	-	-
2008	235039	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 16 W	34 \$	-	\$ 0.01	0.8	Bulb	16	0	\$ 5.00	\$ 19.17	-	-	-
2008	235041	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 25 < 1,600 Lumens - pin based	38 \$	-	\$ 0.01	0.8	Bulb	16	0	\$ 10.00	\$ 24.27	-	-	-
2008	235043	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 30	69 \$	-	\$ 0.01	0.8	Bulb	16	60000	\$ 10.00	\$ 24.74	637	3,320,741	-
2008	235045	Lighting - Torchiere - Energy Star (55 /70watt averaged -) Retail	106 \$	-	\$ 0.03	0.8	Unit	16	0	\$ 10.00	\$ 22.63	-	-	-
2008	235052	Lighting - CFL Bulb (>39 watt)	87 \$	-	\$ 0.02	0.8	Unit	8	0	\$ 2.50	\$ 4.28	-	-	-
2008	235057	Lighting - CFL Bulb (13 watt >= 800 Lumens)	36 \$	-	\$ 0.01	0.8	Bulb	9.3	450000	\$ 1.25	\$ 3.42	2,494	13,006,235	-
2008	235061	Lighting - CFL Bulb (18 watt >= 1,100 Lumens)	44 \$	-	\$ 0.01	0.8	Bulb	9.3	475000	\$ 1.75	\$ 4.14	3,193	16,649,825	-
2008	235063	Lighting - CFL Bulb (23 watt)	59 \$	-	\$ 0.01	0.8	Bulb	9.3	550000	\$ 1.75	\$ 4.58	4,995	26,043,217	-
2008	235065	Lighting - Hardwired Fluorescent Lighting Fixtures (ext) 18 watt	48 \$	-	\$	0.8	Unit	16	0	\$ 5.00	\$ 19.00	-	-	-
2008	235067	Lighting - Hardwired Fluorescent Lighting Fixtures (ext) 18 watt >= 1,100 Lumens	64 \$	-	\$	0.8	Unit	16	4600	\$ 5.00	\$ 21.63	-	237,343	-
2008	235069	Lighting - Hardwired Fluorescent Lighting Fixtures (ext) 20 watt	62 \$	-	\$	0.8	Unit	16	0	\$ 10.00	\$ 19.00	-	-	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2008	235071	Lighting - Hardwired Fluorescent Lighting Fixtures (ext) 65 watt	153 \$	-	\$	0.8 Bulb	16	49900	\$ 10.00	\$ 41.26	-	6,097,780	-	
2008	235073	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 18 W < 1,100 Lumens	32 \$	-	\$ 0.01	0.8 Bulb	16	0	\$ 5.00	\$ 19.96	-	-	-	
2008	235074	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 18 W >= 1,100 Lumens	44 \$	-	\$ 0.01	0.8 Bulb	16	0	\$ 10.00	\$ 20.28	-	-	-	
2008	235076	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 26 < 1,600 Lumens	38 \$	-	\$ 0.01	0.8 Bulb	16	0	\$ 5.00	\$ 23.15	-	-	-	
2008	235079	Lighting - Hardwired Fluorescent Lighting Fixtures (int) 26 >= 1,600 Lumens	57 \$	-	\$ 0.01	0.8 Bulb	16	0	\$ 10.00	\$ 23.43	-	-	-	
2008	235081	Lighting - CFL Bulb (26 watt<1,600 Lumens)	38 \$	-	\$ 0.01	0.8 Bulb	9.3	0	\$ 1.75	\$ 5.26	-	-	-	
2008	235083	Lighting - CFL Bulb (26 watt>=1,600 Lumens)	57 \$	-	\$ 0.01	0.8 Bulb	9.3	0	\$ 2.00	\$ 5.26	-	-	-	
2008	235085	Lighting - CFL Bulb (25 watt>=1,600 Lumens)	58 \$	-	\$ 0.01	0.8 Bulb	9.3	375000	\$ 2.00	\$ 5.03	3,317	17,295,525	-	
2008	235086	Lighting - LED Bulbs 3w	24 \$	-	\$ 0.01	0.8 Unit	8	250000	\$ 1.25		1,340	4,892,000	-	
2008	235091	20W CFL Table Lamp	41 \$	-	\$ 0.01	0.8 Bulb	16	15000	\$ 5.00	\$ 104.85	95	494,327	-	
2008	235092	25W CFL Table Lamp	56 \$	-	\$ 0.01	0.8 Bulb	16	15000	\$ 5.00	\$ 72.82	129	674,082	-	
2008	235093	15 Watt Intergral CFL (Reflector)	35 \$	-	\$ 0.01	0.8 Bulb	9.3	75000	\$ 1.00	\$ 4.04	398	2,075,463	-	
2008	235094	15 Watt Intergral CFL (Dimmable)	35 \$	-	\$ 0.01	0.8 Bulb	9.3	10000	\$ 2.75	\$ 4.04	53	276,728	-	
2008	235095	15 Watt Intergral CFL (Globes)	35 \$	-	\$ 0.01	0.8 Bulb	9.3	15000	\$ 2.75	\$ 4.04	80	415,093	-	
2008	235096	18 Watt Intergral CFL - (Reflectors)	183 \$	-	\$ 0.03	0.8 Bulb	2.1	10070	\$ 1.25	\$ 4.98	281	1,475,523	-	

PARTNERSHIPS

2006-2008 Energy Efficiency Concept Paper City of Chula Vista & San Diego Gas & Electric Initiative Conservation Outreach Program (ECO Program)

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 255,876	\$ 255,876	\$ 255,876
Overhead	\$ 36,554	\$ 36,554	\$ 36,554
Direct Implementation			
Financial Incentives	\$ -	\$ -	\$ -
Activity	\$ 438,645	\$ 438,645	\$ 438,645
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ -	\$ -	\$ -
Rebate Processing and Inspection	\$ -	\$ -	\$ -
Marketing			
Program Specific Marketing	\$ -	\$ -	\$ -
Statewide Marketing			
Total Program Budget	\$ 731,075	\$ 731,075	\$ 731,075

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
133	1,277,626	36,593	133	1,277,626	36,593	133	1,277,626	36,593

Savings identified in this paper are estimated based on the Energy Efficient Housing Project component. The kW, kWh and therm savings along with incentives and rebates for City of Chula Vista retrofit projects for City facilities are included in the SDG&E Energy Savings Bid Program (see City Energy Efficient Facilities Showcase Project below). There are no projected kW, kWh and therm direct savings for the ECO Exhibit and the Municipal Energy BMPs Education Projects.

3. Program Cost Effectiveness

Attached

4. Program Descriptors

The Energy Efficiency and Conservation Outreach Program (ECO Program) is being offered by San Diego Gas & Electric Company, (SDG&E) and the City of Chula Vista (Chula Vista). The ECO Program aims to enable Chula Vista, residents, developers, and Southbay cities to implement energy efficiency and conservation measures by overcoming existing barriers. Southbay includes Chula Vista, Coronado, Imperial Beach, National City and unincorporated areas of the San Diego County. The ECO Program also aims to increase public awareness about energy efficiency and conservation through non-traditional education and outreach outlets and channels used by cities and the County.

5. Program Statement

The ECO Program will enable target customers to implement energy efficiency and conservation measures by overcoming barriers that they face. The target customers and barriers for each customer include:

- **City of Chula Vista:** The City does not have adequate resources to assign dedicated staff to pursue and implement energy efficiency projects on a consistent basis.
- **Residents:** Residents do not have a clear understanding of what programs are available to them and which programs they qualify for. Residents also need face-to-face assistance to access and participate in energy efficiency programs.
- **Condominium Conversion Developers:** Developers do not have the appropriate motivations to enhance the energy efficiency level of condominium conversion projects beyond Title 24 compliance.
- **Southbay Cities:** Southbay Cities lack policies, procedures and plans to institutionalize energy efficiency and conservation measures into how they do business.

6. Program Rationale

- **City Energy Efficient Facilities Showcase Project:** Chula Vista has over 100 City owned buildings and infrastructure that consume electricity and natural gas. The City has about 550 electricity and natural gas meters and uses approximately 18 million kW-hrs of electricity and approximately 800,000 therms of natural gas annually. Due to addition of new City buildings and infrastructure, the City's energy use is projected to increase by at least 5% in 2006. The City's annual energy budget is approximately \$3.4 million. The City's actual energy costs are also projected to increase due to new City load and rising energy rates. Although the City has aggressively pursued energy efficiency retrofits to reduce energy use, to reduce cost, to improve maintenance and to reduce its impact on the environment, there are still many opportunities to improve how the City uses energy. An opportunity to position City facilities to participate in SDG&E's demand response programs also exists. The ECO Program seeks to enable the City to manage its energy use more effectively and consistently by providing funding to the City for dedicated energy staff.
- **ECO Exhibit Project:** Chula Vista has co-sponsored Hard-to-Reach lighting events with SDG&E for the past three years at various City venues. Year after year, an average of 600 households (.01% of Chula Vista's housing stock) participate in the one-day events to exchange their inefficient incandescent light bulbs for more efficient compact fluorescent lights. Approximately 15% of the participating households also sign up for SDG&E programs available to low income and senior citizens. The City believes that the success of the events can be attributed to effective execution of a marketing plan developed by SDG&E and City staff, face-to-face assistance from SDG&E and City staff and customer convenience. The mobile ECO Exhibits aims to provide face-to-face assistance and convenience on a more predictable basis by placing the staffed ECO Exhibits in high traffic community locations. The City's believes that it can reach more than the .01% of the households

in the City by providing a predictable location where residents can go to for assistance on energy issues.

- **Energy Efficient Housing Project:** There are currently about 800 apartment units at various stages of the condominium conversion process by the City's Planning and Building Department. The Chula Vista Planning and Building department estimates that at least 500 units per year will undergo conversions from apartments to condominiums from 2006 to 2008 in. There is an untapped potential for energy efficiency since condominium conversion developers are not often required to meet the most current Title 24 requirements. Under this project, condominium conversion projects with three or more units will be eligible for expedited plan review and permitting if they commit to incorporating energy efficiency measures to exceed Title 24 requirements by at least 10% or if they incorporate measures to reduce the average energy use for each unit by 515 kW-hr and 15 therms per month. . Note: SDG&E, along with the City of Chula Vista, City of San Diego, and the County of San Diego will continue to review various options for implementing Title 24 guidelines. Where necessary, standard thresholds may be applied Although it is preferred that program participants not receive utility incentives payments, in exchange for expedited approval of their requested building permits or land use, ability to participate in both the expedite and incentive programs may be considered. Both strategies will be reviewed during the initial phases of the program.
- **Municipal Energy BMPs Education Project:** Staff from Southbay cities have continually expressed their desire to participate in energy efficiency programs available from SDREO and SDG&E. Unfortunately, due to competing priorities, staff from Southbay cities have not dedicated time or resources to pursuing potential energy retrofit projects. Staff believes that the major barrier to participating in energy efficiency programs is their City's lack of policies related to energy management. The goal of the Municipal Energy BMPs Education project workshop series is to assist cities develop energy action plans for Council adoption to manage energy more effectively. The City of Chula Vista's CO2 Reduction Plan will be used as a model for the workshops. By the end of the fourth workshop, participating cities will have an Energy Action Plan to reduce their energy use.

7. Program Outcomes

The program is a savings, education and outreach program, which will deliver net energy savings, peak demand savings and sustained efficiency at City facilities, for residents, multi-family housing units and at other Cities.

The desired outcomes of the ECO Partnership are to:

- Enable the City to pursue energy efficiency projects and implement demand response at City owned facilities,
- Enable residents to take action by educating residents about energy efficient technology and energy conservation best management practices,

- Enable and motivate developers to invest in energy efficiency upgrades for multi-dwelling units by expediting the City's plan review and permitting process,
- Enable Southbay cities to institutionalize energy efficiency and conservation into their practices by providing a step-by-step approach to developing and implementing locally adopted policies.

8. Program Strategy

The City will assign an Energy Administrator to oversee general management of the ECO Program. The Energy Administrator will be responsible for coordinating with SDG&E, SDREO and other third party provider staff to ensure ECO Program projects work plans are developed and implemented to meet established goals and objectives. The Energy Administrator will also coordinate efforts with internal and external partners to develop effective outreach and marketing material to ensure program clarity.

9. Program Objectives

Major program objectives for the ECO Program projects are as follows:

City Energy Efficient Facilities Showcase Project: Reduce the City's energy use by 5% per year for a cumulative reduction of 15% by 2008 relative to 2005 energy use.

ECO Exhibit Project: Increase public awareness by assisting an average of 160 people per day (average of 40 people per day at each ECO Exhibit) access and participate in energy efficiency and conservation programs.

Energy Efficient Housing Project: Encourage condominium conversion developers to upgrade the energy efficiency of converted units by committing to complying with applicable Title 24 requirements and by further incorporate measures that go beyond Title 24 requirements by at least 10% or by reducing energy use for each unit by an average of 515 kW-hr and 15 therms per month. Participating developers will receive expedited plan review and permitting. At least 500 condominiums per year will be targeted for upgrades for a total of 1,500 energy efficient condominiums by 2008.

Municipal Energy BMPs Education Project: Sponsor and coordinate at least four energy efficiency and conservation workshops for cities every year. The goal of the workshop series is to initially assist South Bay cities develop energy action plans to manage energy. By the fourth workshop, participating cities will have an Energy Action Plan to reduce their energy use. Workshops will be targeted to east county cities in year 2 and north county cities in year 3.

10. Program Implementation

The ECO Program consists of four projects to overcome barriers to implementing and participating in energy efficiency and conservation programs. Each project aims to achieve energy efficiency and conservation through a combination of energy efficiency retrofit projects at City facilities, public education and outreach at high traffic community destinations, expedited plan review and permitting services for condominium conversion

projects and best management practices workshops for County cities. The projects and implementation plans are described below:

a) City Energy Efficient Facilities Showcase Project

The goal of this element is to facilitate installation of energy efficiency measures and development of efficiency and conservation outreach best management practices (BMPs) for City facilities and employees by providing the City with funding to hire dedicated energy staff. Energy staff funded by the partnership will develop retrofit projects for City buildings and facilities. For existing facilities, energy staff will work with the San Diego Regional Energy Office's (SDREO) to participate in SDG&E's Energy Savings Bid Program. SDREO will assist the City to assess opportunities through audits and identify incentives, development of an implementation plan, access project incentives, develop a funding mechanism and coordinate project execution to achieve energy savings. For new facilities, energy staff will work with SDG&E's Saving's by Design and Sustainable Communities Program to design and build City facilities that are at least 20% more energy efficient than state standards. Energy staff will also work to develop, implement and train City personnel about energy BMPs to improve energy conservation practices by employees. The City's goal is to reduce baseline energy use at City facilities by at least 5% per year over the three-year period. The City's energy goals are captured in SDG&E's Energy Savings Bid Program.

b) ECO Exhibit Project

The goal of this element is to provide face-to-face energy efficiency and conservation outreach to low income, elderly and other hard-to-reach customers. This project will reach the target audience through mobile energy efficiency and conservation outreach exhibits (ECO Exhibits) staffed by trained personnel. The mobile ECO Exhibits will be located at City facilities and at regional centers such as shopping centers and malls throughout the Southbay and potentially countywide. Specifically, the mobile ECO Exhibits locations will include but are not limited to a local City hall, at libraries, recreational centers, police stations, local shopping centers and regional shopping malls. The ECO Exhibits will be used to engage the target audience to learn about energy efficiency and energy conservation. Trained personnel will demonstrate energy efficient technology available in the marketplace to residents, educate residents about low or no-cost energy conservation practices, assist residents access programs offered by energy conservation program providers such as SDG&E and SDREO, allow residents to conduct home energy audits via the internet and direct residents to EnergyStar product retailers. The ECO Exhibits will also coordinate with SDG&E's Hard-to-Reach Lighting Turn-in Program to market and provide a venue for hard to reach customers to exchange inefficient lights for more efficient lights. Lastly, the ECO Exhibits will serve as an outlet to recruit participants for SDREO's Shade Tree Program.

c) Energy Efficient Housing Project:

The goal of this element is to improve the energy efficiency of existing multi-family housing units that are proposed for conversion from apartments to condominiums by providing expedited plan review and permitting services. The City will reach condominium conversion developers by modifying plan review and permit applications to inform developers about the expedite process.

d) Municipal Energy BMPs Education Project

The goal of this element is to share lessons learned and BMPs with Southbay cities through a series of four workshops. In November 2000, the City adopted a CO2 Reduction Plan to reduce the City's greenhouse gas emissions. The CO2 Plan's goals are to reduce the City's reliance on fossil fuel and to improve the energy efficiency of City buildings and facilities. Since 1990, the City has retrofitted and constructed buildings and facilities that are more energy efficient than the State's conservation standards (Title 24). The City will use existing forums and outlets to reach Southbay cities. The City will use the CO2 Plan as a model to encourage and assist other cities develop their own strategic plan to achieve energy efficiency at their facilities and to incorporate low or no cost energy conservation BMPs into how they do business. The project's goal is to enable Southbay cities to develop and adopt strategic policies to improve their energy efficiency and reduce their environmental impact.

11. Customer Description

City facilities and staff, residents, condominium conversion developers, Southbay cities in San Diego County are eligible to participate in ECO Partnership programs.

12. Customer Interface

- **City Energy Efficient Facilities Showcase Project:** The Energy Administrator will coordinate internally with city staff to develop and implement retrofit projects for City facilities. As described in the SDG&E's Energy Savings Bid Program, public agencies including the City of Chula Vista will receive the following energy efficiency project related services from the San Diego Regional Energy Office (SDREO) at no cost:
 - Energy audits
 - Technical assistance, and
 - Incentive documentation/processing
- **ECO Exhibit Project:** The Energy Administrator will coordinate with SDREO, SDG&E, cities and the County to develop and place the mobile ECO Exhibits in high traffic locations. The ECO Exhibits staff will serve to engage customers to participate in energy efficiency and conservation programs. ECO Exhibits customers will have an opportunity to learn about energy efficient technology, receive information about low-or-no cost energy conservation best management practices and receive direct assistance to access offerings from other program providers.
- **Energy Efficient Housing Project:** The Energy Administrator will coordinate with SDG&E and the City's Planning and Building staff to streamline the City's plan

review and permitting process application for condominium conversions projects. The Energy Administrator will also act as a liaison between the City's Planning and Building staff and developers to resolve any potential issues.

- **Municipal Energy BMPs Education Project:** The Energy Administrator will work with SDREO and SDG&E to develop a series of four workshops per year to assist cities develop individual strategic plans to manage their energy use and budget more effectively. The Energy Administrator will base the workshops on the City of Chula Vista's CO2 Reduction Plan. The CO2 Plan guides the City's effort to reduce reliance on fossil fuel, improve energy efficiency for buildings and vehicles and to reduce the City's overall impact on the environment. The workshops will be marketed to cities through existing working group technical committees such as San Diego County's Pollution Prevention Committee and SANDAG's Energy Working Group.

13. Energy Measures and Program Activities

13.1. **Prescriptive Measures**

See SDG&E June 1, 2005 Filing Workbook

13.2. **kWh Level Data –**

See SDG&E June 1, 2005 Filing Workbook - Savings are included in the Energy Savings Bid Program

13.3. **Non-Energy Activities –**

Audits, Education and Technical Assistance may be utilized

13.4. **Subcontractor Activities**

None

13.5. **Quality Assurance and Evaluation Activities**

Quality assurance for city facilities projects will consist of on-site inspections by SDREO through SDG&E's Energy Savings Bid Program. Quality assurance for condominium conversion projects will consist of on-site inspections by SDG&E's utility inspection department.

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs

13.6. **Marketing Activities**

The City will work with, SDREO, SDG&E, City of San Diego and the County of San Diego to develop and distribute marketing material to promote the ECO Partnership Programs to target customers through new and existing distribution channels. These channels will include but are limited to the four mobile ECO Exhibits, governing board meetings, public access cable stations, partner websites, partner publications (Chula Vista Spotlight), employee newsletters and local community newspapers.,

14. Conclusion

The Energy ECO Partnership between SDG&E and the City of Chula Vista is a community wide effort that will enable the City, residents, developers and Southbay cities to implement sustainable energy efficiency and conservation measures.

		SDGE3002 CCV-City of Chula Vista Partnership
BUDGET		
Administrative Costs	\$	877,290
Overhead and G&A	\$	109,661
Other Administrative Costs	\$	767,629
Marketing/Outreach	\$	-
Direct Implementation	\$	1,315,935
Total Incentives and Rebates		
User Input Incentive	\$	-
Direct Install Rebate	\$	-
Direct Install Labor	\$	-
Direct Install Materials	\$	-
Activity	\$	1,315,935
Installation	\$	-
Hardware & Materials	\$	-
Rebate Processing & Inspection	\$	-
EM&V Costs	\$	-
Budget	\$	2,193,225
Costs recovered from other sources	\$	-
Budget (plus other costs)	\$	2,193,225

PROGRAM IMPACTS		
DEER kW (kW)		399
Net NCP (kW)		10,713
Net CEC (kW)		832
Annual Net kWh		3,832,877
Lifecycle Net kWh		50,082,775
Annual Net Therms		109,778
Lifecycle Net Therms		1,445,088
Cost Effectiveness		
TRC		
Costs	\$	10,274,950
Electric Benefits	\$	8,391,000
Gas Benefits	\$	702,725
Net Benefits (NPV)	\$	(1,181,225)
BC Ratio		0.89
PAC		
Costs	\$	2,193,225
Electric Benefits	\$	8,391,000
Gas Benefits	\$	702,725
Net Benefits (NPV)	\$	6,900,501
BC Ratio		4.15
Levelized Cost		
Levelized Cost TRC (\$/kWh)		
Discounted kWh		30,399,991
Cost	\$	0.3097
Benefits	\$	0.2760
Benefit-Cost	\$	(0.0337)
Levelized Cost PAC (\$/kWh)		
Discounted kWh		30,399,991
Cost	\$	0.0666
Benefits	\$	0.2760
Benefit-Cost	\$	0.2094
Levelized Cost TRC (\$/therm)		
Discounted Therms		874,461
Cost	\$	0.9829
Benefits	\$	0.8036
Benefit-Cost	\$	(0.1793)
Levelized Cost PAC (\$/therm)		
Discounted Therms		874,461
Cost	\$	0.1938
Benefits	\$	0.8036
Benefit-Cost	\$	0.6098

SDGE City of Chula Vista Partnership

Year	Total Budget	Total Incentives	Admin Budget	Net kWh	Net Therms	Net kW
2006	\$ 731,075	\$ -	\$ 731,075	1,277,626	36,593	133
2007	\$ 731,075	\$ -	\$ 731,075	1,277,626	36,593	133
2008	\$ 731,075	\$ -	\$ 731,075	1,277,626	36,593	133

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	239002	Package 1	807	58	0.32	0.8	Dwelling Unit	14	63	\$ -	\$ 4,467.00	16	40,673	2,928
2006	239003	Package 2	882	61	0.13	0.8	Dwelling Unit	14	63	\$ -	\$ 4,872.00	7	44,453	3,064
2006	239004	Package 3	2,385	61	0.22	0.8	Dwelling Unit	13	625	\$ -	\$ 5,013.00	110	1,192,500	30,600
2007	239002	Package 1	807	58	0.32	0.8	Dwelling Unit	14	63	\$ -	\$ 4,467.00	16	40,673	2,928
2007	239003	Package 2	882	61	0.13	0.8	Dwelling Unit	14	63	\$ -	\$ 4,872.00	7	44,453	3,064
2007	239004	Package 3	2,385	61	0.22	0.8	Dwelling Unit	13	625	\$ -	\$ 5,013.00	110	1,192,500	30,600
2008	239002	Package 1	807	58	0.32	0.8	Dwelling Unit	14	63	\$ -	\$ 4,467.00	16	40,673	2,928
2008	239003	Package 2	882	61	0.13	0.8	Dwelling Unit	14	63	\$ -	\$ 4,872.00	7	44,453	3,064
2008	239004	Package 3	2,385	61	0.22	0.8	Dwelling Unit	13	625	\$ -	\$ 5,013.00	110	1,192,500	30,600

2006-2008 Energy Efficiency Concept Paper

City of San Diego and San Diego Gas & Electric Initiative

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 250,704	\$ 291,756	\$ 291,756
Overhead	\$ -	\$ -	\$ -
Direct Implementation			
Financial Incentives	\$ -	\$ -	\$ -
Activity	\$ 637,000	\$ 657,832	\$ 657,832
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ -	\$ -	\$ -
Rebate Processing and Inspection	\$ -	\$ -	\$ -
Marketing			
Program Specific Marketing	\$ 32,296	\$ 32,296	\$ 32,296
Statewide Marketing			
Total Program Budget	\$ 920,000	\$ 981,884	\$ 981,884

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
133	1,277,626	36,593	133	1,277,626	36,593	133	1,277,626	36,593

Savings identified in this paper are estimated based on the Condo Conversion Expedite component. In addition, the City would derive additional energy savings from retrofitting its buildings for energy efficiency. Savings derived from these retrofit projects will be calculated under SDG&E's various incentives programs.

