CALIFORNIA STATEWIDE COMMERCIAL SECTOR ENERGY EFFICIENCY POTENTIAL STUDY
Study ID #SW039A

FINAL REPORT

VOLUME 2 OF 2
Appendixes A through K

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A

DEVELOPMENT OF BASELINE AND ENERGY EFFICIENCY DATA

This appendix describes the baseline and energy efficiency measure data used in the study. The remaining appendices contain a complete listing of the data used in our modeling process.

A.1 BASELINE DATA

The principal baseline data used in this study consist of end use and technology specific data as well as economic data (avoided costs and commercial rates).

A.1.1 End Use and Technology Specific Data

Estimating the potential for energy-efficiency improvements requires a comparison of the energy impacts of existing, standard-efficiency technologies with those of alternative high-efficiency equipment. This, in turn, dictates a relatively detailed understanding of the statewide energy characteristics of the existing marketplace. Data that were required at the utility service area and building type level included:

- Annual energy consumption per square foot for each end use studied;
- End use load shapes and energy/peak factors;
- Electric end use saturation, and
- Technology share for each base technology in scope.

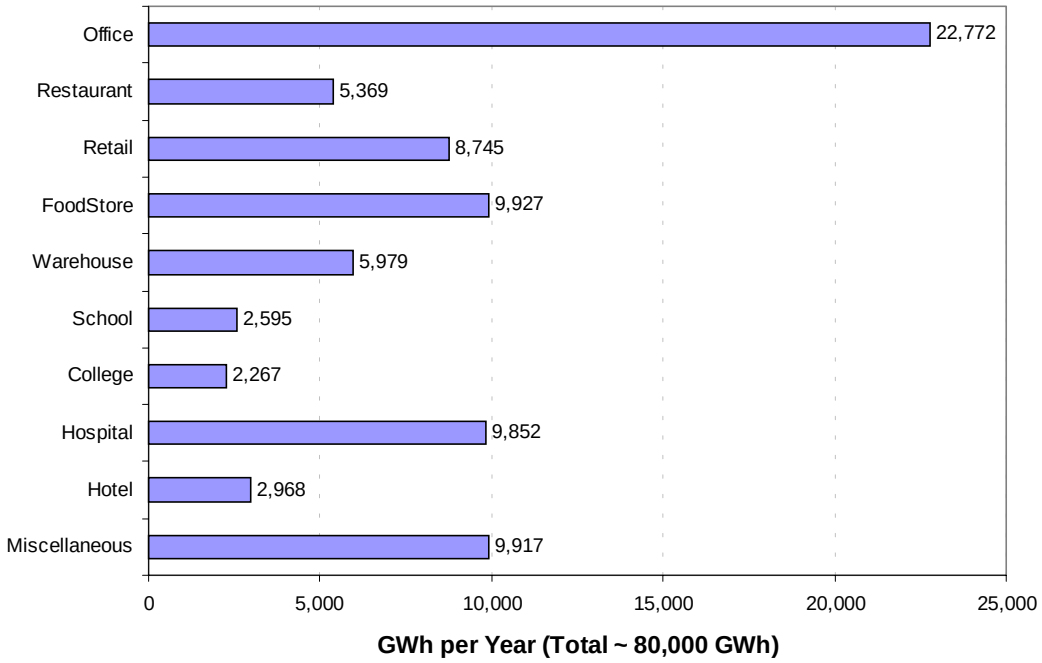
Sources for and development of each of these key data elements are discussed in the following subsections.

End Use Energy Consumption

The primary source used for end use energy consumption is the CEC commercial end use forecasting database. In the end use forecasting approach, end use energy consumption is expressed as the product of building floorspace (in square feet), the fraction of floorspace associated with a given end use (the end use saturation), and EUI (the energy use intensity of an end use, expressed in kWh per square foot). These three data elements have been collected and estimated from various sources over time and form the foundation upon which the CEC energy demand forecasts are developed.

Figure A-1 summarizes commercial energy usage by building type. In 2000, commercial energy usage for the three major California electric utilities was about 80,000 GWh. Office buildings accounted for about 34% of this usage, or about 23,000 GWh. The next largest energy consuming building types were food stores, hospital/health facilities, and miscellaneous buildings, each accounting for about 12% of commercial usage, or about 10,000 GWh.

Figure A-1
Commercial Energy Usage by Building Type

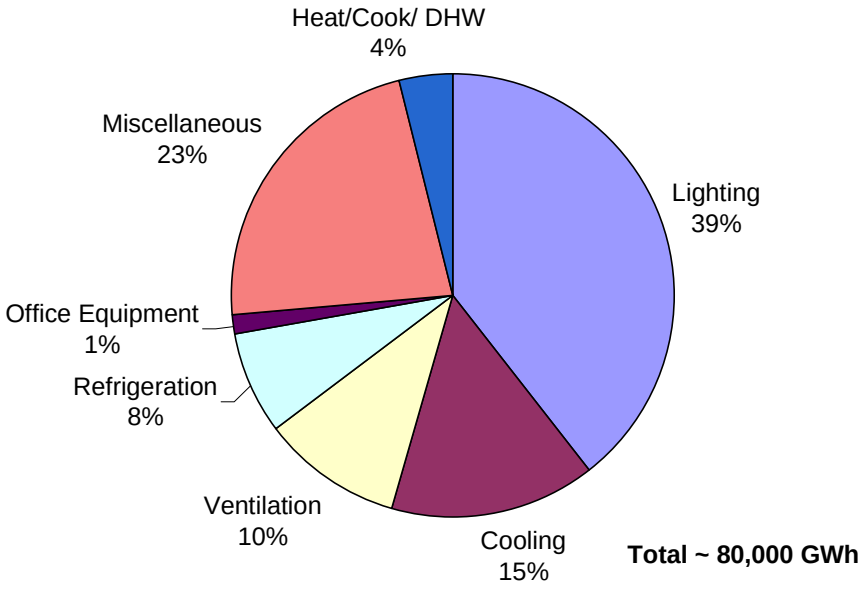


Source: CEC 2000. *California Energy Demand: 2000-2010*.

Figure A-2 summarizes the CEC's estimates of commercial energy use by end use. We made a small number of changes in some of the CEC's estimates, where we believed that energy use had been significantly underestimated. For lighting and cooling, we made changes when the equivalent full-load hours implied by the EUIs were judged to be unreasonable. We also changed some office equipment estimates. While the CEC forecast data show the office equipment end use accounting for only 1% of commercial consumption, it is likely that a portion of "miscellaneous" consumption is also attributable to office equipment. The office equipment usage figure was adjusted upward to about 3% of total consumption, based on data developed from the PG&E CEUS. The final end use breakdown resulting from our baseline estimates is shown in Figure A-3. Lighting remains the most predominant end use, accounting for 39% of total consumption or about 31,000 GWh. Cooling, ventilation, and refrigeration are the next largest end uses, accounting for about 15%, 11%, and 8% of total consumption respectively. Our final EUIs are shown, by technology, in Appendix C.

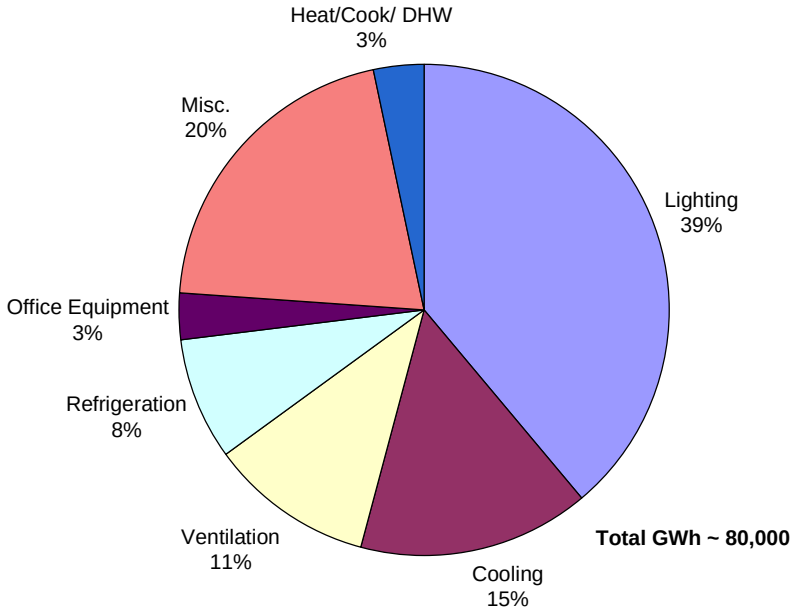
To determine measure costs and cost-effectiveness, we also need estimates of the number of technology *units* per square foot of floorspace, i.e., lighting fixtures, cooling tons, ventilation horsepower, etc. per square foot. These estimates are derived by first dividing our EUIs (kWh/square foot) by estimates of full-load equivalent hours, which results in kW/square foot. We then estimate kW/unit and then divide by kW/square foot to arrive at units per square foot. Our estimates of units per square foot are provided in Appendix C. Our underlying full-load equivalent hours for lighting and cooling are shown in Table A-1.

Figure A-2
CEC Commercial Energy Usage Breakdown by End Use for Major IOUs



Source: CEC 2000. *California Energy Demand: 2000-2010.*

Figure A-3
Commercial End Use Breakdown for this Study



Source: CEC 2000. *California Energy Demand: 2000-2010.*

Table A-1
Implicit Full-Load Equivalent Hours

	Cooling			Indoor Lighting		
Building Type	PG&E	SCE	SDG&E	PG&E	SCE	SDG&E
Office	1,113	1,508	1,225	4,926	4,358	4,469
Restaurant	1,292	1,643	1,420	2,935	2,847	3,133
Retail	850	1,212	901	3,068	3,113	3,332
FoodStore	1,672	2,049	1,801	6,658	6,055	6,564
Warehouse	515	687	558	1,857	3,212	3,354
School	677	706	739	1,875	2,045	2,208
College	682	910	770	2,027	2,158	2,214
Hospital	1,847	2,210	2,062	6,213	5,999	5,900
Hotel	928	1,150	1,034	2,589	2,666	2,919
Miscellaneous	1,635	1,875	1,822	1,486	1,951	2,885

Load shapes and Energy / Peak ("H") Factors

Load shape data was used to develop energy and peak factors. Energy and peak factors are used to allocate annual energy usage into utility costing periods and to provide estimates of peak demand based on cost period energy usage. The factors were developed by California IOU service area, end-use, and building type and were used to allocate measure impacts to utility costing periods for purposes of estimating avoided-cost benefits. The energy and peak factors are sometimes referred to as "H" factors.

In the case of the electric energy factors, these factors are computed based on predefined costing periods (e.g., season, day of the week, and hours of the day) divided by annual energy use. The end result is a series of values for each period such that the sum of the periods is equal to one.

The peak factors are based on the same predefined periods as the energy factors. In this case, the peak demand within a cost period is divided by the average demand within that same period; that is, the peak factor is the ratio of peak to average demand in a period. This is done for both noncoincident demands as well as for coincident demands. In the case of coincident demands, the time of coincidence was set to be the time at which the California electric system typically peaked within each marginal costing period.

Data Sources for Load shape and TOU Analysis

The data used to develop the load shape/time-of-use factors for SDG&E were obtained from a SDG&E EUI study performed by RER, Inc. in 2000. The data used in the EUI study originated from the following research efforts performed by SDG&E:

- 1995 Nonresidential New Construction Database,
- 1996 Nonresidential New Construction Database,

- 1995 Title 24 Plus Measurement & Evaluation Survey Database, and
- 1998 Measurement & Evaluation Survey Database.

The new construction databases for 1995 and 1996 were fielded to determine first-year load impacts from SDG&E's new construction program. Over 650 sites were surveyed for this effort. The other databases, listed above, were obtained from SDG&E's Measurement and Evaluation CEUS in both 1995 and 1998 where over 1,000 surveys were fielded. These data were collected using on-site surveyors subcontracted by SDG&E. RER's survey analysis tool, SITEPRO, was used to evaluate these data and develop the load profiles used in the current study.

The data used to develop the load shape/time-of-use factors for PG&E were obtained from the PG&E 1998 Commercial Building Survey Project. The Commercial Building Survey was a data collection effort involving an on-site survey of almost 1,000 commercial customers chosen to represent the population of commercial buildings in the PG&E service territory. This survey collected information about customers' building structures, business operations, equipment types, fuel choices, and operating schedules. This information, along with billing data and other available customer information, was further analyzed to produce simulated end-use intensities and simulated hourly end-use consumption. Data in this report were collected during the calendar years 1996 and 1997.

Because no comparable data were available for SCE, a combination of data sources was used. SDG&E factors were utilized for the non-cooling end uses. For the cooling end use, SCE commercial load research data were utilized for the office, restaurant, retail, grocery, warehouse, and hospital/health building types, and SDG&E factors were utilized for the school, college, hotel, and miscellaneous building type.

TOU Energy Factors

With the load shapes from the studies described above, representative electric rates were identified that represented typical marginal cost time-of-use (TOU) periods. To determine these periods, the "ALTOU" rate and the "A-6" rate were used for SDG&E and PG&E respectively. These tariffs are considered general service TOU rates for small businesses. They were chosen to be representative of the standard time-of-use schedules found throughout most of the tariffs offered by the utilities to their customers. The energy factors were calculated using this TOU information by applying it to the existing load shape data.

TOU Peak Factors

Determining the coincident peak times was accomplished by examining system-wide load data made available from California ISO for the entire state of California. Load data for the year 2000 was summarized by weekday and weekend. A graphical analysis was performed to identify peak times by month and daytype. The following months, daytypes, and hours were determined to represent the coincident peak for each of six TOU periods. There are differences between SDG&E and PG&E's coincident peak hours. This is due to the differences in their TOU period definitions. The peak hours for each TOU period are listed below.

Table A-2
Peak Hours for Each TOU Period

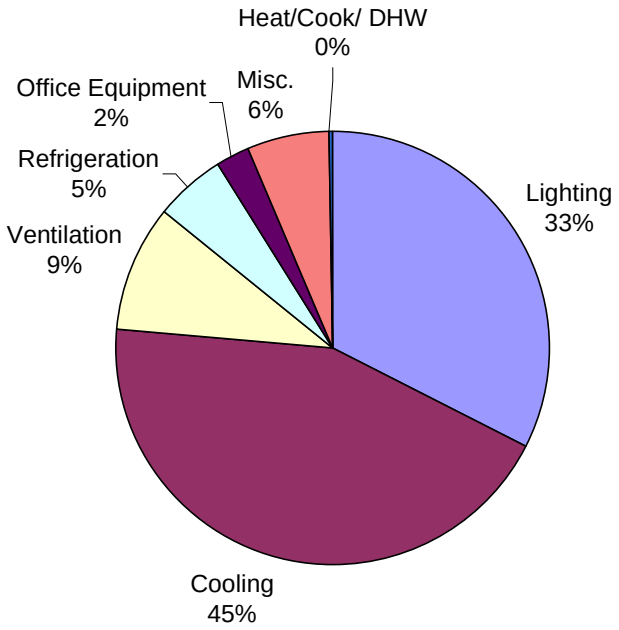
Utility	Season	TOU Period	Month	Daytype	Hour
SDG&E	Winter	Off-peak	January	Coldest	2300
		Semi-peak	January	Coldest	1100
		On-peak	January	Coldest	1800
	Summer	Off-peak	August	Hottest	1100
		Semi-peak	August	Hottest	1900
		On-peak	August	Hottest	1600
PG&E	Winter	Semi-peak	January	Coldest	0800
		On-peak	January	Coldest	1800
	Summer	Off-peak	August	Hottest	2200
		Semi-peak	August	Hottest	1200
		On-peak	August	Hottest	1600

An example of the electric energy and peak factors that were developed is shown in Table A-3 (all factors are provided in Appendix A). By combining these factors with annual end use energy consumption figures, estimates of commercial peak demand can be developed for each end use. Figure A-4 shows the end use allocation of peak demand developed for this study.

Table A-3
Example of Electric Energy Factors - Offices by End-Use

End Use	Season	TOU Period	Energy Factor	Peak Factor	Coin. Peak Factor
Cool	Winter	Off-Peak	0.0438	58.5310	1.0891
Cool	Winter	Semi-Peak	0.1324	8.3020	0.1042
Cool	Summer	Off-Peak	0.2107	12.1411	1.8877
Cool	Summer	Semi-Peak	0.2382	3.2244	3.0486
Cool	Summer	Peak	0.3750	1.9281	1.9281
Interior Light	Winter	Off-Peak	0.1719	4.2817	2.7480
Interior Light	Winter	Semi-Peak	0.3307	1.3183	0.8008
Interior Light	Summer	Off-Peak	0.1655	4.1998	0.8876
Interior Light	Summer	Semi-Peak	0.1578	1.4526	1.4150
Interior Light	Summer	Peak	0.1742	1.1125	1.0481
Misc	Winter	Off-Peak	0.2796	1.8211	1.3033
Misc	Winter	Semi-Peak	0.2344	1.2870	0.9392
Misc	Summer	Off-Peak	0.2572	1.7549	0.9262
Misc	Summer	Semi-Peak	0.1146	1.2957	1.1979
Misc	Summer	Peak	0.1143	1.1161	1.0204
Office Equip	Winter	Off-Peak	0.2556	1.9983	1.5072
Office Equip	Winter	Semi-Peak	0.2483	1.2186	0.9134
Office Equip	Summer	Off-Peak	0.2473	1.9275	0.9774
Office Equip	Summer	Semi-Peak	0.1239	1.2682	1.2299
Office Equip	Summer	Peak	0.1248	1.0713	1.0302

Figure A-4
Estimated Commercial Peak Demand for Major IOUs
Breakdown by End Use



Total ~ 16,500 MW

Baseline Technology Shares (Applicability Factors)

The technology or equipment mix within an end use determines the applicability of energy efficiency measures for that end use. For example, high-efficiency DX air conditioning measures are only applicable to the portion of the space cooling end use that is served by DX air conditioning (as opposed to other air conditioning equipment such as chillers). Data on technology shares were developed from several sources, as summarized in Table A-4. A brief discussion of sources and development of technology share data follows.

Table A-4
Data Sources for Technology Shares

End Use	Data Source
Indoor Lighting	PG&E CEUS, SCE CEUS, SDG&E CEUS
Outdoor Lighting	PG&E CEUS, SCE CEUS, SDG&E CEUS
Space Cooling	PG&E CEUS, SCE CEUS, SDG&E CEUS
Ventilation	PG&E CEUS applied to all three utilities
Refrigeration	LBNL Commercial Refrigeration Report (LBL-37397)
Office Equipment	LBNL Office Equipment Study (LBNL-45917)

The data sources listed in Table 4-5 are summarized below:

- The PG&E Commercial End Use Survey (CEUS). Data from this survey were collected during calendar years 1996 and 1997 via on-site surveys. A total of 983 buildings were included in the sample. XENERGY analyzed the CEUS data directly to estimate technology shares.
- The SCE CEUS. Data from this survey were collected via on-site surveys in two waves, based on building type. Data for offices, retail stores, food stores, restaurants, and warehouses were collected in 1992. Data for schools, colleges, hospitals/health facilities, lodging, and miscellaneous buildings were collected in 1995. A total of 700 surveys were conducted in 1992, and 500 surveys were conducted in 1995. ADM Associates provided analysis of SCE CEUS data.
- SDG&E CEUS: This was a survey of 350 commercial buildings in the SDG&E service territory. Data were collected via on-site surveys during 1998. Extensive technology detail on lighting and HVAC systems was available. RER analyzed the data to provide technology share inputs.
- LBNL commercial refrigeration study. This study provides detailed specification of commercial refrigeration systems as well as methods for estimating savings for efficient refrigeration measures. Modeling procedures and methods used in this study rely, where possible, on the inputs and assumptions contained in the LBL report. In addition, PG&E program application filings were mined for individual measure algorithms, and, where necessary, some algorithms were developed independently for this study. Refer to appendices J and K for baseline modeling and measure modeling, respectively.
- LBNL office equipment study. In this study Lawrence Berkeley National Laboratories utilized secondary source data to estimate office equipment electricity consumption by sector (residential, commercial, and industrial) and equipment type. Estimates were made for calendar year 1999.

Indoor and Outdoor Lighting

Indoor and outdoor lighting technology shares were developed using a six-step process. For the analysis, it was assumed that lighting intensity (lumens per square foot) remained relatively constant for a given building type, regardless of the type of equipment used for lighting. The six steps of the analysis process were as follows:

1. Tabulate lamp counts by fixture type and business type for CEUS and SDG&E survey data;
2. Translate lamp counts into fixture counts based on lamps per fixture;
3. Identify lighting output (lumens) for each fixture type;
4. Translate fixture counts into estimates of lighting output for each fixture type;
5. Aggregate detailed fixture types into a reduced set of prototypical fixture types; and
6. Calculated technology shares as the fraction of lighting output accounted for by the aggregate fixture type.

Table 4-6 summarizes lighting equipment shares developed for each utility. Shares by utility and building type are shown in Appendix C under the Applicability table.

Review of PG&E and SCE CEUS data revealed that lighting equipment shares for small customers were not appreciably different from the average. Thus, the average shares shown in Table A-5 were used for the small customer potential analysis.

Table A-5
Lighting Technology Shares for Reduced Set of Prototypical Fixtures

	Technology Shares		
Base Equipment Type	**PG&E**	**SCE**	**SDG&E**
Indoor Lighting			
4-lamp, 4-foot fluorescent	32%	30%	25%
2-lamp, 4-foot fluorescent	40%	31%	33%
2-lamp, 8-foot fluorescent	17%	30%	9%
75W Incandescent	4%	3%	2%
150W Incandescent	1%	1%	11%
Other indoor	7%	5%	19%
Indoor Total	100%	100%	100%
Outdoor Lighting			
2-lamp, 4-foot fluorescent	15%	18%	7%
400W mercury vapor	83%	82%	90%
Other outdoor	2%	0%	4%
Outdoor Total	100%	100%	100%

Space Cooling

The key technology distinction in this study for the space cooling end use was between DX (direct expansion) air conditioning units and central chillers. Technology shares were developed by building type and were based on installed cooling tons. Table A-6 summarizes technology shares by utility. Shares by utility and building type are shown in Appendix C under the Applicability table.

Table A-6
Space Cooling Technology Shares

	Technology Shares		
Base Equipment Type	**PG&E**	**SCE**	**SDG&E**
DX air conditioning	49%	67%	79%
Chillers	50%	33%	21%
Total	100%	100%	100%

For small customers, review of PG&E and SCE CEUS data revealed that space cooling was provided almost exclusively by DX systems. Thus, the DX equipment shares were set to 100% for the small customer potential analysis.

Ventilation

The technology distinction for ventilation was fan motor size. Using PG&E CEUS data, fans were grouped into four different size categories based on fan horsepower. Each category was then modeled using a prototypical fan size. (Motor sizes under 1hp were not analyzed.) Size shares were calculated as the percent of total fan horsepower that falls into each category. Table A-7 shows the ventilation-fan size distribution across all commercial building types. Shares by utility and building type are shown in Appendix C under the Applicability table.

Table A-7
Ventilation Fan Size Shares

Fan Size Range	Representative Fan Size	Share
Under 1hp	none	14%
1hp to 10 hp	5hp	31%
10+hp to 30 hp	15hp	18%
Over 30hp	40hp	37%
Total		100%

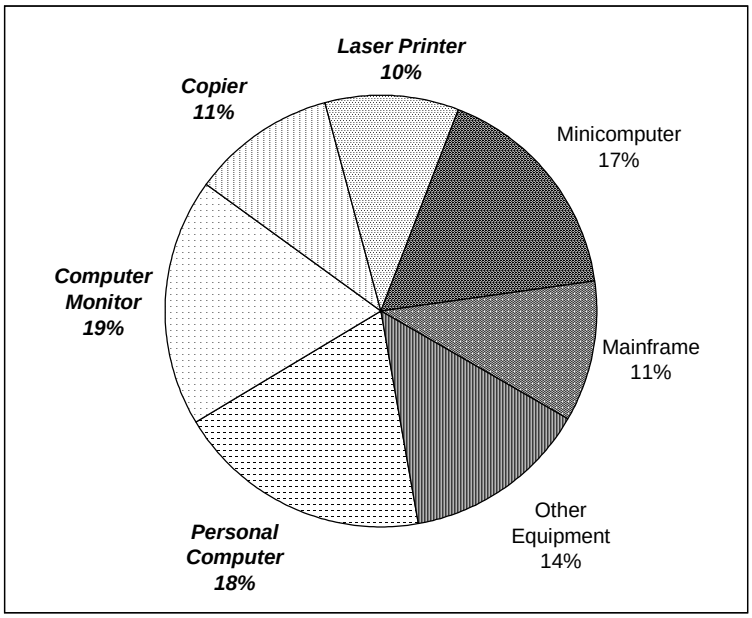
Refrigeration

All grocery stores were assumed to have a central refrigeration system. The mix of loads in the prototypical store were developed from the LBNL refrigeration study.

Office Equipment

Four types of office equipment were addressed in this study: personal computers (PCs), PC monitors, copiers, and laser printers. Together, these four equipment categories account for about 60% of commercial office equipment energy consumption. Overall office equipment shares for these four categories were developed from office equipment energy usage estimates developed at the national level by LBNL. Figure A-5 shows the technology shares of the four studied technologies (in lighter shading) along with technology shares of other key office equipment that was not addressed in this study. Variation in technology shares across building type was estimated using data on office equipment from the PG&E CEUS.

Figure A-5
Office Equipment Technology Shares



Source: Wawamoto, Kaoru, J. Koomey, B. Nordman, R. Brown, M.A. Piette, M. Ting, A. Meier, *Electricity Used by Office Equipment and Network Equipment in the U.S.*, LBNL, February 2001.

A.1.2 Energy Cost Data

This subsection outlines the basis for assumptions for avoided costs and commercial rates. Additional discussion and references are provided in Section 2.

Avoided Cost

As discussed in Section 2, the base run avoided cost forecast was taken from the avoided cost forecasts used by the utilities in their PY2001 energy efficiency program applications. These forecasted values were required and approved by the CPUC. The values were derived by the utilities by applying the CPUC-required on-peak multipliers to avoided cost forecasts developed prior to the California energy crisis. These multipliers were ordered by the CPUC in Fall 2000 to account for the skyrocketing market clearing prices observed in Summer 2000. The basis for the multipliers was a study conducted by JBS Energy Inc on behalf of the Utility Reform Network (TURN) in September 2000. Continued use of these multipliers has been required as part of the CPUC's energy efficiency policy rules for PY2002.

The Low scenario avoided costs are half of the Base scenario avoided costs throughout the forecast period. The High scenario avoided costs are 25 percent above the Base avoided costs throughout the forecast period. The avoided cost data are provided in Appendix B.

Electricity Rates

The Base run commercial rate forecast used in this study was described in Section 2 (Table 2-1 and Figure 2-3). Current rates are roughly 70 percent higher in the summer and 40 percent higher in the winter than the frozen tariffs in place between 1998 and the first half of 2001. Our Base run commercial rate forecast starts out at current levels and then declines to values equivalent to levels the pre-energy crisis rates would have achieved by 2006 if they had increased by inflation. This rate forecast was based on and is fairly similar to that included in the CEC's October draft of their California Energy Outlook 2002-2012 report. The Low scenario commercial rates are set at 1998 frozen levels, and then increase from 2001 by 3 percent per year to account for inflation. In the High scenario, current commercial rates continue to rise throughout the forecast period. The electric rate data are provided in Appendix B.

A.2 ENERGY EFFICIENCY MEASURE DATA

This subsection presents information on the energy efficiency measures included in the study. Cost and savings fraction sources are listed and measure descriptions are provided.

A.2.1 Measures Included

The set of measures included in this potential study is shown in Table A-8 below. In reviewing this list, readers should be aware of the following:

- Measures are generally organized around base case technologies. These base case technologies are intentional aggregations of the wide variety of actual base case technologies in the market. Thus, the measure list for the potential study is not as detailed as measure lists that are necessary for actual program implementation.
  - For example, we use the three most common fluorescent fixtures (4-foot, 4-lamp; 4-foot, 2-lamp; and 8-foot, 2-lamp to represent the base case energy for fluorescent lighting. The square footage and base case energy for other types of fluorescent systems are mapped into one of these three types.
- The measures shown in the tables were selected by starting with the *DEER 2001 Update Study*, with some aggregation to prototypical applications. We then reviewed utility PY2001 filings and program documentation and added measures that could have significant potential but were not on the DEER list.

Table A-8
Commercial Study Measure List
(ROB = Replace-on-Burnout, RET = Retrofit)

End Use	Measure #	Measure Name
Indoor Lighting	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG
Indoor Lighting	111	ROB 4L4'T8, 1EB
Indoor Lighting	112	ROB 2L4'T8, 1EB, Reflector
Indoor Lighting	114	RET 4L4'T8, 1EB
Indoor Lighting	115	RET 2L4'T8, 1EB, Reflector

End Use	Measure #	Measure Name
Indoor Lighting	117	Occupancy Sensor, 4L4' Fluorescent Fixtures
Indoor Lighting	118	Continuous Dimming, 5L4' Fluorescent Fixtures
Indoor Lighting	119	RNV 2L4'T5HO, 1EB
Indoor Lighting	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG
Indoor Lighting	131	ROB 2L4'T8, 1EB
Indoor Lighting	133	RET 2L4'T8, 1EB
Indoor Lighting	134	RET 1L4'T8, 1EB, Reflector OEM
Indoor Lighting	136	Occupancy Sensor, 8L4' Fluorescent Fixtures
Indoor Lighting	137	Continuous Dimming, 10L4' Fluorescent Fixtures
Indoor Lighting	138	RNV 1L4'T5HO, 1EB
Indoor Lighting	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG
Indoor Lighting	151	ROB 2L8'T12, 60W, 1EB
Indoor Lighting	152	ROB 1L8'T12, 60W, 1EB, Reflector
Indoor Lighting	153	RET 2L8'T12, 60W, 1EB
Indoor Lighting	154	RET 1L8'T12, 60W, 1EB, Reflector
Indoor Lighting	155	Occupancy Sensor, 4L8' Fluorescent Fixtures
Indoor Lighting	156	Continuous Dimming, 5L8' Fluorescent Fixtures
Indoor Lighting	165	Base Incandescent Flood, 75W
Indoor Lighting	166	CFL Screw-in, Modular 18W
Indoor Lighting	175	Base Incandescent Flood, 150W PAR
Indoor Lighting	176	Halogen PAR Flood, 90W
Indoor Lighting	177	Metal Halide, 50W
Outdoor Lighting	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG
Outdoor Lighting	211	RET 2L4'T8, 1EB
Outdoor Lighting	212	Outdoor Lighting Controls (Photocell/Timeclock)
Outdoor Lighting	220	Base Mercury Vapor 400W Lamp
Outdoor Lighting	221	High Pressure Sodium 250W Lamp
Outdoor Lighting	222	Outdoor Lighting Controls (Photocell/Timeclock)
Space Cooling	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons
Space Cooling	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons
Space Cooling	302	Window Film (Standard)
Space Cooling	303	EMS - Chiller
Space Cooling	304	Cool Roof - Chiller
Space Cooling	305	Chiller Tune Up/Diagnostics
Space Cooling	306	Cooling Circ. Pumps - VSD
Space Cooling	310	DX Packaged System, EER=10.3, 10 tons
Space Cooling	311	DX Tune Up/ Advanced Diagnostics
Space Cooling	312	DX Packaged System, EER=10.9, 10 tons
Space Cooling	313	Window Film (Standard)
Space Cooling	314	Evaporative Pre-Cooler
Space Cooling	315	Prog. Thermostat - DX
Space Cooling	316	Cool Roof - DX

End Use	Measure #	Measure Name
Ventilation	400	Base Fan Motor, 5hp, 1800rpm, 87.5%
Ventilation	401	Fan Motor, 5hp, 1800rpm, 89.5%
Ventilation	402	Variable Speed Drive Control, 5 HP
Ventilation	410	Base Fan Motor, 15hp, 1800rpm, 91.0%
Ventilation	411	Fan Motor, 15hp, 1800rpm, 92.4%
Ventilation	412	Variable Speed Drive Control, 15 HP
Ventilation	420	Base Fan Motor, 40hp, 1800rpm, 93.0%
Ventilation	421	Fan Motor, 40hp, 1800rpm, 94.1%
Ventilation	422	Variable Speed Drive Control, 40 HP
Ventilation	500	Base Refrigeration System
Refrigeration	501	High-efficiency fan motors
Refrigeration	502	Strip curtains for walk-ins
Refrigeration	503	Night covers for display cases
Refrigeration	504	Evaporator fan controller for MT walk-ins
Refrigeration	505	Efficient compressor motor retrofit
Refrigeration	506	Compressor VSD retrofit
Refrigeration	507	Floating head pressure controls
Refrigeration	508	Refrigeration Commissioning
Refrigeration	509	Demand Hot Gas Defrost
Refrigeration	510	Demand Defrost Electric
Refrigeration	511	Anti-sweat (humidistat) controls
Office Equipment	610	Desktop PC - Base
Office Equipment	611	Power Management Enabling
Office Equipment	620	Display Monitor
Office Equipment	621	Purchase LCD monitor
Office Equipment	622	Power Management Enabling
Office Equipment	623	Network Power Management Enabling
Office Equipment	624	External hardware control
Office Equipment	630	Copier
Office Equipment	631	Power Management Enabling
Office Equipment	640	Laser Printer
Office Equipment	641	External hardware control
Office Equipment	642	Nighttime shutdown

A.2.2 Measure Cost and Savings Sources

Most of the measure cost data for this study were developed as part of the DEER 2001 Update study. Part of that study involved collection and analysis of residential and commercial measure cost data. Measure savings were developed from a variety of sources, including: standard engineering calculations, the CCIG Technology Energy Savings Study (NEOS, May 1994), a

comprehensive LBNL refrigeration study, and recent utility program filings. All measure cost and savings estimates are shown in Appendix C.

A.2.3 Existing Energy-Efficient Measure Saturations

In order to assess the amount of energy efficiency savings available, estimates of the current saturation of energy efficient measures were developed from available data sources. In some cases, judgmental adjustments to these saturation estimates were required to bring them up to date because the available sources were several years old. Development of measure saturation data is discussed next, by end use.

Indoor and Outdoor Lighting

The saturations of efficient lighting equipment (T8s fixtures with electronic ballast, CFLs, and HID lighting) were initially developed from the PG&E CEUS and the SDG&E evaluation survey databases. For SCE, because half of the SCE CEUS was from 1992, the PG&E data were used.[1] The saturations were adjusted upward to account for naturally occurring and program-influenced installations of efficient lighting equipment that occurred in the years since the initial data were collected. Table A-9 summarizes the key efficient lighting saturations, which also vary by utility and building type (with additional data provided in Appendix C). Both the initial saturation and the adjusted final saturations are presented. No adjustment was made to outdoor lighting saturations, because initial evidence of program activity showed much lower activity levels in this end use.

Table A-9
Summary of Efficient Lighting Equipment Saturations

End Use	Equipment Type	Saturation		
		Initial	Final	Small - Final
Indoor Lighting	4 Foot T8	0.371	0.552	0.250
	8 Foot T8	0.126	0.336	0.112
	CFLs	0.189	0.593	0.407
	HIDs	0.372	0.424	0.219
Outdoor Lighting	T8s	0.185	0.185	0.054
	HIDs	0.830	0.830	0.756

Table 4-9 also shows the saturations of efficient lighting equipment for small customers. These saturations were based on differences between small customers and all commercial customers developed from the PG&E CEUS.

Saturations of indoor occupancy sensors and outdoor lighting controls were developed from the PG&E CEUS. No adjustments were made to these saturations from the 1997 data. Occupancy sensors were estimated to have about a 5% overall saturation, concentrated primarily in offices

[1] The age and lack of consistency in available measure saturation data represent an important limitation to this study. We believe we have made the best possible estimates based on the available information. Fortunately, a new commercial end use study is now underway that will provide updated and consistent measure saturation data across the major investor-owned utility service territories in California.

and schools. Outdoor controls, primarily photocells and timers, were estimated to have about a saturation of about 80 percent. For small customers, saturations of occupancy sensors and photocells were estimated to be 2% and 75%, respectively.

Space Cooling

Saturation estimates of efficient DX and chiller equipment were set to zero because the CEC's emergency equipment efficiency standards significantly increased the efficiency of units required at burnout. Units with efficiencies that exceed these new standards have very low current saturation levels. The saturation of cooling system tune-up/diagnostic measures were set at 50 percent to reflect the fact that not all units are in a poorly commissioned state (no empirical estimates of saturation for these measures were available from sources with which we are familiar). Saturations of other cooling measures - window film (or similar window treatments), cool or light colored roofs, EMSs, and multi-speed/VSD chilled-water circulation pumps - were based on the PG&E CEUS and varied by business type and type of cooling system.

Ventilation

The saturation of variable-speed drive (VSD) controls for ventilation motors was based on data from the PG&E CEUS. Saturations of this measure increased with motor size. Average saturations for these measures were estimated to be 3% for motors in the 5 hp range, 9% for motors in the 15 hp range, and 39% for motors in the 40hp range. (Note that while VSD saturations are fairly low for the smaller motor ranges, the feasibility of VSD installations in these smaller ranges is also fairly low.) The saturation of premium-efficiency ventilation motors was set to zero as this measure was modeled as replace-on-burnout.

Refrigeration

Refrigeration measure saturations were developed primarily from the LBNL refrigeration study and supplemented, where necessary, using program filing documents and interviews with industry experts. We caution the reader in this area as the LBNL study is national in scope rather than reflecting the California market, and few other sources were checked for consistency across sources. Of those that were reviewed, there are substantial differences between the national market and the California market for certain measures. We recommend further work in this area. Refrigeration measures were applied only to the commercial grocery store segment.

Office Equipment

The saturation estimates of office equipment energy efficiency measures were developed from an analysis conducted at the national level by LBNL[2] and summarized by Energy Solutions. Saturations are shown in Table A-10.

[2] Wawamoto, Kaoru, J. Koomey, B. Nordman, R. Brown, M.A. Piette, M. Ting, A. Meier, Electricity Used by Office Equipment and Network Equipment in the U.S., LBNL, February 2001.

Table A-10
Saturations of Office Equipment Measures

Equipment	Measure	Saturation	Notes
PC	Power Management Enabling	0.35	
PC Monitor	LCD monitor	0.29	
	Power Management Enabling	0.60	
	Network Power Management Enabling	0.00	Only applies to 40% of monitors that don't have individual power management enabled.
	External hardware control	0.60	
Copier	Power Management Enabling	0.67	This reflects units that are low-power enabled; about 1/3 of all units are also power-off enabled.
Laser Printer	External hardware control	0.01	Only feasible for 70% of units that are not already manually shut down
	Nighttime shutdown	0.30	

A.2.4 Description of Measures Included in the Study

This subsection provides brief descriptions of the measures included in this study.

Lighting

T-8 Lamps with Electronic Ballast: T-8 lamps are a smaller diameter fluorescent lamp than T-12 lamps. When paired with specially designed electronic ballasts, T-8 lamps provide more lumens per watt resulting in energy savings. Electronic ballasts replace the standard core and coil technology in magnetic ballasts with solid-state components. This technology allows for more consistent control over ballast output and converts power to higher frequencies, causing the fluorescent lamps to operate more efficiently.

Reflectors: Optical reflectors are mirrored surfaces installed in fluorescent fixtures to direct light toward a specific area or work surface. By installing optical reflectors, four-lamp and three-lamp fluorescent fixtures can be reduced to two lamp fixtures and still meet the needed lighting levels.

Occupancy Sensors: Occupancy sensors (infrared or ultrasonic motion detection devices) turn lights on upon entry of a person into a room, and then turn the lights off from ½ minute to 20 minutes after they have left. Occupancy sensors require proper installation and calibration. Their savings depend on the mounting type.

Continuous Dimming: Dimming electronic ballasts can be incorporated into a daylighting strategy around the perimeter of office buildings or in areas under skylights. These systems use photocells to reduce power consumption and light output when daylight is available.

Compact Fluorescent Lighting (CFLs): Compact fluorescent lamps are designed to replace standard incandescent lamps. They are approximately four times more efficacious than

incandescent light sources. Screw-in modular lamps have reusable ballasts that typically last for four lamp lives.

Halogen PAR Flood Lights: Halogen PAR (parabolic aluminized reflector) lamps use an enclosed tungsten filament within a halogen-filled glass tube. This design allows them to remain brighter for a longer time. A 90-watt halogen PAR lamp can replace a conventional 150-watt PAR lamp.

Metal Halide Lamps: Metal halide lamps are HID lamps, which are approximately four times more efficacious than incandescent lamps. Metal halide (MH) lamps are a form of high intensity discharge (HID) lighting with good lighting efficiency and excellent color rendition.

High Pressure Sodium Lamps: In many situations, 400 watt mercury vapor lamps can be replaced by 250 watt high pressure sodium (HPS) lamps. HPS lamps are HID lighting and emit a golden-white or yellow light. The color rendition for HPS lamps is worse than for MV lamps, but the number of lumens per watt, although dependent on the size of the lamps, is much improved over MV lamps.

Outdoor Lighting Controls (Photocells and Timeclocks): Photocells can be used to automatically control both outdoor lamps and indoor lamps adjacent to skylights and windows. When lights do not need to be on all night, a photocell in series with a time clock provides maximum savings and eliminates the need for manual operation and seasonal time clock adjustments. Time clocks enable users to turn on and off electrical equipment at specific times during the day or week.

Space Cooling

Chiller Efficiency Upgrade: Centrifugal chillers are used in building types which normally use water-based cooling systems and have cooling requirements greater than 200 tons. Centrifugal chillers reject heat through a water cooled condenser or cooling tower. In general, efficiency levels for centrifugal chillers start at 0.80 kW/ton (for older units) and may go as high as 0.4 kW/ton. This measure involves installation of a high-efficiency chiller (0.51 kW per ton) versus a standard unit (0.58 kW per ton).

Energy Management System: The term Energy Management System (EMS) refers to a complete building control system which usually can include controls for both lighting and HVAC systems. The HVAC control system may include on\off scheduling and warm-up routines. The complete lighting and HVAC control systems are generally integrated using a personal computer and control system software.

VSD – Cooling Circulation Pumps: Variable speed drives installed on chilled water pumps can reduce energy use by varying the pump speed according to the building's demand for cooling. There is also a reduction in piping losses associated with this measure, which can have a major impact on the heating loads and energy use for a building. Pump speeds, however, can generally

only be reduced to a minimum specified rate, because chillers and the control valves may require a minimum flow rate to operate.

DX Packaged System Efficiency Upgrade: A single-package A/C unit consists of a single package (or cabinet housing) containing a condensing unit, a compressor, and an indoor fan/coil. An additional benefit of package units is that there is no need for field-installed refrigerant piping, thus minimizing labor costs and the possibility of contaminating the system with dirt, metal, oxides or non-condensing gases. This measure involves installation of a TIER 2 high-efficiency unit (EER=10.9) versus a standard unit (EER=10.3). The 10.3 EER unit recently became a requirement in California as part of the AB970 emergency Title 24 standards.

Evaporative Pre-cooler: Evaporative pre-cooler pre-cools outdoor air through an air-to-water heat exchanger so that the outdoor supply air is sensibly cooled and humidity is not raised. This process is designed to reduce the need for mechanical cooling by providing a cooler than ambient source of supply outdoor air. The effectiveness of this measure is highly dependent on the characteristics of the outdoor and the cooling requirements of the building.

Programmable Thermostat: Setback programmable thermostats are appropriate controls for HVAC equipment that serve spaces with regular occupied and unoccupied periods, resulting in long periods of time when heating and cooling setpoints can be adjusted.

Window Film: Reflective window film is an effective way to reduce solar energy gains, thus reducing mechanical cooling energy consumption. Windows affect building energy use through thermal heat transfer (U-value), solar heat gains (shading coefficient), daylighting (visible light transmittance), and air leakage.

Cool Roof: The color and material of a building structure surface will determine the amount of solar radiation absorbed by that surface. By using an appropriate reflective material to coat the roof, the roof will absorb less solar radiation and consequently reduce the cooling load.

Tune up/Advanced Diagnostics: The assumed tune-up includes cleaning the condenser and evaporator coils, establishing optimal refrigerant levels, and purging refrigerant loops of entrained air. The qualifying relative performance range for a tune-up is between 60 and 85 percent of the rated efficiency of the unit. Includes fresh air economizer controls providing demand control ventilation and consisting of a logic module, enthalpy sensor(s), and CO^2 sensors in appropriate applications.

Ventilation

Motor Efficiency Upgrade: Premium-efficiency motors use additional copper to reduce electrical losses and better magnetic materials to reduce core losses, and are generally built to more precise tolerances. Consequently, such motors are more reliable, resulting in reduced downtime and replacement costs. Premium-efficiency motors may also carry longer manufacturer's warranties.

VSD on Motor Installation: Energy usage in HVAC systems can be reduced by installing electronic variable frequency drives (VFDs) on ventilation fans. VFDs are a far more efficient method of regulating speed or torque than throttling valves, inlet vanes and fan dampers. Energy required to operate a fan motor can be reduced as much as 85% during reduced load conditions by installing a VFD.

Refrigeration

Motor Efficiency Upgrade for Fans and Compressors: In addition to saving energy, premium-efficiency motors are more reliable, resulting in reduced downtime and replacement costs.

Evaporator Fan Controller for Medium Temperatur Walk-Ins: In response to the temperature setpoint being satisfied in a medium temperature walk-in cooler, evaporator fans are cycled to maintain minimum necessary air flow, which prevents ice build-up on the evaporator coils. In conventional systems, fans run constantly whether the temperature setpoint is satisfied or not.

Strip Curtains: Installing strip curtains on doorways to walk-in boxes and refrigerated warehouses can produce energy savings due to decreased infiltration of outside air into the refrigerated space. Although refrigerated spaces have doors, these doors are often left open, for example during product delivery and store stocking activities.

Night Covers: Installing film or blanket type night covers on display cases can significantly reduce the infiltration of warm ambient air into the refrigerated space. This reduction in display case loads in turn reduces the electric use of the central plant, including compressors and condensers, thus saving energy. The target market for this measure is small, independently owned grocery stores and other stores that are typically closed at night and restock their shelves during the day. The target cases are vertical displays, with a single- or double-air curtain, and tub (coffin) type cases.

Humidistat Controls: A humidistat control is a control device to turn refrigeration display case anti-sweat heaters off when ambient relative humidity is low enough that sweating will not occur. Anti-sweat heaters evaporate moisture by heating the door rails, case frame and glass of display cases. Savings result from reducing the operating hours of the anti-sweat heaters, which without a humidistat control generally run continuously. There are various types of control strategies including cycling on a fixed schedule.

Demand Defrost Controls: Defrost of evaporator coils in freezer displays is normally completed on a timed basis, but this is wasteful, as the time interval is designed to remove ice around the coil under worst case humidity levels. Demand defrost sensor and control systems are designed to optimize coil defrost. Demand defrost controls can work in conjunction with both electric heat defrost and hot gas defrost systems. Unfortunately, at the time, industry experts suggest that this technology is still in an early stage of design and not yet ready for the

market. However, in the near future this technology should be viewed as a substantial opportunity for energy savings.

Floating Head Pressure Controls: Floating head pressure controls allow a refrigeration system to operate under lower condensing temperature and pressure settings, where compressor operation is most efficient, working against a relatively low head pressure. The condensing temperature is allowed to float below the design setpoint of, say, 95 deg. F under lower outdoor temperatures, which in-turn lowers the condensate pressure. In a conventional system a higher fixed condensing temperature setpoint is used which results in a lowered capacity for the system, requires extra power, and may overload the compressor motor. Energy savings can be realized if the refrigeration system head pressure is allowed to float during periods of low ambient temperature, when the condensing temperature can be dramatically reduced.

Variable Speed Compressor Retrofit: A variable speed compressor is a screw or reciprocating compressor whose current is modulated by a frequency inverter. A controller senses the compressor suction pressure and modulates the current and therefore the motor speed in response to changes in this pressure. When low load conditions exist, the current to the compressor motor is decreased, decreasing the compressor work done on the refrigerant.

Retrofit Glass Door on Medium Temperature Displays: Like the freezer case doors that are now common practice in grocery stores, there are opportunities to install doors on existing medium temperature displays, resulting in display load reductions and thus energy savings.

Office Equipment

Power Management Enabling: This measure can be applied to PCs, PC monitors, and copiers. For PCs and copiers, manual enabling of the power management features is the only viable solution. For monitors, manual enabling and group enabling via network software are options.

LCD Monitors: LCDs are becoming more attractive options in terms of quality. However, because they cost five times more than a comparable CRT, until prices drop, using them purely as an energy saving measure will not be an option for most desktop users.

External Hardware Controls: Occupancy sensors have been used for years to conserve energy in office lighting applications. The application has expanded to include other office equipment as “plug-load sensors” incorporate an occupancy sensor with a relay that is able to turn equipment that is plugged into it on or off. The plug-load sensors range from devices that control a single electrical outlet or piece of equipment, to devices that control multiple outlets and can work together with other sensors.

Printer Nighttime Shutdown: The simplest action to save printer energy is to shut the machine off at night. While this recommendation is particularly important for conventional printers without power management, it is important to turn off ENERGY STAR printers as well, as they can draw up to 30-45 watts when in low power mode.

B

ECONOMIC INPUTS

ECONOMIC PARAMETERS

BASE ECONOMIC SCENARIO

UTILITY NAME	**PG&E**
SECTOR	COM
BATCH #	1
UTILITY DISCOUNT RATE	8.0%
CUSTOMER DISCOUNT RATE	15.0%
GENERAL INFLATION RATE (Measure)	3.0%
BASE YEAR	2001
START YEAR	2001
DIFFERENCE	0
UTILITY LINE LOSS RATE	8.5%

ENERGY COSTS AND RATES

RATE TYPE	COMMERCIAL
ENERGY UNITS	$/KWh
DEMAND UNITS	$/KW

Rate/Time Periods	1	2	3	4	5	
Name	Summer On-Peak	Summer Partial-Peak	Summer Off-Peak	Winter Partial Peak	Winter Off-Peak	
Abbreviation	SOP	SPP	SOFF	WPP	WOFF	TOTAL
Hours	768	896	2752	1638	2706	8760
Monthly Adjustment for	6	0	0	6	0	

	AVOIDED ENERGY COSTS BY TIME PERIOD					AVOIDED DEMAND COSTS BY TIME PERIOD					COMMERCIAL ENERGY RATES					COMMERCIAL DEMAND RATES					Environmental Adder to be Subtracted for RIM
Year	SOP $/KWh	SPP $/KWh	SOFF $/KWh	WPP $/KWh	WOFF $/KWh	SOP $/KW	SPP $/KW	SOFF $/KW	WPP $/KW	WOFF $/KW	SOP $/KWh	SPP $/KWh	SOFF $/KWh	WPP $/KWh	WOFF $/KWh	SOP $/KW	SPP $/KW	SOFF $/KW	WPP $/KW	WOFF $/KW	$/KWh
2001	0.59	0.11	0.08	0.03	0.03	25.63	10.21	2.23	11.45	2.21	0.16	0.16	0.16	0.10	0.10	6.70	0.00	0.00	1.65	0.00	0.01
2002	0.59	0.11	0.08	0.03	0.03	26.65	10.65	2.33	12.01	2.30	0.13	0.13	0.13	0.08	0.08	6.90	0.00	0.00	1.70	0.00	0.01
2003	0.26	0.06	0.03	0.05	0.04	27.73	11.11	2.43	12.58	2.40	0.12	0.12	0.12	0.08	0.08	7.11	0.00	0.00	1.75	0.00	0.01
2004	0.24	0.05	0.03	0.05	0.04	28.88	11.58	2.53	13.16	2.50	0.11	0.11	0.11	0.07	0.07	7.32	0.00	0.00	1.80	0.00	0.01
2005	0.25	0.05	0.03	0.05	0.04	30.20	12.08	2.64	13.63	2.61	0.10	0.10	0.10	0.07	0.07	6.79	0.00	0.00	1.67	0.00	0.01
2006	0.22	0.05	0.03	0.05	0.04	31.49	12.59	2.75	14.22	2.72	0.11	0.11	0.11	0.07	0.07	6.29	0.00	0.00	1.55	0.00	0.01
2007	0.23	0.06	0.03	0.05	0.04	32.90	13.13	2.87	14.76	2.84	0.11	0.11	0.11	0.07	0.07	5.83	0.00	0.00	1.44	0.00	0.01
2008	0.23	0.06	0.03	0.05	0.04	34.24	13.69	2.99	15.46	2.96	0.11	0.11	0.11	0.07	0.07	6.01	0.00	0.00	1.48	0.00	0.01
2009	0.24	0.06	0.04	0.06	0.04	35.69	14.28	3.12	16.14	3.08	0.12	0.12	0.12	0.08	0.08	6.19	0.00	0.00	1.52	0.00	0.01
2010	0.25	0.06	0.04	0.06	0.04	37.27	14.89	3.25	16.78	3.22	0.12	0.12	0.12	0.08	0.08	6.37	0.00	0.00	1.57	0.00	0.01
2011	0.22	0.05	0.03	0.05	0.04	38.86	15.52	3.39	17.51	3.35	0.12	0.12	0.12	0.08	0.08	6.56	0.00	0.00	1.62	0.00	0.01
2012	0.23	0.06	0.03	0.05	0.04	40.54	16.18	3.53	18.23	3.50	0.13	0.13	0.13	0.08	0.08	6.76	0.00	0.00	1.67	0.00	0.01
2013	0.24	0.06	0.03	0.06	0.04	42.28	16.88	3.68	19.00	3.65	0.13	0.13	0.13	0.09	0.09	6.96	0.00	0.00	1.71	0.00	0.01
2014	0.25	0.06	0.04	0.06	0.04	44.09	17.61	3.84	19.81	3.80	0.14	0.14	0.14	0.09	0.09	7.17	0.00	0.00	1.77	0.00	0.01
2015	0.26	0.06	0.04	0.06	0.05	45.98	18.36	4.01	20.66	3.97	0.14	0.14	0.14	0.09	0.09	7.39	0.00	0.00	1.82	0.00	0.02
2016	0.27	0.07	0.04	0.06	0.05	47.94	19.15	4.18	21.54	4.14	0.14	0.14	0.14	0.09	0.09	7.61	0.00	0.00	1.87	0.00	0.02
2017	0.28	0.07	0.04	0.07	0.05	49.99	19.97	4.35	22.47	4.31	0.15	0.15	0.15	0.10	0.10	7.84	0.00	0.00	1.93	0.00	0.02
2018	0.30	0.07	0.04	0.07	0.05	52.13	20.82	4.54	23.43	4.50	0.15	0.15	0.15	0.10	0.10	8.07	0.00	0.00	1.99	0.00	0.02
2019	0.31	0.08	0.05	0.07	0.06	54.36	21.71	4.73	24.43	4.69	0.16	0.16	0.16	0.10	0.10	8.32	0.00	0.00	2.05	0.00	0.02
2020	0.33	0.08	0.05	0.08	0.06	56.68	22.64	4.94	25.48	4.89	0.16	0.16	0.16	0.11	0.11	8.56	0.00	0.00	2.11	0.00	0.02
2021	0.35	0.08	0.05	0.08	0.06	59.10	23.61	5.15	26.57	5.10	0.17	0.17	0.17	0.11	0.11	8.82	0.00	0.00	2.17	0.00	0.02

ECONOMIC PARAMETERS

BASE ECONOMIC SCENARIO

UTILITY NAME	**SCE**
SECTOR	COM
BATCH #	1
UTILITY DISCOUNT RATE	8.0%
CUSTOMER DISCOUNT RATE	15.0%
GENERAL INFLATION RATE (Measure)	3.0%
BASE YEAR	2001
START YEAR	2001
DIFFERENCE	0
UTILITY LINE LOSS RATE	8.5%

ENERGY COSTS AND RATES

RATE TYPE	COMMERCIAL
ENERGY UNITS	$/KWh
DEMAND UNITS	$/KW

Rate/Time Periods	1	2	3	4	5	
Name	Summer On-Peak	Summer Partial-Peak	Summer Off-Peak	Winter Partial Peak	Winter Off-Peak	
Abbreviation	SOP	SPP	SOFF	WPP	WOFF	TOTAL
Hours	768	896	2752	1638	2706	8760
Monthly Adjustment for	6	0	0	6	0	

	AVOIDED ENERGY COSTS BY TIME PERIOD					AVOIDED DEMAND COSTS BY TIME PERIOD					COMMERCIAL ENERGY RATES					COMMERCIAL DEMAND RATES					Environmental Adder to be Subtracted for RIM
	SOP	SPP	SOFF	WPP	WOFF	SOP	SPP	SOFF	WPP	WOFF	SOP	SPP	SOFF	WPP	WOFF	SOP	SPP	SOFF	WPP	WOFF	
Year	$/KWh	$/KWh	$/KWh	$/KWh	$/KWh	$/KW	$/KW	$/KW	$/KW	$/KW	$/KWh	$/KWh	$/KWh	$/KWh	$/KWh	$/KW	$/KW	$/KW	$/KW	$/KW	$/KWh
2001	0.59	0.11	0.08	0.03	0.03	25.63	10.21	2.23	11.45	2.21	0.17	0.17	0.17	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.01
2002	0.59	0.11	0.08	0.03	0.03	26.65	10.65	2.33	12.01	2.30	0.14	0.14	0.14	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.01
2003	0.26	0.06	0.03	0.05	0.04	27.73	11.11	2.43	12.58	2.40	0.13	0.13	0.13	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.01
2004	0.24	0.05	0.03	0.05	0.04	28.88	11.58	2.53	13.16	2.50	0.12	0.12	0.12	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.01
2005	0.25	0.05	0.03	0.05	0.04	30.20	12.08	2.64	13.63	2.61	0.11	0.11	0.11	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.01
2006	0.22	0.05	0.03	0.05	0.04	31.49	12.59	2.75	14.22	2.72	0.11	0.11	0.11	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.01
2007	0.23	0.06	0.03	0.05	0.04	32.90	13.13	2.87	14.76	2.84	0.12	0.12	0.12	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.01
2008	0.23	0.06	0.03	0.05	0.04	34.24	13.69	2.99	15.46	2.96	0.12	0.12	0.12	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.01
2009	0.24	0.06	0.04	0.06	0.04	35.69	14.28	3.12	16.14	3.08	0.13	0.13	0.13	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.01
2010	0.25	0.06	0.04	0.06	0.04	37.27	14.89	3.25	16.78	3.22	0.13	0.13	0.13	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.01
2011	0.22	0.05	0.03	0.05	0.04	38.86	15.52	3.39	17.51	3.35	0.13	0.13	0.13	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.01
2012	0.23	0.06	0.03	0.05	0.04	40.54	16.18	3.53	18.23	3.50	0.14	0.14	0.14	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.01
2013	0.24	0.06	0.03	0.06	0.04	42.28	16.88	3.68	19.00	3.65	0.14	0.14	0.14	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.01
2014	0.25	0.06	0.04	0.06	0.04	44.09	17.61	3.84	19.81	3.80	0.15	0.15	0.15	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.01
2015	0.26	0.06	0.04	0.06	0.05	45.98	18.36	4.01	20.66	3.97	0.15	0.15	0.15	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.02
2016	0.27	0.07	0.04	0.06	0.05	47.94	19.15	4.18	21.54	4.14	0.15	0.15	0.15	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.02
2017	0.28	0.07	0.04	0.07	0.05	49.99	19.97	4.35	22.47	4.31	0.16	0.16	0.16	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.02
2018	0.30	0.07	0.04	0.07	0.05	52.13	20.82	4.54	23.43	4.50	0.16	0.16	0.16	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.02
2019	0.31	0.08	0.05	0.07	0.06	54.36	21.71	4.73	24.43	4.69	0.17	0.17	0.17	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.02
2020	0.33	0.08	0.05	0.08	0.06	56.68	22.64	4.94	25.48	4.89	0.17	0.17	0.17	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.02
2021	0.35	0.08	0.05	0.08	0.06	59.10	23.61	5.15	26.57	5.10	0.18	0.18	0.18	0.14	0.14	0.00	0.00	0.00	0.00	0.00	0.02

ECONOMIC PARAMETERS

BASE ECONOMIC SCENARIO

UTILITY NAME	**SDG&E**
SECTOR	COM
BATCH #	1
UTILITY DISCOUNT RATE	8.0%
CUSTOMER DISCOUNT RATE	15.0%
GENERAL INFLATION RATE (Measure)	3.0%
BASE YEAR	2001
START YEAR	2001
DIFFERENCE	0
UTILITY LINE LOSS RATE	8.5%

ENERGY COSTS AND RATES

RATE TYPE	COMMERCIAL
ENERGY UNITS	$/KWh
DEMAND UNITS	$/KW

		0.0333664	0.011397	0.000811	0.006991	0.000815	0.053381	0.048043
Rate/Time Periods		1	2	3	4	5		
Name		Summer On-Peak	Summer Partial-Peak	Summer Off-Peak	Winter Partial Peak	Winter Off-Peak		
Abbreviation		SOP	SPP	SOFF	WPP	WOFF	TOTAL	
Hours		768	896	2752	1638	2706	8760	
Monthly Adjustment for		6	0	0	6	0		

	AVOIDED ENERGY COSTS BY TIME PERIOD					AVOIDED DEMAND COSTS BY TIME PERIOD					COMMERCIAL ENERGY RATES					COMMERCIAL DEMAND RATES					Environmental Adder to be Subtracted for RIM
	SOP	SPP	SOFF	WPP	WOFF	SOP	SPP	SOFF	WPP	WOFF	SOP	SPP	SOFF	WPP	WOFF	SOP	SPP	SOFF	WPP	WOFF	
Year	$/KWh	$/KWh	$/KWh	$/KWh	$/KWh	$/KW	$/KW	$/KW	$/KW	$/KW	$/KWh	$/KWh	$/KWh	$/KWh	$/KWh	$/KW	$/KW	$/KW	$/KW	$/KW	$/KWh
2001	0.59	0.11	0.08	0.03	0.03	25.63	10.21	2.23	11.45	2.21	0.17	0.17	0.17	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.01
2002	0.59	0.11	0.08	0.03	0.03	26.65	10.65	2.33	12.01	2.30	0.14	0.14	0.14	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.01
2003	0.26	0.06	0.03	0.05	0.04	27.73	11.11	2.43	12.58	2.40	0.13	0.13	0.13	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.01
2004	0.24	0.05	0.03	0.05	0.04	28.88	11.58	2.53	13.16	2.50	0.12	0.12	0.12	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.01
2005	0.25	0.05	0.03	0.05	0.04	30.20	12.08	2.64	13.63	2.61	0.11	0.11	0.11	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.01
2006	0.22	0.05	0.03	0.05	0.04	31.49	12.59	2.75	14.22	2.72	0.11	0.11	0.11	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.01
2007	0.23	0.06	0.03	0.05	0.04	32.90	13.13	2.87	14.76	2.84	0.12	0.12	0.12	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.01
2008	0.23	0.06	0.03	0.05	0.04	34.24	13.69	2.99	15.46	2.96	0.12	0.12	0.12	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.01
2009	0.24	0.06	0.04	0.06	0.04	35.69	14.28	3.12	16.14	3.08	0.13	0.13	0.13	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.01
2010	0.25	0.06	0.04	0.06	0.04	37.27	14.89	3.25	16.78	3.22	0.13	0.13	0.13	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.01
2011	0.22	0.05	0.03	0.05	0.04	38.86	15.52	3.39	17.51	3.35	0.13	0.13	0.13	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.01
2012	0.23	0.06	0.03	0.05	0.04	40.54	16.18	3.53	18.23	3.50	0.14	0.14	0.14	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.01
2013	0.24	0.06	0.03	0.06	0.04	42.28	16.88	3.68	19.00	3.65	0.14	0.14	0.14	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.01
2014	0.25	0.06	0.04	0.06	0.04	44.09	17.61	3.84	19.81	3.80	0.15	0.15	0.15	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.01
2015	0.26	0.06	0.04	0.06	0.05	45.98	18.36	4.01	20.66	3.97	0.15	0.15	0.15	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.02
2016	0.27	0.07	0.04	0.06	0.05	47.94	19.15	4.18	21.54	4.14	0.15	0.15	0.15	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.02
2017	0.28	0.07	0.04	0.07	0.05	49.99	19.97	4.35	22.47	4.31	0.16	0.16	0.16	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.02
2018	0.30	0.07	0.04	0.07	0.05	52.13	20.82	4.54	23.43	4.50	0.16	0.16	0.16	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.02
2019	0.31	0.08	0.05	0.07	0.06	54.36	21.71	4.73	24.43	4.69	0.17	0.17	0.17	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.02
2020	0.33	0.08	0.05	0.08	0.06	56.68	22.64	4.94	25.48	4.89	0.17	0.17	0.17	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.02
2021	0.35	0.08	0.05	0.08	0.06	59.10	23.61	5.15	26.57	5.10	0.18	0.18	0.18	0.14	0.14	0.00	0.00	0.00	0.00	0.00	0.02

ECONOMIC PARAMETERS

LOW ECONOMIC SCENARIO

UTILITY NAME	**PG&E**
SECTOR	COM
BATCH #	1
UTILITY DISCOUNT RATE	8.0%
CUSTOMER DISCOUNT RATE	15.0%
GENERAL INFLATION RATE (Measure)	3.0%
BASE YEAR	2001
START YEAR	2001
DIFFERENCE	0
UTILITY LINE LOSS RATE	8.5%

ENERGY COSTS AND RATES

RATE TYPE COMMERCIAL
ENERGY UNITS $/KWh
DEMAND UNITS $/KW

Rate/Time Periods	1	2	3	4	5	
Name	Summer On-Peak	Summer Partial-Peak	Summer Off-Peak	Winter Partial Peak	Winter Off-Peak	TOTAL
Abbreviation	SOP	SPP	SOFF	WPP	WOFF	
Hours	768	896	2752	1638	2706	8760
Monthly Adjustment fo	6	0	0	6	0	

	AVOIDED ENERGY COSTS BY TIME PERIOD					AVOIDED DEMAND COSTS BY TIME PERIOD					COMMERCIAL ENERGY RATES					COMMERCIAL DEMAND RATES					Environmental Adder to be Subtracted for RIM
	SOP	SPP	SOFF	WPP	WOFF	SOP	SPP	SOFF	WPP	WOFF	SOP	SPP	SOFF	WPP	WOFF	SOP	SPP	SOFF	WPP	WOFF	
Year	$/KWh	$/KWh	$/KWh	$/KWh	$/KWh	$/KW	$/KW	$/KW	$/KW	$/KW	$/KWh	$/KWh	$/KWh	$/KWh	$/KWh	$/KW	$/KW	$/KW	$/KW	$/KW	$/KWh
2001	0.30	0.05	0.04	0.02	0.01	25.63	10.21	2.23	11.45	2.21	0.09	0.09	0.09	0.07	0.07	6.70	0.00	0.00	1.65	0.00	0.01
2002	0.30	0.05	0.04	0.02	0.01	26.65	10.65	2.33	12.01	2.30	0.09	0.09	0.09	0.08	0.08	6.90	0.00	0.00	1.70	0.00	0.01
2003	0.13	0.03	0.02	0.03	0.02	27.73	11.11	2.43	12.58	2.40	0.09	0.09	0.09	0.08	0.08	7.11	0.00	0.00	1.75	0.00	0.01
2004	0.12	0.03	0.02	0.02	0.02	28.88	11.58	2.53	13.16	2.50	0.10	0.10	0.10	0.08	0.08	7.32	0.00	0.00	1.80	0.00	0.01
2005	0.12	0.03	0.02	0.02	0.02	30.20	12.08	2.64	13.63	2.61	0.10	0.10	0.10	0.08	0.08	7.54	0.00	0.00	1.86	0.00	0.01
2006	0.11	0.03	0.02	0.03	0.02	31.49	12.59	2.75	14.22	2.72	0.10	0.10	0.10	0.08	0.08	7.77	0.00	0.00	1.91	0.00	0.01
2007	0.11	0.03	0.02	0.03	0.02	32.90	13.13	2.87	14.76	2.84	0.11	0.11	0.11	0.09	0.09	8.00	0.00	0.00	1.97	0.00	0.01
2008	0.12	0.03	0.02	0.03	0.02	34.24	13.69	2.99	15.46	2.96	0.11	0.11	0.11	0.09	0.09	8.24	0.00	0.00	2.03	0.00	0.01
2009	0.12	0.03	0.02	0.03	0.02	35.69	14.28	3.12	16.14	3.08	0.11	0.11	0.11	0.09	0.09	8.49	0.00	0.00	2.09	0.00	0.01
2010	0.13	0.03	0.02	0.03	0.02	37.27	14.89	3.25	16.78	3.22	0.12	0.12	0.12	0.10	0.10	8.74	0.00	0.00	2.15	0.00	0.01
2011	0.11	0.03	0.02	0.03	0.02	38.86	15.52	3.39	17.51	3.35	0.12	0.12	0.12	0.10	0.10	9.00	0.00	0.00	2.22	0.00	0.01
2012	0.11	0.03	0.02	0.03	0.02	40.54	16.18	3.53	18.23	3.50	0.12	0.12	0.12	0.10	0.10	9.27	0.00	0.00	2.28	0.00	0.01
2013	0.12	0.03	0.02	0.03	0.02	42.28	16.88	3.68	19.00	3.65	0.13	0.13	0.13	0.10	0.10	9.55	0.00	0.00	2.35	0.00	0.01
2014	0.12	0.03	0.02	0.03	0.02	44.09	17.61	3.84	19.81	3.80	0.13	0.13	0.13	0.11	0.11	9.84	0.00	0.00	2.42	0.00	0.01
2015	0.13	0.03	0.02	0.03	0.02	45.98	18.36	4.01	20.66	3.97	0.13	0.13	0.13	0.11	0.11	10.13	0.00	0.00	2.50	0.00	0.02
2016	0.14	0.03	0.02	0.03	0.02	47.94	19.15	4.18	21.54	4.14	0.14	0.14	0.14	0.11	0.11	10.44	0.00	0.00	2.57	0.00	0.02
2017	0.14	0.03	0.02	0.03	0.02	49.99	19.97	4.35	22.47	4.31	0.14	0.14	0.14	0.12	0.12	10.75	0.00	0.00	2.65	0.00	0.02
2018	0.15	0.04	0.02	0.03	0.03	52.13	20.82	4.54	23.43	4.50	0.15	0.15	0.15	0.12	0.12	11.07	0.00	0.00	2.73	0.00	0.02
2019	0.16	0.04	0.02	0.04	0.03	54.36	21.71	4.73	24.43	4.69	0.15	0.15	0.15	0.12	0.12	11.41	0.00	0.00	2.81	0.00	0.02
2020	0.16	0.04	0.02	0.04	0.03	56.68	22.64	4.94	25.48	4.89	0.16	0.16	0.16	0.13	0.13	11.75	0.00	0.00	2.89	0.00	0.02
2021	0.17	0.04	0.03	0.04	0.03	59.10	23.61	5.15	26.57	5.10	0.16	0.16	0.16	0.13	0.13	12.10	0.00	0.00	2.98	0.00	0.02

ECONOMIC PARAMETERS

LOW ECONOMIC SCENARIO

UTILITY NAME	**SCE**
SECTOR	COM
BATCH #	1
UTILITY DISCOUNT RATE	8.0%
CUSTOMER DISCOUNT RATE	15.0%
GENERAL INFLATION RATE (Measure)	3.0%
BASE YEAR	2001
START YEAR	2001
DIFFERENCE	0
UTILITY LINE LOSS RATE	8.5%

ENERGY COSTS AND RATES

RATE TYPE	COMMERCIAL
ENERGY UNITS	$/KWh
DEMAND UNITS	$/KW

Rate/Time Periods	1	2	3	4	5	
Name	Summer On-Peak	Summer Partial-Peak	Summer Off-Peak	Winter Partial Peak	Winter Off-Peak	
Abbreviation	SOP	SPP	SOFF	WPP	WOFF	TOTAL
Hours	768	896	2752	1638	2706	8760
Monthly Adjustment for r	6	0	0	6	0	

	AVOIDED ENERGY COSTS BY TIME PERIOD					AVOIDED DEMAND COSTS BY TIME PERIOD					COMMERCIAL ENERGY RATES **Need to work out GS-2 as proxy**					COMMERCIAL DEMAND RATES					Environmental Adder to be Subtracted for RIM
Year	SOP $/KWh	SPP $/KWh	SOFF $/KWh	WPP $/KWh	WOFF $/KWh	SOP $/KW	SPP $/KW	SOFF $/KW	WPP $/KW	WOFF $/KW	SOP $/KWh	SPP $/KWh	SOFF $/KWh	WPP $/KWh	WOFF $/KWh	SOP $/KW	SPP $/KW	SOFF $/KW	WPP $/KW	WOFF $/KW	$/KWh
2001	0.30	0.05	0.04	0.02	0.01	25.63	10.21	2.23	11.45	2.21	0.10	0.10	0.10	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.01
2002	0.30	0.05	0.04	0.02	0.01	26.65	10.65	2.33	12.01	2.30	0.10	0.10	0.10	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.01
2003	0.13	0.03	0.02	0.03	0.02	27.73	11.11	2.43	12.58	2.40	0.11	0.11	0.11	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.01
2004	0.12	0.03	0.02	0.02	0.02	28.88	11.58	2.53	13.16	2.50	0.11	0.11	0.11	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.01
2005	0.12	0.03	0.02	0.02	0.02	30.20	12.08	2.64	13.63	2.61	0.11	0.11	0.11	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.01
2006	0.11	0.03	0.02	0.03	0.02	31.49	12.59	2.75	14.22	2.72	0.12	0.12	0.12	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.01
2007	0.11	0.03	0.02	0.03	0.02	32.90	13.13	2.87	14.76	2.84	0.12	0.12	0.12	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.01
2008	0.12	0.03	0.02	0.03	0.02	34.24	13.69	2.99	15.46	2.96	0.12	0.12	0.12	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.01
2009	0.12	0.03	0.02	0.03	0.02	35.69	14.28	3.12	16.14	3.08	0.13	0.13	0.13	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.01
2010	0.13	0.03	0.02	0.03	0.02	37.27	14.89	3.25	16.78	3.22	0.13	0.13	0.13	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.01
2011	0.11	0.03	0.02	0.03	0.02	38.86	15.52	3.39	17.51	3.35	0.13	0.13	0.13	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.01
2012	0.11	0.03	0.02	0.03	0.02	40.54	16.18	3.53	18.23	3.50	0.14	0.14	0.14	0.14	0.14	0.00	0.00	0.00	0.00	0.00	0.01
2013	0.12	0.03	0.02	0.03	0.02	42.28	16.88	3.68	19.00	3.65	0.14	0.14	0.14	0.14	0.14	0.00	0.00	0.00	0.00	0.00	0.01
2014	0.12	0.03	0.02	0.03	0.02	44.09	17.61	3.84	19.81	3.80	0.15	0.15	0.15	0.15	0.15	0.00	0.00	0.00	0.00	0.00	0.01
2015	0.13	0.03	0.02	0.03	0.02	45.98	18.36	4.01	20.66	3.97	0.15	0.15	0.15	0.15	0.15	0.00	0.00	0.00	0.00	0.00	0.02
2016	0.14	0.03	0.02	0.03	0.02	47.94	19.15	4.18	21.54	4.14	0.16	0.16	0.16	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.02
2017	0.14	0.03	0.02	0.03	0.02	49.99	19.97	4.35	22.47	4.31	0.16	0.16	0.16	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.02
2018	0.15	0.04	0.02	0.03	0.03	52.13	20.82	4.54	23.43	4.50	0.17	0.17	0.17	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.02
2019	0.16	0.04	0.02	0.04	0.03	54.36	21.71	4.73	24.43	4.69	0.17	0.17	0.17	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.02
2020	0.16	0.04	0.02	0.04	0.03	56.68	22.64	4.94	25.48	4.89	0.18	0.18	0.18	0.18	0.18	0.00	0.00	0.00	0.00	0.00	0.02
2021	0.17	0.04	0.03	0.04	0.03	59.10	23.61	5.15	26.57	5.10	0.18	0.18	0.18	0.18	0.18	0.00	0.00	0.00	0.00	0.00	0.02

ECONOMIC PARAMETERS

LOW ECONOMIC SCENARIO

UTILITY NAME	**SDG&E**
SECTOR	COM
BATCH #	1
UTILITY DISCOUNT RATE	8.0%
CUSTOMER DISCOUNT RATE	15.0%
GENERAL INFLATION RATE (Measure)	3.0%
BASE YEAR	2001
START YEAR	2001
DIFFERENCE	0
UTILITY LINE LOSS RATE	8.5%

ENERGY COSTS AND RATES

RATE TYPE	COMMERCIAL
ENERGY UNITS	$/KWh
DEMAND UNITS	$/KW

Rate/Time Periods	1	2	3	4	5	
Name	Summer On-Peak	Summer Partial-Peak	Summer Off-Peak	Winter Partial Peak	Winter Off-Peak	
Abbreviation	SOP	SPP	SOFF	WPP	WOFF	TOTAL
Hours	768	896	2752	1638	2706	8760
Monthly Adjustment fo	6	0	0	6	0	

	AVOIDED ENERGY COSTS BY TIME PERIOD					AVOIDED DEMAND COSTS BY TIME PERIOD					COMMERCIAL ENERGY RATES					COMMERCIAL DEMAND RATES					Environmental Adder to be Subtracted for RIM
	SOP	SPP	SOFF	WPP	WOFF	SOP	SPP	SOFF	WPP	WOFF	SOP	SPP	SOFF	WPP	WOFF	SOP	SPP	SOFF	WPP	WOFF	
Year	$/KWh	$/KWh	$/KWh	$/KWh	$/KWh	$/KW	$/KW	$/KW	$/KW	$/KW	$/KWh	$/KWh	$/KWh	$/KWh	$/KWh	$/KW	$/KW	$/KW	$/KW	$/KW	$/KWh
2001	0.30	0.05	0.04	0.02	0.01	25.63	10.21	2.23	11.45	2.21	0.10	0.10	0.10	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.01
2002	0.30	0.05	0.04	0.02	0.01	26.65	10.65	2.33	12.01	2.30	0.10	0.10	0.10	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.01
2003	0.13	0.03	0.02	0.03	0.02	27.73	11.11	2.43	12.58	2.40	0.11	0.11	0.11	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.01
2004	0.12	0.03	0.02	0.02	0.02	28.88	11.58	2.53	13.16	2.50	0.11	0.11	0.11	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.01
2005	0.12	0.03	0.02	0.02	0.02	30.20	12.08	2.64	13.63	2.61	0.11	0.11	0.11	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.01
2006	0.11	0.03	0.02	0.03	0.02	31.49	12.59	2.75	14.22	2.72	0.12	0.12	0.12	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.01
2007	0.11	0.03	0.02	0.03	0.02	32.90	13.13	2.87	14.76	2.84	0.12	0.12	0.12	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.01
2008	0.12	0.03	0.02	0.03	0.02	34.24	13.69	2.99	15.46	2.96	0.12	0.12	0.12	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.01
2009	0.12	0.03	0.02	0.03	0.02	35.69	14.28	3.12	16.14	3.08	0.13	0.13	0.13	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.01
2010	0.13	0.03	0.02	0.03	0.02	37.27	14.89	3.25	16.78	3.22	0.13	0.13	0.13	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.01
2011	0.11	0.03	0.02	0.03	0.02	38.86	15.52	3.39	17.51	3.35	0.13	0.13	0.13	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.01
2012	0.11	0.03	0.02	0.03	0.02	40.54	16.18	3.53	18.23	3.50	0.14	0.14	0.14	0.14	0.14	0.00	0.00	0.00	0.00	0.00	0.01
2013	0.12	0.03	0.02	0.03	0.02	42.28	16.88	3.68	19.00	3.65	0.14	0.14	0.14	0.14	0.14	0.00	0.00	0.00	0.00	0.00	0.01
2014	0.12	0.03	0.02	0.03	0.02	44.09	17.61	3.84	19.81	3.80	0.15	0.15	0.15	0.15	0.15	0.00	0.00	0.00	0.00	0.00	0.01
2015	0.13	0.03	0.02	0.03	0.02	45.98	18.36	4.01	20.66	3.97	0.15	0.15	0.15	0.15	0.15	0.00	0.00	0.00	0.00	0.00	0.02
2016	0.14	0.03	0.02	0.03	0.02	47.94	19.15	4.18	21.54	4.14	0.16	0.16	0.16	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.02
2017	0.14	0.03	0.02	0.03	0.02	49.99	19.97	4.35	22.47	4.31	0.16	0.16	0.16	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.02
2018	0.15	0.04	0.02	0.03	0.03	52.13	20.82	4.54	23.43	4.50	0.17	0.17	0.17	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.02
2019	0.16	0.04	0.02	0.04	0.03	54.36	21.71	4.73	24.43	4.69	0.17	0.17	0.17	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.02
2020	0.16	0.04	0.02	0.04	0.03	56.68	22.64	4.94	25.48	4.89	0.18	0.18	0.18	0.18	0.18	0.00	0.00	0.00	0.00	0.00	0.02
2021	0.17	0.04	0.03	0.04	0.03	59.10	23.61	5.15	26.57	5.10	0.18	0.18	0.18	0.18	0.18	0.00	0.00	0.00	0.00	0.00	0.02

ECONOMIC PARAMETERS

HIGH ECONOMIC SCENARIO

UTILITY NAME	**PG&E**
SECTOR	COM
BATCH #	1
UTILITY DISCOUNT RATE	8.0%
CUSTOMER DISCOUNT RATE	15.0%
GENERAL INFLATION RATE (Measure)	3.0%
BASE YEAR	2001
START YEAR	2001
DIFFERENCE	0
UTILITY LINE LOSS RATE	8.5%

ENERGY COSTS AND RATES

RATE TYPE	COMMERCIAL
ENERGY UNITS	$/KWh
DEMAND UNITS	$/KW

Rate/Time Periods	1	2	3	4	5	
Name	Summer On-Peak	Summer Partial-	Summer Off-Peak	Winter Partial	Winter Off-Peak	
Abbreviation	SOP	SPP	SOFF	WPP	WOFF	TOTAL
Hours	768	896	2752	1638	2706	8760
Monthly Adjustment for	6	0	0	6	0	