3. Program Cost Effectiveness

Attached

4. Program Descriptors

The City of San Diego and San Diego Gas & Electric (the partnership) propose to administer a new program for residential customers, developers and government agencies. This program will be a combination of education, training, and incentives program. The program will facilitate the retrofitting for energy efficiency of the least energy efficient facilities owned by the City; offer incentives to developers to retrofit condominium unit conversions for energy efficiency; make use of the City's existing community outreach infrastructure to inform residents about energy efficient technologies and available incentives for the installation of energy efficiency measures; and take advantage of the City's experience in running a successful energy program to help other local governments implement energy efficiency practices that they can afford and maintain.

The program would allow the City to assign a Project Manager to facilitate the performance of comprehensive energy efficiency retrofits and installation of energy management systems at City facilities. The City expects to derive significant energy savings from these retrofits, and the installation of energy management systems at these locations would allow the City to better manage its consumption and demand, maximize the potential energy savings, and participate in demand reduction programs during critical peak hours.

The program provides incentives to developers who install energy efficiency measures in their condo conversion units by giving them the opportunity to participate in the City's Sustainable Building Expedite Program free of charge. The program will pay for the expected \$550 (incentive) per dwelling cost of participation on the Sustainable Expedite Program for those developers that install one of the packages described on Attachment A on each of the units of participating condo conversion projects. Although it is preferred that program participants not receive utility incentives payments, in exchange for expedited approval of their requested building permits or land use, ability to participate in both the expedite and incentive programs may be considered. Both strategies will be reviewed during the initial phases of the program

This program would offer the use of City facilities to provide outreach to City residents. The City would dispense energy conservation, efficiency, and renewable energy sources information and encourage activity in those areas by educating the public of current energy efficiency programs available to them.

Finally, this program would allow the City to provide training and assistance to local government agencies in the implementation of programs for energy conservation, efficiency, and management. Local agencies would learn from the City's experience in implementing policy to promote energy efficiency and conservation at all its existing and new facilities, installing energy management systems at City facilities to participate in demand reduction programs, using existing community outreach infrastructure to educate and promote energy efficiency among City residents, and working with contractors and developers to promote energy efficiency in new residential developments.

5. Program Statement

Potential obstacles to achieving an acceptable level of energy efficiency and energy conservation that the City has identified in its facilities and among its residents:

The City owns and operates several facilities that use energy inefficiently. The process to identify facilities for retrofitting, going through the City Council approval process, obtaining financing for the retrofitting, working with SDREO through the proposed BID program to obtain energy efficiency audits at those facilities, issuing RFPs for the installation of the energy efficiency measures recommended on the audits, and working with SDG&E to obtain SPC Program and other potentially available energy efficiency incentives is a long and intensive process that requires a full-time project manager.

The City is experiencing a tremendous search in condo conversions. Most of these condo conversions involve buildings built prior to 1978 that use energy inefficiently. The City

does not have construction standards that will force developers to install energy efficiency measures when converting old apartments into condominiums.

A great deal of low-income and elderly residents need information about available energy efficiency incentives and energy efficiency technologies, as evidenced by phone calls the City gets from residents asking about available programs for energy efficiency. Additionally, the City has noticed a relaxation of energy conservation efforts among its work force, which reflects a need for long-term energy conservation education.

Many local governments operate in old inefficient buildings, but don't have the staffing to dedicate to establishing sound energy efficiency program.

6. Program Rationale

Currently, SDREO offers the LGEEP program that successfully satisfies the project management funding and other needs that local governments have when retrofitting facilities. However, SDREO is merging the LGEEP program and its current TAP program with SDG&E's Bid program to provide full project management, audits, and other services to retrofit facilities owned by government agencies. While the BID program alone will work well for smaller government agencies, there are further challenges with larger government agencies that have numerous facilities to be retrofitted. This partnership with SDG&E will allow the City to better take advantage of some features of the BID and the SPC programs to manage the retrofitting of its facilities

To address the second statement in Section 6, this program will provide an incentive for developers to install a package of energy efficiency measures, as described on Attachment A, to all units of a condo conversion project. Currently none of the packages of measures required by this program contains all the requirements of the current Title 24, however, three of the core requirements of the program are measures contained in Title 24; including, central air conditioning with SEER 14 rating (exceeds Title 24 requirements by 36%), ceiling insulation with R30 rating (exceeds Title 24 requirements by 58%), and double pane windows. Note: SDG&E, along with the City of San Diego, the County of San Diego and the City of Chula Vista will continue to review various options for implementing Title 24 guidelines. Where necessary, standard thresholds may be applied.

This program will provide funding to allow the City to use its community service credibility and its community outreach infrastructure to inform the hard-to-reach residents about energy efficient technologies and available incentives for the installation of energy efficiency measures. The City's outreach/education efforts offer a long-term, comprehensive educational approach to energy conservation and the use of energy-efficient technology and renewable energy in the community.

Finally, the program will provide funding for the City to offer its experience in running a successful program to other local governments.

- 7. Program Outcomes** - To successfully retrofit 20 energy inefficient facilities owned and operated by the City,

- To encourage developers to install energy efficiency measures at all units of their condo conversion projects,
- To increase the number of local government agencies that participate in energy efficiency retrofit projects and encourage their residents to conserve energy, and
- To provide City residents with a local clearinghouse for energy efficiency and conservation information

8. Program Strategy

Under this program, the City will assign a Project Officer to carry out energy efficiency retrofits at all inefficient City facilities. This manager will identify facilities that are candidates for retrofits, work with SDREO to get energy efficiency audits under the BID Program to determine the facilities with the best potential for energy savings, obtain financing to carry out the projects, issue an RFP to implement recommendations of SDREO audits, and work with SDG&E and SDREO to obtain available rebates.

The City will assign a Program Analyst to manage the Condo Conversion feature of this partnership. The City will encourage developers to install a package of energy efficiency measures as described in Attachment A by allowing developers to participate in the City's Sustainable Expedite Program at no cost to them. The estimated \$550 per unit fee will be paid by the program for the Developer.

The City will assign a Program Analyst in charge of managing the City's outreach/education efforts and of promoting energy conservation and efficiency at community events and community presentations.

Finally the City will assign a Program Analyst to work with SDG&E and other local government agencies to set workshops with the purpose of sharing energy efficiency experience with other local governments.

9. Program Objectives - The City plans to retrofit 20 facilities per year, and to

- Encourage developers to install a package of energy efficiency measures on an estimated 500 units per year.
- Establish two City facilities as energy information clearinghouses with displays and energy information,
- Participate in 6 community events per year to promote energy efficiency and conservation and to provide energy efficiency and energy conservation information to the community
- Deliver 10 presentations to community groups to promote the energy efficiency and conservation and to provide information on energy efficiency, energy conservation, and available energy help for the low-income and the disabled.
- Work with other local governments and SDG&E to set 2 workshops per year for Peer-to-Peer education

10. Program Implementation

Under this program, the City will assign a Project Officer to carry out energy efficiency retrofits at all City facilities that use energy inefficiently. The Project Officer will identify

facilities that are candidates for retrofits, work with SDREO to get energy efficiency audits to determine the facilities with the best potential for energy savings, obtain financing to carry out the projects, issue RFPs to implement recommendations of SDREO audits and energy management systems, and work with SDG&E and SDREO to obtain available rebates. The City of San Diego will require the help of SDREO under SDG&E's BID program to accomplish these goals. After these projects are completed, the City will be better equipped to participate in demand reduction programs due to its new capability to manage its energy consumption.

The City will encourage developers to install a package of energy efficiency measures to all units of condo conversion projects by allowing developers to participate in the City's Sustainable Expedite Program at no cost to them. The city plans to advertise this program through workshops for developers and through fliers available at the different City locations where Developers can apply for construction permits. The estimated \$550 per unit fee to participate in the City's Sustainable Expedite Program will be paid by the program for the Developer. SDG&E will check some of the completed conversions for the successful installation of the required energy efficiency measures.

The City will assign a Program Analyst in charge of managing the City's outreach/education efforts. The Analyst will stock the Environmental Services Library and another City facility with information, materials, and displays about energy efficiency and energy conservation to serve as clearing houses for energy information; he will provide energy information services at both of these sites; and he will promote the clearinghouses and energy conservation at community events and through community presentations.

Finally the City will work with SDG&E and other local government agencies to set workshops with the purpose of sharing energy efficiency experience with other local governments.

11. Customer Description

The customers for this program will be the City of San Diego, Developers converting existing apartments into condominiums, and San Diego residents (especially hard-to-reach residents).

12. Customer Interface

The City of San Diego will have a Project officer in charge of managing the retrofit projects, who will understand how to use this program and other incentives programs offered by SDG&E, SDREO, and the CEC.

The City will produce fliers and workshops for the purpose of informing condo conversion Developers about the program.

The City will have a Program Analyst in charge of managing the two proposed clearinghouses, and of promoting the clearinghouses and energy conservation and efficiency at community events and community presentations.

Finally the City will work with SDG&E and other local government agencies to set workshops with the purpose of sharing energy efficiency experience with other local governments.

13. Energy Measures and Program Activities

13.1. Prescriptive Measures

See SDG&E June 1, 2005 Filing Workbook

13.2. kWh Level Data

See SDG&E June 1, 2005 Filing Workbook - Savings are included in the Energy Savings Bid Program.

13.3. Non-Energy Activities

Audits, Education and Technical Assistance may be utilized

13.4. Subcontractor Activities – None

13.5. Quality Assurance and Evaluation Activities

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs

13.6. Marketing Activities

14. Conclusion

This program will facilitate the retrofitting for energy efficiency of the least energy efficient facilities owned by the; offer incentives to developers to retrofit condominium unit conversions for energy efficiency; make use of the City's existing community outreach infrastructure to inform residents about energy efficient technologies and available incentives for the installation of energy efficiency measures; and take advantage of the City's experience in running a successful energy program to help other local governments implement energy efficiency practices that they can afford and maintain.

	SDGE3005 CSD-City of San Diego Partnership	
BUDGET		
Administrative Costs	\$	834,216
Overhead and G&A	\$	-
Other Administrative Costs	\$	834,216
Marketing/Outreach	\$	96,888
Direct Implementation	\$	1,952,664
Total Incentives and Rebates		
User Input Incentive	\$	-
Direct Install Rebate	\$	-
Direct Install Labor	\$	-
Direct Install Materials	\$	-
Activity	\$	1,952,664
Installation	\$	-
Hardware & Materials	\$	-
Rebate Processing & Inspection	\$	-
EM&V Costs	\$	-
Budget	\$	2,883,768
Costs recovered from other sources	\$	-
Budget (plus other costs)	\$	2,883,768

PROGRAM IMPACTS		
DEER kW (kW)		399
Net NCP (kW)		10,713
Net CEC (kW)		832
Annual Net kWh		3,832,877
Lifecycle Net kWh		50,082,775
Annual Net Therms		109,778
Lifecycle Net Therms		1,445,088
Cost Effectiveness		
TRC		
Costs	\$	10,965,493
Electric Benefits	\$	8,391,000
Gas Benefits	\$	702,725
Net Benefits (NPV)	\$	(1,871,768)
BC Ratio		0.83
PAC		
Costs	\$	2,883,768
Electric Benefits	\$	8,391,000
Gas Benefits	\$	702,725
Net Benefits (NPV)	\$	6,209,958
BC Ratio		3.15
Levelized Cost		
Levelized Cost TRC (\$/kWh)		
Discounted kWh		30,399,991
Cost	\$	0.3307
Benefits	\$	0.2760
Benefit-Cost	\$	(0.0547)
Levelized Cost PAC (\$/kWh)		
Discounted kWh		30,399,991
Cost	\$	0.0875
Benefits	\$	0.2760
Benefit-Cost	\$	0.1885
Levelized Cost TRC (\$/therm)		
Discounted Therms		874,461
Cost	\$	1.0440
Benefits	\$	0.8036
Benefit-Cost	\$	(0.2404)
Levelized Cost PAC (\$/therm)		
Discounted Therms		874,461
Cost	\$	0.2548
Benefits	\$	0.8036
Benefit-Cost	\$	0.5488

SDGE City of San Diego Partnership

Year	Total Budget	Total Incentives	Admin Budget	Net kWh	Net Therms	Net kW
2006	\$ 920,000	-	\$ 920,000	1,277,626	36,593	133
2007	\$ 981,884	-	\$ 981,884	1,277,626	36,593	133
2008	\$ 981,884	-	\$ 981,884	1,277,626	36,593	133

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	241002	Package 1	807	58	0.32	0.8	Home	14	63	\$ -	\$ 4,467.00	16	40,673	2,928
2006	241003	Package 2	882	61	0.13	0.8	Home	14	63	\$ -	\$ 4,872.00	7	44,453	3,064
2006	241004	Package 3	2,385	61	0.22	0.8	Home	13	625	\$ -	\$ 5,013.00	110	1,192,500	30,600
2007	241002	Package 1	807	58	0.32	0.8	Home	14	63	\$ -	\$ 4,467.00	16	40,673	2,928
2007	241003	Package 2	882	61	0.13	0.8	Home	14	63	\$ -	\$ 4,872.00	7	44,453	3,064
2007	241004	Package 3	2,385	61	0.22	0.8	Home	13	625	\$ -	\$ 5,013.00	110	1,192,500	30,600
2008	241002	Package 1	807	58	0.32	0.8	Home	14	63	\$ -	\$ 4,467.00	16	40,673	2,928
2008	241003	Package 2	882	61	0.13	0.8	Home	14	63	\$ -	\$ 4,872.00	7	44,453	3,064
2008	241004	Package 3	2,385	61	0.22	0.8	Home	13	625	\$ -	\$ 5,013.00	110	1,192,500	30,600

2006-2008 Energy Efficiency Concept Paper
County of San Diego and San Diego Gas & Electric Energy Initiative

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 251,200	\$ 264,000	\$ 276,000
Overhead	\$ 62,800	\$ 66,000	\$ 69,000
Direct Implementation			
Financial Incentives	\$ -	\$ -	\$ -
Activity	\$ -	\$ -	\$ -
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ -	\$ -	\$ -
Rebate Processing and Inspection	\$ -	\$ -	\$ -
Marketing			
Program Specific Marketing	\$ -	\$ -	\$ -
Statewide Marketing			
Total Program Budget	\$ 314,000	\$ 330,000	\$ 345,000

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
-	-	-	-	-	-	-	-	-

The kW, kWh and therm savings along with incentives and rebates for County of San Diego retrofit projects for County facilities are included in the SDG&E Energy Savings Bid Program.

3. Program Cost Effectiveness

Attached

4. Program Descriptors

The County of San Diego/SDGE Energy Initiative Partnership (COSD/SDGE EIP) is a local program within the SDG&E territory. This is a new program that targets small and large commercial county government facilities and county residential public housing units as well as promotion of the County's Green Building Program to business and commercial property owners that work with the County of San Diego's (County) Department of Planning and Land Use (DPLU).

5. Program Statement

The County faces a number of barriers that limit its ability to participate in implementing energy efficiency projects. These barriers include a lengthy approval process, time consuming application processes, appropriate staffing levels to train and educate county employees in facilitation of energy efficiency initiatives, and competing funding demands.

6. Program Rationale

There is a large untapped potential to achieve energy efficiency and demand response at the County's more than 7 Million Sq. Ft. of commercial space as well as County public housing units, peer-to-peer education and promotion of green building energy efficiency in new and remodeled residential and commercial building owners that work with the County's DPLU. The barriers to implementing energy efficiency projects and demand response within County facilities along with training and education of County staff can be overcome by providing administrative support funding for County and SDGE staff who will: (1) Facilitate energy project and demand response implementation at County facilities and public housing units, (2) Coordinate an on-bill financing pilot project development and implementation, (3) Provide peer-to-peer education to other local governments, and (4) Promote energy efficiency in County facilities to County staff along with county-wide energy efficiency promotion for public and private entities. Along with the administrative support funding, the County will participate in the Energy Savings Bid Program with the assistance of the San Diego Regional Energy Office (SDREO) which will address time, technical resource, staffing and funding barriers for implementing County facilities projects.

7. Program Outcomes

The program is a savings and education program designed to deliver net energy savings, peak demand savings and sustained efficiency through the implementation of energy efficiency activities at County facilities and Public Housing units. The desired outcome of the COSD/SDGE EIP is to (1) Achieve a comprehensive understanding of the energy conservation opportunities at County facilities and County public housing units (2) Implement energy projects and demand response opportunities at up to 7 million square feet of County commercial space and County public housing units through County staff participation in the REAP's customized incentive and rebate program, (3) Implement on-bill financing for appropriate projects, (4) Peer-to-peer, County staff and public education in energy efficiency and demand response.

8. Program Strategy

County will achieve program objectives thru staff participation in the Energy Savings Bid as well as coordination with SDGE representatives for joint training/education to County employees and outreach to residential and business customers in the areas serviced by the County's DPLU.

9. Program Objectives

The table below shows the key areas that likely will be the focus of the energy project facilitation, outreach/demand response program, peer-to-peer education and green building program.

Measure	Typical Items Addressed
County Energy Project Facilitation	<ul style="list-style-type: none"> • Lighting retrofits at up to 67 County sites; example: T-8 lamps to second generation T-8 lamps; T-12 lamps to second generation T-8 lamps • Energy efficiency mechanical projects at up to 12 County sites • Energy management systems and demand response opportunities at up to 67 county facilities • Coordinate installation with SDGE of metering and County web access for up to 45 county facilities to enable demand response initiatives • Heat recovery systems at detention facility • Retro/continuous commissioning at up to 67 county facilities
Outreach/ Demand Response Program	<ul style="list-style-type: none"> • Demand Response education for County facility managers • Demand Response education for up to 17,000 County staff • Continue to work with SDGE staff to outreach to County residential and business customers in areas services by the County's DPLU. • Up to 30 joint training/education sessions provided to County employees (residents) by both SDG&E and County staff.
Peer to Peer Education	<ul style="list-style-type: none"> • Best practices networking with other Local Governments • Assistance with project ideas and expertise • Assistance with identification of resources available to Local Governments
County's Green Building Program	<ul style="list-style-type: none"> • The County of San Diego has a Green Building Incentive Program designed to promote the use of resource efficient construction materials, water conservation and energy efficiency in new and remodeled residential and commercial buildings. The program offers a non-financial incentive of reduced plan check turnaround time and a 7.5% reduction in plan check and building permit fees for projects meeting program requirements. To qualify for the incentives, the project must comply with energy use that is below CEC Standards. Residential projects that exceed the minimum Title 24 standards by 15% and commercial projects that exceed the standards by 25% qualify for the Green Building Incentive Program. The applicant must demonstrate to the Building Division that the project exceeds the Title 24 minimum standards by submitting compliance documentation done on a computer program approved by the California Energy Commission. Note: SDG&E, along with the County of San Diego, The City of San Diego and the City of Chula Vista will continue to review various options for implementing Title 24 guidelines. Where necessary, standard thresholds may be applied.

Measure	Typical Items Addressed
	<ul style="list-style-type: none"> • Although it is preferred that program participants not receive utility incentives payments, in exchange for expedited approval of their requested building permits or land use, ability to participate in both the expedite and incentive programs may be considered. Both strategies will be reviewed during the initial phases of the program • SDGE staff to validate installation of measures

10. Program implementation

The County will assign a Project Manager to spend 100% of his time for the duration of the program to work with SDG&E staff to achieve the objectives of this program. A list of facilities that can potentially participate will be provided by the County and submitted to the San Diego Regional Energy Office for enrollment into the Energy Savings Bid program which will provide energy audits to determine which facilities are good candidates for energy retrofits and potential energy savings to be achieved at each facility. A list of best candidates will be compiled and targeted for implementation. Project implementation will be coordinated through the County Project Manager, SDGE staff and the Energy Savings Bid program based on potential energy savings and demand management opportunities.

SDGE and County staff will provide joint training/education sessions to County employees, along with outreach to other local governments, and residential and business customers in areas served by the County's DPLU.

This program will provide funding to allow the County to use its community service credibility and its community outreach infrastructure to inform "hard-to-reach" residents about energy efficient technologies and available incentives for the installation of energy efficiency measures. The County's outreach/education efforts off a long-term, comprehensive educational approach to energy conservation and the use of energy efficient technology and renewable energy in the community

11. Customer Description

County staff along with residential and business customers located in areas served by the County's DPLU.

12. Customer Interface

County Project Manager will provide a single point of contact to coordinate all programs. Additional staff and consultant resources will be utilized to provide training and outreach services.

13. Energy Measures and Program Activities

13.1. Prescriptive Measures

See SDG&E June 1, 2005 Filing Workbook

13.2. kWh Level Data

See SDG&E June 1, 2005 Filing Workbook - Savings are included in the Energy Savings Bid Program.

13.3. Non-Energy Activities

Audits, Education and Technical Assistance may be utilized

SDGE and County staff will provide joint training/education sessions to County employees, along with outreach to other local governments, and residential and business customers in areas served by the County's DPLU.

13.4. **Subcontractor Activities**

None

13.5. **Quality Assurance and Evaluation Activities**

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs

13.6. **Marketing Activities**

Marketing activities will include but not be limited to program informational materials, website development and updates, and participation in County, San Diego Regional Energy Office, SDGE and other sponsored events.

14. Conclusion

The success of the program will be attributed to a comprehensive understanding of the energy conservation opportunities at County facilities and County public housing units through audits, a customized incentive and rebate plan provided by the Energy Savings Bid Program that offers the maximum incentive to facilitate program implementation, on-going technical assistance, on-bill financing and proactively addressing energy efficiency and conservation goals with County staff and housing developers.

The program will allow for outreach into all communities served by the County's Department of Planning and Land Use and assist in marketing the County's Green Building Program to "hard-to-reach" residents.

	SDGE3022 SDP-County of San Diego Partnership
BUDGET	
Administrative Costs	\$ 989,000
Overhead and G&A	\$ 197,800
Other Administrative Costs	\$ 791,200
Marketing/Outreach	\$ -
Direct Implementation	\$ -
Total Incentives and Rebates	
User Input Incentive	\$ -
Direct Install Rebate	\$ -
Direct Install Labor	\$ -
Direct Install Materials	\$ -
Activity	\$ -
Installation	\$ -
Hardware & Materials	\$ -
Rebate Processing & Inspection	\$ -
EM&V Costs	\$ -
Budget	\$ 989,000
Costs recovered from other sources	\$ -
Budget (plus other costs)	\$ 989,000
PROGRAM IMPACTS	
DEER kW (kW)	-
Net NCP (kW)	-
Net CEC (kW)	-
Annual Net kWh	-
Lifecycle Net kWh	-
Annual Net Therms	-
Lifecycle Net Therms	-
Cost Effectiveness	
TRC	
Costs	\$ 989,000
Electric Benefits	\$ -
Gas Benefits	\$ -
Net Benefits (NPV)	\$ -
BC Ratio	-
PAC	
Costs	\$ 989,000
Electric Benefits	\$ -
Gas Benefits	\$ -
Net Benefits (NPV)	\$ -
BC Ratio	-
Levelized Cost	
Levelized Cost TRC (\$/kWh)	
Discounted kWh	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -
Levelized Cost PAC (\$/kWh)	
Discounted kWh	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -
Levelized Cost TRC (\$/therm)	
Discounted Therms	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -
Levelized Cost PAC (\$/therm)	
Discounted Therms	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -

2006-2008 Energy Efficiency Concept Paper

San Diego Energy Resource Center

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 369,449	\$ 369,153	\$ 389,318
Overhead	\$ 158,336	\$ 158,209	\$ 166,850
Direct Implementation			
Financial Incentives	\$ -	\$ -	\$ -
Activity	\$ 649,583	\$ 649,062	\$ 684,515
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ -	\$ -	\$ -
Rebate Processing and Inspection	\$ -	\$ -	\$ -
Marketing			
Program Specific Marketing	\$ 175,929	\$ 175,788	\$ 185,389
Statewide Marketing			
Total Program Budget	\$ 1,353,297	\$ 1,352,212	\$ 1,426,072

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
-	-	-	-	-	-	-	-	-

3. Program Cost Effectiveness

Attached

4. Program Descriptors

The San Diego Energy Resource Center (SDERC) is a collaborative effort between two existing successful programs – SDREO’s Energy Resource Center and SDG&E’s statewide Education and Training Program. SDERC is a local (SDG&E Territory) program that provides energy efficiency information, education and outreach. The combined program will serve both the residential and non-residential sectors.

5. Program Statement

Education and outreach are key components in transforming the energy market. In order to obtain hard energy savings people must understand the compelling economic benefits of energy efficiency. Over the past four years, SDREO’s Energy Resource Center has definitively demonstrated that focused marketing and outreach in the form of workshops, specialized trainings, technical assistance, industry collaboration and partnering will lead to hard energy savings. SDG&E has been undertaking a similar effort through their participation in a statewide Education and Training Program.

6. Program Rationale

The overarching objective of the SDERC is to bring about an increased customer awareness and knowledge of the importance of energy efficiency and the overwhelming economic benefits of energy efficiency both for the region and the individual customer. Experience has shown that true energy savings will only come about through public education and market transformation. The programs offered by the joint collaboration of SDG&E and SDREO through the SDERC will provide the education, assistance, and outreach that are a necessary precursor to achieving substantial energy savings.

To maximize outreach opportunities, SDG&E will collaborate with SDREO to develop a comprehensive education and training portfolio. While it is difficult to quantify the results of educational efforts, through ongoing contact with previous ERC users and attendees of SDG&E seminars there is clear indication that the services provided through the various components have led to documented reductions in energy use. It is known in fact, that both SDERC's and SDG&E's programs and resources have been the catalyst for numerous local Public Agencies, military commands, commercial enterprises, contractors and engineering firms to implement energy conservation programs and measures that have ultimately resulted in significant kWh, kW, and therm savings.

Integration of the Building Operator Certification (BOC) into the statewide education and training program will be part of the new program implementation strategy for 2006-08. The program will be offered within the SDG&E service territory under the SDERC, in coordination with the efforts of Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and Southern California Gas Company (SCG), as a continuation of the building operator training and certification program implemented in 2002 on a statewide basis. Operators of medium and large commercial buildings (including governmental and institutional buildings and complexes) are the primary target group for this program. The program content trains operators of these buildings to identify and implement long-term annual energy savings and electric peak-demand reduction opportunities as an integral part of their operations and maintenance activities. As a certification program, BOC seeks to establish a recognized professional credential for building operators.

SDERC is the region's single physical center for energy information, resources and programs. Given the noted importance of education and outreach, SDREO and SDG&E partnering together will continue operation of the "San Diego Energy Resource Center" for the 2006 to 2008 energy efficiency program cycle. In addition to the current SDERC program elements and in an effort to both continue other ongoing educational/outreach efforts as well as increase overall program efficiency, SDREO will incorporate elements from several other successful SDREO programs into the SDERC, including the Green Building Education and Technical Assistance (GBETA), and Technical Assistance (TAP) programs.

7. Program Outcomes

The SDERC's primary objective of this program is to increase customer awareness and knowledge of the importance of energy efficiency and the overwhelming regional and individual economic benefits of energy efficiency. True energy savings will only come

about through public education and market transformation. The programs offered by the joint collaboration of SDG&E and SDREO through the SDERC will provide the education, assistance, and outreach that are necessary to bring about substantial energy savings for the entire region.

8. Program Strategy

Achieve the program outcome of increased customer awareness and knowledge, the SDERC will provide education and outreach for both residential and non-residential customers. Direct implementation activities include workshops, training, and promotional events. To insure the program meets the needs of the various target audiences, the program elements will be flexible both in focus and content.

Technical Assistance sessions, also a direct implementation element of the SDERC, are used to provide follow-up information for appropriate implementation as customers research the ideas learned during educational and outreach programs. Technical assistance sessions may also be used to “coach” or advise customers through the project design process, equipment purchase and installation, commissioning, and ongoing operation and maintenance.

9. Program Objectives

Although this is an “information only” program, with no implied savings, previous SDG&E and SDREO experience has shown that actual implementation of energy savings equipment and processes can be directly linked to the education and training program. Throughout the course of the program, and in-conjunction with the other energy efficiency programs, an effort will be made to track direct implementation efforts related to the SDERC.

Approximate major program goals (specific goals will be developed with SDG&E and provided in the PIP) are as follows:

- Workshops and other training/outreach events – 270
- SANDEE Energy Awards – 3 competitions with 8 awards presented each year. Other energy awards and recognition opportunities as appropriate.
- Diagnostic tools – 200 “lends.”
- Customer Coaching & Assistance – 45 sessions.

10. Program Implementation

The overall implementation strategy contains three critical elements: community education, community outreach, and community resources. Local government partners will be utilized to support community outreach to communicate with residential and commercial hard-to-reach customers. SDREO in coordination with SDG&E will use available databases to insure maximum outreach to all market sectors. This will allow SDERC staff to effectively conduct the targeted marketing campaigns necessary to draw the various audiences addressed in workshops and events. SDREO and SDG&E will continue to provide resources to the community to help increase their practice of energy efficiency measures. Both SDREO’s and SDG&E’s websites will continue to be comprehensive regional sources of energy information for all market segments and will be used to promote classes and events, handle on-line course registration for workshops, RSVPs for community events, provide access to vendor and energy technology databases, and provide post-workshop

support and follow up. The SDERC will also continue to provide an energy efficiency resource library and Diagnostic Tool Lending Program.

- **Community Education:**

- Provide onsite workshops in one of the SDERC's multipurpose classrooms, as well as offsite locations. Topics will include energy efficiency, green building practices, building commissioning, sustainable design and other appropriate topics.
- Provide customized trainings for public agencies, business, and other groups upon request.
- Customized information programs for hard-to-reach sectors including seniors and non-English speakers.
- Regional energy information forums.

- **Community Outreach**

- Participation in local "energy fairs," trade shows, and other public forums appropriate for promoting energy efficiency.
- Collaboration with professional/trade associations, and local, regional, state and federal agencies that promote energy efficiency programs.
- San Diego Excellence in Energy Award (SANDEE).
- Partnership with the Regional and local Chamber(s) of Commerce to help meet the needs of the business community.

- **Community Resources**

- Online resources including technology/vendor databases, residential and non-residential e-Learning courses, energy-related links, an online newsletter, and an online "sustainability meter."
- A Learning Center for technical workshops, educational programs and meetings.
- Comprehensive energy resource library and Tool Lending program.
- A Technology Center featuring energy efficiency related equipment, displays, and exhibits.
- Technical Assistance Sessions that "coach" customers through project design, equipment purchase and installation, commissioning, and ongoing operation and maintenance.
- Follow up on educational trainings to provide additional resources and information including SDG&E incentive and rebate offers.
- Library of materials from training events.

Demand response workshops will also be facilitated by the SDERC, the costs for which will be coordinated with the demand response program and is not included in the budget proposed in this paper.

11. **Customer Description**

The SDERC will continue to provide energy efficiency support to all market sectors, however, the program specifically targets:

- Local, state and federal agencies
- Local institutions and schools
- Architectural and engineering firms

- Manufacturers, contractors and distributors
- Commercial food service operations
- Technical, trade and vendor businesses
- Building owners and facility managers

12. Customer Interface

The primary customer interface between the SDERC and the customer is through the education and outreach services provided. Direct customer related activities include workshops, training, on-line resources and promotional events. Technical Assistance sessions with individual customers will provide follow-up information for appropriate implementation as customers research ideas learned during SDERC programs.

13. Energy Measures and Program Activities

13.1. Prescriptive Measures

Not applicable.

13.2. kWh Level Data

Not applicable.

13.3. Non-energy Activities

13.3.1. End Use Load

Not applicable

13.3.2. Targeted Sector

Residential and non-residential, with primary focus on sectors as noted in section 11.

13.3.3. Activity Description

Education and outreach for both residential and non-residential sectors.

13.3.4. Quantitative Activity Goals:

- Workshops and other training/outreach events – 270.
- SANDEE Energy Awards – 3 competitions with 8 awards presented each year.
 - Other energy awards and recognition opportunities as appropriate.
- Diagnostic tool lending – 200
- Customer Coaching & Assistance – 45 sessions.

13.3.5. Assigned attributes of the activity (market sector, end use)

As noted in Section 10 (Project Implementation), there are three major areas of emphasis within the SDERC program:

- **Community Education:** workshops, customized trainings, information programs, and energy forums.
- **Community Outreach:** energy fairs, trade shows, collaboration with professional/trade associations, energy awards, and partnership with the local business community.
- **Community Resources:** online resources, a learning center, energy resource library, tool lending program, technology center, technical assistance, education follow-up, and training materials library.

13.4. Subcontractor Activities

No specific subcontractor tasks are anticipated, although some training and educations opportunities will be provided by subcontractor/consultants with expertise in specific areas.

13.5. **Quality Assurance and Evaluation Activities**

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs.

13.6. **Marketing Activities.**

The SDERC marketing strategy is dependant on using all available resources including: local government partners for community outreach, targeted marketing to commercial hard-to-reach customers, and continued use of SDG&E and SDREO databases for maximum outreach to all market sectors. This strategy will allow SDERC staff (includes SDG&E and SDREO) to effectively conduct the type of targeted marketing campaigns necessary to draw the various audiences addressed in workshops and events. SDG&E's and SDREO's websites will continue to be used to promote classes and events, handle on-line course registration for workshops, RSVPs for community events, provide access to vendor and energy technology databases, and provide post-workshop support and follow up.

14. **Conclusion**

Education and outreach have time and again been sighted as key components in transforming the energy market. If true regional energy savings are to be achieved then people must understand the compelling social, environmental and economic benefits of energy efficiency and conservation. SDREO's Energy Resource Center and SDG&E's participation in a statewide Education and Training Program have been extremely successful in realizing hard energy savings through focused marketing, outreach, collaboration and partnering. A collaborative comprehensive education and training portfolio developed between SDG&E and SDREO will maximize these outreach opportunities. Quantifying the results of educational efforts through ongoing contact with previous ERC users and attendees of SDG&E seminars has clearly shown that the services provided through both of these components have led to documented reductions in energy use. It has also been noted that having a known, centrally located Energy Resource Center for housing displays and conducting workshops has been of great benefit to the many program participant. The SDERC partnership program will continue this successful model.

SDREO's and SDG&E's programs and resources have been the catalyst for driving numerous Public Agencies and commercial enterprises to implement energy conservation programs and measures.

		SDGE3009 ERC-SDREO Energy Resource Center Partnership
BUDGET		
Administrative Costs	\$	1,611,315
Overhead and G&A	\$	483,395
Other Administrative Costs	\$	1,127,920
Marketing/Outreach	\$	537,106
Direct Implementation	\$	1,983,160
Total Incentives and Rebates		
User Input Incentive	\$	-
Direct Install Rebate	\$	-
Direct Install Labor	\$	-
Direct Install Materials	\$	-
Activity	\$	1,983,160
Installation	\$	-
Hardware & Materials	\$	-
Rebate Processing & Inspection	\$	-
EM&V Costs	\$	-
Budget	\$	4,131,581
Costs recovered from other sources	\$	-
Budget (plus other costs)	\$	4,131,581
PROGRAM IMPACTS		
DEER kW (kW)		-
Net NCP (kW)		-
Net CEC (kW)		-
Annual Net kWh		-
Lifecycle Net kWh		-
Annual Net Therms		-
Lifecycle Net Therms		-
Cost Effectiveness		
TRC		
Costs	\$	4,131,581
Electric Benefits	\$	-
Gas Benefits	\$	-
Net Benefits (NPV)	\$	-
BC Ratio		-
PAC		
Costs	\$	4,131,581
Electric Benefits	\$	-
Gas Benefits	\$	-
Net Benefits (NPV)	\$	-
BC Ratio		-
Levelized Cost		
Levelized Cost TRC (\$/kWh)		
Discounted kWh		-
Cost	\$	-
Benefits	\$	-
Benefit-Cost	\$	-
Levelized Cost PAC (\$/kWh)		
Discounted kWh		-
Cost	\$	-
Benefits	\$	-
Benefit-Cost	\$	-
Levelized Cost TRC (\$/therm)		
Discounted Therms		-
Cost	\$	-
Benefits	\$	-
Benefit-Cost	\$	-
Levelized Cost PAC (\$/therm)		
Discounted Therms		-
Cost	\$	-
Benefits	\$	-
Benefit-Cost	\$	-

2006-2008 Energy Efficiency Concept Paper SDG&E, University of California and California State University Program

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 5,373	\$ 5,373	\$ 5,373
Overhead	\$ 17,934	\$ 17,934	\$ 17,934
Direct Implementation			
Financial Incentives	\$ 1,400,000	\$ 1,400,000	\$ 1,400,000
Activity	\$ 567,394	\$ 567,394	\$ 567,394
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ -	\$ -	\$ -
Rebate Processing and Inspection	\$ 9,299	\$ 9,299	\$ 9,299
Marketing			
Program Specific Marketing	\$ -	\$ -	\$ -
Statewide Marketing			
Total Program Budget	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
652	4,046,926	156,568	652	4,046,926	156,568	652	4,046,926	156,568

3. Program Cost Effectiveness

Attached

4. Program Descriptors

The SDG&E, University of California and California State University (SDG&E/UC/CSU) program is an existing statewide nonresidential program that will continue in the 2006 through 2008. The program will continue to offer incentives for retrofit projects, continuous commissioning, and educational training for campus energy managers.

5. Program Statement

The University of California (UC) and California State University (CSU) systems consume vast quantities of energy and, as a combined entity, make up a significant portion of the both the

What's New for 2006-08?

- Innovation
 - Improved outreach to campuses for a more effective training and education program
- Integration
 - Similar potential programs for the community colleges and Department of Corrections to provide for more deployment synergies and improved outreach
- Other Program Improvements
 - Overall program budgets are increased and are being allocated to campuses based upon higher energy savings and demand reduction potential. Administrative costs to be reduced to improve cost effectiveness.

electric and natural gas load in the State of California. These are large, complex organizations with a broad set of goals, stakeholders, processes and constituencies. They are diverse from a geographic, climate, and operational needs standpoint. But with this size and diversity also comes a considerable opportunity to save energy use and cost on a scale that is meaningful to the State of California. The University of California/California State University (UC/CSU) and Investor-Owned Utility (IOU) Energy Efficiency program is designed to meet this challenge.

6. Program Rationale

The Program is a unique, statewide energy efficiency program that accomplishes immediate, long-term peak energy and demand savings, and establishes a permanent framework for a sustainable, long-term, comprehensive energy management program at the UC and CSU campuses served by California's four large IOUs. This program capitalizes on the vast resources and expertise of UC/CSU and California IOUs to ensure a successful and cost-effective program that meets all objectives of the California Public Utilities Commission (CPUC or Commission) as articulated in Decision 03-08-067. The program is an extension of the same partnership first established in the 2004-2005 Energy Efficiency Program cycle, and will capitalize on lessons learned in the areas of improved program delivery efficiency and communication between the stakeholders. The new program will also address a backlog of cost effective projects that were identified in the previous cycle but could not be completed because of budget limitation. The previous 2004-2005 partnership not only provided a comprehensive energy efficiency program for UC/CSU, but also established a model for statewide partnership programs and which could allow expansion of this program, or establish new programs, to other partners such as the California's community colleges in the 2006-2008 funding cycle.

7. Program Outcomes

The Program will continue the progress made with the 2004-2005 UC/CSU/IOU Energy Efficiency Partnership in developing the framework and implementing the energy savings strategies developed in that cycle, as well as achieving new energy and demand savings goals as outlined in the estimates that accompany this narrative.

8. Program Strategy

Like the 2004-2005 program, the 2006-2008 UC/CSU/IOU partnership program is comprised of three elements, which will operate on a statewide, integrated basis, providing immediate energy savings and setting the foundation for a long-term program focused on sustainability and best practices:

- *Energy Efficiency Retrofits*

The Energy Efficiency Retrofit element of the program involves implementation of energy efficiency retrofit projects providing cost-effective energy savings during the 2006-2008 program implementation period. UC and CSU have an existing and extensive inventory of cost-effective energy saving measures, as well as many new projects developed as part of the 2004-2005 program cycle. This inventory will be reviewed and finalized during the initial stages of the program to finalize an implementation plan and schedule. Projects that were started in the previous cycle will be completed during this phase of

the program. The process of finalizing the inventory and installation of measures will be well documented and passed on for use in the retro- and continuous commissioning element and the development of best practices and training and education in the third element of the program.

- Monitoring Based Commissioning (MBCx)

This element of the program is a unique approach to obtaining savings that combines the expertise of the Universities' statewide campus facility management staff, additional utility and subcontractor expertise, and the installation of energy monitoring and metering equipment at the building submeter and system level. Through these resources, a systematic, comprehensive continuous commissioning program was developed by the program in the last cycle. Until the establishment of this program in the 2004-2005 cycle, almost every retro-commissioning program has consisted of a one-time review of building operations, installation of equipment control measures, one or two training workshops, and possibly development of commissioning documents. The approach of this portion of the partnership program is far different. It includes the usual first step, a review of building operations and installation of equipment. However, it goes beyond the typical program to date in three aspects. First, the campuses that participate in this aspect of the program will install sufficient equipment to insure an extensive and comprehensive built-in measurement and verification capability. Second, this element of the program will be combined with the third element (Energy Efficiency Education and Best Practices Development and Training) to become a "continuous commissioning" program, that is institutionalized at the campuses for the foreseeable future. In this way, savings will be sustained well beyond those from the more typical and limited retro-commissioning programs. Third, the program will use the campus facilities management staff to identify new cost-effective retrofit opportunities efficiently and at low cost.

The Monitoring Based Commissioning projects implemented during the 2004-2005 cycle have been thoroughly reviewed and evaluated for effectiveness; best-practices have been documented and processes will be streamlined for MBCx activities during the 2006-2008 program cycle.

- Energy Efficiency Education and Best Practices Development and Training

The Energy Efficiency Education and Best Practices Development and Training element of the program will continue the comprehensive program for energy education and information exchange among the UC/CSU campus energy managers, project managers, and facility staff and with the IOUs that began with the 2004-2005 program cycle. This program provides a venue for those individuals responsible for managing energy use on campuses to share information and experiences related to facility operations, best practices, and successful retrofit projects, among other issues. This is an information and education program that develops and shares best practice operating methods and technologies applicable to university campus facilities. The primary

vehicles for training and dissemination of information will be and a series of training sessions and workshops (covering new construction, building operator training, retrofits, retro-commissioning, and monitoring based commissioning) to be held in Northern and Southern California. Course offerings, curriculum and content will be based on extensive material and best-practices documentation developed during the 2004-2005 cycle.

Work is ongoing to refine the program elements and consider sub-elements to best meet the needs of the campuses and utility partners.

9. Program Objectives

The objectives of the program are as follows:

A. Immediate, Cost-Effective Energy Savings and Demand Reduction

Retrofit projects will be efficiently implemented to meet or exceed all savings goals as outlined in the program economics.

B. Improved Energy Efficient Operations and Maintenance Practices

Campus energy managers and other staff will be trained on initial and continuous commissioning and will receive tools to reduce energy consumption and peak demand through energy information at the building systems level.

C. UC/CSU Energy Managers Trained To Identify and Implement Energy Efficient Opportunities

Similarly, this program will fund training campus energy managers, project managers and other staff in use of a "best practices" methodology for identifying and implementing energy efficiency projects.

10. Program Implementation

The UC/CSU/IOU Energy Efficiency Program will use the same implementation strategy for the 2006-2008 cycle as was used in the last cycle. A more detailed description of these implementations tasks will be provided in future, comprehensive program descriptions. The implementation plan for this cycle will be refined to account for progress already made and will include:

- A. Coordination with other energy efficiency programs and ongoing campus projects
- B. Energy Efficiency Retrofit Program Element Implementation (including project selection and implementation).
- C. Facility Monitoring Based Commissioning Implementation
- D. Energy Efficiency Education and Best Practices Development and Training Implementation

11. Customer Description

The customer is the UC/CSU campus facilities in the four IOU service areas.

12. Customer Interface

The 2006-2008 Program will utilize the same program management and team interface structure that was established during the program previous cycle. UC/CSU and the four IOUs have formed a partnership to manage and implement the UC/CSU Energy Efficiency Program. Staff from each utility and from both UC and CSU will be responsible for the

successful execution of the program. The 2006-2008 program will benefit from the significant progress that has been made during the previous cycle in developing program processes and improving communication between the many partner organizations.

13. Energy Measures and Program Activities

13.1. Prescriptive Measures

See SDG&E June 1, 2005 Filing Workbook

13.2. kWh Level Data

See SDG&E June 1, 2005 Filing Workbook

13.3. Non-energy Activities

The training and education component of the partnership program involves training of campus design staff, project managers, energy managers and others on using best energy practices in the construction, retrofit, and monitoring based commissioning of campus buildings and central plant infrastructures. This will continue progress made on the establishment of a statewide approach to training and building operation so that this best energy practices approach can be used for ensuring long-term energy efficiency savings. The training and education component will work hand-in-hand with the first two program components – energy retrofits and retro- and continuous commissioning.

13.4. Subcontractor Activities

Subcontractors will be used to assist in program administration and management, and in each of the three program elements. This approach was used successfully in the program previous cycle.

A consultant will assist in day-to-day coordination and communication among the partners (the Universities and four utilities) and provide staffing to the Management and Administration Team and Program Specific Implementation Teams. Consultant will assist in identifying project tasks, establishing a schedule of deliverables and responsibilities, helping UC/CSU ensure successful program implementation, and obtaining UC/CSU input and decision-making on key program elements. Consultant will also assist in the three program elements, especially in facilitating coordination and communications with and among campuses, providing analytical assistance to UCOP and the CSU Chancellor's Office as needed, provide assistance with successful retention of subcontractors through competitive procurement processes, and helping to track and ensure successful program implementation based on specific deliverables required by the CPUC. Finally, the consultant will assist the IOUs and UC/CSU in CPUC reporting and regulatory communications. For the third program component, Training and Education, the consultant may assist in development of workshop agendas and materials, identification of experts, facilitation of workshops and training sessions, and preparation of the minutes.

The campuses will hire Energy Efficiency Retrofit subcontractors to install the energy efficiency measures for the retrofit component.

As in the 2004-2005 program, the campus facilities management staff will play a major role in this program component with the assistance of subcontractors will assist, particularly in campuses in their commissioning efforts. The Program Team will conduct a competitive process to develop a pool of qualified commissioning agents/trainers that will be available to the campuses.

13.5. **Quality Assurance and Evaluation Activities**

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs.

13.6. **Marketing Activities**

Since the UC/CSU/IOU team already has an established communication network with campus energy managers and staff, marketing to new 2004-2005 potential program will be based on the pre-established channels.