	AVOIDED ENERGY COSTS BY TIME PERIOD					AVOIDED DEMAND COSTS BY TIME PERIOD					COMMERCIAL ENERGY RATES					COMMERCIAL DEMAND RATES					Environmental Adder to be Subtracted for RIM
Year	SOP $/KWh	SPP $/KWh	SOFF $/KWh	WPP $/KWh	WOFF $/KWh	SOP $/KW	SPP $/KW	SOFF $/KW	WPP $/KW	WOFF $/KW	SOP $/KWh	SPP $/KWh	SOFF $/KWh	WPP $/KWh	WOFF $/KWh	SOP $/KW	SPP $/KW	SOFF $/KW	WPP $/KW	WOFF $/KW	$/KWh
2001	0.74	0.13	0.10	0.04	0.04	25.63	10.21	2.23	11.45	2.21	0.16	0.16	0.16	0.10	0.10	6.70	0.00	0.00	1.65	0.00	0.01
2002	0.74	0.13	0.10	0.04	0.04	26.65	10.65	2.33	12.01	2.30	0.16	0.16	0.16	0.11	0.11	6.90	0.00	0.00	1.70	0.00	0.01
2003	0.32	0.07	0.04	0.06	0.05	27.73	11.11	2.43	12.58	2.40	0.17	0.17	0.17	0.11	0.11	7.11	0.00	0.00	1.75	0.00	0.01
2004	0.30	0.06	0.04	0.06	0.05	28.88	11.58	2.53	13.16	2.50	0.17	0.17	0.17	0.11	0.11	7.32	0.00	0.00	1.80	0.00	0.01
2005	0.31	0.06	0.04	0.06	0.05	30.20	12.08	2.64	13.63	2.61	0.18	0.18	0.18	0.12	0.12	7.54	0.00	0.00	1.86	0.00	0.01
2006	0.27	0.07	0.04	0.06	0.05	31.49	12.59	2.75	14.22	2.72	0.18	0.18	0.18	0.12	0.12	7.77	0.00	0.00	1.91	0.00	0.01
2007	0.28	0.07	0.04	0.07	0.05	32.90	13.13	2.87	14.76	2.84	0.19	0.19	0.19	0.12	0.12	8.00	0.00	0.00	1.97	0.00	0.01
2008	0.29	0.07	0.04	0.07	0.05	34.24	13.69	2.99	15.46	2.96	0.20	0.20	0.20	0.13	0.13	8.24	0.00	0.00	2.03	0.00	0.01
2009	0.30	0.07	0.04	0.07	0.05	35.69	14.28	3.12	16.14	3.08	0.20	0.20	0.20	0.13	0.13	8.49	0.00	0.00	2.09	0.00	0.01
2010	0.31	0.08	0.05	0.07	0.06	37.27	14.89	3.25	16.78	3.22	0.21	0.21	0.21	0.13	0.13	8.74	0.00	0.00	2.15	0.00	0.01
2011	0.27	0.07	0.04	0.06	0.05	38.86	15.52	3.39	17.51	3.35	0.21	0.21	0.21	0.14	0.14	9.00	0.00	0.00	2.22	0.00	0.01
2012	0.28	0.07	0.04	0.07	0.05	40.54	16.18	3.53	18.23	3.50	0.22	0.22	0.22	0.14	0.14	9.27	0.00	0.00	2.28	0.00	0.01
2013	0.30	0.07	0.04	0.07	0.05	42.28	16.88	3.68	19.00	3.65	0.23	0.23	0.23	0.15	0.15	9.55	0.00	0.00	2.35	0.00	0.01
2014	0.31	0.08	0.05	0.07	0.05	44.09	17.61	3.84	19.81	3.80	0.23	0.23	0.23	0.15	0.15	9.84	0.00	0.00	2.42	0.00	0.01
2015	0.32	0.08	0.05	0.08	0.06	45.98	18.36	4.01	20.66	3.97	0.24	0.24	0.24	0.16	0.16	10.13	0.00	0.00	2.50	0.00	0.02
2016	0.34	0.08	0.05	0.08	0.06	47.94	19.15	4.18	21.54	4.14	0.25	0.25	0.25	0.16	0.16	10.44	0.00	0.00	2.57	0.00	0.02
2017	0.35	0.09	0.05	0.08	0.06	49.99	19.97	4.35	22.47	4.31	0.26	0.26	0.26	0.17	0.17	10.75	0.00	0.00	2.65	0.00	0.02
2018	0.37	0.09	0.05	0.09	0.07	52.13	20.82	4.54	23.43	4.50	0.26	0.26	0.26	0.17	0.17	11.07	0.00	0.00	2.73	0.00	0.02
2019	0.39	0.10	0.06	0.09	0.07	54.36	21.71	4.73	24.43	4.69	0.27	0.27	0.27	0.18	0.18	11.41	0.00	0.00	2.81	0.00	0.02
2020	0.41	0.10	0.06	0.10	0.07	56.68	22.64	4.94	25.48	4.89	0.28	0.28	0.28	0.18	0.18	11.75	0.00	0.00	2.89	0.00	0.02
2021	0.43	0.11	0.06	0.10	0.08	59.10	23.61	5.15	26.57	5.10	0.29	0.29	0.29	0.19	0.19	12.10	0.00	0.00	2.98	0.00	0.02

ECONOMIC PARAMETERS

HIGH ECONOMIC SCENARIO

UTILITY NAME	**SCE**
SECTOR	COM
BATCH #	1
UTILITY DISCOUNT RATE	8.0%
CUSTOMER DISCOUNT RATE	15.0%
GENERAL INFLATION RATE (Measure)	3.0%
BASE YEAR	2001
START YEAR	2001
DIFFERENCE	0
UTILITY LINE LOSS RATE	8.5%

ENERGY COSTS AND RATES

RATE TYPE	COMMERCIAL
ENERGY UNITS	$/KWh
DEMAND UNITS	$/KW

Rate/Time Periods	1	2	3	4	5	
Name	Summer On-Peak	Summer Partial-	Summer Off-Peak	Winter Partial Peak	Winter Off-Peak	
Abbreviation	SOP	SPP	SOFF	WPP	WOFF	TOTAL
Hours	768	896	2752	1638	2706	8760
Monthly Adjustment for	6	0	0	6	0	

	AVOIDED ENERGY COSTS BY TIME PERIOD					AVOIDED DEMAND COSTS BY TIME PERIOD					COMMERCIAL ENERGY RATES					COMMERCIAL DEMAND RATES					Environmental Adder to be Subtracted for RIM
	SOP	SPP	SOFF	WPP	WOFF	SOP	SPP	SOFF	WPP	WOFF	SOP	SPP	SOFF	WPP	WOFF	SOP	SPP	SOFF	WPP	WOFF	
Year	$/KWh	$/KWh	$/KWh	$/KWh	$/KWh	$/KW	$/KW	$/KW	$/KW	$/KW	$/KWh	$/KWh	$/KWh	$/KWh	$/KWh	$/KW	$/KW	$/KW	$/KW	$/KW	$/KWh
2001	0.74	0.13	0.10	0.04	0.04	25.63	10.21	2.23	11.45	2.21	0.17	0.17	0.17	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.01
2002	0.74	0.13	0.10	0.04	0.04	26.65	10.65	2.33	12.01	2.30	0.18	0.18	0.18	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.01
2003	0.32	0.07	0.04	0.06	0.05	27.73	11.11	2.43	12.58	2.40	0.18	0.18	0.18	0.14	0.14	0.00	0.00	0.00	0.00	0.00	0.01
2004	0.30	0.06	0.04	0.06	0.05	28.88	11.58	2.53	13.16	2.50	0.19	0.19	0.19	0.14	0.14	0.00	0.00	0.00	0.00	0.00	0.01
2005	0.31	0.06	0.04	0.06	0.05	30.20	12.08	2.64	13.63	2.61	0.19	0.19	0.19	0.15	0.15	0.00	0.00	0.00	0.00	0.00	0.01
2006	0.27	0.07	0.04	0.06	0.05	31.49	12.59	2.75	14.22	2.72	0.20	0.20	0.20	0.15	0.15	0.00	0.00	0.00	0.00	0.00	0.01
2007	0.28	0.07	0.04	0.07	0.05	32.90	13.13	2.87	14.76	2.84	0.20	0.20	0.20	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.01
2008	0.29	0.07	0.04	0.07	0.05	34.24	13.69	2.99	15.46	2.96	0.21	0.21	0.21	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.01
2009	0.30	0.07	0.04	0.07	0.05	35.69	14.28	3.12	16.14	3.08	0.22	0.22	0.22	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.01
2010	0.31	0.08	0.05	0.07	0.06	37.27	14.89	3.25	16.78	3.22	0.22	0.22	0.22	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.01
2011	0.27	0.07	0.04	0.06	0.05	38.86	15.52	3.39	17.51	3.35	0.23	0.23	0.23	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.01
2012	0.28	0.07	0.04	0.07	0.05	40.54	16.18	3.53	18.23	3.50	0.24	0.24	0.24	0.18	0.18	0.00	0.00	0.00	0.00	0.00	0.01
2013	0.30	0.07	0.04	0.07	0.05	42.28	16.88	3.68	19.00	3.65	0.24	0.24	0.24	0.19	0.19	0.00	0.00	0.00	0.00	0.00	0.01
2014	0.31	0.08	0.05	0.07	0.05	44.09	17.61	3.84	19.81	3.80	0.25	0.25	0.25	0.19	0.19	0.00	0.00	0.00	0.00	0.00	0.01
2015	0.32	0.08	0.05	0.08	0.06	45.98	18.36	4.01	20.66	3.97	0.26	0.26	0.26	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.02
2016	0.34	0.08	0.05	0.08	0.06	47.94	19.15	4.18	21.54	4.14	0.26	0.26	0.26	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.02
2017	0.35	0.09	0.05	0.08	0.06	49.99	19.97	4.35	22.47	4.31	0.27	0.27	0.27	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.02
2018	0.37	0.09	0.05	0.09	0.07	52.13	20.82	4.54	23.43	4.50	0.28	0.28	0.28	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.02
2019	0.39	0.10	0.06	0.09	0.07	54.36	21.71	4.73	24.43	4.69	0.29	0.29	0.29	0.22	0.22	0.00	0.00	0.00	0.00	0.00	0.02
2020	0.41	0.10	0.06	0.10	0.07	56.68	22.64	4.94	25.48	4.89	0.30	0.30	0.30	0.23	0.23	0.00	0.00	0.00	0.00	0.00	0.02
2021	0.43	0.11	0.06	0.10	0.08	59.10	23.61	5.15	26.57	5.10	0.31	0.31	0.31	0.23	0.23	0.00	0.00	0.00	0.00	0.00	0.02

ECONOMIC PARAMETERS

HIGH ECONOMIC SCENARIO

UTILITY NAME	**SDG&E**
SECTOR	COM
BATCH #	1
UTILITY DISCOUNT RATE	8.0%
CUSTOMER DISCOUNT RATE	15.0%
GENERAL INFLATION RATE (Measure)	3.0%
BASE YEAR	2001
START YEAR	2001
DIFFERENCE	0
UTILITY LINE LOSS RATE	8.5%

ENERGY COSTS AND RATES

RATE TYPE	COMMERCIAL
ENERGY UNITS	$/KWh
DEMAND UNITS	$/KW

Rate/Time Periods	1	2	3	4	5	
Name	Summer On-Peak	Summer Partial-Peak	Summer Off-Peak	Winter Partial Peak	Winter Off-Peak	
Abbreviation	SOP	SPP	SOFF	WPP	WOFF	TOTAL
Hours	768	896	2752	1638	2706	8760
Monthly Adjustment for r	6	0	0	6	0	

	AVOIDED ENERGY COSTS BY TIME PERIOD					AVOIDED DEMAND COSTS BY TIME PERIOD					COMMERCIAL ENERGY RATES					COMMERCIAL DEMAND RATES					Environmental Adder to be Subtracted for RIM
	SOP	SPP	SOFF	WPP	WOFF	SOP	SPP	SOFF	WPP	WOFF	SOP	SPP	SOFF	WPP	WOFF	SOP	SPP	SOFF	WPP	WOFF	
Year	$/KWh	$/KWh	$/KWh	$/KWh	$/KWh	$/KW	$/KW	$/KW	$/KW	$/KW	$/KWh	$/KWh	$/KWh	$/KWh	$/KWh	$/KW	$/KW	$/KW	$/KW	$/KW	$/KWh
2001	0.74	0.13	0.10	0.04	0.04	25.63	10.21	2.23	11.45	2.21	0.17	0.17	0.17	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.01
2002	0.74	0.13	0.10	0.04	0.04	26.65	10.65	2.33	12.01	2.30	0.18	0.18	0.18	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.01
2003	0.32	0.07	0.04	0.06	0.05	27.73	11.11	2.43	12.58	2.40	0.18	0.18	0.18	0.14	0.14	0.00	0.00	0.00	0.00	0.00	0.01
2004	0.30	0.06	0.04	0.06	0.05	28.88	11.58	2.53	13.16	2.50	0.19	0.19	0.19	0.14	0.14	0.00	0.00	0.00	0.00	0.00	0.01
2005	0.31	0.06	0.04	0.06	0.05	30.20	12.08	2.64	13.63	2.61	0.19	0.19	0.19	0.15	0.15	0.00	0.00	0.00	0.00	0.00	0.01
2006	0.27	0.07	0.04	0.06	0.05	31.49	12.59	2.75	14.22	2.72	0.20	0.20	0.20	0.15	0.15	0.00	0.00	0.00	0.00	0.00	0.01
2007	0.28	0.07	0.04	0.07	0.05	32.90	13.13	2.87	14.76	2.84	0.20	0.20	0.20	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.01
2008	0.29	0.07	0.04	0.07	0.05	34.24	13.69	2.99	15.46	2.96	0.21	0.21	0.21	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.01
2009	0.30	0.07	0.04	0.07	0.05	35.69	14.28	3.12	16.14	3.08	0.22	0.22	0.22	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.01
2010	0.31	0.08	0.05	0.07	0.06	37.27	14.89	3.25	16.78	3.22	0.22	0.22	0.22	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.01
2011	0.27	0.07	0.04	0.06	0.05	38.86	15.52	3.39	17.51	3.35	0.23	0.23	0.23	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.01
2012	0.28	0.07	0.04	0.07	0.05	40.54	16.18	3.53	18.23	3.50	0.24	0.24	0.24	0.18	0.18	0.00	0.00	0.00	0.00	0.00	0.01
2013	0.30	0.07	0.04	0.07	0.05	42.28	16.88	3.68	19.00	3.65	0.24	0.24	0.24	0.19	0.19	0.00	0.00	0.00	0.00	0.00	0.01
2014	0.31	0.08	0.05	0.07	0.05	44.09	17.61	3.84	19.81	3.80	0.25	0.25	0.25	0.19	0.19	0.00	0.00	0.00	0.00	0.00	0.01
2015	0.32	0.08	0.05	0.08	0.06	45.98	18.36	4.01	20.66	3.97	0.26	0.26	0.26	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.02
2016	0.34	0.08	0.05	0.08	0.06	47.94	19.15	4.18	21.54	4.14	0.26	0.26	0.26	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.02
2017	0.35	0.09	0.05	0.08	0.06	49.99	19.97	4.35	22.47	4.31	0.27	0.27	0.27	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.02
2018	0.37	0.09	0.05	0.09	0.07	52.13	20.82	4.54	23.43	4.50	0.28	0.28	0.28	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.02
2019	0.39	0.10	0.06	0.09	0.07	54.36	21.71	4.73	24.43	4.69	0.29	0.29	0.29	0.22	0.22	0.00	0.00	0.00	0.00	0.00	0.02
2020	0.41	0.10	0.06	0.10	0.07	56.68	22.64	4.94	25.48	4.89	0.30	0.30	0.30	0.23	0.23	0.00	0.00	0.00	0.00	0.00	0.02
2021	0.43	0.11	0.06	0.10	0.08	59.10	23.61	5.15	26.57	5.10	0.31	0.31	0.31	0.23	0.23	0.00	0.00	0.00	0.00	0.00	0.02

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MEASURE INPUTS

MEASURE COSTS

Utility	Measure#	Measure Description	Savings Units	Cost Unit	Unit Equipment Cost	Unit Labor Cost	NPV of Lifetime O & M Cost	Implementation Cost Factor	Cost per Savings Unit	Service Life	Full = 1 Incr. = 0 Initial Cost	Full = 1 Incr. = 0 Replace Cost	Full Unit Cost	Relative Energy Reduction Factors SP	SPP	SOP	WPP	WOP	End Use	Implementation Type 1=1 time 2=turnover
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	fixture	fixture	27	15	0	$42	1	45,000	0	0	$42	1	1	1	1	1	1	2
PG&E	111	ROB 4L4'T8, 1EB	fixture	fixture	28	15	0	$43	1	70,000	0	0	$43	1	1	1	1	1	1	2
PG&E	112	ROB 2L4'T8, 1EB, Reflector	fixture	fixture	47	15	0	$62	1	70,000	0	0	$62	1	1	1	1	1	1	2
PG&E	114	RET 4L4'T8, 1EB	fixture	fixture	28	15	0	$43	1	70,000	1	0	$43	1	1	1	1	1	1	1
PG&E	115	RET 2L4'T8, 1EB, Reflector	fixture	fixture	47	15	0	$62	1	70,000	1	0	$62	1	1	1	1	1	1	1
PG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	fixture	fixture	25	3	0	$28	1	40,000	1	1	$28	1	1	0.5	1	0.5	1	1
PG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	fixture	fixture	181	107	0	$288	1	50,000	1	1	$288	1	0.5	0	0.75	0	1	1
PG&E	119	RNV 2L4'T5HO, 1EB	fixture	fixture	187	63	0	$250	1	70,000	1	0	$250	1	1	1	1	1	1	1
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	fixture	fixture	14	9	0	$23	1	45,000	0	0	$23	1	1	1	1	1	1	2
PG&E	131	ROB 2L4'T8, 1EB	fixture	fixture	20	9	0	$29	1	70,000	0	0	$29	1	1	1	1	1	1	2
PG&E	133	RET 2L4'T8, 1EB	fixture	fixture	20	9	0	$29	1	70,000	1	0	$29	1	1	1	1	1	1	1
PG&E	134	RET 1L4'T8, 1EB, Reflector OEM	fixture	fixture	37	8	0	$45	1	70,000	1	0	$45	1	1	1	1	1	1	1
PG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	fixture	fixture	12	2	0	$14	1	40,000	1	1	$14	1	1	0.5	1	0.5	1	1
PG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	fixture	fixture	90	54	0	$144	1	50,000	1	1	$144	1	0.5	0	0.75	0	1	1
PG&E	138	RNV 1L4'T5HO, 1EB	fixture	fixture	173	63	0	$236	1	70,000	1	0	$236	1	1	1	1	1	1	1
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	fixture	fixture	36	17	0	$53	1	45,000	0	0	$53	1	1	1	1	1	1	2
PG&E	151	ROB 2L8'T12, 60W, 1EB	fixture	fixture	48	17	0	$65	1	70,000	0	0	$65	1	1	1	1	1	1	2
PG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	fixture	fixture	72	17	0	$89	1	70,000	0	0	$89	1	1	1	1	1	1	2
PG&E	153	RET 2L8'T12, 60W, 1EB	fixture	fixture	48	17	0	$65	1	70,000	1	0	$65	1	1	1	1	1	1	1
PG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	fixture	fixture	72	17	0	$89	1	70,000	1	0	$89	1	1	1	1	1	1	1
PG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	fixture	fixture	25	3	0	$28	1	40,000	1	1	$28	1	1	0.5	1	0.5	1	1
PG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	fixture	fixture	181	107	0	$288	1	50,000	1	1	$288	1	0.5	0	0.75	0	1	1
PG&E	165	Base Incandescent Flood, 75W	fixture	fixture	2	4	0	$6	1	2,000	0	0	$6	1	1	1	1	1	1	2
PG&E	166	CFL Screw-in, Modular 18W	fixture	fixture	22	5	-8.41	$27	1	20,000	1	0	$19	1	1	1	1	1	1	1
PG&E	175	Base Incandescent Flood, 150W PAR	fixture	fixture	3	5	0	$8	1	2,000	0	0	$8	1	1	1	1	1	1	2
PG&E	176	Halogen PAR Flood, 90W	fixture	fixture	7	5	0	$12	1	2,000	1	0	$12	1	1	1	1	1	1	1
PG&E	177	Metal Halide, 50W	fixture	fixture	227	60	0	$287	1	24,000	1	0	$287	1	1	1	1	1	1	1
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	fixture	fixture	27	15	0	$42	1	45,000	0	0	$42	1	1	1	1	1	1	2
SCE	111	ROB 4L4'T8, 1EB	fixture	fixture	28	15	0	$43	1	70,000	0	0	$43	1	1	1	1	1	1	2
SCE	112	ROB 2L4'T8, 1EB, Reflector	fixture	fixture	47	15	0	$62	1	70,000	0	0	$62	1	1	1	1	1	1	2
SCE	114	RET 4L4'T8, 1EB	fixture	fixture	28	15	0	$43	1	70,000	1	0	$43	1	1	1	1	1	1	1
SCE	115	RET 2L4'T8, 1EB, Reflector	fixture	fixture	47	15	0	$62	1	70,000	1	0	$62	1	1	1	1	1	1	1
SCE	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	fixture	fixture	25	3	0	$28	1	40,000	1	1	$28	1	1	0.5	1	0.5	1	1
SCE	118	Continuous Dimming, 5L4' Fluorescent Fixtures	fixture	fixture	181	107	0	$288	1	50,000	1	1	$288	1	0.5	0	0.75	0	1	1
SCE	119	RNV 2L4'T5HO, 1EB	fixture	fixture	187	63	0	$250	1	70,000	1	0	$250	1	1	1	1	1	1	1
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	fixture	fixture	14	9	0	$23	1	45,000	0	0	$23	1	1	1	1	1	1	2
SCE	131	ROB 2L4'T8, 1EB	fixture	fixture	20	9	0	$29	1	70,000	0	0	$29	1	1	1	1	1	1	2
SCE	133	RET 2L4'T8, 1EB	fixture	fixture	20	9	0	$29	1	70,000	1	0	$29	1	1	1	1	1	1	1
SCE	134	RET 1L4'T8, 1EB, Reflector OEM	fixture	fixture	37	8	0	$45	1	70,000	1	0	$45	1	1	1	1	1	1	1
SCE	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	fixture	fixture	12	2	0	$14	1	40,000	1	1	$14	1	1	0.5	1	0.5	1	1
SCE	137	Continuous Dimming, 10L4' Fluorescent Fixtures	fixture	fixture	90	54	0	$144	1	50,000	1	1	$144	1	0.5	0	0.75	0	1	1
SCE	138	RNV 1L4'T5HO, 1EB	fixture	fixture	173	63	0	$236	1	70,000	1	0	$236	1	1	1	1	1	1	1
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	fixture	fixture	36	17	0	$53	1	45,000	0	0	$53	1	1	1	1	1	1	2
SCE	151	ROB 2L8'T12, 60W, 1EB	fixture	fixture	48	17	0	$65	1	70,000	0	0	$65	1	1	1	1	1	1	2
SCE	152	ROB 1L8'T12, 60W, 1EB, Reflector	fixture	fixture	72	17	0	$89	1	70,000	0	0	$89	1	1	1	1	1	1	2
SCE	153	RET 2L8'T12, 60W, 1EB	fixture	fixture	48	17	0	$65	1	70,000	1	0	$65	1	1	1	1	1	1	1
SCE	154	RET 1L8'T12, 60W, 1EB, Reflector	fixture	fixture	72	17	0	$89	1	70,000	1	0	$89	1	1	1	1	1	1	1
SCE	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	fixture	fixture	25	3	0	$28	1	40,000	1	1	$28	1	1	0.5	1	0.5	1	1
SCE	156	Continuous Dimming, 5L8' Fluorescent Fixtures	fixture	fixture	181	107	0	$288	1	50,000	1	1	$288	1	0.5	0	0.75	0	1	1
SCE	165	Base Incandescent Flood, 75W	fixture	fixture	2	4	0	$6	1	2,000	0	0	$6	1	1	1	1	1	1	2
SCE	166	CFL Screw-in, Modular 18W	fixture	fixture	22	5	-8.41	$27	1	20,000	1	0	$19	1	1	1	1	1	1	1
SCE	175	Base Incandescent Flood, 150W PAR	fixture	fixture	3	5	0	$8	1	2,000	0	0	$8	1	1	1	1	1	1	2
SCE	176	Halogen PAR Flood, 90W	fixture	fixture	7	5	0	$12	1	2,000	1	0	$12	1	1	1	1	1	1	1
SCE	177	Metal Halide, 50W	fixture	fixture	227	60	0	$287	1	24,000	1	0	$287	1	1	1	1	1	1	1

MEASURE COSTS

Utility	Measure#	Measure Description	Savings Units	Cost Unit	Unit Equipment Cost	Unit Labor Cost	NPV of Lifetime O & M Cost	Implementation Cost Factor	Cost per Savings Unit	Service Life	Full = 1 Incr. = 0 Initial Cost	Full = 1 Incr. = 0 Replace Cost	Full Unit Cost	Relative Energy Reduction Factors SP	SPP	SOP	WPP	WOP	End Use	Implementation Type 1=1 time 2=turnover
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	fixture	fixture	27	15	0	$42	1	45,000	0	0	$42	1	1	1	1	1	1	2
SDG&E	111	ROB 4L4'T8, 1EB	fixture	fixture	28	15	0	$43	1	70,000	0	0	$43	1	1	1	1	1	1	2
SDG&E	112	ROB 2L4'T8, 1EB, Reflector	fixture	fixture	47	15	0	$62	1	70,000	0	0	$62	1	1	1	1	1	1	2
SDG&E	114	RET 4L4'T8, 1EB	fixture	fixture	28	15	0	$43	1	70,000	1	0	$43	1	1	1	1	1	1	1
SDG&E	115	RET 2L4'T8, 1EB, Reflector	fixture	fixture	47	15	0	$62	1	70,000	1	0	$62	1	1	1	1	1	1	1
SDG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	fixture	fixture	25	3	0	$28	1	40,000	1	1	$28	1	1	0.5	1	0.5	1	1
SDG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	fixture	fixture	181	107	0	$288	1	50,000	1	1	$288	1	0.5	0	0.75	0	1	1
SDG&E	119	RNV 2L4'T5HO, 1EB	fixture	fixture	187	63	0	$250	1	70,000	1	0	$250	1	1	1	1	1	1	1
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	fixture	fixture	14	9	0	$23	1	45,000	0	0	$23	1	1	1	1	1	1	2
SDG&E	131	ROB 2L4'T8, 1EB	fixture	fixture	20	9	0	$29	1	70,000	0	0	$29	1	1	1	1	1	1	2
SDG&E	133	RET 2L4'T8, 1EB	fixture	fixture	20	9	0	$29	1	70,000	1	0	$29	1	1	1	1	1	1	1
SDG&E	134	RET 1L4'T8, 1EB, Reflector OEM	fixture	fixture	37	8	0	$45	1	70,000	1	0	$45	1	1	1	1	1	1	1
SDG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	fixture	fixture	12	2	0	$14	1	40,000	1	1	$14	1	1	0.5	1	0.5	1	1
SDG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	fixture	fixture	90	54	0	$144	1	50,000	1	1	$144	1	0.5	0	0.75	0	1	1
SDG&E	138	RNV 1L4'T5HO, 1EB	fixture	fixture	173	63	0	$236	1	70,000	1	0	$236	1	1	1	1	1	1	1
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	fixture	fixture	36	17	0	$53	1	45,000	0	0	$53	1	1	1	1	1	1	2
SDG&E	151	ROB 2L8'T12, 60W, 1EB	fixture	fixture	48	17	0	$65	1	70,000	0	0	$65	1	1	1	1	1	1	2
SDG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	fixture	fixture	72	17	0	$89	1	70,000	0	0	$89	1	1	1	1	1	1	2
SDG&E	153	RET 2L8'T12, 60W, 1EB	fixture	fixture	48	17	0	$65	1	70,000	1	0	$65	1	1	1	1	1	1	1
SDG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	fixture	fixture	72	17	0	$89	1	70,000	1	0	$89	1	1	1	1	1	1	1
SDG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	fixture	fixture	25	3	0	$28	1	40,000	1	1	$28	1	1	0.5	1	0.5	1	1
SDG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	fixture	fixture	181	107	0	$288	1	50,000	1	1	$288	1	0.5	0	0.75	0	1	1
SDG&E	165	Base Incandescent Flood, 75W	fixture	fixture	2	4	0	$6	1	2,000	0	0	$6	1	1	1	1	1	1	2
SDG&E	166	CFL Screw-in, Modular 18W	fixture	fixture	22	5	-8.41	$27	1	20,000	1	0	$19	1	1	1	1	1	1	1
SDG&E	175	Base Incandescent Flood, 150W PAR	fixture	fixture	3	5	0	$8	1	2,000	0	0	$8	1	1	1	1	1	1	2
SDG&E	176	Halogen PAR Flood, 90W	fixture	fixture	7	5	0	$12	1	2,000	1	0	$12	1	1	1	1	1	1	1
SDG&E	177	Metal Halide, 50W	fixture	fixture	227	60	0	$287	1	24,000	1	0	$287	1	1	1	1	1	1	1
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	fixture	fixture	14	9	0	$23	1	45,000	0	0	$23	1	1	1	1	1	2	2
PG&E	211	RET 2L4'T8, 1EB	fixture	fixture	20	9	0	$29	1	70,000	1	0	$29	1	1	1	1	1	2	2
PG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	fixture	fixture	51	57	0	$108	1	45,000	1	1	$108	0	1.7	1	0.9	1	2	1
PG&E	220	Base Mercury Vapor 400W Lamp	fixture	fixture			0	$0	1	24,000	0	0	$0	1	1	1	1	1	2	2
PG&E	221	High Pressure Sodium 250W Lamp	fixture	fixture	89	60	0	$149	1	24,000	1	1	$149	1	1	1	1	1	2	1
PG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	fixture	fixture	51	57	0	$108	1	24,000	1	1	$108	0	1.7	1	0.9	1	2	1
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	fixture	fixture	14	9	0	$23	1	45,000	0	0	$23	1	1	1	1	1	2	2
SCE	211	RET 2L4'T8, 1EB	fixture	fixture	20	9	0	$29	1	70,000	1	0	$29	1	1	1	1	1	2	2
SCE	212	Outdoor Lighting Controls (Photocell/Timeclock)	fixture	fixture	51	57	0	$108	1	45,000	1	1	$108	0	1.7	1	0.9	1	2	1
SCE	220	Base Mercury Vapor 400W Lamp	fixture	fixture			0	$0	1	24,000	0	0	$0	1	1	1	1	1	2	2
SCE	221	High Pressure Sodium 250W Lamp	fixture	fixture	89	60	0	$149	1	24,000	1	1	$149	1	1	1	1	1	2	1
SCE	222	Outdoor Lighting Controls (Photocell/Timeclock)	fixture	fixture	51	57	0	$108	1	24,000	1	1	$108	0	1.7	1	0.9	1	2	1
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	fixture	fixture	14	9	0	$23	1	45,000	0	0	$23	1	1	1	1	1	2	2
SDG&E	211	RET 2L4'T8, 1EB	fixture	fixture	20	9	0	$29	1	70,000	1	0	$29	1	1	1	1	1	2	2
SDG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	fixture	fixture	51	57	0	$108	1	45,000	1	1	$108	0	1.7	1	0.9	1	2	1
SDG&E	220	Base Mercury Vapor 400W Lamp	fixture	fixture			0	$0	1	24,000	0	0	$0	1	1	1	1	1	2	2
SDG&E	221	High Pressure Sodium 250W Lamp	fixture	fixture	89	60	0	$149	1	24,000	1	1	$149	1	1	1	1	1	2	1
SDG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	fixture	fixture	51	57	0	$108	1	24,000	1	1	$108	0	1.7	1	0.9	1	2	1

MEASURE COSTS

Utility	Measure#	Measure Description	Savings Units	Cost Unit	Unit Equipment Cost	Unit Labor Cost	NPV of Lifetime O & M Cost	Implementation Cost	Cost Units per Savings Unit	Service Life	Full = 1 Incr. = 0 Initial Cost	Replace Cost	Full Unit Cost	Relative Energy Reduction Factors SP	SPP	SOP	WPP	WOP	End Use	Implementation Type 1=1 time 2=turnover
PG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	$/ton	$/ton	241		0	$241	1	20	0	0	$241	1	1	1	1	1	3	2
PG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	$/ton	$/ton	262		0	$262	1	20	0	0	$262	1	1	1	1	1	3	2
PG&E	302	Window Film (Standard)	$/sf-window	$/sf-window			0	$3	1	10	1	1	$3	1	1	1	1	1	3	1
PG&E	303	EMS - Chiller	$/ton	$/ton			0	$60	1	10	1	1	$60	1	1	1	1	1	3	1
PG&E	304	Cool Roof - Chiller	$/sf-roof	$/sf-roof			0	$0	1	10	1	1	$0	1	1	1	1	1	3	1
PG&E	305	Chiller Tune Up/Diagnostics	$/ton	$/ton	17		20.91	$17	1	10	1	1	$38	1	0.5	0	0	0	3	1
PG&E	306	Cooling Circ. Pumps - VSD	$/ton	$/ton			0	$65	1	15	1	1	$65	1	1	1	1	1	3	1
PG&E	310	DX Packaged System, EER=10.3, 10 tons	$/ton	$/ton	672		0	$672	1	15	0	0	$672	1	1	1	1	1	3	2
PG&E	311	DX Tune Up/ Advanced Diagnostics	$/ton	$/ton			0	$78	1	3	1	1	$78	1	1	1	1	1	3	1
PG&E	312	DX Packaged System, EER=10.9, 10 tons	$/ton	$/ton	724		0	$724	1	15	0	0	$724	1	1	1	1	1	3	2
PG&E	313	Window Film (Standard)	$/sf-window	$/sf-window			0	$3	1	10	1	1	$3	1	1	1	1	1	3	1
PG&E	314	Evaporative Pre-Cooler	$/ton	$/ton	133	160	0	$293	1	10	1	1	$293	1	1	1	1	1	3	1
PG&E	315	Prog. Thermostat - DX	$/ton	$/ton	6	15	0	$21	1	10	1	1	$21	0.25	1	1	1	1	3	1
PG&E	316	Cool Roof - DX	$/sf-roof	$/sf-roof			0	$0	1	10	1	1	$0	1	1	1	1	1	3	1
SCE	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	$/ton	$/ton	241		0	$241	1	20	0	0	$241	1	1	1	1	1	3	2
SCE	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	$/ton	$/ton	262		0	$262	1	20	0	0	$262	1	1	1	1	1	3	2
SCE	302	Window Film (Standard)	$/sf-window	$/sf-window			0	$3	1	10	1	1	$3	1	1	1	1	1	3	1
SCE	303	EMS - Chiller	$/ton	$/ton			0	$60	1	10	1	1	$60	1	1	1	1	1	3	1
SCE	304	Cool Roof - Chiller	$/sf-roof	$/sf-roof			0	$0	1	10	1	1	$0	1	1	1	1	1	3	1
SCE	305	Chiller Tune Up/Diagnostics	$/ton	$/ton	17		20.91	$17	1	10	1	1	$38	1	0.5	0	0	0	3	1
SCE	306	Cooling Circ. Pumps - VSD	$/ton	$/ton			0	$65	1	15	1	1	$65	1	1	1	1	1	3	1
SCE	310	DX Packaged System, EER=10.3, 10 tons	$/ton	$/ton	672		0	$672	1	15	0	0	$672	1	1	1	1	1	3	2
SCE	311	DX Tune Up/ Advanced Diagnostics	$/ton	$/ton			0	$78	1	3	1	1	$78	1	1	1	1	1	3	1
SCE	312	DX Packaged System, EER=10.9, 10 tons	$/ton	$/ton	724		0	$724	1	15	0	0	$724	1	1	1	1	1	3	2
SCE	313	Window Film (Standard)	$/sf-window	$/sf-window			0	$3	1	10	1	1	$3	1	1	1	1	1	3	1
SCE	314	Evaporative Pre-Cooler	$/ton	$/ton	133	160	0	$293	1	10	1	1	$293	1	1	1	1	1	3	1
SCE	315	Prog. Thermostat - DX	$/ton	$/ton	6	15	0	$21	1	10	1	1	$21	0.25	1	1	1	1	3	1
SCE	316	Cool Roof - DX	$/sf-roof	$/sf-roof			0	$0	1	10	1	1	$0	1	1	1	1	1	3	1
SDG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	$/ton	$/ton	241		0	$241	1	20	0	0	$241	1	1	1	1	1	3	2
SDG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	$/ton	$/ton	262		0	$262	1	20	0	0	$262	1	1	1	1	1	3	2
SDG&E	302	Window Film (Standard)	$/sf-window	$/sf-window			0	$3	1	10	1	1	$3	1	1	1	1	1	3	1
SDG&E	303	EMS - Chiller	$/ton	$/ton			0	$60	1	10	1	1	$60	1	1	1	1	1	3	1
SDG&E	304	Cool Roof - Chiller	$/sf-roof	$/sf-roof			0	$0	1	10	1	1	$0	1	1	1	1	1	3	1
SDG&E	305	Chiller Tune Up/Diagnostics	$/ton	$/ton	17		20.91	$17	1	10	1	1	$38	1	0.5	0	0	0	3	1
SDG&E	306	Cooling Circ. Pumps - VSD	$/ton	$/ton			0	$65	1	15	1	1	$65	1	1	1	1	1	3	1
SDG&E	310	DX Packaged System, EER=10.3, 10 tons	$/ton	$/ton	672		0	$672	1	15	0	0	$672	1	1	1	1	1	3	2
SDG&E	311	DX Tune Up/ Advanced Diagnostics	$/ton	$/ton			0	$78	1	3	1	1	$78	1	1	1	1	1	3	1
SDG&E	312	DX Packaged System, EER=10.9, 10 tons	$/ton	$/ton	724		0	$724	1	15	0	0	$724	1	1	1	1	1	3	2
SDG&E	313	Window Film (Standard)	$/sf-window	$/sf-window			0	$3	1	10	1	1	$3	1	1	1	1	1	3	1
SDG&E	314	Evaporative Pre-Cooler	$/ton	$/ton	133	160	0	$293	1	10	1	1	$293	1	1	1	1	1	3	1
SDG&E	315	Prog. Thermostat - DX	$/ton	$/ton	6	15	0	$21	1	10	1	1	$21	0.25	1	1	1	1	3	1
SDG&E	316	Cool Roof - DX	$/sf-roof	$/sf-roof			0	$0	1	10	1	1	$0	1	1	1	1	1	3	1
PG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	$/HP	$/HP	91		0	$91	1	15	0	0	$91	1	1	1	1	1	4	2
PG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	$/HP	$/HP	115		0	$115	1	15	0	0	$115	1	1	1	1	1	4	2
PG&E	402	Variable Speed Drive Control, 5 HP	$/HP	$/HP	214	171	0	$385	1	15	1	1	$385	0.25	1	1	1	1	4	1
PG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	$/HP	$/HP	72		0	$72	1	15	0	0	$72	1	1	1	1	1	4	2
PG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	$/HP	$/HP	76		0	$76	1	15	0	0	$76	1	1	1	1	1	4	2
PG&E	412	Variable Speed Drive Control, 15 HP	$/HP	$/HP	129	102	0	$231	1	15	1	1	$231	0.25	1	1	1	1	4	1
PG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	$/HP	$/HP	60		0	$60	1	15	0	0	$60	1	1	1	1	1	4	2
PG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	$/HP	$/HP	76		0	$76	1	15	0	0	$76	1	1	1	1	1	4	2
PG&E	422	Variable Speed Drive Control, 40 HP	$/HP	$/HP	120	37	0	$157	1	15	1	1	$157	0.25	1	1	1	1	4	1

MEASURE COSTS

Utility	Measure#	Measure Description	Savings Units	Cost Unit	Unit Equipment Cost	Unit Labor Cost	NPV of Lifetime O & M Cost	Implementation Cost Factor	Cost per Savings Unit	Service Life	Full = 1 Incr. = 0 Initial Cost	Replace Cost	Full Unit Cost	Relative Energy Reduction Factors SP	SPP	SOP	WPP	WOP	End Use	Implementation Type 1=1 time 2=turnover
SCE	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	$/HP	$/HP	91		0	$91	1	15	0	0	$91	1	1	1	1	1	4	2
SCE	401	Fan Motor, 5hp, 1800rpm, 89.5%	$/HP	$/HP	115		0	$115	1	15	0	0	$115	1	1	1	1	1	4	2
SCE	402	Variable Speed Drive Control, 5 HP	$/HP	$/HP	214	171	0	$385	1	15	1	1	$385	0.25	1	1	1	1	4	1
SCE	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	$/HP	$/HP	72		0	$72	1	15	0	0	$72	1	1	1	1	1	4	2
SCE	411	Fan Motor, 15hp, 1800rpm, 92.4%	$/HP	$/HP	76		0	$76	1	15	0	0	$76	1	1	1	1	1	4	2
SCE	412	Variable Speed Drive Control, 15 HP	$/HP	$/HP	129	102	0	$231	1	15	1	1	$231	0.25	1	1	1	1	4	1
SCE	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	$/HP	$/HP	60		0	$60	1	15	0	0	$60	1	1	1	1	1	4	2
SCE	421	Fan Motor, 40hp, 1800rpm, 94.1%	$/HP	$/HP	76		0	$76	1	15	0	0	$76	1	1	1	1	1	4	2
SCE	422	Variable Speed Drive Control, 40 HP	$/HP	$/HP	120	37	0	$157	1	15	1	1	$157	0.25	1	1	1	1	4	1
SDG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	$/HP	$/HP	91		0	$91	1	15	0	0	$91	1	1	1	1	1	4	2
SDG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	$/HP	$/HP	115		0	$115	1	15	0	0	$115	1	1	1	1	1	4	2
SDG&E	402	Variable Speed Drive Control, 5 HP	$/HP	$/HP	214	171	0	$385	1	15	1	1	$385	0.25	1	1	1	1	4	1
SDG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	$/HP	$/HP	72		0	$72	1	15	0	0	$72	1	1	1	1	1	4	2
SDG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	$/HP	$/HP	76		0	$76	1	15	0	0	$76	1	1	1	1	1	4	2
SDG&E	412	Variable Speed Drive Control, 15 HP	$/HP	$/HP	129	102	0	$231	1	15	1	1	$231	0.25	1	1	1	1	4	1
SDG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	$/HP	$/HP	60		0	$60	1	15	0	0	$60	1	1	1	1	1	4	2
SDG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	$/HP	$/HP	76		0	$76	1	15	0	0	$76	1	1	1	1	1	4	2
SDG&E	422	Variable Speed Drive Control, 40 HP	$/HP	$/HP	120	37	0	$157	1	15	1	1	$157	0.25	1	1	1	1	4	1
PG&E	500	Base Refrigeration System	40,000 sqft store	40,000 sqft store	0	0	0	$0	1	10	0	0	$0	1	1	1	1	1	5	2
PG&E	501	High-efficiency fan motors	40,000 sqft store	40,000 sqft store	46429	0	0	$46,429	1	16	1	1	$46,429	1	1	1	1	1	5	1
PG&E	502	Strip curtains for walk-ins	40,000 sqft store	40,000 sqft store	1995	0	0	$1,995	1	4	1	1	$1,995	1	1	1	1	1	5	1
PG&E	503	Night covers for display cases	linear ft. display	linear ft. display	9	0	0	$9	1	5	1	1	$9	0	1	1	1	1	5	1
PG&E	504	Evaporator fan controller for MT walk-ins	controller	controller	300	0	0	$300	1	5	1	1	$300	0	1	1	1	1	5	1
PG&E	505	Efficient compressor motor retrofit	40,000 sqft store	40,000 sqft store	3510	0	0	$3,510	1	10	1	1	$3,510	1	1	1	1	1	5	1
PG&E	506	Compressor VSD retrofit	40,000 sqft store	40,000 sqft store	16200	0	0	$16,200	1	10	1	1	$16,200	0.5	1	1	1	1	5	1
PG&E	507	Floating head pressure controls	40,000 sqft store	40,000 sqft store	4995	0	0	$4,995	1	14	1	1	$4,995	0	1	1	1	1	5	1
PG&E	508	Refrigeration Commissioning	Ton of Load	Ton of Load	113	0	0	$113	1	3	1	1	$113	1	1	1	1	1	5	1
PG&E	509	Demand Hot Gas Defrost	HP	HP	25	0	0	$25	1	10	1	1	$25	1	1	1	1	1	5	1
PG&E	510	Demand Defrost Electric	HP	HP	25	0	0	$25	1	10	1	1	$25	1	1	1	1	1	5	1
PG&E	511	Anti-sweat (humidistat) controls	40,000 sqft store	40,000 sqft store	6450	0	0	$6,450	1	12	1	1	$6,450	0.5	1	1	1	1	5	1
SCE	500	Base Refrigeration System	40,000 sqft store	40,000 sqft store	0	0	0	$0	1	10	0	0	$0	1	1	1	1	1	5	2
SCE	501	High-efficiency fan motors	40,000 sqft store	40,000 sqft store	46429	0	0	$46,429	1	16	1	1	$46,429	1	1	1	1	1	5	1
SCE	502	Strip curtains for walk-ins	40,000 sqft store	40,000 sqft store	1995	0	0	$1,995	1	4	1	1	$1,995	1	1	1	1	1	5	1
SCE	503	Night covers for display cases	linear ft. display	linear ft. display	9	0	0	$9	1	5	1	1	$9	0	1	1	1	1	5	1
SCE	504	Evaporator fan controller for MT walk-ins	controller	controller	300	0	0	$300	1	5	1	1	$300	0	1	1	1	1	5	1
SCE	505	Efficient compressor motor retrofit	40,000 sqft store	40,000 sqft store	3510	0	0	$3,510	1	10	1	1	$3,510	1	1	1	1	1	5	1
SCE	506	Compressor VSD retrofit	40,000 sqft store	40,000 sqft store	16200	0	0	$16,200	1	10	1	1	$16,200	0.5	1	1	1	1	5	1
SCE	507	Floating head pressure controls	40,000 sqft store	40,000 sqft store	4995	0	0	$4,995	1	14	1	1	$4,995	0	1	1	1	1	5	1
SCE	508	Refrigeration Commissioning	Ton of Load	Ton of Load	113	0	0	$113	1	3	1	1	$113	1	1	1	1	1	5	1
SCE	509	Demand Hot Gas Defrost	HP	HP	25	0	0	$25	1	10	1	1	$25	1	1	1	1	1	5	1
SCE	510	Demand Defrost Electric	HP	HP	25	0	0	$25	1	10	1	1	$25	1	1	1	1	1	5	1
SCE	511	Anti-sweat (humidistat) controls	40,000 sqft store	40,000 sqft store	6450	0	0	$6,450	1	12	1	1	$6,450	0.5	1	1	1	1	5	1
SDG&E	500	Base Refrigeration System	40,000 sqft store	40,000 sqft store	0	0	0	$0	1	10	0	0	$0	1	1	1	1	1	5	2
SDG&E	501	High-efficiency fan motors	40,000 sqft store	40,000 sqft store	46429	0	0	$46,429	1	16	1	1	$46,429	1	1	1	1	1	5	1
SDG&E	502	Strip curtains for walk-ins	40,000 sqft store	40,000 sqft store	1995	0	0	$1,995	1	4	1	1	$1,995	1	1	1	1	1	5	1
SDG&E	503	Night covers for display cases	linear ft. display	linear ft. display	9	0	0	$9	1	5	1	1	$9	0	1	1	1	1	5	1
SDG&E	504	Evaporator fan controller for MT walk-ins	controller	controller	300	0	0	$300	1	5	1	1	$300	0	1	1	1	1	5	1
SDG&E	505	Efficient compressor motor retrofit	40,000 sqft store	40,000 sqft store	3510	0	0	$3,510	1	10	1	1	$3,510	1	1	1	1	1	5	1
SDG&E	506	Compressor VSD retrofit	40,000 sqft store	40,000 sqft store	16200	0	0	$16,200	1	10	1	1	$16,200	0.5	1	1	1	1	5	1
SDG&E	507	Floating head pressure controls	40,000 sqft store	40,000 sqft store	4995	0	0	$4,995	1	14	1	1	$4,995	0	1	1	1	1	5	1
SDG&E	508	Refrigeration Commissioning	Ton of Load	Ton of Load	113	0	0	$113	1	3	1	1	$113	1	1	1	1	1	5	1
SDG&E	509	Demand Hot Gas Defrost	HP	HP	25	0	0	$25	1	10	1	1	$25	1	1	1	1	1	5	1
SDG&E	510	Demand Defrost Electric	HP	HP	25	0	0	$25	1	10	1	1	$25	1	1	1	1	1	5	1
SDG&E	511	Anti-sweat (humidistat) controls	40,000 sqft store	40,000 sqft store	6450	0	0	$6,450	1	12	1	1	$6,450	0.5	1	1	1	1	5	1

MEASURE COSTS

Utility	Measure#	Measure Description	Savings Units	Cost Unit	Unit Equipment Cost	Unit Labor Cost	NPV of Lifetime O & M Cost	Implementation Cost Factor	Cost per Savings Unit	Service Life	Full = 1 Incr. = 0 Initial Cost	Full = 1 Incr. = 0 Replace Cost	Full Unit Cost	Relative Energy Reduction Factors SP	SPP	SOP	WPP	WOP	End Use	Implementation Type 1=1 time 2=turnover
PG&E	610	Desktop PC - Base	PC	PC	0	0	0	$0	1	4	0	0	$0	1	1	1	1	1	6	1
PG&E	611	Power Management Enabling	PC	PC	0	14	0	$14	1	4	1	0	$14	0.67	0.94	1.29	0.82	1.29	6	1
PG&E	620	Display Monitor	Monitor	Monitor	100	0	0	$100	1	4	0	0	$100	1	1	1	1	1	6	1
PG&E	621	Purchase LCD monitor	Monitor	Monitor	800		0	$800	1	4	0	0	$800	1.04	1.00	0.94	1.02	0.94	6	1
PG&E	622	Power Management Enabling	Monitor	Monitor		8	0	$8	1	4	1	1	$8	0.66	0.94	1.32	0.81	1.32	6	1
PG&E	623	Network Power Management Enabling	Monitor	Monitor		4	0	$4	1	4	1	1	$4	0.66	0.94	1.32	0.81	1.32	6	1
PG&E	624	External hardware control	Monitor	Monitor	62	33	0	$95	1	4	1	1	$95	0.66	0.94	1.32	0.81	1.32	6	1
PG&E	630	Copier	Copier	Copier				$0	1	4	0	0	$0	1	1	1	1	1	6	1
PG&E	631	Power Management Enabling	Copier	Copier		45	0	$45	1	4	1	1	$45	0.47	0.80	1.24	0.65	1.24	6	1
PG&E	640	Laser Printer	Printer	Printer			0	$0	1	4	0	0	$0	1	1	1	1	1	6	1
PG&E	641	External hardware control	Printer	Printer	140	33	0	$173	1	4	1	1	$173	0	0.75	1.75	0.40	1.75	6	1
PG&E	642	Nighttime shutdown	Printer	Printer			556.67	$0	1	4	1	1	$557	0	0.75	1.75	0.40	1.75	6	1
SCE	610	Desktop PC - Base	PC	PC			0	$0	1	4	0	0	$0	1	1	1	1	1	6	1
SCE	611	Power Management Enabling	PC	PC		14	0	$14	1	4	1	0	$14	0.67	0.94	1.29	0.82	1.29	6	1
SCE	620	Display Monitor	Monitor	Monitor	100		0	$100	1	4	0	0	$100	1	1	1	1	1	6	1
SCE	621	Purchase LCD monitor	Monitor	Monitor	800		0	$800	1	4	0	0	$800	1.04	1.00	0.94	1.02	0.94	6	1
SCE	622	Power Management Enabling	Monitor	Monitor		8	0	$8	1	4	1	1	$8	0.66	0.94	1.32	0.81	1.32	6	1
SCE	623	Network Power Management Enabling	Monitor	Monitor		4	0	$4	1	4	1	1	$4	0.66	0.94	1.32	0.81	1.32	6	1
SCE	624	External hardware control	Monitor	Monitor	62	33	0	$95	1	4	1	1	$95	0.66	0.94	1.32	0.81	1.32	6	1
SCE	630	Copier	Copier	Copier				$0	1	4	0	0	$0	1	1	1	1	1	6	1
SCE	631	Power Management Enabling	Copier	Copier		45	0	$45	1	4	1	1	$45	0.47	0.80	1.24	0.65	1.24	6	1
SCE	640	Laser Printer	Printer	Printer			0	$0	1	4	0	0	$0	1	1	1	1	1	6	1
SCE	641	External hardware control	Printer	Printer	140	33	0	$173	1	4	1	1	$173	0	0.75	1.75	0.40	1.75	6	1
SCE	642	Nighttime shutdown	Printer	Printer			556.67	$0	1	4	1	1	$557	0	0.75	1.75	0.40	1.75	6	1
SDG&E	610	Desktop PC - Base	PC	PC			0	$0	1	4	0	0	$0	1	1	1	1	1	6	1
SDG&E	611	Power Management Enabling	PC	PC		14	0	$14	1	4	1	0	$14	0.67	0.94	1.29	0.82	1.29	6	1
SDG&E	620	Display Monitor	Monitor	Monitor	100		0	$100	1	4	0	0	$100	1	1	1	1	1	6	1
SDG&E	621	Purchase LCD monitor	Monitor	Monitor	800		0	$800	1	4	0	0	$800	1.04	1.00	0.94	1.02	0.94	6	1
SDG&E	622	Power Management Enabling	Monitor	Monitor		8	0	$8	1	4	1	1	$8	0.66	0.94	1.32	0.81	1.32	6	1
SDG&E	623	Network Power Management Enabling	Monitor	Monitor		4	0	$4	1	4	1	1	$4	0.66	0.94	1.32	0.81	1.32	6	1
SDG&E	624	External hardware control	Monitor	Monitor	62	33	0	$95	1	4	1	1	$95	0.66	0.94	1.32	0.81	1.32	6	1
SDG&E	630	Copier	Copier	Copier				$0	1	4	0	0	$0	1	1	1	1	1	6	1
SDG&E	631	Power Management Enabling	Copier	Copier		45	0	$45	1	4	1	1	$45	0.467	0.7989	1.2415	0.6457	1.2415	6	1
SDG&E	640	Laser Printer	Printer	Printer			0	$0	1	4	0	0	$0	1	1	1	1	1	6	1
SDG&E	641	External hardware control	Printer	Printer	140	33	0	$173	1	4	1	1	$173	0	0.75	1.75	0.40	1.75	6	1
SDG&E	642	Nighttime shutdown	Printer	Printer			556.67	$0	1	4	1	1	$557	0	0.75	1.75	0.40	1.75	6	1

ENERGY SAVINGS

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG										
PG&E	111	ROB 4L4'T8, 1EB	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%
PG&E	112	ROB 2L4'T8, 1EB, Reflector	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%
PG&E	114	RET 4L4'T8, 1EB	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%
PG&E	115	RET 2L4'T8, 1EB, Reflector	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%
PG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	30%	20%	20%	20%	20%	20%	20%	20%	20%	20%
PG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
PG&E	119	RNV 2L4'T5HO, 1EB	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG										
PG&E	131	ROB 2L4'T8, 1EB	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%
PG&E	133	RET 2L4'T8, 1EB	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%
PG&E	134	RET 1L4'T8, 1EB, Reflector OEM	57%	57%	57%	57%	57%	57%	57%	57%	57%	57%
PG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	30%	20%	20%	20%	20%	20%	20%	20%	20%	20%
PG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
PG&E	138	RNV 1L4'T5HO, 1EB	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG										
PG&E	151	ROB 2L8'T12, 60W, 1EB	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%
PG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
PG&E	153	RET 2L8'T12, 60W, 1EB	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%
PG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
PG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	30%	20%	20%	20%	20%	20%	20%	20%	20%	20%
PG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
PG&E	165	Base Incandescent Flood, 75W										
PG&E	166	CFL Screw-in, Modular 18W	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%
PG&E	175	Base Incandescent Flood, 150W PAR										
PG&E	176	Halogen PAR Flood, 90W	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
PG&E	177	Metal Halide, 50W	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG										
SCE	111	ROB 4L4'T8, 1EB	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%
SCE	112	ROB 2L4'T8, 1EB, Reflector	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%
SCE	114	RET 4L4'T8, 1EB	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%
SCE	115	RET 2L4'T8, 1EB, Reflector	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%
SCE	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	30%	20%	20%	20%	20%	20%	20%	20%	20%	20%
SCE	118	Continuous Dimming, 5L4' Fluorescent Fixtures	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
SCE	119	RNV 2L4'T5HO, 1EB	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG										
SCE	131	ROB 2L4'T8, 1EB	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%
SCE	133	RET 2L4'T8, 1EB	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%
SCE	134	RET 1L4'T8, 1EB, Reflector OEM	57%	57%	57%	57%	57%	57%	57%	57%	57%	57%
SCE	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	30%	20%	20%	20%	20%	20%	20%	20%	20%	20%
SCE	137	Continuous Dimming, 10L4' Fluorescent Fixtures	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
SCE	138	RNV 1L4'T5HO, 1EB	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG										
SCE	151	ROB 2L8'T12, 60W, 1EB	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%
SCE	152	ROB 1L8'T12, 60W, 1EB, Reflector	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
SCE	153	RET 2L8'T12, 60W, 1EB	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%
SCE	154	RET 1L8'T12, 60W, 1EB, Reflector	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
SCE	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	30%	20%	20%	20%	20%	20%	20%	20%	20%	20%
SCE	156	Continuous Dimming, 5L8' Fluorescent Fixtures	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
SCE	165	Base Incandescent Flood, 75W										
SCE	166	CFL Screw-in, Modular 18W	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%
SCE	175	Base Incandescent Flood, 150W PAR										
SCE	176	Halogen PAR Flood, 90W	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
SCE	177	Metal Halide, 50W	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%

ENERGY SAVINGS

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG										
SDG&E	111	ROB 4L4'T8, 1EB	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%
SDG&E	112	ROB 2L4'T8, 1EB, Reflector	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%
SDG&E	114	RET 4L4'T8, 1EB	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%
SDG&E	115	RET 2L4'T8, 1EB, Reflector	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%
SDG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	30%	20%	20%	20%	20%	20%	20%	20%	20%	20%
SDG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
SDG&E	119	RNV 2L4'T5HO, 1EB	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG										
SDG&E	131	ROB 2L4'T8, 1EB	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%
SDG&E	133	RET 2L4'T8, 1EB	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%
SDG&E	134	RET 1L4'T8, 1EB, Reflector OEM	57%	57%	57%	57%	57%	57%	57%	57%	57%	57%
SDG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	30%	20%	20%	20%	20%	20%	20%	20%	20%	20%
SDG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
SDG&E	138	RNV 1L4'T5HO, 1EB	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG										
SDG&E	151	ROB 2L8'T12, 60W, 1EB	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%
SDG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
SDG&E	153	RET 2L8'T12, 60W, 1EB	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%
SDG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
SDG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	30%	20%	20%	20%	20%	20%	20%	20%	20%	20%
SDG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
SDG&E	165	Base Incandescent Flood, 75W										
SDG&E	166	CFL Screw-in, Modular 18W	72%	72%	72%	72%	72%	72%	72%	72%	72%	72%
SDG&E	175	Base Incandescent Flood, 150W PAR										
SDG&E	176	Halogen PAR Flood, 90W	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
SDG&E	177	Metal Halide, 50W	58%	58%	58%	58%	58%	58%	58%	58%	58%	58%
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG										
PG&E	211	RET 2L4'T8, 1EB	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%
PG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%
PG&E	220	Base Mercury Vapor 400W Lamp										
PG&E	221	High Pressure Sodium 250W Lamp	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%
PG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG										
SCE	211	RET 2L4'T8, 1EB	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%
SCE	212	Outdoor Lighting Controls (Photocell/Timeclock)	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%
SCE	220	Base Mercury Vapor 400W Lamp										
SCE	221	High Pressure Sodium 250W Lamp	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%
SCE	222	Outdoor Lighting Controls (Photocell/Timeclock)	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG										
SDG&E	211	RET 2L4'T8, 1EB	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%
SDG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%
SDG&E	220	Base Mercury Vapor 400W Lamp										
SDG&E	221	High Pressure Sodium 250W Lamp	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%
SDG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%

ENERGY SAVINGS

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons										
PG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%
PG&E	302	Window Film (Standard)	8%	10%	1%	7%	12%	3%	4%	1%	6%	1%
PG&E	303	EMS - Chiller	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
PG&E	304	Cool Roof - Chiller	2%	7%	8%	16%	17%	7%	1%	1%	0%	8%
PG&E	305	Chiller Tune Up/Diagnostics	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
PG&E	306	Cooling Circ. Pumps - VSD	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
PG&E	310	DX Packaged System, EER=10.3, 10 tons										
PG&E	311	DX Tune Up/ Advanced Diagnostics	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
PG&E	312	DX Packaged System, EER=10.9, 10 tons	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
PG&E	313	Window Film (Standard)	8%	10%	1%	7%	12%	3%	4%	1%	6%	1%
PG&E	314	Evaporative Pre-Cooler	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
PG&E	315	Prog. Thermostat - DX	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
PG&E	316	Cool Roof - DX	2%	7%	8%	16%	17%	7%	1%	1%	0%	8%
SCE	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons										
SCE	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%
SCE	302	Window Film (Standard)	9%	10%	2%	9%	12%	4%	4%	1%	7%	2%
SCE	303	EMS - Chiller	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
SCE	304	Cool Roof - Chiller	2%	7%	13%	15%	18%	6%	1%	1%	0%	13%
SCE	305	Chiller Tune Up/Diagnostics	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
SCE	306	Cooling Circ. Pumps - VSD	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
SCE	310	DX Packaged System, EER=10.3, 10 tons										
SCE	311	DX Tune Up/ Advanced Diagnostics	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
SCE	312	DX Packaged System, EER=10.9, 10 tons	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
SCE	313	Window Film (Standard)	9%	10%	2%	9%	12%	4%	4%	1%	7%	2%
SCE	314	Evaporative Pre-Cooler	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
SCE	315	Prog. Thermostat - DX	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
SCE	316	Cool Roof - DX	2%	7%	13%	15%	18%	6%	1%	1%	0%	13%
SDG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons										
SDG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%
SDG&E	302	Window Film (Standard)	9%	10%	2%	9%	12%	4%	4%	1%	7%	2%
SDG&E	303	EMS - Chiller	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
SDG&E	304	Cool Roof - Chiller	2%	7%	13%	15%	18%	6%	1%	1%	0%	13%
SDG&E	305	Chiller Tune Up/Diagnostics	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
SDG&E	306	Cooling Circ. Pumps - VSD	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
SDG&E	310	DX Packaged System, EER=10.3, 10 tons										
SDG&E	311	DX Tune Up/ Advanced Diagnostics	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
SDG&E	312	DX Packaged System, EER=10.9, 10 tons	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
SDG&E	313	Window Film (Standard)	9%	10%	2%	9%	12%	4%	4%	1%	7%	2%
SDG&E	314	Evaporative Pre-Cooler	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
SDG&E	315	Prog. Thermostat - DX	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
SDG&E	316	Cool Roof - DX	2%	7%	13%	15%	18%	6%	1%	1%	0%	13%
PG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%										
PG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
PG&E	402	Variable Speed Drive Control, 5 HP	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
PG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%										
PG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
PG&E	412	Variable Speed Drive Control, 15 HP	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
PG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%										
PG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
PG&E	422	Variable Speed Drive Control, 40 HP	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%

ENERGY SAVINGS

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
SCE	400	Base Fan Motor, 5hp, 1800rpm, 87.5%										
SCE	401	Fan Motor, 5hp, 1800rpm, 89.5%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
SCE	402	Variable Speed Drive Control, 5 HP	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
SCE	410	Base Fan Motor, 15hp, 1800rpm, 91.0%										
SCE	411	Fan Motor, 15hp, 1800rpm, 92.4%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
SCE	412	Variable Speed Drive Control, 15 HP	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
SCE	420	Base Fan Motor, 40hp, 1800rpm, 93.0%										
SCE	421	Fan Motor, 40hp, 1800rpm, 94.1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
SCE	422	Variable Speed Drive Control, 40 HP	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
SDG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%										
SDG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
SDG&E	402	Variable Speed Drive Control, 5 HP	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
SDG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%										
SDG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
SDG&E	412	Variable Speed Drive Control, 15 HP	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
SDG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%										
SDG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
SDG&E	422	Variable Speed Drive Control, 40 HP	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
PG&E	500	Base Refrigeration System										
PG&E	501	High-efficiency fan motors				12%						
PG&E	502	Strip curtains for walk-ins				4%						
PG&E	503	Night covers for display cases				6%						
PG&E	504	Evaporator fan controller for MT walk-ins				1%						
PG&E	505	Efficient compressor motor retrofit				7%						
PG&E	506	Compressor VSD retrofit				6%						
PG&E	507	Floating head pressure controls				7%						
PG&E	508	Refrigeration Commissioning				5%						
PG&E	509	Demand Hot Gas Defrost				3%						
PG&E	510	Demand Defrost Electric				8%						
PG&E	511	Anti-sweat (humidistat) controls				5%						
SCE	500	Base Refrigeration System										
SCE	501	High-efficiency fan motors				12%						
SCE	502	Strip curtains for walk-ins				4%						
SCE	503	Night covers for display cases				6%						
SCE	504	Evaporator fan controller for MT walk-ins				1%						
SCE	505	Efficient compressor motor retrofit				7%						
SCE	506	Compressor VSD retrofit				6%						
SCE	507	Floating head pressure controls				7%						
SCE	508	Refrigeration Commissioning				5%						
SCE	509	Demand Hot Gas Defrost				3%						
SCE	510	Demand Defrost Electric				8%						
SCE	511	Anti-sweat (humidistat) controls				5%						
SDG&E	500	Base Refrigeration System										
SDG&E	501	High-efficiency fan motors				12%						
SDG&E	502	Strip curtains for walk-ins				4%						
SDG&E	503	Night covers for display cases				6%						
SDG&E	504	Evaporator fan controller for MT walk-ins				1%						
SDG&E	505	Efficient compressor motor retrofit				7%						
SDG&E	506	Compressor VSD retrofit				6%						
SDG&E	507	Floating head pressure controls				7%						
SDG&E	508	Refrigeration Commissioning				5%						
SDG&E	509	Demand Hot Gas Defrost				3%						
SDG&E	510	Demand Defrost Electric				8%						
SDG&E	511	Anti-sweat (humidistat) controls				5%						

ENERGY SAVINGS

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	610	Desktop PC - Base										
PG&E	611	Power Management Enabling	41%	41%	41%	41%	41%	41%	41%	41%	41%	41%
PG&E	620	Display Monitor	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PG&E	621	Purchase LCD monitor	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
PG&E	622	Power Management Enabling	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%
PG&E	623	Network Power Management Enabling	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%
PG&E	624	External hardware control	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%
PG&E	630	Copier	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PG&E	631	Power Management Enabling	64%	64%	64%	64%	64%	64%	64%	64%	64%	64%
PG&E	640	Laser Printer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PG&E	641	External hardware control	54%	54%	54%	54%	54%	54%	54%	54%	54%	54%
PG&E	642	Nighttime shutdown	54%	54%	54%	54%	54%	54%	54%	54%	54%	54%
SCE	610	Desktop PC - Base	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SCE	611	Power Management Enabling	41%	41%	41%	41%	41%	41%	41%	41%	41%	41%
SCE	620	Display Monitor										
SCE	621	Purchase LCD monitor	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
SCE	622	Power Management Enabling	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%
SCE	623	Network Power Management Enabling	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%
SCE	624	External hardware control	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%
SCE	630	Copier	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SCE	631	Power Management Enabling	64%	64%	64%	64%	64%	64%	64%	64%	64%	64%
SCE	640	Laser Printer	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
SCE	641	External hardware control	54%	54%	54%	54%	54%	54%	54%	54%	54%	54%
SCE	642	Nighttime shutdown	54%	54%	54%	54%	54%	54%	54%	54%	54%	54%
SDG&E	610	Desktop PC - Base										
SDG&E	611	Power Management Enabling	41%	41%	41%	41%	41%	41%	41%	41%	41%	41%
SDG&E	620	Display Monitor										
SDG&E	621	Purchase LCD monitor	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
SDG&E	622	Power Management Enabling	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%
SDG&E	623	Network Power Management Enabling	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%
SDG&E	624	External hardware control	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%
SDG&E	630	Copier										
SDG&E	631	Power Management Enabling	64%	64%	64%	64%	64%	64%	64%	64%	64%	64%
SDG&E	640	Laser Printer										
SDG&E	641	External hardware control	54%	54%	54%	54%	54%	54%	54%	54%	54%	54%
SDG&E	642	Nighttime shutdown	54%	54%	54%	54%	54%	54%	54%	54%	54%	54%

APPLICABILITY FACTOR

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	46%	20%	33%	19%	13%	26%	30%	42%	2%	21%
PG&E	111	ROB 4L4'T8, 1EB	46%	20%	33%	19%	13%	26%	30%	42%	2%	21%
PG&E	112	ROB 2L4'T8, 1EB, Reflector	46%	20%	33%	19%	13%	26%	30%	42%	2%	21%
PG&E	114	RET 4L4'T8, 1EB	46%	20%	33%	19%	13%	26%	30%	42%	2%	21%
PG&E	115	RET 2L4'T8, 1EB, Reflector	46%	20%	33%	19%	13%	26%	30%	42%	2%	21%
PG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	46%	20%	33%	19%	13%	26%	30%	42%	2%	21%
PG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	46%	20%	33%	19%	13%	26%	30%	42%	2%	21%
PG&E	119	RNV 2L4'T5HO, 1EB	46%	20%	33%	19%	13%	26%	30%	42%	2%	21%
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	48%	36%	31%	43%	8%	50%	55%	50%	59%	34%
PG&E	131	ROB 2L4'T8, 1EB	48%	36%	31%	43%	8%	50%	55%	50%	59%	34%
PG&E	133	RET 2L4'T8, 1EB	48%	36%	31%	43%	8%	50%	55%	50%	59%	34%
PG&E	134	RET 1L4'T8, 1EB, Reflector OEM	48%	36%	31%	43%	8%	50%	55%	50%	59%	34%
PG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	48%	36%	31%	43%	8%	50%	55%	50%	59%	34%
PG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	48%	36%	31%	43%	8%	50%	55%	50%	59%	34%
PG&E	138	RNV 1L4'T5HO, 1EB	48%	36%	31%	43%	8%	50%	55%	50%	59%	34%
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	3%	11%	23%	35%	46%	18%	4%	2%	1%	25%
PG&E	151	ROB 2L8'T12, 60W, 1EB	3%	11%	23%	35%	46%	18%	4%	2%	1%	25%
PG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	3%	11%	23%	35%	46%	18%	4%	2%	1%	25%
PG&E	153	RET 2L8'T12, 60W, 1EB	3%	11%	23%	35%	46%	18%	4%	2%	1%	25%
PG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	3%	11%	23%	35%	46%	18%	4%	2%	1%	25%
PG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	3%	11%	23%	35%	46%	18%	4%	2%	1%	25%
PG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	3%	11%	23%	35%	46%	18%	4%	2%	1%	25%
PG&E	165	Base Incandescent Flood, 75W	1%	20%	4%	1%	1%	1%	1%	3%	34%	4%
PG&E	166	CFL Screw-in, Modular 18W	1%	20%	4%	1%	1%	1%	1%	3%	34%	4%
PG&E	175	Base Incandescent Flood, 150W PAR	0%	1%	2%	1%	3%	1%	0%	1%	4%	2%
PG&E	176	Halogen PAR Flood, 90W	0%	1%	2%	1%	3%	1%	0%	1%	4%	2%
PG&E	177	Metal Halide, 50W	0%	1%	2%	1%	3%	1%	0%	1%	4%	2%
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	50%	19%	24%	12%	20%	29%	33%	30%	2%	23%
SCE	111	ROB 4L4'T8, 1EB	50%	19%	24%	12%	20%	29%	33%	30%	2%	23%
SCE	112	ROB 2L4'T8, 1EB, Reflector	50%	19%	24%	12%	20%	29%	33%	30%	2%	23%
SCE	114	RET 4L4'T8, 1EB	50%	19%	24%	12%	20%	29%	33%	30%	2%	23%
SCE	115	RET 2L4'T8, 1EB, Reflector	50%	19%	24%	12%	20%	29%	33%	30%	2%	23%
SCE	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	50%	19%	24%	12%	20%	29%	33%	30%	2%	23%
SCE	118	Continuous Dimming, 5L4' Fluorescent Fixtures	50%	19%	24%	12%	20%	29%	33%	30%	2%	23%
SCE	119	RNV 2L4'T5HO, 1EB	50%	19%	24%	12%	20%	29%	33%	30%	2%	23%
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	37%	14%	14%	25%	11%	53%	51%	66%	51%	31%
SCE	131	ROB 2L4'T8, 1EB	37%	14%	14%	25%	11%	53%	51%	66%	51%	31%
SCE	133	RET 2L4'T8, 1EB	37%	14%	14%	25%	11%	53%	51%	66%	51%	31%
SCE	134	RET 1L4'T8, 1EB, Reflector OEM	37%	14%	14%	25%	11%	53%	51%	66%	51%	31%
SCE	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	37%	14%	14%	25%	11%	53%	51%	66%	51%	31%
SCE	137	Continuous Dimming, 10L4' Fluorescent Fixtures	37%	14%	14%	25%	11%	53%	51%	66%	51%	31%
SCE	138	RNV 1L4'T5HO, 1EB	37%	14%	14%	25%	11%	53%	51%	66%	51%	31%
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	11%	44%	57%	60%	39%	16%	6%	2%	3%	25%
SCE	151	ROB 2L8'T12, 60W, 1EB	11%	44%	57%	60%	39%	16%	6%	2%	3%	25%
SCE	152	ROB 1L8'T12, 60W, 1EB, Reflector	11%	44%	57%	60%	39%	16%	6%	2%	3%	25%
SCE	153	RET 2L8'T12, 60W, 1EB	11%	44%	57%	60%	39%	16%	6%	2%	3%	25%
SCE	154	RET 1L8'T12, 60W, 1EB, Reflector	11%	44%	57%	60%	39%	16%	6%	2%	3%	25%
SCE	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	11%	44%	57%	60%	39%	16%	6%	2%	3%	25%
SCE	156	Continuous Dimming, 5L8' Fluorescent Fixtures	11%	44%	57%	60%	39%	16%	6%	2%	3%	25%
SCE	165	Base Incandescent Flood, 75W	1%	19%	2%	0%	0%	1%	3%	2%	38%	5%
SCE	166	CFL Screw-in, Modular 18W	1%	19%	2%	0%	0%	1%	3%	2%	38%	5%
SCE	175	Base Incandescent Flood, 150W PAR	0%	3%	1%	2%	3%	1%	0%	0%	4%	3%
SCE	176	Halogen PAR Flood, 90W	0%	3%	1%	2%	3%	1%	0%	0%	4%	3%
SCE	177	Metal Halide, 50W	0%	3%	1%	2%	3%	1%	0%	0%	4%	3%

APPLICABILITY FACTOR

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	45%	11%	41%	6%	17%	34%	25%	29%	2%	14%
SDG&E	111	ROB 4L4'T8, 1EB	45%	11%	41%	6%	17%	34%	25%	29%	2%	14%
SDG&E	112	ROB 2L4'T8, 1EB, Reflector	45%	11%	41%	6%	17%	34%	25%	29%	2%	14%
SDG&E	114	RET 4L4'T8, 1EB	45%	11%	41%	6%	17%	34%	25%	29%	2%	14%
SDG&E	115	RET 2L4'T8, 1EB, Reflector	45%	11%	41%	6%	17%	34%	25%	29%	2%	14%
SDG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	45%	11%	41%	6%	17%	34%	25%	29%	2%	14%
SDG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	45%	11%	41%	6%	17%	34%	25%	29%	2%	14%
SDG&E	119	RNV 2L4'T5HO, 1EB	45%	11%	41%	6%	17%	34%	25%	29%	2%	14%
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	41%	13%	17%	26%	9%	54%	34%	48%	55%	31%
SDG&E	131	ROB 2L4'T8, 1EB	41%	13%	17%	26%	9%	54%	34%	48%	55%	31%
SDG&E	133	RET 2L4'T8, 1EB	41%	13%	17%	26%	9%	54%	34%	48%	55%	31%
SDG&E	134	RET 1L4'T8, 1EB, Reflector OEM	41%	13%	17%	26%	9%	54%	34%	48%	55%	31%
SDG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	41%	13%	17%	26%	9%	54%	34%	48%	55%	31%
SDG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	41%	13%	17%	26%	9%	54%	34%	48%	55%	31%
SDG&E	138	RNV 1L4'T5HO, 1EB	41%	13%	17%	26%	9%	54%	34%	48%	55%	31%
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	3%	9%	24%	62%	42%	4%	33%	0%	2%	26%
SDG&E	151	ROB 2L8'T12, 60W, 1EB	3%	9%	24%	62%	42%	4%	33%	0%	2%	26%
SDG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	3%	9%	24%	62%	42%	4%	33%	0%	2%	26%
SDG&E	153	RET 2L8'T12, 60W, 1EB	3%	9%	24%	62%	42%	4%	33%	0%	2%	26%
SDG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	3%	9%	24%	62%	42%	4%	33%	0%	2%	26%
SDG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	3%	9%	24%	62%	42%	4%	33%	0%	2%	26%
SDG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	3%	9%	24%	62%	42%	4%	33%	0%	2%	26%
SDG&E	165	Base Incandescent Flood, 75W	2%	2%	0%	1%	1%	0%	1%	1%	36%	1%
SDG&E	166	CFL Screw-in, Modular 18W	2%	2%	0%	1%	1%	0%	1%	1%	36%	1%
SDG&E	175	Base Incandescent Flood, 150W PAR	3%	54%	9%	2%	3%	1%	6%	16%	4%	11%
SDG&E	176	Halogen PAR Flood, 90W	3%	54%	9%	2%	3%	1%	6%	16%	4%	11%
SDG&E	177	Metal Halide, 50W	3%	54%	9%	2%	3%	1%	6%	16%	4%	11%
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	14%	27%	25%	36%	2%	11%	1%	9%	32%	7%
PG&E	211	RET 2L4'T8, 1EB	14%	27%	25%	36%	2%	11%	1%	9%	32%	7%
PG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	14%	27%	25%	36%	2%	11%	1%	9%	32%	7%
PG&E	220	Base Mercury Vapor 400W Lamp	85%	59%	70%	62%	98%	89%	99%	91%	67%	93%
PG&E	221	High Pressure Sodium 250W Lamp	85%	59%	70%	62%	98%	89%	99%	91%	67%	93%
PG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	85%	59%	70%	62%	98%	89%	99%	91%	67%	93%
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	8%	63%	43%	16%	4%	1%	7%	9%	14%	1%
SCE	211	RET 2L4'T8, 1EB	8%	63%	43%	16%	4%	1%	7%	9%	14%	1%
SCE	212	Outdoor Lighting Controls (Photocell/Timeclock)	8%	63%	43%	16%	4%	1%	7%	9%	14%	1%
SCE	220	Base Mercury Vapor 400W Lamp	92%	37%	57%	84%	96%	99%	93%	91%	86%	99%
SCE	221	High Pressure Sodium 250W Lamp	92%	37%	57%	84%	96%	99%	93%	91%	86%	99%
SCE	222	Outdoor Lighting Controls (Photocell/Timeclock)	92%	37%	57%	84%	96%	99%	93%	91%	86%	99%
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	15%	12%	6%	23%	18%	2%	2%	6%	7%	3%
SDG&E	211	RET 2L4'T8, 1EB	15%	12%	6%	23%	18%	2%	2%	6%	7%	3%
SDG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	15%	12%	6%	23%	18%	2%	2%	6%	7%	3%
SDG&E	220	Base Mercury Vapor 400W Lamp	79%	65%	92%	66%	82%	98%	98%	94%	86%	96%
SDG&E	221	High Pressure Sodium 250W Lamp	79%	65%	92%	66%	82%	98%	98%	94%	86%	96%
SDG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	79%	65%	92%	66%	82%	98%	98%	94%	86%	96%

APPLICABILITY FACTOR

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	57%	1%	27%	3%	9%	26%	69%	67%	72%	14%
PG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	57%	1%	27%	3%	9%	26%	69%	67%	72%	14%
PG&E	302	Window Film (Standard)	57%	1%	27%	3%	9%	26%	69%	67%	72%	14%
PG&E	303	EMS - Chiller	57%	1%	27%	3%	9%	26%	69%	67%	72%	14%
PG&E	304	Cool Roof - Chiller	57%	1%	27%	3%	9%	26%	69%	67%	72%	14%
PG&E	305	Chiller Tune Up/Diagnostics	57%	1%	27%	3%	9%	26%	69%	67%	72%	14%
PG&E	306	Cooling Circ. Pumps - VSD	57%	1%	27%	3%	9%	26%	69%	67%	72%	14%
PG&E	310	DX Packaged System, EER=10.3, 10 tons	28%	79%	38%	68%	24%	20%	13%	25%	5%	40%
PG&E	311	DX Tune Up/ Advanced Diagnostics	28%	79%	38%	68%	24%	20%	13%	25%	5%	40%
PG&E	312	DX Packaged System, EER=10.9, 10 tons	28%	79%	38%	68%	24%	20%	13%	25%	5%	40%
PG&E	313	Window Film (Standard)	28%	79%	38%	68%	24%	20%	13%	25%	5%	40%
PG&E	314	Evaporative Pre-Cooler	28%	79%	38%	68%	24%	20%	13%	25%	5%	40%
PG&E	315	Prog. Thermostat - DX	28%	79%	38%	68%	24%	20%	13%	25%	5%	40%
PG&E	316	Cool Roof - DX	28%	79%	38%	68%	24%	20%	13%	25%	5%	40%
SCE	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	26%	1%	13%	8%	0%	9%	65%	72%	25%	21%
SCE	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	26%	1%	13%	8%	0%	9%	65%	72%	25%	21%
SCE	302	Window Film (Standard)	26%	1%	13%	8%	0%	9%	65%	72%	25%	21%
SCE	303	EMS - Chiller	26%	1%	13%	8%	0%	9%	65%	72%	25%	21%
SCE	304	Cool Roof - Chiller	26%	1%	13%	8%	0%	9%	65%	72%	25%	21%
SCE	305	Chiller Tune Up/Diagnostics	26%	1%	13%	8%	0%	9%	65%	72%	25%	21%
SCE	306	Cooling Circ. Pumps - VSD	26%	1%	13%	8%	0%	9%	65%	72%	25%	21%
SCE	310	DX Packaged System, EER=10.3, 10 tons	60%	74%	53%	62%	19%	52%	12%	19%	62%	41%
SCE	311	DX Tune Up/ Advanced Diagnostics	60%	74%	53%	62%	19%	52%	12%	19%	62%	41%
SCE	312	DX Packaged System, EER=10.9, 10 tons	60%	74%	53%	62%	19%	52%	12%	19%	62%	41%
SCE	313	Window Film (Standard)	60%	74%	53%	62%	19%	52%	12%	19%	62%	41%
SCE	314	Evaporative Pre-Cooler	60%	74%	53%	62%	19%	52%	12%	19%	62%	41%
SCE	315	Prog. Thermostat - DX	60%	74%	53%	62%	19%	52%	12%	19%	62%	41%
SCE	316	Cool Roof - DX	60%	74%	53%	62%	19%	52%	12%	19%	62%	41%
SDG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	18%	0%	26%	22%	0%	15%	17%	36%	5%	8%
SDG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	18%	0%	26%	22%	0%	15%	17%	36%	5%	8%
SDG&E	302	Window Film (Standard)	18%	0%	26%	22%	0%	15%	17%	36%	5%	8%
SDG&E	303	EMS - Chiller	18%	0%	26%	22%	0%	15%	17%	36%	5%	8%
SDG&E	304	Cool Roof - Chiller	18%	0%	26%	22%	0%	15%	17%	36%	5%	8%
SDG&E	305	Chiller Tune Up/Diagnostics	18%	0%	26%	22%	0%	15%	17%	36%	5%	8%
SDG&E	306	Cooling Circ. Pumps - VSD	18%	0%	26%	22%	0%	15%	17%	36%	5%	8%
SDG&E	310	DX Packaged System, EER=10.3, 10 tons	49%	74%	48%	33%	28%	52%	51%	47%	85%	48%
SDG&E	311	DX Tune Up/ Advanced Diagnostics	49%	74%	48%	33%	28%	52%	51%	47%	85%	48%
SDG&E	312	DX Packaged System, EER=10.9, 10 tons	49%	74%	48%	33%	28%	52%	51%	47%	85%	48%
SDG&E	313	Window Film (Standard)	49%	74%	48%	33%	28%	52%	51%	47%	85%	48%
SDG&E	314	Evaporative Pre-Cooler	49%	74%	48%	33%	28%	52%	51%	47%	85%	48%
SDG&E	315	Prog. Thermostat - DX	49%	74%	48%	33%	28%	52%	51%	47%	85%	48%
SDG&E	316	Cool Roof - DX	49%	74%	48%	33%	28%	52%	51%	47%	85%	48%
PG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	19%	76%	42%	42%	38%	43%	41%	36%	62%	53%
PG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	19%	76%	42%	42%	38%	43%	41%	36%	62%	53%
PG&E	402	Variable Speed Drive Control, 5 HP	19%	76%	42%	42%	38%	43%	41%	36%	62%	53%
PG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	24%	0%	17%	41%	12%	12%	29%	35%	16%	19%
PG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	24%	0%	17%	41%	12%	12%	29%	35%	16%	19%
PG&E	412	Variable Speed Drive Control, 15 HP	24%	0%	17%	41%	12%	12%	29%	35%	16%	19%
PG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	47%	0%	14%	0%	0%	0%	11%	25%	6%	5%
PG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	47%	0%	14%	0%	0%	0%	11%	25%	6%	5%
PG&E	422	Variable Speed Drive Control, 40 HP	47%	0%	14%	0%	0%	0%	11%	25%	6%	5%