14. Conclusion

The SDG&E UC/CSU program will continue to build upon its successes in 2006 to 2008. Program cost effectiveness is improved since many of the program costs to start-up program are no longer required. Based upon the projects identified during 2004-2005, it is expected that there is a tremendous opportunity for energy savings in 2006 to 2008.

		SDGE3026 UCP- IOU/UC/CSU Partnership
BUDGET		
Administrative Costs	\$	69,921
Overhead and G&A	\$	53,802
Other Administrative Costs	\$	16,119
Marketing/Outreach	\$	-
Direct Implementation	\$	5,930,079
Total Incentives and Rebates		
User Input Incentive	\$	-
Direct Install Rebate	\$	4,200,000
Direct Install Labor	\$	-
Direct Install Materials	\$	-
Activity	\$	1,702,181
Installation	\$	-
Hardware & Materials	\$	-
Rebate Processing & Inspection	\$	27,898
EM&V Costs	\$	-
Budget	\$	6,000,000
Costs recovered from other sources	\$	-
Budget (plus other costs)	\$	6,000,000
PROGRAM IMPACTS		
DEER kW (kW)		1,955
Net NCP (kW)		3,575
Net CEC (kW)		2,635
Annual Net kWh		12,140,779
Lifecycle Net kWh		160,993,771
Annual Net Therms		469,703
Lifecycle Net Therms		4,912,308
Cost Effectiveness		
TRC		
Costs	\$	6,512,890
Electric Benefits	\$	11,239,333
Gas Benefits	\$	1,967,088
Net Benefits (NPV)	\$	6,693,531
BC Ratio		2.03
PAC		
Costs	\$	5,600,373
Electric Benefits	\$	11,239,333
Gas Benefits	\$	1,967,088
Net Benefits (NPV)	\$	7,606,048
BC Ratio		2.36
Levelized Cost		
Levelized Cost TRC (\$/kWh)		
Discounted kWh		96,436,995
Cost	\$	0.0498
Benefits	\$	0.1165
Benefit-Cost	\$	0.0668
Levelized Cost PAC (\$/kWh)		
Discounted kWh		96,436,995
Cost	\$	0.0434
Benefits	\$	0.1165
Benefit-Cost	\$	0.0732
Levelized Cost TRC (\$/therm)		
Discounted Therms		3,219,553
Cost	\$	0.5321
Benefits	\$	0.6110
Benefit-Cost	\$	0.0789
Levelized Cost PAC (\$/therm)		
Discounted Therms		3,219,553
Cost	\$	0.4400
Benefits	\$	0.6110
Benefit-Cost	\$	0.1710

SDGE IOU/UC/CSU Partnership

Year	Total Budget	Total Incentives	Admin Budget	Net kWh	Net Therms	Net kW
2006	\$ 2,000,000	\$ 1,400,000	\$ 600,000	4,046,926	156,568	652
2007	\$ 2,000,000	\$ 1,400,000	\$ 600,000	4,046,926	156,568	652
2008	\$ 2,000,000	\$ 1,400,000	\$ 600,000	4,046,926	156,568	652

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	238002	Gas Measures	-	1	-	0.8	Therm	10	172,000	\$ 2.46	\$ 3.87	-	-	137,600
2006	238003	Lighting	1	-	0.00	0.8	kWh	11	1,544,158	\$ 0.19	\$ 0.13	371	1,235,326	-
2006	238004	Other	1	0	0.00	0.8	kWh	10	524,500	\$ 0.22	\$ 0.32	42	419,600	4,616
2006	238005	HVAC	1	0	0.00	0.8	kWh	15	2,990,000	\$ 0.19	\$ 0.38	239	2,392,000	14,352
2007	238002	Gas Measures	-	1	-	0.8	Therm	10	172,000	\$ 2.46	\$ 3.87	-	-	137,600
2007	238003	Lighting	1	-	0.00	0.8	kWh	11	1,544,158	\$ 0.19	\$ 0.13	371	1,235,326	-
2007	238004	Other	1	0	0.00	0.8	kWh	10	524,500	\$ 0.22	\$ 0.32	42	419,600	4,616
2007	238005	HVAC	1	0	0.00	0.8	kWh	15	2,990,000	\$ 0.19	\$ 0.38	239	2,392,000	14,352
2008	238002	Gas Measures	-	1	-	0.8	Therm	10	172,000	\$ 2.46	\$ 3.87	-	-	137,600
2008	238003	Lighting	1	-	0.00	0.8	kWh	11	1,544,158	\$ 0.19	\$ 0.13	371	1,235,326	-
2008	238004	Other	1	0	0.00	0.8	kWh	10	524,500	\$ 0.22	\$ 0.32	42	419,600	4,616
2008	238005	HVAC	1	0	0.00	0.8	kWh	15	2,990,000	\$ 0.19	\$ 0.38	239	2,392,000	14,352

2006-2008 Energy Efficiency Concept Paper SDG&E/California Community Colleges Program

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 35,795	\$ 35,795	\$ 35,795
Overhead	\$ 19,343	\$ 19,343	\$ 19,343
Direct Implementation			
Financial Incentives	\$ 1,400,000	\$ 1,400,000	\$ 1,400,000
Activity	\$ 535,563	\$ 535,563	\$ 535,563
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ -	\$ -	\$ -
Rebate Processing and Inspection	\$ 9,299	\$ 9,299	\$ 9,299
Marketing			
Program Specific Marketing	\$ -	\$ -	\$ -
Statewide Marketing			
Total Program Budget	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
618	4,046,926	156,568	618	4,046,926	156,568	618	4,046,926	156,568

3. Program Cost Effectiveness

Attached

4. Program Descriptors

The SDG&E/California Community Colleges program is a new statewide nonresidential program that will be very similar to the existing SDG&E UC/CSU Partnership program. The program will offer incentives for retrofit and new construction projects, continuous commissioning, and educational training for the community colleges.

5. Program Statement

The California Community College (CCC) system includes 110 campuses statewide. These facilities consume vast quantities of energy and make up a significant portion of the both the electric and natural gas loads in the State of California. This is a large, complex organization with a broad set of goals, stakeholders, processes and constituencies. The organization is diverse from a geographic, climate, and operational needs standpoint. But with this size and diversity also comes a considerable opportunity to save energy use and cost on a scale that is meaningful to the State of California. The California Community College (CCC) and Investor-Owned Utility (IOU) Energy Efficiency program is designed to meet this challenge.

6. Program Rationale

The Program is modeled after the successful UC/CSU/IOU Energy Efficiency Partnership program that was funded in the 2004-2005 CPUC energy efficiency program cycle. This program capitalizes on the vast resources and expertise of Community College system and California IOUs to ensure a successful and cost-effective program that meets all objectives of the California Public Utilities Commission (CPUC or Commission). The new CCC/IOU program will incorporate lessons learned from previous statewide partnership programs in the areas of improved program delivery efficiency and communication between the stakeholders. The timing of the CCC/IOU Partnership is critical; the CCC is embarking on a major construction cycle and needs technical and financial input from the IOUs to ensure that the resulting new buildings are as energy efficient as possible.

7. Program Outcomes

The Program will adopt the framework and methodology of the UC/CSU/IOU Partnership Program to design and implement a sustainable, long-term, comprehensive energy management program at the CCC campuses served by California's four large IOUs. This will be a statewide energy efficiency program that is designed to efficiently accomplish immediate and long-term peak energy and demand savings goals as outlined in the estimates that accompany this narrative.

8. Program Strategy

To best meet the need of the CCC system and optimize opportunities for energy savings and load reduction, the CCC/IOU Partnership is comprised of four program elements. These elements will operate on a statewide, integrated basis, providing immediate energy savings and setting the foundation for a long-term program focused on sustainability and best practices:

- *Energy Efficiency Retrofits and Load Management Projects*
The Energy Efficiency Retrofit and Load Management Retrofit element of the program involves implementation of energy efficiency retrofit projects and retro-commissioning projects that will provide cost-effective energy savings during the 2006-2008 program implementation period. CCC has an existing and extensive inventory of cost-effective energy saving measures, as well as many new projects to be developed as part of the 2006-2008 program cycle. Methodology for further screening and selection of eligible project will be standardized as part of the program, based on previous project identification tools the CCC has successfully used in the past. The resulting inventory of potential projects will be reviewed and finalized during the initial stages of the program to develop an overall implementation plan and schedule. Load management will be achieved through retro-commissioning and monitoring-based commissioning (MBCx) projects. These projects will be implemented where there are opportunities to achieve sustainable savings through operational changes. The MBCx projects involved installation of submetering equipment and will be based on best practices as developed during the 2004-2005 UC/CSU Partnership. The project plan assumes that the CCC will co-fund projects, paying for 20% of implementation cost.

- *New Construction Assistance*

The New Construction Assistance element of the program focuses on the unique needs and opportunities of the CCC as they embark on a major construction cycle associated with bond funding as approved by Proposition 39. There are many demands on the budgets associated with these projects, and the buildings will be built to Title-24 minimum standards for energy efficiency without input from the IOUs that exceeds that available through general new construction programs. The needs of the CCC are both specific and vast and this program capitalizes on a unique window of opportunity to optimize the efficiency of millions of square feet of new building stock that will be added in the State of California over the next five years.

New Construction Assistance will include design review, development of design guidelines and equipment specification standards, and incentivizing of the incremental cost of energy efficiency measure in new construction projects. The program will provide a uniform, statewide approach that will offer the CCC consistency and ease-of-access not available from standard programs like Savings By Design. The program will all directly focus on the CCC system's needs in implement the Governor's Green Building Initiative Executive order and LEED certification.

- *Energy Efficiency Education and Training*

The Energy Efficiency Education and Training focuses on the specific needs of the CCC and is designed to compliment existing training programs available to the Campuses including those offered internally, by the IOUs, and by the UC/CSU Partnership. Training class elements will focus on three primary opportunities:

- Training CCC staff on the identification and implementation of energy efficiency projects and MBCx projects and operation best practices,
- Training project managers on the elements of green building design and energy efficient specification and construction practices by exceeding Title-24,
- Developing and implementing vocational education training curriculum for students and trade technicians, including topics such a refrigeration and HVAC service and installation, duct testing and sealing, energy code compliance, lighting retrofits, and others.

Courses will be held statewide. Where applicable, course offerings, curriculum and content will be based on extensive material and best-practices documentation developed for the UC/CSU program during the 2004-2005 cycle.

- *Emerging Technologies Demonstration Program*

The Emerging Technologies Demonstration element capitalizes on the unique opportunities associated with the upcoming new construction projects at CCC campuses throughout the state. Along with New Construction Assistance and

related training, the program provides specific opportunities for well planned and highly visible demonstration projects. A methodology will be developed to screen potential projects and determine the best applications for new and emerging technologies including high efficiency lighting, HVAC, and building envelope measures. Incremental cost will be funded through the partnership program at levels exceeding those offered through the New Construction Assistance program for selected demonstration projects.

9. Program Objectives

The objectives of the program are as follows:

A. Immediate, Cost-Effective Energy and Demand Savings

Retrofit projects will be efficiently implemented to meet or exceed all savings goals as outlined in the program economics.

B. On-going Improved Energy Efficient Operations and Maintenance Practices

Campus energy managers and other staff will be trained on initial and continuous commissioning and will receive tools to reduce energy consumption and peak demand through energy information at the building systems level.

C. CCC Facilities Staff and Project Managers Trained To Identify and Implement Energy Efficient Opportunities

Similarly, this program will fund training campus facilities staff, project managers and other staff in use of a “best practices” methodology for identifying and implementing energy efficiency projects.

D. Optimization of the Energy Efficiency of New Construction projects

The Partnership will provide technical and financial resources and a systematic program approach to ensure that millions of square feet of CCC new construction projects are built to optimal energy efficiency levels, avoiding significant future load growth.

E. Future savings through Vocational Training and Technology demonstration

Although it is not quantified, the Partnership will impact future energy and demand savings by helping to training the next generation of building technicians and through the demonstration of emerging technologies.

10. Program Implementation

The CCC/IOU Energy Efficiency Program will use a similar implementation strategy that was used in the UC/CSU program during the 2004-2005 cycle. A more detailed description of these implementations tasks will be provided in future with comprehensive program descriptions. The implementation plan for this cycle will include:

- A. Coordination with other energy efficiency programs and ongoing campus projects
- B. Energy Efficiency Retrofit and Load Management Project program implementation.
- C. New Construction Assistance program implementation
- D. Energy Efficiency Education and Training implementation
- E. Emerging technologies Demonstration Program implementation

11. Customer Description

The program will be offered to all California Community College campus facilities in the four IOU service areas.

12. Customer Interface

The 2006-2008 Program will utilize a similar program management and team interface structure that was established during the UC/CSU/IOU Partnership in the previous cycle. The Community Colleges and the four IOUs will form a partnership to manage and implement the CCC Energy Efficiency Program. Staff from each utility and from the CCC Chancellors Office and system will be responsible for the successful execution of the program. The CCC/IOU program will benefit from the significant progress that has been made with the UC/CSU/IOU program during the previous cycle in developing program processes and improving communication between the many partner organizations.

13. Energy Measures and Program Activities

13.1. Prescriptive Measures

See SDG&E June 1, 2005 Filing Workbook

13.2. kWh Level Data

See SDG&E June 1, 2005 Filing Workbook

13.3. Non-energy Activities

The training and education component of the partnership program involves training of campus facilities staff, project managers, energy managers and others on using best energy practices in the construction, retrofit and monitoring based commissioning of campus buildings and central plant infrastructures. This will continue progress made on the establishment of a statewide approach to training and building operation so that this best energy practices approach can be used for ensuring long-term energy efficiency savings. The training and education component will work hand-in-hand with the other program components.

13.4. Subcontractor Activities

Subcontractors will be used to assist in program administration and management, and in each of the three program elements. This approach was used successfully in the UC/CSU/IOU partnership program in the previous cycle.

A consultant will assist in day-to-day coordination and communication among the partners (the colleges and four utilities) and provide staffing to the Management and Administration Team and Program Specific Implementation Teams. Consultant will assist in identifying project tasks, establishing a schedule of deliverables and responsibilities, helping the CCC ensure successful program implementation, and obtaining CCC input and decision-making on key program elements. Consultant will also assist in the four program elements, especially in facilitating coordination and communications with and among campuses, providing analytical assistance to the CCCCCO and campuses as needed, provide assistance with successful retention of subcontractors through competitive procurement processes, and helping to track and ensure successful program implementation based on specific deliverables required by the CPUC. Finally, the consultant will assist the IOUs and the CCC in CPUC reporting and regulatory communications. For the third program component, Training and Education, the consultant may assist in development of workshop agendas and materials, identification of experts, facilitation of workshops and training sessions, and preparation of the minutes.

The campuses will hire Energy Efficiency Retrofit subcontractors to install the energy efficiency measures for the retrofit component.

13.5. **Quality Assurance and Evaluation Activities**

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs.

13.6. **Marketing Activities**

To be determined.

14. Conclusion

The SDG&E/California Community Colleges program is a new program that will build upon the successful model of the UC/CSU/IOU Partnership of 2004 and 2005. In addition to the program elements of the UC/CSU/IOU program, the CCC program may also include new construction and emerging technologies elements. Based upon the projects identified thus far, it is expected that there is a tremendous opportunity for energy savings in 2006 to 2008.

	SDGE3001 CCP- IOU/Community College Partnership	
BUDGET		
Administrative Costs	\$	165,414
Overhead and G&A	\$	58,029
Other Administrative Costs	\$	107,385
Marketing/Outreach	\$	-
Direct Implementation	\$	5,834,586
Total Incentives and Rebates		
User Input Incentive	\$	-
Direct Install Rebate	\$	4,200,000
Direct Install Labor	\$	-
Direct Install Materials	\$	-
Activity	\$	1,606,688
Installation	\$	-
Hardware & Materials	\$	-
Rebate Processing & Inspection	\$	27,898
EM&V Costs	\$	-
Budget	\$	6,000,000
Costs recovered from other sources	\$	-
Budget (plus other costs)	\$	6,000,000

PROGRAM IMPACTS		
DEER kW (kW)		1,855
Net NCP (kW)		3,575
Net CEC (kW)		2,635
Annual Net kWh		12,140,779
Lifecycle Net kWh		160,993,771
Annual Net Therms		469,703
Lifecycle Net Therms		4,912,308
Cost Effectiveness		
TRC		
Costs	\$	5,746,891
Electric Benefits	\$	11,239,333
Gas Benefits	\$	2,362,164
Net Benefits (NPV)	\$	7,854,606
BC Ratio		2.37
PAC		
Costs	\$	5,600,373
Electric Benefits	\$	11,239,333
Gas Benefits	\$	2,362,164
Net Benefits (NPV)	\$	8,001,124
BC Ratio		2.43
Levelized Cost		
Levelized Cost TRC (\$/kWh)		
Discounted kWh		96,436,995
Cost	\$	0.0480
Benefits	\$	0.1165
Benefit-Cost	\$	0.0685
Levelized Cost PAC (\$/kWh)		
Discounted kWh		96,436,995
Cost	\$	0.0420
Benefits	\$	0.1165
Benefit-Cost	\$	0.0745
Levelized Cost TRC (\$/therm)		
Discounted Therms		3,219,553
Cost	\$	0.3462
Benefits	\$	0.7337
Benefit-Cost	\$	0.3875
Levelized Cost PAC (\$/therm)		
Discounted Therms		3,219,553
Cost	\$	0.4812
Benefits	\$	0.7337
Benefit-Cost	\$	0.2525

SDGE IOU/Community College Partnership

Year	Total Budget	Total Incentives	Admin Budget	Net kWh	Net Therms	Net kW
2006	\$ 2,000,000	\$ 1,400,000	\$ 600,000	4,046,926	156,568	618
2007	\$ 2,000,000	\$ 1,400,000	\$ 600,000	4,046,926	156,568	618
2008	\$ 2,000,000	\$ 1,400,000	\$ 600,000	4,046,926	156,568	618

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	237002	Lighting	1	-	0.00	0.8 kwh	11	1,544,158	\$ 0.19	\$0.13	337	1,235,326	-	
2006	237003	Other	1	0	0.00	0.8 kwh	10	524,500	\$ 0.22	\$0.32	42	419,600	4,616	
2006	237004	HVAC	1	0	0.00	0.8 kwh	15	2,990,000	\$ 0.19	\$0.38	239	2,392,000	14,352	
2006	237005	Gas Measures	-	1	-	0.8 Therm	10	172,000	\$ 2.46	\$1.80	-	-	137,600	
2007	237002	Lighting	1	-	0.00	0.8 kwh	11	1,544,158	\$ 0.19	\$0.13	337	1,235,326	-	
2007	237003	Other	1	0	0.00	0.8 kwh	10	524,500	\$ 0.22	\$0.32	42	419,600	4,616	
2007	237004	HVAC	1	0	0.00	0.8 kwh	15	2,990,000	\$ 0.19	\$0.38	239	2,392,000	14,352	
2007	237005	Gas Measures	-	1	-	0.8 Therm	10	172,000	\$ 2.46	\$1.80	-	-	137,600	
2008	237002	Lighting	1	-	0.00	0.8 kwh	11	1,544,158	\$ 0.19	\$0.13	337	1,235,326	-	
2008	237003	Other	1	0	0.00	0.8 kwh	10	524,500	\$ 0.22	\$0.32	42	419,600	4,616	
2008	237004	HVAC	1	0	0.00	0.8 kwh	15	2,990,000	\$ 0.19	\$0.38	239	2,392,000	14,352	
2008	237005	Gas Measures	-	1	-	0.8 Therm	10	172,000	\$ 2.46	\$1.80	-	-	137,600	

2006-2008 Energy Efficiency Concept Paper SDG&E/California Department of Corrections Program

1. Projected Program Budget

	2006	2007	2008
Administrative			
Other Administrative	\$ 681	\$ 681	\$ 681
Overhead	\$ 4,104	\$ 4,104	\$ 4,104
Direct Implementation			
Financial Incentives	\$ 300,002	\$ 300,002	\$ 300,002
Activity	\$ 91,327	\$ 91,327	\$ 91,327
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ -	\$ -	\$ -
Rebate Processing and Inspection	\$ 3,886	\$ 3,886	\$ 3,886
Marketing			
Program Specific Marketing	\$ -	\$ -	\$ -
Statewide Marketing			
Total Program Budget	\$ 400,000	\$ 400,000	\$ 400,000

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
192	1,192,956	9,504	192	1,192,956	9,504	192	1,192,956	9,504

3. Program Cost Effectiveness

Attached

4. Program Descriptors

The SDG&E/California Department of Corrections program is a new statewide nonresidential program that will be very similar to the existing SDG&E UC/CSU Partnership program. The program will offer incentives for retrofit projects, continuous commissioning, and educational training for the prisons and youth facilities.

5. Program Statement

The State of California Department of Corrections facilities consume vast quantities of energy and makes up a significant portion of the both the electric and natural gas load in the State of California. The more than 30 institutions that make up this system are large and complex and are diverse from a geographic, climate, infrastructure and operational needs standpoint. But with this size and diversity also comes a considerable opportunity to save energy use and cost on a scale that is meaningful to the State of California. The Department of Corrections and Investor-Owned Utility (IOU) Energy Efficiency Program is designed to meet this challenge.

6. Program Rationale

The Program is a customized statewide energy efficiency program that accomplishes immediate, long-term peak energy and demand savings, and establishes a permanent framework for a sustainable, long-term, comprehensive energy management program at the CDC institutions served by California's four large IOUs. This program capitalizes on the vast opportunities for efficiency improvements and utilized the resources and expertise of CDC and IOU staff to ensure a successful and cost-effective program that meets all objectives of the California Public Utilities Commission (CPUC or Commission). The program will be modeled after the UC/CSU partnership program first established in the 2004-2005 Energy Efficiency Program cycle, however assumes greater financial contribution from the CDC. The new program will also address a significant backlog of cost effective projects that have been previously identified by the CDC but could not be completed because of budget limitations. The previous 2004-2005 UC/CSU partnership established a model for statewide partnership programs facilitating expansion to other partners such as the CDC in the 2006-2008 funding cycle.

7. Program Outcomes

The Program will continue the progress made during the last program cycle for establishing a statewide partnership programs delivery and will achieve new energy and demand savings goals as outlined in the estimates that accompany this narrative. It is anticipated that this program will lay the groundwork for future expanded partnership programs that may include the vast network of California Youth Authority facilities.

8. Program Strategy

Like the 2004-2005 UC/CSU program, the 2006-2008 CDC/IOU partnership program is comprised of three elements, which will operate on a statewide, integrated basis, providing immediate energy savings and setting the foundation for a long-term program focused on sustainability and best practices: In each case, the program elements will be customized to meet the specific needs of the CDC and the specific barriers to implementing projects in the past.

- Energy Efficiency Retrofits
The Energy Efficiency Retrofit element of the program involves implementation of energy efficiency retrofit projects providing cost-effective energy savings during the 2006-2008 program implementation period. CDC has an existing and extensive inventory of cost-effective energy saving measures. This inventory will be reviewed and finalized during the initial stages of the program to finalize an implementation plan and schedule. Project identification processes will incorporate the specific needs of the CDC accounting for additional costs and processes of completing work in high security facilities. The process of finalizing the inventory and installation of measures will be well documented and establish guidelines implementation standards systemwide.
- Monitoring Based Commissioning (MBCx)
This element of the program is a unique approach to obtaining savings that combines the expertise of the CDC's statewide facility management staff,

additional utility and subcontractor expertise, and the installation of energy monitoring and metering equipment at the building submeter and system level. Through these resources, a systematic, comprehensive continuous commissioning program was developed by the UC/CSU program in the last cycle. This approach involves the usual first step of commissioning, a review of building operations and installation of equipment. However, it goes beyond the typical program to date in three aspects. First, the institutions that participate in this aspect of the program will install sufficient equipment to insure an extensive and comprehensive built-in measurement and verification capability. Second, this element of the program will be combined with the third element (Energy Efficiency Education and Best Practices Development and Training) to become a “continuous commissioning” program, that is institutionalized at the campuses for the foreseeable future. In this way, savings will be sustained well beyond those from the more typical and limited retro-commissioning programs. Third, the program will use the institution’s facilities management staff to identify new cost-effective retrofit opportunities efficiently and at low cost.

- *Energy Efficiency Education and Best Practices Development and Training*
The Energy Efficiency Education and Best Practices Development and Training element of the program will focus on meeting the specific needs of the CDC to establish operational guidelines and improve retention of facilities staff. This element will establish a comprehensive program for energy education and information exchange among the CDC project managers, and facility staff and with the IOUs that began with the 2004-2005 program cycle. This program provides a venue for those individuals responsible for managing energy and operating systems at institutions to share information and experiences related to facility operations, best practices, and successful retrofit projects, among other issues. This is an information and education program that develops and shares best practice operating methods and technologies applicable to institutional facilities. The primary vehicles for training and dissemination of information will be and a series of training sessions and workshops (covering new construction, building operator training, retrofits, retro-commissioning, and monitoring based commissioning) to be held in locations statewide. Where applicable, course offerings, curriculum and content will be based on extensive material and best-practices documentation developed for the UC/CSU partnership during the 2004-2005 cycle, but will focus on the specific needs of the CDC

9. Program Objectives

The objectives of the program are as follows:

A. Immediate, Cost-Effective Energy and Demand Savings

Retrofit projects will be efficiently implemented to meet or exceed all savings goals as outlined in the program economics.

B. Improved Energy Efficient Operations and Maintenance Practices

CDC staff will be trained on initial and continuous commissioning and will receive tools to reduce energy consumption and peak demand through energy information at the building systems level.

- C. **CDC Staff Trained To Identify and Implement Energy Efficient Opportunities**
Similarly, this program will fund training of CDC project managers and other staff in use of a “best practices” methodology for identifying and implementing energy efficiency projects.

10. Program Implementation

The CDC/IOU Energy Efficiency Program will use the similar implementation strategy for the 2006-2008 cycle as was used in the last cycle partnership programs. A more detailed description of these implementations tasks will be provided in future, comprehensive program descriptions. The implementation plan for this cycle will be refined to account for progress already made and will include:

- A. Coordination with other previous energy efficiency programs and previously project identification and backlog.
- B. Energy Efficiency Retrofit Program Element Implementation (including project selection and implementation).
- C. Facility Monitoring Based Commissioning Implementation
- D. Energy Efficiency Education and Best Practices Development and Training Implementation

11. Customer Description

The CDC institutional campus facilities in the four IOU service areas

12. Customer Interface

The 2006-2008 Program will utilize a program management team to interface with the CDC management and facilities staff. Staff from each utility and the CDC will be responsible for the successful execution of the program.

13. Energy Measures and Program Activities

- 13.1. **Prescriptive Measures**
See SDG&E June 1, 2005 Filing Workbook

- 13.2. **kWh Level Data**
See SDG&E June 1, 2005 Filing Workbook

- 13.3. **Non-energy Activities**
The training and education component of the partnership program involves training of CDC design staff, project managers, facilities staff, and others on using best energy practices in the construction, retrofit and monitoring based commissioning of buildings and central plant infrastructures. This will continue progress made on the establishment of a statewide approach to training and building operation so that this best energy practices approach can be used for ensuring long-term energy efficiency savings. The training and education component will work hand-in-hand with the first two program components – energy retrofits and retro- and continuous commissioning.

- 13.4. **Subcontractor Activities**

Subcontractors will be used to assist in program administration and management, and in each of the three program elements. This approach was used successfully in partnerships in the program previous cycle.

A consultant will assist in day-to-day coordination and communication among the partners (the CDC and four utilities) and provide staffing to the Management and Administration Team and Program Specific Implementation Teams. Consultant will assist in identifying project tasks, establishing a schedule of deliverables and responsibilities, helping CDC ensure successful program implementation, and obtaining CDC input and decision-making on key program elements. Consultant will also assist in the three program elements, especially in facilitating coordination and communications with and among institutions, providing analytical assistance as needed, provide assistance with successful retention of subcontractors through competitive procurement processes, and helping to track and ensure successful program implementation based on specific deliverables required by the CPUC. Finally, the consultant will assist the IOUs and CDC in CPUC reporting and regulatory communications. For the third program component, Training and Education, the consultant may assist in development of workshop agendas and materials, identification of experts, facilitation of workshops and training sessions, and preparation of the minutes.

The campuses will hire Energy Efficiency Retrofit subcontractors to install the energy efficiency measures for the retrofit component.

As in the 2004-2005 program, the campus facilities management staff will play a major role in this program component but that one or more subcontractors will assist, particularly in campuses in their commissioning efforts. The Program Team will conduct a competitive process to develop a pool of qualified commissioning agents/trainers that will be available to the campuses.

13.5. **Quality Assurance and Evaluation Activities**

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs.

13.6. **Marketing Activities**

The CDC/IOU team will develop a communication network with the institutional staff and stakeholders, marketing the new 2006-2008 program through internal channels. Marketing efforts will be based on highlighting the unique advantages and efficiencies of the partnership program and the ability to achieve results and meet program goals.

14. Conclusion

The SDG&E/California Department of Corrections program is a new program that will build upon the successful model of the UC/CSU/IOU Partnership of 2004 and 2005. Based

upon the projects identified thus far, it is expected that there is a tremendous opportunity for energy savings in 2006 to 2008.

	SDGE3003 CDC-CA Department of Corrections Partnership	
BUDGET		
Administrative Costs	\$	14,356
Overhead and G&A	\$	12,312
Other Administrative Costs	\$	2,044
Marketing/Outreach	\$	-
Direct Implementation	\$	1,185,644
Total Incentives and Rebates		
User Input Incentive	\$	-
Direct Install Rebate	\$	900,005
Direct Install Labor	\$	-
Direct Install Materials	\$	-
Activity	\$	273,980
Installation	\$	-
Hardware & Materials	\$	-
Rebate Processing & Inspection	\$	11,659
EM&V Costs	\$	-
Budget	\$	1,200,000
Costs recovered from other sources	\$	-
Budget (plus other costs)	\$	1,200,000

PROGRAM IMPACTS		
DEER kW (kW)		576
Net NCP (kW)		1,054
Net CEC (kW)		777
Annual Net kWh		3,578,868
Lifecycle Net kWh		47,455,020
Annual Net Therms		28,512
Lifecycle Net Therms		348,570
Cost Effectiveness		
TRC		
Costs	\$	1,282,452
Electric Benefits	\$	3,312,852
Gas Benefits	\$	172,390
Net Benefits (NPV)	\$	2,202,790
BC Ratio		2.72
PAC		
Costs	\$	1,114,365
Electric Benefits	\$	3,312,852
Gas Benefits	\$	172,390
Net Benefits (NPV)	\$	2,370,877
BC Ratio		3.13
Levelized Cost		
Levelized Cost TRC (\$/kWh)		
Discounted kWh		28,426,656
Cost	\$	0.0426
Benefits	\$	0.1165
Benefit-Cost	\$	0.0740
Levelized Cost PAC (\$/kWh)		
Discounted kWh		28,426,656
Cost	\$	0.0366
Benefits	\$	0.1165
Benefit-Cost	\$	0.0799
Levelized Cost TRC (\$/therm)		
Discounted Therms		214,697
Cost	\$	0.3364
Benefits	\$	0.8029
Benefit-Cost	\$	0.4666
Levelized Cost PAC (\$/therm)		
Discounted Therms		214,697
Cost	\$	0.3419
Benefits	\$	0.8029
Benefit-Cost	\$	0.4610

SDGE CA Department of Corrections Partnership

Year	Total Budget	Total Incentives	Admin Budget	Net kWh	Net Therms	Net kW
2006	\$ 400,000	\$ 300,002	\$ 99,998	1,192,956	9,504	192
2007	\$ 400,000	\$ 300,002	\$ 99,998	1,192,956	9,504	192
2008	\$ 400,000	\$ 300,002	\$ 99,998	1,192,956	9,504	192

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	240002	Gas Measures	-	1	-	0.8	Therm	10	4,888	\$ 2.46	\$ 1.80	-	-	3,910
2006	240003	Lighting	1	-	0.00	0.8	kWh	11	455,000	\$ 0.19	\$ 0.13	109	364,000	-
2006	240004	Other	1	0	0.00	0.8	kWh	10	155,000	\$ 0.22	\$ 0.32	12	124,000	1,364
2006	240005	HVAC	1	0	0.00	0.8	kWh	15	881,195	\$ 0.19	\$ 0.38	70	704,956	4,230
2007	240002	Gas Measures	-	1	-	0.8	Therm	10	4,888	\$ 2.46	\$ 1.80	-	-	3,910
2007	240003	Lighting	1	-	0.00	0.8	kWh	11	455,000	\$ 0.19	\$ 0.13	109	364,000	-
2007	240004	Other	1	0	0.00	0.8	kWh	10	155,000	\$ 0.22	\$ 0.32	12	124,000	1,364
2007	240005	HVAC	1	0	0.00	0.8	kWh	15	881,195	\$ 0.19	\$ 0.38	70	704,956	4,230
2008	240002	Gas Measures	-	1	-	0.8	Therm	10	4,888	\$ 2.46	\$ 1.80	-	-	3,910
2008	240003	Lighting	1	-	0.00	0.8	kWh	11	455,000	\$ 0.19	\$ 0.13	109	364,000	-
2008	240004	Other	1	0	0.00	0.8	kWh	10	155,000	\$ 0.22	\$ 0.32	12	124,000	1,364
2008	240005	HVAC	1	0	0.00	0.8	kWh	15	881,195	\$ 0.19	\$ 0.38	70	704,956	4,230

2006-2008 Energy Efficiency Concept Paper High-Efficiency Clothes Washer Voucher Incentive Program

1. Projected Program Budget -

	2006	2007	2008
Administrative			
Other Administrative	\$ -	\$ -	\$ -
Overhead	\$ -	\$ -	\$ -
Direct Implementation			
Financial Incentives	\$ 650,000	\$ 650,000	\$ 650,000
Activity	\$ -	\$ -	\$ -
Installation	\$ -	\$ -	\$ -
Hardware & Materials	\$ -	\$ -	\$ -
Rebate Processing and Inspection	\$ 50,000	\$ 50,000	\$ 50,000
Marketing			
Program Specific Marketing	\$ 25,000	\$ 4,000	\$ 8,000
Statewide Marketing			
Total Program Budget	\$ 725,000	\$ 704,000	\$ 708,000

Note: Total program budget. SDG&E proposed cost share is \$705,000 annually.

2. Projected Program Impacts

2006			2007			2008		
kW	kWh	Therms	kW	kWh	Therms	kW	kWh	Therms
-	-	197,805	-	-	197,805	-	-	197,805

3. Program Cost Effectiveness

Attached

4. Program Descriptors.

The high-efficiency clothes washer component of the Voucher Incentive Program offers point-of-purchase vouchers to encourage consumers to purchase high-efficiency clothes washers. Water customers of participating water agencies are eligible as long as vouchers are available for those agencies. Vouchers are provided to single-family and multi-family (in unit only) residences.

5. Program Statement

The high price of high-efficiency clothes washers (HEW) discourages many consumers from purchasing them in lieu of standard top-loading machines. Offering a point-of-purchase discount immediately reduces the cost of these machines.

6. Program Rationale

The Water Authority has offered vouchers to consumers since 2000. Since then almost 40,000 HEWs being installed in San Diego households resulting in water savings of 1,600 acre feet. All of these machines were required to meet a 9.5 or less water efficiency factor. This requirement also amounted in reduced energy costs.

We also offer vouchers to laundromats and common use laundry rooms through the commercial component of the program.

7. Program Outcomes

An estimated 30,000 residential HEWs will be installed in the San Diego region by December 31,2008. This will amount in 11,600 acre-feet of water savings. Through a partnership with SDG&E 1,500 coin-operated washers can be installed. In 2001, commercial customers saved an estimated 254,000 kWh as a result of this program.

8. Program Strategy

The Water Authority contracts with Honeywell DMC (HDMC) to provide program administration. HDMC has been operating the Voucher Incentive Program since 1995. The current contract with HDMC expires June 30, 2007.

9. Program Objectives

Refer to section 7.

10. Program Implementation

This is an ongoing program. It is proposed that one program be presented to residents in San Diego for customer ease and cost benefits. Should SDG&E join our program, it will be a partner in a highly successful program. The Water Authority operates on a fiscal year (July – June) so the program will begin in July 2005 for the new year. We anticipate SDG&E joining the program in January 2006 and operating the program virtually seamlessly. We will offer residential HEW vouchers for \$125 per machine but will increase it to \$175 when SDG&E joins. The current \$150 voucher offered for commercial sectors can increase to \$250 with SDG&E cost sharing.

The attached flowchart illustrates how the program is implemented.

11. Customer Description

Single-family and multi-family (in unit) for residential washers. Laundromats and multi-family common use laundries for coin-operated machines.

12. Customer Interface

Program information is provided to the Dealers (stores) to dispense to customers. Customer can obtain instant point-of-purchase vouchers at the Dealer by calling the Voucher Processing Center and requesting a voucher. In most cases, the voucher will be faxed directly to the store within 30 minutes to be used immediately. The customer does not have to deal with filling out paperwork and submitting for an after-purchase rebate. Information is also provided by the individual water agencies through billings and newsletters. The Water Authority and most of the participating retail water agencies have information on the respective web sites.

The commercial component does not utilize instant vouchers but the program Dealer liaison works closely with the San Diego Coin-Op Laundry Association and BOMA.

13. Energy Measures and Program Activities

- 13.1. **Prescriptive Measures**
See SDG&E June 1, 2005 Filing Workbook
- 13.2. **kWh Level Data**
See SDG&E June 1, 2005 Filing Workbook.
- 13.3. **Non-Energy Activities**
Audits, Education and Technical Assistance may be utilized
- 13.4. **Subcontractor Activities**
None
- 13.5. **Quality Assurance and Evaluation Activities –**
 - 13.5.1. Expected number/percent of inspections (planned percent of projects)
The Water Authority requires HDMC inspect at least 15% of the HEWs purchased using a voucher. As part of its quality control program, the Water Authority conducts random inspections on HDMC to insure they are complying with program requirements and conducting inspections. The Water Authority also requires HDMC provide all original paperwork, which the Water Authority reviews for accuracy and program compliance.

An evaluation plan will be developed in accordance with the soon to be developed EM&V Protocols. The CPUC Energy Division will be holding meetings, workshops and possibly hearings throughout the summer to develop these Protocols. SDG&E looks forward to participating and commenting on those activities and plans to file EM&V plans for all programs on October 1, 2005 in conjunction with the ED, CEC, and the other IOUs

- 13.6. **Marketing Activities –**
HDMC contracts with WSA Marketing to serve as Dealer liaison and as the marketing arm of the program. WSA provides annually updates the program brochure and distributes to Dealers, along with other market tools such as the program's brand to put on floor models. WSA issues news releases twice a year and provides inserts in two Cox Communications billings in September and October. WSA also maintains continuous communications with the Dealers.

14. **Conclusion**

The San Diego County Water Authority's program to provide funding incentives to consumers to purchase high-efficiency clothes washers (HEW) has operated successfully for over five years. The nexus between water and energy savings is becoming more apparent in California. Collaborating on programs that reduce both water and energy use will better serve water/energy customers. The Water Authority's unique program provides customers the incentive up front, thus immediately reducing the cost of the machine. The Voucher Incentive Program is designed to encourage those consumers on limited incomes to purchase the higher efficient models by providing the instant discount.

The Water Authority partnered with SDG&E prior to implementing our residential HEW program. For that successful venture, SDG&E administered the program, with the Water Authority and Metropolitan Water District providing funding to enhance the customer incentive. We look forward to duplicating that collaboration.

	SDGE3023 SDW-San Diego Co. Water Authority Partnership	
BUDGET		
Administrative Costs	\$	-
Overhead and G&A	\$	-
Other Administrative Costs	\$	-
Marketing/Outreach	\$	37,000
Direct Implementation	\$	2,100,000
Total Incentives and Rebates		
User Input Incentive	\$	-
Direct Install Rebate	\$	1,950,000
Direct Install Labor	\$	-
Direct Install Materials	\$	-
Activity	\$	-
Installation	\$	-
Hardware & Materials	\$	-
Rebate Processing & Inspection	\$	150,000
EM&V Costs	\$	-
Budget	\$	2,137,000
Costs recovered from other sources	\$	-
Budget (plus other costs)	\$	2,137,000

PROGRAM IMPACTS		
DEER kW (kW)		-
Net NCP (kW)		-
Net CEC (kW)		-
Annual Net kWh		-
Lifecycle Net kWh		-
Annual Net Therms		593,416
Lifecycle Net Therms		5,934,155
Cost Effectiveness		
TRC		
Costs	\$	20,872,159
Electric Benefits	\$	-
Gas Benefits	\$	2,705,476
Net Benefits (NPV)	\$	(18,166,682)
BC Ratio		0.13
PAC		
Costs	\$	1,951,459
Electric Benefits	\$	-
Gas Benefits	\$	2,705,476
Net Benefits (NPV)	\$	754,018
BC Ratio		1.39
Levelized Cost		
Levelized Cost TRC (\$/kWh)		
Discounted kWh		-
Cost	\$	-
Benefits	\$	-
Benefit-Cost	\$	-
Levelized Cost PAC (\$/kWh)		
Discounted kWh		-
Cost	\$	-
Benefits	\$	-
Benefit-Cost	\$	-
Levelized Cost TRC (\$/therm)		
Discounted Therms		3,963,553
Cost	\$	5.2660
Benefits	\$	0.6826
Benefit-Cost	\$	(4.5834)
Levelized Cost PAC (\$/therm)		
Discounted Therms		3,963,553
Cost	\$	0.4924
Benefits	\$	0.6826
Benefit-Cost	\$	0.1902

SDGE San Diego Co. Water Authority Partnership

Year	Total Budget	Total Incentives	Admin Budget	Net kWh	Net Therms	Net kW
2006	\$ 725,000	\$ 650,000	\$ 75,000	-	197,805	-
2007	\$ 704,000	\$ 650,000	\$ 54,000	-	197,805	-
2008	\$ 708,000	\$ 650,000	\$ 58,000	-	197,805	-

Year	Filing Meas. #	Meas. Desc.	Gross kWh	Gross Therms	Gross kW	NTG	Unit Type	Meas. Life	Units	Incentive	IMC	Total Net kW	Total Net kWh	Total Net Therms
2006	242001	Energy Star Clothes Washer - 3.5 cf (Res)	-	22	-	0.8	Washer	10	10,000	\$ 50.00	\$842.00	-	-	174,855
2006	242002	Energy Star Clothes Washer - 3.5 cf (Comm'l)	-	22	-	0.7	Washer	10	1,500	\$ 100.00	\$842.00	-	-	22,950
2007	242001	Energy Star Clothes Washer - 3.5 cf (Res)	-	22	-	0.8	Washer	10	10,000	\$ 50.00	\$842.00	-	-	174,855
2007	242002	Energy Star Clothes Washer - 3.5 cf (Comm'l)	-	22	-	0.7	Washer	10	1,500	\$ 100.00	\$842.00	-	-	22,950
2008	242001	Energy Star Clothes Washer - 3.5 cf (Res)	-	22	-	0.8	Washer	10	10,000	\$ 50.00	\$842.00	-	-	174,855
2008	242002	Energy Star Clothes Washer - 3.5 cf (Comm'l)	-	22	-	0.7	Washer	10	1,500	\$ 100.00	\$842.00	-	-	22,950

STATEWIDE MARKETING AND OUTREACH PROGRAMS

2006-2008 Energy Efficiency Concept Paper

Flex Your Power Statewide Marketing and Outreach

1. Projected Program Budget: \$45,000,000 statewide

The SDG&E portion of the 2006 – 2008 statewide budget for the Flex Your Power marketing and outreach program is \$6,133,605.

2. Projected Program Impacts

Flex Your Power statewide marketing and outreach program is unique in that it supports and complements other energy efficiency programs and focuses on the broader goal of heightening consumer understanding of the benefits of energy efficiency. It serves as the “call to action” that leads to increased purchases of energy-efficient products and supports all other energy efficiency programs. While Flex Your Power does generate energy savings, like other information-only programs, it is difficult to determine the energy savings directly caused by the program. The *Energy Efficiency Policy Manual Version 3*, Rule IV.9, recognizes this issue, stating, “For statewide marketing and outreach programs and information-only programs, the link between programs and savings is difficult to discern.”

3. Program Cost Effectiveness

Under CPUC guidelines for 2006-08 programs, statewide marketing and outreach programs are not subject to cost-effectiveness tests: “The Commission and program administrators will need to consider factors and performance metrics other than the TRC and PAC Tests of cost-effectiveness when evaluating such program [statewide marketing and outreach programs and information-only programs] proposals for funding and when evaluating their results.” (*Energy Efficiency Policy Manual Version 3*, Rule IV.9.)

4. Program Descriptors

Market Sector:	Residential/Nonresidential - All sectors (Commercial, industrial, Government, agricultural and residential)
Program Classification:	Statewide
Program Status:	Existing

5. Program Statement

Introduction

The Flex Your Power statewide energy efficiency marketing and outreach program, managed by the Efficiency Partnership (EP), is an extension of the innovative and historically successful *Flex Your Power* public education and outreach effort initiated by the State of California in 2001. The program works in partnership with the investor-owned utilities (IOUs), third parties and thousands of businesses, local governments, water agencies, non-profits and others including the state and federal government agencies with responsibility for energy and water efficiency. The campaign targets all sectors: commercial (including small businesses and hard-to-reach), industrial, governmental, institutional (including schools), agricultural and residential (including single-family, multifamily and hard-to-reach audiences.)

The campaign's goals are (1) to educate Californians on the energy, financial and environmental benefits of energy efficiency; (2) to motivate them to take action to achieve lasting energy efficiency; and (3) to support the energy efficiency programs of the Investor Owned Utilities (IOUs), third-party program providers and other organizations. The campaign achieves these goals through a full and synergistic range of marketing and outreach strategies including television; radio and newspaper ads; earned media; printed educational materials; events; a comprehensive website resource serving all parties statewide; a biweekly electronic newsletter; forums and workshops; and partnerships with thousands of businesses, government and nonprofit organizations.

To ensure cost-efficient and effective marketing and outreach, the campaign will continue to coordinate closely with IOUs, municipal utilities, water agencies, non-utility program providers, manufacturers, retailers of energy-efficient products, contractors and other energy efficiency service providers. The campaign also coordinates closely with demand response and renewable energy generation marketing and outreach programs including a combined energy efficiency/demand response Flex Your Power campaign. The statewide campaign delivers a widely recognized, clear, concise and compelling call-to-action message of energy efficiency. The 2006-08 effort will continue to build on the relationships, successes and momentum of the past five years, and add innovative new marketing and outreach tools targeted to each sector and supporting all energy efficiency programs.

California's economy and population are expected to grow over the next three years, which means that, without action, so will the state's demand for electricity. In fact, energy consumption is projected to grow by as much as 2% annually over the next 10 years. Given projected supply constraints caused by older plants being taken offline, slower than expected construction of generation plants and low wind and hydro production, California will face significant challenges in ensuring adequate electricity supplies on especially during peak periods at our current growth pace. By 2006, the California ISO projects a supply deficit of 2,335 megawatts.

The state's energy agencies – the California Energy Commission (CEC), the California Public Utilities Commission (CPUC) and the California Consumer Power and Conservation Financing Authority – outlined a new loading order for future energy policy to ensure California has reliable, affordable and environmentally sound energy. Specifically, the Action Plan places energy efficiency, energy conservation and demand response first and foremost among the solutions to secure new energy. The administration also enacted policies to ensure California could meet its future energy needs. On December 15, 2004, Governor Schwarzenegger signed the Green Buildings Executive Order, which set a goal of reducing electricity used in existing government and private commercial buildings by 10% per square foot by 2010 and 20% per square foot by 2015 through energy efficiency, demand response and renewable energy generation. The Order also mandated that all new and renovated buildings paid for with state funds be certified as Leadership in Energy and Environmental Design (“LEED”) Silver standard or higher, and that office spaces and office equipment leased or purchased by the state be Energy Star-qualified where cost-effective.