APPLICABILITY FACTOR

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
SCE	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	20%	99%	56%	51%	25%	78%	51%	37%	73%	53%
SCE	401	Fan Motor, 5hp, 1800rpm, 89.5%	20%	99%	56%	51%	25%	78%	51%	37%	73%	53%
SCE	402	Variable Speed Drive Control, 5 HP	20%	99%	56%	51%	25%	78%	51%	37%	73%	53%
SCE	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	25%	0%	22%	49%	8%	21%	35%	37%	19%	19%
SCE	411	Fan Motor, 15hp, 1800rpm, 92.4%	25%	0%	22%	49%	8%	21%	35%	37%	19%	19%
SCE	412	Variable Speed Drive Control, 15 HP	25%	0%	22%	49%	8%	21%	35%	37%	19%	19%
SCE	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	50%	0%	19%	0%	0%	0%	13%	26%	7%	5%
SCE	421	Fan Motor, 40hp, 1800rpm, 94.1%	50%	0%	19%	0%	0%	0%	13%	26%	7%	5%
SCE	422	Variable Speed Drive Control, 40 HP	50%	0%	19%	0%	0%	0%	13%	26%	7%	5%
SDG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	20%	99%	56%	51%	25%	78%	51%	37%	73%	53%
SDG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	20%	99%	56%	51%	25%	78%	51%	37%	73%	53%
SDG&E	402	Variable Speed Drive Control, 5 HP	20%	99%	56%	51%	25%	78%	51%	37%	73%	53%
SDG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	25%	0%	22%	49%	8%	21%	35%	37%	19%	19%
SDG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	25%	0%	22%	49%	8%	21%	35%	37%	19%	19%
SDG&E	412	Variable Speed Drive Control, 15 HP	25%	0%	22%	49%	8%	21%	35%	37%	19%	19%
SDG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	50%	0%	19%	0%	0%	0%	13%	26%	7%	5%
SDG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	50%	0%	19%	0%	0%	0%	13%	26%	7%	5%
SDG&E	422	Variable Speed Drive Control, 40 HP	50%	0%	19%	0%	0%	0%	13%	26%	7%	5%
PG&E	400	Base Refrigeration System				100.0%						
PG&E	501	High-efficiency fan motors				100.0%						
PG&E	502	Strip curtains for walk-ins				100.0%						
PG&E	503	Night covers for display cases				100.0%						
PG&E	504	Evaporator fan controller for MT walk-ins				100.0%						
PG&E	505	Efficient compressor motor retrofit				100.0%						
PG&E	506	Compressor VSD retrofit				100.0%						
PG&E	507	Floating head pressure controls				100.0%						
PG&E	508	Refrigeration Commissioning				100.0%						
PG&E	509	Demand Hot Gas Defrost				95.9%						
PG&E	510	Demand Defrost Electric				95.9%						
PG&E	511	Anti-sweat (humidistat) controls				100.0%						
SCE	400	Base Refrigeration System				100.0%						
SCE	501	High-efficiency fan motors				100.0%						
SCE	502	Strip curtains for walk-ins				100.0%						
SCE	503	Night covers for display cases				100.0%						
SCE	504	Evaporator fan controller for MT walk-ins				100.0%						
SCE	505	Efficient compressor motor retrofit				100.0%						
SCE	506	Compressor VSD retrofit				100.0%						
SCE	507	Floating head pressure controls				100.0%						
SCE	508	Refrigeration Commissioning				100.0%						
SCE	509	Demand Hot Gas Defrost				95.9%						
SCE	510	Demand Defrost Electric				95.9%						
SCE	511	Anti-sweat (humidistat) controls				100.0%						
SDG&E	400	Base Refrigeration System				100.0%						
SDG&E	501	High-efficiency fan motors				100.0%						
SDG&E	502	Strip curtains for walk-ins				100.0%						
SDG&E	503	Night covers for display cases				100.0%						
SDG&E	504	Evaporator fan controller for MT walk-ins				100.0%						
SDG&E	505	Efficient compressor motor retrofit				100.0%						
SDG&E	506	Compressor VSD retrofit				100.0%						
SDG&E	507	Floating head pressure controls				100.0%						
SDG&E	508	Refrigeration Commissioning				100.0%						
SDG&E	509	Demand Hot Gas Defrost				95.9%						
SDG&E	510	Demand Defrost Electric				95.9%						
SDG&E	511	Anti-sweat (humidistat) controls				100.0%						

APPLICABILITY FACTOR

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	610	Desktop PC - Base	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
PG&E	611	Power Management Enabling	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
PG&E	620	Display Monitor	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
PG&E	621	Purchase LCD monitor	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
PG&E	622	Power Management Enabling	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
PG&E	623	Network Power Management Enabling	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
PG&E	624	External hardware control	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
PG&E	630	Copier	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
PG&E	631	Power Management Enabling	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
PG&E	640	Laser Printer	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
PG&E	641	External hardware control	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
PG&E	642	Nighttime shutdown	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SCE	610	Desktop PC - Base	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SCE	611	Power Management Enabling	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SCE	620	Display Monitor	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SCE	621	Purchase LCD monitor	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SCE	622	Power Management Enabling	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SCE	623	Network Power Management Enabling	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SCE	624	External hardware control	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SCE	630	Copier	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SCE	631	Power Management Enabling	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SCE	640	Laser Printer	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SCE	641	External hardware control	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SCE	642	Nighttime shutdown	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SDG&E	610	Desktop PC - Base	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SDG&E	611	Power Management Enabling	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SDG&E	620	Display Monitor	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SDG&E	621	Purchase LCD monitor	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SDG&E	622	Power Management Enabling	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SDG&E	623	Network Power Management Enabling	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SDG&E	624	External hardware control	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SDG&E	630	Copier	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SDG&E	631	Power Management Enabling	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SDG&E	640	Laser Printer	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SDG&E	641	External hardware control	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SDG&E	642	Nighttime shutdown	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

INCOMPLETE FACTOR

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	111	ROB 4L4'T8, 1EB	40%	90%	35%	20%	76%	21%	42%	46%	62%	58%
PG&E	112	ROB 2L4'T8, 1EB, Reflector	40%	90%	35%	20%	76%	21%	42%	46%	62%	58%
PG&E	114	RET 4L4'T8, 1EB	40%	90%	35%	20%	76%	21%	42%	46%	62%	58%
PG&E	115	RET 2L4'T8, 1EB, Reflector	40%	90%	35%	20%	76%	21%	42%	46%	62%	58%
PG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	86%	100%	100%	100%	98%	87%	97%	100%	100%	100%
PG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
PG&E	119	RNV 2L4'T5HO, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	131	ROB 2L4'T8, 1EB	41%	90%	36%	20%	76%	22%	43%	46%	63%	58%
PG&E	133	RET 2L4'T8, 1EB	41%	90%	36%	20%	76%	22%	43%	46%	63%	58%
PG&E	134	RET 1L4'T8, 1EB, Reflector OEM	41%	90%	36%	20%	76%	22%	43%	46%	63%	58%
PG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	87%	100%	100%	100%	98%	87%	97%	100%	100%	100%
PG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
PG&E	138	RNV 1L4'T5HO, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	151	ROB 2L8'T12, 60W, 1EB	93%	100%	67%	52%	57%	24%	63%	100%	100%	91%
PG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	93%	100%	67%	52%	57%	24%	63%	100%	100%	91%
PG&E	153	RET 2L8'T12, 60W, 1EB	93%	100%	67%	52%	57%	24%	63%	100%	100%	91%
PG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	93%	100%	67%	52%	57%	24%	63%	100%	100%	91%
PG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	87%	100%	100%	100%	98%	87%	97%	100%	100%	100%
PG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
PG&E	165	Base Incandescent Flood, 75W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	166	CFL Screw-in, Modular 18W	20%	20%	28%	72%	69%	20%	20%	29%	45%	71%
PG&E	175	Base Incandescent Flood, 150W PAR	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	176	Halogen PAR Flood, 90W	15%	30%	24%	20%	98%	100%	20%	100%	93%	90%
PG&E	177	Metal Halide, 50W	15%	30%	24%	20%	98%	100%	20%	100%	93%	90%
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	111	ROB 4L4'T8, 1EB	40%	90%	35%	20%	76%	21%	42%	46%	62%	58%
SCE	112	ROB 2L4'T8, 1EB, Reflector	40%	90%	35%	20%	76%	21%	42%	46%	62%	58%
SCE	114	RET 4L4'T8, 1EB	40%	90%	35%	20%	76%	21%	42%	46%	62%	58%
SCE	115	RET 2L4'T8, 1EB, Reflector	40%	90%	35%	20%	76%	21%	42%	46%	62%	58%
SCE	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	86%	100%	100%	100%	98%	87%	97%	100%	100%	100%
SCE	118	Continuous Dimming, 5L4' Fluorescent Fixtures	100%	100%	100%	100%	96%	100%	100%	100%	100%	100%
SCE	119	RNV 2L4'T5HO, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	131	ROB 2L4'T8, 1EB	41%	90%	36%	20%	76%	22%	43%	46%	63%	58%
SCE	133	RET 2L4'T8, 1EB	41%	90%	36%	20%	76%	22%	43%	46%	63%	58%
SCE	134	RET 1L4'T8, 1EB, Reflector OEM	41%	90%	36%	20%	76%	22%	43%	46%	63%	58%
SCE	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	87%	100%	100%	100%	98%	87%	97%	100%	100%	100%
SCE	137	Continuous Dimming, 10L4' Fluorescent Fixtures	100%	100%	100%	100%	96%	100%	100%	100%	100%	100%
SCE	138	RNV 1L4'T5HO, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	151	ROB 2L8'T12, 60W, 1EB	93%	100%	67%	52%	57%	24%	63%	100%	100%	91%
SCE	152	ROB 1L8'T12, 60W, 1EB, Reflector	93%	100%	67%	52%	57%	24%	63%	100%	100%	91%
SCE	153	RET 2L8'T12, 60W, 1EB	93%	100%	67%	52%	57%	24%	63%	100%	100%	91%
SCE	154	RET 1L8'T12, 60W, 1EB, Reflector	93%	100%	67%	52%	57%	24%	63%	100%	100%	91%
SCE	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	87%	100%	100%	100%	98%	87%	97%	100%	100%	100%
SCE	156	Continuous Dimming, 5L8' Fluorescent Fixtures	100%	100%	100%	100%	96%	100%	100%	100%	100%	100%
SCE	165	Base Incandescent Flood, 75W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	166	CFL Screw-in, Modular 18W	20%	20%	28%	72%	69%	20%	20%	29%	45%	71%
SCE	175	Base Incandescent Flood, 150W PAR	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	176	Halogen PAR Flood, 90W	15%	30%	24%	20%	98%	100%	20%	100%	93%	90%
SCE	177	Metal Halide, 50W	15%	30%	24%	20%	98%	100%	20%	100%	93%	90%

INCOMPLETE FACTOR

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	111	ROB 4L4'T8, 1EB	30%	30%	91%	49%	20%	87%	20%	63%	35%	52%
SDG&E	112	ROB 2L4'T8, 1EB, Reflector	30%	30%	91%	49%	20%	87%	20%	63%	35%	52%
SDG&E	114	RET 4L4'T8, 1EB	30%	30%	91%	49%	20%	87%	20%	63%	35%	52%
SDG&E	115	RET 2L4'T8, 1EB, Reflector	30%	30%	91%	49%	20%	87%	20%	63%	35%	52%
SDG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	87%	100%	100%	100%	98%	88%	97%	100%	100%	100%
SDG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	100%	100%	100%	100%	96%	100%	100%	100%	100%	100%
SDG&E	119	RNV 2L4'T5HO, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	131	ROB 2L4'T8, 1EB	30%	30%	91%	49%	20%	87%	20%	62%	34%	52%
SDG&E	133	RET 2L4'T8, 1EB	30%	30%	91%	49%	20%	87%	20%	62%	34%	52%
SDG&E	134	RET 1L4'T8, 1EB, Reflector OEM	30%	30%	91%	49%	20%	87%	20%	62%	34%	52%
SDG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	87%	100%	100%	100%	98%	88%	97%	100%	100%	100%
SDG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	100%	100%	100%	100%	96%	100%	100%	100%	100%	100%
SDG&E	138	RNV 1L4'T5HO, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	151	ROB 2L8'T12, 60W, 1EB	72%	38%	42%	50%	38%	87%	38%	38%	65%	38%
SDG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	72%	38%	42%	50%	38%	87%	38%	38%	65%	38%
SDG&E	153	RET 2L8'T12, 60W, 1EB	72%	38%	42%	50%	38%	87%	38%	38%	65%	38%
SDG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	72%	38%	42%	50%	38%	87%	38%	38%	65%	38%
SDG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	87%	100%	100%	100%	98%	88%	97%	100%	100%	100%
SDG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	100%	100%	100%	100%	96%	100%	100%	100%	100%	100%
SDG&E	165	Base Incandescent Flood, 75W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	166	CFL Screw-in, Modular 18W	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
SDG&E	175	Base Incandescent Flood, 150W PAR	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	176	Halogen PAR Flood, 90W	20%	20%	20%	20%	39%	39%	20%	39%	36%	35%
SDG&E	177	Metal Halide, 50W	20%	20%	20%	20%	39%	39%	20%	39%	36%	35%
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	211	RET 2L4'T8, 1EB	59%	99%	90%	91%	98%	32%	100%	18%	100%	98%
PG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	15%	52%	27%	23%	13%	31%	4%	23%	3%	30%
PG&E	220	Base Mercury Vapor 400W Lamp	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	221	High Pressure Sodium 250W Lamp	15%	25%	22%	16%	10%	15%	14%	12%	25%	19%
PG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	15%	52%	27%	23%	13%	31%	4%	23%	3%	30%
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	211	RET 2L4'T8, 1EB	59%	99%	90%	91%	98%	32%	100%	18%	100%	98%
SCE	212	Outdoor Lighting Controls (Photocell/Timeclock)	15%	52%	27%	23%	13%	31%	4%	23%	3%	30%
SCE	220	Base Mercury Vapor 400W Lamp	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	221	High Pressure Sodium 250W Lamp	15%	25%	22%	16%	10%	15%	40%	12%	25%	19%
SCE	222	Outdoor Lighting Controls (Photocell/Timeclock)	15%	52%	27%	23%	13%	31%	4%	23%	3%	30%
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	211	RET 2L4'T8, 1EB	43%	79%	77%	100%	100%	71%	6%	20%	96%	94%
SDG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	15%	52%	27%	23%	13%	31%	4%	23%	3%	30%
SDG&E	220	Base Mercury Vapor 400W Lamp	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	221	High Pressure Sodium 250W Lamp	12%	10%	27%	10%	41%	10%	17%	31%	15%	43%
SDG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	15%	52%	27%	23%	13%	31%	4%	23%	3%	30%

INCOMPLETE FACTOR

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	302	Window Film (Standard)	25%	31%	34%	100%	76%	37%	11%	3%	71%	63%
PG&E	303	EMS - Chiller	54%	91%	25%	100%	72%	32%	45%	84%	91%	50%
PG&E	304	Cool Roof - Chiller	34%	78%	34%	100%	83%	89%	75%	70%	69%	62%
PG&E	305	Chiller Tune Up/Diagnostics	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
PG&E	306	Cooling Circ. Pumps - VSD	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
PG&E	310	DX Packaged System, EER=10.3, 10 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	311	DX Tune Up/ Advanced Diagnostics	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
PG&E	312	DX Packaged System, EER=10.9, 10 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	313	Window Film (Standard)	40%	55%	75%	69%	21%	77%	32%	42%	84%	56%
PG&E	314	Evaporative Pre-Cooler	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
PG&E	315	Prog. Thermostat - DX	29%	69%	43%	72%	62%	52%	32%	64%	81%	64%
PG&E	316	Cool Roof - DX	57%	80%	54%	58%	66%	39%	92%	56%	86%	62%
SCE	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	302	Window Film (Standard)	25%	31%	34%	100%	76%	37%	11%	3%	71%	63%
SCE	303	EMS - Chiller	54%	91%	25%	100%	72%	32%	45%	84%	91%	50%
SCE	304	Cool Roof - Chiller	34%	78%	34%	100%	83%	89%	75%	70%	69%	62%
SCE	305	Chiller Tune Up/Diagnostics	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
SCE	306	Cooling Circ. Pumps - VSD	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
SCE	310	DX Packaged System, EER=10.3, 10 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	311	DX Tune Up/ Advanced Diagnostics	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
SCE	312	DX Packaged System, EER=10.9, 10 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	313	Window Film (Standard)	40%	55%	75%	69%	21%	77%	32%	42%	84%	56%
SCE	314	Evaporative Pre-Cooler	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
SCE	315	Prog. Thermostat - DX	29%	69%	43%	72%	62%	52%	32%	64%	81%	64%
SCE	316	Cool Roof - DX	57%	80%	54%	58%	66%	39%	92%	56%	86%	62%
SDG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	302	Window Film (Standard)	25%	31%	34%	100%	76%	37%	11%	3%	71%	63%
SDG&E	303	EMS - Chiller	54%	91%	25%	100%	72%	32%	45%	84%	91%	50%
SDG&E	304	Cool Roof - Chiller	34%	78%	34%	100%	83%	89%	75%	70%	69%	62%
SDG&E	305	Chiller Tune Up/Diagnostics	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
SDG&E	306	Cooling Circ. Pumps - VSD	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
SDG&E	310	DX Packaged System, EER=10.3, 10 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	311	DX Tune Up/ Advanced Diagnostics	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
SDG&E	312	DX Packaged System, EER=10.9, 10 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	313	Window Film (Standard)	40%	55%	75%	69%	21%	77%	32%	42%	84%	56%
SDG&E	314	Evaporative Pre-Cooler	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
SDG&E	315	Prog. Thermostat - DX	29%	69%	43%	72%	62%	52%	32%	64%	81%	64%
SDG&E	316	Cool Roof - DX	57%	80%	54%	58%	66%	39%	92%	56%	86%	62%
PG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	402	Variable Speed Drive Control, 5 HP	92%	0%	38%	0%	100%	100%	89%	100%	100%	94%
PG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	412	Variable Speed Drive Control, 15 HP	85%	0%	42%	0%	100%	100%	84%	87%	100%	84%
PG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	422	Variable Speed Drive Control, 40 HP	51%	0%	71%	0%	0%	0%	73%	71%	100%	68%

INCOMPLETE FACTOR

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
SCE	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	401	Fan Motor, 5hp, 1800rpm, 89.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	402	Variable Speed Drive Control, 5 HP	92%	0%	38%	0%	100%	100%	89%	100%	100%	94%
SCE	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	411	Fan Motor, 15hp, 1800rpm, 92.4%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	412	Variable Speed Drive Control, 15 HP	85%	0%	42%	0%	100%	100%	84%	87%	100%	84%
SCE	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	421	Fan Motor, 40hp, 1800rpm, 94.1%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	422	Variable Speed Drive Control, 40 HP	51%	0%	71%	0%	0%	0%	73%	71%	100%	68%
SDG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	402	Variable Speed Drive Control, 5 HP	92%	0%	38%	0%	100%	100%	89%	100%	100%	94%
SDG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	412	Variable Speed Drive Control, 15 HP	85%	0%	42%	0%	100%	100%	84%	87%	100%	84%
SDG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	422	Variable Speed Drive Control, 40 HP	51%	0%	71%	0%	0%	0%	73%	71%	100%	68%
PG&E	400	Base Refrigeration System				100%						
PG&E	501	High-efficiency fan motors				95%						
PG&E	502	Strip curtains for walk-ins				30%						
PG&E	503	Night covers for display cases				95%						
PG&E	504	Evaporator fan controller for MT walk-ins				80%						
PG&E	505	Efficient compressor motor retrofit				81%						
PG&E	506	Compressor VSD retrofit				95%						
PG&E	507	Floating head pressure controls				51%						
PG&E	508	Refrigeration Commissioning				50%						
PG&E	509	Demand Hot Gas Defrost				30%						
PG&E	510	Demand Defrost Electric				95%						
PG&E	511	Anti-sweat (humidistat) controls				90%						
SCE	400	Base Refrigeration System				100%						
SCE	501	High-efficiency fan motors				95%						
SCE	502	Strip curtains for walk-ins				30%						
SCE	503	Night covers for display cases				95%						
SCE	504	Evaporator fan controller for MT walk-ins				80%						
SCE	505	Efficient compressor motor retrofit				81%						
SCE	506	Compressor VSD retrofit				95%						
SCE	507	Floating head pressure controls				51%						
SCE	508	Refrigeration Commissioning				50%						
SCE	509	Demand Hot Gas Defrost				30%						
SCE	510	Demand Defrost Electric				95%						
SCE	511	Anti-sweat (humidistat) controls				90%						
SDG&E	400	Base Refrigeration System				100%						
SDG&E	501	High-efficiency fan motors				95%						
SDG&E	502	Strip curtains for walk-ins				30%						
SDG&E	503	Night covers for display cases				95%						
SDG&E	504	Evaporator fan controller for MT walk-ins				80%						
SDG&E	505	Efficient compressor motor retrofit				81%						
SDG&E	506	Compressor VSD retrofit				95%						
SDG&E	507	Floating head pressure controls				51%						
SDG&E	508	Refrigeration Commissioning				50%						
SDG&E	509	Demand Hot Gas Defrost				30%						
SDG&E	510	Demand Defrost Electric				95%						
SDG&E	511	Anti-sweat (humidistat) controls				90%						

INCOMPLETE FACTOR

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	610	Desktop PC - Base	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	611	Power Management Enabling	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%
PG&E	620	Display Monitor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	621	Purchase LCD monitor	71%	71%	71%	71%	71%	71%	71%	71%	71%	71%
PG&E	622	Power Management Enabling	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
PG&E	623	Network Power Management Enabling	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
PG&E	624	External hardware control	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
PG&E	630	Copier	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	631	Power Management Enabling	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
PG&E	640	Laser Printer	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	641	External hardware control	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
PG&E	642	Nighttime shutdown	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
SCE	610	Desktop PC - Base	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	611	Power Management Enabling	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%
SCE	620	Display Monitor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	621	Purchase LCD monitor	71%	71%	71%	71%	71%	71%	71%	71%	71%	71%
SCE	622	Power Management Enabling	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
SCE	623	Network Power Management Enabling	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
SCE	624	External hardware control	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
SCE	630	Copier	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	631	Power Management Enabling	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
SCE	640	Laser Printer	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	641	External hardware control	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
SCE	642	Nighttime shutdown	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
SDG&E	610	Desktop PC - Base	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	611	Power Management Enabling	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%
SDG&E	620	Display Monitor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	621	Purchase LCD monitor	71%	71%	71%	71%	71%	71%	71%	71%	71%	71%
SDG&E	622	Power Management Enabling	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
SDG&E	623	Network Power Management Enabling	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
SDG&E	624	External hardware control	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
SDG&E	630	Copier	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	631	Power Management Enabling	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
SDG&E	640	Laser Printer	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	641	External hardware control	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
SDG&E	642	Nighttime shutdown	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%

FEASIBILITY FACTOR

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	111	ROB 4L4'T8, 1EB	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
PG&E	112	ROB 2L4'T8, 1EB, Reflector	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
PG&E	114	RET 4L4'T8, 1EB	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
PG&E	115	RET 2L4'T8, 1EB, Reflector	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
PG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	40%	10%	10%	10%	20%	50%	50%	50%	20%	20%
PG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	40%	50%	12%	26%	40%	30%	30%	10%	30%	30%
PG&E	119	RNV 2L4'T5HO, 1EB	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	131	ROB 2L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	133	RET 2L4'T8, 1EB	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
PG&E	134	RET 1L4'T8, 1EB, Reflector OEM	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
PG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	40%	10%	10%	10%	20%	50%	50%	50%	20%	20%
PG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	40%	50%	12%	26%	40%	30%	30%	10%	30%	30%
PG&E	138	RNV 1L4'T5HO, 1EB	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	151	ROB 2L8'T12, 60W, 1EB	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
PG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
PG&E	153	RET 2L8'T12, 60W, 1EB	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
PG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
PG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	40%	10%	10%	10%	20%	50%	50%	50%	20%	20%
PG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	40%	50%	12%	26%	40%	30%	30%	10%	30%	30%
PG&E	165	Base Incandescent Flood, 75W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	166	CFL Screw-in, Modular 18W	90%	50%	50%	90%	90%	90%	90%	90%	70%	90%
PG&E	175	Base Incandescent Flood, 150W PAR	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	176	Halogen PAR Flood, 90W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	177	Metal Halide, 50W	90%	50%	50%	90%	90%	90%	90%	90%	70%	90%
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	111	ROB 4L4'T8, 1EB	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
SCE	112	ROB 2L4'T8, 1EB, Reflector	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
SCE	114	RET 4L4'T8, 1EB	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
SCE	115	RET 2L4'T8, 1EB, Reflector	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
SCE	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	40%	10%	10%	10%	20%	50%	50%	50%	20%	20%
SCE	118	Continuous Dimming, 5L4' Fluorescent Fixtures	40%	50%	12%	26%	40%	30%	30%	10%	30%	30%
SCE	119	RNV 2L4'T5HO, 1EB	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	131	ROB 2L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	133	RET 2L4'T8, 1EB	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
SCE	134	RET 1L4'T8, 1EB, Reflector OEM	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
SCE	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	40%	10%	10%	10%	20%	50%	50%	50%	20%	20%
SCE	137	Continuous Dimming, 10L4' Fluorescent Fixtures	40%	50%	12%	26%	40%	30%	30%	10%	30%	30%
SCE	138	RNV 1L4'T5HO, 1EB	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	151	ROB 2L8'T12, 60W, 1EB	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
SCE	152	ROB 1L8'T12, 60W, 1EB, Reflector	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
SCE	153	RET 2L8'T12, 60W, 1EB	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
SCE	154	RET 1L8'T12, 60W, 1EB, Reflector	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
SCE	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	40%	10%	10%	10%	20%	50%	50%	50%	20%	20%
SCE	156	Continuous Dimming, 5L8' Fluorescent Fixtures	40%	50%	12%	26%	40%	30%	30%	10%	30%	30%
SCE	165	Base Incandescent Flood, 75W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	166	CFL Screw-in, Modular 18W	90%	50%	50%	90%	90%	90%	90%	90%	70%	90%
SCE	175	Base Incandescent Flood, 150W PAR	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	176	Halogen PAR Flood, 90W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	177	Metal Halide, 50W	90%	50%	50%	90%	90%	90%	90%	90%	70%	90%

FEASIBILITY FACTOR

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	111	ROB 4L4'T8, 1EB	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
SDG&E	112	ROB 2L4'T8, 1EB, Reflector	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
SDG&E	114	RET 4L4'T8, 1EB	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
SDG&E	115	RET 2L4'T8, 1EB, Reflector	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
SDG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	40%	10%	10%	10%	20%	50%	50%	50%	20%	20%
SDG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	40%	50%	12%	26%	40%	30%	30%	10%	30%	30%
SDG&E	119	RNV 2L4'T5HO, 1EB	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	131	ROB 2L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	133	RET 2L4'T8, 1EB	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
SDG&E	134	RET 1L4'T8, 1EB, Reflector OEM	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
SDG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	40%	10%	10%	10%	20%	50%	50%	50%	20%	20%
SDG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	40%	50%	12%	26%	40%	30%	30%	10%	30%	30%
SDG&E	138	RNV 1L4'T5HO, 1EB	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	151	ROB 2L8'T12, 60W, 1EB	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
SDG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
SDG&E	153	RET 2L8'T12, 60W, 1EB	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
SDG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
SDG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	40%	10%	10%	10%	20%	50%	50%	50%	20%	20%
SDG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	40%	50%	12%	26%	40%	30%	30%	10%	30%	30%
SDG&E	165	Base Incandescent Flood, 75W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	166	CFL Screw-in, Modular 18W	90%	50%	50%	90%	90%	90%	90%	90%	70%	90%
SDG&E	175	Base Incandescent Flood, 150W PAR	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	176	Halogen PAR Flood, 90W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	177	Metal Halide, 50W	90%	50%	50%	90%	90%	90%	90%	90%	70%	90%
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	211	RET 2L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
PG&E	220	Base Mercury Vapor 400W Lamp	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	221	High Pressure Sodium 250W Lamp	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	211	RET 2L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	212	Outdoor Lighting Controls (Photocell/Timeclock)	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
SCE	220	Base Mercury Vapor 400W Lamp	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	221	High Pressure Sodium 250W Lamp	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	222	Outdoor Lighting Controls (Photocell/Timeclock)	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	211	RET 2L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
SDG&E	220	Base Mercury Vapor 400W Lamp	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	221	High Pressure Sodium 250W Lamp	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%

FEASIBILITY FACTOR

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	302	Window Film (Standard)	75%	75%	50%	75%	75%	75%	75%	75%	75%	75%
PG&E	303	EMS - Chiller	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	304	Cool Roof - Chiller	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
PG&E	305	Chiller Tune Up/Diagnostics	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
PG&E	306	Cooling Circ. Pumps - VSD	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
PG&E	310	DX Packaged System, EER=10.3, 10 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	311	DX Tune Up/ Advanced Diagnostics	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
PG&E	312	DX Packaged System, EER=10.9, 10 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	313	Window Film (Standard)	75%	75%	50%	75%	75%	75%	75%	75%	75%	75%
PG&E	314	Evaporative Pre-Cooler	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
PG&E	315	Prog. Thermostat - DX	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
PG&E	316	Cool Roof - DX	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
SCE	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	302	Window Film (Standard)	75%	75%	50%	75%	75%	75%	75%	75%	75%	75%
SCE	303	EMS - Chiller	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	304	Cool Roof - Chiller	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
SCE	305	Chiller Tune Up/Diagnostics	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
SCE	306	Cooling Circ. Pumps - VSD	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
SCE	310	DX Packaged System, EER=10.3, 10 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	311	DX Tune Up/ Advanced Diagnostics	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
SCE	312	DX Packaged System, EER=10.9, 10 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	313	Window Film (Standard)	75%	75%	50%	75%	75%	75%	75%	75%	75%	75%
SCE	314	Evaporative Pre-Cooler	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
SCE	315	Prog. Thermostat - DX	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
SCE	316	Cool Roof - DX	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
SDG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	302	Window Film (Standard)	75%	75%	50%	75%	75%	75%	75%	75%	75%	75%
SDG&E	303	EMS - Chiller	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	304	Cool Roof - Chiller	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
SDG&E	305	Chiller Tune Up/Diagnostics	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
SDG&E	306	Cooling Circ. Pumps - VSD	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
SDG&E	310	DX Packaged System, EER=10.3, 10 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	311	DX Tune Up/ Advanced Diagnostics	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
SDG&E	312	DX Packaged System, EER=10.9, 10 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	313	Window Film (Standard)	75%	75%	50%	75%	75%	75%	75%	75%	75%	75%
SDG&E	314	Evaporative Pre-Cooler	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
SDG&E	315	Prog. Thermostat - DX	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
SDG&E	316	Cool Roof - DX	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
PG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	402	Variable Speed Drive Control, 5 HP	24%	0%	19%	0%	6%	23%	31%	18%	4%	10%
PG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	412	Variable Speed Drive Control, 15 HP	71%	0%	19%	0%	55%	67%	88%	86%	7%	35%
PG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	422	Variable Speed Drive Control, 40 HP	87%	0%	68%	0%	0%	0%	90%	88%	30%	55%

FEASIBILITY FACTOR

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
SCE	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	401	Fan Motor, 5hp, 1800rpm, 89.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	402	Variable Speed Drive Control, 5 HP	24%	0%	19%	0%	6%	23%	31%	18%	4%	10%
SCE	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	411	Fan Motor, 15hp, 1800rpm, 92.4%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	412	Variable Speed Drive Control, 15 HP	71%	0%	19%	0%	55%	67%	88%	86%	7%	35%
SCE	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	421	Fan Motor, 40hp, 1800rpm, 94.1%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	422	Variable Speed Drive Control, 40 HP	87%	0%	68%	0%	0%	0%	90%	88%	30%	55%
SDG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	402	Variable Speed Drive Control, 5 HP	24%	0%	19%	0%	6%	23%	31%	18%	4%	10%
SDG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	412	Variable Speed Drive Control, 15 HP	71%	0%	19%	0%	55%	67%	88%	86%	7%	35%
SDG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	422	Variable Speed Drive Control, 40 HP	87%	0%	68%	0%	0%	0%	90%	88%	30%	55%
PG&E	400	Base Refrigeration System				100%						
PG&E	401	High-efficiency fan motors				100%						
PG&E	402	Strip curtains for walk-ins				100%						
PG&E	403	Night covers for display cases				50%						
PG&E	404	Evaporator fan controller for MT walk-ins				100%						
PG&E	405	Efficient compressor motor retrofit				100%						
PG&E	406	Compressor VSD retrofit				50%						
PG&E	407	Floating head pressure controls				100%						
PG&E	408	Refrigeration Commissioning				100%						
PG&E	416	Demand Hot Gas Defrost				100%						
PG&E	417	Demand Defrost Electric				100%						
PG&E	419	Anti-sweat (humidistat) controls				100%						
SCE	400	Base Refrigeration System				100%						
SCE	401	High-efficiency fan motors				100%						
SCE	402	Strip curtains for walk-ins				100%						
SCE	403	Night covers for display cases				50%						
SCE	404	Evaporator fan controller for MT walk-ins				100%						
SCE	405	Efficient compressor motor retrofit				100%						
SCE	406	Compressor VSD retrofit				50%						
SCE	407	Floating head pressure controls				100%						
SCE	408	Refrigeration Commissioning				100%						
SCE	416	Demand Hot Gas Defrost				100%						
SCE	417	Demand Defrost Electric				100%						
SCE	419	Anti-sweat (humidistat) controls				100%						
SDG&E	400	Base Refrigeration System				100%						
SDG&E	401	High-efficiency fan motors				100%						
SDG&E	402	Strip curtains for walk-ins				100%						
SDG&E	403	Night covers for display cases				50%						
SDG&E	404	Evaporator fan controller for MT walk-ins				100%						
SDG&E	405	Efficient compressor motor retrofit				100%						
SDG&E	406	Compressor VSD retrofit				50%						
SDG&E	407	Floating head pressure controls				100%						
SDG&E	408	Refrigeration Commissioning				100%						
SDG&E	416	Demand Hot Gas Defrost				100%						
SDG&E	417	Demand Defrost Electric				100%						
SDG&E	419	Anti-sweat (humidistat) controls				100%						

FEASIBILITY FACTOR

(percent)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	610	Desktop PC - Base	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	611	Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	620	Display Monitor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	621	Purchase LCD monitor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	622	Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	623	Network Power Management Enabling	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
PG&E	624	External hardware control	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	630	Copier	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	631	Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	640	Laser Printer	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	641	External hardware control	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
PG&E	642	Nighttime shutdown	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	610	Desktop PC - Base	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	611	Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	620	Display Monitor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	621	Purchase LCD monitor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	622	Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	623	Network Power Management Enabling	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
SCE	624	External hardware control	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	630	Copier	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	631	Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	640	Laser Printer	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	641	External hardware control	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
SCE	642	Nighttime shutdown	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	610	Desktop PC - Base	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	611	Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	620	Display Monitor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	621	Purchase LCD monitor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	622	Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	623	Network Power Management Enabling	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
SDG&E	624	External hardware control	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	630	Copier	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	631	Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	640	Laser Printer	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	641	External hardware control	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
SDG&E	642	Nighttime shutdown	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

STANDARDS ADJUSTMENT FACTOR

(percent)

Utility	Measure#	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	111	ROB 4L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	112	ROB 2L4'T8, 1EB, Reflector	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	114	RET 4L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	115	RET 2L4'T8, 1EB, Reflector	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	119	RNV 2L4'T5HO, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	131	ROB 2L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	133	RET 2L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	134	RET 1L4'T8, 1EB, Reflector OEM	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	138	RNV 1L4'T5HO, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	151	ROB 2L8'T12, 60W, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	153	RET 2L8'T12, 60W, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	165	Base Incandescent Flood, 75W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	166	CFL Screw-in, Modular 18W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	175	Base Incandescent Flood, 150W PAR	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	176	Halogen PAR Flood, 90W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	177	Metal Halide, 50W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	111	ROB 4L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	112	ROB 2L4'T8, 1EB, Reflector	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	114	RET 4L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	115	RET 2L4'T8, 1EB, Reflector	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	118	Continuous Dimming, 5L4' Fluorescent Fixtures	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	119	RNV 2L4'T5HO, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	131	ROB 2L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	133	RET 2L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	134	RET 1L4'T8, 1EB, Reflector OEM	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	137	Continuous Dimming, 10L4' Fluorescent Fixtures	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	138	RNV 1L4'T5HO, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	151	ROB 2L8'T12, 60W, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	152	ROB 1L8'T12, 60W, 1EB, Reflector	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	153	RET 2L8'T12, 60W, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	154	RET 1L8'T12, 60W, 1EB, Reflector	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	156	Continuous Dimming, 5L8' Fluorescent Fixtures	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	165	Base Incandescent Flood, 75W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	166	CFL Screw-in, Modular 18W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	175	Base Incandescent Flood, 150W PAR	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	176	Halogen PAR Flood, 90W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	177	Metal Halide, 50W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

STANDARDS ADJUSTMENT FACTOR

(percent)

Utility	Measure#	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	111	ROB 4L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	112	ROB 2L4'T8, 1EB, Reflector	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	114	RET 4L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	115	RET 2L4'T8, 1EB, Reflector	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	119	RNV 2L4'T5HO, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	131	ROB 2L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	133	RET 2L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	134	RET 1L4'T8, 1EB, Reflector OEM	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	138	RNV 1L4'T5HO, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	151	ROB 2L8'T12, 60W, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	153	RET 2L8'T12, 60W, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	165	Base Incandescent Flood, 75W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	166	CFL Screw-in, Modular 18W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	175	Base Incandescent Flood, 150W PAR	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	176	Halogen PAR Flood, 90W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	177	Metal Halide, 50W	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	211	RET 2L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	220	Base Mercury Vapor 400W Lamp	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	221	High Pressure Sodium 250W Lamp	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	211	RET 2L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	212	Outdoor Lighting Controls (Photocell/Timeclock)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	220	Base Mercury Vapor 400W Lamp	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	221	High Pressure Sodium 250W Lamp	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	222	Outdoor Lighting Controls (Photocell/Timeclock)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	211	RET 2L4'T8, 1EB	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	220	Base Mercury Vapor 400W Lamp	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	221	High Pressure Sodium 250W Lamp	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

STANDARDS ADJUSTMENT FACTOR

(percent)

Utility	Measure#	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%
PG&E	302	Window Film (Standard)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	303	EMS - Chiller	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	304	Cool Roof - Chiller	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	305	Chiller Tune Up/Diagnostics	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	306	Cooling Circ. Pumps - VSD	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	310	DX Packaged System, EER=10.3, 10 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	311	DX Tune Up/ Advanced Diagnostics	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	312	DX Packaged System, EER=10.9, 10 tons	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%
PG&E	313	Window Film (Standard)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	314	Evaporative Pre-Cooler	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	315	Prog. Thermostat - DX	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	316	Cool Roof - DX	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%
SCE	302	Window Film (Standard)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	303	EMS - Chiller	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	304	Cool Roof - Chiller	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	305	Chiller Tune Up/Diagnostics	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	306	Cooling Circ. Pumps - VSD	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	310	DX Packaged System, EER=10.3, 10 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	311	DX Tune Up/ Advanced Diagnostics	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	312	DX Packaged System, EER=10.9, 10 tons	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%
SCE	313	Window Film (Standard)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	314	Evaporative Pre-Cooler	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	315	Prog. Thermostat - DX	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	316	Cool Roof - DX	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%
SDG&E	302	Window Film (Standard)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	303	EMS - Chiller	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	304	Cool Roof - Chiller	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	305	Chiller Tune Up/Diagnostics	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	306	Cooling Circ. Pumps - VSD	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	310	DX Packaged System, EER=10.3, 10 tons	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	311	DX Tune Up/ Advanced Diagnostics	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	312	DX Packaged System, EER=10.9, 10 tons	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%
SDG&E	313	Window Film (Standard)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	314	Evaporative Pre-Cooler	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	315	Prog. Thermostat - DX	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	316	Cool Roof - DX	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	402	Variable Speed Drive Control, 5 HP	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	412	Variable Speed Drive Control, 15 HP	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	422	Variable Speed Drive Control, 40 HP	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

STANDARDS ADJUSTMENT FACTOR

(percent)

Utility	Measure#	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
SCE	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	401	Fan Motor, 5hp, 1800rpm, 89.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	402	Variable Speed Drive Control, 5 HP	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	411	Fan Motor, 15hp, 1800rpm, 92.4%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	412	Variable Speed Drive Control, 15 HP	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	421	Fan Motor, 40hp, 1800rpm, 94.1%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	422	Variable Speed Drive Control, 40 HP	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	402	Variable Speed Drive Control, 5 HP	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	412	Variable Speed Drive Control, 15 HP	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	422	Variable Speed Drive Control, 40 HP	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	400	Base Refrigeration System				100%						
PG&E	501	High-efficiency fan motors				100%						
PG&E	502	Strip curtains for walk-ins				100%						
PG&E	503	Night covers for display cases				100%						
PG&E	504	Evaporator fan controller for MT walk-ins				100%						
PG&E	505	Efficient compressor motor retrofit				100%						
PG&E	506	Compressor VSD retrofit				100%						
PG&E	507	Floating head pressure controls				100%						
PG&E	508	Refrigeration Commissioning				100%						
PG&E	509	Demand Hot Gas Defrost				100%						
PG&E	510	Demand Defrost Electric				100%						
PG&E	511	Anti-sweat (humidistat) controls				100%						
SCE	400	Base Refrigeration System				100%						
SCE	501	High-efficiency fan motors				100%						
SCE	502	Strip curtains for walk-ins				100%						
SCE	503	Night covers for display cases				100%						
SCE	504	Evaporator fan controller for MT walk-ins				100%						
SCE	505	Efficient compressor motor retrofit				100%						
SCE	506	Compressor VSD retrofit				100%						
SCE	507	Floating head pressure controls				100%						
SCE	508	Refrigeration Commissioning				100%						
SCE	509	Demand Hot Gas Defrost				100%						
SCE	510	Demand Defrost Electric				100%						
SCE	511	Anti-sweat (humidistat) controls				100%						
SDG&E	400	Base Refrigeration System				100%						
SDG&E	501	High-efficiency fan motors				100%						
SDG&E	502	Strip curtains for walk-ins				100%						
SDG&E	503	Night covers for display cases				100%						
SDG&E	504	Evaporator fan controller for MT walk-ins				100%						
SDG&E	505	Efficient compressor motor retrofit				100%						
SDG&E	506	Compressor VSD retrofit				100%						
SDG&E	507	Floating head pressure controls				100%						
SDG&E	508	Refrigeration Commissioning				100%						
SDG&E	509	Demand Hot Gas Defrost				100%						
SDG&E	510	Demand Defrost Electric				100%						
SDG&E	511	Anti-sweat (humidistat) controls				100%						

STANDARDS ADJUSTMENT FACTOR

(percent)

Utility	Measure#	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	610	Desktop PC - Base	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	611	Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	620	Display Monitor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	621	Purchase LCD monitor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	622	Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	623	Network Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	624	External hardware control	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	630	Copier	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	631	Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	640	Laser Printer	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	641	External hardware control	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
PG&E	642	Nighttime shutdown	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	610	Desktop PC - Base	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	611	Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	620	Display Monitor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	621	Purchase LCD monitor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	622	Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	623	Network Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	624	External hardware control	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	630	Copier	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	631	Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	640	Laser Printer	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	641	External hardware control	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SCE	642	Nighttime shutdown	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	610	Desktop PC - Base	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	611	Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	620	Display Monitor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	621	Purchase LCD monitor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	622	Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	623	Network Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	624	External hardware control	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	630	Copier	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	631	Power Management Enabling	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	640	Laser Printer	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	641	External hardware control	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SDG&E	642	Nighttime shutdown	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

TECHNOLOGY SATURATION

(units per square foot)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	0.01371	0.01540	0.01368	0.01599	0.00666	0.01232	0.01176	0.01318	0.00470	0.00648
PG&E	111	ROB 4L4'T8, 1EB	0.01371	0.01540	0.01368	0.01599	0.00666	0.01232	0.01176	0.01318	0.00470	0.00648
PG&E	112	ROB 2L4'T8, 1EB, Reflector	0.01371	0.01540	0.01368	0.01599	0.00666	0.01232	0.01176	0.01318	0.00470	0.00648
PG&E	114	RET 4L4'T8, 1EB	0.01371	0.01540	0.01368	0.01599	0.00666	0.01232	0.01176	0.01318	0.00470	0.00648
PG&E	115	RET 2L4'T8, 1EB, Reflector	0.01371	0.01540	0.01368	0.01599	0.00666	0.01232	0.01176	0.01318	0.00470	0.00648
PG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	0.01371	0.01540	0.01368	0.01599	0.00666	0.01232	0.01176	0.01318	0.00470	0.00648
PG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	0.01371	0.01540	0.01368	0.01599	0.00666	0.01232	0.01176	0.01318	0.00470	0.00648
PG&E	119	RNV 2L4'T5HO, 1EB	0.01371	0.01540	0.01368	0.01599	0.00666	0.01232	0.01176	0.01318	0.00470	0.00648
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	0.02662	0.03066	0.02649	0.03074	0.01318	0.02367	0.02287	0.02567	0.00923	0.01271
PG&E	131	ROB 2L4'T8, 1EB	0.02662	0.03066	0.02649	0.03074	0.01318	0.02367	0.02287	0.02567	0.00923	0.01271
PG&E	133	RET 2L4'T8, 1EB	0.02662	0.03066	0.02649	0.03074	0.01318	0.02367	0.02287	0.02567	0.00923	0.01271
PG&E	134	RET 1L4'T8, 1EB, Reflector OEM	0.02662	0.03066	0.02649	0.03074	0.01318	0.02367	0.02287	0.02567	0.00923	0.01271
PG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	0.02662	0.03066	0.02649	0.03074	0.01318	0.02367	0.02287	0.02567	0.00923	0.01271
PG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	0.02662	0.03066	0.02649	0.03074	0.01318	0.02367	0.02287	0.02567	0.00923	0.01271
PG&E	138	RNV 1L4'T5HO, 1EB	0.02662	0.03066	0.02649	0.03074	0.01318	0.02367	0.02287	0.02567	0.00923	0.01271
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	0.01425	0.01766	0.01491	0.01738	0.00816	0.01444	0.01318	0.01368	0.00506	0.00707
PG&E	151	ROB 2L8'T12, 60W, 1EB	0.01425	0.01766	0.01491	0.01738	0.00816	0.01444	0.01318	0.01368	0.00506	0.00707
PG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	0.01425	0.01766	0.01491	0.01738	0.00816	0.01444	0.01318	0.01368	0.00506	0.00707
PG&E	153	RET 2L8'T12, 60W, 1EB	0.01425	0.01766	0.01491	0.01738	0.00816	0.01444	0.01318	0.01368	0.00506	0.00707
PG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	0.01425	0.01766	0.01491	0.01738	0.00816	0.01444	0.01318	0.01368	0.00506	0.00707
PG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	0.01425	0.01766	0.01491	0.01738	0.00816	0.01444	0.01318	0.01368	0.00506	0.00707
PG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	0.01425	0.01766	0.01491	0.01738	0.00816	0.01444	0.01318	0.01368	0.00506	0.00707
PG&E	165	Base Incandescent Flood, 75W	0.09343	0.11748	0.09460	0.11507	0.05447	0.08021	0.08058	0.09374	0.03601	0.05104
PG&E	166	CFL Screw-in, Modular 18W	0.09343	0.11748	0.09460	0.11507	0.05447	0.08021	0.08058	0.09374	0.03601	0.05104
PG&E	175	Base Incandescent Flood, 150W PAR	0.03888	0.04200	0.04040	0.08572	0.02140	0.01700	0.03172	0.02278	0.01127	0.02144
PG&E	176	Halogen PAR Flood, 90W	0.03888	0.04200	0.04040	0.08572	0.02140	0.01700	0.03172	0.02278	0.01127	0.02144
PG&E	177	Metal Halide, 50W	0.03888	0.04200	0.04040	0.08572	0.02140	0.01700	0.03172	0.02278	0.01127	0.02144
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	0.01376	0.01529	0.01403	0.01364	0.00682	0.01231	0.01155	0.01342	0.00671	0.01291
SCE	111	ROB 4L4'T8, 1EB	0.01376	0.01529	0.01403	0.01364	0.00682	0.01231	0.01155	0.01342	0.00671	0.01291
SCE	112	ROB 2L4'T8, 1EB, Reflector	0.01376	0.01529	0.01403	0.01364	0.00682	0.01231	0.01155	0.01342	0.00671	0.01291
SCE	114	RET 4L4'T8, 1EB	0.01376	0.01529	0.01403	0.01364	0.00682	0.01231	0.01155	0.01342	0.00671	0.01291
SCE	115	RET 2L4'T8, 1EB, Reflector	0.01376	0.01529	0.01403	0.01364	0.00682	0.01231	0.01155	0.01342	0.00671	0.01291
SCE	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	0.01376	0.01529	0.01403	0.01364	0.00682	0.01231	0.01155	0.01342	0.00671	0.01291
SCE	118	Continuous Dimming, 5L4' Fluorescent Fixtures	0.01376	0.01529	0.01403	0.01364	0.00682	0.01231	0.01155	0.01342	0.00671	0.01291
SCE	119	RNV 2L4'T5HO, 1EB	0.01376	0.01529	0.01403	0.01364	0.00682	0.01231	0.01155	0.01342	0.00671	0.01291
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	0.02671	0.03045	0.02717	0.02622	0.01349	0.02364	0.02246	0.02614	0.01319	0.02532
SCE	131	ROB 2L4'T8, 1EB	0.02671	0.03045	0.02717	0.02622	0.01349	0.02364	0.02246	0.02614	0.01319	0.02532
SCE	133	RET 2L4'T8, 1EB	0.02671	0.03045	0.02717	0.02622	0.01349	0.02364	0.02246	0.02614	0.01319	0.02532
SCE	134	RET 1L4'T8, 1EB, Reflector OEM	0.02671	0.03045	0.02717	0.02622	0.01349	0.02364	0.02246	0.02614	0.01319	0.02532
SCE	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	0.02671	0.03045	0.02717	0.02622	0.01349	0.02364	0.02246	0.02614	0.01319	0.02532
SCE	137	Continuous Dimming, 10L4' Fluorescent Fixtures	0.02671	0.03045	0.02717	0.02622	0.01349	0.02364	0.02246	0.02614	0.01319	0.02532
SCE	138	RNV 1L4'T5HO, 1EB	0.02671	0.03045	0.02717	0.02622	0.01349	0.02364	0.02246	0.02614	0.01319	0.02532
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	0.01430	0.01754	0.01529	0.01483	0.00836	0.01442	0.01294	0.01394	0.00724	0.01407
SCE	151	ROB 2L8'T12, 60W, 1EB	0.01430	0.01754	0.01529	0.01483	0.00836	0.01442	0.01294	0.01394	0.00724	0.01407
SCE	152	ROB 1L8'T12, 60W, 1EB, Reflector	0.01430	0.01754	0.01529	0.01483	0.00836	0.01442	0.01294	0.01394	0.00724	0.01407
SCE	153	RET 2L8'T12, 60W, 1EB	0.01430	0.01754	0.01529	0.01483	0.00836	0.01442	0.01294	0.01394	0.00724	0.01407
SCE	154	RET 1L8'T12, 60W, 1EB, Reflector	0.01430	0.01754	0.01529	0.01483	0.00836	0.01442	0.01294	0.01394	0.00724	0.01407
SCE	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	0.01430	0.01754	0.01529	0.01483	0.00836	0.01442	0.01294	0.01394	0.00724	0.01407
SCE	156	Continuous Dimming, 5L8' Fluorescent Fixtures	0.01430	0.01754	0.01529	0.01483	0.00836	0.01442	0.01294	0.01394	0.00724	0.01407
SCE	165	Base Incandescent Flood, 75W	0.09374	0.11668	0.09702	0.09816	0.05576	0.08011	0.07913	0.09545	0.05148	0.10165
SCE	166	CFL Screw-in, Modular 18W	0.09374	0.11668	0.09702	0.09816	0.05576	0.08011	0.07913	0.09545	0.05148	0.10165
SCE	175	Base Incandescent Flood, 150W PAR	0.03901	0.04171	0.04144	0.07312	0.02190	0.01698	0.03115	0.02319	0.01612	0.04270
SCE	176	Halogen PAR Flood, 90W	0.03901	0.04171	0.04144	0.07312	0.02190	0.01698	0.03115	0.02319	0.01612	0.04270
SCE	177	Metal Halide, 50W	0.03901	0.04171	0.04144	0.07312	0.02190	0.01698	0.03115	0.02319	0.01612	0.04270

TECHNOLOGY SATURATION

(units per square foot)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	0.01372	0.01454	0.01194	0.01328	0.00813	0.01060	0.01196	0.01342	0.00936	0.01068
SDG&E	111	ROB 4L4'T8, 1EB	0.01372	0.01454	0.01194	0.01328	0.00813	0.01060	0.01196	0.01342	0.00936	0.01068
SDG&E	112	ROB 2L4'T8, 1EB, Reflector	0.01372	0.01454	0.01194	0.01328	0.00813	0.01060	0.01196	0.01342	0.00936	0.01068
SDG&E	114	RET 4L4'T8, 1EB	0.01372	0.01454	0.01194	0.01328	0.00813	0.01060	0.01196	0.01342	0.00936	0.01068
SDG&E	115	RET 2L4'T8, 1EB, Reflector	0.01372	0.01454	0.01194	0.01328	0.00813	0.01060	0.01196	0.01342	0.00936	0.01068
SDG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	0.01372	0.01454	0.01194	0.01328	0.00813	0.01060	0.01196	0.01342	0.00936	0.01068
SDG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	0.01372	0.01454	0.01194	0.01328	0.00813	0.01060	0.01196	0.01342	0.00936	0.01068
SDG&E	119	RNV 2L4'T5HO, 1EB	0.01372	0.01454	0.01194	0.01328	0.00813	0.01060	0.01196	0.01342	0.00936	0.01068
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	0.02656	0.02814	0.02380	0.02596	0.01564	0.02108	0.02301	0.02642	0.01816	0.02090
SDG&E	131	ROB 2L4'T8, 1EB	0.02656	0.02814	0.02380	0.02596	0.01564	0.02108	0.02301	0.02642	0.01816	0.02090
SDG&E	133	RET 2L4'T8, 1EB	0.02656	0.02814	0.02380	0.02596	0.01564	0.02108	0.02301	0.02642	0.01816	0.02090
SDG&E	134	RET 1L4'T8, 1EB, Reflector OEM	0.02656	0.02814	0.02380	0.02596	0.01564	0.02108	0.02301	0.02642	0.01816	0.02090
SDG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	0.02656	0.02814	0.02380	0.02596	0.01564	0.02108	0.02301	0.02642	0.01816	0.02090
SDG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	0.02656	0.02814	0.02380	0.02596	0.01564	0.02108	0.02301	0.02642	0.01816	0.02090
SDG&E	138	RNV 1L4'T5HO, 1EB	0.02656	0.02814	0.02380	0.02596	0.01564	0.02108	0.02301	0.02642	0.01816	0.02090
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	0.01461	0.01681	0.01569	0.01560	0.00917	0.01243	0.01348	0.01674	0.01023	0.01300
SDG&E	151	ROB 2L8'T12, 60W, 1EB	0.01461	0.01681	0.01569	0.01560	0.00917	0.01243	0.01348	0.01674	0.01023	0.01300
SDG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	0.01461	0.01681	0.01569	0.01560	0.00917	0.01243	0.01348	0.01674	0.01023	0.01300
SDG&E	153	RET 2L8'T12, 60W, 1EB	0.01461	0.01681	0.01569	0.01560	0.00917	0.01243	0.01348	0.01674	0.01023	0.01300
SDG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	0.01461	0.01681	0.01569	0.01560	0.00917	0.01243	0.01348	0.01674	0.01023	0.01300
SDG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	0.01461	0.01681	0.01569	0.01560	0.00917	0.01243	0.01348	0.01674	0.01023	0.01300
SDG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	0.01461	0.01681	0.01569	0.01560	0.00917	0.01243	0.01348	0.01674	0.01023	0.01300
SDG&E	165	Base Incandescent Flood, 75W	0.09135	0.09680	0.09133	0.09249	0.05278	0.08031	0.07765	0.09643	0.06296	0.07487
SDG&E	166	CFL Screw-in, Modular 18W	0.09135	0.09680	0.09133	0.09249	0.05278	0.08031	0.07765	0.09643	0.06296	0.07487
SDG&E	175	Base Incandescent Flood, 150W PAR	0.03613	0.03829	0.03612	0.03658	0.01737	0.02624	0.03071	0.03150	0.02115	0.02553
SDG&E	176	Halogen PAR Flood, 90W	0.03613	0.03829	0.03612	0.03658	0.01737	0.02624	0.03071	0.03150	0.02115	0.02553
SDG&E	177	Metal Halide, 50W	0.03613	0.03829	0.03612	0.03658	0.01737	0.02624	0.03071	0.03150	0.02115	0.02553
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	0.00251	0.00603	0.00247	0.00429	0.00140	0.00102	0.00041	0.00133	0.00096	0.00117
PG&E	211	RET 2L4'T8, 1EB	0.00251	0.00603	0.00247	0.00429	0.00140	0.00102	0.00041	0.00133	0.00096	0.00117
PG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	0.00063	0.00151	0.00062	0.00107	0.00035	0.00025	0.00010	0.00033	0.00024	0.00029
PG&E	220	Base Mercury Vapor 400W Lamp	0.00052	0.00128	0.00053	0.00094	0.00032	0.00020	0.00009	0.00026	0.00021	0.00026
PG&E	221	High Pressure Sodium 250W Lamp	0.00052	0.00128	0.00053	0.00094	0.00032	0.00020	0.00009	0.00026	0.00021	0.00026
PG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	0.00013	0.00032	0.00013	0.00023	0.00008	0.00005	0.00002	0.00006	0.00005	0.00006
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	0.00507	0.01248	0.00398	0.00621	0.00063	0.00418	0.00081	0.00128	0.00200	0.00337
SCE	211	RET 2L4'T8, 1EB	0.00507	0.01248	0.00398	0.00621	0.00063	0.00418	0.00081	0.00128	0.00200	0.00337
SCE	212	Outdoor Lighting Controls (Photocell/Timeclock)	0.00127	0.00312	0.00099	0.00155	0.00016	0.00104	0.00020	0.00032	0.00050	0.00084
SCE	220	Base Mercury Vapor 400W Lamp	0.00105	0.00265	0.00085	0.00136	0.00014	0.00083	0.00016	0.00025	0.00043	0.00074
SCE	221	High Pressure Sodium 250W Lamp	0.00105	0.00265	0.00085	0.00136	0.00014	0.00083	0.00016	0.00025	0.00043	0.00074
SCE	222	Outdoor Lighting Controls (Photocell/Timeclock)	0.00026	0.00066	0.00021	0.00034	0.00004	0.00021	0.00004	0.00006	0.00011	0.00018
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	0.00568	0.01448	0.00458	0.00688	0.00073	0.00454	0.00113	0.00148	0.00233	0.00386
SDG&E	211	RET 2L4'T8, 1EB	0.00568	0.01448	0.00458	0.00688	0.00073	0.00454	0.00113	0.00148	0.00233	0.00386
SDG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	0.00142	0.00362	0.00114	0.00172	0.00018	0.00113	0.00028	0.00037	0.00058	0.00096
SDG&E	220	Base Mercury Vapor 400W Lamp	0.00116	0.00320	0.00093	0.00157	0.00015	0.00099	0.00021	0.00027	0.00052	0.00075
SDG&E	221	High Pressure Sodium 250W Lamp	0.00116	0.00320	0.00093	0.00157	0.00015	0.00099	0.00021	0.00027	0.00052	0.00075
SDG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	0.00029	0.00080	0.00023	0.00039	0.00004	0.00025	0.00005	0.00007	0.00013	0.00019

TECHNOLOGY SATURATION

(units per square foot)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	0.00450	0.00350	0.00150	0.00350	0.00300	0.00050	0.00300	0.00600	0.00100	0.00150
PG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	0.00450	0.00350	0.00150	0.00350	0.00300	0.00050	0.00300	0.00600	0.00100	0.00150
PG&E	302	Window Film (Standard)	0.08770	0.04600	0.02844	0.04090	0.01707	0.02423	0.06252	0.02012	0.09450	0.02844
PG&E	303	EMS - Chiller	0.00450	0.00350	0.00150	0.00350	0.00300	0.00050	0.00300	0.00600	0.00100	0.00150
PG&E	304	Cool Roof - Chiller	0.50000	1.00000	1.00000	1.00000	1.00000	0.50000	0.43333	0.33333	0.08333	1.00000
PG&E	305	Chiller Tune Up/Diagnostics	0.00450	0.00350	0.00150	0.00350	0.00300	0.00050	0.00300	0.00600	0.00100	0.00150
PG&E	306	Cooling Circ. Pumps - VSD	0.00450	0.00350	0.00150	0.00350	0.00300	0.00050	0.00300	0.00600	0.00100	0.00150
PG&E	310	DX Packaged System, EER=10.3, 10 tons	0.00450	0.00350	0.00150	0.00350	0.00300	0.00050	0.00300	0.00600	0.00100	0.00150
PG&E	311	DX Tune Up/ Advanced Diagnostics	0.00450	0.00350	0.00150	0.00350	0.00300	0.00050	0.00300	0.00600	0.00100	0.00150
PG&E	312	DX Packaged System, EER=10.9, 10 tons	0.00450	0.00350	0.00150	0.00350	0.00300	0.00050	0.00300	0.00600	0.00100	0.00150
PG&E	313	Window Film (Standard)	0.08770	0.04600	0.02844	0.04090	0.01707	0.02423	0.06252	0.02012	0.09450	0.02844
PG&E	314	Evaporative Pre-Cooler	0.00450	0.00350	0.00150	0.00350	0.00300	0.00050	0.00300	0.00600	0.00100	0.00150
PG&E	315	Prog. Thermostat - DX	0.00450	0.00350	0.00150	0.00350	0.00300	0.00050	0.00300	0.00600	0.00100	0.00150
PG&E	316	Cool Roof - DX	0.50000	1.00000	1.00000	1.00000	1.00000	0.50000	0.43333	0.33333	0.08333	1.00000
SCE	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SCE	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SCE	302	Window Film (Standard)	0.08770	0.04600	0.02844	0.04090	0.01707	0.02423	0.06252	0.02012	0.09450	0.02844
SCE	303	EMS - Chiller	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SCE	304	Cool Roof - Chiller	0.50000	1.00000	1.00000	1.00000	1.00000	0.50000	0.43333	0.33333	0.08333	1.00000
SCE	305	Chiller Tune Up/Diagnostics	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SCE	306	Cooling Circ. Pumps - VSD	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SCE	310	DX Packaged System, EER=10.3, 10 tons	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SCE	311	DX Tune Up/ Advanced Diagnostics	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SCE	312	DX Packaged System, EER=10.9, 10 tons	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SCE	313	Window Film (Standard)	0.08770	0.04600	0.02844	0.04090	0.01707	0.02423	0.06252	0.02012	0.09450	0.02844
SCE	314	Evaporative Pre-Cooler	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SCE	315	Prog. Thermostat - DX	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SCE	316	Cool Roof - DX	0.50000	1.00000	1.00000	1.00000	1.00000	0.50000	0.43333	0.33333	0.08333	1.00000
SDG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SDG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SDG&E	302	Window Film (Standard)	0.08770	0.04600	0.02844	0.04090	0.01707	0.02423	0.06252	0.02012	0.09450	0.02844
SDG&E	303	EMS - Chiller	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SDG&E	304	Cool Roof - Chiller	0.50000	1.00000	1.00000	1.00000	1.00000	0.50000	0.43333	0.33333	0.08333	1.00000
SDG&E	305	Chiller Tune Up/Diagnostics	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SDG&E	306	Cooling Circ. Pumps - VSD	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SDG&E	310	DX Packaged System, EER=10.3, 10 tons	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SDG&E	311	DX Tune Up/ Advanced Diagnostics	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SDG&E	312	DX Packaged System, EER=10.9, 10 tons	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SDG&E	313	Window Film (Standard)	0.08770	0.04600	0.02844	0.04090	0.01707	0.02423	0.06252	0.02012	0.09450	0.02844
SDG&E	314	Evaporative Pre-Cooler	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SDG&E	315	Prog. Thermostat - DX	0.00300	0.00250	0.00190	0.00325	0.00090	0.00225	0.00450	0.00450	0.00475	0.00200
SDG&E	316	Cool Roof - DX	0.50000	1.00000	1.00000	1.00000	1.00000	0.50000	0.43333	0.33333	0.08333	1.00000
PG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
PG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
PG&E	402	Variable Speed Drive Control, 5 HP	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
PG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
PG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
PG&E	412	Variable Speed Drive Control, 15 HP	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
PG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
PG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
PG&E	422	Variable Speed Drive Control, 40 HP	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142

TECHNOLOGY SATURATION

(units per square foot)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
SCE	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
SCE	401	Fan Motor, 5hp, 1800rpm, 89.5%	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
SCE	402	Variable Speed Drive Control, 5 HP	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
SCE	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
SCE	411	Fan Motor, 15hp, 1800rpm, 92.4%	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
SCE	412	Variable Speed Drive Control, 15 HP	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
SCE	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
SCE	421	Fan Motor, 40hp, 1800rpm, 94.1%	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
SCE	422	Variable Speed Drive Control, 40 HP	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
SDG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
SDG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
SDG&E	402	Variable Speed Drive Control, 5 HP	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
SDG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
SDG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
SDG&E	412	Variable Speed Drive Control, 15 HP	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
SDG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
SDG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
SDG&E	422	Variable Speed Drive Control, 40 HP	0.00089	0.00194	0.00034	0.00115	0.00056	0.00045	0.00057	0.00064	0.00045	0.00142
PG&E	400	Base Refrigeration System				0.00003						
PG&E	501	High-efficiency fan motors				0.00003						
PG&E	502	Strip curtains for walk-ins				0.00003						
PG&E	503	Night covers for display cases				0.01230						
PG&E	504	Evaporator fan controller for MT walk-ins				0.00015						
PG&E	505	Efficient compressor motor retrofit				0.00003						
PG&E	506	Compressor VSD retrofit				0.00003						
PG&E	507	Floating head pressure controls				0.00003						
PG&E	508	Refrigeration Commissioning				0.00155						
PG&E	509	Demand Hot Gas Defrost				0.00130						
PG&E	510	Demand Defrost Electric				0.00130						
PG&E	511	Anti-sweat (humidistat) controls				0.00003						
SCE	400	Base Refrigeration System				0.00003						
SCE	501	High-efficiency fan motors				0.00003						
SCE	502	Strip curtains for walk-ins				0.00003						
SCE	503	Night covers for display cases				0.01230						
SCE	504	Evaporator fan controller for MT walk-ins				0.00015						
SCE	505	Efficient compressor motor retrofit				0.00003						
SCE	506	Compressor VSD retrofit				0.00003						
SCE	507	Floating head pressure controls				0.00003						
SCE	508	Refrigeration Commissioning				0.00155						
SCE	509	Demand Hot Gas Defrost				0.00130						
SCE	510	Demand Defrost Electric				0.00130						
SCE	511	Anti-sweat (humidistat) controls				0.00003						
SDG&E	400	Base Refrigeration System				0.00003						
SDG&E	501	High-efficiency fan motors				0.00003						
SDG&E	502	Strip curtains for walk-ins				0.00003						
SDG&E	503	Night covers for display cases				0.01230						
SDG&E	504	Evaporator fan controller for MT walk-ins				0.00015						
SDG&E	505	Efficient compressor motor retrofit				0.00003						
SDG&E	506	Compressor VSD retrofit				0.00003						
SDG&E	507	Floating head pressure controls				0.00003						
SDG&E	508	Refrigeration Commissioning				0.00155						
SDG&E	509	Demand Hot Gas Defrost				0.00130						
SDG&E	510	Demand Defrost Electric				0.00130						
SDG&E	511	Anti-sweat (humidistat) controls				0.00003						

TECHNOLOGY SATURATION

(units per square foot)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	610	Desktop PC - Base	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
PG&E	611	Power Management Enabling	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
PG&E	620	Display Monitor	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
PG&E	621	Purchase LCD monitor	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
PG&E	622	Power Management Enabling	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
PG&E	623	Network Power Management Enabling	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
PG&E	624	External hardware control	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
PG&E	630	Copier	0.00017	0.00003	0.00006	0.00006	0.00011	0.00007	0.00002	0.00020	0.00001	0.00021
PG&E	631	Power Management Enabling	0.00017	0.00003	0.00006	0.00006	0.00011	0.00007	0.00002	0.00020	0.00001	0.00021
PG&E	640	Laser Printer	0.00052	0.00010	0.00018	0.00006	0.00031	0.00032	0.00009	0.00056	0.00005	0.00053
PG&E	641	External hardware control	0.00052	0.00010	0.00018	0.00006	0.00031	0.00032	0.00009	0.00056	0.00005	0.00053
PG&E	642	Nighttime shutdown	0.00052	0.00010	0.00018	0.00006	0.00031	0.00032	0.00009	0.00056	0.00005	0.00053
SCE	610	Desktop PC - Base	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
SCE	611	Power Management Enabling	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
SCE	620	Display Monitor	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
SCE	621	Purchase LCD monitor	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
SCE	622	Power Management Enabling	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
SCE	623	Network Power Management Enabling	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
SCE	624	External hardware control	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
SCE	630	Copier	0.00017	0.00003	0.00006	0.00006	0.00011	0.00007	0.00002	0.00020	0.00001	0.00021
SCE	631	Power Management Enabling	0.00017	0.00003	0.00006	0.00006	0.00011	0.00007	0.00002	0.00020	0.00001	0.00021
SCE	640	Laser Printer	0.00052	0.00010	0.00018	0.00006	0.00031	0.00032	0.00009	0.00056	0.00005	0.00053
SCE	641	External hardware control	0.00052	0.00010	0.00018	0.00006	0.00031	0.00032	0.00009	0.00056	0.00005	0.00053
SCE	642	Nighttime shutdown	0.00052	0.00010	0.00018	0.00006	0.00031	0.00032	0.00009	0.00056	0.00005	0.00053
SDG&E	610	Desktop PC - Base	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
SDG&E	611	Power Management Enabling	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
SDG&E	620	Display Monitor	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
SDG&E	621	Purchase LCD monitor	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
SDG&E	622	Power Management Enabling	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
SDG&E	623	Network Power Management Enabling	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
SDG&E	624	External hardware control	0.00183	0.00015	0.00030	0.00012	0.00099	0.00116	0.00031	0.00111	0.00010	0.00145
SDG&E	630	Copier	0.00017	0.00003	0.00006	0.00006	0.00011	0.00007	0.00002	0.00020	0.00001	0.00021
SDG&E	631	Power Management Enabling	0.00017	0.00003	0.00006	0.00006	0.00011	0.00007	0.00002	0.00020	0.00001	0.00021
SDG&E	640	Laser Printer	0.00052	0.00010	0.00018	0.00006	0.00031	0.00032	0.00009	0.00056	0.00005	0.00053
SDG&E	641	External hardware control	0.00052	0.00010	0.00018	0.00006	0.00031	0.00032	0.00009	0.00056	0.00005	0.00053
SDG&E	642	Nighttime shutdown	0.00052	0.00010	0.00018	0.00006	0.00031	0.00032	0.00009	0.00056	0.00005	0.00053

HOUR ADJUSTMENT FOR LIGHTING

(hours per year)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	111	ROB 4L4'T8, 1EB	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	112	ROB 2L4'T8, 1EB, Reflector	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	114	RET 4L4'T8, 1EB	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	115	RET 2L4'T8, 1EB, Reflector	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	119	RNV 2L4'T5HO, 1EB	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	131	ROB 2L4'T8, 1EB	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	133	RET 2L4'T8, 1EB	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	134	RET 1L4'T8, 1EB, Reflector OEM	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	138	RNV 1L4'T5HO, 1EB	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	151	ROB 2L8'T12, 60W, 1EB	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	153	RET 2L8'T12, 60W, 1EB	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	165	Base Incandescent Flood, 75W	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	166	CFL Screw-in, Modular 18W	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	175	Base Incandescent Flood, 150W PAR	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	176	Halogen PAR Flood, 90W	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
PG&E	177	Metal Halide, 50W	4,926	2,935	3,068	6,658	1,857	1,875	2,027	6,213	2,589	1,486
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	111	ROB 4L4'T8, 1EB	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	112	ROB 2L4'T8, 1EB, Reflector	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	114	RET 4L4'T8, 1EB	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	115	RET 2L4'T8, 1EB, Reflector	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	118	Continuous Dimming, 5L4' Fluorescent Fixtures	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	119	RNV 2L4'T5HO, 1EB	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	131	ROB 2L4'T8, 1EB	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	133	RET 2L4'T8, 1EB	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	134	RET 1L4'T8, 1EB, Reflector OEM	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	137	Continuous Dimming, 10L4' Fluorescent Fixtures	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	138	RNV 1L4'T5HO, 1EB	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	151	ROB 2L8'T12, 60W, 1EB	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	152	ROB 1L8'T12, 60W, 1EB, Reflector	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	153	RET 2L8'T12, 60W, 1EB	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	154	RET 1L8'T12, 60W, 1EB, Reflector	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	156	Continuous Dimming, 5L8' Fluorescent Fixtures	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	165	Base Incandescent Flood, 75W	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	166	CFL Screw-in, Modular 18W	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	175	Base Incandescent Flood, 150W PAR	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	176	Halogen PAR Flood, 90W	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951
SCE	177	Metal Halide, 50W	4,358	2,847	3,113	6,055	3,212	2,045	2,158	5,999	2,666	1,951

HOUR ADJUSTMENT FOR LIGHTING

(hours per year)

Utility	Measure #	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	111	ROB 4L4'T8, 1EB	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	112	ROB 2L4'T8, 1EB, Reflector	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	114	RET 4L4'T8, 1EB	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	115	RET 2L4'T8, 1EB, Reflector	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	119	RNV 2L4'T5HO, 1EB	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	131	ROB 2L4'T8, 1EB	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	133	RET 2L4'T8, 1EB	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	134	RET 1L4'T8, 1EB, Reflector OEM	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	138	RNV 1L4'T5HO, 1EB	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	151	ROB 2L8'T12, 60W, 1EB	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	153	RET 2L8'T12, 60W, 1EB	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	165	Base Incandescent Flood, 75W	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	166	CFL Screw-in, Modular 18W	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	175	Base Incandescent Flood, 150W PAR	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	176	Halogen PAR Flood, 90W	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
SDG&E	177	Metal Halide, 50W	4,469	3,133	3,332	6,564	3,354	2,208	2,214	5,900	2,919	2,885
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380
PG&E	211	RET 2L4'T8, 1EB	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380
PG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380
PG&E	220	Base Mercury Vapor 400W Lamp	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380
PG&E	221	High Pressure Sodium 250W Lamp	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380
PG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380
SCE	211	RET 2L4'T8, 1EB	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380
SCE	212	Outdoor Lighting Controls (Photocell/Timeclock)	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380
SCE	220	Base Mercury Vapor 400W Lamp	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380
SCE	221	High Pressure Sodium 250W Lamp	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380
SCE	222	Outdoor Lighting Controls (Photocell/Timeclock)	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380
SDG&E	211	RET 2L4'T8, 1EB	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380
SDG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380
SDG&E	220	Base Mercury Vapor 400W Lamp	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380
SDG&E	221	High Pressure Sodium 250W Lamp	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380
SDG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380	4,380

BASE TECHNOLOGY EUIs

(kWh per square foot)

Utility	Measure#	Measure Description	Office 2	Restaurant 3	Retail 4	Grocery 5	Warehouse 6	School 7	College 8	Hospital 9	Lodging 10	Other 11
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	8.51	6.38	5.23	12.77	1.69	2.78	3.02	10.46	1.61	1.27
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	8.51	6.38	5.23	12.77	1.69	2.78	3.02	10.46	1.61	1.27
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	8.51	6.38	5.23	12.77	1.69	2.78	3.02	10.46	1.61	1.27
PG&E	165	Base Incandescent Flood, 75W	14.64	10.97	10.43	45.89	5.90	4.78	5.19	21.23	4.21	4.49
PG&E	175	Base Incandescent Flood, 150W PAR	14.64	10.97	10.43	45.89	5.90	4.78	5.19	21.23	4.21	4.49
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	7.55	6.14	5.44	9.91	2.99	3.03	3.16	10.28	2.37	3.31
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	7.55	6.14	5.44	9.91	2.99	3.03	3.16	10.28	2.37	3.31
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	7.55	6.14	5.44	9.91	2.99	3.03	3.16	10.28	2.37	3.31
SCE	165	Base Incandescent Flood, 75W	12.99	10.56	10.85	35.60	10.45	5.21	5.43	20.87	6.19	11.74
SCE	175	Base Incandescent Flood, 150W PAR	12.99	10.56	10.85	35.60	10.45	5.21	5.43	20.87	6.19	11.74
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	7.55	5.61	5.63	11.22	3.27	3.28	3.18	10.52	3.40	3.99
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	7.55	5.61	5.63	11.22	3.27	3.28	3.18	10.52	3.40	3.99
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	7.55	5.61	5.63	11.22	3.27	3.28	3.18	10.52	3.40	3.99
SDG&E	165	Base Incandescent Flood, 75W	12.98	9.64	9.68	19.30	5.63	5.64	5.47	18.09	5.84	6.87
SDG&E	175	Base Incandescent Flood, 150W PAR	12.98	9.64	9.68	19.30	5.63	5.64	5.47	18.09	5.84	6.87
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	0.74	1.90	0.77	1.33	0.44	0.28	0.13	0.36	0.30	0.37
PG&E	220	Base Mercury Vapor 400W Lamp	0.74	1.90	0.77	1.33	0.44	0.28	0.13	0.36	0.30	0.37
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	1.49	3.93	1.23	1.93	0.20	1.17	0.26	0.35	0.63	1.06
SCE	220	Base Mercury Vapor 400W Lamp	1.49	3.93	1.23	1.93	0.20	1.17	0.26	0.35	0.63	1.06
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	1.62	4.41	1.39	2.17	0.23	1.36	0.30	0.40	0.73	1.20
SDG&E	220	Base Mercury Vapor 400W Lamp	1.62	4.41	1.39	2.17	0.23	1.36	0.30	0.40	0.73	1.20
PG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	3.76	3.36	0.95	4.39	1.16	0.25	1.53	8.31	0.70	1.84
PG&E	310	DX Packaged System, EER=10.3, 10 tons	6.51	5.83	1.65	7.61	2.01	0.44	2.66	14.40	1.21	3.19
SCE	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	2.78	3.06	1.54	5.14	0.41	0.97	3.07	7.77	2.82	2.92
SCE	310	DX Packaged System, EER=10.3, 10 tons	4.82	5.30	2.67	8.91	0.71	1.68	5.32	13.47	4.88	5.06
SDG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	2.23	2.96	1.05	5.07	0.40	0.95	1.84	5.39	2.72	2.48
SDG&E	310	DX Packaged System, EER=10.3, 10 tons	3.86	5.14	1.82	8.78	0.69	1.65	3.19	9.35	4.71	4.30
PG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	2.98	4.41	0.77	6.23	1.93	0.85	1.13	3.47	0.69	2.16
PG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	2.76	4.09	0.72	5.77	1.79	0.79	1.05	3.21	0.64	2.00
PG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	2.72	4.02	0.70	5.68	1.76	0.77	1.03	3.16	0.63	1.97
SCE	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	2.50	5.76	1.46	6.22	1.93	0.84	1.96	2.44	0.99	1.64
SCE	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	2.32	5.34	1.36	5.77	1.79	0.78	1.82	2.26	0.92	1.52
SCE	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	2.28	5.25	1.33	5.67	1.76	0.77	1.79	2.23	0.90	1.50
SDG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	2.98	4.41	0.77	6.23	1.93	0.85	1.13	3.47	0.69	2.16
SDG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	2.76	4.09	0.72	5.77	1.79	0.79	1.05	3.21	0.64	2.00
SDG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	2.72	4.02	0.70	5.68	1.76	0.77	1.03	3.16	0.63	1.97
PG&E	500	Base System				30.21						
SCE	500	Base System				30.21						
SDG&E	500	Base System				30.21						
PG&E	610	Desktop PC - Base	0.603	0.061	0.042	0.113	0.047	0.034	0.104	0.139	0.019	0.025
PG&E	620	Display Monitor	0.580	0.059	0.041	0.109	0.045	0.032	0.101	0.134	0.018	0.024
PG&E	630	Copier	0.192	0.055	0.029	0.100	0.026	0.025	0.049	0.133	0.051	0.025
PG&E	640	Laser Printer	0.212	0.056	0.037	0.089	0.028	0.021	0.061	0.115	0.013	0.013
SCE	610	Desktop PC - Base	0.603	0.061	0.042	0.113	0.047	0.034	0.104	0.139	0.019	0.025
SCE	620	Display Monitor	0.580	0.059	0.041	0.109	0.045	0.032	0.101	0.134	0.018	0.024
SCE	630	Copier	0.192	0.055	0.029	0.100	0.026	0.025	0.049	0.133	0.051	0.025
SCE	640	Laser Printer	0.212	0.056	0.037	0.089	0.028	0.021	0.061	0.115	0.013	0.013
SDG&E	610	Desktop PC - Base	0.603	0.061	0.042	0.113	0.047	0.034	0.104	0.139	0.019	0.025
SDG&E	620	Display Monitor	0.580	0.059	0.041	0.109	0.045	0.032	0.101	0.134	0.018	0.024
SDG&E	630	Copier	0.192	0.055	0.029	0.100	0.026	0.025	0.049	0.133	0.051	0.025
SDG&E	640	Laser Printer	0.212	0.056	0.037	0.089	0.028	0.021	0.061	0.115	0.013	0.013