However, there is no single or simple mechanism the State can use to reduce energy use. As we learned in the energy crisis, successfully reducing energy use will take the actions of virtually all

residents, businesses, governments and other entities. Also, given the combination of California's large market size – more than 11 percent of the nation's gross domestic product – and serious commitment to energy efficiency – greater and sustained investment in energy efficiency than any state in the nation – California is in a position to exert enormous leverage over the design, manufacture and supply of energy-efficient products and services. The challenge facing the State is to implement a comprehensive, well-executed public education and outreach campaign to encourage behavioral change, drive energy users to the programs and products that will help them save energy and increase private sector investment in energy efficiency.

The lessons learned during the 2001-02 energy crisis as well as Energy Star sales data showing increased sales of energy-efficient equipment and products over the last five years demonstrate that Californians can be motivated to reduce energy use through education. Key to the success of encouraging all sectors to take advantage of cost-effective energy efficiency is to support a statewide marketing and outreach program that can overcome several informational and financial barriers to public and private sector investments in energy efficiency. Specifically, we need to:

- *Ensure marketing and outreach continuity.* To be effective, statewide marketing and outreach programs need long-term planning cycles to build and maintain lasting relationships, cost-effectively take advantage of mass media strategies and leverage additional public and private resources to make the most of the limited funding available. Manufacturers and retailers of energy-efficient products plan their production and marketing programs eighteen months to three years in advance and can only coordinate their plans with utilities and educational efforts with similar long-range cycles. Longer planning cycles and cooperation are equally important to the customers of energy-efficient products and services. Local governments, water agencies and businesses of all sizes are more likely to incorporate energy efficiency into their long-term capital outlays planning and budget allocations if program and incentives (including public recognition) are certain. Finally, continuity is needed to enable programs to secure mass media – television, radio and newspaper – several months in advance, and therefore at a much lower cost.
- In the past years, the California Public Utilities Commission (CPUC) has helped foster California's leadership in energy efficiency by supporting statewide marketing and outreach programs and calling for program continuity and multi-year funding.
- *Provide constant information.* Consumers must have constant and consistent messages to take action. This is important for several reasons. First of all, consumers make the decision to purchase major-cost items, such as appliances and new homes on a three-year or longer timeframe. Therefore, messages must be constant from year to year to remind consumers when they are making decisions. Secondly, without the daily presence of energy issues in the news (which occurred during the 2001-02 Energy Crisis), Californians need to be constantly reminded to take action. Focus group and other research found that although Californians are much more aware of energy conservation and efficiency measures after the energy crisis, reminders through ads, the press, their peers and other means are the key to ongoing behavior changes. In fact, the public wants and appreciates these reminders. Finally, to break through the "noise" in the public

consciousness and its ever-changing environment requires sustained and consistent messages.

- *Provide compelling information.* To effectively communicate to consumers through mass media, the Internet and other forms, the messages conveyed must be clear, compelling and concise. Consumers must be able to understand the importance of energy efficiency and see the value in considering it in their purchase decisions. Programs have to find the right tone and motivators for a wide range of customers. For example, market research has consistently shown that businesses are motivated by energy market (reliability) and financial (energy price and profitability) concerns. While residents are also concerned about money and reliability, social responsibility (helping others, or their neighborhood) plays an equally important role.
- *Provide consistency and coordination across the state.* In order to avoid confusing customers and amply compelling messages, California needs a statewide marketing and outreach effort to coordinate messages and timing with the myriad of programs offered by program providers in the state – IOUs, municipal utilities, water agencies, manufacturers, retailers, third parties and contractors. A statewide effort, for example, can build relationships and outreach to corporate businesses with facilities that cross service territories or local government boundaries and provide a complete package of available resources and tools. Also, statewide marketing and outreach programs can take advantage of strategies that may be unavailable or not cost effective for regional efforts, such as broadcast media. Finally, with statewide coordination and consistency, larger manufacturers and retailers can reliably plan their production and marketing programs to include energy efficiency; their marketing campaigns are statewide rather than regional.
- *Leverage resources to promote energy efficiency.* Given their limited funding, energy efficiency marketing and outreach programs need to leverage private sector and other resources. California needs significant public and private investments in marketing energy efficiency. Flex Your Power successfully utilizes advertising and public recognition as an incentive to recruit retailers, manufacturers, builders and other stakeholders to sell energy-efficient products, distribute educational materials, augment energy efficiency marketing and outreach funding, and invest in energy efficiency within their own facilities. Other strategies including sharing information and developing joint marketing and outreach initiatives with public and private entities as well as other related outreach efforts such as water conservation or demand response programs.

6. Program Rationale

The Flex Your Power campaign address the above-mentioned problems by:

Ensuring marketing and outreach continuity. The Flex Your Power campaign will:

- Build on the existing momentum, structure, partnerships, marketing and outreach materials and plan, and strategies. Any other campaign would have to start from scratch.
- Continue to work with existing and build new relationships with sector leaders across the state. Since 2001, the campaign has established partnerships and built relationships with thousands of entities in all sectors.

- Build on the equity of the campaign's near universal and universally favorable "call to action" to save energy.

Providing constant information. The Flex Your Power campaign will:

- Continue to employ all message delivery vehicles, including paid and free media, outreach and partnerships, to reach a significant portion of all sectors (commercial, industrial, government, agriculture, and residential) of the state.
- Continue to develop proven marketing and outreach tools to support all energy efficiency programs, including its television, radio and newspaper advertising, partnerships, and its comprehensive website, events and electronic newsletter.

Providing constant and compelling information. The Flex Your Power campaign will:

- Convey the energy, financial and environmental savings potential of energy efficiency measures through existing and innovative new marketing and outreach efforts.
- Utilize market, focus group and other research to develop compelling messages for all sectors.
- Continue to communicate that energy efficiency measures are not hard, are cost effective and save money; communicate that by "working together" we can all secure reliable, affordable energy, and, of course, call on Californians to make saving energy a way of life.

Providing consistency and coordination across the state. The Flex Your Power campaign will:

- Serve as a statewide platform for energy efficiency marketing and outreach and communicate across service areas, private sector market territories and media markets. As a statewide program, Flex Your Power is uniquely positioned to accomplish this goal.
- Provide opportunities for regional and local educational efforts to benefit from identification with the Flex Your Power umbrella campaign and its consistent and compelling messages in a way that would be cost prohibitive for them to undertake individually.
- Expand the involvement of, and support for, all utility, public and private energy efficiency providers in a coordinated statewide educational effort.
- Continue to work with partners to coordinate their communications to reduce confusion, eliminate duplication, and amplify everyone's messages.
- Keep all stakeholders and participants in the campaign up to date and alleviate problems associated with miscommunications through regular meetings (e.g., the 2005 Energy Summits with the Governor's office), the Flex Your Power website and e-Newswire.
- Host the Flex Your Power website as a one-stop, statewide resource for information about energy efficiency for all sectors, eliminating the redundancy and inefficiency of having all sites gather this information. A single resources allows all providers to focus their website information on their programs. Through crosslinks, Flex Your Power will drive customers to providers' sites.

Leveraging resources to promote energy efficiency. The Flex Your Power campaign will:

- Augment the marketing and outreach scope and reach with municipal utility, water agency, government and private sector marketing and outreach support, delivery

structures, messages, relationships and customer knowledge and trust. The result is a more cost-effective energy efficiency marketing and outreach campaign.

- Enable retailers, manufacturers and contractors to market their energy-efficient products and services regardless of utility service territory. Every program dollar is stretched further, achieving greater impact of existing efforts.
- Partner with the California Urban Water Conservation Council and the American Council of Water Agencies, and water agencies across the state on a joint campaign to educate the public on saving energy by saving water. The campaign will also work its many manufacturer partners that produce energy/water-efficient products.
- Provide integrated marketing and outreach of energy efficiency and demand response to all sectors to magnify the limited marketing and outreach dollars of both efficiency and demand response assuming ongoing funding for Flex Your Power NOW!. Flex Your Power will incorporate the Flex Your Power Now! demand reduction messaging into the overall energy campaign and achieve efficiencies in advertising and outreach by promoting conservation, load shifting and long-term energy efficiency in one clear, consistent and compelling message.

Flex Your Power is being advanced instead of other program approaches.

The IOUs plan to continue the Flex Your Power Statewide Marketing and Outreach Campaign for the 2006-2008 program cycle based its success over the past four and one half years, the campaign's ability to build upon this success and the enormous equity, awareness and relationships the campaign has with major players in all sectors California.

Flex Your Power has established a near universal and favorable awareness of its "call to action" to save energy. The relationships that the campaign has built with private and public entities and the near-and long-term marketing and outreach strategies the campaign has developed, working hand-in-hand with IOUs and third party program providers, have helped California maintain leadership nationally and in the world in the arena of energy efficiency. As a statewide campaign not restricted to territories or markets and with a history of working with hundreds of entities, the Flex Your Power campaign delivers clear, compelling and consistent information across service territories and government boundaries through strategies and means of communications not available to individual efforts. Flex Your Power successfully and cost-effectively uses mass media, the Internet, partnerships, educational materials and other outreach strategies to reach virtually the entire population of California institutions to save energy immediately and lock in the savings for years to come. The continuation of the Flex Your Power campaign builds on the existing momentum, partnerships and strategies without wasting money and resources to reinvent the wheel.

Over the years, Flex Your Power has also successfully addressed the challenge of coordinating the programs and messages of California's providers of energy-efficient products and services – IOUs, municipal utilities, water agencies, manufacturers, retailers and contractors. California is now leveraging the additional funding and resources of the private sector — money left on the table in past years — to further augment and amplify the State's energy efficiency messages. Several examples highlight Flex Your Power success in building leveraging partnerships with the private sector including:

- Retailer's sales of energy-efficient appliances doubled during one week after running three co-op ads with Flex Your Power.
- Co-op brochure developed with a retailer and Flex Your Power, which was distributed by retailer's service technicians and included a "10% off ENERGY STAR appliances coupon," (funded by the retailer) produced an estimated 1,300 coupon redemptions in just three weeks (plus numerous secondary sales of ENERGY STAR products).
- Manufacturing partner's co-op direct mail piece with Flex Your Power led to a 70% increase in wholesale orders of high-efficiency clothes washers in California over two months. One store reported that they sold more during the single Flex Your Power promotion weekend than they usually sell in one month.
- Retail partner sales of energy-efficient lighting jumped over 400% during an off-peak sales period due to header board displays and ads developed jointly with Flex Your Power and a major energy-efficient lighting manufacturer.

7. Program Outcomes

The overarching goal of the Flex Your Power campaign is to increase overall statewide awareness and demand for energy efficiency and continue to build the market for energy-efficient appliances, products and services to help the state reach its long-term energy goals. As such, the campaign seeks to:

- Educate all Californians on the economic, environmental and system reliability benefits of energy efficiency;
- Motivate all sectors to commit to take action to achieve lasting energy savings;
- Support the energy efficiency programs of the Investor Owned Utilities (IOUs), third-party program providers and other organizations; and
- Facilitate marketing and outreach coordination between program providers, other energy industry stakeholders and customers from all sectors through planning forums and educational events.

8. Program Strategy

The 2006-08 Flex Your Power statewide energy efficiency marketing and outreach program will achieve its goals using a full and synergistic range of marketing and outreach strategies including television; radio and newspaper ads; earned media; printed educational materials; events; a comprehensive website resource serving all parties statewide; a biweekly electronic newsletter; forums and workshops; and partnerships with thousands of businesses, government and nonprofit organizations. The program works in partnership with the investor-owned utilities (IOUs), third parties and thousands of businesses, local governments, water agencies, non-profits and others including the state and federal government agencies with responsibility for energy and water efficiency. Many of these entities are well underway in planning activities with Flex Your Power for 2006 and beyond.

To ensure cost-efficient and effective marketing and outreach, the campaign will coordinate closely with all the abovementioned entities. The campaign will also coordinate with demand response and renewable energy generation marketing and outreach programs including Flex Your Power NOW!, which is an existing partnerships between the IOUs, the ISO, CEC the administration and Flex Your Power.

9. Program Objectives

A major objective of the campaign is to maximize targeted reach and frequency. This includes: building the subscriber base of the e-Newswire; continuing to drive traffic to Flex Your Power's and program providers websites; building new, and expanding existing, partnerships across all sectors; and reaching the public through mass media (reach 95 percent (95 percent is highest possible) of the target market, at a frequency of 38 times through the joint energy efficiency and demand response program).

Another objective is to drive traffic to IOU and third party programs. Once these programs are approved by the CPUC, EP will work with program providers on specific strategies goals.

Finally, EP seeks to increase investments in energy efficiency and will work with partners across all sectors to encourage them to commit to savings goals and share – through Flex Your Power's case studies, best practice guides, year-end congratulation ads and awards – their progress.

10. Program Implementation

10.1 Residential Sector

The primary strategy EP will use to reach, educate and motivate the general public is through mass media. EP will continue to produce clear, compelling and consistent messaging for television, radio and newspapers to encourage California residents to always consider energy efficiency when purchasing products or designing projects. The message will build on the success and recognition of the statewide Flex Your Power campaign.

As was done in 2004, EP will continue to refine media buys to ensure broadcast messages have the greatest impact on targeted markets. For instance, the general market media buy will reflect a targeted approach to reach those residents that are most likely to purchase energy-efficient products and appliances. These Californians have specific and identifiable television viewing and radio listening habits. Combined with the multi-media mix, the targeted media buys will enable EP to continue to frequently reach the target audience and during the times they are most likely to be watching television or listening to the radio. Through these various media, 94.5 percent of the target audience will be reached. To these same markets, the target audience will be reached an average of 19.2 times with the messaging.² The combined demand response and energy efficiency campaigns will increase the overall reach to 95 percent (95 percent is highest possible) and frequency to 38 times.

The media buy will also be run seasonally to help ease strain on the system during seasons with high peak demand (e.g., media may run more frequently during the summer months and the hot month of September to keep energy at the top of residents' minds).

The Flex Your Power campaign will explore other mass-media opportunities, including online, direct mail and outdoor. Equally important, EP will incorporate and coordinate where appropriate demand response and renewable energy generation messages into the overall

² Reach is the percentage of the target audience that is being reached with the message. Frequency is the average number of times that the target is being reached.

efficiency messages to magnify the limited marketing and outreach dollars of both efficiency and demand response and provide a complete array of energy-saving solutions to customers.

The Flex Your Power campaign will also reach residents through partnerships:

- *Ethnic media partnerships.* The Flex Your Power campaign will continue to build and expand relationships with ethnic media publications to reach non-English speaking residents. These communities are difficult to penetrate given geographic and language barriers. The goal of the partnerships is to leverage key ethnic publications' influence within their readership base to drive awareness of and traffic to energy-efficient products and programs. Ethnic media outlets serve as both a news source and a respected voice in the communities they serve. As a cultural and information hub, ethnic media plays a critical role in raising awareness about energy efficiency among their readers/viewers.

The Flex Your Power campaign will continue to coordinate advertising with partner publications to outreach to their readers, which represent 16 different ethnicities and 13 different languages. Advertising, co-developed with the ethnic press, will follow the overarching themes of the general market campaign and be culturally relevant to the audience. Potential joint outreach strategies between Flex Your Power and partner publications include educating residents and businesses through events and editorial content (press releases, op-eds or articles); creating web links between media's and Flex Your Power's websites; and communicating regularly to ethnic community leaders. Through the e-Newswire and events, the Flex Your Power campaign will keep ethnic publishers and broadcasters abreast of energy efficiency news, programs and opportunities and provide informative content on energy efficiency.

- *Partnerships with retailers and manufacturers:* The Flex Your Power campaign will continue to work to increase private sector involvement and investment in the marketing and outreach campaign. While EP will develop some common statewide marketing and outreach materials in conjunction with industry stakeholders, the Flex Your Power campaign will primarily focus on exploring opportunities for ongoing cooperative marketing and outreach partnerships and to leverage manufacturer incentives and promotion funding for other direct-to-consumer and direct-to-retailer efforts. For instance, the Flex Your Power campaign will roll out a statewide all-appliance recycling campaign in partnership with Lowe's Home Improvement and Adams Steel and that supports California's recycling program. The program, the first all-appliance recycling program in the United States, was initially launched in 2005 whereby Flex Your Power worked with Lowe's and Adams Steel to place large (10' x 4') recycling containers at 18 Lowe's stores throughout Southern California. Under the agreement, Adams Steel agreed to recycle old appliances if customers purchased an Energy Star appliance from Lowe's. Flex Your Power produced marketing materials for the program, including billboards for the containers, which were seen by hundreds of thousands of people. Lowe's and Adams Steel paid all other costs of this program. Lowe's will roll out the program statewide in 2006 in partnership with Flex Your Power due to the success of the Southern California pilot. All cooperative efforts will be coordinated with the IOUs. The result will be creative marketing and outreach tools that continually remind customers to take action.

The Flex Your Power campaign will also continue to facilitate the advancement of new energy-efficient products and appliances by working with and coordinating with the CEC and manufacturers as they work to create more energy-efficient products. For instance, the Flex Your Power campaign in partnership with the CEC, GE, Phillips Lighting and other lighting manufactures will launch a marketing and outreach initiative in 2006 to not only continue to increase the sale of compact fluorescent lamps (CFLs), but also test the market acceptance of new efficient incandescent bulbs. Planning for the initiative began in 2005, when the CEC considered lighting standards to increase the efficiency of incandescent light bulbs by as much as 10%. The vast majority of residents still use incandescent lighting; therefore, these standards will deliver large energy savings for the state. The CEC enlisted Flex Your Power, and Flex Your Power has been working with national lighting manufacturers and retailers to develop a comprehensive efficiency lighting campaign for 2006-08. Since, the manufacturers and retailers require long-lead times to research, produce, and ship the planned marketing devices (e.g., end-caps, shelf space, and advertising) the CEC's and Flex Your Power's early involvement has been essential to initiating and implementing the campaign. All parties anticipate an increase in CFL sales as an integral part of the effort.

The Flex Your Power campaign will continue to coordinate with national, regional and other California energy efficiency promotions, including those run by Energy Star, utilities, third parties and water efficiency campaigns. The result will be greater awareness of each program, promoted measures, and the overall message of efficient use of resources.

To increase awareness, demand and availability of energy-efficient products, the Flex Your Power campaign will also communicate regularly with retailer and manufacturer partners through e-Newswire, partnerships with program providers, and personal contact. EP will challenge manufacturers and retailers to make long-term commitments to energy efficiency and will track their success in meeting the goals.

- *Partnerships with the residential new construction industry.* The Flex Your Power campaign will continue to support to new home builders to increase customer awareness of Energy Star homes, support utility, third-party and Energy Star new homes programs, help move California's building industry toward greater overall efficiency goals beyond Title 24, and accelerate implementation of future Title 24 measures and standards. To meet these goals, EP will convene industry leaders with utilities, state agencies, water agencies and others to lead new homebuilders to programs and resources and gather commitments from them to build energy-efficient new homes. EP will also continue to communicate and coordinate with the building industry, providing updates and resources to builders so that they can permanently incorporate energy efficiency into their business plans. EP will continue to develop best practice guides on building new homes with assistance from industry associations and the IOUs. EP will also explore the potential of further developing the Flex Your Power website to serve as a tool and resource for builders, realtors and homebuyers. The result will be co-developed, creative and consistent marketing and outreach tools.
- *Partnerships with water agency partners/water campaign.* There are numerous synergies between water and energy efficiency strategies. Joint water and energy efficiency

campaigns lead to higher customer awareness and offer manufacturers and retailers larger coordination and sales opportunities – many water-efficient appliances are also energy efficient. EP will continue to communicate regularly with water agencies to coordinate statewide efforts and events and integrate wherever appropriate water efficiency into the overall Flex Your Power campaign. Also, to augment the reach of energy efficiency marketing and outreach, Flex Your Power will continue to urge these agencies to commit their resources in support of the Flex Your Power campaign. For example, in a partnership with the California Urban Water Conservation Council and the American Council of Water Agencies, Flex Your Power will work with water agencies and manufacturers of water-efficient products on a joint campaign to educate the public on saving water and saving energy in 2006-08. The campaign will develop coordinated promotions for Energy Star clothes washers and dishwashers.

Flex Your Power will recognize the successful efforts of these partners – manufacturers, retailers, new home builders and water agencies – in helping to increase energy efficiency for California residents through the Fifth (2006), Sixth (2007) and Seventh (2008) Annual Flex Your Power Awards. The winners will receive publicity for their achievements as an incentive for implementing innovative programs and will be highlighted in case studies, on the Flex Your Power website and in e-Newswire so that other entities can learn from their success. Their leadership and energy savings measures will be highlighted in congratulatory newspapers ads run statewide.

To reach and educate residents the Flex Your Power campaign will also continue to host, build and expand the Flex Your Power website as a one-stop, statewide resource for information about energy efficiency. The Flex Your Power campaign will keep the web content for residents timely, useful and relevant through regular communication and coordination with energy efficiency program providers and other stakeholders. The website will continue to provide:

- All energy efficiency, demand response, and water efficiency programs (including rebates, grants, loans, technical assistance, classes, and audits offered by utilities, 3rd parties, water agencies, municipal utilities, the private sector and other providers).
- Energy efficiency product guides describing the benefits and savings potential of high-efficiency products/equipment, operating and purchasing tips and lists of major manufacturer.
- Store locator for energy-efficient products, enabling visitors to find stores near them, by distance and address. These stores have committed to Flex Your Power to sell specific energy-efficient products.
- Links to relevant information, program providers and other sites to drive traffic to the programs and services offered by the IOUs, third parties and others.
- Additional tools to assist in the promotion and support of these programs.
- Information in Spanish and Chinese.

Finally, EP will continually explore new marketing and outreach opportunities. EP will explore possible programs include educational programs for schools, developed in coordinated with the IOUs and possibly modeled after the successful 2001-02 Flex Your Power school programs.

10.2 Commercial and Industrial Sector

To encourage action among businesses requires educating them about energy market (reliability, price) concerns, publicly recognizing their positive efforts, and securing decision-maker buy-in within each company and within the business community. As such, Flex Your Power's outreach will continue to involve working with the campaign's existing business and business association partners recruited over the past four and one half years as well as to new businesses recruited by staff and with assistance from program providers and trade associations.

One step in this initiative is to convene commercial and industrial sector businesses, representing diverse industries and sizes, to meet with utilities, state agencies and other stakeholders to provide these organizations access to tools and resources to help them set and meet long-term energy goals, as well as learn about successful programs from peers in their industry. The Flex Your Power campaign will continue to challenge organizations to set energy efficiency goals based on the goals of the Governor's Green Building Initiative and the Energy Action Plan. Major events will be modeled after the successful summits held statewide in 2005, which drew participation from more than 1,000 businesses and included participants from the state agencies, the Governor's office, business organizations, IOUs, water agencies, municipal utilities, and others. The Flex Your Power campaign will also convene facility manager trainings in partnership with business organizations and the IOUs and modeled after the pilot program developed jointly in 2005 with the Building Owners and Managers Association (BOMA). The 2006-08 training program will include facility manager "workbooks" and best practice guides produced by Flex Your Power and training programs co-hosted by business organizations and the IOUs. Flex Your Power will write and use these best practice guides and training workbooks and use them as the basis for trainings in different industry groups. For instance, the California Sustainable Wine Growers Association has agreed to host the training sessions with 800 wineries. Warehouses, hotels and motels, and other subsectors will be approached to do the same. In each case, the businesses will be encouraged to avail themselves of IOU and third party programs.