D

NON-ADDITIVE MEASURE-LEVEL RESULTS

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Office	0%	0%	0.00	9.4	9.4	2.2	9	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	111	ROB 4L4'T8, 1EB	Office	21%	21%	0.01	10.7	8.5	2.0	14	141.8	33.7	35.3	0.00	3	157.1	116.0	0.0	1.5
PG&E	112	ROB 2L4'T8, 1EB, Reflector	Office	58%	58%	0.28	14.4	6.0	1.4	14	133.7	31.8	33.3	0.00	17	29.6	21.9	0.2	1.5
PG&E	114	RET 4L4'T8, 1EB	Office	21%	21%	0.59	10.7	8.5	2.0	14	141.8	33.7	35.3	0.03	113	4.4	2.9	2.0	1.5
PG&E	115	RET 2L4'T8, 1EB, Reflector	Office	58%	58%	0.86	14.4	6.0	1.4	14	133.7	31.8	33.3	0.01	46	10.9	7.5	0.8	1.5
PG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Office	25%	30%	0.38	9.7	7.3	1.6	8	166.0	47.5	49.8	0.03	106	4.4	3.4	1.2	1.7
PG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Office	38%	75%	3.98	9.4	5.9	0.6	10	278.7	132.2	69.3	0.18	387	1.0	0.6	7.8	2.1
PG&E	119	RNV 2L4'T5HO, 1EB	Office	24%	24%	3.46	9.4	7.2	1.7	14	109.9	26.1	27.4	0.19	780	0.6	0.5	11.7	1.5
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Office	0%	0%	0.00	9.4	9.4	2.2	9	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	131	ROB 2L4'T8, 1EB	Office	17%	17%	0.16	10.4	8.7	2.1	14	148.2	35.2	36.9	0.01	48	10.5	7.7	0.7	1.5
PG&E	133	RET 2L4'T8, 1EB	Office	17%	17%	0.79	10.4	8.7	2.1	14	133.4	31.7	33.2	0.05	201	2.5	1.7	3.4	1.5
PG&E	134	RET 1L4'T8, 1EB, Reflector OEM	Office	57%	57%	1.20	14.2	6.1	1.5	14	68.9	16.4	17.2	0.02	70	7.2	5.0	1.1	1.5
PG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Office	25%	30%	0.37	9.7	7.3	1.6	8	176.3	50.4	52.8	0.03	103	4.5	3.5	1.1	1.7
PG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Office	38%	75%	3.87	9.4	5.9	0.6	10	294.8	139.8	73.3	0.18	375	1.0	0.6	7.6	2.1
PG&E	138	RNV 1L4'T5HO, 1EB	Office	24%	24%	6.33	9.4	7.2	1.7	14	116.3	27.6	29.0	0.34	1447	0.3	0.3	21.4	1.5
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Office	0%	0%	0.00	9.4	9.4	2.2	9	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	151	ROB 2L8'T12, 60W, 1EB	Office	22%	22%	0.17	9.5	7.5	1.8	14	21.7	5.1	5.4	0.01	43	11.6	8.6	0.6	1.5
PG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	Office	60%	60%	0.52	9.8	3.9	0.9	14	15.5	3.7	3.9	0.01	45	11.1	8.2	0.7	1.5
PG&E	153	RET 2L8'T12, 60W, 1EB	Office	22%	22%	0.93	9.5	7.5	1.8	14	21.7	5.1	5.4	0.05	199	2.5	1.7	3.4	1.5
PG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	Office	60%	60%	1.28	9.8	3.9	0.9	14	15.5	3.7	3.9	0.02	100	5.0	3.5	1.6	1.5
PG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Office	25%	30%	0.40	9.7	7.3	1.6	8	11.8	3.4	3.5	0.03	111	4.2	3.3	1.2	1.7
PG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Office	38%	75%	4.14	9.4	5.9	0.6	10	19.8	9.4	4.9	0.19	401	1.0	0.6	8.1	2.1
PG&E	165	Base Incandescent Flood, 75W	Office	0%	0%	0.00	16.1	16.1	3.8	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	166	CFL Screw-in, Modular 18W	Office	72%	72%	1.75	38.1	10.7	2.5	4	30.5	7.3	7.6	0.02	74	6.7	6.0	0.5	1.5
PG&E	175	Base Incandescent Flood, 150W PAR	Office	0%	0%	0.00	16.1	16.1	3.8	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	176	Halogen PAR Flood, 90W	Office	40%	40%	0.47	24.4	14.6	3.5	1	2.6	0.6	0.6	0.06	264	1.9	1.8	0.9	1.5
PG&E	177	Metal Halide, 50W	Office	58%	58%	11.26	31.7	13.3	3.2	5	4.4	1.0	1.1	0.18	768	0.7	0.6	4.8	1.5
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Restaurant	0%	0%	0.00	7.8	7.8	1.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	111	ROB 4L4'T8, 1EB	Restaurant	21%	21%	0.02	7.9	6.3	1.0	24	10.6	1.7	1.8	0.00	6	92.8	71.6	0.1	1.3
PG&E	112	ROB 2L4'T8, 1EB, Reflector	Restaurant	58%	58%	0.34	8.2	3.4	0.6	24	7.7	1.3	1.3	0.01	42	13.5	10.4	0.6	1.3
PG&E	114	RET 4L4'T8, 1EB	Restaurant	21%	21%	0.74	7.9	6.3	1.0	24	10.6	1.7	1.8	0.04	263	2.2	1.7	3.5	1.3
PG&E	115	RET 2L4'T8, 1EB, Reflector	Restaurant	58%	58%	1.06	8.2	3.4	0.6	24	7.7	1.3	1.3	0.02	130	4.4	3.4	1.7	1.3
PG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Restaurant	15%	20%	0.47	7.8	6.6	1.0	14	1.0	0.2	0.2	0.05	240	2.2	1.7	3.2	1.5
PG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Restaurant	29%	75%	4.94	7.8	5.6	0.3	17	9.8	4.2	2.1	0.24	572	0.7	0.4	15.8	2.1
PG&E	119	RNV 2L4'T5HO, 1EB	Restaurant	24%	24%	4.29	7.8	5.9	1.0	24	4.1	0.7	0.7	0.22	1377	0.4	0.3	18.4	1.3
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Restaurant	0%	0%	0.00	7.8	7.8	1.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	131	ROB 2L4'T8, 1EB	Restaurant	17%	17%	0.20	7.9	6.6	1.1	24	18.8	3.1	3.1	0.01	92	6.2	4.8	1.2	1.3
PG&E	133	RET 2L4'T8, 1EB	Restaurant	17%	17%	1.00	7.9	6.6	1.1	24	16.9	2.7	2.8	0.07	449	1.3	1.0	6.0	1.3
PG&E	134	RET 1L4'T8, 1EB, Reflector OEM	Restaurant	57%	57%	1.53	8.2	3.5	0.6	24	6.7	1.1	1.1	0.03	193	2.9	2.3	2.6	1.3
PG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Restaurant	15%	20%	0.47	7.8	6.6	1.0	14	1.9	0.4	0.4	0.05	239	2.3	1.7	3.2	1.5
PG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Restaurant	29%	75%	4.91	7.8	5.6	0.3	17	17.5	7.4	3.8	0.24	569	0.7	0.4	15.7	2.1
PG&E	138	RNV 1L4'T5HO, 1EB	Restaurant	24%	24%	8.05	7.8	5.9	1.0	24	7.3	1.2	1.2	0.42	2586	0.2	0.2	34.5	1.3
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Restaurant	0%	0%	0.00	7.8	7.8	1.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	151	ROB 2L8'T12, 60W, 1EB	Restaurant	22%	22%	0.24	7.8	6.1	1.0	24	6.4	1.0	1.1	0.01	83	6.9	5.3	1.1	1.3
PG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	Restaurant	60%	60%	0.71	7.8	3.1	0.5	24	4.4	0.7	0.7	0.01	89	6.4	4.9	1.2	1.3
PG&E	153	RET 2L8'T12, 60W, 1EB	Restaurant	22%	22%	1.28	7.8	6.1	1.0	24	6.4	1.0	1.1	0.07	448	1.3	1.0	6.0	1.3
PG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	Restaurant	60%	60%	1.75	7.8	3.1	0.5	24	4.4	0.7	0.7	0.04	220	2.6	2.0	2.9	1.3
PG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Restaurant	15%	20%	0.54	7.8	6.6	1.0	14	0.6	0.1	0.1	0.06	276	2.0	1.5	3.6	1.5
PG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Restaurant	29%	75%	5.65	7.8	5.6	0.3	17	5.2	2.2	1.1	0.28	655	0.6	0.3	18.1	2.1
PG&E	165	Base Incandescent Flood, 75W	Restaurant	0%	0%	0.00	13.3	13.3	2.2	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	166	CFL Screw-in, Modular 18W	Restaurant	72%	72%	2.43	31.5	8.8	1.4	7	19.7	3.2	3.3	0.02	124	4.9	4.7	0.9	1.3
PG&E	175	Base Incandescent Flood, 150W PAR	Restaurant	0%	0%	0.00	13.3	13.3	2.2	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	176	Halogen PAR Flood, 90W	Restaurant	40%	40%	0.56	18.5	11.1	1.8	1	1.1	0.2	0.2	0.06	360	1.7	1.9	0.9	1.3
PG&E	177	Metal Halide, 50W	Restaurant	58%	58%	13.42	22.5	9.4	1.5	8	1.0	0.2	0.2	0.19	1195	0.5	0.5	7.8	1.3

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Retail	0%	0%	0.00	6.1	6.1	1.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	111	ROB 4L4'T8, 1EB	Retail	21%	21%	0.01	7.1	5.6	1.2	23	42.7	9.4	9.3	0.00	4	110.7	76.4	0.1	1.4
PG&E	112	ROB 2L4'T8, 1EB, Reflector	Retail	58%	58%	0.29	9.9	4.1	0.9	23	41.6	9.2	9.1	0.00	23	21.6	14.9	0.4	1.4
PG&E	114	RET 4L4'T8, 1EB	Retail	21%	21%	0.63	7.1	5.6	1.2	23	42.7	9.4	9.3	0.04	189	2.6	1.8	3.3	1.4
PG&E	115	RET 2L4'T8, 1EB, Reflector	Retail	58%	58%	0.91	9.9	4.1	0.9	23	41.6	9.2	9.1	0.02	70	7.0	4.8	1.2	1.4
PG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Retail	16%	20%	0.41	6.1	5.2	1.1	13	10.1	2.8	2.8	0.05	197	2.4	1.7	3.1	1.6
PG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Retail	34%	75%	4.23	6.2	4.0	0.3	16	26.0	12.4	6.2	0.22	466	0.8	0.4	13.8	2.1
PG&E	119	RNV 2L4'T5HO, 1EB	Retail	24%	24%	3.67	6.1	4.7	1.0	23	37.3	8.2	8.1	0.25	1121	0.4	0.3	19.6	1.4
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Retail	0%	0%	0.00	6.1	6.1	1.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	131	ROB 2L4'T8, 1EB	Retail	17%	17%	0.17	6.9	5.7	1.3	23	40.2	8.8	8.8	0.01	66	7.4	5.1	1.2	1.4
PG&E	133	RET 2L4'T8, 1EB	Retail	17%	17%	0.84	6.9	5.7	1.3	23	36.2	8.0	7.9	0.07	323	1.5	1.0	5.6	1.4
PG&E	134	RET 1L4'T8, 1EB, Reflector OEM	Retail	57%	57%	1.28	9.7	4.2	0.9	23	19.3	4.3	4.2	0.02	102	4.8	3.3	1.8	1.4
PG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Retail	16%	20%	0.39	6.1	5.2	1.1	13	9.7	2.6	2.6	0.05	191	2.5	1.7	3.0	1.6
PG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Retail	34%	75%	4.10	6.2	4.0	0.3	16	24.8	11.8	5.9	0.22	451	0.8	0.4	13.3	2.1
PG&E	138	RNV 1L4'T5HO, 1EB	Retail	24%	24%	6.71	6.1	4.7	1.0	23	35.5	7.8	7.8	0.45	2048	0.2	0.2	35.8	1.4
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Retail	0%	0%	0.00	6.1	6.1	1.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	151	ROB 2L8'T12, 60W, 1EB	Retail	22%	22%	0.19	6.6	5.2	1.1	23	56.1	12.3	12.2	0.01	59	8.2	5.7	1.0	1.4
PG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	Retail	60%	60%	0.58	7.7	3.0	0.7	23	45.4	10.0	9.9	0.01	55	8.8	6.1	1.0	1.4
PG&E	153	RET 2L8'T12, 60W, 1EB	Retail	22%	22%	1.04	6.6	5.2	1.1	23	56.1	12.3	12.2	0.07	322	1.5	1.0	5.6	1.4
PG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	Retail	60%	60%	1.43	7.7	3.0	0.7	23	45.4	10.0	9.9	0.03	136	3.6	2.5	2.4	1.4
PG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Retail	16%	20%	0.44	6.1	5.2	1.1	13	7.2	2.0	2.0	0.06	215	2.2	1.6	3.4	1.6
PG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Retail	34%	75%	4.61	6.2	4.0	0.3	16	18.5	8.8	4.4	0.24	507	0.8	0.4	15.0	2.1
PG&E	165	Base Incandescent Flood, 75W	Retail	0%	0%	0.00	12.2	12.2	2.7	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	166	CFL Screw-in, Modular 18W	Retail	72%	72%	1.89	25.6	7.2	1.6	7	31.0	6.8	6.8	0.02	92	5.6	4.8	0.8	1.4
PG&E	175	Base Incandescent Flood, 150W PAR	Retail	0%	0%	0.00	12.2	12.2	2.7	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	176	Halogen PAR Flood, 90W	Retail	40%	40%	0.52	17.6	10.5	2.3	1	9.8	2.2	2.1	0.06	273	1.9	1.9	0.9	1.4
PG&E	177	Metal Halide, 50W	Retail	58%	58%	12.46	21.8	9.2	2.0	8	8.8	1.9	1.9	0.19	883	0.6	0.5	7.7	1.4
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	FoodStore	0%	0%	0.00	14.2	14.2	2.2	7	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	111	ROB 4L4'T8, 1EB	FoodStore	21%	21%	0.02	17.1	13.5	2.1	11	9.1	1.4	1.5	0.00	5	132.8	124.8	0.0	1.3
PG&E	112	ROB 2L4'T8, 1EB, Reflector	FoodStore	58%	58%	0.33	26.7	11.1	1.7	11	10.0	1.6	1.6	0.00	21	29.1	27.3	0.2	1.3
PG&E	114	RET 4L4'T8, 1EB	FoodStore	21%	21%	0.70	17.1	13.5	2.1	11	9.1	1.4	1.5	0.02	136	4.5	3.6	1.6	1.3
PG&E	115	RET 2L4'T8, 1EB, Reflector	FoodStore	58%	58%	1.01	26.7	11.1	1.7	11	10.0	1.6	1.6	0.01	51	12.0	10.2	0.5	1.3
PG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	FoodStore	15%	20%	0.45	14.2	12.1	1.8	6	3.4	0.7	0.7	0.05	253	2.1	2.0	1.6	1.5
PG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	FoodStore	27%	75%	4.69	14.3	10.3	0.6	8	16.2	6.9	3.6	0.25	584	0.7	0.4	9.2	2.1
PG&E	119	RNV 2L4'T5HO, 1EB	FoodStore	24%	24%	4.07	14.2	10.9	1.7	11	13.5	2.1	2.2	0.18	1160	0.5	0.5	9.9	1.3
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	FoodStore	0%	0%	0.00	14.2	14.2	2.2	7	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	131	ROB 2L4'T8, 1EB	FoodStore	17%	17%	0.19	16.4	13.7	2.1	11	20.0	3.1	3.3	0.01	70	8.9	8.3	0.6	1.3
PG&E	133	RET 2L4'T8, 1EB	FoodStore	17%	17%	0.92	16.4	13.7	2.1	11	18.0	2.8	3.0	0.04	252	2.4	2.0	2.8	1.3
PG&E	134	RET 1L4'T8, 1EB, Reflector OEM	FoodStore	57%	57%	1.40	26.1	11.2	1.8	11	10.9	1.7	1.8	0.01	79	7.8	6.8	0.8	1.3
PG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	FoodStore	15%	20%	0.43	14.2	12.1	1.8	6	7.8	1.6	1.7	0.05	244	2.2	2.0	1.6	1.5
PG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	FoodStore	27%	75%	4.51	14.3	10.3	0.6	8	36.9	15.8	8.3	0.24	562	0.7	0.5	8.8	2.1
PG&E	138	RNV 1L4'T5HO, 1EB	FoodStore	24%	24%	7.39	14.2	10.9	1.7	11	30.8	4.8	5.0	0.34	2154	0.3	0.3	18.0	1.3
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	FoodStore	0%	0%	0.00	14.2	14.2	2.2	7	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	151	ROB 2L8'T12, 60W, 1EB	FoodStore	22%	22%	0.21	15.9	12.4	1.9	11	43.8	6.8	7.2	0.01	63	9.8	9.2	0.5	1.3
PG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	FoodStore	60%	60%	0.64	20.0	7.9	1.2	11	38.5	6.0	6.3	0.01	54	11.5	10.8	0.4	1.3
PG&E	153	RET 2L8'T12, 60W, 1EB	FoodStore	22%	22%	1.15	15.9	12.4	1.9	11	43.8	6.8	7.2	0.04	249	2.5	2.0	2.8	1.3
PG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	FoodStore	60%	60%	1.58	20.0	7.9	1.2	11	38.5	6.0	6.3	0.02	107	5.8	5.0	1.1	1.3
PG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	FoodStore	15%	20%	0.49	14.2	12.1	1.8	6	6.4	1.4	1.4	0.06	276	2.0	1.8	1.8	1.5
PG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	FoodStore	27%	75%	5.09	14.3	10.3	0.6	8	30.6	13.1	6.9	0.27	634	0.6	0.4	10.0	2.1
PG&E	165	Base Incandescent Flood, 75W	FoodStore	0%	0%	0.00	51.1	51.1	8.0	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	166	CFL Screw-in, Modular 18W	FoodStore	72%	72%	2.18	64.0	17.9	2.8	3	20.0	3.1	3.3	0.02	107	5.7	6.3	0.4	1.3
PG&E	175	Base Incandescent Flood, 150W PAR	FoodStore	0%	0%	0.00	51.1	51.1	8.0	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	176	Halogen PAR Flood, 90W	FoodStore	40%	40%	1.05	75.1	45.1	7.1	1	4.5	0.7	0.7	0.06	392	1.6	1.8	0.9	1.3
PG&E	177	Metal Halide, 50W	FoodStore	58%	58%	25.07	95.3	40.0	6.3	4	7.4	1.2	1.2	0.18	1139	0.5	0.6	3.9	1.3

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Warehouse	0%	0%	0.00	2.5	2.5	0.4	24	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	111	ROB 4L4'T8, 1EB	Warehouse	21%	21%	0.01	2.7	2.1	0.3	38	11.9	1.9	2.2	0.00	9	57.5	45.7	0.1	1.3
PG&E	112	ROB 2L4'T8, 1EB, Reflector	Warehouse	58%	58%	0.18	2.9	1.2	0.2	38	9.2	1.5	1.7	0.01	56	8.9	7.1	0.8	1.3
PG&E	114	RET 4L4'T8, 1EB	Warehouse	21%	21%	0.39	2.7	2.1	0.3	38	11.9	1.9	2.2	0.06	375	1.3	1.1	5.5	1.3
PG&E	115	RET 2L4'T8, 1EB, Reflector	Warehouse	58%	58%	0.56	2.9	1.2	0.2	38	9.2	1.5	1.7	0.03	174	2.9	2.3	2.6	1.3
PG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Warehouse	15%	20%	0.25	2.5	2.2	0.3	22	2.6	0.6	0.6	0.07	309	1.6	1.1	5.2	1.5
PG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Warehouse	26%	75%	2.62	2.5	1.9	0.1	27	9.4	4.3	2.5	0.36	788	0.4	0.2	27.4	2.1
PG&E	119	RNV 2L4'T5HO, 1EB	Warehouse	24%	24%	2.27	2.5	1.9	0.3	38	5.3	0.9	1.0	0.33	2025	0.2	0.2	29.7	1.3
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Warehouse	0%	0%	0.00	2.5	2.5	0.4	24	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	131	ROB 2L4'T8, 1EB	Warehouse	17%	17%	0.11	2.6	2.2	0.4	38	7.0	1.1	1.3	0.02	131	3.8	3.0	1.9	1.3
PG&E	133	RET 2L4'T8, 1EB	Warehouse	17%	17%	0.53	2.6	2.2	0.4	38	6.3	1.0	1.2	0.10	640	0.8	0.6	9.4	1.3
PG&E	134	RET 1L4'T8, 1EB, Reflector OEM	Warehouse	57%	57%	0.81	2.9	1.3	0.2	38	2.7	0.4	0.5	0.04	257	2.0	1.6	3.8	1.3
PG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Warehouse	15%	20%	0.25	2.5	2.2	0.3	22	1.5	0.3	0.4	0.07	306	1.7	1.1	5.1	1.5
PG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Warehouse	26%	75%	2.59	2.5	1.9	0.1	27	5.6	2.5	1.5	0.36	780	0.5	0.2	27.0	2.1
PG&E	138	RNV 1L4'T5HO, 1EB	Warehouse	24%	24%	4.24	2.5	1.9	0.3	38	3.1	0.5	0.6	0.61	3777	0.1	0.1	55.5	1.3
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Warehouse	0%	0%	0.00	2.5	2.5	0.4	24	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	151	ROB 2L8'T12, 60W, 1EB	Warehouse	22%	22%	0.13	2.8	2.2	0.3	38	34.0	5.5	6.2	0.02	118	4.2	3.4	1.7	1.3
PG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	Warehouse	60%	60%	0.40	3.4	1.3	0.2	38	29.0	4.7	5.3	0.02	103	4.8	3.9	1.5	1.3
PG&E	153	RET 2L8'T12, 60W, 1EB	Warehouse	22%	22%	0.72	2.8	2.2	0.3	38	34.0	5.5	6.2	0.10	638	0.8	0.6	9.4	1.3
PG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	Warehouse	60%	60%	0.99	3.4	1.3	0.2	38	29.0	4.7	5.3	0.04	255	2.0	1.6	3.7	1.3
PG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Warehouse	15%	20%	0.31	2.5	2.2	0.3	22	9.0	2.0	2.2	0.08	379	1.3	0.9	6.4	1.5
PG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Warehouse	26%	75%	3.20	2.5	1.9	0.1	27	32.8	15.0	8.6	0.44	965	0.4	0.2	33.5	2.1
PG&E	165	Base Incandescent Flood, 75W	Warehouse	0%	0%	0.00	8.8	8.8	1.4	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	166	CFL Screw-in, Modular 18W	Warehouse	72%	72%	1.38	11.3	3.2	0.5	11	18.7	3.0	3.4	0.02	147	4.1	3.7	1.3	1.3
PG&E	175	Base Incandescent Flood, 150W PAR	Warehouse	0%	0%	0.00	8.8	8.8	1.4	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	176	Halogen PAR Flood, 90W	Warehouse	40%	40%	0.35	8.9	5.3	0.9	1	24.2	3.9	4.4	0.05	301	2.0	2.3	0.7	1.3
PG&E	177	Metal Halide, 50W	Warehouse	58%	58%	8.37	8.9	3.7	0.6	13	31.6	5.1	5.8	0.21	1329	0.5	0.4	12.6	1.3
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	School	0%	0%	0.00	3.2	3.2	0.7	24	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	111	ROB 4L4'T8, 1EB	School	21%	21%	0.01	3.8	3.0	0.6	37	6.2	1.3	1.5	0.00	6	68.9	47.9	0.1	1.4
PG&E	112	ROB 2L4'T8, 1EB, Reflector	School	58%	58%	0.26	5.9	2.5	0.5	37	6.7	1.4	1.7	0.01	29	14.9	10.4	0.6	1.4
PG&E	114	RET 4L4'T8, 1EB	School	21%	21%	0.56	3.8	3.0	0.6	37	6.2	1.3	1.5	0.06	273	1.6	1.1	5.3	1.4
PG&E	115	RET 2L4'T8, 1EB, Reflector	School	58%	58%	0.80	5.9	2.5	0.5	37	6.7	1.4	1.7	0.02	91	4.8	3.4	1.8	1.4
PG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	School	16%	20%	0.36	3.3	2.7	0.6	21	10.6	2.8	3.2	0.07	250	1.9	1.2	5.0	1.6
PG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	School	35%	75%	3.72	3.2	2.1	0.2	27	15.3	7.1	4.1	0.31	668	0.5	0.3	23.6	2.1
PG&E	119	RNV 2L4'T5HO, 1EB	School	24%	24%	3.23	3.2	2.4	0.5	37	8.7	1.9	2.2	0.36	1678	0.3	0.2	32.4	1.4
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	School	0%	0%	0.00	3.2	3.2	0.7	24	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	131	ROB 2L4'T8, 1EB	School	17%	17%	0.15	3.7	3.1	0.7	37	11.7	2.5	2.9	0.02	95	4.6	3.2	1.8	1.4
PG&E	133	RET 2L4'T8, 1EB	School	17%	17%	0.73	3.7	3.1	0.7	37	10.5	2.3	2.6	0.10	467	0.9	0.7	9.0	1.4
PG&E	134	RET 1L4'T8, 1EB, Reflector OEM	School	57%	57%	1.11	5.7	2.5	0.5	37	6.2	1.3	1.5	0.03	133	3.3	2.3	2.6	1.4
PG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	School	16%	20%	0.34	3.3	2.7	0.6	21	20.0	5.3	6.1	0.06	241	2.0	1.2	4.8	1.6
PG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	School	35%	75%	3.57	3.2	2.1	0.2	27	28.8	13.4	7.7	0.30	641	0.5	0.3	22.7	2.1
PG&E	138	RNV 1L4'T5HO, 1EB	School	24%	24%	5.85	3.2	2.4	0.5	37	16.4	3.5	4.0	0.65	3040	0.1	0.1	58.6	1.4
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	School	0%	0%	0.00	3.2	3.2	0.7	24	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	151	ROB 2L8'T12, 60W, 1EB	School	22%	22%	0.18	3.8	3.0	0.6	37	4.9	1.1	1.2	0.02	86	5.1	3.5	1.7	1.4
PG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	School	60%	60%	0.54	5.9	2.3	0.5	37	5.3	1.1	1.3	0.01	60	7.3	5.1	1.1	1.4
PG&E	153	RET 2L8'T12, 60W, 1EB	School	22%	22%	0.98	3.8	3.0	0.6	37	4.9	1.1	1.2	0.10	466	0.9	0.7	9.0	1.4
PG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	School	60%	60%	1.35	5.9	2.3	0.5	37	5.3	1.1	1.3	0.03	147	3.0	2.1	2.8	1.4
PG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	School	16%	20%	0.42	3.3	2.7	0.6	21	7.2	1.9	2.2	0.08	294	1.6	1.0	5.8	1.6
PG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	School	35%	75%	4.35	3.2	2.1	0.2	27	10.3	4.8	2.8	0.36	781	0.4	0.2	27.6	2.1
PG&E	165	Base Incandescent Flood, 75W	School	0%	0%	0.00	5.5	5.5	1.2	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	166	CFL Screw-in, Modular 18W	School	72%	72%	1.56	12.9	3.6	0.8	11	3.0	0.6	0.7	0.02	109	4.8	3.8	1.3	1.4
PG&E	175	Base Incandescent Flood, 150W PAR	School	0%	0%	0.00	5.5	5.5	1.2	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	176	Halogen PAR Flood, 90W	School	40%	40%	0.21	5.5	3.3	0.7	1	2.2	0.5	0.6	0.05	224	2.3	2.4	0.7	1.4
PG&E	177	Metal Halide, 50W	School	58%	58%	5.12	5.5	2.3	0.5	13	2.9	0.6	0.7	0.21	992	0.5	0.4	12.4	1.4

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	College	0%	0%	0.00	3.7	3.7	0.4	22	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	111	ROB 4L4'T8, 1EB	College	21%	21%	0.01	4.2	3.3	0.4	35	9.3	1.0	1.7	0.00	12	70.9	52.5	0.1	1.4
PG&E	112	ROB 2L4'T8, 1EB, Reflector	College	58%	58%	0.26	5.6	2.3	0.3	35	8.7	0.9	1.6	0.01	65	13.2	9.8	0.6	1.4
PG&E	114	RET 4L4'T8, 1EB	College	21%	21%	0.57	4.2	3.3	0.4	35	9.3	1.0	1.7	0.06	519	1.6	1.2	4.9	1.4
PG&E	115	RET 2L4'T8, 1EB, Reflector	College	58%	58%	0.82	5.6	2.3	0.3	35	8.7	0.9	1.6	0.02	201	4.2	3.1	1.9	1.4
PG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	College	17%	20%	0.36	3.7	3.1	0.3	20	9.9	1.2	2.1	0.06	466	2.1	1.4	4.1	1.4
PG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	College	42%	75%	3.79	3.7	2.2	0.1	25	14.5	2.8	2.4	0.23	1193	0.6	0.4	16.9	1.7
PG&E	119	RNV 2L4'T5HO, 1EB	College	24%	24%	3.29	3.7	2.8	0.3	35	6.9	0.7	1.3	0.33	3024	0.3	0.2	28.4	1.4
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	College	0%	0%	0.00	3.7	3.7	0.4	22	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	131	ROB 2L4'T8, 1EB	College	17%	17%	0.15	4.1	3.4	0.4	35	16.7	1.8	3.0	0.02	181	4.7	3.5	1.7	1.4
PG&E	133	RET 2L4'T8, 1EB	College	17%	17%	0.75	4.1	3.4	0.4	35	15.0	1.6	2.7	0.10	886	1.0	0.7	8.3	1.4
PG&E	134	RET 1L4'T8, 1EB, Reflector OEM	College	57%	57%	1.15	5.5	2.4	0.3	35	7.6	0.8	1.4	0.03	295	2.9	2.1	2.8	1.4
PG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	College	17%	20%	0.35	3.7	3.1	0.3	20	18.0	2.2	3.8	0.06	453	2.1	1.5	4.0	1.4
PG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	College	42%	75%	3.68	3.7	2.2	0.1	25	26.4	5.1	4.3	0.23	1160	0.6	0.4	16.4	1.7
PG&E	138	RNV 1L4'T5HO, 1EB	College	24%	24%	6.03	3.7	2.8	0.3	35	12.5	1.4	2.3	0.60	5545	0.2	0.1	52.1	1.4
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	College	0%	0%	0.00	3.7	3.7	0.4	22	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	151	ROB 2L8'T12, 60W, 1EB	College	22%	22%	0.18	4.0	3.1	0.3	35	1.8	0.2	0.3	0.02	163	5.2	3.9	1.5	1.4
PG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	College	60%	60%	0.53	4.8	1.9	0.2	35	1.5	0.2	0.3	0.02	147	5.8	4.3	1.4	1.4
PG&E	153	RET 2L8'T12, 60W, 1EB	College	22%	22%	0.96	4.0	3.1	0.3	35	1.8	0.2	0.3	0.10	883	1.0	0.7	8.3	1.4
PG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	College	60%	60%	1.31	4.8	1.9	0.2	35	1.5	0.2	0.3	0.04	365	2.3	1.7	3.4	1.4
PG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	College	17%	20%	0.41	3.7	3.1	0.3	20	1.3	0.2	0.3	0.06	522	1.8	1.3	4.6	1.4
PG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	College	42%	75%	4.24	3.7	2.2	0.1	25	1.9	0.4	0.3	0.26	1336	0.5	0.3	18.9	1.7
PG&E	165	Base Incandescent Flood, 75W	College	0%	0%	0.00	6.3	6.3	0.7	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	166	CFL Screw-in, Modular 18W	College	72%	72%	1.68	15.0	4.2	0.5	10	1.7	0.2	0.3	0.02	211	4.8	4.1	1.2	1.4
PG&E	175	Base Incandescent Flood, 150W PAR	College	0%	0%	0.00	6.3	6.3	0.7	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	176	Halogen PAR Flood, 90W	College	40%	40%	0.43	9.3	5.6	0.6	1	0.1	0.0	0.0	0.06	563	1.8	1.9	0.9	1.4
PG&E	177	Metal Halide, 50W	College	58%	58%	10.18	11.8	5.0	0.5	12	0.2	0.0	0.0	0.21	1937	0.5	0.5	11.2	1.4
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Hospital	0%	0%	0.00	11.6	11.6	2.3	7	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	111	ROB 4L4'T8, 1EB	Hospital	21%	21%	0.01	13.1	10.4	2.0	11	45.4	8.9	8.7	0.00	4	153.2	128.9	0.0	1.4
PG&E	112	ROB 2L4'T8, 1EB, Reflector	Hospital	58%	58%	0.27	17.0	7.1	1.4	11	41.2	8.1	7.9	0.00	20	27.8	23.4	0.2	1.4
PG&E	114	RET 4L4'T8, 1EB	Hospital	21%	21%	0.57	13.1	10.4	2.0	11	45.4	8.9	8.7	0.02	108	5.2	3.7	1.6	1.4
PG&E	115	RET 2L4'T8, 1EB, Reflector	Hospital	58%	58%	0.83	17.0	7.1	1.4	11	41.2	8.1	7.9	0.01	49	11.5	8.7	0.6	1.4
PG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Hospital	16%	20%	0.37	11.6	9.7	1.8	6	43.1	10.4	10.1	0.05	189	2.8	2.4	1.4	1.6
PG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Hospital	36%	75%	3.85	11.6	7.4	0.6	8	18.9	7.8	3.8	0.18	435	1.0	0.6	6.4	2.0
PG&E	119	RNV 2L4'T5HO, 1EB	Hospital	24%	24%	3.34	11.6	8.9	1.7	11	31.2	6.1	6.0	0.17	865	0.7	0.5	9.1	1.4
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Hospital	0%	0%	0.00	11.6	11.6	2.3	7	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	131	ROB 2L4'T8, 1EB	Hospital	17%	17%	0.16	12.7	10.6	2.1	11	53.5	10.5	10.2	0.01	55	10.2	8.6	0.6	1.4
PG&E	133	RET 2L4'T8, 1EB	Hospital	17%	17%	0.77	12.7	10.6	2.1	11	48.2	9.5	9.2	0.04	200	2.8	2.1	2.7	1.4
PG&E	134	RET 1L4'T8, 1EB, Reflector OEM	Hospital	57%	57%	1.17	16.7	7.2	1.4	11	24.0	4.7	4.6	0.02	76	7.4	5.7	0.9	1.4
PG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Hospital	16%	20%	0.36	11.6	9.7	1.8	6	51.5	12.4	12.1	0.04	184	2.8	2.4	1.3	1.6
PG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Hospital	36%	75%	3.75	11.6	7.4	0.6	8	22.6	9.3	4.5	0.17	424	1.0	0.6	6.3	2.0
PG&E	138	RNV 1L4'T5HO, 1EB	Hospital	24%	24%	6.14	11.6	8.9	1.7	11	37.2	7.3	7.1	0.32	1627	0.3	0.3	16.8	1.4
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Hospital	0%	0%	0.00	11.6	11.6	2.3	7	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	151	ROB 2L8'T12, 60W, 1EB	Hospital	22%	22%	0.17	11.6	9.1	1.8	11	5.1	1.0	1.0	0.01	50	11.3	9.5	0.5	1.4
PG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	Hospital	60%	60%	0.50	11.6	4.6	0.9	11	3.5	0.7	0.7	0.01	53	10.5	8.9	0.5	1.4
PG&E	153	RET 2L8'T12, 60W, 1EB	Hospital	22%	22%	0.90	11.6	9.1	1.8	11	5.1	1.0	1.0	0.04	198	2.9	2.1	2.7	1.4
PG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	Hospital	60%	60%	1.24	11.6	4.6	0.9	11	3.5	0.7	0.7	0.02	106	5.3	4.1	1.3	1.4
PG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Hospital	16%	20%	0.38	11.6	9.7	1.8	6	2.4	0.6	0.6	0.05	196	2.7	2.3	1.4	1.6
PG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Hospital	36%	75%	3.99	11.6	7.4	0.6	8	1.0	0.4	0.2	0.19	451	0.9	0.6	6.7	2.0
PG&E	165	Base Incandescent Flood, 75W	Hospital	0%	0%	0.00	23.5	23.5	4.6	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	166	CFL Screw-in, Modular 18W	Hospital	72%	72%	1.77	48.4	13.6	2.7	3	30.6	6.0	5.8	0.02	85	6.6	6.5	0.4	1.4
PG&E	175	Base Incandescent Flood, 150W PAR	Hospital	0%	0%	0.00	23.5	23.5	4.6	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	176	Halogen PAR Flood, 90W	Hospital	40%	40%	0.28	23.5	14.1	2.8	1	7.2	1.4	1.4	0.05	245	2.3	2.4	0.7	1.4
PG&E	177	Metal Halide, 50W	Hospital	58%	58%	6.63	23.5	9.9	1.9	4	9.4	1.8	1.8	0.18	904	0.6	0.6	3.9	1.4

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Hotel	0%	0%	0.00	1.8	1.8	0.4	17	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	111	ROB 4L4'T8, 1EB	Hotel	21%	21%	0.00	1.9	1.5	0.3	27	0.4	0.1	0.1	0.00	5	94.6	65.3	0.1	1.4
PG&E	112	ROB 2L4'T8, 1EB, Reflector	Hotel	58%	58%	0.09	2.3	0.9	0.2	27	0.3	0.1	0.1	0.01	30	15.6	10.8	0.5	1.4
PG&E	114	RET 4L4'T8, 1EB	Hotel	21%	21%	0.20	1.9	1.5	0.3	27	0.4	0.1	0.1	0.05	214	2.2	1.5	3.9	1.4
PG&E	115	RET 2L4'T8, 1EB, Reflector	Hotel	58%	58%	0.29	2.3	0.9	0.2	27	0.3	0.1	0.1	0.02	93	5.0	3.5	1.7	1.4
PG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Hotel	16%	20%	0.13	1.8	1.5	0.3	15	0.1	0.0	0.0	0.05	196	2.5	1.7	3.3	1.6
PG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Hotel	35%	75%	1.36	1.8	1.1	0.1	19	0.3	0.2	0.1	0.22	483	0.8	0.4	15.0	2.1
PG&E	119	RNV 2L4'T5HO, 1EB	Hotel	24%	24%	1.18	1.8	1.4	0.3	27	0.2	0.0	0.0	0.26	1192	0.4	0.3	21.5	1.4
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Hotel	0%	0%	0.00	1.8	1.8	0.4	17	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	131	ROB 2L4'T8, 1EB	Hotel	17%	17%	0.06	1.9	1.6	0.3	27	11.5	2.5	2.6	0.02	75	6.3	4.4	1.3	1.4
PG&E	133	RET 2L4'T8, 1EB	Hotel	17%	17%	0.27	1.9	1.6	0.3	27	10.3	2.2	2.4	0.08	366	1.3	0.9	6.6	1.4
PG&E	134	RET 1L4'T8, 1EB, Reflector OEM	Hotel	57%	57%	0.41	2.2	1.0	0.2	27	4.7	1.0	1.1	0.03	137	3.4	2.4	2.5	1.4
PG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Hotel	16%	20%	0.13	1.8	1.5	0.3	15	3.3	0.9	0.9	0.05	193	2.5	1.7	3.2	1.6
PG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Hotel	35%	75%	1.33	1.8	1.1	0.1	19	10.9	5.0	2.6	0.22	475	0.8	0.4	14.7	2.1
PG&E	138	RNV 1L4'T5HO, 1EB	Hotel	24%	24%	2.18	1.8	1.4	0.3	27	6.1	1.3	1.4	0.48	2208	0.2	0.1	39.9	1.4
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Hotel	0%	0%	0.00	1.8	1.8	0.4	17	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	151	ROB 2L8'T12, 60W, 1EB	Hotel	22%	22%	0.06	1.8	1.4	0.3	27	0.2	0.0	0.0	0.01	67	7.0	4.8	1.2	1.4
PG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	Hotel	60%	60%	0.18	1.8	0.7	0.2	27	0.1	0.0	0.0	0.02	72	6.5	4.5	1.3	1.4
PG&E	153	RET 2L8'T12, 60W, 1EB	Hotel	22%	22%	0.33	1.8	1.4	0.3	27	0.2	0.0	0.0	0.08	365	1.3	0.9	6.6	1.4
PG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	Hotel	60%	60%	0.45	1.8	0.7	0.2	27	0.1	0.0	0.0	0.04	179	2.6	1.8	3.2	1.4
PG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Hotel	16%	20%	0.14	1.8	1.5	0.3	15	0.0	0.0	0.0	0.06	212	2.3	1.6	3.6	1.6
PG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Hotel	35%	75%	1.46	1.8	1.1	0.1	19	0.1	0.0	0.0	0.24	521	0.7	0.4	16.1	2.1
PG&E	165	Base Incandescent Flood, 75W	Hotel	0%	0%	0.00	4.6	4.6	1.0	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	166	CFL Screw-in, Modular 18W	Hotel	72%	72%	0.67	7.7	2.1	0.5	8	57.3	12.4	13.1	0.02	97	5.4	4.5	1.0	1.4
PG&E	175	Base Incandescent Flood, 150W PAR	Hotel	0%	0%	0.00	4.6	4.6	1.0	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	176	Halogen PAR Flood, 90W	Hotel	40%	40%	0.14	4.7	2.8	0.6	1	6.6	1.4	1.5	0.05	226	2.3	2.3	0.7	1.4
PG&E	177	Metal Halide, 50W	Hotel	58%	58%	3.25	4.8	2.0	0.4	9	6.8	1.5	1.5	0.20	921	0.6	0.5	8.7	1.4
PG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Miscellanec	0%	0%	0.00	1.6	1.6	0.2	30	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	111	ROB 4L4'T8, 1EB	Miscellanec	21%	21%	0.01	1.7	1.4	0.1	47	13.2	1.3	1.2	0.00	17	38.5	36.1	0.2	1.1
PG&E	112	ROB 2L4'T8, 1EB, Reflector	Miscellanec	58%	58%	0.15	2.1	0.9	0.1	47	11.2	1.1	1.0	0.01	99	6.5	6.1	1.0	1.1
PG&E	114	RET 4L4'T8, 1EB	Miscellanec	21%	21%	0.31	1.7	1.4	0.1	47	13.2	1.3	1.2	0.07	719	0.9	0.8	6.9	1.1
PG&E	115	RET 2L4'T8, 1EB, Reflector	Miscellanec	58%	58%	0.45	2.1	0.9	0.1	47	11.2	1.1	1.0	0.03	306	2.1	2.0	3.0	1.1
PG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Miscellanec	14%	20%	0.20	1.6	1.3	0.1	27	3.4	0.5	0.5	0.09	590	1.0	0.8	7.2	1.2
PG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Miscellanec	21%	75%	2.10	1.6	1.2	0.0	34	7.8	2.8	1.3	0.56	1557	0.2	0.1	45.6	1.8
PG&E	119	RNV 2L4'T5HO, 1EB	Miscellanec	24%	24%	1.82	1.6	1.2	0.1	47	7.4	0.7	0.7	0.41	4044	0.2	0.1	38.9	1.1
PG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Miscellanec	0%	0%	0.00	1.6	1.6	0.2	30	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	131	ROB 2L4'T8, 1EB	Miscellanec	17%	17%	0.09	1.7	1.4	0.1	47	20.6	2.1	1.9	0.03	251	2.6	2.4	2.4	1.1
PG&E	133	RET 2L4'T8, 1EB	Miscellanec	17%	17%	0.42	1.7	1.4	0.1	47	18.6	1.9	1.7	0.12	1230	0.5	0.5	11.8	1.1
PG&E	134	RET 1L4'T8, 1EB, Reflector OEM	Miscellanec	57%	57%	0.64	2.0	0.9	0.1	47	8.6	0.9	0.8	0.05	450	1.4	1.3	4.3	1.1
PG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Miscellanec	14%	20%	0.20	1.6	1.3	0.1	27	5.4	0.8	0.7	0.08	579	1.0	0.8	7.1	1.2
PG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Miscellanec	21%	75%	2.06	1.6	1.2	0.0	34	12.3	4.4	2.0	0.55	1526	0.2	0.1	44.7	1.8
PG&E	138	RNV 1L4'T5HO, 1EB	Miscellanec	24%	24%	3.37	1.6	1.2	0.1	47	11.6	1.2	1.1	0.75	7478	0.1	0.1	72.0	1.1
PG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Miscellanec	0%	0%	0.00	1.6	1.6	0.2	30	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	151	ROB 2L8'T12, 60W, 1EB	Miscellanec	22%	22%	0.10	1.6	1.2	0.1	47	23.6	2.4	2.2	0.02	226	2.8	2.7	2.2	1.1
PG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	Miscellanec	60%	60%	0.29	1.6	0.7	0.1	47	17.1	1.7	1.6	0.02	234	2.8	2.6	2.3	1.1
PG&E	153	RET 2L8'T12, 60W, 1EB	Miscellanec	22%	22%	0.52	1.6	1.2	0.1	47	23.6	2.4	2.2	0.12	1225	0.5	0.5	11.8	1.1
PG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	Miscellanec	60%	60%	0.71	1.6	0.7	0.1	47	17.1	1.7	1.6	0.06	579	1.1	1.0	5.6	1.1
PG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Miscellanec	14%	20%	0.22	1.6	1.3	0.1	27	4.1	0.6	0.5	0.09	643	0.9	0.7	7.8	1.2
PG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Miscellanec	21%	75%	2.29	1.6	1.2	0.0	34	9.2	3.3	1.5	0.61	1695	0.2	0.1	49.6	1.8
PG&E	165	Base Incandescent Flood, 75W	Miscellanec	0%	0%	0.00	5.5	5.5	0.6	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	166	CFL Screw-in, Modular 18W	Miscellanec	72%	72%	1.07	7.0	2.0	0.2	13	53.6	5.4	4.9	0.03	249	3.2	3.3	1.6	1.1
PG&E	175	Base Incandescent Flood, 150W PAR	Miscellanec	0%	0%	0.00	5.5	5.5	0.6	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	176	Halogen PAR Flood, 90W	Miscellanec	40%	40%	0.29	5.8	3.5	0.3	1	18.5	1.9	1.7	0.05	489	1.6	2.2	0.7	1.1
PG&E	177	Metal Halide, 50W	Miscellanec	58%	58%	6.93	5.9	2.5	0.2	16	24.7	2.5	2.3	0.23	2269	0.4	0.4	15.8	1.1

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Office	0%	0%	0.00	7.2	7.2	1.7	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	111	ROB 4L4'T8, 1EB	Office	21%	21%	0.01	8.3	6.5	1.6	16	129.3	30.7	32.2	0.00	3	150.2	108.3	0.1	1.5
SCE	112	ROB 2L4'T8, 1EB, Reflector	Office	58%	58%	0.24	11.1	4.6	1.1	16	121.9	29.0	30.4	0.00	18	28.3	20.4	0.3	1.5
SCE	114	RET 4L4'T8, 1EB	Office	21%	21%	0.52	8.3	6.5	1.6	16	129.3	30.7	32.2	0.03	129	3.9	2.6	2.2	1.5
SCE	115	RET 2L4'T8, 1EB, Reflector	Office	58%	58%	0.75	11.1	4.6	1.1	16	121.9	29.0	30.4	0.01	51	9.8	6.8	0.8	1.5
SCE	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Office	25%	30%	0.33	7.5	5.6	1.2	9	151.4	43.3	45.4	0.03	109	4.3	3.2	1.3	1.7
SCE	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Office	38%	75%	3.47	7.2	4.5	0.4	11	255.3	121.1	63.5	0.19	391	1.0	0.5	8.9	2.3
SCE	119	RNV 2L4'T5HO, 1EB	Office	24%	24%	3.01	7.2	5.5	1.3	16	100.3	23.8	25.0	0.20	827	0.6	0.4	12.8	1.5
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Office	0%	0%	0.00	7.2	7.2	1.7	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	131	ROB 2L4'T8, 1EB	Office	17%	17%	0.14	8.0	6.7	1.6	16	93.7	22.3	23.3	0.01	50	10.0	7.2	0.8	1.5
SCE	133	RET 2L4'T8, 1EB	Office	17%	17%	0.69	8.0	6.7	1.6	16	84.3	20.0	21.0	0.05	225	2.2	1.5	3.7	1.5
SCE	134	RET 1L4'T8, 1EB, Reflector OEM	Office	57%	57%	1.05	10.9	4.7	1.1	16	43.6	10.4	10.9	0.02	76	6.6	4.6	1.2	1.5
SCE	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Office	25%	30%	0.32	7.5	5.6	1.2	9	111.5	31.9	33.4	0.03	106	4.4	3.3	1.2	1.7
SCE	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Office	38%	75%	3.37	7.2	4.5	0.4	11	187.3	88.8	46.6	0.18	379	1.0	0.5	8.6	2.3
SCE	138	RNV 1L4'T5HO, 1EB	Office	24%	24%	5.51	7.2	5.5	1.3	16	73.5	17.5	18.3	0.36	1525	0.3	0.2	23.5	1.5
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Office	0%	0%	0.00	7.2	7.2	1.7	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	151	ROB 2L8'T12, 60W, 1EB	Office	22%	22%	0.15	7.3	5.7	1.4	16	61.3	14.6	15.3	0.01	45	11.1	8.0	0.7	1.5
SCE	152	ROB 1L8'T12, 60W, 1EB, Reflector	Office	60%	60%	0.45	7.5	3.0	0.7	16	44.0	10.4	11.0	0.01	47	10.6	7.7	0.7	1.5
SCE	153	RET 2L8'T12, 60W, 1EB	Office	22%	22%	0.81	7.3	5.7	1.4	16	61.3	14.6	15.3	0.05	224	2.2	1.5	3.7	1.5
SCE	154	RET 1L8'T12, 60W, 1EB, Reflector	Office	60%	60%	1.11	7.5	3.0	0.7	16	44.0	10.4	11.0	0.03	109	4.6	3.2	1.8	1.5
SCE	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Office	25%	30%	0.35	7.5	5.6	1.2	9	33.5	9.6	10.0	0.03	113	4.1	3.1	1.3	1.7
SCE	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Office	38%	75%	3.60	7.2	4.5	0.4	11	56.2	26.7	14.0	0.19	406	0.9	0.5	9.2	2.3
SCE	165	Base Incandescent Flood, 75W	Office	0%	0%	0.00	12.4	12.4	3.0	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	166	CFL Screw-in, Modular 18W	Office	72%	72%	1.53	29.3	8.2	2.0	5	19.6	4.7	4.9	0.02	78	6.4	5.7	0.6	1.5
SCE	175	Base Incandescent Flood, 150W PAR	Office	0%	0%	0.00	12.4	12.4	3.0	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	176	Halogen PAR Flood, 90W	Office	40%	40%	0.41	18.8	11.3	2.7	1	1.4	0.3	0.4	0.06	264	1.9	1.9	0.9	1.5
SCE	177	Metal Halide, 50W	Office	58%	58%	9.80	24.4	10.3	2.4	6	2.4	0.6	0.6	0.19	783	0.6	0.6	5.5	1.5
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Restaurant	0%	0%	0.00	7.8	7.8	1.2	16	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	111	ROB 4L4'T8, 1EB	Restaurant	21%	21%	0.02	7.9	6.3	1.0	25	14.3	2.3	2.4	0.00	6	87.0	72.5	0.1	1.2
SCE	112	ROB 2L4'T8, 1EB, Reflector	Restaurant	58%	58%	0.35	8.2	3.4	0.6	25	10.4	1.7	1.7	0.01	44	12.7	10.5	0.5	1.2
SCE	114	RET 4L4'T8, 1EB	Restaurant	21%	21%	0.76	7.9	6.3	1.0	25	14.3	2.3	2.4	0.04	272	2.0	1.7	3.4	1.2
SCE	115	RET 2L4'T8, 1EB, Reflector	Restaurant	58%	58%	1.09	8.2	3.4	0.6	25	10.4	1.7	1.7	0.02	135	4.1	3.4	1.7	1.2
SCE	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Restaurant	15%	20%	0.49	7.8	6.6	1.0	14	1.4	0.3	0.3	0.05	242	2.2	1.7	3.1	1.4
SCE	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Restaurant	27%	75%	5.08	7.8	5.7	0.3	18	12.6	5.6	2.9	0.27	594	0.7	0.3	18.1	2.2
SCE	119	RNV 2L4'T5HO, 1EB	Restaurant	24%	24%	4.41	7.8	5.9	1.0	25	5.5	0.9	0.9	0.23	1427	0.4	0.3	17.8	1.2
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Restaurant	0%	0%	0.00	7.8	7.8	1.2	16	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	131	ROB 2L4'T8, 1EB	Restaurant	17%	17%	0.21	7.9	6.6	1.1	25	10.8	1.7	1.8	0.02	95	5.8	4.8	1.2	1.2
SCE	133	RET 2L4'T8, 1EB	Restaurant	17%	17%	1.03	7.9	6.6	1.1	25	9.8	1.6	1.6	0.08	466	1.2	1.0	5.8	1.2
SCE	134	RET 1L4'T8, 1EB, Reflector OEM	Restaurant	57%	57%	1.58	8.2	3.5	0.6	25	3.9	0.6	0.6	0.03	200	2.8	2.3	2.5	1.2
SCE	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Restaurant	15%	20%	0.49	7.8	6.6	1.0	14	1.1	0.2	0.2	0.05	241	2.2	1.7	3.1	1.4
SCE	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Restaurant	27%	75%	5.06	7.8	5.7	0.3	18	9.6	4.3	2.2	0.26	591	0.7	0.3	18.0	2.2
SCE	138	RNV 1L4'T5HO, 1EB	Restaurant	24%	24%	8.29	7.8	5.9	1.0	25	4.2	0.7	0.7	0.43	2679	0.2	0.2	33.5	1.2
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Restaurant	0%	0%	0.00	7.8	7.8	1.2	16	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	151	ROB 2L8'T12, 60W, 1EB	Restaurant	22%	22%	0.24	7.8	6.1	1.0	25	37.1	6.0	6.2	0.01	86	6.4	5.4	1.1	1.2
SCE	152	ROB 1L8'T12, 60W, 1EB, Reflector	Restaurant	60%	60%	0.73	7.8	3.1	0.5	25	25.9	4.2	4.3	0.01	92	6.0	5.0	1.2	1.2
SCE	153	RET 2L8'T12, 60W, 1EB	Restaurant	22%	22%	1.32	7.8	6.1	1.0	25	37.1	6.0	6.2	0.07	464	1.2	1.0	5.8	1.2
SCE	154	RET 1L8'T12, 60W, 1EB, Reflector	Restaurant	60%	60%	1.80	7.8	3.1	0.5	25	25.9	4.2	4.3	0.04	228	2.4	2.0	2.8	1.2
SCE	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Restaurant	15%	20%	0.56	7.8	6.6	1.0	14	3.2	0.7	0.7	0.06	278	1.9	1.5	3.5	1.4
SCE	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Restaurant	27%	75%	5.83	7.8	5.7	0.3	18	29.0	13.0	6.7	0.30	680	0.6	0.3	20.7	2.2
SCE	165	Base Incandescent Flood, 75W	Restaurant	0%	0%	0.00	13.3	13.3	2.1	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	166	CFL Screw-in, Modular 18W	Restaurant	72%	72%	2.51	31.4	8.8	1.4	7	27.7	4.5	4.6	0.02	125	4.8	5.0	0.8	1.2
SCE	175	Base Incandescent Flood, 150W PAR	Restaurant	0%	0%	0.00	13.3	13.3	2.1	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	176	Halogen PAR Flood, 90W	Restaurant	40%	40%	0.58	18.5	11.1	1.8	1	3.8	0.6	0.6	0.06	364	1.6	2.0	0.8	1.2
SCE	177	Metal Halide, 50W	Restaurant	58%	58%	13.82	22.5	9.4	1.5	8	3.3	0.5	0.6	0.19	1205	0.5	0.5	7.3	1.2

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Retail	0%	0%	0.00	6.0	6.0	1.1	14	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	111	ROB 4L4'T8, 1EB	Retail	21%	21%	0.01	6.9	5.5	1.0	22	33.0	6.2	6.2	0.00	5	108.0	82.2	0.1	1.3
SCE	112	ROB 2L4'T8, 1EB, Reflector	Retail	58%	58%	0.28	9.6	4.0	0.8	22	32.2	6.1	6.1	0.00	26	21.0	16.0	0.4	1.3
SCE	114	RET 4L4'T8, 1EB	Retail	21%	21%	0.61	6.9	5.5	1.0	22	33.0	6.2	6.2	0.04	214	2.5	1.9	3.0	1.3
SCE	115	RET 2L4'T8, 1EB, Reflector	Retail	58%	58%	0.87	9.6	4.0	0.8	22	32.2	6.1	6.1	0.01	79	6.8	5.2	1.1	1.3
SCE	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Retail	16%	20%	0.39	6.0	5.0	0.9	13	7.6	1.8	1.8	0.06	230	2.2	1.7	3.1	1.5
SCE	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Retail	32%	75%	4.06	6.0	4.1	0.3	16	18.6	8.3	4.1	0.24	545	0.7	0.4	15.5	2.2
SCE	119	RNV 2L4'T5HO, 1EB	Retail	24%	24%	3.53	6.0	4.6	0.9	22	28.8	5.4	5.4	0.24	1272	0.4	0.3	17.8	1.3
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Retail	0%	0%	0.00	6.0	6.0	1.1	14	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	131	ROB 2L4'T8, 1EB	Retail	17%	17%	0.16	6.7	5.6	1.1	22	19.7	3.7	3.7	0.01	75	7.2	5.5	1.0	1.3
SCE	133	RET 2L4'T8, 1EB	Retail	17%	17%	0.80	6.7	5.6	1.1	22	17.7	3.3	3.3	0.07	367	1.5	1.1	5.1	1.3
SCE	134	RET 1L4'T8, 1EB, Reflector OEM	Retail	57%	57%	1.22	9.4	4.1	0.8	22	9.5	1.8	1.8	0.02	116	4.6	3.5	1.6	1.3
SCE	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Retail	16%	20%	0.38	6.0	5.0	0.9	13	4.6	1.1	1.1	0.05	223	2.3	1.7	3.0	1.5
SCE	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Retail	32%	75%	3.93	6.0	4.1	0.3	16	11.2	5.0	2.5	0.23	528	0.8	0.4	15.0	2.2
SCE	138	RNV 1L4'T5HO, 1EB	Retail	24%	24%	6.44	6.0	4.6	0.9	22	17.4	3.3	3.3	0.44	2323	0.2	0.2	32.5	1.3
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Retail	0%	0%	0.00	6.0	6.0	1.1	14	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	151	ROB 2L8'T12, 60W, 1EB	Retail	22%	22%	0.18	6.4	5.0	1.0	22	144.9	27.3	27.3	0.01	67	8.0	6.1	0.9	1.3
SCE	152	ROB 1L8'T12, 60W, 1EB, Reflector	Retail	60%	60%	0.55	7.5	3.0	0.6	22	117.3	22.1	22.1	0.01	62	8.6	6.6	0.9	1.3
SCE	153	RET 2L8'T12, 60W, 1EB	Retail	22%	22%	1.00	6.4	5.0	1.0	22	144.9	27.3	27.3	0.07	365	1.5	1.1	5.1	1.3
SCE	154	RET 1L8'T12, 60W, 1EB, Reflector	Retail	60%	60%	1.37	7.5	3.0	0.6	22	117.3	22.1	22.1	0.03	154	3.5	2.7	2.2	1.3
SCE	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Retail	16%	20%	0.43	6.0	5.0	0.9	13	18.1	4.4	4.4	0.06	251	2.0	1.5	3.3	1.5
SCE	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Retail	32%	75%	4.42	6.0	4.1	0.3	16	44.2	19.7	9.8	0.26	594	0.7	0.3	16.9	2.2
SCE	165	Base Incandescent Flood, 75W	Retail	0%	0%	0.00	11.9	11.9	2.2	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	166	CFL Screw-in, Modular 18W	Retail	72%	72%	1.81	24.9	7.0	1.3	6	19.3	3.6	3.6	0.02	102	5.5	5.3	0.7	1.3
SCE	175	Base Incandescent Flood, 150W PAR	Retail	0%	0%	0.00	11.9	11.9	2.2	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	176	Halogen PAR Flood, 90W	Retail	40%	40%	0.50	17.1	10.3	1.9	1	4.4	0.8	0.8	0.06	318	1.8	1.9	0.8	1.3
SCE	177	Metal Halide, 50W	Retail	58%	58%	11.96	21.3	8.9	1.7	8	3.9	0.7	0.7	0.19	1030	0.5	0.5	7.3	1.3
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	FoodStore	0%	0%	0.00	14.4	14.4	2.0	7	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	111	ROB 4L4'T8, 1EB	FoodStore	21%	21%	0.02	17.3	13.7	1.9	12	6.1	0.9	0.9	0.00	5	123.5	128.0	0.0	1.1
SCE	112	ROB 2L4'T8, 1EB, Reflector	FoodStore	58%	58%	0.36	27.0	11.2	1.6	12	6.7	0.9	0.9	0.00	24	27.0	28.0	0.2	1.1
SCE	114	RET 4L4'T8, 1EB	FoodStore	21%	21%	0.78	17.3	13.7	1.9	12	6.1	0.9	0.9	0.02	166	3.9	3.5	1.6	1.1
SCE	115	RET 2L4'T8, 1EB, Reflector	FoodStore	58%	58%	1.12	27.0	11.2	1.6	12	6.7	0.9	0.9	0.01	61	10.7	10.1	0.5	1.1
SCE	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	FoodStore	14%	20%	0.50	14.4	12.3	1.6	7	2.2	0.4	0.4	0.06	292	1.9	1.9	1.9	1.3
SCE	118	Continuous Dimming, 5L4' Fluorescent Fixtures	FoodStore	25%	75%	5.21	14.4	10.8	0.5	8	9.9	4.2	2.1	0.28	658	0.6	0.4	10.4	2.1
SCE	119	RNV 2L4'T5HO, 1EB	FoodStore	24%	24%	4.53	14.4	11.0	1.5	12	9.1	1.3	1.3	0.19	1332	0.5	0.5	10.1	1.1
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	FoodStore	0%	0%	0.00	14.4	14.4	2.0	7	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	131	ROB 2L4'T8, 1EB	FoodStore	17%	17%	0.21	16.6	13.8	1.9	12	12.3	1.7	1.7	0.01	79	8.2	8.5	0.6	1.1
SCE	133	RET 2L4'T8, 1EB	FoodStore	17%	17%	1.02	16.6	13.8	1.9	12	11.1	1.5	1.5	0.04	303	2.1	2.0	2.8	1.1
SCE	134	RET 1L4'T8, 1EB, Reflector OEM	FoodStore	57%	57%	1.56	26.4	11.4	1.6	12	6.7	0.9	0.9	0.01	93	7.0	6.7	0.8	1.1
SCE	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	FoodStore	14%	20%	0.48	14.4	12.3	1.6	7	4.6	0.9	0.9	0.05	280	2.0	2.0	1.8	1.3
SCE	137	Continuous Dimming, 10L4' Fluorescent Fixtures	FoodStore	25%	75%	5.01	14.4	10.8	0.5	8	20.5	8.7	4.3	0.27	633	0.6	0.4	10.0	2.1
SCE	138	RNV 1L4'T5HO, 1EB	FoodStore	24%	24%	8.21	14.4	11.0	1.5	12	18.9	2.6	2.6	0.34	2463	0.3	0.3	18.3	1.1
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	FoodStore	0%	0%	0.00	14.4	14.4	2.0	7	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	151	ROB 2L8'T12, 60W, 1EB	FoodStore	22%	22%	0.24	16.0	12.6	1.7	12	78.7	10.9	11.0	0.01	71	9.1	9.5	0.5	1.1
SCE	152	ROB 1L8'T12, 60W, 1EB, Reflector	FoodStore	60%	60%	0.71	20.2	8.0	1.1	12	69.2	9.6	9.6	0.01	61	10.7	11.1	0.4	1.1
SCE	153	RET 2L8'T12, 60W, 1EB	FoodStore	22%	22%	1.28	16.0	12.6	1.7	12	78.7	10.9	11.0	0.04	300	2.2	2.0	2.8	1.1
SCE	154	RET 1L8'T12, 60W, 1EB, Reflector	FoodStore	60%	60%	1.75	20.2	8.0	1.1	12	69.2	9.6	9.6	0.02	126	5.2	4.9	1.1	1.1
SCE	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	FoodStore	14%	20%	0.54	14.4	12.3	1.6	7	11.2	2.2	2.2	0.06	317	1.8	1.7	2.0	1.3
SCE	156	Continuous Dimming, 5L8' Fluorescent Fixtures	FoodStore	25%	75%	5.66	14.4	10.8	0.5	8	49.9	21.1	10.5	0.30	715	0.6	0.3	11.3	2.1
SCE	165	Base Incandescent Flood, 75W	FoodStore	0%	0%	0.00	51.7	51.7	7.2	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	166	CFL Screw-in, Modular 18W	FoodStore	72%	72%	2.42	64.7	18.1	2.5	3	9.1	1.3	1.3	0.02	121	5.4	6.7	0.3	1.1
SCE	175	Base Incandescent Flood, 150W PAR	FoodStore	0%	0%	0.00	51.7	51.7	7.2	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	176	Halogen PAR Flood, 90W	FoodStore	40%	40%	1.17	76.0	45.6	6.3	1	12.7	1.8	1.8	0.06	440	1.5	1.9	0.8	1.1
SCE	177	Metal Halide, 50W	FoodStore	58%	58%	27.87	96.4	40.5	5.6	4	21.1	2.9	2.9	0.18	1281	0.5	0.6	3.7	1.1

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Warehouse	0%	0%	0.00	3.4	3.4	0.8	14	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	111	ROB 4L4'T8, 1EB	Warehouse	21%	21%	0.01	3.6	2.8	0.7	22	30.3	7.4	7.8	0.00	4	123.2	82.2	0.1	1.5
SCE	112	ROB 2L4'T8, 1EB, Reflector	Warehouse	58%	58%	0.14	4.0	1.6	0.4	22	23.5	5.8	6.0	0.01	25	19.1	12.7	0.5	1.5
SCE	114	RET 4L4'T8, 1EB	Warehouse	21%	21%	0.30	3.6	2.8	0.7	22	30.3	7.4	7.8	0.04	165	2.9	1.9	3.0	1.5
SCE	115	RET 2L4'T8, 1EB, Reflector	Warehouse	58%	58%	0.44	4.0	1.6	0.4	22	23.5	5.8	6.0	0.02	77	6.2	4.1	1.4	1.5
SCE	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Warehouse	17%	20%	0.20	3.4	2.8	0.7	12	7.4	2.2	2.3	0.05	158	2.9	2.0	2.4	1.7
SCE	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Warehouse	37%	75%	2.04	3.4	2.2	0.2	16	33.2	16.4	8.6	0.19	377	1.0	0.5	11.9	2.3
SCE	119	RNV 2L4'T5HO, 1EB	Warehouse	24%	24%	1.77	3.4	2.6	0.6	22	13.5	3.3	3.5	0.22	891	0.5	0.4	16.2	1.5
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Warehouse	0%	0%	0.00	3.4	3.4	0.8	14	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	131	ROB 2L4'T8, 1EB	Warehouse	17%	17%	0.08	3.5	2.9	0.7	22	16.5	4.0	4.2	0.01	57	8.2	5.5	1.0	1.5
SCE	133	RET 2L4'T8, 1EB	Warehouse	17%	17%	0.41	3.5	2.9	0.7	22	14.9	3.6	3.8	0.07	282	1.7	1.1	5.1	1.5
SCE	134	RET 1L4'T8, 1EB, Reflector OEM	Warehouse	57%	57%	0.63	3.9	1.7	0.4	22	6.3	1.5	1.6	0.03	113	4.2	2.8	2.1	1.5
SCE	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Warehouse	17%	20%	0.19	3.4	2.8	0.7	12	4.1	1.2	1.3	0.05	157	2.9	2.0	2.4	1.7
SCE	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Warehouse	37%	75%	2.01	3.4	2.2	0.2	16	18.2	9.0	4.7	0.18	372	1.0	0.5	11.7	2.3
SCE	138	RNV 1L4'T5HO, 1EB	Warehouse	24%	24%	3.30	3.4	2.6	0.6	22	7.4	1.8	1.9	0.41	1662	0.3	0.2	30.3	1.5
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Warehouse	0%	0%	0.00	3.4	3.4	0.8	14	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	151	ROB 2L8'T12, 60W, 1EB	Warehouse	22%	22%	0.10	3.7	2.9	0.7	22	47.8	11.7	12.3	0.01	52	9.1	6.1	0.9	1.5
SCE	152	ROB 1L8'T12, 60W, 1EB, Reflector	Warehouse	60%	60%	0.31	4.6	1.8	0.4	22	40.9	10.0	10.5	0.01	45	10.4	6.9	0.8	1.5
SCE	153	RET 2L8'T12, 60W, 1EB	Warehouse	22%	22%	0.56	3.7	2.9	0.7	22	47.8	11.7	12.3	0.07	281	1.7	1.1	5.1	1.5
SCE	154	RET 1L8'T12, 60W, 1EB, Reflector	Warehouse	60%	60%	0.77	4.6	1.8	0.4	22	40.9	10.0	10.5	0.03	112	4.2	2.8	2.0	1.5
SCE	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Warehouse	17%	20%	0.24	3.4	2.8	0.7	12	14.2	4.2	4.4	0.06	194	2.4	1.6	3.0	1.7
SCE	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Warehouse	37%	75%	2.49	3.4	2.2	0.2	16	63.8	31.5	16.5	0.23	461	0.8	0.4	14.5	2.3
SCE	165	Base Incandescent Flood, 75W	Warehouse	0%	0%	0.00	11.8	11.8	2.9	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	166	CFL Screw-in, Modular 18W	Warehouse	72%	72%	1.07	15.2	4.3	1.0	6	7.7	1.9	2.0	0.02	79	6.2	5.3	0.7	1.5
SCE	175	Base Incandescent Flood, 150W PAR	Warehouse	0%	0%	0.00	11.8	11.8	2.9	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	176	Halogen PAR Flood, 90W	Warehouse	40%	40%	0.27	11.9	7.2	1.8	1	40.3	9.9	10.4	0.05	197	2.5	2.4	0.7	1.5
SCE	177	Metal Halide, 50W	Warehouse	58%	58%	6.52	12.0	5.0	1.2	7	52.8	12.9	13.6	0.19	778	0.6	0.6	6.4	1.5
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	School	0%	0%	0.00	3.5	3.5	0.6	22	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	111	ROB 4L4'T8, 1EB	School	21%	21%	0.01	4.2	3.3	0.6	34	7.5	1.3	2.0	0.00	7	78.2	52.7	0.1	1.5
SCE	112	ROB 2L4'T8, 1EB, Reflector	School	58%	58%	0.26	6.5	2.7	0.5	34	8.2	1.4	2.1	0.01	34	17.0	11.4	0.5	1.5
SCE	114	RET 4L4'T8, 1EB	School	21%	21%	0.56	4.2	3.3	0.6	34	7.5	1.3	2.0	0.05	316	1.8	1.2	4.7	1.5
SCE	115	RET 2L4'T8, 1EB, Reflector	School	58%	58%	0.81	6.5	2.7	0.5	34	8.2	1.4	2.1	0.02	105	5.5	3.7	1.6	1.5
SCE	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	School	17%	20%	0.36	3.6	3.0	0.5	20	13.8	2.8	4.2	0.06	300	2.1	1.3	4.4	1.6
SCE	118	Continuous Dimming, 5L4' Fluorescent Fixtures	School	41%	75%	3.74	3.5	2.1	0.2	24	22.0	7.0	5.3	0.24	764	0.6	0.3	18.9	2.1
SCE	119	RNV 2L4'T5HO, 1EB	School	24%	24%	3.25	3.5	2.7	0.5	34	10.6	1.8	2.8	0.34	1938	0.3	0.2	28.7	1.5
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	School	0%	0%	0.00	3.5	3.5	0.6	22	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	131	ROB 2L4'T8, 1EB	School	17%	17%	0.15	4.0	3.3	0.6	34	13.8	2.4	3.6	0.02	110	5.2	3.5	1.6	1.5
SCE	133	RET 2L4'T8, 1EB	School	17%	17%	0.73	4.0	3.3	0.6	34	12.4	2.2	3.3	0.09	540	1.1	0.7	8.0	1.5
SCE	134	RET 1L4'T8, 1EB, Reflector OEM	School	57%	57%	1.12	6.3	2.7	0.5	34	7.4	1.3	1.9	0.03	154	3.7	2.5	2.3	1.5
SCE	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	School	17%	20%	0.34	3.6	3.0	0.5	20	25.3	5.1	7.7	0.06	289	2.2	1.4	4.2	1.6
SCE	137	Continuous Dimming, 10L4' Fluorescent Fixtures	School	41%	75%	3.59	3.5	2.1	0.2	24	40.2	12.8	9.7	0.23	734	0.7	0.3	18.1	2.1
SCE	138	RNV 1L4'T5HO, 1EB	School	24%	24%	5.88	3.5	2.7	0.5	34	19.3	3.4	5.1	0.61	3510	0.2	0.1	52.1	1.5
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	School	0%	0%	0.00	3.5	3.5	0.6	22	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	151	ROB 2L8'T12, 60W, 1EB	School	22%	22%	0.18	4.2	3.3	0.6	34	4.8	0.8	1.3	0.02	99	5.8	3.9	1.5	1.5
SCE	152	ROB 1L8'T12, 60W, 1EB, Reflector	School	60%	60%	0.55	6.5	2.6	0.4	34	5.2	0.9	1.4	0.01	69	8.3	5.6	1.0	1.5
SCE	153	RET 2L8'T12, 60W, 1EB	School	22%	22%	0.99	4.2	3.3	0.6	34	4.8	0.8	1.3	0.09	538	1.1	0.7	8.0	1.5
SCE	154	RET 1L8'T12, 60W, 1EB, Reflector	School	60%	60%	1.35	6.5	2.6	0.4	34	5.2	0.9	1.4	0.03	170	3.4	2.3	2.5	1.5
SCE	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	School	17%	20%	0.42	3.6	3.0	0.5	20	7.6	1.5	2.3	0.07	352	1.8	1.1	5.1	1.6
SCE	156	Continuous Dimming, 5L8' Fluorescent Fixtures	School	41%	75%	4.38	3.5	2.1	0.2	24	12.0	3.8	2.9	0.29	894	0.5	0.3	22.1	2.1
SCE	165	Base Incandescent Flood, 75W	School	0%	0%	0.00	6.0	6.0	1.0	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	166	CFL Screw-in, Modular 18W	School	72%	72%	1.57	14.2	4.0	0.7	10	3.2	0.6	0.8	0.02	132	5.2	4.0	1.2	1.5
SCE	175	Base Incandescent Flood, 150W PAR	School	0%	0%	0.00	6.0	6.0	1.0	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	176	Halogen PAR Flood, 90W	School	40%	40%	0.22	6.0	3.6	0.6	1	3.5	0.6	0.9	0.05	277	2.4	2.4	0.7	1.5
SCE	177	Metal Halide, 50W	School	58%	58%	5.14	6.0	2.5	0.4	12	4.5	0.8	1.2	0.21	1206	0.6	0.4	11.1	1.5

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	College	0%	0%	0.00	3.5	3.5	0.7	21	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	111	ROB 4L4'T8, 1EB	College	21%	21%	0.01	4.0	3.1	0.6	32	8.0	1.6	1.6	0.00	6	78.9	56.4	0.1	1.4
SCE	112	ROB 2L4'T8, 1EB, Reflector	College	58%	58%	0.23	5.3	2.2	0.5	32	7.5	1.5	1.5	0.01	32	14.7	10.5	0.5	1.4
SCE	114	RET 4L4'T8, 1EB	College	21%	21%	0.50	4.0	3.1	0.6	32	8.0	1.6	1.6	0.05	256	1.8	1.3	4.4	1.4
SCE	115	RET 2L4'T8, 1EB, Reflector	College	58%	58%	0.73	5.3	2.2	0.5	32	7.5	1.5	1.5	0.02	99	4.7	3.4	1.7	1.4
SCE	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	College	16%	20%	0.32	3.5	2.9	0.6	19	7.9	2.0	1.9	0.06	239	2.1	1.3	4.3	1.6
SCE	118	Continuous Dimming, 5L4' Fluorescent Fixtures	College	35%	75%	3.37	3.5	2.3	0.2	23	10.5	4.6	2.2	0.26	600	0.6	0.3	20.0	2.2
SCE	119	RNV 2L4'T5HO, 1EB	College	24%	24%	2.93	3.5	2.7	0.5	32	5.9	1.2	1.2	0.31	1492	0.3	0.2	25.5	1.4
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	College	0%	0%	0.00	3.5	3.5	0.7	21	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	131	ROB 2L4'T8, 1EB	College	17%	17%	0.14	3.9	3.2	0.7	32	12.5	2.6	2.5	0.02	89	5.3	3.8	1.5	1.4
SCE	133	RET 2L4'T8, 1EB	College	17%	17%	0.67	3.9	3.2	0.7	32	11.2	2.3	2.2	0.09	437	1.1	0.8	7.5	1.4
SCE	134	RET 1L4'T8, 1EB, Reflector OEM	College	57%	57%	1.02	5.2	2.2	0.5	32	5.7	1.2	1.1	0.03	145	3.2	2.3	2.5	1.4
SCE	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	College	16%	20%	0.31	3.5	2.9	0.6	19	12.4	3.2	3.0	0.06	233	2.2	1.4	4.1	1.6
SCE	137	Continuous Dimming, 10L4' Fluorescent Fixtures	College	35%	75%	3.28	3.5	2.3	0.2	23	16.6	7.3	3.5	0.26	583	0.7	0.3	19.4	2.2
SCE	138	RNV 1L4'T5HO, 1EB	College	24%	24%	5.37	3.5	2.7	0.5	32	9.3	1.9	1.8	0.56	2735	0.2	0.1	46.8	1.4
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	College	0%	0%	0.00	3.5	3.5	0.7	21	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	151	ROB 2L8'T12, 60W, 1EB	College	22%	22%	0.16	3.8	3.0	0.6	32	2.3	0.5	0.4	0.02	80	5.8	4.2	1.4	1.4
SCE	152	ROB 1L8'T12, 60W, 1EB, Reflector	College	60%	60%	0.47	4.5	1.8	0.4	32	1.9	0.4	0.4	0.01	73	6.5	4.6	1.2	1.4
SCE	153	RET 2L8'T12, 60W, 1EB	College	22%	22%	0.85	3.8	3.0	0.6	32	2.3	0.5	0.4	0.09	436	1.1	0.8	7.5	1.4
SCE	154	RET 1L8'T12, 60W, 1EB, Reflector	College	60%	60%	1.17	4.5	1.8	0.4	32	1.9	0.4	0.4	0.04	180	2.6	1.9	3.1	1.4
SCE	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	College	16%	20%	0.36	3.5	2.9	0.6	19	1.5	0.4	0.4	0.07	268	1.9	1.2	4.8	1.6
SCE	156	Continuous Dimming, 5L8' Fluorescent Fixtures	College	35%	75%	3.78	3.5	2.3	0.2	23	2.0	0.9	0.4	0.30	672	0.6	0.3	22.3	2.2
SCE	165	Base Incandescent Flood, 75W	College	0%	0%	0.00	6.0	6.0	1.2	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	166	CFL Screw-in, Modular 18W	College	72%	72%	1.49	14.2	4.0	0.8	9	5.0	1.0	1.0	0.02	107	5.1	4.3	1.0	1.4
SCE	175	Base Incandescent Flood, 150W PAR	College	0%	0%	0.00	6.0	6.0	1.2	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	176	Halogen PAR Flood, 90W	College	40%	40%	0.38	8.8	5.3	1.1	1	0.3	0.1	0.1	0.06	298	1.8	1.9	0.8	1.4
SCE	177	Metal Halide, 50W	College	58%	58%	9.07	11.2	4.7	1.0	11	0.4	0.1	0.1	0.21	1012	0.5	0.5	10.1	1.4
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Hospital	0%	0%	0.00	8.0	8.0	1.5	8	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	111	ROB 4L4'T8, 1EB	Hospital	21%	21%	0.01	9.0	7.2	1.3	12	20.3	3.8	4.0	0.00	4	141.2	128.4	0.0	1.3
SCE	112	ROB 2L4'T8, 1EB, Reflector	Hospital	58%	58%	0.19	11.7	4.9	0.9	12	18.5	3.5	3.7	0.00	22	25.7	23.3	0.2	1.3
SCE	114	RET 4L4'T8, 1EB	Hospital	21%	21%	0.41	9.0	7.2	1.3	12	20.3	3.8	4.0	0.02	123	4.5	3.5	1.6	1.3
SCE	115	RET 2L4'T8, 1EB, Reflector	Hospital	58%	58%	0.59	11.7	4.9	0.9	12	18.5	3.5	3.7	0.01	54	10.2	8.4	0.6	1.3
SCE	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Hospital	15%	20%	0.26	8.0	6.8	1.2	7	18.1	4.4	4.7	0.05	203	2.4	2.1	1.6	1.5
SCE	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Hospital	30%	75%	2.76	8.0	5.7	0.4	8	7.0	3.3	1.8	0.22	458	0.8	0.5	8.1	2.3
SCE	119	RNV 2L4'T5HO, 1EB	Hospital	24%	24%	2.39	8.0	6.1	1.1	12	14.0	2.6	2.8	0.17	928	0.6	0.5	9.4	1.3
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Hospital	0%	0%	0.00	8.0	8.0	1.5	8	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	131	ROB 2L4'T8, 1EB	Hospital	17%	17%	0.11	8.8	7.3	1.4	12	44.6	8.4	8.8	0.01	59	9.4	8.6	0.6	1.3
SCE	133	RET 2L4'T8, 1EB	Hospital	17%	17%	0.55	8.8	7.3	1.4	12	40.1	7.5	7.9	0.04	225	2.5	2.0	2.8	1.3
SCE	134	RET 1L4'T8, 1EB, Reflector OEM	Hospital	57%	57%	0.84	11.6	5.0	0.9	12	20.0	3.7	4.0	0.02	84	6.6	5.6	0.9	1.3
SCE	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Hospital	15%	20%	0.26	8.0	6.8	1.2	7	40.1	9.9	10.4	0.05	198	2.5	2.2	1.6	1.5
SCE	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Hospital	30%	75%	2.69	8.0	5.7	0.4	8	15.5	7.4	3.9	0.21	447	0.9	0.5	7.9	2.3
SCE	138	RNV 1L4'T5HO, 1EB	Hospital	24%	24%	4.40	8.0	6.1	1.1	12	31.0	5.8	6.1	0.33	1738	0.3	0.3	17.3	1.3
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Hospital	0%	0%	0.00	8.0	8.0	1.5	8	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	151	ROB 2L8'T12, 60W, 1EB	Hospital	22%	22%	0.12	8.0	6.3	1.2	12	2.9	0.5	0.6	0.01	53	10.4	9.5	0.5	1.3
SCE	152	ROB 1L8'T12, 60W, 1EB, Reflector	Hospital	60%	60%	0.36	8.0	3.2	0.6	12	2.0	0.4	0.4	0.01	57	9.7	8.8	0.6	1.3
SCE	153	RET 2L8'T12, 60W, 1EB	Hospital	22%	22%	0.65	8.0	6.3	1.2	12	2.9	0.5	0.6	0.04	222	2.5	2.0	2.8	1.3
SCE	154	RET 1L8'T12, 60W, 1EB, Reflector	Hospital	60%	60%	0.89	8.0	3.2	0.6	12	2.0	0.4	0.4	0.02	118	4.7	3.9	1.4	1.3
SCE	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Hospital	15%	20%	0.28	8.0	6.8	1.2	7	1.3	0.3	0.3	0.05	211	2.3	2.0	1.7	1.5
SCE	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Hospital	30%	75%	2.86	8.0	5.7	0.4	8	0.5	0.2	0.1	0.23	476	0.8	0.5	8.4	2.3
SCE	165	Base Incandescent Flood, 75W	Hospital	0%	0%	0.00	16.3	16.3	3.1	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	166	CFL Screw-in, Modular 18W	Hospital	72%	72%	1.27	33.5	9.4	1.8	3	10.2	1.9	2.0	0.02	89	6.2	6.7	0.3	1.3
SCE	175	Base Incandescent Flood, 150W PAR	Hospital	0%	0%	0.00	16.3	16.3	3.1	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	176	Halogen PAR Flood, 90W	Hospital	40%	40%	0.20	16.3	9.8	1.8	1	2.5	0.5	0.5	0.05	257	2.1	2.4	0.7	1.3
SCE	177	Metal Halide, 50W	Hospital	58%	58%	4.75	16.3	6.8	1.3	4	3.3	0.6	0.7	0.18	950	0.6	0.6	3.7	1.3

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Hotel	0%	0%	0.00	4.5	4.5	0.6	17	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	111	ROB 4L4'T8, 1EB	Hotel	21%	21%	0.01	4.9	3.9	0.5	26	0.8	0.1	0.1	0.00	8	73.6	69.9	0.1	1.1
SCE	112	ROB 2L4'T8, 1EB, Reflector	Hotel	58%	58%	0.23	5.8	2.4	0.3	26	0.7	0.1	0.1	0.01	51	12.2	11.6	0.5	1.1
SCE	114	RET 4L4'T8, 1EB	Hotel	21%	21%	0.50	4.9	3.9	0.5	26	0.8	0.1	0.1	0.05	360	1.7	1.6	3.5	1.1
SCE	115	RET 2L4'T8, 1EB, Reflector	Hotel	58%	58%	0.72	5.8	2.4	0.3	26	0.7	0.1	0.1	0.02	157	3.9	3.7	1.5	1.1
SCE	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Hotel	14%	20%	0.32	4.5	3.9	0.5	15	0.2	0.0	0.0	0.06	339	1.7	1.4	3.8	1.3
SCE	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Hotel	21%	75%	3.35	4.5	3.5	0.1	19	0.5	0.2	0.1	0.37	836	0.5	0.2	25.8	2.2
SCE	119	RNV 2L4'T5HO, 1EB	Hotel	24%	24%	2.91	4.5	3.4	0.4	26	0.4	0.1	0.1	0.25	2005	0.3	0.3	19.7	1.1
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Hotel	0%	0%	0.00	4.5	4.5	0.6	17	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	131	ROB 2L4'T8, 1EB	Hotel	17%	17%	0.14	4.8	4.0	0.5	26	22.7	2.8	2.8	0.02	126	4.9	4.7	1.2	1.1
SCE	133	RET 2L4'T8, 1EB	Hotel	17%	17%	0.67	4.8	4.0	0.5	26	20.5	2.6	2.5	0.08	616	1.0	1.0	6.0	1.1
SCE	134	RET 1L4'T8, 1EB, Reflector OEM	Hotel	57%	57%	1.02	5.7	2.5	0.3	26	9.3	1.2	1.1	0.03	231	2.7	2.5	2.3	1.1
SCE	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Hotel	14%	20%	0.32	4.5	3.9	0.5	15	5.6	1.0	1.0	0.06	333	1.7	1.5	3.7	1.3
SCE	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Hotel	21%	75%	3.29	4.5	3.5	0.1	19	13.0	5.7	2.8	0.36	822	0.5	0.2	25.4	2.2
SCE	138	RNV 1L4'T5HO, 1EB	Hotel	24%	24%	5.39	4.5	3.4	0.4	26	12.0	1.5	1.5	0.46	3715	0.2	0.2	36.5	1.1
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Hotel	0%	0%	0.00	4.5	4.5	0.6	17	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	151	ROB 2L8'T12, 60W, 1EB	Hotel	22%	22%	0.15	4.5	3.5	0.4	26	2.3	0.3	0.3	0.01	113	5.4	5.2	1.1	1.1
SCE	152	ROB 1L8'T12, 60W, 1EB, Reflector	Hotel	60%	60%	0.45	4.5	1.8	0.2	26	1.6	0.2	0.2	0.02	122	5.1	4.8	1.2	1.1
SCE	153	RET 2L8'T12, 60W, 1EB	Hotel	22%	22%	0.82	4.5	3.5	0.4	26	2.3	0.3	0.3	0.08	613	1.0	1.0	6.0	1.1
SCE	154	RET 1L8'T12, 60W, 1EB, Reflector	Hotel	60%	60%	1.12	4.5	1.8	0.2	26	1.6	0.2	0.2	0.04	301	2.0	1.9	3.0	1.1
SCE	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Hotel	14%	20%	0.35	4.5	3.9	0.5	15	0.4	0.1	0.1	0.07	365	1.6	1.3	4.0	1.3
SCE	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Hotel	21%	75%	3.61	4.5	3.5	0.1	19	0.8	0.4	0.2	0.40	901	0.4	0.2	27.8	2.2
SCE	165	Base Incandescent Flood, 75W	Hotel	0%	0%	0.00	11.7	11.7	1.5	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	166	CFL Screw-in, Modular 18W	Hotel	72%	72%	1.66	19.5	5.5	0.7	8	148.9	18.6	18.3	0.02	167	4.1	4.7	0.9	1.1
SCE	175	Base Incandescent Flood, 150W PAR	Hotel	0%	0%	0.00	11.7	11.7	1.5	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	176	Halogen PAR Flood, 90W	Hotel	40%	40%	0.34	12.1	7.2	0.9	1	16.0	2.0	2.0	0.05	391	1.7	2.4	0.7	1.1
SCE	177	Metal Halide, 50W	Hotel	58%	58%	8.02	12.2	5.1	0.6	9	16.5	2.1	2.0	0.20	1591	0.4	0.5	8.2	1.1
SCE	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Miscellanec	0%	0%	0.00	4.1	4.1	0.8	23	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	111	ROB 4L4'T8, 1EB	Miscellanec	21%	21%	0.01	4.5	3.5	0.7	36	39.4	7.6	8.1	0.00	7	66.6	50.2	0.1	1.3
SCE	112	ROB 2L4'T8, 1EB, Reflector	Miscellanec	58%	58%	0.29	5.4	2.3	0.4	36	33.3	6.5	6.9	0.01	41	11.3	8.5	0.7	1.3
SCE	114	RET 4L4'T8, 1EB	Miscellanec	21%	21%	0.63	4.5	3.5	0.7	36	39.4	7.6	8.1	0.06	297	1.5	1.2	4.9	1.3
SCE	115	RET 2L4'T8, 1EB, Reflector	Miscellanec	58%	58%	0.91	5.4	2.3	0.4	36	33.3	6.5	6.9	0.02	126	3.6	2.7	2.1	1.3
SCE	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Miscellanec	16%	20%	0.40	4.1	3.5	0.6	21	11.6	2.9	3.1	0.06	260	1.9	1.2	4.7	1.5
SCE	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Miscellanec	31%	75%	4.20	4.1	2.8	0.2	26	35.0	16.2	8.6	0.31	662	0.5	0.2	24.2	2.2
SCE	119	RNV 2L4'T5HO, 1EB	Miscellanec	24%	24%	3.65	4.1	3.1	0.6	36	22.0	4.3	4.5	0.32	1667	0.3	0.2	27.6	1.3
SCE	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Miscellanec	0%	0%	0.00	4.1	4.1	0.8	23	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	131	ROB 2L4'T8, 1EB	Miscellanec	17%	17%	0.17	4.4	3.7	0.7	36	53.4	10.4	11.0	0.02	103	4.4	3.3	1.7	1.3
SCE	133	RET 2L4'T8, 1EB	Miscellanec	17%	17%	0.84	4.4	3.7	0.7	36	48.1	9.3	9.9	0.10	507	0.9	0.7	8.4	1.3
SCE	134	RET 1L4'T8, 1EB, Reflector OEM	Miscellanec	57%	57%	1.28	5.4	2.3	0.4	36	22.2	4.3	4.6	0.04	185	2.5	1.9	3.1	1.3
SCE	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Miscellanec	16%	20%	0.40	4.1	3.5	0.6	21	15.9	4.0	4.2	0.06	255	1.9	1.2	4.6	1.5
SCE	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Miscellanec	31%	75%	4.12	4.1	2.8	0.2	26	48.0	22.3	11.9	0.30	649	0.5	0.2	23.7	2.2
SCE	138	RNV 1L4'T5HO, 1EB	Miscellanec	24%	24%	6.75	4.1	3.1	0.6	36	30.1	5.8	6.2	0.60	3083	0.1	0.1	51.1	1.3
SCE	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Miscellanec	0%	0%	0.00	4.1	4.1	0.8	23	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	151	ROB 2L8'T12, 60W, 1EB	Miscellanec	22%	22%	0.19	4.2	3.3	0.6	36	66.0	12.8	13.6	0.02	93	4.9	3.7	1.5	1.3
SCE	152	ROB 1L8'T12, 60W, 1EB, Reflector	Miscellanec	60%	60%	0.57	4.3	1.7	0.3	36	47.8	9.3	9.9	0.02	97	4.8	3.6	1.6	1.3
SCE	153	RET 2L8'T12, 60W, 1EB	Miscellanec	22%	22%	1.03	4.2	3.3	0.6	36	66.0	12.8	13.6	0.10	505	0.9	0.7	8.4	1.3
SCE	154	RET 1L8'T12, 60W, 1EB, Reflector	Miscellanec	60%	60%	1.42	4.3	1.7	0.3	36	47.8	9.3	9.9	0.05	239	1.9	1.5	4.0	1.3
SCE	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Miscellanec	16%	20%	0.44	4.1	3.5	0.6	21	12.8	3.2	3.4	0.07	283	1.7	1.1	5.2	1.5
SCE	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Miscellanec	31%	75%	4.58	4.1	2.8	0.2	26	38.7	18.0	9.6	0.33	721	0.5	0.2	26.3	2.2
SCE	165	Base Incandescent Flood, 75W	Miscellanec	0%	0%	0.00	14.5	14.5	2.8	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	166	CFL Screw-in, Modular 18W	Miscellanec	72%	72%	2.14	18.4	5.1	1.0	10	152.3	29.6	31.5	0.02	118	4.6	4.1	1.1	1.3
SCE	175	Base Incandescent Flood, 150W PAR	Miscellanec	0%	0%	0.00	14.5	14.5	2.8	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	176	Halogen PAR Flood, 90W	Miscellanec	40%	40%	0.58	15.1	9.1	1.8	1	54.8	10.6	11.3	0.05	254	2.2	2.4	0.7	1.3
SCE	177	Metal Halide, 50W	Miscellanec	58%	58%	13.85	15.4	6.5	1.3	12	72.9	14.1	15.0	0.21	1083	0.5	0.4	11.0	1.3

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Office	0%	0%	0.00	7.4	7.4	1.7	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	111	ROB 4L4'T8, 1EB	Office	21%	21%	0.01	8.7	6.9	1.6	16	25.4	6.0	6.4	0.00	3	149.6	108.3	0.1	1.5
SDG&E	112	ROB 2L4'T8, 1EB, Reflector	Office	58%	58%	0.25	12.5	5.2	1.2	16	25.6	6.0	6.4	0.00	17	30.1	21.8	0.3	1.5
SDG&E	114	RET 4L4'T8, 1EB	Office	21%	21%	0.53	8.7	6.9	1.6	16	25.4	6.0	6.4	0.03	130	3.9	2.6	2.2	1.5
SDG&E	115	RET 2L4'T8, 1EB, Reflector	Office	58%	58%	0.76	12.5	5.2	1.2	16	25.6	6.0	6.4	0.01	48	10.5	7.2	0.8	1.5
SDG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Office	25%	30%	0.34	7.7	5.8	1.3	9	38.3	10.9	11.7	0.03	113	4.2	3.1	1.3	1.7
SDG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Office	37%	75%	3.55	7.4	4.7	0.4	11	63.2	30.3	16.2	0.19	404	0.9	0.5	9.3	2.3
SDG&E	119	RNV 2L4'T5HO, 1EB	Office	24%	24%	3.08	7.4	5.7	1.3	16	25.3	6.0	6.4	0.20	855	0.6	0.4	13.1	1.5
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Office	0%	0%	0.00	7.4	7.4	1.7	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	131	ROB 2L4'T8, 1EB	Office	17%	17%	0.14	8.4	7.0	1.6	16	21.9	5.1	5.5	0.01	51	10.0	7.2	0.8	1.5
SDG&E	133	RET 2L4'T8, 1EB	Office	17%	17%	0.70	8.4	7.0	1.6	16	19.7	4.6	5.0	0.05	227	2.2	1.5	3.7	1.5
SDG&E	134	RET 1L4'T8, 1EB, Reflector OEM	Office	57%	57%	1.07	12.3	5.3	1.2	16	11.0	2.6	2.8	0.02	71	7.1	5.0	1.1	1.5
SDG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Office	25%	30%	0.33	7.7	5.8	1.3	9	34.6	9.9	10.5	0.03	109	4.3	3.2	1.3	1.7
SDG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Office	37%	75%	3.44	7.4	4.7	0.4	11	57.1	27.3	14.6	0.19	391	1.0	0.5	9.0	2.3
SDG&E	138	RNV 1L4'T5HO, 1EB	Office	24%	24%	5.63	7.4	5.7	1.3	16	22.9	5.4	5.7	0.37	1572	0.3	0.2	23.9	1.5
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Office	0%	0%	0.00	7.4	7.4	1.7	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	151	ROB 2L8'T12, 60W, 1EB	Office	22%	22%	0.16	7.9	6.2	1.5	16	4.4	1.0	1.1	0.01	46	11.1	8.0	0.7	1.5
SDG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	Office	60%	60%	0.47	8.9	3.5	0.8	16	3.4	0.8	0.9	0.01	43	11.6	8.4	0.7	1.5
SDG&E	153	RET 2L8'T12, 60W, 1EB	Office	22%	22%	0.85	7.9	6.2	1.5	16	4.4	1.0	1.1	0.05	226	2.2	1.5	3.7	1.5
SDG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	Office	60%	60%	1.17	8.9	3.5	0.8	16	3.4	0.8	0.9	0.02	101	5.0	3.5	1.6	1.5
SDG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Office	25%	30%	0.36	7.7	5.8	1.3	9	2.9	0.8	0.9	0.03	120	3.9	2.9	1.4	1.7
SDG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Office	37%	75%	3.78	7.4	4.7	0.4	11	4.8	2.3	1.2	0.21	430	0.9	0.5	9.9	2.3
SDG&E	165	Base Incandescent Flood, 75W	Office	0%	0%	0.00	12.8	12.8	3.0	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	166	CFL Screw-in, Modular 18W	Office	72%	72%	1.53	30.1	8.4	2.0	4	8.3	1.9	2.1	0.02	75	6.7	6.2	0.5	1.5
SDG&E	175	Base Incandescent Flood, 150W PAR	Office	0%	0%	0.00	12.8	12.8	3.0	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	176	Halogen PAR Flood, 90W	Office	40%	40%	0.39	18.8	11.3	2.6	1	6.5	1.5	1.6	0.06	260	1.9	1.9	0.8	1.5
SDG&E	177	Metal Halide, 50W	Office	58%	58%	9.32	23.8	10.0	2.3	5	10.7	2.5	2.7	0.18	776	0.7	0.6	4.6	1.5
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Restaurant	0%	0%	0.00	8.5	8.5	1.4	14	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	111	ROB 4L4'T8, 1EB	Restaurant	21%	21%	0.02	10.0	7.9	1.3	22	0.7	0.1	0.1	0.00	6	98.9	82.4	0.1	1.2
SDG&E	112	ROB 2L4'T8, 1EB, Reflector	Restaurant	58%	58%	0.40	14.4	6.0	1.0	22	0.7	0.1	0.1	0.00	29	19.9	16.6	0.3	1.2
SDG&E	114	RET 4L4'T8, 1EB	Restaurant	21%	21%	0.87	10.0	7.9	1.3	22	0.7	0.1	0.1	0.04	251	2.3	1.9	3.0	1.2
SDG&E	115	RET 2L4'T8, 1EB, Reflector	Restaurant	58%	58%	1.25	14.4	6.0	1.0	22	0.7	0.1	0.1	0.01	90	6.4	5.4	1.1	1.2
SDG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Restaurant	15%	20%	0.56	8.5	7.3	1.1	13	0.2	0.0	0.0	0.06	273	1.9	1.6	3.3	1.4
SDG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Restaurant	27%	75%	5.82	8.5	6.2	0.3	16	1.7	0.8	0.4	0.29	645	0.6	0.3	18.4	2.2
SDG&E	119	RNV 2L4'T5HO, 1EB	Restaurant	24%	24%	5.06	8.5	6.5	1.0	22	0.7	0.1	0.1	0.24	1505	0.4	0.3	18.0	1.2
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Restaurant	0%	0%	0.00	8.5	8.5	1.4	14	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	131	ROB 2L4'T8, 1EB	Restaurant	17%	17%	0.24	9.7	8.0	1.3	22	0.8	0.1	0.1	0.01	88	6.6	5.5	1.0	1.2
SDG&E	133	RET 2L4'T8, 1EB	Restaurant	17%	17%	1.15	9.7	8.0	1.3	22	0.7	0.1	0.1	0.07	429	1.3	1.1	5.1	1.2
SDG&E	134	RET 1L4'T8, 1EB, Reflector OEM	Restaurant	57%	57%	1.75	14.2	6.1	1.0	22	0.4	0.1	0.1	0.02	130	4.4	3.7	1.6	1.2
SDG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Restaurant	15%	20%	0.54	8.5	7.3	1.1	13	0.2	0.0	0.0	0.06	264	2.0	1.6	3.2	1.4
SDG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Restaurant	27%	75%	5.64	8.5	6.2	0.3	16	1.9	0.9	0.4	0.28	624	0.6	0.3	17.8	2.2
SDG&E	138	RNV 1L4'T5HO, 1EB	Restaurant	24%	24%	9.24	8.5	6.5	1.0	22	0.8	0.1	0.1	0.44	2749	0.2	0.2	32.8	1.2
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Restaurant	0%	0%	0.00	8.5	8.5	1.4	14	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	151	ROB 2L8'T12, 60W, 1EB	Restaurant	22%	22%	0.28	9.9	7.7	1.2	22	0.7	0.1	0.1	0.01	79	7.3	6.1	0.9	1.2
SDG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	Restaurant	60%	60%	0.84	13.7	5.4	0.9	22	0.7	0.1	0.1	0.01	61	9.4	7.9	0.7	1.2
SDG&E	153	RET 2L8'T12, 60W, 1EB	Restaurant	22%	22%	1.52	9.9	7.7	1.2	22	0.7	0.1	0.1	0.07	427	1.3	1.1	5.1	1.2
SDG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	Restaurant	60%	60%	2.08	13.7	5.4	0.9	22	0.7	0.1	0.1	0.02	151	3.8	3.2	1.8	1.2
SDG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Restaurant	15%	20%	0.65	8.5	7.3	1.1	13	0.1	0.0	0.0	0.07	315	1.7	1.3	3.8	1.4
SDG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Restaurant	27%	75%	6.73	8.5	6.2	0.3	16	1.3	0.6	0.3	0.33	745	0.5	0.3	21.2	2.2
SDG&E	165	Base Incandescent Flood, 75W	Restaurant	0%	0%	0.00	14.7	14.7	2.4	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	166	CFL Screw-in, Modular 18W	Restaurant	72%	72%	2.51	34.6	9.7	1.6	6	0.5	0.1	0.1	0.02	120	5.0	5.3	0.7	1.2
SDG&E	175	Base Incandescent Flood, 150W PAR	Restaurant	0%	0%	0.00	14.7	14.7	2.4	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	176	Halogen PAR Flood, 90W	Restaurant	40%	40%	0.64	21.6	12.9	2.1	1	12.2	2.0	2.0	0.06	380	1.6	1.9	0.8	1.2
SDG&E	177	Metal Halide, 50W	Restaurant	58%	58%	15.30	27.4	11.5	1.9	8	11.2	1.8	1.9	0.19	1205	0.5	0.5	7.3	1.2

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Retail	0%	0%	0.00	6.4	6.4	1.2	14	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	111	ROB 4L4'T8, 1EB	Retail	21%	21%	0.01	6.5	5.2	1.0	21	34.0	6.4	6.4	0.00	5	113.1	86.1	0.1	1.3
SDG&E	112	ROB 2L4'T8, 1EB, Reflector	Retail	58%	58%	0.25	6.7	2.8	0.5	21	24.7	4.6	4.7	0.01	33	16.4	12.5	0.5	1.3
SDG&E	114	RET 4L4'T8, 1EB	Retail	21%	21%	0.53	6.5	5.2	1.0	21	34.0	6.4	6.4	0.04	208	2.6	2.0	2.9	1.3
SDG&E	115	RET 2L4'T8, 1EB, Reflector	Retail	58%	58%	0.77	6.7	2.8	0.5	21	24.7	4.6	4.7	0.02	104	5.3	4.0	1.4	1.3
SDG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Retail	16%	20%	0.34	6.4	5.4	1.0	12	3.4	0.8	0.8	0.05	200	2.5	2.0	2.5	1.5
SDG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Retail	32%	75%	3.58	6.4	4.4	0.3	15	8.4	3.7	1.9	0.21	469	0.8	0.4	12.8	2.2
SDG&E	119	RNV 2L4'T5HO, 1EB	Retail	24%	24%	3.11	6.4	4.9	0.9	21	13.0	2.4	2.4	0.21	1089	0.5	0.4	15.0	1.3
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Retail	0%	0%	0.00	6.4	6.4	1.2	14	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	131	ROB 2L4'T8, 1EB	Retail	17%	17%	0.15	6.5	5.4	1.0	21	13.8	2.6	2.6	0.01	73	7.5	5.7	1.0	1.3
SDG&E	133	RET 2L4'T8, 1EB	Retail	17%	17%	0.73	6.5	5.4	1.0	21	12.5	2.3	2.3	0.07	356	1.5	1.2	4.9	1.3
SDG&E	134	RET 1L4'T8, 1EB, Reflector OEM	Retail	57%	57%	1.11	6.7	2.9	0.5	21	4.9	0.9	0.9	0.03	153	3.6	2.7	2.1	1.3
SDG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Retail	16%	20%	0.34	6.4	5.4	1.0	12	1.4	0.3	0.3	0.05	199	2.5	2.0	2.5	1.5
SDG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Retail	32%	75%	3.56	6.4	4.4	0.3	15	3.4	1.5	0.8	0.21	467	0.8	0.4	12.8	2.2
SDG&E	138	RNV 1L4'T5HO, 1EB	Retail	24%	24%	5.84	6.4	4.9	0.9	21	5.3	1.0	1.0	0.39	2047	0.3	0.2	28.1	1.3
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Retail	0%	0%	0.00	6.4	6.4	1.2	14	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	151	ROB 2L8'T12, 60W, 1EB	Retail	22%	22%	0.20	7.3	5.7	1.1	21	10.8	2.0	2.0	0.01	66	8.4	6.4	0.9	1.3
SDG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	Retail	60%	60%	0.59	9.8	3.9	0.7	21	10.2	1.9	1.9	0.01	52	10.5	8.0	0.7	1.3
SDG&E	153	RET 2L8'T12, 60W, 1EB	Retail	22%	22%	1.06	7.3	5.7	1.1	21	10.8	2.0	2.0	0.07	355	1.5	1.2	4.9	1.3
SDG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	Retail	60%	60%	1.45	9.8	3.9	0.7	21	10.2	1.9	1.9	0.02	130	4.2	3.2	1.8	1.3
SDG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Retail	16%	20%	0.45	6.4	5.4	1.0	12	2.0	0.5	0.5	0.06	262	1.9	1.5	3.3	1.5
SDG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Retail	32%	75%	4.69	6.4	4.4	0.3	15	4.9	2.2	1.1	0.27	615	0.6	0.3	16.8	2.2
SDG&E	165	Base Incandescent Flood, 75W	Retail	0%	0%	0.00	12.8	12.8	2.4	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	166	CFL Screw-in, Modular 18W	Retail	72%	72%	2.05	30.1	8.4	1.6	6	0.6	0.1	0.1	0.02	102	5.5	5.3	0.7	1.3
SDG&E	175	Base Incandescent Flood, 150W PAR	Retail	0%	0%	0.00	12.8	12.8	2.4	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	176	Halogen PAR Flood, 90W	Retail	40%	40%	0.52	18.8	11.3	2.1	1	11.1	2.1	2.1	0.06	325	1.7	1.9	0.8	1.3
SDG&E	177	Metal Halide, 50W	Retail	58%	58%	12.51	23.8	10.0	1.9	7	10.2	1.9	1.9	0.19	1012	0.6	0.5	6.4	1.3
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	FoodStore	0%	0%	0.00	15.6	15.6	2.2	7	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	111	ROB 4L4'T8, 1EB	FoodStore	21%	21%	0.02	17.4	13.8	1.9	11	1.6	0.2	0.2	0.00	5	124.9	132.2	0.0	1.1
SDG&E	112	ROB 2L4'T8, 1EB, Reflector	FoodStore	58%	58%	0.34	22.2	9.2	1.3	11	1.4	0.2	0.2	0.00	29	22.2	23.5	0.2	1.1
SDG&E	114	RET 4L4'T8, 1EB	FoodStore	21%	21%	0.73	17.4	13.8	1.9	11	1.6	0.2	0.2	0.02	153	4.3	3.8	1.5	1.1
SDG&E	115	RET 2L4'T8, 1EB, Reflector	FoodStore	58%	58%	1.05	22.2	9.2	1.3	11	1.4	0.2	0.2	0.01	71	9.2	8.8	0.6	1.1
SDG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	FoodStore	14%	20%	0.47	15.6	13.3	1.7	6	0.3	0.0	0.0	0.05	266	2.1	2.1	1.5	1.3
SDG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	FoodStore	25%	75%	4.86	15.6	11.7	0.5	8	1.1	0.5	0.2	0.26	613	0.7	0.4	9.7	2.1
SDG&E	119	RNV 2L4'T5HO, 1EB	FoodStore	24%	24%	4.22	15.6	11.9	1.7	11	1.0	0.1	0.1	0.17	1216	0.5	0.6	8.6	1.1
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	FoodStore	0%	0%	0.00	15.6	15.6	2.2	7	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	131	ROB 2L4'T8, 1EB	FoodStore	17%	17%	0.20	17.0	14.2	2.0	11	7.1	1.0	1.0	0.01	78	8.3	8.8	0.5	1.1
SDG&E	133	RET 2L4'T8, 1EB	FoodStore	17%	17%	0.97	17.0	14.2	2.0	11	6.4	0.9	0.9	0.04	284	2.3	2.1	2.6	1.1
SDG&E	134	RET 1L4'T8, 1EB, Reflector OEM	FoodStore	57%	57%	1.48	22.0	9.5	1.3	11	3.1	0.4	0.4	0.02	110	5.9	5.8	0.9	1.1
SDG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	FoodStore	14%	20%	0.46	15.6	13.3	1.7	6	1.1	0.2	0.2	0.05	260	2.2	2.2	1.5	1.3
SDG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	FoodStore	25%	75%	4.75	15.6	11.7	0.5	8	5.1	2.2	1.1	0.25	600	0.7	0.4	9.4	2.1
SDG&E	138	RNV 1L4'T5HO, 1EB	FoodStore	24%	24%	7.78	15.6	11.9	1.7	11	4.7	0.7	0.7	0.32	2295	0.3	0.3	15.9	1.1
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	FoodStore	0%	0%	0.00	15.6	15.6	2.2	7	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	151	ROB 2L8'T12, 60W, 1EB	FoodStore	22%	22%	0.24	17.5	13.7	1.9	11	18.2	2.5	2.5	0.01	71	9.2	9.8	0.5	1.1
SDG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	FoodStore	60%	60%	0.71	22.4	8.9	1.2	11	16.2	2.3	2.3	0.01	59	11.0	11.6	0.4	1.1
SDG&E	153	RET 2L8'T12, 60W, 1EB	FoodStore	22%	22%	1.29	17.5	13.7	1.9	11	18.2	2.5	2.5	0.04	280	2.3	2.1	2.6	1.1
SDG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	FoodStore	60%	60%	1.76	22.4	8.9	1.2	11	16.2	2.3	2.3	0.02	118	5.5	5.3	1.0	1.1
SDG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	FoodStore	14%	20%	0.55	15.6	13.3	1.7	6	2.7	0.5	0.5	0.06	312	1.8	1.8	1.7	1.3
SDG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	FoodStore	25%	75%	5.70	15.6	11.7	0.5	8	12.0	5.1	2.5	0.30	720	0.6	0.3	11.3	2.1
SDG&E	165	Base Incandescent Flood, 75W	FoodStore	0%	0%	0.00	56.0	56.0	7.8	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	166	CFL Screw-in, Modular 18W	FoodStore	72%	72%	4.56	132.1	37.0	5.1	3	3.5	0.5	0.5	0.02	121	5.4	6.7	0.3	1.1
SDG&E	175	Base Incandescent Flood, 150W PAR	FoodStore	0%	0%	0.00	56.0	56.0	7.8	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	176	Halogen PAR Flood, 90W	FoodStore	40%	40%	1.17	82.4	49.4	6.9	1	2.8	0.4	0.4	0.06	440	1.5	1.9	0.8	1.1
SDG&E	177	Metal Halide, 50W	FoodStore	58%	58%	27.87	104.5	43.9	6.1	4	4.6	0.6	0.6	0.18	1281	0.5	0.6	3.7	1.1

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Warehouse	0%	0%	0.00	3.5	3.5	0.9	13	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	111	ROB 4L4'T8, 1EB	Warehouse	21%	21%	0.01	4.3	3.4	0.8	21	1.2	0.3	0.3	0.00	4	129.1	86.2	0.1	1.5
SDG&E	112	ROB 2L4'T8, 1EB, Reflector	Warehouse	58%	58%	0.16	6.6	2.8	0.7	21	1.3	0.3	0.3	0.00	17	28.2	18.8	0.3	1.5
SDG&E	114	RET 4L4'T8, 1EB	Warehouse	21%	21%	0.35	4.3	3.4	0.8	21	1.2	0.3	0.3	0.04	160	3.0	2.0	2.9	1.5
SDG&E	115	RET 2L4'T8, 1EB, Reflector	Warehouse	58%	58%	0.50	6.6	2.8	0.7	21	1.3	0.3	0.3	0.01	53	9.1	6.1	0.9	1.5
SDG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Warehouse	17%	20%	0.22	3.6	3.0	0.7	12	1.0	0.3	0.3	0.05	180	2.5	1.8	2.8	1.7
SDG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Warehouse	37%	75%	2.32	3.6	2.3	0.2	15	4.5	2.2	1.2	0.21	419	0.9	0.4	12.7	2.3
SDG&E	119	RNV 2L4'T5HO, 1EB	Warehouse	24%	24%	2.01	3.5	2.7	0.7	21	1.8	0.4	0.5	0.24	986	0.5	0.3	17.6	1.5
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Warehouse	0%	0%	0.00	3.5	3.5	0.9	13	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	131	ROB 2L4'T8, 1EB	Warehouse	17%	17%	0.09	4.1	3.4	0.8	21	0.7	0.2	0.2	0.01	56	8.6	5.7	1.0	1.5
SDG&E	133	RET 2L4'T8, 1EB	Warehouse	17%	17%	0.46	4.1	3.4	0.8	21	0.6	0.1	0.2	0.07	274	1.8	1.2	4.9	1.5
SDG&E	134	RET 1L4'T8, 1EB, Reflector OEM	Warehouse	57%	57%	0.69	6.5	2.8	0.7	21	0.4	0.1	0.1	0.02	77	6.3	4.2	1.4	1.5
SDG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Warehouse	17%	20%	0.21	3.6	3.0	0.7	12	0.6	0.2	0.2	0.05	173	2.6	1.8	2.7	1.7
SDG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Warehouse	37%	75%	2.23	3.6	2.3	0.2	15	2.5	1.2	0.7	0.20	403	0.9	0.4	12.2	2.3
SDG&E	138	RNV 1L4'T5HO, 1EB	Warehouse	24%	24%	3.65	3.5	2.7	0.7	21	1.0	0.3	0.3	0.44	1789	0.3	0.2	32.0	1.5
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Warehouse	0%	0%	0.00	3.5	3.5	0.9	13	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	151	ROB 2L8'T12, 60W, 1EB	Warehouse	22%	22%	0.11	4.1	3.2	0.8	21	5.9	1.4	1.5	0.01	50	9.5	6.4	0.9	1.5
SDG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	Warehouse	60%	60%	0.33	5.7	2.2	0.6	21	5.7	1.4	1.5	0.01	39	12.3	8.2	0.7	1.5
SDG&E	153	RET 2L8'T12, 60W, 1EB	Warehouse	22%	22%	0.59	4.1	3.2	0.8	21	5.9	1.4	1.5	0.07	273	1.8	1.2	4.9	1.5
SDG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	Warehouse	60%	60%	0.81	5.7	2.2	0.6	21	5.7	1.4	1.5	0.02	97	5.0	3.3	1.7	1.5
SDG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Warehouse	17%	20%	0.25	3.6	3.0	0.7	12	2.5	0.7	0.8	0.06	203	2.3	1.6	3.1	1.7
SDG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Warehouse	37%	75%	2.61	3.6	2.3	0.2	15	11.3	5.6	2.9	0.23	472	0.8	0.4	14.3	2.3
SDG&E	165	Base Incandescent Flood, 75W	Warehouse	0%	0%	0.00	12.4	12.4	3.0	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	166	CFL Screw-in, Modular 18W	Warehouse	72%	72%	1.97	29.2	8.2	2.0	6	1.7	0.4	0.4	0.02	79	6.2	5.3	0.7	1.5
SDG&E	175	Base Incandescent Flood, 150W PAR	Warehouse	0%	0%	0.00	12.4	12.4	3.0	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	176	Halogen PAR Flood, 90W	Warehouse	40%	40%	0.42	16.4	9.8	2.4	1	3.4	0.8	0.9	0.06	231	2.1	2.1	0.8	1.5
SDG&E	177	Metal Halide, 50W	Warehouse	58%	58%	10.01	19.2	8.1	2.0	7	5.2	1.3	1.3	0.19	778	0.6	0.6	6.4	1.5
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	School	0%	0%	0.00	3.8	3.8	0.7	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	111	ROB 4L4'T8, 1EB	School	21%	21%	0.01	3.9	3.1	0.5	32	6.9	1.2	1.8	0.00	7	83.1	56.0	0.1	1.5
SDG&E	112	ROB 2L4'T8, 1EB, Reflector	School	58%	58%	0.22	4.1	1.7	0.3	32	5.1	0.9	1.3	0.01	47	12.3	8.3	0.7	1.5
SDG&E	114	RET 4L4'T8, 1EB	School	21%	21%	0.48	3.9	3.1	0.5	32	6.9	1.2	1.8	0.05	301	1.9	1.3	4.4	1.5
SDG&E	115	RET 2L4'T8, 1EB, Reflector	School	58%	58%	0.69	4.1	1.7	0.3	32	5.1	0.9	1.3	0.03	147	4.0	2.7	2.2	1.5
SDG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	School	17%	20%	0.31	3.9	3.2	0.5	18	3.6	0.7	1.1	0.05	244	2.6	1.7	3.4	1.6
SDG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	School	41%	75%	3.21	3.8	2.2	0.2	23	5.7	1.8	1.4	0.20	639	0.8	0.4	15.5	2.1
SDG&E	119	RNV 2L4'T5HO, 1EB	School	24%	24%	2.79	3.8	2.9	0.5	32	2.7	0.5	0.7	0.28	1587	0.4	0.2	23.2	1.5
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	School	0%	0%	0.00	3.8	3.8	0.7	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	131	ROB 2L4'T8, 1EB	School	17%	17%	0.13	3.9	3.2	0.6	32	11.2	1.9	2.9	0.02	105	5.5	3.7	1.5	1.5
SDG&E	133	RET 2L4'T8, 1EB	School	17%	17%	0.65	3.9	3.2	0.6	32	10.1	1.8	2.6	0.09	515	1.1	0.8	7.5	1.5
SDG&E	134	RET 1L4'T8, 1EB, Reflector OEM	School	57%	57%	0.99	4.1	1.8	0.3	32	4.0	0.7	1.1	0.04	217	2.7	1.8	3.2	1.5
SDG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	School	17%	20%	0.31	3.9	3.2	0.5	18	5.9	1.2	1.8	0.05	242	2.7	1.7	3.4	1.6
SDG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	School	41%	75%	3.19	3.8	2.2	0.2	23	9.3	3.0	2.2	0.20	635	0.8	0.4	15.4	2.1
SDG&E	138	RNV 1L4'T5HO, 1EB	School	24%	24%	5.23	3.8	2.9	0.5	32	4.5	0.8	1.2	0.52	2978	0.2	0.1	43.6	1.5
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	School	0%	0%	0.00	3.8	3.8	0.7	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	151	ROB 2L8'T12, 60W, 1EB	School	22%	22%	0.16	3.9	3.0	0.5	32	0.9	0.2	0.2	0.02	95	6.1	4.1	1.4	1.5
SDG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	School	60%	60%	0.47	4.1	1.6	0.3	32	0.7	0.1	0.2	0.02	96	6.0	4.1	1.4	1.5
SDG&E	153	RET 2L8'T12, 60W, 1EB	School	22%	22%	0.85	3.9	3.0	0.5	32	0.9	0.2	0.2	0.09	513	1.1	0.8	7.5	1.5
SDG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	School	60%	60%	1.16	4.1	1.6	0.3	32	0.7	0.1	0.2	0.04	238	2.4	1.6	3.5	1.5
SDG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	School	17%	20%	0.36	3.9	3.2	0.5	18	0.5	0.1	0.1	0.06	286	2.3	1.4	4.0	1.6
SDG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	School	41%	75%	3.76	3.8	2.2	0.2	23	0.7	0.2	0.2	0.24	748	0.7	0.3	18.2	2.1
SDG&E	165	Base Incandescent Flood, 75W	School	0%	0%	0.00	6.5	6.5	1.1	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	166	CFL Screw-in, Modular 18W	School	72%	72%	1.57	15.3	4.3	0.7	9	0.3	0.1	0.1	0.02	126	5.4	4.3	1.0	1.5
SDG&E	175	Base Incandescent Flood, 150W PAR	School	0%	0%	0.00	6.5	6.5	1.1	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	176	Halogen PAR Flood, 90W	School	40%	40%	0.33	8.6	5.1	0.9	1	0.5	0.1	0.1	0.06	324	2.1	2.0	0.8	1.5
SDG&E	177	Metal Halide, 50W	School	58%	58%	7.92	10.0	4.2	0.7	11	0.8	0.1	0.2	0.21	1191	0.6	0.5	10.2	1.5

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	College	0%	0%	0.00	3.6	3.6	0.7	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	111	ROB 4L4'T8, 1EB	College	21%	21%	0.01	4.3	3.4	0.7	32	0.8	0.2	0.2	0.00	6	78.9	56.4	0.1	1.4
SDG&E	112	ROB 2L4'T8, 1EB, Reflector	College	58%	58%	0.25	6.7	2.8	0.6	32	0.9	0.2	0.2	0.01	27	17.3	12.3	0.5	1.4
SDG&E	114	RET 4L4'T8, 1EB	College	21%	21%	0.53	4.3	3.4	0.7	32	0.8	0.2	0.2	0.05	256	1.8	1.3	4.4	1.4
SDG&E	115	RET 2L4'T8, 1EB, Reflector	College	58%	58%	0.77	6.7	2.8	0.6	32	0.9	0.2	0.2	0.02	84	5.6	4.0	1.4	1.4
SDG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	College	16%	20%	0.34	3.6	3.0	0.6	18	1.6	0.4	0.4	0.06	246	2.1	1.3	4.3	1.6
SDG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	College	35%	75%	3.56	3.6	2.3	0.2	23	2.1	0.9	0.4	0.28	633	0.6	0.3	21.1	2.2
SDG&E	119	RNV 2L4'T5HO, 1EB	College	24%	24%	3.09	3.6	2.7	0.6	32	1.2	0.2	0.2	0.32	1575	0.3	0.2	27.0	1.4
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	College	0%	0%	0.00	3.6	3.6	0.7	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	131	ROB 2L4'T8, 1EB	College	17%	17%	0.14	4.1	3.5	0.7	32	1.0	0.2	0.2	0.02	89	5.3	3.8	1.5	1.4
SDG&E	133	RET 2L4'T8, 1EB	College	17%	17%	0.70	4.1	3.5	0.7	32	0.9	0.2	0.2	0.09	437	1.1	0.8	7.5	1.4
SDG&E	134	RET 1L4'T8, 1EB, Reflector OEM	College	57%	57%	1.07	6.6	2.8	0.6	32	0.6	0.1	0.1	0.03	123	3.8	2.7	2.1	1.4
SDG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	College	16%	20%	0.33	3.6	3.0	0.6	18	2.2	0.5	0.5	0.06	236	2.1	1.4	4.1	1.6
SDG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	College	35%	75%	3.42	3.6	2.3	0.2	23	2.9	1.3	0.6	0.27	609	0.6	0.3	20.3	2.2
SDG&E	138	RNV 1L4'T5HO, 1EB	College	24%	24%	5.61	3.6	2.7	0.6	32	1.6	0.3	0.3	0.59	2856	0.2	0.1	48.9	1.4
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	College	0%	0%	0.00	3.6	3.6	0.7	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	151	ROB 2L8'T12, 60W, 1EB	College	22%	22%	0.17	4.1	3.2	0.7	32	2.0	0.4	0.4	0.02	80	5.8	4.2	1.4	1.4
SDG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	College	60%	60%	0.50	5.7	2.3	0.5	32	1.9	0.4	0.4	0.01	62	7.5	5.4	1.1	1.4
SDG&E	153	RET 2L8'T12, 60W, 1EB	College	22%	22%	0.91	4.1	3.2	0.7	32	2.0	0.4	0.4	0.09	436	1.1	0.8	7.5	1.4
SDG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	College	60%	60%	1.24	5.7	2.3	0.5	32	1.9	0.4	0.4	0.03	154	3.0	2.2	2.6	1.4
SDG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	College	16%	20%	0.39	3.6	3.0	0.6	18	2.1	0.5	0.5	0.07	277	1.8	1.2	4.8	1.6
SDG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	College	35%	75%	4.01	3.6	2.3	0.2	23	2.7	1.2	0.6	0.31	713	0.5	0.2	23.7	2.2
SDG&E	165	Base Incandescent Flood, 75W	College	0%	0%	0.00	6.2	6.2	1.3	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	166	CFL Screw-in, Modular 18W	College	72%	72%	1.49	14.6	4.1	0.8	9	0.3	0.1	0.1	0.02	107	5.1	4.3	1.0	1.4
SDG&E	175	Base Incandescent Flood, 150W PAR	College	0%	0%	0.00	6.2	6.2	1.3	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	176	Halogen PAR Flood, 90W	College	40%	40%	0.38	9.1	5.4	1.1	1	0.9	0.2	0.2	0.06	299	1.8	1.9	0.8	1.4
SDG&E	177	Metal Halide, 50W	College	58%	58%	9.11	11.5	4.8	1.0	11	1.5	0.3	0.3	0.21	1012	0.5	0.5	10.1	1.4
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Hospital	0%	0%	0.00	9.0	9.0	1.7	8	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	111	ROB 4L4'T8, 1EB	Hospital	21%	21%	0.01	9.8	7.7	1.5	12	8.2	1.5	1.6	0.00	4	141.2	128.4	0.0	1.3
SDG&E	112	ROB 2L4'T8, 1EB, Reflector	Hospital	58%	58%	0.21	11.5	4.8	0.9	12	6.7	1.3	1.3	0.00	24	23.3	21.2	0.2	1.3
SDG&E	114	RET 4L4'T8, 1EB	Hospital	21%	21%	0.45	9.8	7.7	1.5	12	8.2	1.5	1.6	0.02	123	4.5	3.5	1.6	1.3
SDG&E	115	RET 2L4'T8, 1EB, Reflector	Hospital	58%	58%	0.65	11.5	4.8	0.9	12	6.7	1.3	1.3	0.01	60	9.2	7.6	0.7	1.3
SDG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Hospital	15%	20%	0.29	9.0	7.6	1.4	7	5.5	1.4	1.4	0.05	195	2.5	2.2	1.6	1.5
SDG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Hospital	30%	75%	3.03	9.0	6.4	0.4	8	2.1	1.0	0.5	0.21	441	0.9	0.5	7.8	2.3
SDG&E	119	RNV 2L4'T5HO, 1EB	Hospital	24%	24%	2.63	9.0	6.9	1.3	12	4.3	0.8	0.8	0.17	892	0.6	0.6	9.1	1.3
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Hospital	0%	0%	0.00	9.0	9.0	1.7	8	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	131	ROB 2L4'T8, 1EB	Hospital	17%	17%	0.12	9.6	8.0	1.5	12	13.3	2.5	2.6	0.01	59	9.4	8.6	0.6	1.3
SDG&E	133	RET 2L4'T8, 1EB	Hospital	17%	17%	0.61	9.6	8.0	1.5	12	12.0	2.2	2.4	0.04	225	2.5	2.0	2.8	1.3
SDG&E	134	RET 1L4'T8, 1EB, Reflector OEM	Hospital	57%	57%	0.93	11.5	4.9	0.9	12	5.4	1.0	1.1	0.02	92	6.0	5.1	1.0	1.3
SDG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Hospital	15%	20%	0.29	9.0	7.6	1.4	7	9.1	2.2	2.4	0.05	192	2.6	2.2	1.6	1.5
SDG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Hospital	30%	75%	2.98	9.0	6.4	0.4	8	3.5	1.7	0.9	0.21	434	0.9	0.5	7.7	2.3
SDG&E	138	RNV 1L4'T5HO, 1EB	Hospital	24%	24%	4.88	9.0	6.9	1.3	12	7.1	1.3	1.4	0.32	1689	0.3	0.3	16.8	1.3
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Hospital	0%	0%	0.00	9.0	9.0	1.7	8	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	151	ROB 2L8'T12, 60W, 1EB	Hospital	22%	22%	0.16	10.4	8.2	1.5	12	0.0	0.0	0.0	0.01	53	10.4	9.5	0.5	1.3
SDG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	Hospital	60%	60%	0.47	14.4	5.7	1.1	12	0.0	0.0	0.0	0.01	41	13.5	12.2	0.4	1.3
SDG&E	153	RET 2L8'T12, 60W, 1EB	Hospital	22%	22%	0.85	10.4	8.2	1.5	12	0.0	0.0	0.0	0.04	222	2.5	2.0	2.8	1.3
SDG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	Hospital	60%	60%	1.17	14.4	5.7	1.1	12	0.0	0.0	0.0	0.02	85	6.5	5.4	1.0	1.3
SDG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Hospital	15%	20%	0.36	9.0	7.6	1.4	7	0.0	0.0	0.0	0.06	244	2.0	1.8	2.0	1.5
SDG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Hospital	30%	75%	3.78	9.0	6.4	0.4	8	0.0	0.0	0.0	0.26	549	0.7	0.4	9.7	2.3
SDG&E	165	Base Incandescent Flood, 75W	Hospital	0%	0%	0.00	18.3	18.3	3.4	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	166	CFL Screw-in, Modular 18W	Hospital	72%	72%	1.66	43.2	12.1	2.3	3	0.9	0.2	0.2	0.02	89	6.2	6.7	0.3	1.3
SDG&E	175	Base Incandescent Flood, 150W PAR	Hospital	0%	0%	0.00	18.3	18.3	3.4	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	176	Halogen PAR Flood, 90W	Hospital	40%	40%	0.35	24.1	14.5	2.7	1	17.1	3.2	3.4	0.06	301	1.8	2.1	0.8	1.3
SDG&E	177	Metal Halide, 50W	Hospital	58%	58%	8.37	28.2	11.8	2.2	4	26.1	4.9	5.2	0.18	950	0.6	0.6	3.7	1.3

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Hotel	0%	0%	0.00	4.9	4.9	0.6	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	111	ROB 4L4'T8, 1EB	Hotel	21%	21%	0.01	5.7	4.5	0.6	24	0.2	0.0	0.0	0.00	8	79.7	75.7	0.1	1.1
SDG&E	112	ROB 2L4'T8, 1EB, Reflector	Hotel	58%	58%	0.25	8.0	3.3	0.4	24	0.2	0.0	0.0	0.01	41	15.6	14.8	0.4	1.1
SDG&E	114	RET 4L4'T8, 1EB	Hotel	21%	21%	0.53	5.7	4.5	0.6	24	0.2	0.0	0.0	0.04	341	1.9	1.8	3.3	1.1
SDG&E	115	RET 2L4'T8, 1EB, Reflector	Hotel	58%	58%	0.77	8.0	3.3	0.4	24	0.2	0.0	0.0	0.02	126	5.0	4.8	1.2	1.1
SDG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Hotel	14%	20%	0.34	4.9	4.2	0.5	14	0.1	0.0	0.0	0.06	354	1.6	1.4	3.7	1.3
SDG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Hotel	21%	75%	3.57	4.9	3.9	0.2	17	0.2	0.1	0.0	0.37	843	0.5	0.2	24.6	2.2
SDG&E	119	RNV 2L4'T5HO, 1EB	Hotel	24%	24%	3.10	4.9	3.8	0.5	24	0.2	0.0	0.0	0.25	2027	0.3	0.3	19.4	1.1
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Hotel	0%	0%	0.00	4.9	4.9	0.6	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	131	ROB 2L4'T8, 1EB	Hotel	17%	17%	0.14	5.5	4.6	0.6	24	5.8	0.7	0.7	0.01	119	5.3	5.0	1.1	1.1
SDG&E	133	RET 2L4'T8, 1EB	Hotel	17%	17%	0.71	5.5	4.6	0.6	24	5.2	0.7	0.6	0.07	583	1.1	1.0	5.6	1.1
SDG&E	134	RET 1L4'T8, 1EB, Reflector OEM	Hotel	57%	57%	1.08	7.9	3.4	0.4	24	2.8	0.4	0.3	0.02	183	3.5	3.3	1.7	1.1
SDG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Hotel	14%	20%	0.33	4.9	4.2	0.5	14	2.5	0.5	0.4	0.06	343	1.7	1.5	3.6	1.3
SDG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Hotel	21%	75%	3.47	4.9	3.9	0.2	17	5.8	2.6	1.3	0.36	818	0.5	0.2	23.9	2.2
SDG&E	138	RNV 1L4'T5HO, 1EB	Hotel	24%	24%	5.68	4.9	3.8	0.5	24	5.4	0.7	0.7	0.46	3709	0.2	0.2	35.4	1.1
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Hotel	0%	0%	0.00	4.9	4.9	0.6	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	151	ROB 2L8'T12, 60W, 1EB	Hotel	22%	22%	0.16	5.3	4.2	0.5	24	0.4	0.0	0.0	0.01	107	5.9	5.6	1.0	1.1
SDG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	Hotel	60%	60%	0.49	6.2	2.5	0.3	24	0.3	0.0	0.0	0.01	98	6.4	6.1	0.9	1.1
SDG&E	153	RET 2L8'T12, 60W, 1EB	Hotel	22%	22%	0.88	5.3	4.2	0.5	24	0.4	0.0	0.0	0.07	581	1.1	1.0	5.6	1.1
SDG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	Hotel	60%	60%	1.21	6.2	2.5	0.3	24	0.3	0.0	0.0	0.03	243	2.6	2.5	2.3	1.1
SDG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Hotel	14%	20%	0.38	4.9	4.2	0.5	14	0.1	0.0	0.0	0.07	387	1.5	1.3	4.1	1.3
SDG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Hotel	21%	75%	3.91	4.9	3.9	0.2	17	0.2	0.1	0.0	0.41	921	0.4	0.2	26.9	2.2
SDG&E	165	Base Incandescent Flood, 75W	Hotel	0%	0%	0.00	12.8	12.8	1.6	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	166	CFL Screw-in, Modular 18W	Hotel	72%	72%	2.35	30.3	8.5	1.1	7	36.8	4.6	4.5	0.02	161	4.2	5.0	0.8	1.1
SDG&E	175	Base Incandescent Flood, 150W PAR	Hotel	0%	0%	0.00	12.8	12.8	1.6	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	176	Halogen PAR Flood, 90W	Hotel	40%	40%	0.51	17.2	10.3	1.3	1	3.3	0.4	0.4	0.06	456	1.5	2.0	0.8	1.1
SDG&E	177	Metal Halide, 50W	Hotel	58%	58%	12.21	20.4	8.5	1.1	8	3.9	0.5	0.5	0.19	1550	0.4	0.5	7.3	1.1
SDG&E	110	Base Fluorescent Fixture, 4L4'T12, 34W, 2EEMAG	Miscellanec	0%	0%	0.00	4.5	4.5	0.9	16	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	111	ROB 4L4'T8, 1EB	Miscellanec	21%	21%	0.01	5.0	4.0	0.8	24	3.8	0.7	0.8	0.00	5	99.9	75.3	0.1	1.3
SDG&E	112	ROB 2L4'T8, 1EB, Reflector	Miscellanec	58%	58%	0.22	6.3	2.6	0.5	24	3.3	0.6	0.7	0.01	29	17.5	13.2	0.4	1.3
SDG&E	114	RET 4L4'T8, 1EB	Miscellanec	21%	21%	0.48	5.0	4.0	0.8	24	3.8	0.7	0.8	0.04	220	2.3	1.8	3.3	1.3
SDG&E	115	RET 2L4'T8, 1EB, Reflector	Miscellanec	58%	58%	0.69	6.3	2.6	0.5	24	3.3	0.6	0.7	0.02	91	5.6	4.3	1.4	1.3
SDG&E	117	Occupancy Sensor, 4L4' Fluorescent Fixtures	Miscellanec	16%	20%	0.31	4.5	3.8	0.7	14	1.2	0.3	0.3	0.05	219	2.3	1.6	3.2	1.5
SDG&E	118	Continuous Dimming, 5L4' Fluorescent Fixtures	Miscellanec	31%	75%	3.19	4.5	3.1	0.2	17	3.7	1.7	0.9	0.24	521	0.7	0.3	16.0	2.2
SDG&E	119	RNV 2L4'T5HO, 1EB	Miscellanec	24%	24%	2.77	4.5	3.5	0.7	24	2.3	0.5	0.5	0.24	1254	0.4	0.3	18.7	1.3
SDG&E	130	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Miscellanec	0%	0%	0.00	4.5	4.5	0.9	16	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	131	ROB 2L4'T8, 1EB	Miscellanec	17%	17%	0.13	4.9	4.1	0.8	24	8.2	1.6	1.7	0.01	77	6.7	5.0	1.1	1.3
SDG&E	133	RET 2L4'T8, 1EB	Miscellanec	17%	17%	0.64	4.9	4.1	0.8	24	7.4	1.4	1.5	0.07	376	1.4	1.0	5.6	1.3
SDG&E	134	RET 1L4'T8, 1EB, Reflector OEM	Miscellanec	57%	57%	0.97	6.3	2.7	0.5	24	3.6	0.7	0.7	0.03	132	3.9	2.9	2.0	1.3
SDG&E	136	Occupancy Sensor, 8L4' Fluorescent Fixtures	Miscellanec	16%	20%	0.30	4.5	3.8	0.7	14	2.7	0.7	0.7	0.05	214	2.3	1.7	3.1	1.5
SDG&E	137	Continuous Dimming, 10L4' Fluorescent Fixtures	Miscellanec	31%	75%	3.13	4.5	3.1	0.2	17	8.2	3.8	2.0	0.24	510	0.8	0.4	15.7	2.2
SDG&E	138	RNV 1L4'T5HO, 1EB	Miscellanec	24%	24%	5.12	4.5	3.5	0.7	24	5.2	1.0	1.1	0.45	2315	0.2	0.2	34.5	1.3
SDG&E	150	Base Fluorescent Fixture, 2L8'T12, 60W, 1EEMAG	Miscellanec	0%	0%	0.00	4.5	4.5	0.9	16	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	151	ROB 2L8'T12, 60W, 1EB	Miscellanec	22%	22%	0.16	5.2	4.1	0.8	24	5.5	1.1	1.1	0.01	69	7.4	5.6	1.0	1.3
SDG&E	152	ROB 1L8'T12, 60W, 1EB, Reflector	Miscellanec	60%	60%	0.49	7.3	2.9	0.6	24	5.3	1.0	1.1	0.01	54	9.5	7.2	0.8	1.3
SDG&E	153	RET 2L8'T12, 60W, 1EB	Miscellanec	22%	22%	0.88	5.2	4.1	0.8	24	5.5	1.1	1.1	0.07	375	1.4	1.0	5.6	1.3
SDG&E	154	RET 1L8'T12, 60W, 1EB, Reflector	Miscellanec	60%	60%	1.20	7.3	2.9	0.6	24	5.3	1.0	1.1	0.03	133	3.9	2.9	2.0	1.3
SDG&E	155	Occupancy Sensor, 4L8' Fluorescent Fixtures	Miscellanec	16%	20%	0.37	4.5	3.8	0.7	14	2.2	0.6	0.6	0.07	266	1.9	1.4	3.9	1.5
SDG&E	156	Continuous Dimming, 5L8' Fluorescent Fixtures	Miscellanec	31%	75%	3.89	4.5	3.1	0.2	17	6.8	3.2	1.7	0.29	634	0.6	0.3	19.5	2.2
SDG&E	165	Base Incandescent Flood, 75W	Miscellanec	0%	0%	0.00	16.1	16.1	3.1	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	166	CFL Screw-in, Modular 18W	Miscellanec	72%	72%	2.98	38.0	10.6	2.1	7	1.9	0.4	0.4	0.02	104	5.3	4.9	0.8	1.3
SDG&E	175	Base Incandescent Flood, 150W PAR	Miscellanec	0%	0%	0.00	16.1	16.1	3.1	1	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	176	Halogen PAR Flood, 90W	Miscellanec	40%	40%	0.66	21.8	13.1	2.5	1	20.7	4.0	4.3	0.06	296	1.9	2.0	0.8	1.3
SDG&E	177	Metal Halide, 50W	Miscellanec	58%	58%	15.71	25.9	10.9	2.1	8	32.0	6.2	6.6	0.19	1000	0.5	0.5	7.3	1.3

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Office	0%	0%	0.00	0.8	0.8	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	211	RET 2L4'T8, 1EB	Office	17%	17%	0.07	0.9	0.7	0.0	16	5.0	0.0	0.0	0.05	8023	0.9	1.4	4.2	0.7
PG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	Office	23%	0%	0.07	1.0	0.8	0.0	10	1.8	0.0	0.0	0.05	N/A	1.0	1.8	2.4	0.7
PG&E	220	Base Mercury Vapor 400W Lamp	Office	0%	0%	0.00	0.8	0.8	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	221	High Pressure Sodium 250W Lamp	Office	35%	35%	0.08	1.1	0.7	0.0	5	22.2	0.1	0.1	0.05	7827	1.0	1.9	1.4	0.7
PG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	Office	23%	0%	0.01	1.0	0.8	0.0	5	11.4	0.0	0.1	0.02	N/A	2.9	5.9	0.5	0.7
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Restaurant	0%	0%	0.00	2.1	2.1	0.1	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	211	RET 2L4'T8, 1EB	Restaurant	17%	17%	0.18	2.1	1.7	0.0	16	4.1	0.1	0.0	0.05	2194	1.1	1.4	4.0	0.8
PG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	Restaurant	23%	0%	0.16	2.3	1.8	0.1	10	2.9	0.0	0.1	0.05	N/A	1.0	1.8	2.5	0.7
PG&E	220	Base Mercury Vapor 400W Lamp	Restaurant	0%	0%	0.00	2.1	2.1	0.1	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	221	High Pressure Sodium 250W Lamp	Restaurant	35%	35%	0.19	2.8	1.8	0.0	5	6.5	0.2	0.1	0.05	2148	1.2	2.0	1.4	0.8
PG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	Restaurant	23%	0%	0.03	2.3	1.8	0.1	5	6.4	0.0	0.1	0.02	N/A	2.9	5.6	0.5	0.7
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Retail	0%	0%	0.00	0.8	0.8	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	211	RET 2L4'T8, 1EB	Retail	17%	17%	0.07	0.9	0.7	0.0	16	10.2	0.1	0.1	0.05	5936	1.0	1.4	4.1	0.7
PG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	Retail	23%	0%	0.07	1.0	0.8	0.0	10	4.5	0.0	0.0	0.05	N/A	1.1	1.8	2.3	0.7
PG&E	220	Base Mercury Vapor 400W Lamp	Retail	0%	0%	0.00	0.8	0.8	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	221	High Pressure Sodium 250W Lamp	Retail	35%	35%	0.08	1.2	0.7	0.0	5	19.6	0.2	0.1	0.05	5804	1.0	1.9	1.4	0.7
PG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	Retail	23%	0%	0.01	1.0	0.8	0.0	5	12.4	0.0	0.1	0.02	N/A	3.0	5.9	0.5	0.7
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	FoodStore	0%	0%	0.00	1.5	1.5	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	211	RET 2L4'T8, 1EB	FoodStore	17%	17%	0.13	1.5	1.2	0.0	16	7.0	0.2	0.2	0.05	1648	1.2	1.4	4.0	0.8
PG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	FoodStore	22%	0%	0.12	1.8	1.4	0.1	10	2.5	0.0	0.1	0.05	N/A	1.1	1.8	2.3	0.7
PG&E	220	Base Mercury Vapor 400W Lamp	FoodStore	0%	0%	0.00	1.5	1.5	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	221	High Pressure Sodium 250W Lamp	FoodStore	35%	35%	0.14	2.1	1.3	0.0	5	6.3	0.2	0.2	0.05	1608	1.2	2.0	1.4	0.8
PG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	FoodStore	22%	0%	0.03	1.8	1.4	0.1	5	4.3	0.0	0.2	0.02	N/A	3.0	5.7	0.5	0.7
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Warehouse	0%	0%	0.00	0.5	0.5	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	211	RET 2L4'T8, 1EB	Warehouse	17%	17%	0.04	0.5	0.4	0.0	16	0.4	0.0	0.0	0.05	1538	1.1	1.4	4.1	0.8
PG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	Warehouse	22%	0%	0.04	0.6	0.5	0.0	10	0.1	0.0	0.0	0.05	N/A	1.1	1.9	2.2	0.7
PG&E	220	Base Mercury Vapor 400W Lamp	Warehouse	0%	0%	0.00	0.5	0.5	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	221	High Pressure Sodium 250W Lamp	Warehouse	35%	35%	0.05	0.7	0.5	0.0	5	6.6	0.2	0.2	0.05	1498	1.1	2.0	1.4	0.8
PG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	Warehouse	22%	0%	0.01	0.6	0.5	0.0	5	4.2	0.0	0.2	0.02	N/A	2.9	5.7	0.5	0.7
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	School	0%	0%	0.00	0.3	0.3	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	211	RET 2L4'T8, 1EB	School	17%	17%	0.03	0.4	0.3	0.0	16	0.3	0.0	0.0	0.05	10148	1.0	1.4	4.1	0.7
PG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	School	23%	0%	0.03	0.4	0.3	0.0	10	0.4	0.0	0.0	0.05	N/A	0.9	1.6	2.6	0.7
PG&E	220	Base Mercury Vapor 400W Lamp	School	0%	0%	0.00	0.3	0.3	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	221	High Pressure Sodium 250W Lamp	School	35%	35%	0.03	0.4	0.3	0.0	5	3.6	0.0	0.0	0.05	9900	1.0	2.0	1.4	0.7
PG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	School	23%	0%	0.01	0.4	0.3	0.0	5	3.6	0.0	0.0	0.02	N/A	2.8	5.6	0.5	0.7
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	College	0%	0%	0.00	0.1	0.1	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	211	RET 2L4'T8, 1EB	College	17%	17%	0.01	0.1	0.1	0.0	16	0.0	0.0	0.0	0.05	2347	1.2	1.5	4.0	0.8
PG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	College	22%	0%	0.01	0.2	0.1	0.0	10	0.0	0.0	0.0	0.04	N/A	1.2	2.0	2.2	0.7
PG&E	220	Base Mercury Vapor 400W Lamp	College	0%	0%	0.00	0.1	0.1	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	221	High Pressure Sodium 250W Lamp	College	35%	35%	0.01	0.2	0.1	0.0	5	1.1	0.0	0.0	0.05	2289	1.2	2.0	1.4	0.8
PG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	College	22%	0%	0.00	0.2	0.1	0.0	5	0.1	0.0	0.0	0.02	N/A	3.1	6.0	0.5	0.7
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Hospital	0%	0%	0.00	0.4	0.4	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	211	RET 2L4'T8, 1EB	Hospital	17%	17%	0.04	0.5	0.4	0.0	16	0.1	0.0	0.0	0.05	3509	1.1	1.5	4.0	0.8
PG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	Hospital	23%	0%	0.04	0.5	0.4	0.0	10	0.2	0.0	0.0	0.05	N/A	1.0	1.6	2.6	0.7
PG&E	220	Base Mercury Vapor 400W Lamp	Hospital	0%	0%	0.00	0.4	0.4	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	221	High Pressure Sodium 250W Lamp	Hospital	35%	35%	0.04	0.6	0.4	0.0	5	2.3	0.0	0.0	0.05	3419	1.2	2.0	1.4	0.8
PG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	Hospital	23%	0%	0.01	0.5	0.4	0.0	5	2.2	0.0	0.1	0.02	N/A	2.9	5.7	0.5	0.7
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Hotel	0%	0%	0.00	0.3	0.3	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	211	RET 2L4'T8, 1EB	Hotel	17%	17%	0.03	0.3	0.3	0.0	16	1.7	0.0	0.0	0.05	8827	1.0	1.4	4.1	0.7
PG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	Hotel	23%	0%	0.03	0.4	0.3	0.0	10	0.1	0.0	0.0	0.04	N/A	1.1	2.0	2.2	0.7
PG&E	220	Base Mercury Vapor 400W Lamp	Hotel	0%	0%	0.00	0.3	0.3	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	221	High Pressure Sodium 250W Lamp	Hotel	35%	35%	0.03	0.5	0.3	0.0	5	2.6	0.0	0.0	0.05	8639	1.0	1.9	1.4	0.7
PG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	Hotel	23%	0%	0.01	0.4	0.3	0.0	5	0.2	0.0	0.0	0.02	N/A	3.2	6.4	0.4	0.7

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
PG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Miscellanec	0%	0%	0.00	0.4	0.4	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	211	RET 2L4'T8, 1EB	Miscellanec	17%	17%	0.03	0.4	0.3	0.0	16	1.8	0.0	0.0	0.05	11770	1.0	1.4	4.1	0.7
PG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	Miscellanec	23%	0%	0.03	0.5	0.4	0.0	10	0.8	0.0	0.0	0.05	N/A	1.1	1.9	2.3	0.7
PG&E	220	Base Mercury Vapor 400W Lamp	Miscellanec	0%	0%	0.00	0.4	0.4	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	221	High Pressure Sodium 250W Lamp	Miscellanec	35%	35%	0.04	0.6	0.4	0.0	5	13.3	0.1	0.1	0.05	11499	1.0	1.9	1.4	0.7
PG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	Miscellanec	23%	0%	0.01	0.5	0.4	0.0	5	10.4	0.0	0.1	0.02	N/A	2.9	5.8	0.5	0.7
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Office	0%	0%	0.00	1.6	1.6	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	211	RET 2L4'T8, 1EB	Office	17%	17%	0.15	1.7	1.5	0.0	16	6.7	0.0	0.0	0.05	8023	0.9	1.5	3.7	0.6
SCE	212	Outdoor Lighting Controls (Photocell/Timeclock)	Office	23%	0%	0.14	2.0	1.6	0.0	10	2.4	0.0	0.0	0.05	N/A	1.0	2.0	2.1	0.6
SCE	220	Base Mercury Vapor 400W Lamp	Office	0%	0%	0.00	1.6	1.6	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	221	High Pressure Sodium 250W Lamp	Office	35%	35%	0.16	2.3	1.5	0.0	5	52.5	0.4	0.3	0.05	7827	1.0	2.1	1.3	0.6
SCE	222	Outdoor Lighting Controls (Photocell/Timeclock)	Office	23%	0%	0.03	2.0	1.6	0.0	5	27.0	0.0	0.3	0.02	N/A	2.9	6.6	0.4	0.6
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Restaurant	0%	0%	0.00	4.3	4.3	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	211	RET 2L4'T8, 1EB	Restaurant	17%	17%	0.37	4.3	3.6	0.0	16	28.2	0.2	0.1	0.05	9166	1.1	1.5	3.7	0.7
SCE	212	Outdoor Lighting Controls (Photocell/Timeclock)	Restaurant	23%	0%	0.34	4.8	3.7	0.0	10	20.1	0.0	0.1	0.05	N/A	1.0	2.0	2.2	0.6
SCE	220	Base Mercury Vapor 400W Lamp	Restaurant	0%	0%	0.00	4.3	4.3	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	221	High Pressure Sodium 250W Lamp	Restaurant	35%	35%	0.40	5.8	3.8	0.0	5	12.2	0.1	0.0	0.05	8973	1.1	2.1	1.3	0.7
SCE	222	Outdoor Lighting Controls (Photocell/Timeclock)	Restaurant	23%	0%	0.07	4.8	3.7	0.0	5	11.9	0.0	0.1	0.02	N/A	2.8	6.3	0.4	0.6
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Retail	0%	0%	0.00	1.3	1.3	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	211	RET 2L4'T8, 1EB	Retail	17%	17%	0.12	1.4	1.1	0.0	16	29.9	0.3	0.3	0.05	5900	1.1	1.5	3.7	0.7
SCE	212	Outdoor Lighting Controls (Photocell/Timeclock)	Retail	23%	0%	0.11	1.6	1.2	0.0	10	13.1	0.0	0.2	0.05	N/A	1.1	2.1	2.1	0.6
SCE	220	Base Mercury Vapor 400W Lamp	Retail	0%	0%	0.00	1.3	1.3	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	221	High Pressure Sodium 250W Lamp	Retail	35%	35%	0.13	1.9	1.2	0.0	5	27.9	0.3	0.2	0.05	5769	1.1	2.1	1.3	0.7
SCE	222	Outdoor Lighting Controls (Photocell/Timeclock)	Retail	23%	0%	0.02	1.6	1.2	0.0	5	17.6	0.0	0.3	0.02	N/A	3.0	6.6	0.4	0.6
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	FoodStore	0%	0%	0.00	2.1	2.1	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	211	RET 2L4'T8, 1EB	FoodStore	17%	17%	0.18	2.1	1.8	0.0	16	4.6	0.0	0.0	0.05	16927	1.1	1.5	3.7	0.7
SCE	212	Outdoor Lighting Controls (Photocell/Timeclock)	FoodStore	23%	0%	0.17	2.6	2.0	0.0	10	1.7	0.0	0.0	0.05	N/A	1.1	2.1	2.0	0.6
SCE	220	Base Mercury Vapor 400W Lamp	FoodStore	0%	0%	0.00	2.1	2.1	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	221	High Pressure Sodium 250W Lamp	FoodStore	35%	35%	0.20	3.0	1.9	0.0	5	12.8	0.0	0.0	0.05	16521	1.1	2.1	1.3	0.7
SCE	222	Outdoor Lighting Controls (Photocell/Timeclock)	FoodStore	23%	0%	0.04	2.6	2.0	0.0	5	8.9	0.0	0.0	0.02	N/A	2.9	6.5	0.4	0.6
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Warehouse	0%	0%	0.00	0.2	0.2	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	211	RET 2L4'T8, 1EB	Warehouse	17%	17%	0.02	0.2	0.2	0.0	16	0.4	0.0	0.0	0.05	16209	1.1	1.5	3.7	0.7
SCE	212	Outdoor Lighting Controls (Photocell/Timeclock)	Warehouse	23%	0%	0.02	0.3	0.2	0.0	10	0.1	0.0	0.0	0.04	N/A	1.1	2.2	2.0	0.6
SCE	220	Base Mercury Vapor 400W Lamp	Warehouse	0%	0%	0.00	0.2	0.2	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	221	High Pressure Sodium 250W Lamp	Warehouse	35%	35%	0.02	0.3	0.2	0.0	5	3.6	0.0	0.0	0.05	15787	1.1	2.1	1.3	0.7
SCE	222	Outdoor Lighting Controls (Photocell/Timeclock)	Warehouse	23%	0%	0.00	0.3	0.2	0.0	5	2.3	0.0	0.0	0.02	N/A	2.9	6.5	0.4	0.6
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	School	0%	0%	0.00	1.3	1.3	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	211	RET 2L4'T8, 1EB	School	17%	17%	0.12	1.4	1.2	0.0	16	0.2	0.0	0.0	0.05	19028	1.1	1.5	3.7	0.7
SCE	212	Outdoor Lighting Controls (Photocell/Timeclock)	School	23%	0%	0.11	1.5	1.2	0.0	10	0.2	0.0	0.0	0.05	N/A	0.9	1.9	2.3	0.6
SCE	220	Base Mercury Vapor 400W Lamp	School	0%	0%	0.00	1.3	1.3	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	221	High Pressure Sodium 250W Lamp	School	35%	35%	0.12	1.8	1.2	0.0	5	16.6	0.0	0.0	0.05	18562	1.1	2.1	1.3	0.7
SCE	222	Outdoor Lighting Controls (Photocell/Timeclock)	School	23%	0%	0.02	1.5	1.2	0.0	5	16.7	0.0	0.1	0.02	N/A	2.8	6.3	0.4	0.6
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	College	0%	0%	0.00	0.3	0.3	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	211	RET 2L4'T8, 1EB	College	17%	17%	0.02	0.3	0.2	0.0	16	0.3	0.0	0.0	0.05	18394	1.1	1.5	3.7	0.7
SCE	212	Outdoor Lighting Controls (Photocell/Timeclock)	College	23%	0%	0.02	0.4	0.3	0.0	10	0.0	0.0	0.0	0.04	N/A	1.1	2.3	1.9	0.6
SCE	220	Base Mercury Vapor 400W Lamp	College	0%	0%	0.00	0.3	0.3	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	221	High Pressure Sodium 250W Lamp	College	35%	35%	0.02	0.4	0.2	0.0	5	4.1	0.0	0.0	0.05	18080	1.1	2.1	1.3	0.7
SCE	222	Outdoor Lighting Controls (Photocell/Timeclock)	College	23%	0%	0.00	0.4	0.3	0.0	5	0.2	0.0	0.0	0.01	N/A	3.4	7.6	0.4	0.6
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Hospital	0%	0%	0.00	0.4	0.4	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	211	RET 2L4'T8, 1EB	Hospital	17%	17%	0.04	0.4	0.4	0.0	16	0.1	0.0	0.0	0.05	12317	1.1	1.5	3.7	0.7
SCE	212	Outdoor Lighting Controls (Photocell/Timeclock)	Hospital	23%	0%	0.03	0.5	0.4	0.0	10	0.2	0.0	0.0	0.05	N/A	0.9	1.8	2.3	0.6
SCE	220	Base Mercury Vapor 400W Lamp	Hospital	0%	0%	0.00	0.4	0.4	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	221	High Pressure Sodium 250W Lamp	Hospital	35%	35%	0.04	0.6	0.4	0.0	5	2.0	0.0	0.0	0.05	12003	1.1	2.1	1.3	0.7
SCE	222	Outdoor Lighting Controls (Photocell/Timeclock)	Hospital	23%	0%	0.01	0.5	0.4	0.0	5	1.9	0.0	0.0	0.02	N/A	2.9	6.4	0.4	0.6

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Hotel	0%	0%	0.00	0.7	0.7	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	211	RET 2L4'T8, 1EB	Hotel	17%	17%	0.06	0.7	0.6	0.0	16	1.4	0.0	0.0	0.05	11955	1.1	1.5	3.7	0.7
SCE	212	Outdoor Lighting Controls (Photocell/Timeclock)	Hotel	23%	0%	0.05	0.9	0.7	0.0	10	0.1	0.0	0.0	0.04	N/A	1.1	2.3	1.9	0.6
SCE	220	Base Mercury Vapor 400W Lamp	Hotel	0%	0%	0.00	0.7	0.7	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	221	High Pressure Sodium 250W Lamp	Hotel	35%	35%	0.06	0.9	0.6	0.0	5	6.2	0.0	0.0	0.05	11701	1.1	2.1	1.3	0.7
SCE	222	Outdoor Lighting Controls (Photocell/Timeclock)	Hotel	23%	0%	0.01	0.9	0.7	0.0	5	0.4	0.0	0.0	0.02	N/A	3.2	7.2	0.4	0.6
SCE	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Miscellanec	0%	0%	0.00	1.2	1.2	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	211	RET 2L4'T8, 1EB	Miscellanec	17%	17%	0.10	1.2	1.0	0.0	16	0.6	0.0	0.0	0.05	5327	1.1	1.5	3.7	0.7
SCE	212	Outdoor Lighting Controls (Photocell/Timeclock)	Miscellanec	23%	0%	0.09	1.4	1.1	0.0	10	0.3	0.0	0.0	0.05	N/A	1.1	2.1	2.1	0.6
SCE	220	Base Mercury Vapor 400W Lamp	Miscellanec	0%	0%	0.00	1.2	1.2	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	221	High Pressure Sodium 250W Lamp	Miscellanec	35%	35%	0.11	1.6	1.0	0.0	5	43.6	0.4	0.4	0.05	5204	1.1	2.1	1.3	0.7
SCE	222	Outdoor Lighting Controls (Photocell/Timeclock)	Miscellanec	23%	0%	0.02	1.4	1.1	0.0	5	34.0	0.0	0.6	0.02	N/A	2.9	6.5	0.4	0.6
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Office	0%	0%	0.00	1.8	1.8	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	211	RET 2L4'T8, 1EB	Office	17%	17%	0.17	2.0	1.6	0.0	16	2.7	0.0	0.0	0.05	12671	1.1	1.5	3.7	0.7
SDG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	Office	23%	0%	0.15	2.2	1.7	0.0	10	1.3	0.0	0.0	0.05	N/A	1.0	2.0	2.2	0.6
SDG&E	220	Base Mercury Vapor 400W Lamp	Office	0%	0%	0.00	1.8	1.8	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	221	High Pressure Sodium 250W Lamp	Office	35%	35%	0.17	2.6	1.7	0.0	5	11.2	0.0	0.0	0.05	12351	1.1	2.1	1.3	0.7
SDG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	Office	23%	0%	0.03	2.2	1.7	0.0	5	6.9	0.0	0.0	0.02	N/A	2.9	6.5	0.4	0.6
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Restaurant	0%	0%	0.00	4.8	4.8	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	211	RET 2L4'T8, 1EB	Restaurant	17%	17%	0.43	5.0	4.2	0.0	16	1.0	0.0	0.0	0.05	9166	1.1	1.5	3.7	0.7
SDG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	Restaurant	23%	0%	0.39	5.4	4.2	0.0	10	0.9	0.0	0.0	0.05	N/A	1.0	1.9	2.3	0.6
SDG&E	220	Base Mercury Vapor 400W Lamp	Restaurant	0%	0%	0.00	4.8	4.8	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	221	High Pressure Sodium 250W Lamp	Restaurant	35%	35%	0.48	7.0	4.6	0.0	5	2.1	0.0	0.0	0.05	8927	1.1	2.1	1.3	0.7
SDG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	Restaurant	23%	0%	0.09	5.4	4.2	0.0	5	4.9	0.0	0.0	0.02	N/A	2.6	5.9	0.5	0.6
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Retail	0%	0%	0.00	1.5	1.5	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	211	RET 2L4'T8, 1EB	Retail	17%	17%	0.13	1.6	1.3	0.0	16	1.1	0.0	0.0	0.05	5900	1.1	1.5	3.7	0.7
SDG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	Retail	23%	0%	0.12	1.8	1.4	0.0	10	0.5	0.0	0.0	0.05	N/A	1.0	2.0	2.1	0.6
SDG&E	220	Base Mercury Vapor 400W Lamp	Retail	0%	0%	0.00	1.5	1.5	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	221	High Pressure Sodium 250W Lamp	Retail	35%	35%	0.14	2.0	1.3	0.0	5	14.8	0.1	0.1	0.05	5778	1.1	2.1	1.3	0.7
SDG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	Retail	23%	0%	0.03	1.8	1.4	0.0	5	7.8	0.0	0.1	0.02	N/A	3.1	6.8	0.4	0.6
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	FoodStore	0%	0%	0.00	2.4	2.4	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	211	RET 2L4'T8, 1EB	FoodStore	17%	17%	0.20	2.4	2.0	0.0	16	1.8	0.0	0.0	0.05	16927	1.1	1.5	3.7	0.7
SDG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	FoodStore	23%	0%	0.19	2.9	2.2	0.0	10	0.6	0.0	0.0	0.05	N/A	1.1	2.1	2.0	0.6
SDG&E	220	Base Mercury Vapor 400W Lamp	FoodStore	0%	0%	0.00	2.4	2.4	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	221	High Pressure Sodium 250W Lamp	FoodStore	35%	35%	0.23	3.5	2.2	0.0	5	1.6	0.0	0.0	0.05	16486	1.1	2.1	1.3	0.7
SDG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	FoodStore	23%	0%	0.04	2.9	2.2	0.0	5	1.7	0.0	0.0	0.02	N/A	2.8	6.3	0.4	0.6
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Warehouse	0%	0%	0.00	0.3	0.3	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	211	RET 2L4'T8, 1EB	Warehouse	17%	17%	0.02	0.3	0.2	0.0	16	0.4	0.0	0.0	0.05	16209	1.1	1.5	3.7	0.7
SDG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	Warehouse	23%	0%	0.02	0.3	0.2	0.0	10	0.1	0.0	0.0	0.04	N/A	1.1	2.2	2.0	0.6
SDG&E	220	Base Mercury Vapor 400W Lamp	Warehouse	0%	0%	0.00	0.3	0.3	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	221	High Pressure Sodium 250W Lamp	Warehouse	35%	35%	0.02	0.3	0.2	0.0	5	1.9	0.0	0.0	0.05	15936	1.1	2.1	1.3	0.7
SDG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	Warehouse	23%	0%	0.00	0.3	0.2	0.0	5	0.4	0.0	0.0	0.01	N/A	3.3	7.5	0.4	0.6
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	School	0%	0%	0.00	1.5	1.5	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	211	RET 2L4'T8, 1EB	School	17%	17%	0.13	1.6	1.3	0.0	16	0.1	0.0	0.0	0.05	19028	1.1	1.5	3.7	0.7
SDG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	School	23%	0%	0.12	1.8	1.4	0.0	10	0.1	0.0	0.0	0.05	N/A	1.0	2.0	2.2	0.6
SDG&E	220	Base Mercury Vapor 400W Lamp	School	0%	0%	0.00	1.5	1.5	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	221	High Pressure Sodium 250W Lamp	School	35%	35%	0.15	2.2	1.4	0.0	5	2.8	0.0	0.0	0.05	18533	1.1	2.1	1.3	0.7
SDG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	School	23%	0%	0.03	1.8	1.4	0.0	5	4.0	0.0	0.0	0.02	N/A	2.8	6.2	0.4	0.6
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	College	0%	0%	0.00	0.3	0.3	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	211	RET 2L4'T8, 1EB	College	17%	17%	0.03	0.4	0.3	0.0	16	0.0	0.0	0.0	0.05	18394	1.1	1.5	3.7	0.7
SDG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	College	23%	0%	0.03	0.4	0.3	0.0	10	0.0	0.0	0.0	0.05	N/A	1.0	1.9	2.3	0.6
SDG&E	220	Base Mercury Vapor 400W Lamp	College	0%	0%	0.00	0.3	0.3	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	221	High Pressure Sodium 250W Lamp	College	35%	35%	0.03	0.5	0.3	0.0	5	0.6	0.0	0.0	0.05	17955	1.1	2.1	1.3	0.7
SDG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	College	23%	0%	0.01	0.4	0.3	0.0	5	0.1	0.0	0.0	0.02	N/A	3.1	6.9	0.4	0.6