Secondly, the Flex Your Power campaign will communicate regularly with businesses partners, following up with them through Flex Your Power's e-Newswire, the Flex Your Power website, educational materials, regional updates and other means. Flex Your Power will provide these partners with consistent and up-to-date information including programs, articles, product information, and policy information to continually help them invest in energy efficiency. For example, the Flex Your Power campaign will continue to write and disseminate industry-specific case studies and best practice guides on a wide range of successful projects to provide guidance on investment in energy efficiency. The Flex Your Power campaign will work with program providers and partners to identify successful projects, as well as report on the Flex Your Power award winners. The primary focus of the studies will be program elements, budget, results and lessons learned. The materials will be displayed on the Flex Your Power website and promoted via e-Newswire and through Flex Your Power campaign partner organizations. Additionally, with assistance from program providers and business leaders, EP will continue to develop the Flex Your Power website. Where appropriate, EP will form partnerships with business publications that allow the campaign to contribute editorial content or other value-add options in exchange for advertising.

Finally, the Flex Your Power campaign will publicly recognize businesses' efforts in the Fifth (2006), Sixth (2007) and Seventh (2008) Annual Flex Your Power Awards. The winners will receive publicity for their achievements as an incentive for implementing innovative programs and will be highlighted in case studies, on the Flex Your Power website and in e-Newswire so that other entities can learn from their success.

Consistent with the IOUs programs and assuming ongoing demand response funding, the Flex Your Power campaign will integrate demand response and renewable energy marketing and outreach when appropriate to the commercial and industrial sectors. Often organizations consider all of these energy strategies together – energy efficiency, demand response and renewable energy generation – when planning capital investments and improvements. By integrating them in the marketing and outreach, Flex Your Power will achieve efficiencies and ensure more consistent and compelling messages.

10.4 Contractors

Nonresidential and residential contractors are a valuable resource to introduce and educate residents and businesses about energy-efficient products – the majority of home improvement and facility retrofit projects are undertaken under the guidance of a contractor. To support the IOUs extensive outreach to and programs for contractors, especially HVAC contractors, Flex Your Power will convene events similar to those for residential new homebuilders described above. EP will also produce best practice guides and case studies in coordination with industry and IOUs. Where appropriate, EP will co-develop and produce with the help of utilities third parties, and manufacturers of energy-efficient products, customer educational materials to be distributed by contractors.

10.5 Government Sector

As stated above, Governor Schwarzenegger signed the Green Buildings Executive Order requiring increased investments in energy efficiency for state-owned buildings and urged the Flex Your Power campaign to assist in the marketing and outreach. EP's outreach to government facilities – including state, local and water agencies – in 2006-08, will focus on urging that government decision makers to make commitments and develop strategies to meet the goals and have the access to resources, information and tools offered by the IOUs, third parties and others like the CEC, to meet those goals. EP will also ask local government partners to provide assistance in reaching businesses, small businesses, and residents.

This outreach will be modeled after the successful commercial and industrial sector outreach program described above. First, the Flex Your Power campaign will invite local government and state agencies representatives to larger regional events with businesses, as well as host events that specifically target government needs. For example, the Flex Your Power campaign would host events that focus on how to finance public energy efficiency projects. In partnership with utilities and state agencies, the Flex Your Power campaign will also tailor facility manager “training” programs and materials for government officials, providing guidance on investing in energy efficiency, from retrofitting city facilities to outreaching to the community.

Secondly, to keep government decision makers abreast of programs, products, resources, and other information, EP will regularly communicate with partners through e-Newswire, the Flex Your Power website, and other means including continued participation in their association meetings (e.g., local government and public information officers). Again, EP will integrate demand response and renewable energy marketing and outreach, when appropriate, to government facilities.

Finally, EP will publicly recognize innovative government and water agencies efforts in the Fifth (2006), Sixth (2007) and Seventh (2008) Annual Flex Your Power Awards. The winners will receive publicity for their achievements as an incentive for implementing innovative programs and will be highlighted in case studies, on the Flex Your Power website and in e-Newswire so that other entities can learn from their success. Leaders will also be recognized in year-end congratulatory ads.

10.6 Institutional Sector

Outreach to medical facilities and schools will be integrated into Flex Your Power commercial sector outreach initiatives.

In 2006-08, the Flex Your Power campaign will also explore opportunities to augment school IOU and third party programs with statewide marketing and outreach support including:

- Partnering with program providers to enhance their marketing and outreach components and/or bring higher awareness of the statewide effort to cut energy use to the programs.
- Building out the schools section on the Flex Your Power website, including updating the database-driven locators with program information and exploring opportunities to co-produce content.
- Providing consistent information to school administrators, teachers and others.

10.7 Agricultural Sector

EP will continue to incorporate agricultural outreach to processors into the Commercial and Industrial Initiative and work with water agencies to market energy efficiency in relation to pumping and irrigation programs. EP will convene leaders, communicate through e-Newswire, continue to build out the section of the Flex Your Power website dedicated to agriculture, promote successful programs through the Flex Your Power awards. Leaders will also be recognized in year-end congratulatory ads. The best practice guides being developed with the wine industry for training of wineries will be expanded to include all agricultural customers and they will likewise be convened for trainings and to connect to program providers.

11. Customer Description

The Flex Your Power campaign targets all customers and market segments and actors in the state, including hard-to-reach. Customers include:

- Residents: English-speaking, non-English speaking residents.
- Commercial: large commercial facilities (e.g., office buildings), lodging and hotel facilities, supermarkets, small commercial (small retail and restaurants) and medical facilities.

- Industrial: fabrication, process, heavy industrial manufacturing, hi-tech facilities and wineries.
- Government: state government facilities, local government facilities and water agencies.
- Institutional: schools and colleges
- Agriculture: irrigation and processing (integrated into industrial outreach)

12. Customer Interface

The Flex Your Power campaign will work and coordinate with IOUs, third parties and other program providers to develop materials, events, the Flex Your Power website and other outreach strategies that provide program information using consistent and compelling messages. By coordinating the messages under the statewide umbrella Flex Your Power education campaign, IOUs and program providers can reduce or eliminate the confusion that would otherwise occur as customers hear competing messages, inconsistent programs and inadequate information upon which to make buying decisions.

13. Energy Measures and Program Activities ³

13.5. Quality Assurance and Evaluation Activities

The Flex Your Power campaign will regularly ensure that the marketing and outreach program provides the most effective strategies to educate and motivate all sectors. EP will work with formal and informal working groups from each sector, such as BOMA, as well as regionally, such as Flex Your Power Silicon Valley, to continue to improve and coordinate programs. EP will also meet regularly with the IOUs to find the most effective ways to promote programs help the utilities meet their goals.

The Flex Your Power campaign will also evaluate the program through a more formal evaluation process using same approaches that were approved by the CPUC for the past four and one half years and recommended for 2006-08. As outlined in CPUC Decision 05-04-051 (page 56), the performance basis of statewide marketing and outreach programs will be based on:

1. "Any direct energy savings impacts attributable to the activity;
2. The intention to act, if no direct impacts are possible to measure; and
3. The reach of the advertising/marketing activity, the frequency of the activity and the leveraging of ancillary resources that comes from the activity."

The evaluation will include:

Consumer focus groups

The overall aim of the consumer focus group research is to assess a range of Flex Your Power messages against a series of communication objectives. The research will evaluate:

- TV commercials
- Radio commercials
- Newspaper advertisements

³ Not all of the categories in the Program Plans template applied to Statewide Marketing and Outreach Programs.

- Educational and sales support materials and other educational materials
- Materials and advertising produced through cooperative partnerships

The focus group research method proposed by the research firm is a “Hybrid” research model that includes both qualitative and quantitative components. The Hybrid method includes an in-depth discussion of each communication piece led by a skilled moderator with experience in the category, plus a numerical scoring of each piece against a number of set criteria. The Hybrid qualitative/quantitative method represents the “best of both worlds” and uses a sample size that is large enough to approach quantitative statistical significance. Furthermore, it resolves some of the limitations of quantitative communications testing by allowing in-depth probing and the ability to truly discover why (or why not) consumers find an advertisement motivating. By using both qualitative and quantitative testing, the Hybrid method provides a more accurate examination of effectiveness across different media and the overall campaign.

The evaluation will include six to eight focus groups consisting of eight to nine per group, which would provide an approximate sample size of 65. The Flex Your Power Campaign evaluation will be coordinated with the Staples/Univision and RSE marketing and outreach effort.

In the Hybrid method, the interview is more structured than typical qualitative focus groups. After a brief warm-up discussion:

- 1) Each communication piece is shown to consumers (in a random order over the total project).
- 2) Before any group discussion, each piece is then scored on a scale of 1-5 on a number of measures such as “*Level of Appeal*” and “*Makes Me Interested In Energy Efficiency.*”
- 3) The focus group respondents then discuss their reaction and impressions of that communication, but are not asked to justify their scores.
- 4) The next communication piece is then exposed, scored and discussed.
- 5) The final report with the Hybrid method contains both in-depth attitudes as well as scores for each communication piece.

Advertising reach and frequency verification

Targeted rating points (TRPs) are input into a third-party computerized reach and frequency program developed by Telmar. The program utilizes the most up-to-date, media industry standardized reach and frequency statistical curves from independent sources like Nielson. The program takes into account the demographic target, selected daypart⁴ mix, media type, and individual market characteristics to calculate average reach and frequency. If multiple media types are used, an additional independent program incorporates various media types to calculate an overall reach and frequency estimate.

⁴ Daypart Mix is the allocation of media weight (generally expressed in targeted rating points--TRPs) across standardized divisions of the broadcast day.

Also, the Flex Your Power campaign will repeatedly reconnect with businesses, local governments and others that make energy savings commitments, attend Flex Your Power events, etc., to solicit information on their accomplishments in energy efficiency (e.g., increase energy efficiency of an office building, sell more energy-efficient products). The incentive to encourage these entities to report their accomplishments are recognitions in best practices guides, the Flex Your Power website, in awards and other outreach materials. The results will be used to guide partners, to educate others through in best practice guides and advertising, and as one of the determinate for selecting Flex Your Power award winners.

13.6. Marketing Activities

Marketing activities are all described above.

2006-2008 Energy Efficiency Concept Paper

Reach for the Stars—Energy Efficiency Campaign

1. Projected Program Budget

\$7.5 million for 3 years, distributed evenly on an annual basis. The SDG&E portion of the 2006 – 2008 statewide budget for the Reach for the Stars marketing and outreach program is \$1,022,250.

2. Projected Program Impacts

The *Reach for the Stars* marketing campaign is a comprehensive statewide energy efficiency communications effort designed to encourage residential energy users in rural areas to make permanent upgrades to their homes and to participate in statewide gas and electric energy efficiency activities.

3. Program Cost Effectiveness

Not applicable.

4. Program Descriptors

Market Sector: Rural
Program Classification: Statewide
Program Status: Existing:

5. Program Statement

In California, a typical homeowner is spending more on electricity than necessary. In fact, the average household could cut up to one-third of its current energy bill by switching to energy-efficient appliances, equipment and lighting, which use less energy than standard products. For rural communities, this issue is especially critical, given they are often situated in remote areas with extreme summer and/or winter climates and significantly greater electricity and/or natural gas requirements. They also historically have been underrepresented in energy efficiency programs. The rural campaign exposure is critical to the overall effectiveness of the California Public Utilities Commission's (CPUC) energy efficiency effort because many California communities are under-reached by traditional mass-market media.

6. Program Rationale

By extending RS&E's contract to implement one of three statewide energy efficiency marketing and outreach programs through 2008, we will be able to maintain the momentum built during the last three years. Since RS&E was awarded this contract in April 2003, we have made notable headway within the rural communities of California. However, ongoing education is imperative in changing people's attitudes and purchasing behaviors and creating social norms where communities and individuals understand and act responsibly when it comes to saving energy. Our program's advertising, public relations and grass roots outreach components, which have a synergistic effect in the rural communities, are intended to teach consumers about ways to reduce their energy consumption, while emphasizing long-term residential improvements.

As noted above, this program has been extremely successful in reaching the rural consumers in IOU territories and delivering energy efficiency messages. Some highlights of our 2004 campaign include:

Generation of more than 85 million advertising impressions via radio.

Outreach through ads in newspapers that had a total readership of almost 52 million.

Outreach to more than 1.5 million Hispanic rural California residents throughout the state through media relations activities and radio and print partnerships.

Dissemination of more than 111,000 pieces of collateral, including informational brochures and branding items at conferences, fairs and community events in rural areas statewide.

Outreach to more than 100 community-based organizations (CBOs) and state organizations in recruitment of 15 grassroots organizations as partners.

7. Program Outcomes

RS&E has identified (through research) two key outcomes of its marketing and outreach activities:

Rural consumers have learned about ways to reduce their energy consumption and lower their utility bills, with emphasis on long-term residential improvements.

Rural residential energy users have made permanent upgrades to their homes and participated in statewide gas and electric energy efficiency activities.

8. Program Strategy

RS&E will maintain the key components of its current effort, recognizing the importance of grass roots outreach and the necessity of targeting rural communities through local media outlets. To reach the target audience and achieve its program objectives, RS&E intends to:

Continue placing newspaper ads and radio commercials in rural markets throughout California.

Expand the activities of the CBO network to facilitate direct access to rural consumers in need of energy efficiency information by coordinating more closely with other statewide marketing and outreach programs.

Participating in a bi-weekly conference call between M&O contractors, as well as the IOUs and representatives of the CPUC.

Sharing information, including a monthly report of marketing activities as well as collateral and advertising creative, in order to avoid duplication of marketing efforts.

Continue providing consumers with an easy-to-access point of contact through the 24-hour toll-free phone line that provides information for energy efficiency programs. Additionally, RS&E will add messaging regarding the Flex Your Power marketing program to the introductory information on the toll-free phone line.

Produce advertising and outreach messages with energy efficiency information that is relevant to all rural customers.

9. Program Objectives

RS&E's statewide program will provide information about IOU and third-party energy-efficiency programs and the related energy saving benefits to the target group of all households in rural areas in order to ultimately reduce energy consumption by the target audience. Rural areas of California are based upon zip code data provided by the IOUs.

To reach these program objectives, our team will:

Place newspaper ads in rural markets throughout the state.

Develop a radio campaign to air in rural markets statewide.

Augment the network of CBOs that will provide outreach to rural consumers seeking energy efficiency information.

Continue the toll-free phone line service to provide energy efficiency program contact information and support throughout the contract.

Implement a Spanish-language public relations effort throughout rural California.

Evaluate messaging and awareness levels related to energy efficiency.

10. Program Implementation

RS&E firmly believes in the importance of coordination between marketing and outreach implementers. Coordination and consistency can only enhance results achieved by everyone. Since all marketing and outreach efforts support the IOU and statewide energy efficiency programs, we believe it is vitally important that the contractors work closely with each other and continually share information to avoid duplication. To that end, RS&E will coordinate its campaign efforts with those of both other marketing and outreach programs:

Efficiency Partnership/McGuire & Co., Inc.'s (EP) statewide general market media campaign.
Univision Television Group and Staples/Hutchinson and Associates' (Univision) Spanish-language media and outreach campaign.

RS&E will participate in regular conference calls and meetings between the M&O contractors listed above, as well as the IOUs and representatives of the CPUC. Additionally, all marketing and outreach materials will be accessible to these groups so information can be shared and the duplication of efforts can be avoided.

In order to implement a successful program, it will be imperative that we begin planning for the 2006 – 2008 program during the end of the 2005 campaign. We will coordinate the messaging and the timing of that messaging with the other statewide marketing and outreach contractors. In addition we will send out requests for proposal to CBOs, research vendors and suppliers to ensure that the 2006-2008 program is as cost efficient as possible. Additionally, our media planning work will also begin early in order to negotiate the most beneficial rates for this program.

11. Customer Description

The populations targets for our 2006-2008 extended energy efficiency advertising component are rural "hard-to-reach" IOU customers who do not have easy access to information or generally do not participate in energy efficiency programs.

We will utilize zip code data provided by the IOUs to guide our media and marketing planning. Only those zip codes categorized by the utilities as "rural" and where the majority of households receive service from a participating IOU will be considered for advertising coverage.

This is the same strategy RS&E used in identifying and targeting the appropriate customers in the past.

12. Customer Interface

In order to ensure that energy efficiency program information is accessible, RS&E will continue to direct consumers to the existing toll-free phone line, as well as to the Flex Your Power Web site. The toll-free phone number and the Web site address will be displayed on all our advertising and outreach materials. Additionally, RS&E added a Spanish-language option to the phone line in 2004 in an effort to support the Spanish-language collateral and Spanish language PR efforts, which will continue in the 2006 – 2008 contract term.

13. Energy Measures and Program Activities

13.1 Measures Information

Not applicable.

13.2 Energy Savings and Demand Reduction Level Data

Not applicable.

13.3 Non-energy Activities (Audits, Trainings, etc.)

All of the activities of the Reach for the Stars campaign fall under the category of “non-energy activities” since the entire program is focused on marketing and outreach. That said, below is an outline of projected activities and tactics proposed for the 2006 – 2008 campaign. We should note that these are estimated projections that will be more clearly defined as development of the program implementation plan gets underway.

Advertising

RS&E will produce between 4 and 6 radio spots to air statewide each year. We will run more than 30,000 radio spots in 12 California metro markets and nine remote counties, including:

Metro Markets include:

Bakersfield
Chico
Fresno
Merced
Modesto
Palm Springs
Redding
Riverside/San Bernardino
Sacramento
San Luis Obispo
Santa Maria
Visalia/Tulare

Non-rated remote counties include:

Humboldt

Inyo
Kern
Lake
Mendocino
Plumas
Riverside East
San Bernardino West
Tuolumne

RS&E will produce between 4 and 6 print ads per year to support the three seasonally appropriate messages (i.e. appliance replacement, cooling and heating and lighting). Print media will run in rural communities throughout the state. RS&E will place approximately 15 insertions per year in a total of 120 newspapers statewide.

CBO Outreach

RS&E's program will include the recruitment of between 16 and 18 CBOs strategically located in IOU rural territories throughout the state. These CBOs will be trained and monitored to disseminate materials and garner public relations locally to promote the energy efficiency messages associated with the *Reach for the Stars* program.

In order to ensure proper messaging is delivered in a quality manner, RS&E will also offer media training opportunities and host an annual gathering where best practices and ideas can be shared between grassroots organizations.

Each CBO will be required under contract to annually:

Staff the campaign portable exhibit and distribute campaign materials at no less than three community events.

Conduct a minimum of three presentations for local organizations or groups appropriate to the energy efficiency message (i.e. business groups, PTAs, etc.).

Develop events or products themselves to further extend campaign messages (i.e. poster contests, public service announcements, etc.).

Distribute press releases to local print media outlets and place campaign advertisements in local venues such as newspapers, newsletters or movie slides.

Hispanic Marketing and Public Relations

Through our Hispanic marketing and public relations efforts, RS&E will distribute press releases to more than 140 media outlets statewide. Additionally, we will secure radio partnerships with two radio networks covering the following markets:

Placerville
Grass Valley
Auburn
Palm Desert
Hemet
Moreno Valley
Murrieta Hot Springs

Temecula
Sun City
Tracy
Bakersfield
Tehachapi
Hanford
Atascadero
Paso Robles
Porterville
Visalia

These radio partners will distribute promotional items at various community events, conduct live remotes, air 60-second spots and promote press coverage in the Hispanic markets. RS&E will also secure several print partners to run ads and place stories that support the energy efficiency messages directed at the Hispanic market.

13.4 Subcontractor Activities

RS&E plans to retain SG Henderson Consulting (SGH) to coordinate CBO activities acceptable for the 2006 – 2008 cycle. SGH, led by Suzane Henderson, has been actively involved in the *Reach for the Stars* program since RS&E was awarded the contract in 2003. For the next three years, these efforts will include:

Implementing a request for proposal process to secure 18 CBOs throughout the state for a one-year term. (We will seek new participants as part of this process.)

Conducting a two-day training session for all CBOs upon award of their contracts to educate them on the program.

Coordinating CBO marketing activities in partnership with RS&E.

Providing a final report of all CBO marketing activities each year of the contract.

RS&E will review proposals and select a research vendor to perform focus groups, the results of which will be used to guide creative development of the campaign. We will secure this vendor in 2006 for a three-year term to ensure continuity.

13.5 Quality Assurance and Evaluation Activities

While the evaluation and verification of marketing activities will be conducted by a third party contractor hired by Southern California Edison, RS&E will conduct quality assurance and evaluation activities including:

Tracking of incoming phone calls to toll-free line.

Measuring the number of advertisements and media placements.

Measuring the quantity of information distributed by participants in the grass roots outreach component.

Conducting focus groups that help guide the messaging.

RS&E's focus groups will be conducted by a research firm based in California that has experience with energy related issues and marketing techniques.

13.5.1 Expected Number/Percent of Inspections

In order to ensure work is performed in a quality and timely manner as stated in agreements secured with vendors, RS&E will conduct a review process for each CBO under contract each fiscal year. This review will consist of a monthly report submitted by contractors to detail their marketing activities, as well as a monthly follow up call conducted by RS&E staff. Additionally, RS&E will conduct random inspections of marketing and outreach activities performed by all subcontractors. These inspections will be conducted, at a minimum, on a monthly basis and will include random site visits to events and trainings hosted by grassroots organizations.

13.6. Marketing Activities

Our experience tells us that the sole use of a traditional medium, such as television, will not be successful in breaking down the barriers faced by this campaign's target audiences. As a result, we propose continuing with a multi-tiered, synergistic marketing approach, utilizing the following tactics:

Placement of media specifically geared to consumers in the IOU rural service territories, using radio and local newspapers as primary mediums.

A strong community connection in which CBOs will be encouraged and rewarded for spreading the word about these energy-saving programs within their communities.

Hispanic/general market rural public relations (PR) activities to secure maximum interest in energy efficiency programs through the engagement of the news media, community leaders, etc.

A toll-free telephone line to provide information in several languages for people who are confused about energy efficiency products or hesitant about taking advantage of IOU or local programs.

2006-2008 Energy Efficiency Concept Paper

Univision Television Energy Efficiency Marketing Program

1. Projected Program Budget: \$9,000,000 statewide

The SDG&E portion of the 2006 – 2008 statewide budget for the Univision Television marketing and outreach program is \$1,227,375.

2. Projected Program Impacts: n/a

3. Program Cost Effectiveness: n/a

4. Program Descriptors

Market Sector:	Residential Crosscutting
Program Classification:	Statewide
Program Status:	Existing

5. Program Statement

Hispanics represent one-third of California's population. Barriers to participation in statewide energy efficiency programs have included language, income, and location. In addition, Hispanics do not have the level of access to the web that the population in general enjoys. Traditionally, these barriers have prevented the Hispanic population from more fully taking advantage of opportunities for making permanent energy saving installations and improvements.

6. Program Rationale

Despite the fact that Hispanics are responsible for the majority of the population growth in California and make-up one-third of the population, this audience is underserved by Spanish-language media. In fact, there is only one Spanish-language daily newspaper in the state. Growth has been realized in the broadcast media.

This program proposes to build on past success in reaching California's Hispanic population with information about and access to statewide energy efficiency programs. This has been accomplished by utilizing a statewide network of Hispanic media to provide energy efficiency messages in Spanish, generating in-depth editorial coverage of energy efficiency subjects; deploying an aggressive program of outreach activities in Hispanic communities and distributing bilingual informational materials to Hispanic audiences. The program has encouraged audience acceptance by using well-known Hispanic media personalities as spokespersons.

7. Program Outcomes

This is an information-only program designed to increase participation in residential energy efficiency programs by Hispanic customers. The goal for the 2006-2008 program cycle is to reach

8. Program Strategy

Since 2001, this program has used the Univision Television Group as the sole media subcontractor. Univision has 11 stations strategically located throughout the state of California which reach up to 98% of the IOUs customers with their broadcast signals.