DSM ASSYST SUMMARY Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Hospital	0%	0%	0.00	0.4	0.4	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	211	RET 2L4'T8, 1EB	Hospital	17%	17%	0.04	0.5	0.4	0.0	16	0.0	0.0	0.0	0.05	12317	1.1	1.5	3.7	0.7
SDG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	Hospital	23%	0%	0.04	0.5	0.4	0.0	10	0.0	0.0	0.0	0.05	N/A	0.9	1.9	2.3	0.6
SDG&E	220	Base Mercury Vapor 400W Lamp	Hospital	0%	0%	0.00	0.4	0.4	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	221	High Pressure Sodium 250W Lamp	Hospital	35%	35%	0.04	0.6	0.4	0.0	5	1.7	0.0	0.0	0.05	12078	1.1	2.1	1.3	0.7
SDG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	Hospital	23%	0%	0.01	0.5	0.4	0.0	5	0.6	0.0	0.0	0.02	N/A	3.1	7.0	0.4	0.6
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Hotel	0%	0%	0.00	0.8	0.8	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	211	RET 2L4'T8, 1EB	Hotel	17%	17%	0.07	0.8	0.7	0.0	16	0.3	0.0	0.0	0.05	11955	1.1	1.5	3.7	0.7
SDG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	Hotel	23%	0%	0.06	1.0	0.8	0.0	10	0.0	0.0	0.0	0.04	N/A	1.1	2.2	1.9	0.6
SDG&E	220	Base Mercury Vapor 400W Lamp	Hotel	0%	0%	0.00	0.8	0.8	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	221	High Pressure Sodium 250W Lamp	Hotel	35%	35%	0.08	1.1	0.7	0.0	5	1.7	0.0	0.0	0.05	11662	1.1	2.1	1.3	0.7
SDG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	Hotel	23%	0%	0.01	1.0	0.8	0.0	5	0.2	0.0	0.0	0.02	N/A	3.1	6.8	0.4	0.6
SDG&E	210	Base Fluorescent Fixture, 2L4'T12, 34W, 1EEMAG	Miscellanec	0%	0%	0.00	1.3	1.3	0.0	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	211	RET 2L4'T8, 1EB	Miscellanec	17%	17%	0.11	1.3	1.1	0.0	16	0.4	0.0	0.0	0.05	5327	1.1	1.5	3.7	0.7
SDG&E	212	Outdoor Lighting Controls (Photocell/Timeclock)	Miscellanec	23%	0%	0.10	1.6	1.2	0.0	10	0.2	0.0	0.0	0.05	N/A	1.1	2.1	2.1	0.6
SDG&E	220	Base Mercury Vapor 400W Lamp	Miscellanec	0%	0%	0.00	1.3	1.3	0.0	5	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	221	High Pressure Sodium 250W Lamp	Miscellanec	35%	35%	0.11	1.6	1.1	0.0	5	14.7	0.1	0.1	0.05	5240	1.1	2.1	1.3	0.7
SDG&E	222	Outdoor Lighting Controls (Photocell/Timeclock)	Miscellanec	23%	0%	0.02	1.6	1.2	0.0	5	5.8	0.0	0.1	0.02	N/A	3.2	7.2	0.4	0.6
PG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Office	0%	0%	0.00	4.1	4.1	3.9	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Office	12%	12%	0.10	3.7	3.2	3.0	20	110.3	103.9	89.4	0.02	23	9.6	5.0	1.2	1.9
PG&E	302	Window Film (Standard)	Office	8%	8%	0.27	4.4	4.0	3.8	10	17.1	16.1	13.9	0.12	128	1.8	1.1	4.1	1.9
PG&E	303	EMS - Chiller	Office	10%	10%	0.27	4.3	3.9	3.6	10	58.1	54.6	47.0	0.10	110	2.0	1.3	3.5	1.9
PG&E	304	Cool Roof - Chiller	Office	2%	2%	0.24	4.2	4.1	3.8	10	3.1	2.9	2.5	0.53	564	0.4	0.3	18.1	1.9
PG&E	305	Chiller Tune Up/Diagnostics	Office	4%	8%	0.17	4.2	4.0	3.6	10	5.2	9.8	4.2	0.17	89	2.1	1.0	4.7	2.6
PG&E	306	Cooling Circ. Pumps - VSD	Office	6%	6%	0.29	4.2	3.9	3.7	15	35.1	33.0	28.4	0.14	147	1.5	0.9	6.6	1.9
PG&E	310	DX Packaged System, EER=10.3, 10 tons	Office	0%	0%	0.00	7.1	7.1	6.7	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	311	DX Tune Up/ Advanced Diagnostics	Office	10%	10%	0.35	7.5	6.7	6.3	3	33.6	31.6	27.2	0.22	234	1.0	0.7	2.6	1.9
PG&E	312	DX Packaged System, EER=10.9, 10 tons	Office	6%	6%	0.23	6.1	5.8	5.5	15	40.5	38.1	32.8	0.08	86	2.6	1.5	3.9	1.9
PG&E	313	Window Film (Standard)	Office	8%	8%	0.27	7.5	6.9	6.5	10	22.7	21.4	18.4	0.07	75	3.0	1.9	2.4	1.9
PG&E	314	Evaporative Pre-Cooler	Office	10%	10%	1.32	7.2	6.4	6.1	10	20.3	19.1	16.5	0.31	324	0.7	0.4	10.4	1.9
PG&E	315	Prog. Thermostat - DX	Office	7%	3%	0.09	7.5	7.0	6.9	10	13.9	4.5	15.6	0.03	86	4.4	4.0	1.1	1.3
PG&E	316	Cool Roof - DX	Office	2%	2%	0.24	7.2	7.0	6.6	10	4.3	4.0	3.5	0.31	327	0.7	0.4	10.5	1.9
PG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Restaurant	0%	0%	0.00	3.7	3.7	1.7	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Restaurant	12%	12%	0.07	3.3	2.9	1.4	20	0.2	0.1	0.1	0.02	41	7.7	4.9	1.2	1.6
PG&E	302	Window Film (Standard)	Restaurant	10%	10%	0.14	4.0	3.5	1.7	10	0.1	0.0	0.0	0.06	123	2.5	2.0	2.3	1.6
PG&E	303	EMS - Chiller	Restaurant	10%	10%	0.21	3.7	3.3	1.6	10	0.2	0.1	0.1	0.09	200	1.6	1.2	3.7	1.6
PG&E	304	Cool Roof - Chiller	Restaurant	7%	7%	0.47	3.7	3.5	1.6	10	0.1	0.0	0.0	0.30	635	0.5	0.4	11.7	1.6
PG&E	305	Chiller Tune Up/Diagnostics	Restaurant	3%	8%	0.13	3.7	3.6	1.6	10	0.0	0.0	0.0	0.22	156	1.5	0.7	6.7	2.6
PG&E	306	Cooling Circ. Pumps - VSD	Restaurant	6%	6%	0.23	3.7	3.5	1.6	15	0.1	0.0	0.0	0.12	257	1.2	0.8	6.6	1.6
PG&E	310	DX Packaged System, EER=10.3, 10 tons	Restaurant	0%	0%	0.00	6.4	6.4	3.0	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	311	DX Tune Up/ Advanced Diagnostics	Restaurant	10%	10%	0.27	6.7	6.0	2.8	3	8.7	4.1	3.6	0.19	409	0.8	0.7	2.6	1.6
PG&E	312	DX Packaged System, EER=10.9, 10 tons	Restaurant	6%	6%	0.18	5.5	5.2	2.4	15	10.5	4.9	4.3	0.07	151	2.1	1.4	3.9	1.6
PG&E	313	Window Film (Standard)	Restaurant	10%	10%	0.14	6.7	6.0	2.8	10	9.7	4.6	4.0	0.03	73	4.3	3.3	1.3	1.6
PG&E	314	Evaporative Pre-Cooler	Restaurant	10%	10%	1.03	6.4	5.8	2.7	10	5.3	2.5	2.2	0.27	566	0.6	0.4	10.4	1.6
PG&E	315	Prog. Thermostat - DX	Restaurant	8%	3%	0.07	6.5	6.0	3.0	10	9.6	1.4	4.8	0.02	155	4.0	4.6	1.0	1.1
PG&E	316	Cool Roof - DX	Restaurant	7%	7%	0.47	6.5	6.0	2.8	10	6.3	2.9	2.6	0.17	367	0.9	0.7	6.7	1.6

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
PG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Retail	0%	0%	0.00	1.0	1.0	0.8	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Retail	12%	12%	0.03	0.9	0.8	0.6	20	9.6	7.4	6.2	0.03	37	6.8	3.6	1.7	1.9
PG&E	302	Window Film (Standard)	Retail	1%	1%	0.09	1.0	1.0	0.8	10	0.2	0.2	0.1	0.96	1248	0.2	0.1	34.1	1.9
PG&E	303	EMS - Chiller	Retail	10%	10%	0.09	1.1	1.0	0.8	10	2.4	1.8	1.5	0.13	172	1.5	1.0	4.7	1.9
PG&E	304	Cool Roof - Chiller	Retail	8%	8%	0.47	1.1	1.0	0.8	10	1.3	1.0	0.8	0.87	1128	0.2	0.1	30.8	1.9
PG&E	305	Chiller Tune Up/Diagnostics	Retail	4%	8%	0.06	1.1	1.0	0.7	10	0.4	0.7	0.3	0.24	143	1.5	0.7	7.0	2.7
PG&E	306	Cooling Circ. Pumps - VSD	Retail	6%	6%	0.10	1.1	1.0	0.8	15	3.0	2.3	2.0	0.18	237	1.1	0.6	9.0	1.9
PG&E	310	DX Packaged System, EER=10.3, 10 tons	Retail	0%	0%	0.00	1.8	1.8	1.4	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	311	DX Tune Up/ Advanced Diagnostics	Retail	10%	10%	0.12	1.9	1.7	1.3	3	8.4	6.5	5.4	0.29	377	0.7	0.5	3.6	1.9
PG&E	312	DX Packaged System, EER=10.9, 10 tons	Retail	6%	6%	0.08	1.6	1.5	1.1	15	10.1	7.8	6.5	0.11	139	1.8	1.1	5.3	1.9
PG&E	313	Window Film (Standard)	Retail	1%	1%	0.09	1.8	1.8	1.4	10	1.2	0.9	0.7	0.56	724	0.4	0.2	19.8	1.9
PG&E	314	Evaporative Pre-Cooler	Retail	10%	10%	0.44	1.8	1.6	1.3	10	5.1	3.9	3.3	0.40	522	0.5	0.3	14.2	1.9
PG&E	315	Prog. Thermostat - DX	Retail	7%	3%	0.03	1.9	1.7	1.4	10	5.3	1.4	4.6	0.04	141	3.1	3.0	1.5	1.3
PG&E	316	Cool Roof - DX	Retail	8%	8%	0.47	1.9	1.7	1.3	10	4.9	3.8	3.2	0.51	662	0.4	0.3	18.1	1.9
PG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	FoodStore	0%	0%	0.00	4.8	4.8	1.9	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	FoodStore	12%	12%	0.07	4.3	3.8	1.5	20	1.3	0.5	0.5	0.01	38	9.0	6.2	1.0	1.5
PG&E	302	Window Film (Standard)	FoodStore	7%	7%	0.13	4.8	4.5	1.7	10	0.7	0.3	0.2	0.06	156	2.2	1.8	2.5	1.5
PG&E	303	EMS - Chiller	FoodStore	10%	10%	0.21	4.8	4.3	1.7	10	1.3	0.5	0.5	0.07	186	1.8	1.5	2.9	1.5
PG&E	304	Cool Roof - Chiller	FoodStore	16%	16%	0.47	4.8	4.0	1.6	10	1.0	0.4	0.4	0.10	254	1.3	1.1	4.0	1.5
PG&E	305	Chiller Tune Up/Diagnostics	FoodStore	2%	8%	0.13	4.9	4.7	1.7	10	0.0	0.0	0.0	0.19	144	1.6	0.8	5.9	2.6
PG&E	306	Cooling Circ. Pumps - VSD	FoodStore	6%	6%	0.23	4.9	4.6	1.8	15	0.4	0.2	0.2	0.09	237	1.4	1.1	5.2	1.5
PG&E	310	DX Packaged System, EER=10.3, 10 tons	FoodStore	0%	0%	0.00	8.3	8.3	3.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	311	DX Tune Up/ Advanced Diagnostics	FoodStore	10%	10%	0.27	8.8	7.9	3.1	3	19.2	7.5	7.0	0.15	377	0.9	0.9	2.1	1.5
PG&E	312	DX Packaged System, EER=10.9, 10 tons	FoodStore	6%	6%	0.18	7.2	6.8	2.6	15	23.2	9.0	8.4	0.05	139	2.4	1.8	3.1	1.5
PG&E	313	Window Film (Standard)	FoodStore	7%	7%	0.13	8.5	7.9	3.1	10	18.4	7.2	6.7	0.03	88	3.8	3.2	1.4	1.5
PG&E	314	Evaporative Pre-Cooler	FoodStore	10%	10%	1.03	8.4	7.5	2.9	10	11.6	4.5	4.2	0.20	522	0.6	0.5	8.2	1.5
PG&E	315	Prog. Thermostat - DX	FoodStore	8%	3%	0.07	8.5	7.8	3.2	10	22.9	2.6	9.8	0.02	143	5.0	6.0	0.7	1.0
PG&E	316	Cool Roof - DX	FoodStore	16%	16%	0.47	8.9	7.5	2.9	10	24.9	9.7	9.0	0.05	137	2.5	2.1	2.2	1.5
PG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Warehouse	0%	0%	0.00	1.3	1.3	0.9	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Warehouse	12%	12%	0.06	1.1	1.0	0.7	20	3.5	2.5	2.3	0.05	67	3.5	2.2	2.7	1.6
PG&E	302	Window Film (Standard)	Warehouse	12%	12%	0.05	1.3	1.1	0.8	10	2.3	1.6	1.5	0.05	77	3.0	2.3	1.9	1.6
PG&E	303	EMS - Chiller	Warehouse	10%	10%	0.18	1.3	1.2	0.8	10	2.4	1.7	1.6	0.23	321	0.7	0.6	8.0	1.6
PG&E	304	Cool Roof - Chiller	Warehouse	17%	17%	0.47	1.3	1.1	0.8	10	2.4	1.7	1.6	0.34	480	0.5	0.4	12.0	1.6
PG&E	305	Chiller Tune Up/Diagnostics	Warehouse	3%	8%	0.11	1.3	1.2	0.8	10	0.1	0.2	0.1	0.49	255	0.7	0.4	13.4	2.4
PG&E	306	Cooling Circ. Pumps - VSD	Warehouse	6%	6%	0.20	1.3	1.2	0.9	15	1.1	0.8	0.7	0.30	421	0.6	0.4	14.7	1.6
PG&E	310	DX Packaged System, EER=10.3, 10 tons	Warehouse	0%	0%	0.00	2.2	2.2	1.6	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	311	DX Tune Up/ Advanced Diagnostics	Warehouse	10%	10%	0.23	2.3	2.1	1.5	3	5.6	4.0	3.7	0.48	669	0.3	0.3	5.9	1.6
PG&E	312	DX Packaged System, EER=10.9, 10 tons	Warehouse	6%	6%	0.15	1.9	1.8	1.3	15	6.7	4.8	4.4	0.18	247	0.9	0.7	8.6	1.6
PG&E	313	Window Film (Standard)	Warehouse	12%	12%	0.05	2.4	2.1	1.5	10	3.0	2.2	2.0	0.03	41	5.6	4.4	1.0	1.6
PG&E	314	Evaporative Pre-Cooler	Warehouse	10%	10%	0.88	2.2	2.0	1.4	10	3.4	2.4	2.2	0.66	927	0.3	0.2	23.2	1.6
PG&E	315	Prog. Thermostat - DX	Warehouse	8%	3%	0.06	2.3	2.1	1.6	10	5.5	1.2	4.5	0.06	252	1.8	2.0	2.2	1.1
PG&E	316	Cool Roof - DX	Warehouse	17%	17%	0.47	2.3	1.9	1.4	10	8.7	6.2	5.7	0.19	269	0.9	0.7	6.7	1.6

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
PG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	School	0%	0%	0.00	0.3	0.3	0.3	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	School	12%	12%	0.01	0.2	0.2	0.2	20	1.3	1.4	1.3	0.04	35	6.3	3.2	1.9	2.0
PG&E	302	Window Film (Standard)	School	3%	3%	0.07	0.3	0.3	0.3	10	0.1	0.1	0.1	1.29	1262	0.2	0.1	42.2	2.0
PG&E	303	EMS - Chiller	School	10%	10%	0.03	0.3	0.3	0.3	10	0.4	0.4	0.4	0.17	163	1.4	0.8	5.4	2.0
PG&E	304	Cool Roof - Chiller	School	7%	7%	0.24	0.3	0.3	0.3	10	0.4	0.4	0.4	2.07	2023	0.1	0.1	67.7	2.0
PG&E	305	Chiller Tune Up/Diagnostics	School	4%	8%	0.02	0.3	0.3	0.3	10	0.1	0.1	0.1	0.26	134	1.4	0.7	6.9	2.5
PG&E	306	Cooling Circ. Pumps - VSD	School	6%	6%	0.03	0.3	0.3	0.3	15	0.4	0.4	0.4	0.23	223	1.0	0.6	10.4	2.0
PG&E	310	DX Packaged System, EER=10.3, 10 tons	School	0%	0%	0.00	0.5	0.5	0.5	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	311	DX Tune Up/ Advanced Diagnostics	School	10%	10%	0.04	0.5	0.5	0.5	3	0.7	0.7	0.6	0.36	354	0.6	0.5	4.2	2.0
PG&E	312	DX Packaged System, EER=10.9, 10 tons	School	6%	6%	0.03	0.4	0.4	0.4	15	0.8	0.8	0.8	0.13	131	1.7	0.9	6.1	2.0
PG&E	313	Window Film (Standard)	School	3%	3%	0.07	0.5	0.5	0.5	10	0.3	0.3	0.3	0.76	738	0.3	0.2	24.7	2.0
PG&E	314	Evaporative Pre-Cooler	School	10%	10%	0.15	0.5	0.4	0.4	10	0.4	0.4	0.4	0.50	490	0.5	0.3	16.4	2.0
PG&E	315	Prog. Thermostat - DX	School	7%	3%	0.01	0.5	0.5	0.5	10	0.5	0.2	0.7	0.05	133	2.8	2.4	1.9	1.4
PG&E	316	Cool Roof - DX	School	7%	7%	0.24	0.5	0.5	0.5	10	0.2	0.2	0.2	1.15	1128	0.2	0.1	37.8	2.0
PG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	College	0%	0%	0.00	1.7	1.7	1.3	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	College	12%	12%	0.06	1.5	1.3	1.0	20	13.0	10.0	16.5	0.04	47	6.6	3.9	1.6	1.7
PG&E	302	Window Film (Standard)	College	4%	4%	0.19	1.7	1.7	1.3	10	0.4	0.3	0.5	0.44	567	0.5	0.4	12.1	1.7
PG&E	303	EMS - Chiller	College	10%	10%	0.18	1.8	1.6	1.2	10	5.8	4.4	7.3	0.17	219	1.4	1.0	4.7	1.7
PG&E	304	Cool Roof - Chiller	College	1%	1%	0.20	1.7	1.7	1.3	10	0.6	0.5	0.8	1.43	1861	0.2	0.1	39.7	1.7
PG&E	305	Chiller Tune Up/Diagnostics	College	5%	8%	0.11	1.7	1.6	1.2	10	0.8	1.0	0.8	0.22	176	1.5	0.9	5.2	2.0
PG&E	306	Cooling Circ. Pumps - VSD	College	6%	6%	0.20	1.7	1.6	1.2	15	4.1	3.2	5.2	0.23	295	1.0	0.7	8.8	1.7
PG&E	310	DX Packaged System, EER=10.3, 10 tons	College	0%	0%	0.00	2.9	2.9	2.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	311	DX Tune Up/ Advanced Diagnostics	College	10%	10%	0.23	3.1	2.7	2.1	3	1.5	1.2	1.9	0.36	468	0.7	0.6	3.5	1.7
PG&E	312	DX Packaged System, EER=10.9, 10 tons	College	6%	6%	0.15	2.5	2.4	1.8	15	1.8	1.4	2.3	0.13	173	1.8	1.2	5.1	1.7
PG&E	313	Window Film (Standard)	College	4%	4%	0.19	3.0	2.9	2.2	10	0.4	0.3	0.5	0.25	330	0.9	0.7	7.0	1.7
PG&E	314	Evaporative Pre-Cooler	College	10%	10%	0.88	2.9	2.6	2.0	10	0.9	0.7	1.2	0.50	649	0.5	0.3	13.8	1.7
PG&E	315	Prog. Thermostat - DX	College	7%	3%	0.06	3.0	2.8	2.3	10	0.6	0.2	1.2	0.05	174	3.0	2.6	1.7	1.4
PG&E	316	Cool Roof - DX	College	1%	1%	0.20	2.9	2.9	2.2	10	0.2	0.2	0.3	0.83	1076	0.3	0.2	23.0	1.7
PG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Hospital	0%	0%	0.00	9.1	9.1	6.6	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Hospital	12%	12%	0.13	8.1	7.1	5.2	20	70.5	51.3	43.0	0.01	18	14.4	8.3	0.7	1.7
PG&E	302	Window Film (Standard)	Hospital	1%	1%	0.06	9.2	9.1	6.6	10	0.1	0.1	0.1	0.11	147	1.8	1.2	3.7	1.7
PG&E	303	EMS - Chiller	Hospital	10%	10%	0.36	9.2	8.3	6.0	10	55.8	40.6	34.1	0.06	89	2.9	2.1	2.2	1.7
PG&E	304	Cool Roof - Chiller	Hospital	1%	1%	0.16	9.1	9.0	6.6	10	1.3	1.0	0.8	0.49	672	0.4	0.3	16.8	1.7
PG&E	305	Chiller Tune Up/Diagnostics	Hospital	4%	8%	0.23	9.2	8.9	6.2	10	3.0	4.9	2.0	0.11	69	3.1	1.5	3.1	2.4
PG&E	306	Cooling Circ. Pumps - VSD	Hospital	6%	6%	0.39	9.2	8.7	6.3	15	22.4	16.3	13.7	0.08	115	2.3	1.4	4.0	1.7
PG&E	310	DX Packaged System, EER=10.3, 10 tons	Hospital	0%	0%	0.00	15.7	15.7	11.5	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	311	DX Tune Up/ Advanced Diagnostics	Hospital	10%	10%	0.47	16.6	14.9	10.9	3	17.0	12.4	10.4	0.13	182	1.4	1.2	1.6	1.7
PG&E	312	DX Packaged System, EER=10.9, 10 tons	Hospital	6%	6%	0.31	13.6	12.9	9.4	15	20.5	15.0	12.5	0.05	67	3.9	2.4	2.3	1.7
PG&E	313	Window Film (Standard)	Hospital	1%	1%	0.06	15.8	15.7	11.4	10	1.4	1.0	0.9	0.06	85	3.1	2.2	2.1	1.7
PG&E	314	Evaporative Pre-Cooler	Hospital	10%	10%	1.76	15.8	14.2	10.4	10	10.3	7.5	6.3	0.18	253	1.0	0.7	6.3	1.7
PG&E	315	Prog. Thermostat - DX	Hospital	7%	3%	0.12	16.2	15.0	11.5	10	15.8	3.9	13.0	0.02	69	6.6	6.7	0.7	1.2
PG&E	316	Cool Roof - DX	Hospital	1%	1%	0.16	15.8	15.7	11.4	10	0.7	0.5	0.4	0.28	388	0.7	0.5	9.7	1.7

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
PG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Hotel	0%	0%	0.00	0.8	0.8	0.6	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Hotel	12%	12%	0.02	0.7	0.6	0.5	20	5.8	4.4	4.0	0.03	34	7.3	4.0	1.5	1.8
PG&E	302	Window Film (Standard)	Hotel	6%	6%	0.29	0.8	0.7	0.6	10	1.8	1.4	1.3	1.01	1308	0.2	0.1	36.0	1.8
PG&E	303	EMS - Chiller	Hotel	10%	10%	0.06	0.8	0.7	0.5	10	4.9	3.8	3.4	0.13	168	1.5	1.0	4.6	1.8
PG&E	304	Cool Roof - Chiller	Hotel	0%	0%	0.04	0.8	0.8	0.6	10	0.1	0.1	0.0	2.27	2956	0.1	0.1	81.5	1.8
PG&E	305	Chiller Tune Up/Diagnostics	Hotel	4%	8%	0.04	0.8	0.7	0.5	10	0.2	0.4	0.2	0.22	130	1.6	0.7	6.3	2.6
PG&E	306	Cooling Circ. Pumps - VSD	Hotel	6%	6%	0.07	0.8	0.7	0.6	15	1.8	1.4	1.3	0.17	217	1.2	0.7	8.3	1.8
PG&E	310	DX Packaged System, EER=10.3, 10 tons	Hotel	0%	0%	0.00	1.3	1.3	1.0	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	311	DX Tune Up/ Advanced Diagnostics	Hotel	10%	10%	0.08	1.4	1.2	1.0	3	0.2	0.2	0.2	0.26	344	0.7	0.6	3.3	1.8
PG&E	312	DX Packaged System, EER=10.9, 10 tons	Hotel	6%	6%	0.05	1.1	1.1	0.8	15	0.3	0.2	0.2	0.10	127	2.0	1.2	4.9	1.8
PG&E	313	Window Film (Standard)	Hotel	6%	6%	0.29	1.3	1.2	1.0	10	0.2	0.2	0.2	0.58	761	0.3	0.2	21.0	1.8
PG&E	314	Evaporative Pre-Cooler	Hotel	10%	10%	0.29	1.3	1.2	0.9	10	0.1	0.1	0.1	0.37	476	0.5	0.3	13.1	1.8
PG&E	315	Prog. Thermostat - DX	Hotel	7%	3%	0.02	1.3	1.2	1.0	10	0.3	0.1	0.3	0.03	132	3.4	3.2	1.4	1.3
PG&E	316	Cool Roof - DX	Hotel	0%	0%	0.04	1.3	1.3	1.0	10	0.0	0.0	0.0	1.31	1707	0.1	0.1	47.0	1.8
PG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Miscellanec	0%	0%	0.00	2.0	2.0	1.4	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Miscellanec	12%	12%	0.03	1.8	1.6	1.1	20	11.7	8.0	6.4	0.01	22	11.8	7.4	0.8	1.6
PG&E	302	Window Film (Standard)	Miscellanec	1%	1%	0.09	2.0	2.0	1.4	10	0.7	0.5	0.4	0.50	729	0.4	0.3	16.8	1.6
PG&E	303	EMS - Chiller	Miscellanec	10%	10%	0.09	2.1	1.9	1.3	10	5.7	3.9	3.2	0.07	103	2.5	1.9	2.4	1.6
PG&E	304	Cool Roof - Chiller	Miscellanec	8%	8%	0.47	2.1	1.9	1.3	10	2.8	1.9	1.6	0.46	672	0.4	0.3	15.5	1.6
PG&E	305	Chiller Tune Up/Diagnostics	Miscellanec	3%	8%	0.06	2.0	2.0	1.3	10	0.4	0.8	0.3	0.14	83	2.5	1.3	3.8	2.4
PG&E	306	Cooling Circ. Pumps - VSD	Miscellanec	6%	6%	0.10	2.0	1.9	1.3	15	3.7	2.5	2.1	0.09	138	1.9	1.3	4.4	1.6
PG&E	310	DX Packaged System, EER=10.3, 10 tons	Miscellanec	0%	0%	0.00	3.5	3.5	2.4	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	311	DX Tune Up/ Advanced Diagnostics	Miscellanec	10%	10%	0.12	3.7	3.3	2.3	3	20.5	14.0	11.3	0.15	219	1.2	1.1	1.8	1.6
PG&E	312	DX Packaged System, EER=10.9, 10 tons	Miscellanec	6%	6%	0.08	3.0	2.8	1.9	15	24.6	16.9	13.6	0.06	81	3.2	2.2	2.6	1.6
PG&E	313	Window Film (Standard)	Miscellanec	1%	1%	0.09	3.5	3.5	2.4	10	3.1	2.1	1.7	0.29	420	0.6	0.5	9.7	1.6
PG&E	314	Evaporative Pre-Cooler	Miscellanec	10%	10%	0.44	3.5	3.2	2.2	10	12.4	8.5	6.8	0.21	304	0.8	0.6	7.0	1.6
PG&E	315	Prog. Thermostat - DX	Miscellanec	8%	3%	0.03	3.6	3.3	2.4	10	19.7	4.4	14.1	0.02	83	5.6	6.2	0.7	1.1
PG&E	316	Cool Roof - DX	Miscellanec	8%	8%	0.47	3.6	3.3	2.3	10	13.5	9.2	7.4	0.27	388	0.7	0.5	9.0	1.6
SCE	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Office	0%	0%	0.00	3.0	3.0	1.4	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Office	12%	12%	0.06	2.7	2.4	1.1	20	40.4	18.1	16.9	0.02	44	7.7	4.2	1.4	1.8
SCE	302	Window Film (Standard)	Office	9%	9%	0.27	3.3	3.0	1.3	10	6.9	3.1	2.9	0.15	328	1.0	0.7	6.2	1.8
SCE	303	EMS - Chiller	Office	10%	10%	0.18	3.2	2.9	1.3	10	21.3	9.5	8.9	0.09	208	1.6	1.1	4.0	1.8
SCE	304	Cool Roof - Chiller	Office	2%	2%	0.24	3.1	3.0	1.4	10	1.2	0.5	0.5	0.70	1560	0.2	0.1	29.6	1.8
SCE	305	Chiller Tune Up/Diagnostics	Office	3%	8%	0.11	3.1	3.0	1.3	10	1.3	1.7	0.8	0.22	169	1.5	0.5	8.4	3.5
SCE	306	Cooling Circ. Pumps - VSD	Office	6%	6%	0.20	3.1	2.9	1.3	15	12.9	5.8	5.4	0.12	279	1.2	0.7	7.4	1.8
SCE	310	DX Packaged System, EER=10.3, 10 tons	Office	0%	0%	0.00	5.3	5.3	2.4	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	311	DX Tune Up/ Advanced Diagnostics	Office	10%	10%	0.23	5.5	5.0	2.2	3	58.8	26.4	24.6	0.20	443	0.8	0.6	3.0	1.8
SCE	312	DX Packaged System, EER=10.9, 10 tons	Office	6%	6%	0.15	4.5	4.3	1.9	15	70.9	31.8	29.6	0.07	163	2.1	1.2	4.3	1.8
SCE	313	Window Film (Standard)	Office	9%	9%	0.27	5.6	5.1	2.3	10	43.8	19.6	18.3	0.09	192	1.8	1.2	3.7	1.8
SCE	314	Evaporative Pre-Cooler	Office	10%	10%	0.88	5.3	4.8	2.1	10	35.6	15.9	14.9	0.27	613	0.6	0.4	11.7	1.8
SCE	315	Prog. Thermostat - DX	Office	8%	3%	0.06	5.6	5.1	2.4	10	27.5	3.8	14.2	0.02	162	4.2	4.4	1.0	1.2
SCE	316	Cool Roof - DX	Office	2%	2%	0.24	5.3	5.2	2.3	10	7.7	3.4	3.2	0.41	904	0.4	0.3	17.2	1.8

DSM ASSYST SUMMARY Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SCE	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Restaurant	0%	0%	0.00	3.3	3.3	0.9	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Restaurant	12%	12%	0.05	3.0	2.6	0.7	20	0.3	0.1	0.1	0.01	56	7.9	5.6	1.0	1.4
SCE	302	Window Film (Standard)	Restaurant	10%	10%	0.14	3.6	3.2	0.9	10	0.1	0.0	0.0	0.06	236	1.9	1.6	2.6	1.4
SCE	303	EMS - Chiller	Restaurant	10%	10%	0.15	3.4	3.0	0.8	10	0.3	0.1	0.1	0.07	276	1.6	1.4	3.1	1.4
SCE	304	Cool Roof - Chiller	Restaurant	7%	7%	0.47	3.4	3.2	0.8	10	0.1	0.0	0.0	0.33	1242	0.4	0.3	14.0	1.4
SCE	305	Chiller Tune Up/Diagnostics	Restaurant	2%	8%	0.09	3.4	3.3	0.8	10	0.0	0.0	0.0	0.23	216	1.3	0.5	8.9	3.4
SCE	306	Cooling Circ. Pumps - VSD	Restaurant	6%	6%	0.16	3.4	3.2	0.8	15	0.1	0.0	0.0	0.09	355	1.2	1.0	5.6	1.4
SCE	310	DX Packaged System, EER=10.3, 10 tons	Restaurant	0%	0%	0.00	5.8	5.8	1.5	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	311	DX Tune Up/ Advanced Diagnostics	Restaurant	10%	10%	0.20	6.1	5.5	1.5	3	10.7	2.8	2.5	0.15	564	0.8	0.8	2.2	1.4
SCE	312	DX Packaged System, EER=10.9, 10 tons	Restaurant	6%	6%	0.13	5.0	4.7	1.3	15	12.9	3.4	3.0	0.06	208	2.1	1.7	3.3	1.4
SCE	313	Window Film (Standard)	Restaurant	10%	10%	0.14	6.1	5.4	1.5	10	12.0	3.2	2.8	0.04	140	3.2	2.7	1.6	1.4
SCE	314	Evaporative Pre-Cooler	Restaurant	10%	10%	0.73	5.8	5.2	1.4	10	6.5	1.7	1.5	0.21	781	0.6	0.5	8.8	1.4
SCE	315	Prog. Thermostat - DX	Restaurant	9%	3%	0.05	5.9	5.4	1.5	10	12.4	1.0	3.3	0.02	213	4.6	6.2	0.7	0.9
SCE	316	Cool Roof - DX	Restaurant	7%	7%	0.47	5.9	5.5	1.5	10	7.6	2.0	1.8	0.19	717	0.6	0.5	8.1	1.4
SCE	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Retail	0%	0%	0.00	1.7	1.7	0.6	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Retail	12%	12%	0.04	1.5	1.3	0.4	20	7.9	2.7	2.4	0.02	66	6.0	3.7	1.5	1.6
SCE	302	Window Film (Standard)	Retail	2%	2%	0.09	1.7	1.7	0.6	10	0.3	0.1	0.1	0.34	1003	0.4	0.3	14.3	1.6
SCE	303	EMS - Chiller	Retail	10%	10%	0.11	1.8	1.6	0.6	10	2.0	0.7	0.6	0.10	304	1.3	1.0	4.3	1.6
SCE	304	Cool Roof - Chiller	Retail	13%	13%	0.47	1.8	1.6	0.5	10	1.8	0.6	0.5	0.33	957	0.4	0.3	13.7	1.6
SCE	305	Chiller Tune Up/Diagnostics	Retail	2%	8%	0.07	1.7	1.7	0.5	10	0.2	0.3	0.1	0.28	254	1.1	0.4	10.8	3.4
SCE	306	Cooling Circ. Pumps - VSD	Retail	6%	6%	0.12	1.7	1.6	0.5	15	2.5	0.9	0.8	0.14	419	0.9	0.6	8.4	1.6
SCE	310	DX Packaged System, EER=10.3, 10 tons	Retail	0%	0%	0.00	2.9	2.9	1.0	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	311	DX Tune Up/ Advanced Diagnostics	Retail	10%	10%	0.15	3.1	2.8	0.9	3	20.9	7.1	6.3	0.23	666	0.6	0.5	3.3	1.6
SCE	312	DX Packaged System, EER=10.9, 10 tons	Retail	6%	6%	0.10	2.5	2.4	0.8	15	25.2	8.6	7.6	0.08	246	1.6	1.1	4.9	1.6
SCE	313	Window Film (Standard)	Retail	2%	2%	0.09	2.9	2.9	1.0	10	4.9	1.7	1.5	0.20	584	0.7	0.5	8.3	1.6
SCE	314	Evaporative Pre-Cooler	Retail	10%	10%	0.56	2.9	2.6	0.9	10	12.6	4.3	3.8	0.31	922	0.4	0.3	13.2	1.6
SCE	315	Prog. Thermostat - DX	Retail	8%	3%	0.04	3.1	2.8	1.0	10	15.1	1.5	5.5	0.03	247	3.4	4.0	1.1	1.0
SCE	316	Cool Roof - DX	Retail	13%	13%	0.47	3.1	2.7	0.9	10	19.8	6.7	6.0	0.19	568	0.7	0.5	8.1	1.6
SCE	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	FoodStore	0%	0%	0.00	5.6	5.6	2.1	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	FoodStore	12%	12%	0.07	5.0	4.4	1.7	20	4.1	1.6	1.1	0.01	30	11.3	7.3	0.8	1.5
SCE	302	Window Film (Standard)	FoodStore	9%	9%	0.13	5.6	5.1	1.9	10	2.7	1.0	0.7	0.04	104	3.3	2.6	1.6	1.5
SCE	303	EMS - Chiller	FoodStore	10%	10%	0.20	5.6	5.1	1.9	10	3.8	1.4	1.1	0.06	151	2.3	1.8	2.4	1.5
SCE	304	Cool Roof - Chiller	FoodStore	15%	15%	0.47	5.6	4.7	1.8	10	2.9	1.1	0.8	0.09	235	1.5	1.2	3.7	1.5
SCE	305	Chiller Tune Up/Diagnostics	FoodStore	2%	8%	0.12	5.7	5.6	2.0	10	0.1	0.1	0.1	0.16	117	2.0	0.7	6.1	3.5
SCE	306	Cooling Circ. Pumps - VSD	FoodStore	6%	6%	0.21	5.7	5.4	2.0	15	1.3	0.5	0.4	0.07	192	1.8	1.3	4.3	1.5
SCE	310	DX Packaged System, EER=10.3, 10 tons	FoodStore	0%	0%	0.00	9.7	9.7	3.7	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	311	DX Tune Up/ Advanced Diagnostics	FoodStore	10%	10%	0.25	10.2	9.2	3.5	3	21.3	8.1	6.0	0.12	305	1.1	1.1	1.7	1.5
SCE	312	DX Packaged System, EER=10.9, 10 tons	FoodStore	6%	6%	0.17	8.4	7.9	3.0	15	25.7	9.8	7.2	0.04	113	3.0	2.2	2.5	1.5
SCE	313	Window Film (Standard)	FoodStore	9%	9%	0.13	10.0	9.1	3.5	10	27.0	10.3	7.6	0.02	58	5.9	4.7	0.9	1.5
SCE	314	Evaporative Pre-Cooler	FoodStore	10%	10%	0.95	9.8	8.8	3.4	10	12.9	4.9	3.6	0.16	423	0.8	0.6	6.7	1.5
SCE	315	Prog. Thermostat - DX	FoodStore	8%	3%	0.07	10.0	9.1	3.7	10	25.3	2.8	8.4	0.01	116	6.2	7.8	0.6	1.0
SCE	316	Cool Roof - DX	FoodStore	15%	15%	0.47	10.4	8.8	3.4	10	25.9	9.9	7.3	0.05	127	2.7	2.1	2.0	1.5

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SCE	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Warehouse	0%	0%	0.00	0.4	0.4	0.2	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Warehouse	12%	12%	0.02	0.4	0.4	0.1	20	0.0	0.0	0.0	0.04	119	3.6	2.1	2.7	1.7
SCE	302	Window Film (Standard)	Warehouse	12%	12%	0.05	0.5	0.4	0.1	10	0.0	0.0	0.0	0.15	450	1.0	0.7	6.4	1.7
SCE	303	EMS - Chiller	Warehouse	10%	10%	0.05	0.5	0.4	0.1	10	0.0	0.0	0.0	0.19	575	0.8	0.5	8.1	1.7
SCE	304	Cool Roof - Chiller	Warehouse	18%	18%	0.47	0.5	0.4	0.1	10	0.0	0.0	0.0	0.92	2716	0.2	0.1	38.4	1.7
SCE	305	Chiller Tune Up/Diagnostics	Warehouse	3%	8%	0.03	0.5	0.4	0.1	10	0.0	0.0	0.0	0.44	456	0.7	0.3	17.1	3.4
SCE	306	Cooling Circ. Pumps - VSD	Warehouse	6%	6%	0.06	0.5	0.4	0.1	15	0.0	0.0	0.0	0.25	754	0.6	0.4	14.9	1.7
SCE	310	DX Packaged System, EER=10.3, 10 tons	Warehouse	0%	0%	0.00	0.8	0.8	0.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	311	DX Tune Up/ Advanced Diagnostics	Warehouse	10%	10%	0.07	0.8	0.7	0.2	3	2.0	0.7	0.6	0.40	1198	0.4	0.3	6.0	1.7
SCE	312	DX Packaged System, EER=10.9, 10 tons	Warehouse	6%	6%	0.05	0.7	0.6	0.2	15	2.4	0.8	0.8	0.15	442	1.0	0.6	8.7	1.7
SCE	313	Window Film (Standard)	Warehouse	12%	12%	0.05	0.9	0.8	0.3	10	1.1	0.4	0.4	0.08	241	1.8	1.3	3.4	1.7
SCE	314	Evaporative Pre-Cooler	Warehouse	10%	10%	0.26	0.8	0.7	0.2	10	1.2	0.4	0.4	0.56	1659	0.3	0.2	23.5	1.7
SCE	315	Prog. Thermostat - DX	Warehouse	8%	3%	0.02	0.8	0.7	0.3	10	1.9	0.2	0.8	0.05	452	1.9	2.1	2.0	1.1
SCE	316	Cool Roof - DX	Warehouse	18%	18%	0.47	0.8	0.7	0.2	10	3.3	1.1	1.0	0.51	1518	0.3	0.2	21.5	1.7
SCE	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	School	0%	0%	0.00	1.1	1.1	0.7	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	School	12%	12%	0.05	0.9	0.8	0.6	20	1.9	1.3	1.9	0.04	63	4.9	2.0	2.8	2.4
SCE	302	Window Film (Standard)	School	4%	4%	0.07	1.1	1.0	0.7	10	0.2	0.1	0.2	0.29	430	0.7	0.4	11.8	2.4
SCE	303	EMS - Chiller	School	10%	10%	0.14	1.1	1.0	0.7	10	0.6	0.4	0.6	0.20	290	1.1	0.5	8.0	2.4
SCE	304	Cool Roof - Chiller	School	6%	6%	0.24	1.1	1.0	0.7	10	0.5	0.3	0.5	0.59	876	0.3	0.2	24.1	2.4
SCE	305	Chiller Tune Up/Diagnostics	School	4%	8%	0.08	1.1	1.0	0.7	10	0.1	0.1	0.1	0.29	238	1.1	0.4	11.3	3.4
SCE	306	Cooling Circ. Pumps - VSD	School	6%	6%	0.15	1.1	1.0	0.7	15	0.6	0.4	0.6	0.27	397	0.8	0.4	15.3	2.4
SCE	310	DX Packaged System, EER=10.3, 10 tons	School	0%	0%	0.00	1.8	1.8	1.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	311	DX Tune Up/ Advanced Diagnostics	School	10%	10%	0.18	1.9	1.7	1.2	3	6.8	4.6	6.9	0.43	630	0.5	0.3	6.1	2.4
SCE	312	DX Packaged System, EER=10.9, 10 tons	School	6%	6%	0.12	1.6	1.5	1.0	15	8.2	5.5	8.4	0.16	233	1.3	0.6	8.9	2.4
SCE	313	Window Film (Standard)	School	4%	4%	0.07	1.9	1.8	1.2	10	3.9	2.6	4.0	0.17	252	1.2	0.6	6.9	2.4
SCE	314	Evaporative Pre-Cooler	School	10%	10%	0.66	1.8	1.7	1.1	10	4.1	2.8	4.2	0.59	873	0.4	0.2	24.1	2.4
SCE	315	Prog. Thermostat - DX	School	7%	3%	0.05	1.9	1.8	1.3	10	5.0	1.2	7.1	0.06	237	2.3	1.9	2.3	1.5
SCE	316	Cool Roof - DX	School	6%	6%	0.24	1.9	1.8	1.2	10	2.2	1.5	2.2	0.33	490	0.6	0.3	13.5	2.4
SCE	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	College	0%	0%	0.00	3.4	3.4	1.6	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	College	12%	12%	0.10	3.0	2.6	1.3	20	20.9	10.1	10.5	0.03	55	6.0	3.1	1.8	1.9
SCE	302	Window Film (Standard)	College	4%	4%	0.19	3.5	3.3	1.6	10	0.6	0.3	0.3	0.23	475	0.7	0.4	9.7	1.9
SCE	303	EMS - Chiller	College	10%	10%	0.27	3.6	3.2	1.5	10	9.3	4.5	4.7	0.13	260	1.3	0.8	5.3	1.9
SCE	304	Cool Roof - Chiller	College	1%	1%	0.20	3.4	3.3	1.6	10	1.0	0.5	0.5	0.74	1531	0.2	0.1	31.3	1.9
SCE	305	Chiller Tune Up/Diagnostics	College	3%	8%	0.17	3.4	3.3	1.5	10	0.8	1.0	0.5	0.26	212	1.2	0.4	10.1	3.4
SCE	306	Cooling Circ. Pumps - VSD	College	6%	6%	0.29	3.4	3.2	1.5	15	6.6	3.2	3.3	0.17	351	0.9	0.5	10.0	1.9
SCE	310	DX Packaged System, EER=10.3, 10 tons	College	0%	0%	0.00	5.8	5.8	2.8	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	311	DX Tune Up/ Advanced Diagnostics	College	10%	10%	0.35	6.1	5.5	2.7	3	2.4	1.2	1.2	0.27	557	0.6	0.5	4.0	1.9
SCE	312	DX Packaged System, EER=10.9, 10 tons	College	6%	6%	0.23	5.0	4.8	2.3	15	2.9	1.4	1.5	0.10	206	1.6	0.9	5.9	1.9
SCE	313	Window Film (Standard)	College	4%	4%	0.19	6.0	5.7	2.8	10	0.6	0.3	0.3	0.13	277	1.2	0.8	5.7	1.9
SCE	314	Evaporative Pre-Cooler	College	10%	10%	1.32	5.8	5.3	2.5	10	1.5	0.7	0.7	0.37	771	0.4	0.3	15.8	1.9
SCE	315	Prog. Thermostat - DX	College	8%	3%	0.09	6.2	5.7	2.9	10	1.2	0.2	0.8	0.03	205	3.1	3.2	1.3	1.2
SCE	316	Cool Roof - DX	College	1%	1%	0.20	5.8	5.7	2.8	10	0.4	0.2	0.2	0.43	885	0.4	0.2	18.1	1.9

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SCE	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Hospital	0%	0%	0.00	8.5	8.5	3.4	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Hospital	12%	12%	0.10	7.6	6.7	2.7	20	66.0	26.4	20.8	0.01	26	12.5	7.9	0.7	1.6
SCE	302	Window Film (Standard)	Hospital	1%	1%	0.06	8.6	8.5	3.4	10	0.1	0.1	0.0	0.10	253	1.3	1.0	4.3	1.6
SCE	303	EMS - Chiller	Hospital	10%	10%	0.27	8.6	7.8	3.1	10	52.2	20.9	16.4	0.05	129	2.6	2.0	2.2	1.6
SCE	304	Cool Roof - Chiller	Hospital	1%	1%	0.16	8.5	8.5	3.4	10	1.4	0.5	0.4	0.48	1196	0.3	0.2	20.3	1.6
SCE	305	Chiller Tune Up/Diagnostics	Hospital	2%	8%	0.17	8.6	8.4	3.2	10	1.7	2.5	1.0	0.15	102	2.2	0.8	5.6	3.6
SCE	306	Cooling Circ. Pumps - VSD	Hospital	6%	6%	0.29	8.6	8.1	3.2	15	21.0	8.4	6.6	0.07	168	2.0	1.4	4.0	1.6
SCE	310	DX Packaged System, EER=10.3, 10 tons	Hospital	0%	0%	0.00	14.7	14.7	5.9	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	311	DX Tune Up/ Advanced Diagnostics	Hospital	10%	10%	0.35	15.5	13.9	5.6	3	11.2	4.5	3.5	0.11	266	1.2	1.1	1.6	1.6
SCE	312	DX Packaged System, EER=10.9, 10 tons	Hospital	6%	6%	0.23	12.7	12.0	4.8	15	13.4	5.4	4.2	0.04	98	3.4	2.3	2.3	1.6
SCE	313	Window Film (Standard)	Hospital	1%	1%	0.06	14.8	14.6	5.9	10	1.0	0.4	0.3	0.06	147	2.2	1.7	2.5	1.6
SCE	314	Evaporative Pre-Cooler	Hospital	10%	10%	1.32	14.8	13.3	5.3	10	6.7	2.7	2.1	0.15	368	0.9	0.7	6.3	1.6
SCE	315	Prog. Thermostat - DX	Hospital	9%	3%	0.09	15.2	13.9	5.9	10	11.9	1.4	4.4	0.01	100	7.0	8.5	0.5	1.0
SCE	316	Cool Roof - DX	Hospital	1%	1%	0.16	14.8	14.7	5.9	10	0.5	0.2	0.2	0.28	690	0.5	0.4	11.7	1.6
SCE	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Hotel	0%	0%	0.00	3.1	3.1	2.0	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Hotel	12%	12%	0.10	2.7	2.4	1.5	20	7.3	4.7	4.6	0.03	48	4.9	2.8	2.0	1.7
SCE	302	Window Film (Standard)	Hotel	7%	7%	0.29	3.1	2.9	1.9	10	2.6	1.7	1.6	0.22	340	0.7	0.5	8.8	1.7
SCE	303	EMS - Chiller	Hotel	10%	10%	0.29	3.1	2.8	1.8	10	6.3	4.0	3.9	0.15	237	1.0	0.7	6.2	1.7
SCE	304	Cool Roof - Chiller	Hotel	0%	0%	0.04	3.1	3.1	2.0	10	0.1	0.1	0.1	0.54	838	0.3	0.2	21.7	1.7
SCE	305	Chiller Tune Up/Diagnostics	Hotel	3%	8%	0.18	3.1	3.0	1.8	10	0.2	0.4	0.2	0.37	185	0.9	0.3	14.5	3.8
SCE	306	Cooling Circ. Pumps - VSD	Hotel	6%	6%	0.31	3.1	2.9	1.9	15	2.3	1.5	1.5	0.20	306	0.8	0.5	11.0	1.7
SCE	310	DX Packaged System, EER=10.3, 10 tons	Hotel	0%	0%	0.00	5.3	5.3	3.4	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	311	DX Tune Up/ Advanced Diagnostics	Hotel	10%	10%	0.37	5.6	5.1	3.2	3	11.4	7.3	7.2	0.31	485	0.5	0.4	4.4	1.7
SCE	312	DX Packaged System, EER=10.9, 10 tons	Hotel	6%	6%	0.25	4.6	4.4	2.8	15	13.8	8.8	8.7	0.11	179	1.3	0.8	6.5	1.7
SCE	313	Window Film (Standard)	Hotel	7%	7%	0.29	5.4	5.0	3.2	10	12.9	8.3	8.1	0.13	198	1.2	0.8	5.1	1.7
SCE	314	Evaporative Pre-Cooler	Hotel	10%	10%	1.39	5.4	4.8	3.1	10	6.9	4.4	4.4	0.43	672	0.4	0.2	17.4	1.7
SCE	315	Prog. Thermostat - DX	Hotel	8%	3%	0.10	5.4	5.0	3.4	10	14.8	2.8	11.2	0.04	186	2.6	2.9	1.5	1.1
SCE	316	Cool Roof - DX	Hotel	0%	0%	0.04	5.3	5.3	3.4	10	0.5	0.3	0.3	0.31	484	0.5	0.3	12.5	1.7
SCE	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Miscellanec	0%	0%	0.00	3.2	3.2	1.6	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Miscellanec	12%	12%	0.04	2.8	2.5	1.3	20	29.2	14.6	14.9	0.01	25	12.5	6.7	0.9	1.9
SCE	302	Window Film (Standard)	Miscellanec	2%	2%	0.09	3.2	3.1	1.6	10	3.2	1.6	1.6	0.18	363	0.9	0.6	7.6	1.9
SCE	303	EMS - Chiller	Miscellanec	10%	10%	0.12	3.4	3.0	1.5	10	14.3	7.1	7.3	0.06	118	2.6	1.7	2.5	1.9
SCE	304	Cool Roof - Chiller	Miscellanec	13%	13%	0.47	3.4	2.9	1.5	10	11.4	5.7	5.8	0.18	357	0.9	0.6	7.5	1.9
SCE	305	Chiller Tune Up/Diagnostics	Miscellanec	3%	8%	0.08	3.2	3.1	1.5	10	1.0	1.4	0.7	0.13	96	2.5	0.8	5.1	3.6
SCE	306	Cooling Circ. Pumps - VSD	Miscellanec	6%	6%	0.13	3.2	3.0	1.5	15	9.3	4.6	4.7	0.08	159	2.0	1.2	4.6	1.9
SCE	310	DX Packaged System, EER=10.3, 10 tons	Miscellanec	0%	0%	0.00	5.5	5.5	2.8	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	311	DX Tune Up/ Advanced Diagnostics	Miscellanec	10%	10%	0.16	5.8	5.2	2.6	3	35.6	17.8	18.2	0.13	252	1.2	1.0	1.9	1.9
SCE	312	DX Packaged System, EER=10.9, 10 tons	Miscellanec	6%	6%	0.10	4.8	4.5	2.3	15	43.0	21.5	21.9	0.05	93	3.4	2.0	2.7	1.9
SCE	313	Window Film (Standard)	Miscellanec	2%	2%	0.09	5.6	5.5	2.7	10	9.5	4.7	4.8	0.10	209	1.5	1.0	4.4	1.9
SCE	314	Evaporative Pre-Cooler	Miscellanec	10%	10%	0.59	5.6	5.0	2.5	10	21.6	10.8	11.0	0.17	349	0.9	0.6	7.3	1.9
SCE	315	Prog. Thermostat - DX	Miscellanec	8%	3%	0.04	5.7	5.2	2.8	10	35.8	5.6	22.7	0.01	95	6.4	6.8	0.6	1.1
SCE	316	Cool Roof - DX	Miscellanec	13%	13%	0.47	5.8	5.1	2.5	10	38.0	19.0	19.4	0.10	206	1.5	1.0	4.3	1.9

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SDG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Office	0%	0%	0.00	2.4	2.4	1.6	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Office	12%	12%	0.06	2.2	1.9	1.3	20	6.1	4.1	4.1	0.02	37	7.7	3.4	1.7	2.2
SDG&E	302	Window Film (Standard)	Office	9%	9%	0.27	2.6	2.4	1.6	10	1.1	0.7	0.7	0.18	277	1.0	0.6	7.7	2.2
SDG&E	303	EMS - Chiller	Office	10%	10%	0.18	2.5	2.3	1.5	10	3.2	2.1	2.2	0.12	176	1.6	0.9	4.9	2.2
SDG&E	304	Cool Roof - Chiller	Office	2%	2%	0.24	2.5	2.4	1.6	10	0.2	0.1	0.1	0.87	1315	0.2	0.1	36.5	2.2
SDG&E	305	Chiller Tune Up/Diagnostics	Office	4%	8%	0.11	2.5	2.4	1.5	10	0.3	0.4	0.2	0.20	141	1.6	0.5	7.9	3.6
SDG&E	306	Cooling Circ. Pumps - VSD	Office	6%	6%	0.20	2.5	2.3	1.5	15	2.0	1.3	1.3	0.16	235	1.2	0.6	9.1	2.2
SDG&E	310	DX Packaged System, EER=10.3, 10 tons	Office	0%	0%	0.00	4.2	4.2	2.8	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	311	DX Tune Up/ Advanced Diagnostics	Office	10%	10%	0.23	4.4	4.0	2.7	3	10.3	6.9	6.9	0.25	373	0.8	0.5	3.6	2.2
SDG&E	312	DX Packaged System, EER=10.9, 10 tons	Office	6%	6%	0.15	3.6	3.4	2.3	15	12.4	8.3	8.3	0.09	138	2.1	1.0	5.3	2.2
SDG&E	313	Window Film (Standard)	Office	9%	9%	0.27	4.5	4.1	2.7	10	7.7	5.1	5.2	0.11	162	1.8	1.0	4.5	2.2
SDG&E	314	Evaporative Pre-Cooler	Office	10%	10%	0.88	4.2	3.8	2.5	10	6.2	4.1	4.2	0.34	517	0.6	0.3	14.3	2.2
SDG&E	315	Prog. Thermostat - DX	Office	7%	3%	0.06	4.5	4.1	2.9	10	4.4	1.0	4.0	0.03	137	3.7	3.3	1.3	1.4
SDG&E	316	Cool Roof - DX	Office	2%	2%	0.24	4.3	4.2	2.8	10	1.3	0.9	0.9	0.51	761	0.4	0.2	21.1	2.2
SDG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Restaurant	0%	0%	0.00	3.2	3.2	1.7	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Restaurant	12%	12%	0.05	2.9	2.5	1.4	20	0.0	0.0	0.0	0.02	29	10.2	5.5	1.0	1.8
SDG&E	302	Window Film (Standard)	Restaurant	10%	10%	0.14	3.5	3.1	1.7	10	0.0	0.0	0.0	0.06	122	2.4	1.6	2.7	1.8
SDG&E	303	EMS - Chiller	Restaurant	10%	10%	0.15	3.3	2.9	1.6	10	0.0	0.0	0.0	0.08	142	2.1	1.4	3.1	1.8
SDG&E	304	Cool Roof - Chiller	Restaurant	7%	7%	0.47	3.3	3.1	1.6	10	0.0	0.0	0.0	0.34	641	0.5	0.3	14.2	1.8
SDG&E	305	Chiller Tune Up/Diagnostics	Restaurant	3%	8%	0.09	3.3	3.2	1.6	10	0.0	0.0	0.0	0.17	111	2.0	0.7	6.4	3.6
SDG&E	306	Cooling Circ. Pumps - VSD	Restaurant	6%	6%	0.16	3.3	3.1	1.6	15	0.0	0.0	0.0	0.10	183	1.6	1.0	5.7	1.8
SDG&E	310	DX Packaged System, EER=10.3, 10 tons	Restaurant	0%	0%	0.00	5.6	5.6	3.0	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	311	DX Tune Up/ Advanced Diagnostics	Restaurant	10%	10%	0.20	5.9	5.3	2.8	3	2.2	1.2	1.2	0.16	291	1.0	0.8	2.3	1.8
SDG&E	312	DX Packaged System, EER=10.9, 10 tons	Restaurant	6%	6%	0.13	4.9	4.6	2.4	15	2.6	1.4	1.4	0.06	107	2.7	1.6	3.3	1.8
SDG&E	313	Window Film (Standard)	Restaurant	10%	10%	0.14	5.9	5.3	2.8	10	2.4	1.3	1.3	0.04	72	4.1	2.7	1.6	1.8
SDG&E	314	Evaporative Pre-Cooler	Restaurant	10%	10%	0.73	5.6	5.1	2.7	10	1.3	0.7	0.7	0.21	403	0.7	0.5	8.9	1.8
SDG&E	315	Prog. Thermostat - DX	Restaurant	8%	3%	0.05	5.8	5.3	3.0	10	2.3	0.4	1.5	0.02	110	5.2	5.6	0.8	1.1
SDG&E	316	Cool Roof - DX	Restaurant	7%	7%	0.47	5.7	5.3	2.8	10	1.6	0.8	0.8	0.20	370	0.8	0.5	8.2	1.8
SDG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Retail	0%	0%	0.00	1.1	1.1	0.6	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Retail	12%	12%	0.04	1.0	0.9	0.5	20	2.7	1.5	1.5	0.03	59	5.1	2.6	2.2	2.0
SDG&E	302	Window Film (Standard)	Retail	2%	2%	0.09	1.2	1.1	0.6	10	0.1	0.1	0.1	0.50	887	0.3	0.2	20.7	2.0
SDG&E	303	EMS - Chiller	Retail	10%	10%	0.11	1.2	1.1	0.6	10	0.7	0.4	0.4	0.15	269	1.1	0.7	6.3	2.0
SDG&E	304	Cool Roof - Chiller	Retail	13%	13%	0.47	1.3	1.1	0.6	10	0.6	0.3	0.3	0.48	846	0.4	0.2	19.7	2.0
SDG&E	305	Chiller Tune Up/Diagnostics	Retail	3%	8%	0.07	1.2	1.1	0.6	10	0.1	0.1	0.1	0.31	224	1.0	0.4	12.1	3.6
SDG&E	306	Cooling Circ. Pumps - VSD	Retail	6%	6%	0.12	1.2	1.1	0.6	15	0.9	0.5	0.5	0.21	371	0.8	0.4	12.1	2.0
SDG&E	310	DX Packaged System, EER=10.3, 10 tons	Retail	0%	0%	0.00	2.0	2.0	1.1	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	311	DX Tune Up/ Advanced Diagnostics	Retail	10%	10%	0.15	2.1	1.9	1.1	3	3.2	1.8	1.8	0.33	589	0.5	0.4	4.8	2.0
SDG&E	312	DX Packaged System, EER=10.9, 10 tons	Retail	6%	6%	0.10	1.7	1.6	0.9	15	3.8	2.1	2.1	0.12	217	1.4	0.8	7.1	2.0
SDG&E	313	Window Film (Standard)	Retail	2%	2%	0.09	2.0	2.0	1.1	10	0.7	0.4	0.4	0.29	517	0.6	0.4	12.0	2.0
SDG&E	314	Evaporative Pre-Cooler	Retail	10%	10%	0.56	2.0	1.8	1.0	10	1.9	1.1	1.1	0.46	815	0.4	0.2	19.0	2.0
SDG&E	315	Prog. Thermostat - DX	Retail	8%	3%	0.04	2.1	1.9	1.1	10	2.1	0.4	1.5	0.04	219	2.6	2.6	1.7	1.2
SDG&E	316	Cool Roof - DX	Retail	13%	13%	0.47	2.1	1.8	1.0	10	3.0	1.7	1.7	0.28	502	0.6	0.4	11.7	2.0

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SDG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	FoodStore	0%	0%	0.00	5.5	5.5	1.7	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	FoodStore	12%	12%	0.07	4.9	4.3	1.3	20	2.6	0.8	0.8	0.01	39	9.9	7.2	0.8	1.4
SDG&E	302	Window Film (Standard)	FoodStore	9%	9%	0.13	5.5	5.0	1.5	10	1.7	0.5	0.5	0.04	131	2.9	2.6	1.7	1.4
SDG&E	303	EMS - Chiller	FoodStore	10%	10%	0.20	5.5	5.0	1.5	10	2.4	0.7	0.7	0.06	191	2.0	1.8	2.4	1.4
SDG&E	304	Cool Roof - Chiller	FoodStore	15%	15%	0.47	5.5	4.7	1.4	10	1.8	0.6	0.6	0.09	298	1.3	1.1	3.8	1.4
SDG&E	305	Chiller Tune Up/Diagnostics	FoodStore	2%	8%	0.12	5.6	5.5	1.6	10	0.1	0.1	0.0	0.18	148	1.7	0.6	7.2	3.4
SDG&E	306	Cooling Circ. Pumps - VSD	FoodStore	6%	6%	0.21	5.6	5.3	1.6	15	0.8	0.2	0.2	0.07	244	1.6	1.2	4.3	1.4
SDG&E	310	DX Packaged System, EER=10.3, 10 tons	FoodStore	0%	0%	0.00	9.6	9.6	2.9	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	311	DX Tune Up/ Advanced Diagnostics	FoodStore	10%	10%	0.25	10.1	9.1	2.8	3	2.4	0.7	0.7	0.12	387	1.0	1.0	1.7	1.4
SDG&E	312	DX Packaged System, EER=10.9, 10 tons	FoodStore	6%	6%	0.17	8.3	7.8	2.4	15	2.9	0.9	0.9	0.04	143	2.7	2.1	2.5	1.4
SDG&E	313	Window Film (Standard)	FoodStore	9%	9%	0.13	9.9	9.0	2.7	10	3.1	0.9	0.9	0.02	74	5.2	4.6	0.9	1.4
SDG&E	314	Evaporative Pre-Cooler	FoodStore	10%	10%	0.95	9.6	8.7	2.6	10	1.5	0.5	0.4	0.16	536	0.7	0.6	6.8	1.4
SDG&E	315	Prog. Thermostat - DX	FoodStore	9%	3%	0.07	9.8	9.0	2.9	10	3.0	0.3	1.0	0.01	147	5.9	8.0	0.5	0.9
SDG&E	316	Cool Roof - DX	FoodStore	15%	15%	0.47	10.3	8.7	2.6	10	3.0	0.9	0.9	0.05	161	2.4	2.1	2.1	1.4
SDG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Warehouse	0%	0%	0.00	0.4	0.4	0.3	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Warehouse	12%	12%	0.02	0.4	0.3	0.2	20	0.0	0.0	0.0	0.04	60	4.7	2.1	2.7	2.2
SDG&E	302	Window Film (Standard)	Warehouse	12%	12%	0.05	0.4	0.4	0.3	10	0.0	0.0	0.0	0.16	228	1.2	0.7	6.3	2.2
SDG&E	303	EMS - Chiller	Warehouse	10%	10%	0.05	0.4	0.4	0.3	10	0.0	0.0	0.0	0.20	291	1.0	0.5	8.1	2.2
SDG&E	304	Cool Roof - Chiller	Warehouse	18%	18%	0.47	0.4	0.4	0.3	10	0.0	0.0	0.0	0.94	1375	0.2	0.1	38.3	2.2
SDG&E	305	Chiller Tune Up/Diagnostics	Warehouse	4%	8%	0.03	0.4	0.4	0.3	10	0.0	0.0	0.0	0.33	230	1.0	0.3	12.7	3.6
SDG&E	306	Cooling Circ. Pumps - VSD	Warehouse	6%	6%	0.06	0.4	0.4	0.3	15	0.0	0.0	0.0	0.26	382	0.7	0.4	14.8	2.2
SDG&E	310	DX Packaged System, EER=10.3, 10 tons	Warehouse	0%	0%	0.00	0.8	0.8	0.5	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	311	DX Tune Up/ Advanced Diagnostics	Warehouse	10%	10%	0.07	0.8	0.7	0.5	3	0.4	0.3	0.3	0.42	606	0.5	0.3	5.9	2.2
SDG&E	312	DX Packaged System, EER=10.9, 10 tons	Warehouse	6%	6%	0.05	0.7	0.6	0.4	15	0.5	0.4	0.4	0.15	224	1.3	0.6	8.7	2.2
SDG&E	313	Window Film (Standard)	Warehouse	12%	12%	0.05	0.8	0.7	0.5	10	0.2	0.2	0.2	0.08	122	2.3	1.3	3.4	2.2
SDG&E	314	Evaporative Pre-Cooler	Warehouse	10%	10%	0.26	0.8	0.7	0.5	10	0.3	0.2	0.2	0.57	839	0.3	0.2	23.4	2.2
SDG&E	315	Prog. Thermostat - DX	Warehouse	7%	3%	0.02	0.8	0.7	0.5	10	0.4	0.1	0.4	0.05	229	2.2	2.0	2.2	1.4
SDG&E	316	Cool Roof - DX	Warehouse	18%	18%	0.47	0.8	0.7	0.4	10	0.7	0.5	0.5	0.53	768	0.4	0.2	21.4	2.2
SDG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	School	0%	0%	0.00	1.0	1.0	0.7	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	School	12%	12%	0.05	0.9	0.8	0.6	20	0.6	0.4	0.6	0.04	64	4.8	2.0	2.9	2.4
SDG&E	302	Window Film (Standard)	School	4%	4%	0.07	1.1	1.0	0.7	10	0.1	0.0	0.1	0.30	438	0.7	0.4	12.1	2.4
SDG&E	303	EMS - Chiller	School	10%	10%	0.14	1.1	1.0	0.7	10	0.2	0.1	0.2	0.20	295	1.0	0.5	8.1	2.4
SDG&E	304	Cool Roof - Chiller	School	6%	6%	0.24	1.0	1.0	0.7	10	0.2	0.1	0.2	0.60	892	0.3	0.2	24.6	2.4
SDG&E	305	Chiller Tune Up/Diagnostics	School	4%	8%	0.08	1.1	1.0	0.7	10	0.0	0.0	0.0	0.30	243	1.0	0.4	11.5	3.4
SDG&E	306	Cooling Circ. Pumps - VSD	School	6%	6%	0.15	1.1	1.0	0.7	15	0.2	0.1	0.2	0.27	404	0.8	0.3	15.5	2.4
SDG&E	310	DX Packaged System, EER=10.3, 10 tons	School	0%	0%	0.00	1.8	1.8	1.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	311	DX Tune Up/ Advanced Diagnostics	School	10%	10%	0.18	1.9	1.7	1.2	3	1.4	0.9	1.4	0.43	642	0.5	0.3	6.2	2.4
SDG&E	312	DX Packaged System, EER=10.9, 10 tons	School	6%	6%	0.12	1.6	1.5	1.0	15	1.6	1.1	1.7	0.16	237	1.3	0.6	9.1	2.4
SDG&E	313	Window Film (Standard)	School	4%	4%	0.07	1.8	1.7	1.2	10	0.8	0.5	0.8	0.17	257	1.2	0.6	7.1	2.4
SDG&E	314	Evaporative Pre-Cooler	School	10%	10%	0.66	1.8	1.6	1.1	10	0.8	0.6	0.8	0.60	889	0.3	0.2	24.5	2.4
SDG&E	315	Prog. Thermostat - DX	School	7%	3%	0.05	1.9	1.7	1.2	10	1.0	0.2	1.4	0.06	241	2.3	1.8	2.4	1.5
SDG&E	316	Cool Roof - DX	School	6%	6%	0.24	1.9	1.8	1.2	10	0.4	0.3	0.4	0.34	499	0.6	0.3	13.7	2.4

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SDG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	College	0%	0%	0.00	2.0	2.0	1.0	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	College	12%	12%	0.10	1.8	1.6	0.8	20	0.8	0.4	0.4	0.04	92	3.6	1.9	3.1	1.9
SDG&E	302	Window Film (Standard)	College	4%	4%	0.19	2.1	2.0	1.0	10	0.0	0.0	0.0	0.38	792	0.4	0.3	16.2	1.9
SDG&E	303	EMS - Chiller	College	10%	10%	0.27	2.1	1.9	0.9	10	0.4	0.2	0.2	0.21	433	0.8	0.5	8.8	1.9
SDG&E	304	Cool Roof - Chiller	College	1%	1%	0.20	2.0	2.0	1.0	10	0.0	0.0	0.0	1.23	2552	0.1	0.1	52.1	1.9
SDG&E	305	Chiller Tune Up/Diagnostics	College	3%	8%	0.17	2.0	2.0	0.9	10	0.0	0.0	0.0	0.43	353	0.7	0.3	16.9	3.4
SDG&E	306	Cooling Circ. Pumps - VSD	College	6%	6%	0.29	2.0	1.9	0.9	15	0.3	0.1	0.1	0.28	585	0.6	0.3	16.7	1.9
SDG&E	310	DX Packaged System, EER=10.3, 10 tons	College	0%	0%	0.00	3.5	3.5	1.7	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	311	DX Tune Up/ Advanced Diagnostics	College	10%	10%	0.35	3.7	3.3	1.6	3	1.6	0.8	0.8	0.45	928	0.4	0.3	6.7	1.9
SDG&E	312	DX Packaged System, EER=10.9, 10 tons	College	6%	6%	0.23	3.0	2.9	1.4	15	1.9	0.9	1.0	0.17	343	1.0	0.6	9.8	1.9
SDG&E	313	Window Film (Standard)	College	4%	4%	0.19	3.6	3.4	1.7	10	0.4	0.2	0.2	0.22	461	0.7	0.5	9.4	1.9
SDG&E	314	Evaporative Pre-Cooler	College	10%	10%	1.32	3.5	3.2	1.5	10	1.0	0.5	0.5	0.62	1286	0.3	0.2	26.3	1.9
SDG&E	315	Prog. Thermostat - DX	College	8%	3%	0.09	3.7	3.4	1.7	10	0.8	0.1	0.5	0.05	342	1.9	1.9	2.2	1.2
SDG&E	316	Cool Roof - DX	College	1%	1%	0.20	3.5	3.4	1.7	10	0.2	0.1	0.1	0.71	1476	0.2	0.1	30.1	1.9
SDG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Hospital	0%	0%	0.00	5.9	5.9	3.6	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Hospital	12%	12%	0.10	5.3	4.6	2.8	20	6.3	3.9	4.0	0.02	25	11.1	5.6	1.0	2.0
SDG&E	302	Window Film (Standard)	Hospital	1%	1%	0.06	6.0	5.9	3.6	10	0.0	0.0	0.0	0.15	237	1.2	0.7	6.0	2.0
SDG&E	303	EMS - Chiller	Hospital	10%	10%	0.27	6.0	5.4	3.3	10	5.0	3.1	3.2	0.07	121	2.3	1.4	3.1	2.0
SDG&E	304	Cool Roof - Chiller	Hospital	1%	1%	0.16	5.9	5.9	3.6	10	0.1	0.1	0.1	0.69	1121	0.2	0.2	28.4	2.0
SDG&E	305	Chiller Tune Up/Diagnostics	Hospital	3%	8%	0.17	6.0	5.8	3.4	10	0.2	0.4	0.2	0.15	95	2.3	0.7	5.8	3.7
SDG&E	306	Cooling Circ. Pumps - VSD	Hospital	6%	6%	0.29	6.0	5.6	3.5	15	2.0	1.2	1.3	0.10	157	1.7	1.0	5.5	2.0
SDG&E	310	DX Packaged System, EER=10.3, 10 tons	Hospital	0%	0%	0.00	10.2	10.2	6.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	311	DX Tune Up/ Advanced Diagnostics	Hospital	10%	10%	0.35	10.8	9.7	6.0	3	5.3	3.2	3.3	0.15	249	1.1	0.8	2.2	2.0
SDG&E	312	DX Packaged System, EER=10.9, 10 tons	Hospital	6%	6%	0.23	8.8	8.3	5.1	15	6.3	3.9	4.0	0.06	92	3.0	1.7	3.2	2.0
SDG&E	313	Window Film (Standard)	Hospital	1%	1%	0.06	10.3	10.2	6.3	10	0.5	0.3	0.3	0.08	138	2.0	1.2	3.5	2.0
SDG&E	314	Evaporative Pre-Cooler	Hospital	10%	10%	1.32	10.3	9.2	5.7	10	3.2	2.0	2.0	0.21	345	0.8	0.5	8.7	2.0
SDG&E	315	Prog. Thermostat - DX	Hospital	8%	3%	0.09	10.5	9.7	6.3	10	5.2	1.0	4.2	0.02	94	5.5	5.6	0.8	1.2
SDG&E	316	Cool Roof - DX	Hospital	1%	1%	0.16	10.2	10.2	6.3	10	0.2	0.1	0.1	0.40	646	0.4	0.3	16.4	2.0
SDG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Hotel	0%	0%	0.00	3.0	3.0	1.9	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Hotel	12%	12%	0.10	2.6	2.3	1.5	20	0.5	0.3	0.3	0.03	50	4.7	2.7	2.1	1.7
SDG&E	302	Window Film (Standard)	Hotel	7%	7%	0.29	3.0	2.8	1.8	10	0.2	0.1	0.1	0.23	352	0.7	0.5	9.1	1.7
SDG&E	303	EMS - Chiller	Hotel	10%	10%	0.29	3.0	2.7	1.7	10	0.4	0.3	0.3	0.16	246	1.0	0.7	6.4	1.7
SDG&E	304	Cool Roof - Chiller	Hotel	0%	0%	0.04	3.0	3.0	1.9	10	0.0	0.0	0.0	0.55	868	0.3	0.2	22.5	1.7
SDG&E	305	Chiller Tune Up/Diagnostics	Hotel	3%	8%	0.18	3.0	2.9	1.8	10	0.0	0.0	0.0	0.39	192	0.9	0.3	15.0	3.8
SDG&E	306	Cooling Circ. Pumps - VSD	Hotel	6%	6%	0.31	3.0	2.8	1.8	15	0.2	0.1	0.1	0.20	317	0.8	0.5	11.4	1.7
SDG&E	310	DX Packaged System, EER=10.3, 10 tons	Hotel	0%	0%	0.00	5.1	5.1	3.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	311	DX Tune Up/ Advanced Diagnostics	Hotel	10%	10%	0.37	5.4	4.9	3.1	3	5.7	3.7	3.6	0.32	503	0.5	0.4	4.6	1.7
SDG&E	312	DX Packaged System, EER=10.9, 10 tons	Hotel	6%	6%	0.25	4.4	4.2	2.7	15	6.9	4.4	4.3	0.12	186	1.3	0.8	6.7	1.7
SDG&E	313	Window Film (Standard)	Hotel	7%	7%	0.29	5.2	4.8	3.1	10	6.5	4.1	4.1	0.13	205	1.2	0.8	5.3	1.7
SDG&E	314	Evaporative Pre-Cooler	Hotel	10%	10%	1.39	5.2	4.7	3.0	10	3.5	2.2	2.2	0.45	696	0.3	0.2	18.1	1.7
SDG&E	315	Prog. Thermostat - DX	Hotel	8%	3%	0.10	5.2	4.8	3.3	10	7.4	1.4	5.6	0.04	193	2.5	2.8	1.5	1.1
SDG&E	316	Cool Roof - DX	Hotel	0%	0%	0.04	5.2	5.1	3.3	10	0.2	0.2	0.2	0.32	501	0.5	0.3	13.0	1.7

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SDG&E	300	Centrifugal Chiller, 0.58 kW/ton, 500 tons	Miscellanec	0%	0%	0.00	2.7	2.7	1.4	20	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	301	Centrifugal Chiller, 0.51 kW/ton, 500 tons	Miscellanec	12%	12%	0.04	2.4	2.1	1.1	20	1.5	0.8	0.8	0.01	29	10.6	5.7	1.0	1.9
SDG&E	302	Window Film (Standard)	Miscellanec	2%	2%	0.09	2.7	2.7	1.3	10	0.2	0.1	0.1	0.21	427	0.7	0.5	9.0	1.9
SDG&E	303	EMS - Chiller	Miscellanec	10%	10%	0.12	2.9	2.6	1.3	10	0.7	0.4	0.4	0.07	139	2.3	1.5	2.9	1.9
SDG&E	304	Cool Roof - Chiller	Miscellanec	13%	13%	0.47	2.9	2.5	1.2	10	0.6	0.3	0.3	0.21	420	0.7	0.5	8.8	1.9
SDG&E	305	Chiller Tune Up/Diagnostics	Miscellanec	3%	8%	0.08	2.8	2.7	1.3	10	0.1	0.1	0.0	0.16	113	2.1	0.7	6.0	3.6
SDG&E	306	Cooling Circ. Pumps - VSD	Miscellanec	6%	6%	0.13	2.8	2.6	1.3	15	0.5	0.2	0.2	0.09	187	1.7	1.0	5.5	1.9
SDG&E	310	DX Packaged System, EER=10.3, 10 tons	Miscellanec	0%	0%	0.00	4.7	4.7	2.4	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	311	DX Tune Up/ Advanced Diagnostics	Miscellanec	10%	10%	0.16	4.9	4.5	2.2	3	5.5	2.8	2.8	0.15	296	1.1	0.8	2.2	1.9
SDG&E	312	DX Packaged System, EER=10.9, 10 tons	Miscellanec	6%	6%	0.10	4.1	3.8	1.9	15	6.7	3.3	3.4	0.05	109	2.9	1.7	3.2	1.9
SDG&E	313	Window Film (Standard)	Miscellanec	2%	2%	0.09	4.8	4.6	2.3	10	1.5	0.7	0.7	0.12	246	1.3	0.8	5.2	1.9
SDG&E	314	Evaporative Pre-Cooler	Miscellanec	10%	10%	0.59	4.7	4.3	2.1	10	3.3	1.7	1.7	0.21	410	0.8	0.5	8.6	1.9
SDG&E	315	Prog. Thermostat - DX	Miscellanec	8%	3%	0.04	4.8	4.5	2.4	10	5.6	0.9	3.5	0.02	112	5.5	5.8	0.7	1.1
SDG&E	316	Cool Roof - DX	Miscellanec	13%	13%	0.47	4.9	4.3	2.2	10	5.9	3.0	3.0	0.12	242	1.3	0.8	5.1	1.9
PG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Office	0%	0%	0.00	3.3	3.3	0.6	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	Office	2%	2%	0.02	3.3	3.2	0.6	15	5.9	1.0	1.1	0.03	194	3.0	2.5	2.2	1.3
PG&E	402	Variable Speed Drive Control, 5 HP	Office	27%	8%	0.34	3.3	2.4	0.5	15	16.0	0.8	3.2	0.05	930	1.6	1.7	3.2	1.0
PG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Office	0%	0%	0.00	3.0	3.0	0.5	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	Office	2%	2%	0.00	3.0	3.0	0.5	15	4.8	0.8	0.9	0.01	54	10.9	8.9	0.6	1.3
PG&E	412	Variable Speed Drive Control, 15 HP	Office	27%	8%	0.21	3.1	2.3	0.5	15	53.3	2.6	10.6	0.03	590	2.5	2.7	2.0	1.0
PG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Office	0%	0%	0.00	3.0	3.0	0.5	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	Office	1%	1%	0.01	3.0	2.9	0.5	15	7.1	1.2	1.3	0.05	269	2.2	1.8	3.1	1.3
PG&E	422	Variable Speed Drive Control, 40 HP	Office	27%	8%	0.14	3.4	2.5	0.6	15	83.9	4.1	16.7	0.02	368	4.0	4.3	1.3	1.0
PG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Restaurant	0%	0%	0.00	4.8	4.8	0.7	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	Restaurant	2%	2%	0.05	4.8	4.7	0.7	15	3.6	0.5	0.5	0.05	340	1.9	1.7	3.3	1.2
PG&E	402	Variable Speed Drive Control, 5 HP	Restaurant	27%	8%	0.75	6.6	4.8	0.9	15	0.0	0.0	0.0	N/A	N/A	99999.0	99999.0	#DIV/0!	#DIV/0!
PG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Restaurant	0%	0%	0.00	4.5	4.5	0.7	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	Restaurant	2%	2%	0.01	4.5	4.4	0.6	15	0.0	0.0	0.0	0.01	94	6.8	6.0	0.9	1.2
PG&E	412	Variable Speed Drive Control, 15 HP	Restaurant	27%	8%	0.45	6.2	4.5	0.8	15	0.0	0.0	0.0	N/A	N/A	99999.0	99999.0	#DIV/0!	#DIV/0!
PG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Restaurant	0%	0%	0.00	4.4	4.4	0.6	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	Restaurant	1%	1%	0.03	4.4	4.3	0.6	15	0.0	0.0	0.0	0.07	472	1.4	1.2	4.6	1.2
PG&E	422	Variable Speed Drive Control, 40 HP	Restaurant	27%	8%	0.30	6.1	4.4	0.8	15	0.0	0.0	0.0	N/A	N/A	99999.0	99999.0	#DIV/0!	#DIV/0!
PG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Retail	0%	0%	0.00	0.8	0.8	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	Retail	2%	2%	0.01	0.8	0.8	0.2	15	2.5	0.5	0.5	0.05	260	2.1	1.7	3.3	1.4
PG&E	402	Variable Speed Drive Control, 5 HP	Retail	27%	8%	0.13	1.0	0.7	0.2	15	2.6	0.1	0.5	0.06	1060	1.2	1.3	4.1	1.0
PG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Retail	0%	0%	0.00	0.8	0.8	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	Retail	2%	2%	0.00	0.8	0.8	0.1	15	0.6	0.1	0.1	0.01	72	7.6	6.0	0.9	1.4
PG&E	412	Variable Speed Drive Control, 15 HP	Retail	27%	8%	0.08	0.9	0.7	0.2	15	1.0	0.1	0.2	0.04	696	1.9	2.0	2.7	1.0
PG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Retail	0%	0%	0.00	0.8	0.8	0.1	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	Retail	1%	1%	0.01	0.8	0.8	0.1	15	0.4	0.1	0.1	0.07	361	1.5	1.2	4.6	1.4
PG&E	422	Variable Speed Drive Control, 40 HP	Retail	27%	8%	0.05	0.8	0.6	0.2	15	4.9	0.3	1.0	0.03	525	2.5	2.7	2.0	1.0
PG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	FoodStore	0%	0%	0.00	6.8	6.8	0.9	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	FoodStore	2%	2%	0.03	6.8	6.7	0.9	15	5.5	0.7	0.8	0.02	155	4.3	3.9	1.4	1.2
PG&E	402	Variable Speed Drive Control, 5 HP	FoodStore	28%	8%	0.44	9.4	6.8	1.2	15	0.0	0.0	0.0	N/A	N/A	99999.0	99999.0	#DIV/0!	#DIV/0!
PG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	FoodStore	0%	0%	0.00	6.3	6.3	0.8	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	FoodStore	2%	2%	0.00	6.3	6.2	0.8	15	3.3	0.5	0.5	0.01	43	15.4	14.2	0.4	1.2
PG&E	412	Variable Speed Drive Control, 15 HP	FoodStore	28%	8%	0.26	8.7	6.3	1.1	15	0.0	0.0	0.0	N/A	N/A	99999.0	99999.0	#DIV/0!	#DIV/0!
PG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	FoodStore	0%	0%	0.00	6.2	6.2	0.8	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	FoodStore	1%	1%	0.02	6.2	6.1	0.8	15	0.0	0.0	0.0	0.03	216	3.1	2.8	1.9	1.2
PG&E	422	Variable Speed Drive Control, 40 HP	FoodStore	28%	8%	0.18	8.6	6.2	1.1	15	0.0	0.0	0.0	N/A	N/A	99999.0	99999.0	#DIV/0!	#DIV/0!