The primary component of the program is an annual 18-week schedule of 30-second commercials promoting energy efficiency programs and initiatives. By focusing the advertising campaign in a single media, we have been able to effectively negotiate value-added opportunities. Delivered at no charge to the program, these bonus components include interviews on locally produced talk shows and news programming, distribution of program materials and information at Hispanic-oriented outreach activities throughout the state, and a bonus 10-second schedule worth 50% of the 30-second schedule.

To ensure that we are effectively reaching the statewide Hispanic audience and achieving the highest value for the available budget, Staples Marketing will investigate other statewide Hispanic media outlets that could be used alone or in combination with other media.

9. Program Objectives

This is an information-only program and, therefore, is not currently tied directly to energy savings goals. Staples Marketing has a goal of reaching 138,122,000 Hispanic consumers per year at least three times with energy efficiency messages. The media schedule includes airing both 10- and 30-second messages. Ten-second messages are projected to air at least 2,699 times; while 30-second message are scheduled to air 6,078 times.

10. Program Implementation

Staples Marketing will investigate, plan, and place an integrated advertising schedule designed to reach the statewide audience of Spanish-speaking Californians with market-specific information about energy efficiency programs available through the program administrators.

Staples Marketing will augment the advertising campaign with outreach activities in the Hispanic community, providing outreach staff with training and orientation, as well as supplies of informational materials and handouts.

To provide Hispanic customers with more in-depth information regarding energy efficiency and statewide and local programs, Staples Marketing will work with the subcontracted media to identify opportunities for editorial coverage, such as interview shows or news programming, depending on availability. In addition, Staples Marketing will coordinate with the program administrators to identify bilingual representatives willing to be interviewed by the media subcontractor.

11. Customer Description

The program targets California's Hispanic population, ages 18-54, with a primary focus on customers who speak Spanish as their first or second language. The majority of customers reached are moderate and middle income, with a large proportion of renters in certain markets where there the economy is dependent on agriculture.

12. Customer Interface

The goal of this program is help Hispanic customers understand the value of and provide access to energy efficiency programs. Specifically, the advertising and marketing materials will provide phone and web contacts that allow them to access information about residential and small business energy efficiency programs in Spanish.

13. Energy Measures and Program Activities

Staples Marketing will not be installing any energy measures.

13.1. Measures Information

This is an information-only program and, therefore, does not offer energy efficiency measures.

13.2. Energy Savings and Demand Reduction Level Data

This is an information-only program and, therefore, does not have energy savings and demand reduction level data attached to it.

13.3. Non-energy Activities (Audits, Trainings, etc.)

All activities associated with this program involve marketing and the distribution of information.

13.4. Subcontractor Activities

The media subcontractor will broadcast the advertising campaign; schedule sponsor and staff outreach activities; and provide vehicles for editorial coverage and facilitate interviews with program administrator representatives.

13.5. Quality Assurance and Evaluation Activities

For quality assurance, Staples Marketing will monitor advertising schedules and review monthly reports from the media subcontractor. The media subcontractor will provide documentation of schedules. Any advertising that does not appear as ordered will be compensated for in the form of a no-charge "make good." Monthly media reports will update progress toward the program goals in terms of number of paid and no-charge ads realized on all media outlets and approximate audience reached.

Prior to the production of advertising, Staples Marketing will facilitate message testing on the previous year's marketing materials. An independent third-party research firm will use focus group(s) to review and comment on previous messages and creative approaches. The results of this message testing will drive the development and production of all future advertising and marketing materials for greatest effectiveness.

Staples Hutchinson will facilitate training and orientation for subcontractor staff involved in outreach activities. To ensure that outreach events are conducted in an appropriate manner and consistent with the goals of the program, the program manager will make random visits, acting like a "secret shopper" to evaluate interactions with outreach staff.

Staples Marketing will also request taped copies of Univision interviews with IOU and/or CPUC staff and monitor the quality of these interviews.

Program evaluation in the form of primary research will depend on current discussions among the CPUC regarding appropriate measurement of information-only programs. In any event, Staples Marketing will review the advertising campaign, outreach activities and editorial coverage to assure that all goals were met. In addition, we anticipate a primary research project designed to determine the effectiveness of the marketing effort in communicating energy efficiency messages.

13.5.1. Expected Number/Percent of Inspections (planned percent of projects)

This does not apply.

13.6. Marketing Activities

This is a marketing program. All activities have been described previously.

		SDGE3013 FYP-Statewide Marketing & Outreach
BUDGET		
Administrative Costs	\$	-
Overhead and G&A	\$	-
Other Administrative Costs	\$	-
Marketing/Outreach	\$	8,383,230
Direct Implementation	\$	-
Total Incentives and Rebates		
User Input Incentive	\$	-
Direct Install Rebate	\$	-
Direct Install Labor	\$	-
Direct Install Materials	\$	-
Activity	\$	-
Installation	\$	-
Hardware & Materials	\$	-
Rebate Processing & Inspection	\$	-
EM&V Costs	\$	-
Budget	\$	8,383,230
Costs recovered from other sources	\$	-
Budget (plus other costs)	\$	8,383,230
PROGRAM IMPACTS		
DEER kW (kW)		-
Net NCP (kW)		-
Net CEC (kW)		-
Annual Net kWh		-
Lifecycle Net kWh		-
Annual Net Therms		-
Lifecycle Net Therms		-
Cost Effectiveness		
TRC		
Costs	\$	8,383,230
Electric Benefits	\$	-
Gas Benefits	\$	-
Net Benefits (NPV)	\$	-
BC Ratio		-
PAC		
Costs	\$	8,383,230
Electric Benefits	\$	-
Gas Benefits	\$	-
Net Benefits (NPV)	\$	-
BC Ratio		-
Levelized Cost		
Levelized Cost TRC (\$/kWh)		
Discounted kWh		-
Cost	\$	-
Benefits	\$	-
Benefit-Cost	\$	-
Levelized Cost PAC (\$/kWh)		
Discounted kWh		-
Cost	\$	-
Benefits	\$	-
Benefit-Cost	\$	-
Levelized Cost TRC (\$/therm)		
Discounted Therms		-
Cost	\$	-
Benefits	\$	-
Benefit-Cost	\$	-
Levelized Cost PAC (\$/therm)		
Discounted Therms		-
Cost	\$	-
Benefits	\$	-
Benefit-Cost	\$	-

COMPETITIVE BID PROGRAMS

2006-2008 Energy Efficiency Concept Paper Time of Sale Energy Efficiency Checkup Program (TOSEC)

The TOSEC targets residential customers at the time they are purchasing an existing home. There are over 45,000 homes in the San Diego area that go through a transfer of ownership each year and approximately 80% or 36,000 of these homes receive a home inspection at the time-of-sale. Trained inspectors at the time-of-sale complete these home inspections. Also, realtors are involved in virtually every transfer of home ownership.

This program seeks to take advantage of the home inspectors and realtors in SDG&E's service territory to implement an incentive program to complete energy efficiency checkups for residential customers in the process of purchasing a home. Based on recent studies of California residential energy audit programs, the most opportune time to provide residential customers with energy efficiency information is at the transfer of home ownership. The studies not only reveal that this was the best time to offer energy checkups but that the energy checkups were more cost effective and had a higher adoption rate of over 45%.

The scope of work would entail:

- Providing an energy efficiency checkup component to the current home inspection
- Developing a cost effective incentive approach for the energy checkup
- Training home inspectors on how to identify energy efficiency opportunities
- Training realtors on the benefits of energy efficiency checkups to residential customers
- Educating customers of financing opportunities for energy efficiency equipment

The purpose of the resulting energy checkups would be to direct these customers to take advantage of the various residential rebate programs to increase the home energy efficiency.

2006-2008 Energy Efficiency Concept Paper Multifamily Affordable Housing Retrofit Program (MFAHRP)

The MFAHRP targets existing SDG&E customers living in apartment complexes with 5 to 15 units. This is a segment of the Multifamily program, which represents about 150,000 dwelling units, and is generally overlooked by the current Multifamily program contractors because the financial benefits are small compared to larger complexes.

This program seeks to promote high efficiency technology for apartment units in the inland and rural areas of SDG&E's service territory (climate zones 10, 14 and 15) that have the highest energy requirements and a hotter climate. The program ideally seeks properties in the planning stages of being renovated. In recent years, many property owners have been renovating their older rental units to take advantage of increased market value. Since property owners do not generally pay the energy bills, they have little incentive to upgrade their properties beyond the minimum requirements of their building permit. This program seeks to take advantage of "lost opportunities" by providing financial incentives to overcome the property owner/tenant "split incentives" issue.

The following measures are anticipated to be part of the direct-implementation approach:

- Thermal shell measures including: high performance windows, wall insulation, floor insulation, attic insulation, and radiant barriers.
- Heating and cooling system replacement including: 14 SEER or better packaged or split system air conditioning, heat pump air conditioning or through wall mounted systems, duct replacement/renovation, duct insulation, 92% AFUE furnace, HVAC system zoning, economizer, HVAC system commissioning, and shade trees.
- Water heating system retrofit including: high efficiency storage water heater or high efficiency boiler, pipe insulation, energy efficient faucet shower heads and faucet aerators and re-circulation systems or controller systems. (Solar water heating may be proposed if existing water heating is electric and eligible under post 2005 CPUC policy rules).
- Low kWh usage refrigerator (1Kwh/day or closest possible in respective program year).
- Energy efficiency lighting systems including: hard wired compact fluorescent lighting fixtures (e.g., four pin recessed lighting and surface mount fixtures), premium 4' T-8 fixtures (low ballast factor ballasts/800 series lamps)
- High efficiency dishwasher (Energy Star or better).
- Common area measures such as coin operated washers, pool pumps, and lighting.

2006-2008 Energy Efficiency Concept Paper Appliance Recycling Program

Refrigerators and freezers represent the base load for most residential customers on an annual basis. It is estimated that the San Diego area has over 100,000 primary refrigerators, 3,500 secondary refrigerators and 4,500 freezers that are 15 or more years old. Given the continued market saturation for older, inefficient, working refrigerators and freezers, the program offers significant opportunities for cost-effective long-term coincident peak demand reduction and long-term annual energy savings. The recycling of these units is a convenient way for customers to reduce their energy usage and reduce peak load in an environmentally safe fashion. The Appliance Recycling Program (ARP) is part of a statewide program that provides a rebate for recycling residential refrigerators and freezers.

ARP continues to explore opportunities to increase energy savings by adding new measures to the existing portfolio. In the 2006-2008 program, ARP will add room air conditioning units (room A/Cs) to the program. Based on market studies, there are over 65,000 room A/Cs in the San Diego area that are between 9 and 21 years old. This provides strong potential for additional cost-effective long-term coincident peak demand reduction and long-term annual energy savings. This new measure will follow the best practice model established through the New York State Energy Research and Development Authority's (NYSERDA) *Keep Cool Bounty Program*. It is expected that the addition of room A/Cs will complement the existing ARP portfolio and supplement the ENERGY STAR® room A/C rebate offered through SDG&E's Residential Rebate Program. The program emphasizes the energy-efficiency benefits associated with the disposal of older, inefficient spare refrigerators and freezers. To maximize demand reduction and energy saving opportunities, the program will also encourage the accelerated retirement of the older and least efficient primary refrigerators, freezers and room air conditioners with the purchase of energy efficient (e.g., ENERGY STAR®) units.

Starting in 2006, SDG&E will include small commercial customers in the program. Many small businesses have old inefficient residential type refrigerators and freezers that have either been donated or purchased second hand to be used by employees. SDG&E is exploring the possibility of recycling smaller commercial refrigeration units for the small commercial customer as well. Many of these units are purchased second hand from larger grocery store chains that are purchasing new units and therefore, the second hand units are old and inefficient.

Also starting in 2006, ARP will coordinate with SDG&E's LIEE/Limited Income Refrigerator Replacement and DAP Programs to take advantage of the customer contacts in identifying secondary refrigerators and freezers that qualify for recycling. Based on the SDG&E's information, there are approximately 3,500 of these secondary units in the limited income segment. The recycling rebates for the limited income customers may be higher to provide more incentive for the early retirement of these secondary units for this segment of the population.

The recycling vendor will be responsible for scheduling, tracking and performing individual pickups for refrigerators, freezers and room A/Cs. The vendor will coordinate with other energy efficiency and lower/limited income programs to encourage energy efficiency comprehensiveness. Duties may also include the scheduling and performing pick-up events and turn-in events for refrigerators, freezers and room A/Cs. The vendor is also responsible for the recycling process of dismantling the refrigerators, freezers and room A/Cs and removing oils and refrigerants. The vendor must meet the comprehensive toxic material recycling and disposal standards in conformance with California environmental laws and regulations, along with relevant permitting requirements.

2006-2008 Energy Efficiency Concept Paper Nonresidential Technology Demonstration Program (NRTEC)

The NRTEC program objective is to successfully demonstrate new recently commercialized technologies and innovative system designs to customers in high-energy savings potential market segments. The NRTEC program is designed to identify and target new technologies and innovative designs in energy efficiency. It will work with host customers to demonstrate the achievable energy savings from identified energy efficiency measures/designs.

Examples of various innovative designs and recently “commercialized” energy efficiency technologies are industrial pumping (design, pipe sizing, and motor downsizing), food service cold storage technologies (Electronically Commutated Motor (ECM), floating head pressure controllers, condenser relocation, etc.), HVAC and chilled water systems (e.g., low face velocity, high coolant velocity coils, innovative supply air fan equipment and configurations), daylight harvesting, compressed air systems and other innovative technologies.

2006-2008 Energy Efficiency Concept Paper

Upstream HVAC/Motor Distributor Rebate Program

The Upstream HVAC/Motors Distributor Rebate program is a cross-cutting program focused on changing distributors' stocking practices to favor qualifying energy-efficient equipment at all levels. The goal is to increase the purchase and installation of qualifying high-efficiency motors and HVAC equipment in the commercial and residential markets by offering prescriptive rebates qualifying distributors. Customers, from the smallest homeowner to the largest commercial or industrial corporation, will be able to see the long-term benefits of cost savings related to reduced energy usage. By offering the rebate upstream, the cost of high efficiency can now be competitive with standard equipment.

Commercial and residential air conditioning is responsible for the largest share of peak demand in California, contributing approximately 33% of peak demand.⁵ In addition, it is a large overall source of energy use. The HVAC component of the Upstream HVAC/Motor Distributor Rebate Program will be expanded to include residential units. This is a logical extension because the same distributor channel serves both residential and commercial contractors. In addition, the effectiveness of the upstream program could be enhanced by a customer incentive, which would create a push-pull to stimulate sales.

This Upstream HVAC/Motor Program provides innovation to traditional downstream programs because it ensures that distributors:

- Stock premium efficiency equipment,
- Recognize the benefits of premium efficiency equipment,
- Have the tools and knowledge to up-sell to premium efficiency equipment
- Can sell it at or near the cost of standard equipment.

As with the existing program, the Upstream HVAC/Motor Program will enroll distributors to stock new high efficiency equipment, create informative material to encourage sales, and provide rebates. As a statewide program, it has been able to get the attention of the largest distributors.

This program will be put out to bid to a 3rd party program implementer. A Request for Proposal process may be used to choose the most cost-effective and comprehensive proposal.

The overall responsibilities for the HVAC/Motor Program are to work directly with the distributors and manufactures to:

- Influence the availability of high efficiency equipment through distributor rebates
- Stimulate high efficiency product sales
- Gain savings through sale of premium equipment

⁵ Brown and Koomey, 2002

- Increase awareness of energy efficiency opportunities
- Coordinate HVAC energy efficiency activities with other programs and IOUs for statewide consistency where applicable.

In order to take advantage of synergies in marketing, industry contacts and to avoid duplication, close cooperation will be required between the HVAC Training, Installation and Maintenance Incentive Program.

2006-2008 Energy Efficiency Concept Paper Advanced Home Renovations Program

The Advanced Home Renovation Program (AHRP) is a local demonstration program to renovate an existing single-family home with the latest in energy efficiency products and equipment. The AHRP project is designed to transform a pre-1978 vintage single family home in a hotter climate zone into a state-of-the-art energy efficient home. The goal will be to demonstrate how little energy a typical San Diego family can use without changing their lifestyle.

This program objective is to increase the awareness of energy efficiency and technological advances in electric and natural gas end uses. This will also provide an opportunity to conduct a pre and post analysis of the savings. The information gathered through this project would be used in designing future energy efficient programs.

The vendor for this program will need to have credentials and experience to:

- Perform the necessary pre and post analysis
- Determine the most cost effective energy efficient measures to be included in the home
- Perform or work with subcontractors to complete the necessary work for energy efficiency upgrades

This program may entail the removal and replacement of all electric and natural gas end uses to accommodate the highest efficiency equipment and designs commercially available. The vendor is encouraged to pursue partnerships with other organizations or energy efficiency programs to maximize exposure to the project and to take advantage of synergies. The energy efficiency measures may include but are not limited to:

- The home's heating and cooling system being controlled via a Smart Thermostat and an energy management system
- The home's thermal shell R-value will be raised to the highest useful level possible
- Trees around the structure will be strategically selected and placed in a manner that reduces the heating and cooling loads
- All appliances replaced with leading edge technology, including Smart Appliances
- The water heating system will be completely re-worked with a solar system with a high-energy factor natural gas-fired instantaneous back-up system
- The home electronics (TV, DVD, VCR, etc) will be equipped with 1-Watt stand-by power systems where possible
- The home's lighting systems will utilize daylight harvesting, 4-pin hardwired compact fluorescent recessed lighting, dimmable CFL fixtures, LED fixtures, premium T-8 lamps, motion sensors, and other advanced lighting systems
- Home-office products will showcase the most energy efficient models
- The home would be equipped with a photovoltaic power generation system.

2006-2008 Energy Efficiency Concept Paper

HVAC Training, Installation and Maintenance Incentive Program

Residential and commercial air conditioning is responsible for the largest share of peak demand in California, contributing approximately 33% of peak demand. In addition, it is a large overall source of energy use. There are approximately 15,000 old inefficient units that are over 10 years old in the SDG&E territory but the purchase of high efficiency air conditioning equipment does not inherently lead to high efficiency operation of the equipment. Conservatively, over 50% of all the air conditioning units in the San Diego area have not been serviced in over a year and studies indicate that most units are not installed properly. Contractors lack training and understanding of how to install a system to optimize energy efficiency. Indeed, they lack the basic tools for appropriate tuning and calibration. The HVAC Training, Installation and Maintenance Program is a midstream HVAC incentive program that will provide training for HVAC contractors to: 1) facilitate proper installation/commissioning of equipment; and 2) maintenance of existing equipment. This program will coordinate with the Upstream HVAC/Motors Distributor Rebate Program.

In recent years, HVAC efficiency programs have focused on encouraging the purchase of high efficiency equipment. However, the purchase of high efficiency equipment only captures a small portion of the potential savings. Research shows that there are significant savings opportunities in installation and operations of HVAC units. The flexibility to fine tune installations for efficiency and capture opportunities up front makes the investment in additional testing and analysis cost-effective at installation. In a servicing mode, technicians need to be able to do a quick diagnosis and then address the highest gain opportunities. Specifically, there is potential for savings in:

- *Proper Sizing* - Supporting proper sizing in residential and commercial units can yield savings. Contractors frequently install oversized systems to avoid potential comfort and call back risks.
- *Refrigerant Charge and Airflow* - Between half and three-quarters of all HVAC units suffer from incorrect charge and low airflow. For both new and existing equipment, ensuring the proper refrigerant charge and airflow can increase efficiency.
- *Duct Sealing* - Ensuring tight ducts in residential and commercial installations yields 10-18% energy savings. The peak load reduction can be higher, yielding a demand savings of 25%.
- *Economizers* - Research shows that the majority of economizers do not function as intended. Use of the Whole Building Diagnostician tool in new and existing buildings in California has confirmed that problems with outside air economizers are endemic. The potential savings from fixing a malfunctioning economizer are approximately 10 – 15%. In addition, enabling economizer function is a pre-requisite for further savings from demand-controlled ventilation.
- *Controls* - Appropriate controls, which enable variable heating and cooling conditions based on occupancy, are also critical to proper operation of the equipment.

Program responsibilities will include training of contractors to perform quality installations and to properly service existing equipment, which includes the following:

- Right Sizing (using Manual J)
- Basic Heating and Cooling Tune-up
- Duct Testing and Sealing (using duct testing equipment such as a Duct Blaster®, blower door)
- Economizer Setup and Adjustment
- Night Venting Techniques

In order to take advantage of synergies in marketing, industry contacts, and avoid duplication, this program will require close cooperation with the Upstream HVAC/Motor Distributor Rebate Program. Finally, to maximize the air conditioning energy savings potential, this program will target residential and small business customers in the hotter inland climate zones (10, 14, and 15).

2006-2008 Energy Efficiency Concept Paper Schools Program

The School Program is a comprehensive program that includes the following:

- Basic understanding of energy efficiency awareness and applications
- Encourage and enable students and staff to make informed decisions
- Deliver measurable energy savings where feasible

2006-2008 Energy Efficiency Concept Paper Building Commissioning/Retro-Commissioning (BCRC)

The BCRC program objective is to accomplish immediate, long-term energy and demand savings, and establish a permanent framework for sustainable, long-term, comprehensive energy management practices at customer facilities. The energy savings will be derived from building commissioning, retro-commissioning and continuous commissioning.

Facility Commissioning and Retro-Commissioning

Program Implementer will work with Facility Managers to commission select buildings and central plants to get them operating as efficiently as possible. Facilities staff will use the knowledge gained from the experienced commissioning agents during actual commissioning to gain hands-on experience, and to utilize this knowledge to maintain the efficient operation of their buildings.

Continuous Commissioning

In order to ensure sustainable, ongoing energy savings, the facility staff, again with the help of the commissioning agents, will establish a program to continuously commission the buildings, using monitoring systems to ensure ongoing efficient operations. Ultimately, program implementation staff will have trained facility managers in the use of permanent monitoring systems to continue to commission the buildings over time, thereby ensuring persistent energy savings.

The process includes a review of building operations, the installation of monitoring equipment, and hands-on commissioning training. Equipment will have the capability of monitoring operations of the buildings, enabling commissioning, retro-commissioning, continuous commissioning and will have the added benefit of enabling customers to participate in demand response programs.

	SDGE3000 3PP-Third Party Programs
BUDGET	
Administrative Costs	\$ 20,603,245
Overhead and G&A	\$ 20,603,245
Other Administrative Costs	\$ -
Marketing/Outreach	\$ -
Direct Implementation	\$ 30,904,868
Total Incentives and Rebates	\$ -
User Input Incentive	\$ -
Direct Install Rebate	\$ 30,904,868
Direct Install Labor	\$ -
Direct Install Materials	\$ -
Activity	\$ -
Installation	\$ -
Hardware & Materials	\$ -
Rebate Processing & Inspection	\$ -
EM&V Costs	\$ -
Budget	\$ 51,508,113
Costs recovered from other sources	\$ -
Budget (plus other costs)	\$ 51,508,113
PROGRAM IMPACTS	
DEER kW (kW)	32,760
Net NCP (kW)	32,760
Net CEC (kW)	32,760
Annual Net kWh	168,300,000
Lifecycle Net kWh	-
Annual Net Therms	1,620,000
Lifecycle Net Therms	-
Cost Effectiveness	
TRC	
Costs	\$ 20,603,245
Electric Benefits	\$ -
Gas Benefits	\$ -
Net Benefits (NPV)	\$ -
BC Ratio	-
PAC	
Costs	\$ 51,508,113
Electric Benefits	\$ -
Gas Benefits	\$ -
Net Benefits (NPV)	\$ -
BC Ratio	-
Levelized Cost	
Levelized Cost TRC (\$/kWh)	
Discounted kWh	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -
Levelized Cost PAC (\$/kWh)	
Discounted kWh	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -
Levelized Cost TRC (\$/therm)	
Discounted Therms	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -
Levelized Cost PAC (\$/therm)	
Discounted Therms	-
Cost	\$ -
Benefits	\$ -
Benefit-Cost	\$ -