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PG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Warehouse	0%	0%	0.00	2.1	2.1	0.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	Warehouse	2%	2%	0.01	2.1	2.1	0.3	15	4.9	0.7	0.7	0.03	237	2.8	2.6	2.1	1.2
PG&E	402	Variable Speed Drive Control, 5 HP	Warehouse	28%	8%	0.22	2.1	1.5	0.3	15	3.6	0.1	0.6	0.04	1163	1.5	1.8	3.0	0.9
PG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Warehouse	0%	0%	0.00	2.0	2.0	0.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	Warehouse	2%	2%	0.00	2.0	1.9	0.3	15	1.0	0.1	0.1	0.01	66	9.9	9.3	0.6	1.2
PG&E	412	Variable Speed Drive Control, 15 HP	Warehouse	28%	8%	0.13	2.0	1.4	0.3	15	9.8	0.4	1.6	0.03	753	2.3	2.8	1.9	0.9
PG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Warehouse	0%	0%	0.00	1.9	1.9	0.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	Warehouse	1%	1%	0.01	1.9	1.9	0.3	15	0.0	0.0	0.0	0.05	330	2.0	1.9	3.0	1.2
PG&E	422	Variable Speed Drive Control, 40 HP	Warehouse	28%	8%	0.09	2.7	1.9	0.3	15	0.0	0.0	0.0	N/A	N/A	99999.0	99999.0	#DIV/0!	#DIV/0!
PG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	School	0%	0%	0.00	0.9	0.9	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	School	2%	2%	0.01	0.9	0.9	0.2	15	1.5	0.4	0.5	0.06	260	2.0	1.5	3.7	1.5
PG&E	402	Variable Speed Drive Control, 5 HP	School	26%	8%	0.17	0.9	0.7	0.2	15	4.2	0.3	1.4	0.08	1276	0.9	0.9	5.8	1.1
PG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	School	0%	0%	0.00	0.9	0.9	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	School	2%	2%	0.00	0.9	0.8	0.2	15	0.3	0.1	0.1	0.02	72	7.1	5.4	1.0	1.5
PG&E	412	Variable Speed Drive Control, 15 HP	School	26%	8%	0.10	0.9	0.6	0.2	15	3.1	0.2	1.0	0.05	826	1.4	1.5	3.8	1.1
PG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	School	0%	0%	0.00	0.8	0.8	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	School	1%	1%	0.01	0.8	0.8	0.2	15	0.0	0.0	0.0	0.08	361	1.4	1.1	5.2	1.5
PG&E	422	Variable Speed Drive Control, 40 HP	School	26%	8%	0.07	1.1	0.8	0.2	15	0.0	0.0	0.0	N/A	N/A	99999.0	99999.0	#DIV/0!	#DIV/0!
PG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	College	0%	0%	0.00	1.2	1.2	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	College	2%	2%	0.01	1.2	1.2	0.2	15	1.2	0.2	0.2	0.06	445	1.9	1.5	3.7	1.3
PG&E	402	Variable Speed Drive Control, 5 HP	College	27%	8%	0.22	1.3	0.9	0.2	15	4.1	0.1	1.0	0.08	2119	1.0	1.0	5.4	1.1
PG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	College	0%	0%	0.00	1.1	1.1	0.1	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	College	2%	2%	0.00	1.1	1.1	0.1	15	0.5	0.1	0.1	0.02	123	6.7	5.5	1.0	1.3
PG&E	412	Variable Speed Drive Control, 15 HP	College	27%	8%	0.13	1.2	0.9	0.1	15	7.0	0.3	1.6	0.05	1351	1.5	1.6	3.4	1.1
PG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	College	0%	0%	0.00	1.1	1.1	0.1	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	College	1%	1%	0.01	1.1	1.1	0.1	15	0.1	0.0	0.0	0.08	619	1.3	1.1	5.1	1.3
PG&E	422	Variable Speed Drive Control, 40 HP	College	27%	8%	0.09	1.2	0.9	0.1	15	2.4	0.1	0.6	0.03	906	2.3	2.4	2.3	1.1
PG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Hospital	0%	0%	0.00	3.8	3.8	0.6	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	Hospital	2%	2%	0.01	3.8	3.7	0.6	15	3.3	0.5	0.5	0.02	125	5.1	4.0	1.4	1.4
PG&E	402	Variable Speed Drive Control, 5 HP	Hospital	27%	8%	0.25	3.8	2.8	0.6	15	7.0	0.3	1.2	0.03	613	2.5	2.7	2.0	1.0
PG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Hospital	0%	0%	0.00	3.5	3.5	0.6	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	Hospital	2%	2%	0.00	3.5	3.5	0.6	15	2.0	0.3	0.3	0.01	35	18.4	14.6	0.4	1.4
PG&E	412	Variable Speed Drive Control, 15 HP	Hospital	27%	8%	0.15	3.6	2.7	0.6	15	27.4	1.3	4.7	0.02	383	4.0	4.3	1.3	1.0
PG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Hospital	0%	0%	0.00	3.5	3.5	0.6	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	Hospital	1%	1%	0.01	3.5	3.4	0.6	15	1.1	0.2	0.2	0.03	174	3.7	2.9	1.9	1.4
PG&E	422	Variable Speed Drive Control, 40 HP	Hospital	27%	8%	0.10	3.7	2.7	0.6	15	16.5	0.8	2.8	0.01	253	6.1	6.5	0.8	1.0
PG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Hotel	0%	0%	0.00	0.8	0.8	0.1	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	Hotel	2%	2%	0.01	0.8	0.7	0.1	15	1.0	0.2	0.2	0.07	458	1.3	1.1	4.9	1.3
PG&E	402	Variable Speed Drive Control, 5 HP	Hotel	27%	8%	0.17	0.8	0.5	0.1	15	0.5	0.0	0.1	0.10	2246	0.7	0.8	7.1	1.0
PG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Hotel	0%	0%	0.00	0.7	0.7	0.1	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	Hotel	2%	2%	0.00	0.7	0.7	0.1	15	0.2	0.0	0.0	0.02	127	4.8	4.1	1.4	1.3
PG&E	412	Variable Speed Drive Control, 15 HP	Hotel	27%	8%	0.10	0.7	0.5	0.1	15	0.2	0.0	0.0	0.07	1454	1.1	1.2	4.6	1.0
PG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Hotel	0%	0%	0.00	0.7	0.7	0.1	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	Hotel	1%	1%	0.01	0.7	0.7	0.1	15	0.0	0.0	0.0	0.10	636	1.0	0.8	6.8	1.3
PG&E	422	Variable Speed Drive Control, 40 HP	Hotel	27%	8%	0.07	0.7	0.5	0.1	15	0.3	0.0	0.1	0.05	1005	1.5	1.7	3.2	1.0
PG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Miscellanec	0%	0%	0.00	2.4	2.4	0.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	Miscellanec	2%	2%	0.03	2.4	2.3	0.2	15	10.6	1.1	1.1	0.07	693	1.1	1.1	5.0	1.1
PG&E	402	Variable Speed Drive Control, 5 HP	Miscellanec	28%	8%	0.54	2.4	1.7	0.2	15	13.2	0.4	1.5	0.10	3336	0.6	0.8	6.7	0.9
PG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Miscellanec	0%	0%	0.00	2.2	2.2	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	Miscellanec	2%	2%	0.01	2.2	2.2	0.2	15	2.3	0.2	0.2	0.02	192	4.0	4.0	1.4	1.1
PG&E	412	Variable Speed Drive Control, 15 HP	Miscellanec	28%	8%	0.33	2.3	1.6	0.2	15	13.1	0.4	1.5	0.06	2099	1.0	1.3	4.2	0.9
PG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Miscellanec	0%	0%	0.00	2.1	2.1	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	Miscellanec	1%	1%	0.02	2.1	2.1	0.2	15	0.5	0.0	0.1	0.10	963	0.8	0.8	6.9	1.1
PG&E	422	Variable Speed Drive Control, 40 HP	Miscellanec	28%	8%	0.22	2.4	1.7	0.2	15	4.6	0.1	0.5	0.04	1384	1.5	2.0	2.8	0.9

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SCE	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Office	0%	0%	0.00	2.7	2.7	0.5	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	401	Fan Motor, 5hp, 1800rpm, 89.5%	Office	2%	2%	0.02	2.7	2.7	0.5	15	5.7	1.0	1.0	0.04	231	2.5	2.2	2.5	1.3
SCE	402	Variable Speed Drive Control, 5 HP	Office	27%	8%	0.34	2.8	2.0	0.5	15	15.4	0.7	3.1	0.05	1107	1.3	1.6	3.4	0.9
SCE	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Office	0%	0%	0.00	2.5	2.5	0.4	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	411	Fan Motor, 15hp, 1800rpm, 92.4%	Office	2%	2%	0.00	2.5	2.5	0.4	15	4.6	0.8	0.8	0.01	64	9.2	7.8	0.7	1.3
SCE	412	Variable Speed Drive Control, 15 HP	Office	27%	8%	0.21	2.6	1.9	0.4	15	51.4	2.5	10.2	0.03	702	2.1	2.5	2.1	0.9
SCE	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Office	0%	0%	0.00	2.5	2.5	0.4	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	421	Fan Motor, 40hp, 1800rpm, 94.1%	Office	1%	1%	0.01	2.5	2.5	0.4	15	6.9	1.2	1.2	0.06	321	1.8	1.6	3.5	1.3
SCE	422	Variable Speed Drive Control, 40 HP	Office	27%	8%	0.14	2.9	2.1	0.5	15	80.9	3.9	16.1	0.02	439	3.3	4.0	1.3	0.9
SCE	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Restaurant	0%	0%	0.00	6.3	6.3	1.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	401	Fan Motor, 5hp, 1800rpm, 89.5%	Restaurant	2%	2%	0.05	6.3	6.2	1.3	15	8.8	1.8	1.7	0.04	186	2.8	2.3	2.3	1.3
SCE	402	Variable Speed Drive Control, 5 HP	Restaurant	27%	8%	0.75	8.6	6.3	1.6	15	0.0	0.0	0.0	0.04	669	1.9	2.2	2.4	0.9
SCE	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Restaurant	0%	0%	0.00	5.8	5.8	1.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	411	Fan Motor, 15hp, 1800rpm, 92.4%	Restaurant	2%	2%	0.01	5.8	5.7	1.2	15	0.0	0.0	0.0	0.01	51	10.2	8.3	0.6	1.3
SCE	412	Variable Speed Drive Control, 15 HP	Restaurant	27%	8%	0.45	8.0	5.8	1.5	15	0.0	0.0	0.0	0.03	433	2.9	3.5	1.6	0.9
SCE	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Restaurant	0%	0%	0.00	5.7	5.7	1.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	421	Fan Motor, 40hp, 1800rpm, 94.1%	Restaurant	1%	1%	0.03	5.7	5.7	1.2	15	0.0	0.0	0.0	0.05	258	2.0	1.7	3.3	1.3
SCE	422	Variable Speed Drive Control, 40 HP	Restaurant	27%	8%	0.30	7.8	5.7	1.5	15	0.0	0.0	0.0	0.02	299	4.2	5.0	1.1	0.9
SCE	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Retail	0%	0%	0.00	1.6	1.6	0.4	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	401	Fan Motor, 5hp, 1800rpm, 89.5%	Retail	2%	2%	0.01	1.6	1.6	0.4	15	6.9	1.5	1.5	0.03	119	4.3	3.3	1.6	1.4
SCE	402	Variable Speed Drive Control, 5 HP	Retail	26%	8%	0.13	1.9	1.4	0.4	15	6.9	0.4	1.8	0.03	488	2.4	2.8	1.9	1.0
SCE	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Retail	0%	0%	0.00	1.5	1.5	0.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	411	Fan Motor, 15hp, 1800rpm, 92.4%	Retail	2%	2%	0.00	1.5	1.5	0.3	15	1.7	0.4	0.4	0.01	33	15.5	11.9	0.5	1.4
SCE	412	Variable Speed Drive Control, 15 HP	Retail	26%	8%	0.08	1.7	1.3	0.4	15	2.7	0.2	0.7	0.02	320	3.7	4.2	1.3	1.0
SCE	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Retail	0%	0%	0.00	1.5	1.5	0.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	421	Fan Motor, 40hp, 1800rpm, 94.1%	Retail	1%	1%	0.01	1.5	1.4	0.3	15	1.1	0.2	0.2	0.04	165	3.1	2.4	2.3	1.4
SCE	422	Variable Speed Drive Control, 40 HP	Retail	26%	8%	0.05	1.6	1.2	0.3	15	13.0	0.8	3.3	0.02	241	4.9	5.6	1.0	1.0
SCE	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	FoodStore	0%	0%	0.00	6.8	6.8	0.8	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	401	Fan Motor, 5hp, 1800rpm, 89.5%	FoodStore	2%	2%	0.03	6.8	6.6	0.8	15	6.9	0.8	0.8	0.02	170	4.1	4.2	1.3	1.1
SCE	402	Variable Speed Drive Control, 5 HP	FoodStore	28%	8%	0.44	9.4	6.8	1.1	15	0.0	0.0	0.0	0.02	602	3.2	4.4	1.2	0.8
SCE	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	FoodStore	0%	0%	0.00	6.3	6.3	0.8	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	411	Fan Motor, 15hp, 1800rpm, 92.4%	FoodStore	2%	2%	0.00	6.3	6.2	0.8	15	4.2	0.5	0.5	0.01	47	14.7	15.2	0.4	1.1
SCE	412	Variable Speed Drive Control, 15 HP	FoodStore	28%	8%	0.26	8.7	6.3	1.0	15	0.0	0.0	0.0	0.01	389	4.9	6.8	0.8	0.8
SCE	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	FoodStore	0%	0%	0.00	6.2	6.2	0.8	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	421	Fan Motor, 40hp, 1800rpm, 94.1%	FoodStore	1%	1%	0.02	6.2	6.1	0.8	15	0.0	0.0	0.0	0.03	236	2.9	3.0	1.8	1.1
SCE	422	Variable Speed Drive Control, 40 HP	FoodStore	28%	8%	0.18	8.6	6.2	1.0	15	0.0	0.0	0.0	0.01	269	7.1	9.8	0.6	0.8
SCE	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Warehouse	0%	0%	0.00	2.1	2.1	0.5	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	401	Fan Motor, 5hp, 1800rpm, 89.5%	Warehouse	2%	2%	0.01	2.1	2.1	0.5	15	3.9	1.0	1.0	0.03	133	3.6	2.6	2.0	1.5
SCE	402	Variable Speed Drive Control, 5 HP	Warehouse	26%	8%	0.22	2.1	1.6	0.5	15	2.7	0.2	0.8	0.05	652	1.7	1.8	2.9	1.0
SCE	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Warehouse	0%	0%	0.00	2.0	2.0	0.5	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	411	Fan Motor, 15hp, 1800rpm, 92.4%	Warehouse	2%	2%	0.00	2.0	1.9	0.5	15	0.8	0.2	0.2	0.01	37	13.2	9.6	0.6	1.5
SCE	412	Variable Speed Drive Control, 15 HP	Warehouse	26%	8%	0.13	2.0	1.4	0.5	15	7.4	0.5	2.1	0.03	422	2.7	2.8	1.9	1.0
SCE	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Warehouse	0%	0%	0.00	1.9	1.9	0.5	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	421	Fan Motor, 40hp, 1800rpm, 94.1%	Warehouse	1%	1%	0.01	1.9	1.9	0.5	15	0.0	0.0	0.0	0.05	185	2.6	1.9	2.8	1.5
SCE	422	Variable Speed Drive Control, 40 HP	Warehouse	26%	8%	0.09	2.6	1.9	0.6	15	0.0	0.0	0.0	0.02	215	5.2	5.6	1.0	1.0
SCE	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	School	0%	0%	0.00	0.9	0.9	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	401	Fan Motor, 5hp, 1800rpm, 89.5%	School	2%	2%	0.01	0.9	0.9	0.2	15	2.9	0.6	0.9	0.06	282	2.2	1.4	3.8	1.7
SCE	402	Variable Speed Drive Control, 5 HP	School	26%	8%	0.17	0.9	0.7	0.2	15	7.6	0.5	2.8	0.09	1381	1.0	1.0	5.6	1.2
SCE	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	School	0%	0%	0.00	0.9	0.9	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	411	Fan Motor, 15hp, 1800rpm, 92.4%	School	2%	2%	0.00	0.9	0.8	0.2	15	0.5	0.1	0.2	0.02	78	7.8	5.2	1.0	1.7
SCE	412	Variable Speed Drive Control, 15 HP	School	26%	8%	0.10	0.9	0.6	0.2	15	5.6	0.4	2.1	0.06	894	1.6	1.5	3.6	1.2
SCE	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	School	0%	0%	0.00	0.8	0.8	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	421	Fan Motor, 40hp, 1800rpm, 94.1%	School	1%	1%	0.01	0.8	0.8	0.2	15	0.0	0.0	0.0	0.08	391	1.6	1.0	5.2	1.7
SCE	422	Variable Speed Drive Control, 40 HP	School	26%	8%	0.07	1.1	0.8	0.2	15	0.0	0.0	0.0	0.03	460	3.1	2.9	1.9	1.2

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SCE	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	College	0%	0%	0.00	2.1	2.1	0.4	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	401	Fan Motor, 5hp, 1800rpm, 89.5%	College	2%	2%	0.01	2.1	2.1	0.4	15	2.2	0.4	0.5	0.03	162	3.3	2.6	2.1	1.4
SCE	402	Variable Speed Drive Control, 5 HP	College	27%	8%	0.22	2.2	1.6	0.4	15	7.3	0.4	1.7	0.04	769	1.7	1.9	2.8	1.0
SCE	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	College	0%	0%	0.00	2.0	2.0	0.4	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	411	Fan Motor, 15hp, 1800rpm, 92.4%	College	2%	2%	0.00	2.0	2.0	0.4	15	0.9	0.2	0.2	0.01	45	12.0	9.5	0.6	1.4
SCE	412	Variable Speed Drive Control, 15 HP	College	27%	8%	0.13	2.1	1.5	0.4	15	12.7	0.7	3.0	0.03	490	2.6	3.0	1.8	1.0
SCE	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	College	0%	0%	0.00	2.0	2.0	0.4	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	421	Fan Motor, 40hp, 1800rpm, 94.1%	College	1%	1%	0.01	2.0	1.9	0.4	15	0.3	0.1	0.1	0.05	224	2.4	1.9	2.9	1.4
SCE	422	Variable Speed Drive Control, 40 HP	College	27%	8%	0.09	2.1	1.5	0.4	15	4.3	0.3	1.0	0.02	329	3.9	4.5	1.2	1.0
SCE	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Hospital	0%	0%	0.00	2.7	2.7	0.5	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	401	Fan Motor, 5hp, 1800rpm, 89.5%	Hospital	2%	2%	0.01	2.7	2.6	0.5	15	2.2	0.5	0.5	0.03	146	3.6	3.0	1.8	1.3
SCE	402	Variable Speed Drive Control, 5 HP	Hospital	27%	8%	0.25	2.7	2.0	0.5	15	4.8	0.3	1.1	0.04	714	1.8	2.1	2.5	0.9
SCE	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Hospital	0%	0%	0.00	2.5	2.5	0.5	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	411	Fan Motor, 15hp, 1800rpm, 92.4%	Hospital	2%	2%	0.00	2.5	2.4	0.5	15	1.4	0.3	0.3	0.01	40	12.8	10.7	0.5	1.3
SCE	412	Variable Speed Drive Control, 15 HP	Hospital	27%	8%	0.15	2.6	1.9	0.5	15	18.8	1.1	4.3	0.03	446	2.8	3.4	1.6	0.9
SCE	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Hospital	0%	0%	0.00	2.4	2.4	0.5	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	421	Fan Motor, 40hp, 1800rpm, 94.1%	Hospital	1%	1%	0.01	2.4	2.4	0.5	15	0.7	0.1	0.1	0.04	202	2.6	2.1	2.5	1.3
SCE	422	Variable Speed Drive Control, 40 HP	Hospital	27%	8%	0.10	2.6	1.9	0.5	15	11.3	0.6	2.6	0.02	294	4.3	5.2	1.0	0.9
SCE	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Hotel	0%	0%	0.00	1.1	1.1	0.1	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	401	Fan Motor, 5hp, 1800rpm, 89.5%	Hotel	2%	2%	0.01	1.1	1.1	0.1	15	1.6	0.2	0.2	0.05	435	1.6	1.7	3.2	1.0
SCE	402	Variable Speed Drive Control, 5 HP	Hotel	28%	8%	0.17	1.1	0.8	0.1	15	0.7	0.0	0.1	0.07	2133	0.9	1.3	4.2	0.8
SCE	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Hotel	0%	0%	0.00	1.0	1.0	0.1	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	411	Fan Motor, 15hp, 1800rpm, 92.4%	Hotel	2%	2%	0.00	1.0	1.0	0.1	15	0.3	0.0	0.0	0.01	120	5.8	6.1	0.9	1.0
SCE	412	Variable Speed Drive Control, 15 HP	Hotel	28%	8%	0.10	1.0	0.7	0.1	15	0.3	0.0	0.0	0.04	1380	1.4	2.0	2.7	0.8
SCE	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Hotel	0%	0%	0.00	1.0	1.0	0.1	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	421	Fan Motor, 40hp, 1800rpm, 94.1%	Hotel	1%	1%	0.01	1.0	1.0	0.1	15	0.1	0.0	0.0	0.07	604	1.2	1.2	4.4	1.0
SCE	422	Variable Speed Drive Control, 40 HP	Hotel	28%	8%	0.07	1.0	0.7	0.1	15	0.5	0.0	0.1	0.03	954	2.0	2.9	1.9	0.8
SCE	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Miscellanec	0%	0%	0.00	1.8	1.8	0.4	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	401	Fan Motor, 5hp, 1800rpm, 89.5%	Miscellanec	2%	2%	0.03	1.8	1.8	0.4	15	8.6	1.8	1.7	0.10	472	1.1	0.9	6.0	1.3
SCE	402	Variable Speed Drive Control, 5 HP	Miscellanec	27%	8%	0.54	1.8	1.3	0.4	15	10.2	0.6	2.3	0.13	2275	0.6	0.7	8.3	0.9
SCE	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Miscellanec	0%	0%	0.00	1.7	1.7	0.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	411	Fan Motor, 15hp, 1800rpm, 92.4%	Miscellanec	2%	2%	0.01	1.7	1.6	0.3	15	1.9	0.4	0.4	0.03	131	4.0	3.2	1.7	1.3
SCE	412	Variable Speed Drive Control, 15 HP	Miscellanec	27%	8%	0.33	1.7	1.3	0.3	15	10.1	0.6	2.3	0.08	1433	0.9	1.0	5.2	0.9
SCE	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Miscellanec	0%	0%	0.00	1.6	1.6	0.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	421	Fan Motor, 40hp, 1800rpm, 94.1%	Miscellanec	1%	1%	0.02	1.6	1.6	0.3	15	0.4	0.1	0.1	0.14	656	0.8	0.6	8.4	1.3
SCE	422	Variable Speed Drive Control, 40 HP	Miscellanec	27%	8%	0.22	1.8	1.3	0.3	15	3.5	0.2	0.8	0.06	947	1.3	1.6	3.4	0.9
SDG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Office	0%	0%	0.00	3.3	3.3	1.0	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	Office	2%	2%	0.02	3.3	3.2	1.0	15	1.8	0.6	0.6	0.03	108	4.1	2.6	2.1	1.7
SDG&E	402	Variable Speed Drive Control, 5 HP	Office	25%	8%	0.34	3.3	2.5	1.0	15	4.6	0.4	1.7	0.05	518	1.8	1.8	3.1	1.1
SDG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Office	0%	0%	0.00	3.0	3.0	0.9	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	Office	2%	2%	0.00	3.0	3.0	0.9	15	1.5	0.5	0.5	0.01	30	14.6	9.4	0.6	1.7
SDG&E	412	Variable Speed Drive Control, 15 HP	Office	25%	8%	0.21	3.1	2.3	0.9	15	15.4	1.4	5.8	0.03	329	2.9	2.8	1.9	1.1
SDG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Office	0%	0%	0.00	3.0	3.0	0.9	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	Office	1%	1%	0.01	3.0	2.9	0.9	15	2.2	0.7	0.7	0.05	150	2.9	1.9	2.9	1.7
SDG&E	422	Variable Speed Drive Control, 40 HP	Office	25%	8%	0.14	3.4	2.5	1.0	15	24.1	2.3	9.0	0.02	207	4.6	4.4	1.2	1.1
SDG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Restaurant	0%	0%	0.00	4.8	4.8	1.0	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	Restaurant	2%	2%	0.05	4.8	4.7	1.0	15	1.4	0.3	0.3	0.05	243	2.2	1.8	3.1	1.3
SDG&E	402	Variable Speed Drive Control, 5 HP	Restaurant	27%	8%	0.75	6.6	4.8	1.2	15	0.0	0.0	0.0	0.05	874	1.4	1.7	3.1	0.9
SDG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Restaurant	0%	0%	0.00	4.5	4.5	0.9	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	Restaurant	2%	2%	0.01	4.5	4.4	0.9	15	0.0	0.0	0.0	0.01	67	7.8	6.4	0.8	1.3
SDG&E	412	Variable Speed Drive Control, 15 HP	Restaurant	27%	8%	0.45	6.1	4.5	1.2	15	0.0	0.0	0.0	0.03	566	2.2	2.6	2.0	0.9
SDG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Restaurant	0%	0%	0.00	4.4	4.4	0.9	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	Restaurant	1%	1%	0.03	4.4	4.3	0.9	15	0.0	0.0	0.0	0.07	338	1.6	1.3	4.2	1.3
SDG&E	422	Variable Speed Drive Control, 40 HP	Restaurant	27%	8%	0.30	6.0	4.4	1.1	15	0.0	0.0	0.0	0.02	391	3.2	3.8	1.4	0.9

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SDG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Retail	0%	0%	0.00	0.8	0.8	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	Retail	2%	2%	0.01	0.8	0.8	0.2	15	0.9	0.2	0.2	0.05	226	2.3	1.7	3.1	1.4
SDG&E	402	Variable Speed Drive Control, 5 HP	Retail	26%	8%	0.13	1.0	0.7	0.2	15	0.9	0.1	0.2	0.06	924	1.3	1.5	3.7	1.0
SDG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Retail	0%	0%	0.00	0.8	0.8	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	Retail	2%	2%	0.00	0.8	0.8	0.2	15	0.2	0.0	0.0	0.01	62	8.2	6.3	0.9	1.4
SDG&E	412	Variable Speed Drive Control, 15 HP	Retail	26%	8%	0.08	0.9	0.7	0.2	15	0.4	0.0	0.1	0.04	606	2.0	2.2	2.4	1.0
SDG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Retail	0%	0%	0.00	0.8	0.8	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	Retail	1%	1%	0.01	0.8	0.8	0.2	15	0.1	0.0	0.0	0.07	313	1.6	1.3	4.3	1.4
SDG&E	422	Variable Speed Drive Control, 40 HP	Retail	26%	8%	0.05	0.8	0.6	0.2	15	1.7	0.1	0.4	0.03	457	2.6	3.0	1.8	1.0
SDG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	FoodStore	0%	0%	0.00	6.8	6.8	0.8	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	FoodStore	2%	2%	0.03	6.8	6.7	0.8	15	1.5	0.2	0.2	0.02	170	4.1	4.2	1.3	1.1
SDG&E	402	Variable Speed Drive Control, 5 HP	FoodStore	28%	8%	0.44	9.4	6.8	1.1	15	0.0	0.0	0.0	0.02	601	3.2	4.4	1.2	0.8
SDG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	FoodStore	0%	0%	0.00	6.3	6.3	0.8	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	FoodStore	2%	2%	0.00	6.3	6.2	0.8	15	0.9	0.1	0.1	0.01	47	14.7	15.2	0.4	1.1
SDG&E	412	Variable Speed Drive Control, 15 HP	FoodStore	28%	8%	0.26	8.7	6.3	1.0	15	0.0	0.0	0.0	0.01	389	4.9	6.8	0.8	0.8
SDG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	FoodStore	0%	0%	0.00	6.2	6.2	0.8	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	FoodStore	1%	1%	0.02	6.2	6.1	0.8	15	0.0	0.0	0.0	0.03	236	2.9	3.0	1.8	1.1
SDG&E	422	Variable Speed Drive Control, 40 HP	FoodStore	28%	8%	0.18	8.6	6.2	1.0	15	0.0	0.0	0.0	0.01	269	7.1	9.8	0.6	0.8
SDG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Warehouse	0%	0%	0.00	2.1	2.1	0.5	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	Warehouse	2%	2%	0.01	2.1	2.1	0.5	15	0.6	0.2	0.2	0.03	133	3.6	2.6	2.0	1.5
SDG&E	402	Variable Speed Drive Control, 5 HP	Warehouse	26%	8%	0.22	2.1	1.6	0.5	15	0.4	0.0	0.1	0.05	652	1.7	1.8	2.9	1.0
SDG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Warehouse	0%	0%	0.00	2.0	2.0	0.5	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	Warehouse	2%	2%	0.00	2.0	1.9	0.5	15	0.1	0.0	0.0	0.01	37	13.2	9.6	0.6	1.5
SDG&E	412	Variable Speed Drive Control, 15 HP	Warehouse	26%	8%	0.13	2.0	1.4	0.5	15	1.1	0.1	0.3	0.03	422	2.7	2.8	1.9	1.0
SDG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Warehouse	0%	0%	0.00	1.9	1.9	0.5	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	Warehouse	1%	1%	0.01	1.9	1.9	0.5	15	0.0	0.0	0.0	0.05	185	2.6	1.9	2.8	1.5
SDG&E	422	Variable Speed Drive Control, 40 HP	Warehouse	26%	8%	0.09	2.6	1.9	0.6	15	0.0	0.0	0.0	0.02	215	5.2	5.6	1.0	1.0
SDG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	School	0%	0%	0.00	0.9	0.9	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	School	2%	2%	0.01	0.9	0.9	0.2	15	0.6	0.1	0.2	0.06	278	2.2	1.4	3.7	1.7
SDG&E	402	Variable Speed Drive Control, 5 HP	School	26%	8%	0.17	0.9	0.7	0.2	15	1.6	0.1	0.6	0.09	1365	1.0	1.0	5.5	1.2
SDG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	School	0%	0%	0.00	0.9	0.9	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	School	2%	2%	0.00	0.9	0.8	0.2	15	0.1	0.0	0.0	0.02	77	7.9	5.2	1.0	1.7
SDG&E	412	Variable Speed Drive Control, 15 HP	School	26%	8%	0.10	0.9	0.6	0.2	15	1.2	0.1	0.4	0.06	884	1.6	1.5	3.6	1.2
SDG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	School	0%	0%	0.00	0.8	0.8	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	School	1%	1%	0.01	0.8	0.8	0.2	15	0.0	0.0	0.0	0.08	387	1.6	1.0	5.2	1.7
SDG&E	422	Variable Speed Drive Control, 40 HP	School	26%	8%	0.07	1.1	0.8	0.2	15	0.0	0.0	0.0	0.03	454	3.1	2.9	1.8	1.2
SDG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	College	0%	0%	0.00	1.2	1.2	0.3	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	College	2%	2%	0.01	1.2	1.2	0.2	15	0.3	0.1	0.1	0.06	280	1.9	1.5	3.6	1.4
SDG&E	402	Variable Speed Drive Control, 5 HP	College	27%	8%	0.22	1.3	0.9	0.2	15	1.1	0.1	0.3	0.08	1335	1.0	1.1	4.9	1.0
SDG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	College	0%	0%	0.00	1.1	1.1	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	College	2%	2%	0.00	1.1	1.1	0.2	15	0.1	0.0	0.0	0.02	78	6.9	5.5	1.0	1.4
SDG&E	412	Variable Speed Drive Control, 15 HP	College	27%	8%	0.13	1.2	0.9	0.2	15	1.8	0.1	0.4	0.05	851	1.5	1.7	3.1	1.0
SDG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	College	0%	0%	0.00	1.1	1.1	0.2	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	College	1%	1%	0.01	1.1	1.1	0.2	15	0.0	0.0	0.0	0.08	390	1.4	1.1	5.0	1.4
SDG&E	422	Variable Speed Drive Control, 40 HP	College	27%	8%	0.09	1.2	0.9	0.2	15	0.6	0.0	0.2	0.03	571	2.3	2.6	2.1	1.0
SDG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Hospital	0%	0%	0.00	3.8	3.8	0.8	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	Hospital	2%	2%	0.01	3.8	3.7	0.8	15	0.9	0.2	0.2	0.02	103	5.0	4.2	1.3	1.3
SDG&E	402	Variable Speed Drive Control, 5 HP	Hospital	27%	8%	0.25	3.8	2.8	0.7	15	1.9	0.1	0.4	0.03	503	2.5	3.0	1.8	0.9
SDG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Hospital	0%	0%	0.00	3.5	3.5	0.7	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	Hospital	2%	2%	0.00	3.5	3.5	0.7	15	0.5	0.1	0.1	0.01	28	18.2	15.2	0.4	1.3
SDG&E	412	Variable Speed Drive Control, 15 HP	Hospital	27%	8%	0.15	3.6	2.7	0.7	15	7.4	0.4	1.7	0.02	314	4.0	4.8	1.1	0.9
SDG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Hospital	0%	0%	0.00	3.5	3.5	0.7	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	Hospital	1%	1%	0.01	3.5	3.4	0.7	15	0.3	0.1	0.1	0.03	143	3.6	3.0	1.8	1.3
SDG&E	422	Variable Speed Drive Control, 40 HP	Hospital	27%	8%	0.10	3.7	2.7	0.7	15	4.5	0.3	1.0	0.01	207	6.1	7.3	0.7	0.9

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
SDG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Hotel	0%	0%	0.00	0.8	0.8	0.1	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	Hotel	2%	2%	0.01	0.8	0.7	0.1	15	0.4	0.0	0.0	0.07	626	1.1	1.2	4.6	1.0
SDG&E	402	Variable Speed Drive Control, 5 HP	Hotel	28%	8%	0.17	0.8	0.5	0.1	15	0.2	0.0	0.0	0.10	3068	0.6	0.9	6.1	0.8
SDG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Hotel	0%	0%	0.00	0.7	0.7	0.1	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	Hotel	2%	2%	0.00	0.7	0.7	0.1	15	0.1	0.0	0.0	0.02	173	4.0	4.2	1.3	1.0
SDG&E	412	Variable Speed Drive Control, 15 HP	Hotel	28%	8%	0.10	0.7	0.5	0.1	15	0.1	0.0	0.0	0.06	1986	1.0	1.4	3.9	0.8
SDG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Hotel	0%	0%	0.00	0.7	0.7	0.1	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	Hotel	1%	1%	0.01	0.7	0.7	0.1	15	0.0	0.0	0.0	0.10	869	0.8	0.8	6.4	1.0
SDG&E	422	Variable Speed Drive Control, 40 HP	Hotel	28%	8%	0.07	0.7	0.5	0.1	15	0.1	0.0	0.0	0.04	1372	1.4	2.0	2.7	0.8
SDG&E	400	Base Fan Motor, 5hp, 1800rpm, 87.5%	Miscellanec	0%	0%	0.00	2.4	2.4	0.5	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	401	Fan Motor, 5hp, 1800rpm, 89.5%	Miscellanec	2%	2%	0.03	2.4	2.3	0.5	15	1.7	0.4	0.4	0.07	360	1.4	1.2	4.6	1.3
SDG&E	402	Variable Speed Drive Control, 5 HP	Miscellanec	27%	8%	0.54	2.4	1.8	0.5	15	2.1	0.1	0.5	0.10	1733	0.7	0.9	6.3	0.9
SDG&E	410	Base Fan Motor, 15hp, 1800rpm, 91.0%	Miscellanec	0%	0%	0.00	2.2	2.2	0.5	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	411	Fan Motor, 15hp, 1800rpm, 92.4%	Miscellanec	2%	2%	0.01	2.2	2.2	0.4	15	0.4	0.1	0.1	0.02	99	5.2	4.3	1.3	1.3
SDG&E	412	Variable Speed Drive Control, 15 HP	Miscellanec	27%	8%	0.33	2.3	1.7	0.4	15	2.0	0.1	0.5	0.06	1092	1.1	1.4	4.0	0.9
SDG&E	420	Base Fan Motor, 40hp, 1800rpm, 93.0%	Miscellanec	0%	0%	0.00	2.1	2.1	0.4	15	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	421	Fan Motor, 40hp, 1800rpm, 94.1%	Miscellanec	1%	1%	0.02	2.1	2.1	0.4	15	0.1	0.0	0.0	0.10	500	1.0	0.8	6.4	1.3
SDG&E	422	Variable Speed Drive Control, 40 HP	Miscellanec	27%	8%	0.22	2.3	1.7	0.5	15	0.7	0.0	0.2	0.04	722	1.7	2.1	2.6	0.9
PG&E	500	Base Refrigeration System	FoodStore	0%	0%	0.00	33.0	33.0	4.7	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	501	High-efficiency fan motors	FoodStore	12%	12%	1.16	33.2	29.2	4.2	16	325.7	46.3	42.8	0.03	233	2.7	2.4	2.3	1.2
PG&E	502	Strip curtains for walk-ins	FoodStore	4%	4%	0.05	34.0	32.6	4.6	4	35.3	5.0	4.6	0.01	93	6.7	8.2	0.3	1.2
PG&E	503	Night covers for display cases	FoodStore	5%	0%	0.11	33.1	31.4	4.7	5	141.3	0.0	20.6	0.02	N/A	2.8	5.0	0.5	0.8
PG&E	504	Evaporator fan controller for MT walk-ins	FoodStore	0%	0%	0.05	33.1	32.9	4.7	5	11.3	0.0	1.6	0.08	N/A	0.7	1.2	2.3	0.8
PG&E	505	Efficient compressor motor retrofit	FoodStore	7%	7%	0.09	33.5	31.2	4.4	10	159.4	22.7	20.9	0.01	45	13.9	14.5	0.3	1.2
PG&E	506	Compressor VSD retrofit	FoodStore	6%	3%	0.41	33.1	31.2	4.6	10	159.7	12.0	22.1	0.03	458	2.1	2.6	1.7	1.0
PG&E	507	Floating head pressure controls	FoodStore	6%	0%	0.12	34.0	32.0	4.8	14	91.9	0.0	13.4	0.01	N/A	7.3	10.6	0.5	0.8
PG&E	508	Refrigeration Commissioning	FoodStore	5%	5%	0.18	33.9	32.2	4.6	3	73.0	10.4	9.6	0.05	342	1.8	2.3	0.8	1.2
PG&E	509	Demand Hot Gas Defrost	FoodStore	3%	3%	0.03	33.6	32.8	4.7	10	20.9	3.0	2.7	0.01	45	13.9	14.5	0.3	1.2
PG&E	510	Demand Defrost Electric	FoodStore	8%	8%	0.03	33.1	30.6	4.3	10	202.1	28.8	26.5	0.00	15	42.3	44.3	0.1	1.2
PG&E	511	Anti-sweat (humidistat) controls	FoodStore	5%	2%	0.16	33.2	31.6	4.6	12	122.0	9.1	16.9	0.01	192	5.0	5.9	0.8	1.0
SCE	500	Base Refrigeration System	FoodStore	0%	0%	0.00	33.0	33.0	4.4	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	501	High-efficiency fan motors	FoodStore	12%	12%	1.16	33.2	29.2	3.9	16	338.3	45.2	42.5	0.03	249	2.6	2.6	2.1	1.1
SCE	502	Strip curtains for walk-ins	FoodStore	4%	4%	0.05	34.0	32.6	4.4	4	36.7	4.9	4.6	0.01	99	6.6	8.7	0.3	1.1
SCE	503	Night covers for display cases	FoodStore	5%	0%	0.11	33.1	31.4	4.4	5	147.5	0.0	20.5	0.02	N/A	2.8	5.7	0.5	0.7
SCE	504	Evaporator fan controller for MT walk-ins	FoodStore	0%	0%	0.05	33.1	32.9	4.4	5	11.8	0.0	1.6	0.08	N/A	0.7	1.4	2.0	0.7
SCE	505	Efficient compressor motor retrofit	FoodStore	7%	7%	0.09	33.5	31.2	4.2	10	165.6	22.1	20.8	0.01	48	13.6	15.4	0.3	1.1
SCE	506	Compressor VSD retrofit	FoodStore	6%	3%	0.41	33.1	31.2	4.3	10	166.2	11.7	21.9	0.03	488	2.1	2.8	1.5	0.9
SCE	507	Floating head pressure controls	FoodStore	6%	0%	0.12	34.0	31.9	4.5	14	95.9	0.0	13.3	0.01	N/A	7.4	12.0	0.4	0.7
SCE	508	Refrigeration Commissioning	FoodStore	5%	5%	0.18	33.9	32.2	4.3	3	75.8	10.1	9.5	0.05	364	1.8	2.4	0.8	1.1
SCE	509	Demand Hot Gas Defrost	FoodStore	3%	3%	0.03	33.6	32.8	4.4	10	21.7	2.9	2.7	0.01	48	13.6	15.4	0.3	1.1
SCE	510	Demand Defrost Electric	FoodStore	8%	8%	0.03	33.1	30.6	4.1	10	209.9	28.0	26.4	0.00	16	41.6	47.1	0.1	1.1
SCE	511	Anti-sweat (humidistat) controls	FoodStore	5%	2%	0.16	33.2	31.6	4.3	12	127.0	8.9	16.8	0.01	205	5.0	6.5	0.7	0.9
SDG&E	500	Base Refrigeration System	FoodStore	0%	0%	0.00	33.0	33.0	4.4	10	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	501	High-efficiency fan motors	FoodStore	12%	12%	1.16	33.2	29.2	3.9	16	73.1	9.8	9.2	0.03	249	2.6	2.6	2.1	1.1
SDG&E	502	Strip curtains for walk-ins	FoodStore	4%	4%	0.05	34.0	32.6	4.4	4	7.9	1.1	1.0	0.01	99	6.6	8.7	0.3	1.1
SDG&E	503	Night covers for display cases	FoodStore	5%	0%	0.11	33.1	31.4	4.4	5	31.9	0.0	4.4	0.02	N/A	2.8	5.7	0.5	0.7
SDG&E	504	Evaporator fan controller for MT walk-ins	FoodStore	0%	0%	0.05	33.1	32.9	4.4	5	2.5	0.0	0.4	0.08	N/A	0.7	1.4	2.0	0.7
SDG&E	505	Efficient compressor motor retrofit	FoodStore	7%	7%	0.09	33.5	31.2	4.2	10	35.8	4.8	4.5	0.01	48	13.6	15.4	0.3	1.1
SDG&E	506	Compressor VSD retrofit	FoodStore	6%	3%	0.41	33.1	31.2	4.3	10	35.9	2.5	4.7	0.03	488	2.1	2.8	1.5	0.9
SDG&E	507	Floating head pressure controls	FoodStore	6%	0%	0.12	34.0	31.9	4.5	14	20.7	0.0	2.9	0.01	N/A	7.4	12.0	0.4	0.7
SDG&E	508	Refrigeration Commissioning	FoodStore	5%	5%	0.18	33.9	32.2	4.3	3	16.4	2.2	2.1	0.05	364	1.8	2.4	0.8	1.1
SDG&E	509	Demand Hot Gas Defrost	FoodStore	3%	3%	0.03	33.6	32.8	4.4	10	4.7	0.6	0.6	0.01	48	13.6	15.4	0.3	1.1
SDG&E	510	Demand Defrost Electric	FoodStore	8%	8%	0.03	33.1	30.6	4.1	10	45.4	6.1	5.7	0.00	16	41.6	47.1	0.1	1.1
SDG&E	511	Anti-sweat (humidistat) controls	FoodStore	5%	2%	0.16	33.2	31.6	4.3	12	27.5	1.9	3.6	0.01	205	5.0	6.5	0.7	0.9

DSM ASSYST SUMMARY

Vintage Batch Utility Segment	E 1 Measure Number	Measure	Building Type	Energy Savings Fraction	Peak Reduction Fraction	Total Costs/ Sq. Ft.	Base EUI	Post EUI	Peak Watts/ Sq. Ft.	Service Life (yrs)	Technical Potential GWH	System Peak Tech. Potential MW	System Second Peak Tech. Potential MW	Levelized Cost of Conserved Energy $/KWH	Levelized Cost of of Avoided Peak Capacity $/KW	Total Resource Cost Test (TRC)	Participant Test	Customer Payback (Years)	Revenue Test
PG&E	610	Desktop PC - Base	Office	0%	0%	0.00	0.7	0.7	0.1	4	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	611	Power Management Enabling	Office	43%	28%	0.03	0.8	0.4	0.1	4	94.5	10.1	14.3	0.03	257	2.9	3.8	0.6	1.1
PG&E	620	Display Monitor	Office	0%	0%	0.00	0.6	0.6	0.1	4	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	621	Purchase LCD monitor	Office	49%	52%	1.28	0.7	0.4	0.1	4	111.8	19.8	19.3	1.27	7181	0.1	0.1	27.5	1.3
PG&E	622	Power Management Enabling	Office	78%	48%	0.01	1.2	0.3	0.1	4	159.7	16.6	24.1	0.01	55	14.0	18.3	0.1	1.1
PG&E	623	Network Power Management Enabling	Office	78%	48%	0.01	1.2	0.3	0.1	4	143.7	14.9	21.7	0.00	28	28.0	36.6	0.1	1.1
PG&E	624	External hardware control	Office	78%	48%	0.17	1.2	0.3	0.1	4	159.7	16.6	24.1	0.07	656	1.2	1.5	1.5	1.1
PG&E	630	Copier	Office	0%	0%	0.00	0.2	0.2	0.0	4	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	631	Power Management Enabling	Office	60%	30%	0.01	0.4	0.1	0.0	4	30.4	2.5	4.4	0.01	156	5.7	8.0	0.3	1.0
PG&E	640	Laser Printer	Office	0%	0%	0.00	0.2	0.2	0.0	4	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
PG&E	641	External hardware control	Office	58%	0%	0.09	0.2	0.1	0.0	4	40.7	0.0	4.8	0.24	N/A	0.2	0.4	5.5	0.7
PG&E	642	Nighttime shutdown	Office	58%	0%	0.29	0.3	0.1	0.0	4	49.5	0.0	5.9	0.64	N/A	0.1	0.2	14.7	0.7
SCE	610	Desktop PC - Base	Office	0%	0%	0.00	0.7	0.7	0.1	4	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	611	Power Management Enabling	Office	43%	28%	0.03	0.8	0.4	0.1	4	102.4	11.0	15.5	0.03	257	2.9	4.1	0.6	1.0
SCE	620	Display Monitor	Office	0%	0%	0.00	0.6	0.6	0.1	4	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	621	Purchase LCD monitor	Office	49%	52%	1.28	0.7	0.4	0.1	4	121.1	21.5	21.0	1.27	7181	0.1	0.1	25.7	1.3
SCE	622	Power Management Enabling	Office	78%	48%	0.01	1.2	0.3	0.1	4	173.1	18.0	26.1	0.01	55	14.0	19.8	0.1	1.0
SCE	623	Network Power Management Enabling	Office	78%	48%	0.01	1.2	0.3	0.1	4	155.8	16.2	23.5	0.00	28	28.0	39.7	0.1	1.0
SCE	624	External hardware control	Office	78%	48%	0.17	1.2	0.3	0.1	4	173.1	18.0	26.1	0.07	656	1.2	1.7	1.4	1.0
SCE	630	Copier	Office	0%	0%	0.00	0.2	0.2	0.0	4	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	631	Power Management Enabling	Office	60%	30%	0.01	0.4	0.1	0.0	4	33.0	2.7	4.8	0.01	156	5.7	8.8	0.3	0.9
SCE	640	Laser Printer	Office	0%	0%	0.00	0.2	0.2	0.0	4	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SCE	641	External hardware control	Office	58%	0%	0.09	0.2	0.1	0.0	4	44.1	0.0	5.2	0.24	N/A	0.2	0.5	4.8	0.6
SCE	642	Nighttime shutdown	Office	58%	0%	0.29	0.3	0.1	0.0	4	53.6	0.0	6.4	0.64	N/A	0.1	0.2	12.9	0.6
SDG&E	610	Desktop PC - Base	Office	0%	0%	0.00	0.7	0.7	0.1	4	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	611	Power Management Enabling	Office	43%	28%	0.03	0.8	0.4	0.1	4	27.7	3.1	4.4	0.03	247	3.0	4.1	0.6	1.0
SDG&E	620	Display Monitor	Office	0%	0%	0.00	0.6	0.6	0.1	4	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	621	Purchase LCD monitor	Office	49%	52%	1.28	0.7	0.4	0.1	4	32.9	6.1	5.9	1.27	6898	0.1	0.1	25.7	1.3
SDG&E	622	Power Management Enabling	Office	77%	48%	0.01	1.2	0.3	0.1	4	46.8	5.1	7.3	0.01	53	14.2	19.8	0.1	1.0
SDG&E	623	Network Power Management Enabling	Office	77%	48%	0.01	1.2	0.3	0.1	4	42.1	4.6	6.6	0.00	27	28.3	39.6	0.1	1.0
SDG&E	624	External hardware control	Office	77%	48%	0.17	1.2	0.3	0.1	4	46.8	5.1	7.3	0.07	632	1.2	1.7	1.4	1.0
SDG&E	630	Copier	Office	0%	0%	0.00	0.2	0.2	0.0	4	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	631	Power Management Enabling	Office	60%	30%	0.01	0.4	0.1	0.0	4	8.9	0.8	1.3	0.01	151	5.8	8.7	0.3	0.9
SDG&E	640	Laser Printer	Office	0%	0%	0.00	0.2	0.2	0.0	4	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A
SDG&E	641	External hardware control	Office	58%	0%	0.09	0.2	0.1	0.0	4	11.9	0.0	1.5	0.24	N/A	0.2	0.5	4.8	0.6
SDG&E	642	Nighttime shutdown	Office	58%	0%	0.29	0.3	0.1	0.0	4	14.5	0.0	1.8	0.64	N/A	0.1	0.2	13.0	0.6

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FLOOR SPACE AND TOU FACTOR INPUTS

BUILDING TABLE

UTILITY	PG&E	Rate/Time Periods	SP	SPP	SOP	WPP	WOP	TOTAL
SECTOR	COM	Hours	772	901	2743	1627	2717	8760
YEAR	2000							
BATCH #	1	EXISTING						

Ref #		0	1	2	3	4	5	6	7	8	9
1											
2	Office		434,345,000								
3	Restaurant		43,828,000								
4	Retail		315,080,000								
5	FoodStore		86,174,000								
6	Warehouse		270,063,000								
7	School		175,595,000								
8	College		105,035,000								
9	Hospital		108,231,000								
10	Hotel		98,077,000								
11	Miscellaneous		376,040,000								

LOAD SHAPE TABLE

SECTOR		1					2					3					4					5					6				
Ref		Indoor Lighting					Outdoor Lighting					Cooling					Ventilation					Refrigeration					Office Equipment				
#		SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP
1																															
2	Office	0.17	0.16	0.17	0.33	0.17	0.00	0.05	0.44	0.09	0.42	0.37	0.24	0.21	0.13	0.04	0.13	0.13	0.22	0.27	0.25	0.10	0.11	0.30	0.20	0.29	0.12	0.12	0.25	0.25	0.26
3	Restaurant	0.13	0.13	0.25	0.25	0.24	0.04	0.09	0.36	0.14	0.37	0.24	0.19	0.33	0.14	0.10	0.12	0.12	0.27	0.22	0.27	0.10	0.11	0.31	0.19	0.29	0.12	0.12	0.27	0.23	0.26
4	Retail	0.16	0.14	0.20	0.30	0.20	0.02	0.07	0.40	0.10	0.42	0.36	0.20	0.26	0.12	0.06	0.14	0.12	0.20	0.29	0.25	0.10	0.11	0.31	0.19	0.30	0.12	0.12	0.25	0.25	0.27
5	FoodStore	0.12	0.13	0.25	0.24	0.25	0.04	0.09	0.36	0.14	0.37	0.20	0.18	0.35	0.15	0.12	0.10	0.11	0.28	0.20	0.30	0.10	0.11	0.32	0.18	0.29	0.11	0.12	0.28	0.22	0.27
6	Warehouse	0.12	0.13	0.27	0.22	0.25	0.03	0.07	0.41	0.10	0.39	0.26	0.23	0.44	0.04	0.03	0.11	0.13	0.35	0.17	0.24	0.11	0.12	0.34	0.17	0.27	0.11	0.13	0.29	0.21	0.27
7	School	0.16	0.15	0.19	0.31	0.19	0.02	0.07	0.39	0.11	0.41	0.42	0.24	0.19	0.12	0.04	0.17	0.15	0.18	0.27	0.23	0.10	0.11	0.30	0.20	0.30	0.12	0.13	0.25	0.25	0.26
8	College	0.16	0.17	0.12	0.43	0.13	0.04	0.10	0.36	0.15	0.36	0.46	0.32	0.05	0.16	0.01	0.14	0.16	0.14	0.38	0.18	0.10	0.10	0.30	0.19	0.30	0.12	0.13	0.20	0.32	0.22
9	Hospital	0.16	0.14	0.18	0.33	0.19	0.04	0.09	0.37	0.13	0.37	0.34	0.22	0.27	0.13	0.04	0.15	0.13	0.18	0.33	0.21	0.09	0.10	0.30	0.20	0.31	0.11	0.11	0.26	0.24	0.28
10	Hotel	0.16	0.15	0.19	0.32	0.19	0.02	0.07	0.40	0.10	0.42	0.34	0.23	0.16	0.21	0.06	0.13	0.12	0.22	0.29	0.25	0.10	0.10	0.29	0.21	0.31	0.12	0.12	0.26	0.24	0.26
11	Miscellaneous	0.08	0.12	0.31	0.19	0.31	0.01	0.07	0.41	0.10	0.42	0.31	0.19	0.42	0.04	0.05	0.09	0.10	0.32	0.18	0.31	0.09	0.11	0.30	0.20	0.30	0.09	0.11	0.31	0.19	0.31

PEAK TO ENERGY RELATIONSHIP TABLE (Utility Coincidence)

SECTOR		1					2					3					4					5					6				
Ref		Indoor Lighting					Outdoor Lighting					Cooling					Ventilation					Refrigeration					Office Equipment				
#		SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP
1																															
2	Office	1.05	1.42	0.89	0.80	2.75	1.07	0.13	1.63	0.68	1.09	1.93	3.05	1.89	0.10	1.09	1.01	1.28	0.98	1.00	1.86	1.03	1.06	1.02	0.87	1.12	1.03	1.23	0.98	0.91	1.51
3	Restaurant	0.97	1.12	1.43	0.57	1.74	0.53	0.11	1.76	0.32	1.52	1.51	1.94	2.25	0.04	0.97	0.98	1.08	1.43	0.77	1.39	1.04	1.08	1.01	0.88	1.09	0.95	1.11	1.26	0.77	1.40
4	Retail	1.03	1.40	0.96	0.46	2.45	0.44	0.09	1.54	1.14	0.87	1.66	2.82	1.72	0.02	0.62	1.04	1.43	1.07	0.73	2.58	1.05	1.03	1.08	0.90	1.15	1.02	1.20	0.99	0.77	1.81
5	FoodStore	1.00	1.12	1.00	0.82	1.55	0.60	0.27	1.73	0.44	1.42	1.47	1.81	1.75	0.06	0.90	1.01	1.08	0.98	0.89	1.14	1.09	1.08	1.07	0.89	1.04	1.01	1.10	1.02	0.92	1.31
6	Warehouse	1.04	1.26	0.97	1.17	1.12	0.91	0.40	1.49	0.55	1.13	2.11	2.61	2.58	0.02	0.10	1.00	1.05	1.16	0.95	0.83	1.10	1.05	1.18	0.88	1.02	0.99	1.20	1.01	1.13	1.10
7	School	1.05	1.45	1.05	0.92	1.76	0.21	0.07	1.40	0.30	1.20	1.89	3.58	3.01	0.04	0.19	1.03	1.81	1.10	1.14	2.15	1.02	1.08	0.99	0.88	1.01	0.99	1.11	1.09	1.00	1.50
8	College	0.54	0.98	0.72	0.90	2.65	0.45	0.13	1.83	0.28	1.71	1.28	3.55	0.54	0.13	1.66	0.69	1.18	0.72	1.14	1.52	1.05	1.05	0.95	1.01	1.02	0.62	0.96	0.77	1.07	1.52
9	Hospital	0.96	1.21	0.94	0.70	2.32	0.32	0.14	1.66	0.20	1.38	1.64	2.45	1.52	0.21	0.90	0.86	1.02	1.31	0.72	2.51	0.97	1.02	0.94	0.92	1.12	0.94	1.05	1.04	0.94	1.46
10	Hotel	1.05	1.40	0.85	0.96	2.06	0.30	0.08	1.48	0.37	1.11	1.76	2.70	1.54	0.08	2.70	0.99	1.21	1.04	0.81	1.70	0.99	1.01	0.98	0.94	1.20	1.03	1.21	0.89	1.01	1.31
11	Miscellaneous	0.99	0.67	1.49	1.11	1.21	0.24	0.06	1.52	0.39	1.01	1.72	2.55	2.86	0.19	0.36	0.97	0.93	1.13	0.91	0.98	1.00	1.01	1.05	0.92	1.15	0.99	1.02	1.06	0.98	1.05

PEAK TO ENERGY RELATIONSHIP TABLE (CUSTOMER COINCIDENCE)

SECTOR		1					2					3					4					5					6				
Ref		Indoor Lighting					Outdoor Lighting					Cooling					Ventilation					Refrigeration					Office Equipment				
#		SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP
1																															
2	Office	1.11	1.45	4.20	1.32	4.28	1.16	4.48	1.63	4.47	1.72	1.93	3.22	12.14	8.30	58.53	1.15	1.40	2.52	1.45	2.66	1.03	1.07	1.29	1.09	1.29	1.07	1.27	1.93	1.22	2.00
3	Restaurant	1.05	1.14	1.94	1.13	1.96	3.38	2.53	1.89	3.06	1.88	1.55	1.95	3.97	4.31	13.04	1.09	1.17	1.62	1.18	1.67	1.04	1.08	1.21	1.10	1.27	1.14	1.18	1.75	1.20	1.79
4	Retail	1.08	1.46	3.21	1.31	3.34	3.62	3.08	1.55	3.77	1.52	1.67	2.90	7.98	8.30	37.11	1.10	1.53	2.82	1.50	2.87	1.06	1.05	1.22	1.06	1.26	1.05	1.22	1.74	1.19	1.88
5	FoodStore	1.05	1.12	1.76	1.08	1.76	2.64	2.24	1.73	2.65	1.72	1.53	1.84	3.14	3.71	8.89	1.07	1.16	1.73	1.18	1.83	1.10	1.08	1.23	1.09	1.36	1.04	1.11	1.46	1.07	1.47
6	Warehouse	1.19	1.28	1.86	1.32	2.02	1.97	2.66	1.50	3.26	1.57	2.26	2.61	4.68	10.13	68.62	1.13	1.11	1.25	1.39	1.77	1.14	1.17	1.26	1.21	1.55	1.19	1.21	1.62	1.24	1.76
7	School	1.22	1.52	3.66	1.37	3.71	4.69	2.92	1.54	3.53	1.51	2.09	3.65	15.94	8.88	84.75	1.48	1.99	4.91	1.97	4.00	1.13	1.18	1.34	1.14	1.32	1.10	1.18	1.83	1.14	1.84
8	College	1.90	2.11	8.97	1.56	8.42	3.70	2.44	2.00	2.98	2.01	3.12	4.45	103.77	13.95	502.41	1.81	1.98	7.01	1.68	6.00	1.10	1.09	1.39	1.13	1.39	1.70	1.86	3.80	1.43	3.51
9	Hospital	1.25	1.57	3.88	1.33	4.02	3.93	2.25	1.71	2.96	1.71	2.06	2.92	9.34	8.06	59.25	1.27	1.55	3.71	1.25	3.34	1.04	1.09	1.18	1.04	1.15	1.15	1.24	1.69	1.14	1.69
10	Hotel	1.19	1.51	3.64	1.34	3.74	4.04	3.02	1.51	3.54	1.45	1.86	2.96	13.38	6.16	37.07	1.29	1.59	2.58	1.45	2.86	1.05	1.08	1.24	1.08	1.22	1.08	1.23	1.79	1.16	1.78
11	Miscellaneous	1.40	1.39	1.67	1.62	1.69	4.53	3.03	1.54	3.80	1.50	2.27	3.15	5.90	22.32	53.27	1.04	1.24	1.25	1.32	1.31	1.01	1.02	1.15	1.04	1.15	1.03	1.05	1.10	1.05	1.08

BUILDING TABLE

UTILITY	SCE	Rate/Time Periods	SP	SPP	SOP	WPP	WOP	TOTAL
SECTOR	COM	Hours	772	901	2743	1627	2717	8760
YEAR	2000							
BATCH #	2	EXISTING						

Ref #		0	1	2	3	4	5	6	7	8	9
1	Small Office										
2	Large Office			470,669,000							
3	Restaurant			63,169,000							
4	Retail			341,651,000							
5	FoodStore			89,501,000							
6	Warehouse			333,384,000							
7	School			177,896,000							
8	College			88,273,000							
9	Hospital			99,553,000							
10	Hotel			88,122,000							
11	Miscellaneous			401,233,000							

LOAD SHAPE TABLE

SECTOR		1					2					3					4					5					6				
Ref		Indoor Lighting					Outdoor Lighting					Cooling					Ventilation					Refrigeration					Office Equipment				
#		SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP
1																															
2	Office	0.17	0.16	0.17	0.33	0.17	0.00	0.05	0.44	0.09	0.42	0.25	0.19	0.21	0.23	0.12	0.13	0.13	0.22	0.27	0.25	0.10	0.11	0.30	0.20	0.29	0.12	0.12	0.25	0.25	0.26
3	Restaurant	0.12	0.13	0.26	0.24	0.26	0.03	0.09	0.39	0.11	0.39	0.18	0.15	0.35	0.15	0.18	0.15	0.14	0.22	0.27	0.22	0.10	0.11	0.31	0.19	0.29	0.13	0.13	0.25	0.24	0.24
4	Retail	0.14	0.14	0.21	0.28	0.22	0.03	0.09	0.39	0.11	0.39	0.22	0.19	0.29	0.18	0.13	0.16	0.16	0.19	0.30	0.19	0.10	0.11	0.31	0.19	0.30	0.13	0.13	0.23	0.26	0.24
5	FoodStore	0.10	0.12	0.28	0.22	0.28	0.03	0.08	0.39	0.11	0.39	0.20	0.16	0.35	0.13	0.16	0.09	0.11	0.31	0.19	0.30	0.10	0.11	0.31	0.19	0.30	0.11	0.12	0.28	0.22	0.28
6	Warehouse	0.18	0.16	0.17	0.32	0.17	0.03	0.08	0.39	0.11	0.39	0.25	0.20	0.25	0.21	0.10	0.17	0.16	0.16	0.34	0.17	0.10	0.11	0.32	0.18	0.29	0.14	0.14	0.23	0.27	0.23
7	School	0.16	0.18	0.12	0.39	0.14	0.03	0.08	0.39	0.11	0.39	0.37	0.36	0.08	0.18	0.01	0.20	0.20	0.06	0.46	0.08	0.09	0.10	0.29	0.20	0.31	0.14	0.15	0.18	0.33	0.20
8	College	0.16	0.15	0.18	0.31	0.20	0.03	0.08	0.39	0.11	0.39	0.27	0.24	0.15	0.26	0.07	0.15	0.15	0.19	0.32	0.19	0.10	0.11	0.31	0.19	0.30	0.13	0.14	0.23	0.26	0.24
9	Hospital	0.14	0.14	0.24	0.25	0.23	0.03	0.09	0.39	0.11	0.38	0.20	0.16	0.29	0.18	0.17	0.14	0.13	0.24	0.26	0.24	0.10	0.11	0.31	0.19	0.29	0.12	0.12	0.27	0.23	0.26
10	Hotel	0.09	0.11	0.32	0.18	0.30	0.03	0.08	0.39	0.11	0.39	0.23	0.19	0.41	0.09	0.08	0.09	0.10	0.31	0.18	0.31	0.10	0.11	0.30	0.19	0.30	0.10	0.11	0.31	0.19	0.30
11	Miscellaneous	0.14	0.14	0.22	0.28	0.22	0.03	0.09	0.39	0.11	0.39	0.26	0.21	0.23	0.20	0.11	0.15	0.14	0.21	0.28	0.23	0.10	0.11	0.31	0.19	0.29	0.13	0.13	0.25	0.25	0.25

PEAK TO ENERGY RELATIONSHIP TABLE (Utility Coincidence)

SECTOR		1					2					3					4					5					6				
Ref		Indoor Lighting					Outdoor Lighting					Cooling					Ventilation					Refrigeration					Office Equipment				
#		SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP
1																															
2	Office	1.05	1.42	0.89	0.80	2.75	1.07	0.13	1.63	0.68	1.09	1.35	1.98	1.26	1.12	2.17	1.01	1.28	0.98	1.00	1.86	1.03	1.06	1.02	0.87	1.12	1.03	1.23	0.98	0.91	1.51
3	Restaurant	1.03	1.16	1.35	0.81	1.56	0.15	0.04	1.55	0.06	1.28	1.16	1.39	1.54	1.20	0.70	1.05	1.24	1.93	0.42	2.40	1.07	1.10	1.03	0.93	1.09	1.07	1.13	1.50	0.62	1.87
4	Retail	1.02	1.17	1.16	0.76	2.27	0.25	0.09	1.52	0.12	1.08	1.20	1.46	1.47	1.22	0.85	1.05	1.27	1.43	0.48	2.93	1.07	1.08	1.03	0.95	1.11	1.03	1.18	1.01	0.84	1.90
5	FoodStore	1.02	1.04	1.14	0.97	1.38	0.09	0.03	1.49	0.05	1.25	1.44	1.58	2.06	1.24	0.78	1.02	1.03	1.03	1.09	1.07	1.07	1.06	1.03	0.97	1.10	1.02	1.07	1.07	0.94	1.38
6	Warehouse	1.08	1.47	0.78	1.01	2.32	0.09	0.04	1.47	0.14	1.22	1.02	1.47	1.00	1.05	1.67	1.10	1.44	1.25	0.97	3.08	1.07	1.07	1.03	0.94	1.06	1.06	1.39	0.85	1.05	1.61
7	School	0.82	1.29	0.92	1.44	2.89	0.08	0.03	1.48	0.04	1.27	1.39	2.55	2.24	0.01	0.18	0.85	1.41	1.03	1.29	3.36	0.96	1.01	0.85	1.10	1.01	0.84	1.17	0.99	1.27	2.16
8	College	1.00	1.18	0.79	1.00	2.49	0.08	0.03	1.48	0.05	1.27	1.36	1.88	1.49	0.12	3.94	1.04	1.29	1.31	0.92	2.11	1.02	1.04	0.98	0.93	1.10	0.87	1.02	1.04	0.89	1.78
9	Hospital	1.06	1.30	0.86	1.01	1.66	0.11	0.03	1.58	0.05	1.34	1.54	1.76	1.71	1.13	1.41	1.13	1.38	0.96	1.15	1.57	1.05	1.08	1.04	0.93	1.16	1.08	1.23	0.90	1.05	1.34
10	Hotel	1.04	1.02	1.12	0.98	1.06	0.12	0.05	1.49	0.07	1.26	2.18	3.03	2.24	0.07	0.30	1.04	1.04	1.04	1.11	1.03	1.03	1.04	1.05	0.93	1.12	1.05	1.09	0.99	1.01	1.05
11	Miscellaneous	1.05	1.33	0.94	1.02	1.80	0.28	0.10	1.52	0.15	1.04	1.47	2.22	1.43	0.25	1.42	1.08	1.33	1.17	0.85	1.99	1.04	1.06	1.01	0.94	1.14	1.06	1.23	0.98	1.06	1.46

PEAK TO ENERGY RELATIONSHIP TABLE (CUSTOMER COINCIDENCE)

SECTOR		1					2					3					4					5					6				
Ref		Indoor Lighting					Outdoor Lighting					Cooling					Ventilation					Refrigeration					Office Equipment				
#		SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP
1																															
2	Office	1.11	1.45	4.20	1.32	4.28	1.16	4.48	1.63	4.47	1.72	1.35	1.98	3.12	1.36	2.17	1.15	1.40	2.52	1.45	2.66	1.03	1.07	1.29	1.09	1.29	1.07	1.27	1.93	1.22	2.00
3	Restaurant	1.08	1.16	1.77	1.11	1.79	4.71	2.33	1.56	3.22	1.57	1.18	1.56	1.99	1.22	1.87	1.07	1.28	2.60	1.19	2.58	1.07	1.10	1.20	1.08	1.27	1.08	1.20	2.00	1.11	2.08
4	Retail	1.04	1.17	2.43	1.16	2.48	4.23	2.27	1.52	3.19	1.53	1.20	1.46	2.73	1.36	3.32	1.06	1.28	3.25	1.19	3.25	1.07	1.08	1.19	1.10	1.26	1.04	1.19	2.08	1.17	2.16
5	FoodStore	1.02	1.04	1.37	1.05	1.38	4.89	2.32	1.49	3.24	1.50	1.47	2.10	2.35	1.28	1.84	1.03	1.04	1.09	1.11	1.15	1.07	1.06	1.17	1.10	1.22	1.02	1.07	1.37	1.06	1.38
6	Warehouse	1.14	1.48	4.12	1.32	4.15	4.85	2.33	1.48	3.25	1.49	1.09	1.47	1.71	1.56	1.72	1.15	1.49	4.54	1.39	4.65	1.07	1.07	1.18	1.07	1.28	1.16	1.39	2.58	1.30	2.60
7	School	1.65	1.82	8.09	1.63	7.58	4.93	2.33	1.49	3.23	1.50	2.07	2.62	36.61	9.24	252.69	1.83	2.10	20.36	2.01	20.61	1.20	1.23	1.34	1.15	1.25	1.45	1.60	4.12	1.41	3.82
8	College	1.12	1.31	3.35	1.24	3.33	4.92	2.31	1.48	3.21	1.49	1.57	2.07	10.00	2.88	21.05	1.25	1.51	3.63	1.62	4.62	1.02	1.04	1.12	1.04	1.14	1.10	1.22	2.16	1.16	2.12
9	Hospital	1.12	1.30	2.24	1.23	2.32	4.82	2.31	1.58	3.21	1.59	1.54	1.76	1.93	1.22	1.41	1.14	1.41	2.38	1.61	2.96	1.05	1.08	1.21	1.10	1.28	1.09	1.23	1.73	1.18	1.79
10	Hotel	1.08	1.09	1.12	1.07	1.19	4.74	2.29	1.49	3.17	1.50	2.88	3.92	5.54	8.01	27.20	1.04	1.06	1.06	1.12	1.11	1.03	1.04	1.15	1.03	1.18	1.06	1.09	1.15	1.05	1.20
11	Miscellaneous	1.11	1.33	2.57	1.27	2.64	4.09	2.25	1.52	3.18	1.53	1.55	2.27	6.31	3.60	13.18	1.12	1.38	2.73	1.30	2.71	1.04	1.06	1.19	1.08	1.24	1.08	1.24	1.93	1.19	1.98

BUILDING TABLE

UTILITY	SDG&E	Rate/Time Periods	SP	SPP	SOP	WPP	WOP	TOTAL
SECTOR	COM	Hours	772	901	2743	1627	2717	8760
YEAR	2000							
BATCH #	1	EXISTING						

Ref #		0	1	2	3	4	5	6	7	8	9
1											
2	Office				127,772,000						
3	Restaurant				13,217,000						
4	Retail				83,526,000						
5	FoodStore				19,346,000						
6	Warehouse				51,849,000						
7	School				36,767,000						
8	College				22,332,000						
9	Hospital				27,550,000						
10	Hotel				33,292,000						
11	Miscellaneous				62,064,000						

LOAD SHAPE TABLE

SECTOR		1					2					3					4					5					6				
Ref		Indoor Lighting					Outdoor Lighting					Cooling					Ventilation					Refrigeration					Office Equipment				
#		SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP
1																														
2	Office	0.17	0.16	0.17	0.32	0.18	0.03	0.08	0.39	0.11	0.39	0.34	0.25	0.12	0.24	0.06	0.22	0.17	0.11	0.39	0.12	0.10	0.10	0.29	0.21	0.30	0.13	0.12	0.25	0.25	0.25
3	Restaurant	0.12	0.13	0.26	0.24	0.26	0.03	0.09	0.39	0.11	0.39	0.26	0.20	0.28	0.16	0.10	0.15	0.14	0.22	0.27	0.22	0.10	0.11	0.31	0.19	0.29	0.13	0.13	0.25	0.24	0.24
4	Retail	0.14	0.14	0.21	0.28	0.22	0.03	0.09	0.39	0.11	0.39	0.29	0.23	0.23	0.17	0.08	0.16	0.16	0.19	0.30	0.19	0.10	0.11	0.31	0.19	0.30	0.13	0.13	0.23	0.26	0.24
5	FoodStore	0.10	0.12	0.28	0.22	0.28	0.03	0.08	0.39	0.11	0.39	0.16	0.16	0.37	0.15	0.15	0.09	0.11	0.31	0.19	0.30	0.10	0.11	0.31	0.19	0.30	0.11	0.12	0.28	0.22	0.28
6	Warehouse	0.18	0.16	0.17	0.32	0.17	0.03	0.08	0.39	0.11	0.39	0.35	0.27	0.19	0.15	0.04	0.17	0.16	0.16	0.34	0.17	0.10	0.11	0.32	0.18	0.29	0.14	0.14	0.23	0.27	0.23
7	School	0.16	0.18	0.12	0.39	0.14	0.03	0.08	0.39	0.11	0.39	0.37	0.36	0.08	0.18	0.01	0.20	0.20	0.06	0.46	0.08	0.09	0.10	0.29	0.20	0.31	0.14	0.15	0.18	0.33	0.20
8	College	0.16	0.15	0.18	0.31	0.20	0.03	0.08	0.39	0.11	0.39	0.27	0.24	0.15	0.26	0.07	0.15	0.15	0.19	0.32	0.19	0.10	0.11	0.31	0.19	0.30	0.13	0.14	0.23	0.26	0.24
9	Hospital	0.14	0.14	0.24	0.25	0.23	0.03	0.09	0.39	0.11	0.38	0.28	0.22	0.26	0.15	0.08	0.14	0.13	0.24	0.26	0.24	0.10	0.11	0.31	0.19	0.29	0.12	0.12	0.27	0.23	0.26
10	Hotel	0.09	0.11	0.32	0.18	0.30	0.03	0.08	0.39	0.11	0.39	0.23	0.19	0.41	0.09	0.08	0.09	0.10	0.31	0.18	0.31	0.10	0.11	0.30	0.19	0.30	0.10	0.11	0.31	0.19	0.30
11	Miscellaneous	0.14	0.14	0.22	0.28	0.22	0.03	0.09	0.39	0.11	0.39	0.26	0.21	0.23	0.20	0.11	0.15	0.14	0.21	0.28	0.23	0.10	0.11	0.31	0.19	0.29	0.13	0.13	0.25	0.25	0.25

PEAK TO ENERGY RELATIONSHIP TABLE (Utility Coincidence)

SECTOR		1					2					3					4					5					6				
Ref		Indoor Lighting					Outdoor Lighting					Cooling					Ventilation					Refrigeration					Office Equipment				
#		SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP
1																														
2	Office	1.06	1.45	0.72	1.09	2.57	0.12	0.04	1.49	0.06	1.23	1.50	2.45	0.89	0.25	2.28	1.12	1.62	0.71	0.87	5.02	0.99	1.01	0.99	0.94	1.26	1.05	1.26	0.93	1.09	1.53
3	Restaurant	1.03	1.16	1.35	0.81	1.56	0.15	0.04	1.55	0.06	1.28	1.58	2.43	2.41	0.07	0.86	1.05	1.24	1.93	0.42	2.40	1.07	1.10	1.03	0.93	1.09	1.07	1.13	1.50	0.62	1.87
4	Retail	1.02	1.17	1.16	0.76	2.27	0.25	0.09	1.52	0.12	1.08	1.48	2.23	1.70	0.03	1.10	1.05	1.27	1.43	0.48	2.93	1.07	1.08	1.03	0.95	1.11	1.03	1.18	1.01	0.84	1.90
5	FoodStore	1.02	1.04	1.14	0.97	1.38	0.09	0.03	1.49	0.05	1.25	1.42	1.70	1.61	0.21	0.54	1.02	1.03	1.03	1.09	1.07	1.07	1.06	1.03	0.97	1.10	1.02	1.07	1.07	0.94	1.38
6	Warehouse	1.08	1.47	0.78	1.01	2.32	0.09	0.04	1.47	0.14	1.22	1.52	2.37	1.37	0.03	0.43	1.10	1.44	1.25	0.97	3.08	1.07	1.07	1.03	0.94	1.06	1.06	1.39	0.85	1.05	1.61
7	School	0.82	1.29	0.92	1.44	2.89	0.08	0.03	1.48	0.04	1.27	1.39	2.55	2.24	0.01	0.18	0.85	1.41	1.03	1.29	3.36	0.96	1.01	0.85	1.10	1.01	0.84	1.17	0.99	1.27	2.16
8	College	1.00	1.18	0.79	1.00	2.49	0.08	0.03	1.48	0.05	1.27	1.36	1.88	1.49	0.12	3.94	1.04	1.29	1.31	0.92	2.11	1.02	1.04	0.98	0.93	1.10	0.87	1.02	1.04	0.89	1.78
9	Hospital	1.06	1.30	0.86	1.01	1.66	0.11	0.03	1.58	0.05	1.34	1.67	2.57	1.48	0.09	0.80	1.13	1.38	0.96	1.15	1.57	1.05	1.08	1.04	0.93	1.16	1.08	1.23	0.90	1.05	1.34
10	Hotel	1.04	1.02	1.12	0.98	1.06	0.12	0.05	1.49	0.07	1.26	2.18	3.03	2.24	0.07	0.30	1.04	1.04	1.04	1.11	1.03	1.03	1.04	1.05	0.93	1.12	1.05	1.09	0.99	1.01	1.05
11	Miscellaneous	1.05	1.33	0.94	1.02	1.80	0.28	0.10	1.52	0.15	1.04	1.47	2.22	1.43	0.25	1.42	1.08	1.33	1.17	0.85	1.99	1.04	1.06	1.01	0.94	1.14	1.06	1.23	0.98	1.06	1.46

PEAK TO ENERGY RELATIONSHIP TABLE (CUSTOMER COINCIDENCE)

SECTOR		1					2					3					4					5					6				
Ref		Indoor Lighting					Outdoor Lighting					Cooling					Ventilation					Refrigeration					Office Equipment				
#		SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP	SP	SPP	SOP	WPP	WOP
1																														
2	Office	1.13	1.45	4.17	1.35	4.34	4.81	2.32	1.49	3.23	1.50	1.54	2.45	16.62	4.07	46.43	1.21	1.74	8.53	1.59	9.11	1.04	1.06	1.24	1.11	1.26	1.07	1.27	1.98	1.21	2.06
3	Restaurant	1.08	1.16	1.77	1.11	1.79	4.71	2.33	1.56	3.22	1.57	1.72	2.43	5.62	4.10	15.56	1.07	1.28	2.60	1.19	2.58	1.07	1.10	1.20	1.08	1.27	1.08	1.20	2.00	1.11	2.08
4	Retail	1.04	1.17	2.43	1.16	2.48	4.23	2.27	1.52	3.19	1.53	1.52	2.23	6.81	4.53	20.00	1.06	1.28	3.25	1.19	3.25	1.07	1.08	1.19	1.10	1.26	1.04	1.19	2.08	1.17	2.16
5	FoodStore	1.02	1.04	1.37	1.05	1.38	4.89	2.32	1.49	3.24	1.50	1.59	1.88	2.48	2.95	6.04	1.03	1.04	1.09	1.11	1.15	1.07	1.06	1.17	1.10	1.22	1.02	1.07	1.37	1.06	1.38
6	Warehouse	1.14	1.48	4.12	1.32	4.15	4.85	2.33	1.48	3.25	1.49	1.58	2.37	10.00	6.45	52.87	1.15	1.49	4.54	1.39	4.65	1.07	1.07	1.18	1.07	1.28	1.16	1.39	2.58	1.30	2.60
7	School	1.65	1.82	8.09	1.63	7.58	4.93	2.33	1.49	3.23	1.50	2.07	2.62	36.61	9.24	252.69	1.83	2.10	20.36	2.01	20.61	1.20	1.23	1.34	1.15	1.25	1.45	1.60	4.12	1.41	3.82
8	College	1.12	1.31	3.35	1.24	3.33	4.92	2.31	1.48	3.21	1.49	1.57	2.07	10.00	2.88	21.05	1.25	1.51	3.63	1.62	4.62	1.02	1.04	1.12	1.04	1.14	1.10	1.22	2.16	1.16	2.12
9	Hospital	1.12	1.30	2.24	1.23	2.32	4.82	2.31	1.58	3.21	1.59	1.73	2.58	6.61	5.67	20.65	1.14	1.41	2.38	1.61	2.96	1.05	1.08	1.21	1.10	1.28	1.09	1.23	1.73	1.18	1.79
10	Hotel	1.08	1.09	1.12	1.07	1.19	4.74	2.29	1.49	3.17	1.50	2.88	3.92	5.54	8.01	27.20	1.04	1.06	1.06	1.12	1.11	1.03	1.04	1.15	1.03	1.18	1.06	1.09	1.15	1.05	1.20
11	Miscellaneous	1.11	1.33	2.57	1.27	2.64	4.09	2.25	1.52	3.18	1.53	1.55	2.27	6.31	3.60	13.18	1.12	1.38	2.73	1.30	2.71	1.04	1.06	1.19	1.08	1.24	1.08	1.24	1.93	1.19	1.98

F

PROGRAM POTENTIAL RESULTS

Percent of Incremental Measure Cost Paid in Level 1 Runs

Meas Num	Measures	% Incentive
114	RET 4L4'T8, 1EB	50%
115	RET 2L4'T8, 1EB, Reflector	20%
117	Occupancy Sensor, 4L4' Fluorescent Fixtures	20%
118	Continuous Dimming, 5L4' Fluorescent Fixtures	50%
133	RET 2L4'T8, 1EB	50%
134	RET 1L4'T8, 1EB, Reflector OEM	20%
136	Occupancy Sensor, 8L4' Fluorescent Fixtures	20%
137	Continuous Dimming, 10L4' Fluorescent Fixtures	50%
153	RET 2L8'T12, 60W, 1EB	50%
154	RET 1L8'T12, 60W, 1EB, Reflector	20%
155	Occupancy Sensor, 4L8' Fluorescent Fixtures	20%
156	Continuous Dimming, 5L8' Fluorescent Fixtures	50%
166	CFL Screw-in, Modular 18W	65%
176	Halogen PAR Flood, 90W	0%
177	Metal Halide, 50W	20%
211	ROB 2L4'T8, 1EB	40%
212	Outdoor Lighting Controls (Photocell/Timeclock)	40%
221	High Pressure Sodium 250W Lamp	20%
222	Outdoor Lighting Controls (Photocell/Timeclock)	40%
301	Centrifugal Chiller, 0.51 kW/ton, 300 tons	50%
302	Window Film (Standard)	30%
303	EMS - Chiller	50%
304	Cool Roof - Chiller	50%
305	Chiller Tune Up/Diagnostics	0%
306	Cooling Circ. Pumps - VSD	50%
311	DX Tune Up/ Advanced Diagnostics	0%
312	DX Packaged System, EER=10.9, 10 tons	50%
313	Window Film (Standard)	30%
314	Evaporative Pre-Cooler	50%
315	Prog. Thermostat - DX	40%
316	Cool Roof - DX	0%
401	Fan Motor, 5hp, 1800rpm, 89.5%	50%
402	Variable Speed Drive Control, 5 HP	50%
411	Fan Motor, 15hp, 1800rpm, 92.4%	50%
412	Variable Speed Drive Control, 15 HP	50%
421	Fan Motor, 40hp, 1800rpm, 94.1%	50%
422	Variable Speed Drive Control, 40 HP	50%
501	High-efficiency fan motors	30%
502	Strip curtains for walk-ins	30%
503	Night covers for display cases	20%
504	Evaporator fan controller for MT walk-ins	30%
505	Efficient compressor motor retrofit	30%
506	Compressor VSD retrofit	30%
507	Floating head pressure controls	20%
508	Refrigeration Commissioning	30%
509	Demand Hot Gas Defrost	30%
510	Demand Defrost Electric	30%
511	Anti-sweat (humidistat) controls	20%
611	Power Management Enabling	Not Modeled
621	Purchase LCD monitor	Not Modeled
623	Network Power Management Enabling	Not Modeled
631	Power Management Enabling	Not Modeled
641	External hardware control	Not Modeled
642	Nighttime shutdown	Not Modeled

Percent of Incremental Measure Cost Paid in Level 2 Runs

Meas Num	Measures	% Incentive
114	RET 4L4'T8, 1EB	75%
115	RET 2L4'T8, 1EB, Reflector	30%
117	Occupancy Sensor, 4L4' Fluorescent Fixtures	30%
118	Continuous Dimming, 5L4' Fluorescent Fixtures	75%
133	RET 2L4'T8, 1EB	75%
134	RET 1L4'T8, 1EB, Reflector OEM	30%
136	Occupancy Sensor, 8L4' Fluorescent Fixtures	30%
137	Continuous Dimming, 10L4' Fluorescent Fixtures	75%
153	RET 2L8'T12, 60W, 1EB	75%
154	RET 1L8'T12, 60W, 1EB, Reflector	30%
155	Occupancy Sensor, 4L8' Fluorescent Fixtures	30%
156	Continuous Dimming, 5L8' Fluorescent Fixtures	75%
166	CFL Screw-in, Modular 18W	80%
176	Halogen PAR Flood, 90W	40%
177	Metal Halide, 50W	30%
211	ROB 2L4'T8, 1EB	60%
212	Outdoor Lighting Controls (Photocell/Timeclock)	60%
221	High Pressure Sodium 250W Lamp	30%
222	Outdoor Lighting Controls (Photocell/Timeclock)	60%
301	Centrifugal Chiller, 0.51 kW/ton, 300 tons	75%
302	Window Film (Standard)	45%
303	EMS - Chiller	75%
304	Cool Roof - Chiller	75%
305	Chiller Tune Up/Diagnostics	40%
306	Cooling Circ. Pumps - VSD	75%
311	DX Tune Up/ Advanced Diagnostics	40%
312	DX Packaged System, EER=10.9, 10 tons	75%
313	Window Film (Standard)	45%
314	Evaporative Pre-Cooler	75%
315	Prog. Thermostat - DX	60%
316	Cool Roof - DX	40%
401	Fan Motor, 5hp, 1800rpm, 89.5%	75%
402	Variable Speed Drive Control, 5 HP	75%
411	Fan Motor, 15hp, 1800rpm, 92.4%	75%
412	Variable Speed Drive Control, 15 HP	75%
421	Fan Motor, 40hp, 1800rpm, 94.1%	75%
422	Variable Speed Drive Control, 40 HP	75%
501	High-efficiency fan motors	45%
502	Strip curtains for walk-ins	45%
503	Night covers for display cases	30%
504	Evaporator fan controller for MT walk-ins	45%
505	Efficient compressor motor retrofit	45%
506	Compressor VSD retrofit	45%
507	Floating head pressure controls	30%
508	Refrigeration Commissioning	45%
509	Demand Hot Gas Defrost	45%
510	Demand Defrost Electric	45%
511	Anti-sweat (humidistat) controls	30%
611	Power Management Enabling	Not Modeled
621	Purchase LCD monitor	Not Modeled
623	Network Power Management Enabling	Not Modeled
631	Power Management Enabling	Not Modeled
641	External hardware control	Not Modeled
642	Nighttime shutdown	Not Modeled

Percent of Incremental Measure Cost Paid in Level 3 Runs

Meas Num	Measures	% Incentive
114	RET 4L4'T8, 1EB	80%
115	RET 2L4'T8, 1EB, Reflector	40%
117	Occupancy Sensor, 4L4' Fluorescent Fixtures	40%
118	Continuous Dimming, 5L4' Fluorescent Fixtures	80%
133	RET 2L4'T8, 1EB	80%
134	RET 1L4'T8, 1EB, Reflector OEM	40%
136	Occupancy Sensor, 8L4' Fluorescent Fixtures	40%
137	Continuous Dimming, 10L4' Fluorescent Fixtures	80%
153	RET 2L8'T12, 60W, 1EB	80%
154	RET 1L8'T12, 60W, 1EB, Reflector	40%
155	Occupancy Sensor, 4L8' Fluorescent Fixtures	40%
156	Continuous Dimming, 5L8' Fluorescent Fixtures	80%
166	CFL Screw-in, Modular 18W	80%
176	Halogen PAR Flood, 90W	40%
177	Metal Halide, 50W	40%
211	ROB 2L4'T8, 1EB	80%
212	Outdoor Lighting Controls (Photocell/Timeclock)	80%
221	High Pressure Sodium 250W Lamp	40%
222	Outdoor Lighting Controls (Photocell/Timeclock)	80%
301	Centrifugal Chiller, 0.51 kW/ton, 300 tons	80%
302	Window Film (Standard)	60%
303	EMS - Chiller	80%
304	Cool Roof - Chiller	80%
305	Chiller Tune Up/Diagnostics	40%
306	Cooling Circ. Pumps - VSD	80%
311	DX Tune Up/ Advanced Diagnostics	40%
312	DX Packaged System, EER=10.9, 10 tons	80%
313	Window Film (Standard)	60%
314	Evaporative Pre-Cooler	80%
315	Prog. Thermostat - DX	80%
316	Cool Roof - DX	40%
401	Fan Motor, 5hp, 1800rpm, 89.5%	80%
402	Variable Speed Drive Control, 5 HP	80%
411	Fan Motor, 15hp, 1800rpm, 92.4%	80%
412	Variable Speed Drive Control, 15 HP	80%
421	Fan Motor, 40hp, 1800rpm, 94.1%	80%
422	Variable Speed Drive Control, 40 HP	80%
501	High-efficiency fan motors	60%
502	Strip curtains for walk-ins	60%
503	Night covers for display cases	40%
504	Evaporator fan controller for MT walk-ins	60%
505	Efficient compressor motor retrofit	60%
506	Compressor VSD retrofit	60%
507	Floating head pressure controls	40%
508	Refrigeration Commissioning	60%
509	Demand Hot Gas Defrost	60%
510	Demand Defrost Electric	60%
511	Anti-sweat (humidistat) controls	40%
611	Power Management Enabling	Not Modeled
621	Purchase LCD monitor	Not Modeled
623	Network Power Management Enabling	Not Modeled
631	Power Management Enabling	Not Modeled
641	External hardware control	Not Modeled
642	Nighttime shutdown	Not Modeled

Percent of Incremental Measure Cost Paid in Level 4 Runs

Meas Num	Measures	% Incentive
114	RET 4L4'T8, 1EB	100%
115	RET 2L4'T8, 1EB, Reflector	100%
117	Occupancy Sensor, 4L4' Fluorescent Fixtures	100%
118	Continuous Dimming, 5L4' Fluorescent Fixtures	100%
133	RET 2L4'T8, 1EB	100%
134	RET 1L4'T8, 1EB, Reflector OEM	100%
136	Occupancy Sensor, 8L4' Fluorescent Fixtures	100%
137	Continuous Dimming, 10L4' Fluorescent Fixtures	100%
153	RET 2L8'T12, 60W, 1EB	100%
154	RET 1L8'T12, 60W, 1EB, Reflector	100%
155	Occupancy Sensor, 4L8' Fluorescent Fixtures	100%
156	Continuous Dimming, 5L8' Fluorescent Fixtures	100%
166	CFL Screw-in, Modular 18W	100%
176	Halogen PAR Flood, 90W	100%
177	Metal Halide, 50W	100%
211	ROB 2L4'T8, 1EB	100%
212	Outdoor Lighting Controls (Photocell/Timeclock)	100%
221	High Pressure Sodium 250W Lamp	100%
222	Outdoor Lighting Controls (Photocell/Timeclock)	100%
301	Centrifugal Chiller, 0.51 kW/ton, 300 tons	100%
302	Window Film (Standard)	100%
303	EMS - Chiller	100%
304	Cool Roof - Chiller	100%
305	Chiller Tune Up/Diagnostics	100%
306	Cooling Circ. Pumps - VSD	100%
311	DX Tune Up/ Advanced Diagnostics	100%
312	DX Packaged System, EER=10.9, 10 tons	100%
313	Window Film (Standard)	100%
314	Evaporative Pre-Cooler	100%
315	Prog. Thermostat - DX	100%
316	Cool Roof - DX	100%
401	Fan Motor, 5hp, 1800rpm, 89.5%	100%
402	Variable Speed Drive Control, 5 HP	100%
411	Fan Motor, 15hp, 1800rpm, 92.4%	100%
412	Variable Speed Drive Control, 15 HP	100%
421	Fan Motor, 40hp, 1800rpm, 94.1%	100%
422	Variable Speed Drive Control, 40 HP	100%
501	High-efficiency fan motors	100%
502	Strip curtains for walk-ins	100%
503	Night covers for display cases	100%
504	Evaporator fan controller for MT walk-ins	100%
505	Efficient compressor motor retrofit	100%
506	Compressor VSD retrofit	100%
507	Floating head pressure controls	100%
508	Refrigeration Commissioning	100%
509	Demand Hot Gas Defrost	100%
510	Demand Defrost Electric	100%
511	Anti-sweat (humidistat) controls	100%
611	Power Management Enabling	Not Modeled
621	Purchase LCD monitor	Not Modeled
623	Network Power Management Enabling	Not Modeled
631	Power Management Enabling	Not Modeled
641	External hardware control	Not Modeled
642	Nighttime shutdown	Not Modeled

DSM ASSYST ANNUAL POTENTIAL ANALYSIS OUTPUTS **Base Energy Costs, Level 1 Funding**

Awareness Parameters:										
Ad effectiveness ratio	0.02									
Aware decay rate	0.25									
Target effectiveness	0									
Starting awareness	25%	1	1	1	1	1	1	1	1	1
Program Budget:										
Year	1	2	3	4	5	6	7	8	9	10
Administration	$15,000,000	$17,067,684	$17,293,679	$16,544,591	$15,438,418	$14,309,097	$13,291,760	$12,419,011	$11,683,749	$11,068,909
Advertising	$15,000,000	$15,450,000	$15,913,500	$16,390,905	$16,882,632	$17,389,111	$17,910,784	$18,448,108	$19,001,551	$19,571,598
Incentive Constraints	1	1	1	1	1	1	1	1	1	1
Incentive Adjuster	1	1	1	1	1	1	1	1	1	1

Vintcrit:	500
Batch:	1

OUTPUT

TRC for Program	2.73									
Utility Test for Program	4.47									
RIM Test for Program	0.68									
Year	1	2	3	4	5	6	7	8	9	10
Annual TRC	3.41	3.13	2.83	2.70	2.58	2.47	2.38	2.30	2.23	2.16
Annual Utility Test	4.81	4.94	4.74	4.67	4.55	4.39	4.22	4.03	3.83	3.63
Annual RIM Test	0.60	0.58	0.56	0.56	0.57	0.57	0.58	0.58	0.58	0.58
Net Energy Savings	502,398,136	1,074,934,027	1,635,429,519	2,144,108,490	2,589,203,511	2,972,953,195	3,302,599,583	3,586,076,840	3,830,499,526	4,041,881,728
Net Peak Demand Savings	87,604	188,763	290,249	385,385	471,816	549,364	618,675	680,591	735,933	785,457
Net 2nd Peak Demand Savings	110,080	237,503	364,924	483,321	589,344	682,679	764,290	835,526	897,743	952,184
Naturally Occurring Energy Savings	218,056,774	388,839,372	526,050,994	639,020,579	734,233,884	816,273,704	888,419,318	953,040,724	1,011,864,572	1,066,157,274
Naturally Occurring Peak Demand Savings	35,505	63,241	85,425	103,586	118,797	131,823	143,214	153,370	162,583	171,069
Peak Period Net Energy Savings	62,183,061	133,643,270	204,898,380	271,229,764	331,042,190	384,292,558	431,507,732	473,334,069	510,388,278	543,229,513
Program Costs	$102,980,802	$102,326,007	$93,809,509	$82,556,200	$71,496,921	$61,783,758	$53,600,745	$46,768,463	$41,042,188	$36,211,118
Participant Costs	$103,057,490	$105,477,268	$99,767,828	$90,185,244	$79,496,646	$69,148,602	$59,748,966	$51,473,872	$44,308,301	$38,162,281
Total 20 Year Avoided Costs	$703,210,042	$651,125,822	$547,943,675	$465,559,149	$389,417,946	$323,516,092	$270,130,849	$226,161,871	$190,104,213	$160,437,653
Net 20 Year Avoided Costs (TRC)	$495,190,911	$505,851,808	$444,287,629	$385,222,759	$325,192,049	$270,967,181	$226,041,535	$188,492,863	$157,388,219	$131,622,512
Discounted Lost Revenue	$615,210,147	$639,525,840	$583,212,105	$497,373,504	$412,380,386	$339,875,295	$279,377,210	$230,108,364	$190,050,068	$157,452,962
Net 20 Year Avoided Costs (RIM)	$428,933,420	$433,750,972	$376,837,415	$326,683,701	$276,175,423	$230,503,927	$192,746,219	$161,058,323	$134,717,835	$112,830,634
Incentives	$72,980,802	$77,994,404	$76,212,232	$71,061,540	$64,949,721	$59,082,403	$53,855,102	$49,285,808	$45,280,926	$41,745,685

DSM ASSYST ANNUAL POTENTIAL ANALYSIS OUTPUTS **Base Energy Costs, Level 2 Funding**

Awareness Parameters:										
Ad effectiveness ratio	0.02									
Aware decay rate	0.25									
Target effectiveness	0									
Starting awareness	25%	1.1	1.1	1.1	1.1	1	1	1	1	1
Program Budget:										
Year	1	2	3	4	5	6	7	8	9	10
Administration	$15,000,000	$18,875,436	$20,936,855	$20,327,826	$19,049,779	$19,214,263	$16,637,308	$16,437,362	$14,060,098	$12,354,916
Advertising	$15,000,000	$16,995,000	$19,255,335	$21,816,295	$24,717,862	$25,459,398	$26,223,180	$27,009,875	$27,820,171	$28,654,776
Incentive Constraints	1	1	1	1	1	1	1	1	1	1
Incentive Adjuster	0.7	0.75	0.8	0.8	0.8	0.9	0.9	1	1	1

Vintcrit:	500
Batch:	1

OUTPUT

TRC for Program	2.55
Utility Test for Program	3.76
RIM Test for Program	0.66

Year	1	2	3	4	5	6	7	8	9	10
Annual TRC	3.36	3.05	2.72	2.57	2.44	2.28	2.20	2.09	2.04	1.99
Annual Utility Test	4.83	4.74	4.28	4.16	4.00	3.50	3.36	2.97	2.87	2.75
Annual RIM Test	0.60	0.58	0.55	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Net Energy Savings	511,822,909	1,174,948,233	1,902,191,456	2,577,926,908	3,177,350,338	3,760,800,812	4,224,102,158	4,661,543,773	4,995,897,040	5,256,085,702
Net Peak Demand Savings	89,817	208,526	343,177	473,124	593,827	719,566	825,092	932,699	1,019,392	1,090,342
Net 2nd Peak Demand Savings	113,839	263,356	430,845	590,183	735,102	880,888	999,501	1,115,907	1,207,025	1,279,640
Naturally Occurring Energy Savings	218,056,774	388,839,372	526,050,994	639,020,579	734,233,884	816,273,704	888,419,318	953,040,724	1,011,864,572	1,066,157,274
Naturally Occurring Peak Demand Savings	35,505	63,241	85,425	103,586	118,797	131,823	143,214	153,370	162,583	171,069
Peak Period Net Energy Savings	63,474,227	146,947,163	240,920,521	330,854,967	413,553,954	498,142,184	568,036,701	637,263,489	691,884,938	735,615,546
Program Costs	$104,716,914	$124,277,319	$135,743,863	$124,243,933	$110,909,055	$120,190,021	$96,947,159	$101,476,966	$78,053,757	$61,458,033
Participant Costs	$107,843,223	$116,553,500	$116,216,707	$107,729,024	$96,764,867	$87,039,245	$70,952,875	$60,898,200	$47,649,573	$37,743,213
Total 20 Year Avoided Costs	$713,413,670	$733,867,936	$684,659,048	$596,989,755	$507,525,569	$473,195,222	$369,799,073	$339,015,330	$256,451,759	$197,667,049
Net 20 Year Avoided Costs (TRC)	$505,394,540	$588,593,921	$581,003,001	$516,653,364	$443,299,672	$420,646,311	$325,709,759	$301,346,322	$223,735,765	$168,851,908
Discounted Lost Revenue	$627,211,063	$741,794,719	$758,642,063	$662,847,013	$557,746,368	$521,058,571	$396,926,349	$361,444,165	$265,571,836	$198,731,628
Net 20 Year Avoided Costs (RIM)	$437,894,087	$505,084,938	$493,486,310	$438,889,354	$377,287,443	$359,126,249	$278,914,875	$259,011,323	$192,724,253	$145,721,136
Incentives	$74,716,914	$98,349,068	$118,139,451	$114,367,453	$107,122,904	$131,924,911	$110,982,470	$130,466,449	$102,591,788	$81,845,200

DSM ASSYST ANNUAL POTENTIAL ANALYSIS OUTPUTS **Base Energy Costs, Level 3 Funding**

Awareness Parameters:										
Ad effectiveness ratio	0.02									
Aware decay rate	0.25									
Target effectiveness	0									
Starting awareness	25%	1.1	1.2	1.1	1.1	1	1	1	1	1
Program Budget:										
Year	1	2	3	4	5	6	7	8	9	10
Administration	$15,000,000	$26,167,880	$30,491,587	$27,862,093	$24,069,102	$19,800,167	$16,299,094	$13,767,440	$12,010,898	$10,786,882
Advertising	$15,000,000	$16,995,000	$21,005,820	$23,799,594	$26,964,940	$27,773,888	$28,607,105	$29,465,318	$30,349,278	$31,259,756
Incentive Constraints	1	1	1	1	1	1	1	1	1	1
Incentive Adjuster	0.6	0.9	1	1	1	1	1	1	1	1

Vintcrit:	500
Batch:	1

OUTPUT

TRC for Program	2.47									
Utility Test for Program	3.22									
RIM Test for Program	0.64									
Year	1	2	3	4	5	6	7	8	9	10
Annual TRC	3.40	2.91	2.52	2.40	2.30	2.21	2.13	2.06	1.99	1.92
Annual Utility Test	5.13	3.96	3.31	3.21	3.10	2.99	2.87	2.74	2.58	2.41
Annual RIM Test	0.60	0.57	0.53	0.54	0.55	0.55	0.55	0.55	0.55	0.54
Net Energy Savings	497,509,691	1,455,191,900	2,560,381,841	3,522,134,937	4,302,012,809	4,891,497,585	5,329,316,490	5,658,521,481	5,911,986,693	6,111,753,281
Net Peak Demand Savings	86,264	263,302	480,443	677,499	845,716	980,416	1,086,372	1,170,431	1,238,324	1,294,100
Net 2nd Peak Demand Savings	112,123	335,152	600,694	835,224	1,028,645	1,177,480	1,289,974	1,376,067	1,443,496	1,497,489
Naturally Occurring Energy Savings	218,056,774	388,839,372	526,050,994	639,020,579	734,233,884	816,273,704	888,419,318	953,040,724	1,011,864,572	1,066,157,274
Naturally Occurring Peak Demand Savings	35,505	63,241	85,425	103,586	118,797	131,823	143,214	153,370	162,583	171,069
Peak Period Net Energy Savings	60,763,270	183,572,809	331,580,827	464,668,352	576,854,757	665,212,005	733,342,819	786,193,695	827,909,627	861,441,543
Program Costs	$95,120,204	$216,440,161	$271,717,744	$233,187,829	$189,465,427	$144,256,613	$108,616,172	$83,240,637	$65,812,065	$53,675,295
Participant Costs	$109,543,792	$128,417,839	$126,295,046	$112,123,578	$94,552,452	$75,166,194	$58,512,243	$45,593,230	$35,940,342	$28,721,030
Total 20 Year Avoided Costs	$696,032,200	$1,003,411,348	$1,001,987,519	$829,416,007	$652,394,494	$483,925,188	$356,128,009	$265,444,867	$202,465,604	$157,967,437
Net 20 Year Avoided Costs (TRC)	$488,013,069	$858,137,333	$898,331,472	$749,079,617	$588,168,597	$431,376,277	$312,038,695	$227,775,859	$169,749,610	$129,152,296
Discounted Lost Revenue	$609,422,108	$1,075,981,830	$1,161,671,632	$950,945,391	$731,906,529	$530,200,868	$378,041,680	$273,269,203	$202,275,077	$153,208,066
Net 20 Year Avoided Costs (RIM)	$422,400,278	$737,534,086	$765,332,547	$638,400,537	$502,283,606	$369,219,948	$267,817,617	$195,915,852	$146,240,525	$111,393,046
Incentives	$65,120,204	$190,592,494	$265,434,169	$242,087,819	$206,731,580	$164,386,236	$127,454,015	$99,427,065	$79,453,364	$65,250,526

DSM ASSYST ANNUAL POTENTIAL ANALYSIS OUTPUTS **Base Energy Costs, Level 4 Funding**

Awareness Parameters:										
Ad effectiveness ratio	0.02									
Aware decay rate	0.25									
Target effectiveness	0									
Starting awareness	25%	1.2	1.2	1.2	1.1	1	1	1	1	1
Program Budget:										
Year	1	2	3	4	5	6	7	8	9	10
Administration	$15,000,000	$27,745,554	$32,154,091	$33,599,870	$31,409,075	$25,985,901	$19,548,302	$14,762,722	$10,435,607	$7,082,791
Advertising	$15,000,000	$18,540,000	$22,915,440	$28,323,484	$32,090,507	$33,053,222	$34,044,819	$35,066,164	$36,118,149	$37,201,693
Incentive Constraints	1	1	1	1	1	1	1	1	1	1
Incentive Adjuster	0.4	0.6	0.65	0.7	0.75	0.8	0.85	0.9	0.95	1

Vintcrit:	500
Batch:	1

OUTPUT

TRC for Program	2.38									
Utility Test for Program	3.03									
RIM Test for Program	0.63									
Year	1	2	3	4	5	6	7	8	9	10
Annual TRC	3.54	3.12	2.73	2.49	2.24	2.01	1.81	1.66	1.53	1.41
Annual Utility Test	5.89	4.74	4.04	3.51	2.99	2.52	2.12	1.81	1.50	1.09
Annual RIM Test	0.62	0.59	0.55	0.54	0.54	0.52	0.50	0.49	0.48	0.45
Net Energy Savings	552,868,415	1,692,388,253	2,997,566,345	4,324,383,721	5,511,530,127	6,428,833,030	7,049,097,081	7,454,703,167	7,675,259,070	7,757,740,644
Net Peak Demand Savings	96,750	303,568	547,834	807,113	1,053,303	1,258,507	1,412,412	1,528,198	1,606,805	1,649,671
Net 2nd Peak Demand Savings	123,471	381,146	679,917	988,557	1,270,043	1,492,545	1,649,462	1,761,459	1,833,548	1,869,711
Naturally Occurring Energy Savings	218,056,774	388,839,372	526,050,994	639,020,579	734,233,884	816,273,704	888,419,318	953,040,724	1,011,864,572	1,066,157,274
Naturally Occurring Peak Demand Savings	35,505	63,241	85,425	103,586	118,797	131,823	143,214	153,370	162,583	171,069
Peak Period Net Energy Savings	68,761,395	214,812,472	385,956,375	565,231,528	731,759,803	865,842,901	961,461,878	1,029,060,912	1,071,604,085	1,092,732,848
Program Costs	$92,739,432	$214,767,333	$259,421,200	$290,490,288	$295,107,968	$262,269,275	$207,415,981	$158,317,862	$108,202,186	$63,090,698
Participant Costs	$119,951,291	$158,256,320	$162,085,351	$151,876,299	$127,552,757	$92,885,566	$59,963,895	$37,301,532	$19,015,054	$6,189,323
Total 20 Year Avoided Costs	$753,933,250	$1,163,450,402	$1,151,113,523	$1,099,358,515	$946,583,004	$714,215,428	$483,575,956	$324,296,764	$194,796,917	$97,803,254
Net 20 Year Avoided Costs (TRC)	$545,914,120	$1,018,176,387	$1,047,457,477	$1,019,022,125	$882,357,107	$661,666,517	$439,486,642	$286,627,756	$162,080,923	$68,988,113
Discounted Lost Revenue	$676,097,637	$1,274,376,954	$1,361,324,628	$1,303,168,370	$1,109,296,615	$824,936,962	$540,032,145	$344,671,495	$186,273,165	$72,674,013
Net 20 Year Avoided Costs (RIM)	$473,000,486	$874,673,885	$890,391,910	$866,331,245	$751,621,177	$564,944,457	$376,838,033	$247,373,756	$141,624,200	$61,655,501
Incentives	$62,739,432	$185,663,166	$247,519,356	$304,010,748	$337,991,550	$326,320,486	$275,549,974	$221,500,108	$153,720,939	$81,834,113

DSM ASSYST ANNUAL POTENTIAL ANALYSIS OUTPUTS **High Energy Costs, Level 1 Funding**

Awareness Parameters:											
Ad effectiveness ratio	0.02										
Aware decay rate	0.25										
Target effectiveness	0										
Starting awareness	25%	1	1	1	1	1	1	1	1	1	1
Program Budget:											
Year	1	2	3	4	5	6	7	8	9	10	
Administration	$17,392,832	$19,748,699	$19,882,905	$18,840,139	$17,371,998	$15,900,481	$14,609,519	$13,550,768	$12,716,791	$12,079,878	
Advertising	$15,000,000	$15,450,000	$15,913,500	$16,390,905	$16,882,632	$17,389,111	$17,910,784	$18,448,108	$19,001,551	$19,571,598	
Incentive Constraints	1	1	1	1	1	1	1	1	1	1	
Incentive Adjuster	1	1	1	1	1	1	1	1	1	1	

Vintcrit:	500
Batch:	1

OUTPUT

TRC for Program	3.15									
Utility Test for Program	4.96									
RIM Test for Program	0.53									
Year	1	2	3	4	5	6	7	8	9	10
Annual TRC	4.00	3.65	3.28	3.10	2.95	2.80	2.68	2.57	2.46	2.36
Annual Utility Test	5.64	5.91	5.64	5.49	5.24	4.92	4.59	4.23	3.86	3.50
Annual RIM Test	0.52	0.48	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Net Energy Savings	638,124,819	1,377,252,731	2,091,879,570	2,721,414,626	3,248,475,292	3,678,036,155	4,023,611,133	4,300,142,247	4,521,127,463	4,697,839,189
Net Peak Demand Savings	112,934	245,198	376,218	495,511	599,416	687,950	762,685	825,636	878,769	923,824
Net 2nd Peak Demand Savings	140,414	304,391	465,051	608,830	731,249	832,753	915,862	983,616	1,038,891	1,084,156
Naturally Occurring Energy Savings	380,872,492	680,211,090	922,254,221	1,123,121,410	1,293,807,248	1,441,962,660	1,572,998,603	1,690,793,471	1,798,159,368	1,897,156,535
Naturally Occurring Peak Demand Savings	62,156	110,923	150,255	182,806	210,397	234,300	255,421	274,409	291,736	307,746
Peak Period Net Energy Savings	79,810,487	172,964,761	264,732,470	347,669,922	419,248,780	479,566,860	529,822,419	571,512,504	606,085,921	634,821,921
Program Costs	$136,364,392	$134,793,103	$122,140,117	$105,497,653	$89,059,107	$74,626,625	$62,619,631	$52,857,268	$44,981,068	$38,629,688
Participant Costs	$167,235,112	$168,662,998	$156,110,319	$137,158,428	$116,818,739	$97,763,114	$81,096,473	$67,058,913	$55,484,365	$46,052,221
Total 20 Year Avoided Costs	$1,213,781,699	$1,107,216,149	$911,373,321	$752,842,651	$607,400,639	$483,492,525	$385,340,676	$307,634,429	$246,972,894	$199,757,470
Net 20 Year Avoided Costs (TRC)	$769,626,307	$796,524,704	$688,632,604	$578,730,123	$466,895,686	$367,519,424	$287,307,026	$223,426,030	$173,619,927	$135,117,116
Discounted Lost Revenue	$1,193,686,503	$1,319,729,521	$1,219,299,751	$1,027,274,919	$823,195,452	$642,639,821	$495,572,967	$380,426,748	$291,900,486	$224,353,550
Net 20 Year Avoided Costs (RIM)	$685,468,850	$703,444,530	$602,634,173	$506,282,879	$408,852,494	$322,225,758	$252,402,873	$196,663,728	$153,123,385	$119,407,444
Incentives	$103,971,561	$110,377,853	$106,667,827	$97,665,615	$86,909,301	$76,361,402	$66,849,181	$58,589,193	$51,538,476	$45,569,449

DSM ASSYST ANNUAL POTENTIAL ANALYSIS OUTPUTS **High Energy Costs, Level 2 Funding**

Awareness Parameters:										
Ad effectiveness ratio	0.02									
Aware decay rate	0.25									
Target effectiveness	0									
Starting awareness	25%	1.1	1.1	1.1	1.1	1	1	1	1	1
Program Budget:										
Year	1	2	3	4	5	6	7	8	9	10
Administration	$17,710,763	$21,556,878	$23,125,590	$22,098,781	$20,305,041	$19,326,112	$16,615,808	$15,689,402	$13,786,589	$12,576,789
Advertising	$15,000,000	$16,995,000	$19,255,335	$21,816,295	$24,717,862	$25,459,398	$26,223,180	$27,009,875	$27,820,171	$28,654,776
Incentive Constraints	1	1	1	1	1	1	1	1	1	1
Incentive Adjuster	0.7	0.75	0.8	0.8	0.8	0.9	0.9	1	1	1

Vintcrit:	500
Batch:	1

OUTPUT

TRC for Program	2.98									
Utility Test for Program	4.28									
RIM Test for Program	0.52									
Year	1	2	3	4	5	6	7	8	9	10
Annual TRC	3.93	3.55	3.15	2.98	2.81	2.61	2.49	2.35	2.27	2.18
Annual Utility Test	5.63	5.60	5.06	4.89	4.64	3.99	3.71	3.21	2.94	2.65
Annual RIM Test	0.52	0.48	0.45	0.44	0.45	0.44	0.45	0.45	0.44	0.44
Net Energy Savings	661,883,359	1,513,109,208	2,415,466,478	3,225,185,308	3,906,484,115	4,507,186,557	4,945,777,800	5,316,206,375	5,576,399,964	5,763,392,228
Net Peak Demand Savings	118,349	273,287	443,075	601,141	740,522	873,290	976,969	1,073,578	1,146,948	1,204,366
Net 2nd Peak Demand Savings	147,345	338,424	544,091	731,624	892,437	1,039,374	1,149,621	1,247,909	1,319,513	1,373,252
Naturally Occurring Energy Savings	380,872,492	680,211,090	922,254,221	1,123,121,410	1,293,807,248	1,441,962,660	1,572,998,603	1,690,793,471	1,798,159,368	1,897,156,535
Naturally Occurring Peak Demand Savings	62,156	110,923	150,255	182,806	210,397	234,300	255,421	274,409	291,736	307,746
Peak Period Net Energy Savings	83,255,108	191,723,968	309,581,800	418,289,452	512,935,827	600,729,386	667,713,230	727,623,112	771,737,025	805,132,637
Program Costs	$142,344,167	$164,574,329	$173,306,734	$153,507,864	$131,331,849	$131,227,591	$100,672,110	$96,424,759	$72,364,526	$56,622,455
Participant Costs	$174,062,851	$182,552,027	$175,319,183	$157,284,920	$135,532,563	$113,377,745	$88,171,551	$71,104,686	$54,022,057	$41,858,727
Total 20 Year Avoided Costs	$1,244,980,905	$1,233,008,366	$1,099,082,041	$924,864,351	$750,173,653	$639,562,751	$471,152,859	$394,146,655	$286,266,776	$214,733,648
Net 20 Year Avoided Costs (TRC)	$800,825,514	$922,316,921	$876,341,324	$750,751,822	$609,668,700	$523,589,650	$373,119,209	$309,938,257	$212,913,809	$150,093,295
Discounted Lost Revenue	$1,239,367,265	$1,522,345,824	$1,543,564,483	$1,325,416,195	$1,068,493,098	$906,269,777	$636,227,026	$519,372,261	$351,985,460	$244,573,502
Net 20 Year Avoided Costs (RIM)	$713,534,723	$815,119,982	$767,751,350	$657,568,930	$534,639,847	$460,250,509	$328,820,123	$274,088,688	$188,780,662	$133,469,682
Incentives	$109,633,404	$139,188,397	$159,764,050	$149,460,623	$133,652,628	$148,030,875	$116,914,999	$122,555,815	$92,334,927	$71,956,985

DSM ASSYST ANNUAL POTENTIAL ANALYSIS OUTPUTS **High Energy Costs, Level 3 Funding**

Awareness Parameters:										
Ad effectiveness ratio	0.02									
Aware decay rate	0.25									
Target effectiveness	0									
Starting awareness	25%	1.1	1.2	1.1	1.1	1	1	1	1	1
Program Budget:										
Year	1	2	3	4	5	6	7	8	9	10
Administration	$17,643,144	$26,975,023	$29,982,552	$27,058,401	$23,041,589	$18,779,709	$15,479,538	$13,272,041	$11,886,042	$11,034,934
Advertising	$15,000,000	$16,995,000	$21,005,820	$23,799,594	$26,964,940	$27,773,888	$28,607,105	$29,465,318	$30,349,278	$31,259,756
Incentive Constraints	1	1	1	1	1	1	1	1	1	1
Incentive Adjuster	0.6	0.9	1	1	1	1	1	1	1	1

Vintcrit:	500
Batch:	1

OUTPUT

TRC for Program	2.91									
Utility Test for Program	3.63									
RIM Test for Program	0.51									
Year	1	2	3	4	5	6	7	8	9	10
Annual TRC	3.98	3.40	2.96	2.81	2.67	2.53	2.41	2.28	2.17	2.06
Annual Utility Test	6.00	4.62	3.90	3.78	3.60	3.35	3.05	2.70	2.34	1.99
Annual RIM Test	0.52	0.48	0.44	0.43	0.43	0.43	0.43	0.43	0.43	0.42
Net Energy Savings	656,683,326	1,812,224,121	3,088,716,554	4,160,956,446	4,982,774,317	5,555,191,935	5,938,737,364	6,195,470,766	6,369,991,349	6,490,483,356
Net Peak Demand Savings	115,847	332,764	584,980	804,384	980,713	1,111,489	1,206,247	1,275,980	1,328,926	1,370,373
Net 2nd Peak Demand Savings	146,785	411,797	710,770	963,885	1,160,103	1,299,147	1,394,799	1,461,460	1,509,403	1,545,009
Naturally Occurring Energy Savings	380,872,492	680,211,090	922,254,221	1,123,121,410	1,293,807,248	1,441,962,660	1,572,998,603	1,690,793,471	1,798,159,368	1,897,156,535
Naturally Occurring Peak Demand Savings	62,156	110,923	150,255	182,806	210,397	234,300	255,421	274,409	291,736	307,746
Peak Period Net Energy Savings	81,483,182	231,107,519	402,098,191	549,463,920	666,225,272	751,018,962	810,734,838	853,148,611	884,087,914	907,326,017
Program Costs	$131,704,651	$273,339,463	$321,660,419	$266,046,072	$206,403,465	$149,517,389	$107,662,617	$79,976,291	$62,145,456	$50,352,150
Participant Costs	$178,287,473	$189,404,639	$177,972,640	$153,201,358	$124,125,387	$94,078,248	$69,583,067	$51,568,754	$38,779,277	$29,659,616
Total 20 Year Avoided Costs	$1,233,741,374	$1,572,310,482	$1,476,675,115	$1,178,630,215	$883,012,086	$617,147,416	$426,581,804	$300,453,355	$218,899,653	$165,008,474
Net 20 Year Avoided Costs (TRC)	$789,585,983	$1,261,619,037	$1,253,934,399	$1,004,517,687	$742,507,133	$501,174,314	$328,548,154	$216,244,956	$145,546,686	$100,368,120
Discounted Lost Revenue	$1,228,944,366	$2,073,972,351	$2,195,456,717	$1,764,393,002	$1,295,872,179	$866,911,645	$559,472,431	$361,958,846	$238,747,871	$160,653,845
Net 20 Year Avoided Costs (RIM)	$702,980,985	$1,116,098,977	$1,100,320,874	$881,123,725	$652,003,448	$440,817,576	$289,808,867	$191,398,650	$129,359,773	$89,656,381
Incentives	$99,061,507	$251,236,596	$324,196,340	$284,283,435	$230,803,106	$173,136,501	$126,760,399	$94,327,951	$72,791,582	$58,359,492

DSM ASSYST ANNUAL POTENTIAL ANALYSIS OUTPUTS **High Energy Costs, Level 4 Funding**

Awareness Parameters:										
Ad effectiveness ratio	0.02									
Aware decay rate	0.25									
Target effectiveness	0									
Starting awareness	25%	1.2	1.2	1.2	1.1	1	1	1	1	1
Program Budget:										
Year	1	2	3	4	5	6	7	8	9	10
Administration	$18,653,941	$29,211,380	$31,869,656	$31,267,059	$27,263,299	$21,099,550	$15,289,481	$11,960,216	$10,138,512	$9,377,398
Advertising	$15,000,000	$18,540,000	$22,915,440	$28,323,484	$32,090,507	$33,053,222	$34,044,819	$35,066,164	$36,118,149	$37,201,693
Incentive Constraints	1	1	1	1	1	1	1	1	1	1
Incentive Adjuster	0.4	0.6	0.65	0.7	0.75	0.8	0.85	0.9	0.95	1

Vintcrit:	500
Batch:	1

OUTPUT

TRC for Program	2.82
Utility Test for Program	3.45
RIM Test for Program	0.51

Year	1	2	3	4	5	6	7	8	9	10
Annual TRC	4.07	3.51	3.06	2.79	2.51	2.25	2.00	1.79	1.62	1.49
Annual Utility Test	6.69	5.25	4.46	3.87	3.27	2.68	2.07	1.49	0.88	0.27
Annual RIM Test	0.52	0.48	0.44	0.43	0.43	0.42	0.42	0.41	0.40	0.31
Net Energy Savings	744,067,322	2,130,124,005	3,627,271,204	5,030,075,992	6,142,482,882	6,856,570,283	7,213,772,741	7,367,269,458	7,406,919,576	7,392,570,868
Net Peak Demand Savings	129,987	382,098	664,391	943,580	1,184,171	1,360,097	1,470,537	1,538,980	1,578,240	1,599,264
Net 2nd Peak Demand Savings	162,564	468,696	803,726	1,124,372	1,388,148	1,569,580	1,674,692	1,734,365	1,764,475	1,776,826
Naturally Occurring Energy Savings	380,872,492	680,211,090	922,254,221	1,123,121,410	1,293,807,248	1,441,962,660	1,572,998,603	1,690,793,471	1,798,159,368	1,897,156,535
Naturally Occurring Peak Demand Savings	62,156	110,923	150,255	182,806	210,397	234,300	255,421	274,409	291,736	307,746
Peak Period Net Energy Savings	92,415,001	269,594,760	465,684,778	655,846,156	814,393,268	924,308,011	987,831,316	1,023,288,444	1,040,961,312	1,048,506,751
Program Costs	$133,567,347	$285,713,460	$325,352,783	$337,075,074	$307,686,404	$237,609,205	$158,730,385	$105,124,802	$68,744,285	$46,721,929
Participant Costs	$195,323,466	$230,210,997	$222,041,915	$193,470,508	$148,432,167	$96,954,821	$54,699,032	$29,424,029	$13,710,130	$5,193,240
Total 20 Year Avoided Costs	$1,337,581,211	$1,811,681,899	$1,675,304,783	$1,477,663,495	$1,145,974,882	$753,084,889	$426,378,332	$240,805,652	$133,591,709	$77,374,999
Net 20 Year Avoided Costs (TRC)	$893,425,819	$1,500,990,455	$1,452,564,066	$1,303,550,967	$1,005,469,929	$637,111,788	$328,344,682	$156,597,254	$60,238,741	$12,734,645
Discounted Lost Revenue	$1,389,970,269	$2,478,501,206	$2,561,941,937	$2,302,050,198	$1,757,293,652	$1,093,627,432	$539,456,724	$236,812,570	$73,731,325	($1,453,203)
Net 20 Year Avoided Costs (RIM)	$795,296,407	$1,326,440,969	$1,272,396,874	$1,142,115,414	$882,964,779	$561,817,134	$292,266,117	$141,742,052	$56,561,163	$14,010,245
Incentives	$99,913,406	$260,819,157	$324,706,390	$365,026,973	$359,250,150	$294,973,104	$202,550,873	$133,139,058	$80,984,213	$46,818,261

DSM ASSYST ANNUAL POTENTIAL ANALYSIS OUTPUTS **Low Energy Costs, Level 1 Funding**

Awareness Parameters:										
Ad effectiveness ratio	0.02									
Aware decay rate	0.25									
Target effectiveness	0									
Starting awareness	25%	1	1	1	1	1	1	1	1	1
Program Budget:										
Year	1	2	3	4	5	6	7	8	9	10
Administration	$12,308,150	$14,103,396	$13,895,010	$12,689,608	$11,190,962	$9,762,070	$8,531,681	$7,512,170	$6,675,254	$5,986,768
Advertising	$15,000,000	$15,450,000	$15,913,500	$16,390,905	$16,882,632	$17,389,111	$17,910,784	$18,448,108	$19,001,551	$19,571,598
Incentive Constraints	1	1	1	1	1	1	1	1	1	1
Incentive Adjuster	1	1	1	1	1	1	1	1	1	1

Vintcrit:	500
Batch:	1

OUTPUT

TRC for Program	1.96									
Utility Test for Program	2.93									
RIM Test for Program	0.38									
Year	1	2	3	4	5	6	7	8	9	10
Annual TRC	2.26	2.12	1.97	1.92	1.87	1.82	1.78	1.73	1.68	1.63
Annual Utility Test	2.99	3.14	3.10	3.12	3.09	3.01	2.90	2.75	2.59	2.41
Annual RIM Test	0.30	0.28	0.27	0.27	0.27	0.28	0.28	0.29	0.29	0.29
Net Energy Savings	405,396,635	860,682,893	1,294,519,601	1,674,858,709	1,995,027,451	2,260,344,141	2,479,690,700	2,661,666,290	2,813,423,618	2,940,635,594
Net Peak Demand Savings	68,973	147,521	224,385	294,335	356,004	409,837	456,839	498,021	534,248	566,237
Net 2nd Peak Demand Savings	88,690	190,285	289,865	380,114	458,789	526,224	583,719	632,743	674,646	710,587
Naturally Occurring Energy Savings	187,910,132	335,432,866	454,367,703	552,708,326	635,989,025	708,106,511	771,840,852	829,196,243	881,629,776	930,208,287
Naturally Occurring Peak Demand Savings	30,014	53,516	72,380	87,889	100,943	112,180	122,058	130,909	138,977	146,438
Peak Period Net Energy Savings	48,739,898	103,888,378	157,390,992	205,578,695	247,576,031	283,797,513	315,032,176	342,050,304	365,499,609	385,911,236
Program Costs	$74,191,466	$71,675,521	$62,937,273	$52,678,485	$43,422,423	$35,970,546	$30,236,457	$25,852,798	$22,457,401	$19,775,113
Participant Costs	$67,762,471	$67,677,049	$61,822,232	$53,691,064	$45,416,776	$37,970,705	$31,631,911	$26,365,603	$22,032,917	$18,480,356
Total 20 Year Avoided Costs	$321,386,901	$295,739,218	$245,761,295	$203,800,805	$166,038,310	$134,555,261	$109,865,887	$90,293,626	$74,774,788	$62,372,869
Net 20 Year Avoided Costs (TRC)	$221,842,109	$225,419,167	$194,900,575	$164,097,183	$134,080,368	$108,225,484	$87,635,939	$71,184,920	$58,083,881	$47,595,040
Discounted Lost Revenue	$485,631,480	$520,669,918	$474,262,244	$397,903,759	$320,901,767	$255,000,964	$202,295,688	$161,120,505	$129,039,610	$103,916,842
Net 20 Year Avoided Costs (RIM)	$168,377,412	$168,083,862	$142,692,522	$120,327,547	$98,821,399	$80,250,017	$65,481,251	$53,573,572	$44,008,277	$36,285,895
Incentives	$46,883,316	$47,856,167	$43,601,525	$37,279,207	$31,002,133	$25,701,352	$21,538,991	$18,346,874	$15,890,276	$13,972,177

DSM ASSYST ANNUAL POTENTIAL ANALYSIS OUTPUTS **Low Energy Costs, Level 2 Funding**

Awareness Parameters:										
Ad effectiveness ratio	0.02									
Aware decay rate	0.25									
Target effectiveness	0									
Starting awareness	25%	1.1	1.1	1.1	1.1	1	1	1	1	1
Program Budget:										
Year	1	2	3	4	5	6	7	8	9	10
Administration	$12,214,943	$21,556,878	$17,016,807	$15,793,115	$13,976,186	$12,935,022	$10,462,782	$9,546,942	$7,815,766	$6,588,207
Advertising	$15,000,000	$16,995,000	$19,255,335	$21,816,295	$24,717,862	$25,459,398	$26,223,180	$27,009,875	$27,820,171	$28,654,776
Incentive Constraints	1	1	1	1	1	1	1	1	1	1
Incentive Adjuster	0.7	0.75	0.8	0.8	0.8	0.9	0.9	1	1	1

Vintcrit:	500
Batch:	1

OUTPUT

TRC for Program	1.89									
Utility Test for Program	2.70									
RIM Test for Program	0.38									
Year	1	2	3	4	5	6	7	8	9	10
Annual TRC	2.25	2.10	1.94	1.87	1.81	1.76	1.71	1.66	1.60	1.53
Annual Utility Test	3.08	3.14	2.96	2.93	2.85	2.67	2.55	2.35	2.17	1.97
Annual RIM Test	0.30	0.28	0.27	0.27	0.27	0.28	0.28	0.29	0.29	0.30
Net Energy Savings	402,704,401	914,051,878	1,453,676,828	1,936,492,347	2,346,453,174	2,711,318,409	2,990,436,278	3,233,762,602	3,420,076,712	3,566,280,542
Net Peak Demand Savings	68,755	157,840	255,248	346,427	428,502	507,932	573,571	636,247	687,536	730,335
Net 2nd Peak Demand Savings	89,770	205,763	331,728	448,361	551,284	647,746	724,416	794,537	849,612	893,874
Naturally Occurring Energy Savings	187,910,132	335,432,866	454,367,703	552,708,326	635,989,025	708,106,511	771,840,852	829,196,243	881,629,776	930,208,287
Naturally Occurring Peak Demand Savings	30,014	53,516	72,380	87,889	100,943	112,180	122,058	130,909	138,977	146,438
Peak Period Net Energy Savings	48,302,692	110,485,247	177,796,363	240,048,237	295,271,503	347,434,779	389,678,607	428,789,480	460,133,621	485,731,511
Program Costs	$71,558,863	$80,981,236	$82,348,419	$71,688,527	$61,084,236	$57,115,277	$45,332,979	$42,401,635	$34,672,433	$29,428,190
Participant Costs	$70,551,809	$73,441,642	$69,623,476	$61,778,777	$53,000,008	$44,505,555	$35,295,401	$29,127,026	$22,732,541	$17,937,755
Total 20 Year Avoided Costs	$320,008,621	$324,335,666	$294,940,947	$250,032,811	$206,081,842	$179,035,871	$137,633,928	$118,935,148	$91,839,433	$72,626,628
Net 20 Year Avoided Costs (TRC)	$220,463,829	$254,015,616	$244,080,227	$210,329,188	$174,123,900	$152,706,094	$115,403,980	$99,826,442	$75,148,525	$57,848,799
Discounted Lost Revenue	$482,638,164	$585,493,528	$591,261,319	$506,707,996	$412,791,571	$353,950,255	$260,727,204	$219,756,141	$162,104,222	$122,566,243
Net 20 Year Avoided Costs (RIM)	$167,354,191	$189,620,385	$179,141,581	$154,766,510	$128,976,470	$114,234,051	$87,212,203	$76,277,655	$57,867,754	$44,851,279
Incentives	$44,343,919	$54,757,224	$59,779,054	$52,697,488	$44,410,381	$45,526,660	$35,251,780	$36,112,134	$28,540,316	$23,584,105

DSM ASSYST ANNUAL POTENTIAL ANALYSIS OUTPUTS **Low Energy Costs, Level 3 Funding**

Awareness Parameters:										
Ad effectiveness ratio	0.02									
Aware decay rate	0.25									
Target effectiveness	0									
Starting awareness	25%	1.1	1.2	1.1	1.1	1	1	1	1	1
Program Budget:										
Year	1	2	3	4	5	6	7	8	9	10
Administration	$12,024,117	$21,140,863	$23,169,508	$20,132,922	$16,302,952	$12,429,840	$9,481,122	$7,449,762	$6,052,849	$5,058,408
Advertising	$15,000,000	$16,995,000	$21,005,820	$23,799,594	$26,964,940	$27,773,888	$28,607,105	$29,465,318	$30,349,278	$31,259,756
Incentive Constraints	1	1	1	1	1	1	1	1	1	1
Incentive Adjuster	0.6	0.9	1	1	1	1	1	1	1	1

Vintcrit:	500
Batch:	1

OUTPUT

TRC for Program	1.88
Utility Test for Program	2.42
RIM Test for Program	0.37

Year	1	2	3	4	5	6	7	8	9	10
Annual TRC	2.26	2.11	1.93	1.87	1.80	1.74	1.67	1.59	1.50	1.42
Annual Utility Test	3.25	2.86	2.58	2.55	2.47	2.36	2.19	1.98	1.75	1.54
Annual RIM Test	0.30	0.28	0.26	0.27	0.27	0.28	0.29	0.29	0.29	0.29
Net Energy Savings	397,302,498	1,094,824,163	1,838,763,965	2,462,100,121	2,946,309,295	3,297,629,694	3,550,708,705	3,737,289,787	3,878,696,221	3,988,271,610
Net Peak Demand Savings	67,122	191,749	332,757	457,431	561,214	642,854	706,705	757,588	799,019	833,349
Net 2nd Peak Demand Savings	90,110	255,304	438,755	596,046	721,536	815,165	884,411	936,821	977,636	1,010,210
Naturally Occurring Energy Savings	187,910,132	335,432,866	454,367,703	552,708,326	635,989,025	708,106,511	771,840,852	829,196,243	881,629,776	930,208,287
Naturally Occurring Peak Demand Savings	30,014	53,516	72,380	87,889	100,943	112,180	122,058	130,909	138,977	146,438
Peak Period Net Energy Savings	46,955,396	132,652,025	227,907,673	311,251,734	379,661,334	432,510,397	472,961,243	504,408,562	529,347,193	549,470,856
Program Costs	$66,555,768	$122,134,418	$132,757,545	$108,780,757	$85,358,283	$63,921,989	$49,142,174	$39,639,061	$33,403,870	$29,040,267
Participant Costs	$72,883,702	$76,429,117	$70,467,736	$60,540,472	$49,364,491	$38,042,008	$28,799,237	$21,832,889	$16,694,052	$12,898,709
Total 20 Year Avoided Costs	$315,662,410	$419,438,401	$392,796,441	$316,870,562	$242,975,938	$177,223,477	$129,875,850	$97,495,554	$75,210,327	$59,370,213
Net 20 Year Avoided Costs (TRC)	$216,117,618	$349,118,351	$341,935,721	$277,166,939	$211,017,996	$150,893,700	$107,645,903	$78,386,849	$58,519,419	$44,592,384
Discounted Lost Revenue	$475,740,983	$801,407,569	$820,215,136	$658,823,779	$491,610,384	$343,366,376	$238,443,884	$169,613,632	$124,085,774	$92,848,309
Net 20 Year Avoided Costs (RIM)	$163,720,396	$261,277,753	$252,409,757	$205,433,068	$157,693,877	$113,849,849	$82,084,131	$60,329,788	$45,403,868	$34,851,132
Incentives	$39,531,652	$93,769,309	$110,673,073	$93,099,909	$72,861,109	$53,718,645	$39,894,227	$31,019,304	$25,426,106	$21,733,463

DSM ASSYST ANNUAL POTENTIAL ANALYSIS OUTPUTS **Low Energy Costs, Level 4 Funding**

Awareness Parameters:										
Ad effectiveness ratio	0.02									
Aware decay rate	0.25									
Target effectiveness	0									
Starting awareness	25%	1.2	1.2	1.2	1.1	1	1	1	1	1
Program Budget:										
Year	1	2	3	4	5	6	7	8	9	10
Administration	$13,813,252	$25,230,219	$28,007,622	$27,072,947	$22,279,395	$15,399,327	$9,279,290	$6,015,479	$4,399,978	$3,810,362
Advertising	$15,000,000	$18,540,000	$22,915,440	$28,323,484	$32,090,507	$33,053,222	$34,044,819	$35,066,164	$36,118,149	$37,201,693
Incentive Constraints	1	1	1	1	1	1	1	1	1	1
Incentive Adjuster	0.4	0.6	0.65	0.7	0.75	0.8	0.85	0.9	0.95	1

Vintcrit:	500
Batch:	1

OUTPUT

TRC for Program	1.85
Utility Test for Program	2.25
RIM Test for Program	0.37

Year	1	2	3	4	5	6	7	8	9	10
Annual TRC	2.31	2.18	2.00	1.89	1.77	1.62	1.42	1.21	1.03	0.91
Annual Utility Test	3.58	3.20	2.86	2.58	2.26	1.87	1.40	0.98	0.65	0.46
Annual RIM Test	0.31	0.29	0.27	0.27	0.27	0.27	0.27	0.27	0.26	0.26
Net Energy Savings	454,457,953	1,340,433,062	2,303,343,336	3,200,638,425	3,896,734,786	4,329,796,578	4,540,180,593	4,634,218,364	4,670,984,265	4,685,408,697
Net Peak Demand Savings	78,026	235,565	412,521	586,142	732,575	836,437	899,105	937,382	962,105	981,051
Net 2nd Peak Demand Savings	101,911	304,608	529,490	745,757	921,659	1,038,954	1,103,064	1,137,816	1,157,305	1,170,581
Naturally Occurring Energy Savings	187,910,132	335,432,866	454,367,703	552,708,326	635,989,025	708,106,511	771,840,852	829,196,243	881,629,776	930,208,287
Naturally Occurring Peak Demand Savings	30,014	53,516	72,380	87,889	100,943	112,180	122,058	130,909	138,977	146,438
Peak Period Net Energy Savings	55,169,264	165,721,717	288,722,976	407,481,589	504,984,180	571,230,928	608,630,934	629,531,506	641,533,195	649,800,877
Program Costs	$69,648,292	$138,910,184	$153,705,218	$152,973,020	$133,481,579	$100,533,278	$68,553,292	$48,637,991	$36,691,359	$30,739,012
Participant Costs	$81,398,093	$97,282,112	$91,952,666	$76,787,113	$54,671,711	$31,729,902	$14,902,950	$6,535,171	$2,608,650	$964,158
Total 20 Year Avoided Costs	$349,071,836	$514,814,288	$490,281,515	$434,978,969	$333,683,127	$214,800,410	$118,358,293	$66,802,681	$40,358,187	$28,881,807
Net 20 Year Avoided Costs (TRC)	$249,527,044	$444,494,237	$439,420,795	$395,275,346	$301,725,185	$188,470,633	$96,128,345	$47,693,975	$23,667,280	$14,103,978
Discounted Lost Revenue	$543,689,584	$1,014,528,631	$1,055,324,153	$943,494,847	$705,527,572	$426,583,109	$204,914,930	$93,126,532	$39,858,007	$19,495,487
Net 20 Year Avoided Costs (RIM)	$189,592,022	$332,921,239	$323,543,852	$292,014,130	$225,066,734	$142,807,822	$74,878,902	$38,593,129	$20,257,215	$12,821,646
Incentives	$40,835,040	$106,252,780	$128,358,704	$137,305,518	$127,230,312	$99,263,818	$65,461,351	$42,275,326	$27,395,017	$20,435,372

G

AB970 HVAC STANDARDS

Efficiency Requirements Under the ASHRAE 90.1 and CEC 2001 Standards

Air-, Water- or Evap-Source	Equipment Type	Capacity (Btuh)	ASHRAE 90.1		New 2001 Title 24
			1989 (1/1/94)*	1999 (10/29/01)*	Baseline
Air	Split System AC or HP	<65,000	10.00	10.00	10.00
	Single Package AC or HP	<65,000	9.70	9.70	9.70
	Air Conditioner	65,000 to 135,000	8.90	10.30	10.30
		135,000 to 240,000	8.50	9.70	9.70
		240,000 to 760,000	8.50	9.50	9.50
		>760,000	8.20	9.20	9.20
	Heat Pump	65,000 to 135,000	8.90	10.10	10.10
		135,000 to 240,000	8.50	9.30	9.30
		>240,000	8.50	9.00	9.00
Water/Evap	Air Conditioner	<65,000	9.30	12.10	
		65,000 to 135,000	10.50	11.50	11.50
		135,000 to 240,000	9.60	11.00	11.00
		>240,000	9.60	11.00	11.00
Water	Heat Pump	<17,000	9.30	11.20	11.20
		17,000 to 65,000	9.30	12.00	12.00
		65,000 to 135,000	10.50	12.00	12.00
Groundwater		<135,000 (70 deg F entering)	11.00	NA	-
		<135,000 (59 deg F entering)	NA	16.20	16.20
Ground		<135,000 (77 deg F entering)	10.00	13.40	13.40

* The efficiency rating is EER for larger units (³65,000 Btuh) and SEER for smaller units (<65,000 Btuh).

H

SUMMARY OF PY2001 NONRES PROGRAMS

This appendix contains a memorandum prepared in mid-2001 that qualitatively describes the major IOUs' PY2001 nonresidential energy-efficiency programs.

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- MEMORANDUM -

TO: Chris Ann Dickerson, PG&E

FROM: Kathleen McElroy, XENERGY

DATE: August 15, 2001

RE: PY2001 Nonresidential Energy Efficiency Program Summaries

CC: Mike Rufo, XENERGY

This memo provides a brief overview of nonresidential energy efficiency programs offered by the California investor-owned utilities (IOUs) in PY2001. This summary includes both statewide and utility-specific programs, and highlights third-party initiatives and Summer Initiative projects.

We have gathered information on PY2001 budgets and energy savings/demand reduction targets through our review of utility filings, PY2001 1st Quarterly Reports, and program manager interviews.

H.1 COMMON PROGRAMS

There are a number of programs – both statewide and utility-specific – that are common to all utilities. Table 1 lists these program categories, and summarizes budgets and energy savings/demand reduction targets by utility for PY2001. The following describes each common program activity.

H.1.1 Standard Performance Contract (SPC)

Over $25 million has been allocated to the Statewide Standard Performance Contract (SPC) Program in PY2001. Offered by PG&E, SCE and SDG&E in 2001, this performance-based program provides financial incentives to customers or EESPs for installation of energy efficient equipment. The program is targeted to both large, and small/medium customers within the commercial, industrial and agricultural segments. Incentives are provided for a variety of nonresidential end-uses, including HVAC, lighting, water heating, and other building-type specific end-uses. Utilities use EESPs and account reps to promote the program. Both the large and the small/medium program elements are standardized statewide, although there are some differences that reflect different service territory needs.

H.1.2 Express Efficiency

With an annual budget of over $41 million statewide, the Express Efficiency Program is the largest nonresidential energy efficiency program in PY2001. All four utilities offer customer rebates through the Express Efficiency Program, targeting small and medium nonresidential customers and addressing HVAC, lighting, refrigeration, water heating, and other building-type specific end-uses. In 2001, PG&E and SCE also target large customers with Express Efficiency incentives. Generally, the utilities use a combination of utility representatives, vendors, and contractors to deliver the program to nonresidential customers.

H.1.3 Energy Audits

All four utilities offer some form of energy audit program; that is, a program that provides customers with site-specific energy efficiency information designed to help them reduce their energy bills. Utilities have allocated 2-6% of their overall nonresidential program budgets to these programs. These energy audits, or "surveys," often provide an opportunity to introduce the utilities' other energy efficiency programs such as Express Efficiency. Each utility offers a variety of survey types, including on-site, on-line, direct mail, and phone.

H.1.4 HVAC Programs

SCE, SDG&E, SCG and PG&E offer upstream financial incentives to HVAC market actors to encourage the installation of energy efficient HVAC equipment in the nonresidential sectors. Most of these programs involve offering financial incentives to HVAC distributors and/or installation contractors to encourage greater supply of energy efficient HVAC equipment and to influence the ultimate customers' HVAC purchase decisions. SCE tracks the budget for marketing to and networking with upstream HVAC market actors under this program category, but the incentives are actually included within SCE's budget for Express Efficiency. The following table summarizes each utility's Upstream HVAC Program and provides PY2001 budget information.

Utility	Program Name	Description	PY2001 Budget
SCE	Nonresidential Upstream HVAC Pilot	Targets HVAC installation contractors with "quick start bonus" incentives to influence small/medium customer HVAC purchase decisions	$70,000 (Incentives offered through Express Efficiency
SDG&E	Midstream HVAC Incentives	Provides incentives to contractors to promote and install high efficiency HVAC equipment	$400,000
SCG	Small Commercial Upstream Gas Air Conditioning Program	Promotes gas air conditioning projects	$708,000
	Nonresidential HVAC Training	Provides training to HVAC contractors in proper installation of gas cooling systems	$147,000
PG&E	Nonresidential HVAC Turnover	Provides incentives to HVAC distributors	$2,000,000

H.1.5 Upstream Motor Programs

SCE, SDG&E and PG&E offer programs designed to encourage premium efficiency motor stocking and sales. These programs provide incentives to motor distributors. The following table summarizes each utility's Upstream Motors Program and provides PY2001 budget information.

Utility	Program name	Description	PY2001 Budget
SCE	Nonresidential Upstream Motors Pilot	Targets motor distributors with incentives to encourage premium efficiency motor stocking and sales	$330,000
SDG&E	Upstream Motors Incentives	Provides incentives to motor distributors to encourage premium efficiency stocking and sales	$123,000
PG&E	Nonresidential Motor Turnover	Provides incentives to motor distributors to encourage premium efficiency motor stocking and sales	$1,000,000

H.1.6 Process Overhaul Programs

SCE, SDG&E, SCG and PG&E offer programs designed to increase the level of energy-efficient process overhauls among nonresidential customers. Most of these programs provide specialized, technical consulting services to study opportunities related to customer process loads. SCE's program targets process load-improvements, but is delivered and funded through other nonresidential programs. The following table summarizes each utility's Process Overhaul Programs and provides PY2001 budget information.

Utility	Program Name	Description	PY2001 Budget
SCE	Nonresidential Process	Uses other programs to deliver and fund targeted process-load improvements	$0 (budget included in other programs)
SDG&E	Technical Assistance, Process	Provides technical consultants to conduct study of process load improvements	$297,000
SCG	Furnace/Kiln/Oven Program	Provides audits and incentives to stimulate efficiency investments in industrial process equipment	$1,418,000
	Process Energy Conservation Program	Provides audits and incentives to encourage adoption of unique process equipment not covered through other programs	$2,305,000
	Advanced Engine Technology Program	Provides audits and incentives to improve availability of gas-fired engine-driven end-uses	$1,074,000
PG&E	Compressed Air Management Program	Provides analysis of compressed air management systems to identify low-cost/no-cost improvements	$300,000

H.2 INFORMATION, OUTREACH, AND TECHNICAL SUPPORT

H.2.1 Business Energy Guide

PG&E, SCE, SDG&E and SCG distribute the statewide Business Energy Guides to small, nonresidential customers. (All but PG&E still show line-item budget funding for this program element in PY2001.) The Energy Guides provide energy information and education to customers to better manage their business energy costs. The Energy Guides provide energy information for office buildings, grocery stores, restaurants, retail outlets, and manufacturing facilities. Statewide, the Energy Guides are currently available in English, Spanish and Chinese. SCE has developed several other non-English language versions of the Energy Guides. The Energy Guides are delivered through targeted marketing efforts focused on small commercial businesses, relevant business trade/vendor shows, Small Business Associations, Chambers of Commerce, building permits and government offices, etc.

H.2.2 Energy Centers

PG&E, SCE and SCG operate Energy Centers. The Energy Centers are designed to educate customers about energy efficient business solutions. The Energy Centers use training, outreach, education, and tool development to support the delivery of statewide energy efficiency programs. The utilities have worked together to collaboratively build on a statewide program for the Energy Centers, including seminar/program coordination, a web-based energy efficiency library, partnership program with third parties and/or other state agencies. The Energy Centers target all nonresidential customers and all applicable end-uses, although elements of all three utilities'

Energy Centers specifically target food service equipment [???]. Each of the utilities' Energy Centers is listed below:

- PG&E – Pacific Energy Center (PEC), Food Service Technology Center (FSTC), and Energy Training Center – Stockton (ETC).
- SCE – Customer Technology Application Center (CTAC), Agricultural Technology Application Center (AGTAC).
- SCG – Energy Resource Center (ERC).

H.2.3 Emerging Technologies

PG&E, SCE, SDG&E, and SCG have set aside funding for statewide Emerging Technologies program activity. These activities focus on demonstrating energy efficiency options not widely adopted by various market actors. The Emerging Technologies Coordinating Council (ETTC) was established to seek opportunities to coordinate efforts between each of the utilities Emerging Technologies Programs, as well as the CEC's PIER Program. The utilities and the CEC continue discussions on emerging technologies through the ETTC, and are working with individual customers to develop showcase emerging technologies projects in their service territories. Results from these projects (e.g., detailed designs and performance criteria) are widely distributed.

H.2.4 Renovation and Remodeling Programs

Through the statewide Savings By Design Program, the utilities encourage high performance nonresidential building design and reconstruction practices for all nonresidential buildings undergoing remodeling and/or renovation. The following summarizes PY2001 budgets for renovation and remodeling activity by utility:

- SCE: $1,150,000
- SDG&E: $855,000
- SCG: $1,130,000
- PG&E: $1,000,000 (additional $100,000 for commissioning projects, and $1,000,000 for renovation and remodeling measures delivered through Express Efficiency).

H.2.5 Other Support Programs

Each of the utilities offers a number of programs that are designed to support the financial incentives programs (e.g., Express Efficiency, SPC). These programs include such activities as providing special services to upstream market actors such as technical assistance, incentives, etc., targeting more complex applications such as chillers or compressed air systems, and/or providing marketing and outreach support to target market segments such as hard-to-reach. The following table summarizes each utility's other program support activities and provides PY2001 budget information.

Utility	Program Name	Description	PY2001 Budget
SCE	Small/Medium Energy Management Services	Targets underserved market segments with on-site energy audits and program promotion via trade associations and community-based organizations	$350,000
	Small Nonresidential Mass Market Information	Includes distribution of English and non-English versions of the Energy Guide, and development of English and non-English "quick tips" guides, technical briefs, and energy kiosks	$1,413,000 (includes Consumer Affairs Agency's statewide media campaign)
	Space Rental Update (pilot component of Small/Medium Nonresidential SPC)	Promotes implementation of weatherization measures in strip malls and other commercial properties.	(Part of Small/Medium SPC budget)
	Commercial Energy Efficiency Information Services (EEIS)	Involves direct contact with large commercial customers to promote SCE programs (e.g., SPC, Express)	$575,000
	Industrial Energy Efficiency Information Services (EEIS)	Involves direct contact with large industrial customers to promote SCE programs (e.g., SPC, Express)	$575,000
	Beat the Peak	Targets municipalities and other large commercial/industrial customers looking for voluntary peak load reduction during State 2 and 3 alerts	(Part of Commercial and Industrial EEIS budgets)
	Agricultural/Pumping Services Program	Provides pump testing services to encourage pumping customers to adopt preventative maintenance practices that ultimately improve overall pumping system efficiency.	$2,100,000
SDG&E	Large Nonresidential Information Program	Promotes incentive programs and offers seminars targeting large nonresidential customers	$95,000
	EnVINTA One-2-Five	Offers building efficiency rating tool to large customers	$75,000
	Energy Information Center (EIC)	Uses trained reps to assist small customers with specific energy efficiency issues	$100,000
	Small Nonresidential Information Program	Promotes incentive programs and offers seminars targeting small/medium nonresidential customers	$453,000
	Small Comprehensive Technical Assistance	Provides technical consulting expertise to small/medium businesses for specific end-use retrofit applications	$150,000
	Building Operator Certification	Trains/certifies facility managers of commercial/governmental buildings	$50,000
	Small Nonresidential Commercial Horizontal Washers Program	Provides incentives for high efficiency, H-axis washing machines in apartment complexes and Laundromats	$250,000
	Small Business "EZ" Turnkey Program	Offers rebates to smallest commercial customers (peak demand less than 50 kW), with special emphasis directed to state-identified Enterprise Zones	$450,000
SCG	Comprehensive Space Conditioning Efficiency Improvement Program	Offers information, audits and incentives for efficiency improvements in gas space conditioning systems	$1,457,000
	Advanced Water Heating Systems Program	Offers information, audits and incentives for high efficiency water heating equipment	$875,000
	Integrated Food Services Equipment Retrofit Program	Provides information, audits, and financial incentives to encourage small commercial cooking customers to make energy efficiency improvements	$2,474,000
PG&E	Chiller Analysis Program (CAP)	Provides analysis of chiller/cooling systems to identify low-cost/no-cost improvements	$500,000
	Lighting System Analysis (LSA)	Provides analysis of lighting systems to identify low-cost/no-cost improvements	$1,500,000

H.2.6 Other Nonresidential Programs

SCE, SDG&E and SCG offer other nonresidential programs that do not fit in any of the above, standard nonresidential categories. These include:

- SCE Agricultural/Pumping Services Program – provides pump testing services to encourage pumping customers to adopt preventative maintenance practices that ultimately improve overall pumping system efficiency. PY2001 Budget: $2,100,000.
- SDG&E Small Nonresidential Commercial Horizontal Washers Program – provides incentives for high efficiency, H-axis washing machines in apartment complexes and laundromats. PY2001 Budget: $250,000.
- SDG&E Small Business "EZ" Turnkey Program – offers rebates to smallest commercial customers (peak demand less than 50 kW), with special emphasis directed to state-identified Enterprise Zones. PY2001 Budget: $450,000.
- SCG Integrated Food Services Equipment Retrofit Program – provides information, audits, and financial incentives to encourage small commercial cooking customers to make energy efficiency improvements. PY2001 Budget: $2,474,000.

H.3 THIRD PARTY INITIATIVES

Most of the utilities are offering programs referred to as Third Party Initiatives, or "TPIs." The strategy behind the TPIs has been to solicit innovative programs and technologies from the marketplace for delivering cost-effective energy savings and demand reductions. Most of the TPIs were initiated in 2000 and some have been extended through 2001. The following summarizes utility-specific TPIs.

Utility	Project Description	Budget
SCE	Beverage vending machine retrofits	$6,390,000 (includes all Residential, Nonresidential, and New Construction TPIs)
	Small/Medium business air conditioning retrofits	
	Commercial building commissioning	
	Hard-to-reach small business lighting retrofits and HVAC enhancements	
	Small/medium commercial lighting audits, design and retrofits	
SDG&E	Building Recommissioning TPI	$270,000
	Peak Load Reduction TPI	$1,300,000
	Retrofits in Leased Spaces TPI	$405,000
SCG	Mobile Energy Clinic	$300,000
	Lodging Education (Audits, Website)	$268,000
	Coin Laundry and Dry Cleaner Education (Workshops, Newsletter, Website))	$351,000
	High Efficiency Medium Tonnage Natural Gas Cooling Field Demonstration	$248,000
PG&E	Marketing/Outreach Support for HTR Market Segment	$2,500,000 (includes all Nonresidential TPIs)
	Audits/Installation in Oakland and Berkeley communities (Aspen)	
	Hotel Financing Project (ICF)	
	Small Business Website (DR International)	
	Engineering Support for SPC (KW Engineering)	
	Long Term Care Facility (IMT)	
	Environmental Waste Management in Restaurants (SAIC)	
	Historical Preservation (Presidio)	
	Small Business Improvements in East Palo Alto (SEI)	

H.4 SUMMER INITIATIVE PROGRAMS

Most of the utilities have also solicited TPIs as part of the Summer 2000 Initiative. These TPIs have also been solicited to deliver cost-effective energy savings and demand reductions prior to June 2001. The following summarizes the various Summer 2000 Initiative Projects.

Utility	Project Type	Project Description	Budget
SCE	Statewide Summer Initiative Programs	Campus Energy Efficiency Project	$3,500,000
		Beat the Heat	$250,000
		LED Traffic Signal Rebates	
		COPE Peak Load Reduction Program	$1,500,000
	Summer Initiative TPIs	Small/medium commercial lighting retrofits	$340,000
		Small/medium commercial HVAC retrofits (evaporative pre-coolers)	$560,000
SDG&E	Statewide Summer Initiative Programs	Campus Energy Efficiency Project	$2,000,000
		Beat the Heat	$150,000
		LED Traffic Signal Rebates	
	Summer Initiative TPIs	HID Lighting Control Project	$1,000,000
		Compressed Air Efficiency Project	
		HID Fixture Replacement Projects	
		Skylight Lighting Control Projects	
		Evaporative Pre-Cooler Project	
		Rooftop AC Repair Projects	
PG&E	Statewide Summer Initiative Programs	Beat the Heat	
		Campus Energy Efficiency Project	
		LED Traffic Signal Rebates	
		COPE Peak Load Reduction	
	Summer Initiative TPIs	Active Load Management Program	
		Commercial Building Energy Efficiency Program – Lighting	
		Commercial Building Energy Efficiency Program – Other	
		Evaporative Cooling Program	
		Industrial Refrigeration Program (Glycol Heat Transfer Fluid Optimization)	
		Industrial Refrigeration Program (Direct Expansion Valve Upgrade)	
		Office Equipment Efficiency Program	
		Vendor Coupon Program	
		Wastewater Plant Aeration System Optimization Program	
		Cool Roofs	
	Utility-Specific Projects	Energy Efficient Design Improvement, City of Oakland	
		Museum Chiller Improvement, City of Oakland	
		Energy Efficiency Measures, Humboldt Creamery	

I

OFFICE EQUIPMENT OPPORTUNITIES

This appendix provides the contents of a report submitted to XENERGY by Energy Solutions in June 2001 in support of this Energy Efficiency Potential Study.

Office Equipment Energy Efficiency and Conservation Opportunities

Submitted to:
XENERGY
Submitted by:
ENERGY SOLUTIONS
June 2001

Important note: Information contained in this report is the result of literature and web research along with Energy Solution's findings from our Office Equipment Efficiency Program, a summer 2001 Third Party Initiative. The information has been compiled only for XENERGY's use in developing office equipment inputs to their DSM ASSYST™ model.

I.1 SCOPE AND PURPOSE

This report presents information about the electricity use and energy-saving potential of common types of office equipment, such as computers, printers, and copiers. In compiling this information, Energy Solutions has been asked to focus on today's largest office equipment end uses and to consider energy-saving measures that could be implemented through utility energy efficiency programs.

The report has been requested as a part of XENERGY's efforts to quantify the energy savings potential for different commercial sectors of the California IOU service territories. Xenergy will be using this information as input to their DSM ASSYST™ model. This model uses a series of macro-linked spreadsheets to estimate potential and cost-effectiveness and to rank technologies by market segment using user-specified criteria. Technology-specific engineering data are integrated with utility market saturation data, load shapes, rate projections, and marginal costs into an easily updated data management system.

I.2 OFFICE EQUIPMENT END USE OVERVIEW

Office plug load, along with its associated air conditioning needs, is the fastest growing electricity end use in the commercial sector. A recent study by Lawrence Berkeley Laboratory finds that direct power use by office and network equipment is about 74,000 GWh per year, which is about 2% of total electricity use in the U.S. (Kawamoto, 2001). Estimates suggest that power management for office equipment currently saves 23,000 GWh/year and that complete saturation and proper function of power management would achieve additional savings of 17,000 GWh/year (Kawamoto, 2001). Despite this potential, relatively few programs have been directed at this end use, and therefore savings and incremental costs from energy efficiency in this sector have not been well described.

With this report, Energy Solutions presents our existing knowledge base for selected office equipment types and currently available energy-saving technology for those equipment types.

Our first step was to identify the largest end uses in the office equipment sector. A breakdown of national electricity consumption by equipment type is shown in Table 1. The breakdown by equipment type in California is assumed to be similar to that of the nation as a whole.[1]

In Table 1 and in this report, "desktop computer" refers to the CPU only, while "display" is the monitor hooked up to a personal computer or terminal. A minicomputer is a multi-user computer capable of supporting from 10 to hundreds of users simultaneously. A mainframe is a powerful multi-user computer capable of supporting many hundreds or thousands of users simultaneously.

Table 1: Estimate of Annual Energy Use by Office Equipment in Commercial Facilities

Equipment Type	Commercial (TWh/year)	% of Office Equipment in Commercial Sector
Desktop Computer	10.21	19%
Display	9.82	19%
Minicomputer	8.86	17%
Copier	5.71	11%
Mainframe	5.62	11%
Laser Printer	5.36	10%
Fax	2.26	4%
Terminal	1.83	3%
Server	1.60	3%
Inkjet/Dot Printer	1.56	3%
Portable Computer	0.13	0%
Total	52.95	100%

(Source: Kawamoto, 2001, p. 9, using 1999 data)

[1] While Pacific Gas and Electric Company's Commercial End Use Survey has different equipment name breakdowns, the percentage of connected kWh is similar.

As the above table shows, six different equipment classes are responsible for 86% of the end electricity use. This report focuses on four of those six classes to examine equipment responsible for roughly 60% of office equipment electricity use nationally:

- Desktop Computers
- Displays
- Copiers
- Printers

Minicomputers and mainframes are not included in the analysis of possible measures for a number of reasons. First, it is difficult to estimate the average power requirements because of the wide range of central processing units and internal drives and the various kinds of peripherals such as tapes and disk storage. Second, for mainframes, there has been a recent significant decrease in power requirements and measures vary significantly depending on equipment stock. Third, and most important, most minicomputer and mainframes are left in full "on" mode continuously, limiting power management options.

At XENERGY's request, the next step in our analysis was to consider potential energy-saving measures for the largest end uses, excluding minicomputers and mainframes.
To identify potential energy-saving measures to be considered in the model analysis we tried to isolate the most cost effective and readily available prospective measures.

This report is organized to show those prospective measures by equipment type. For each type of equipment a description is provided, a listing and brief discussion of the energy-savings opportunities/measures quantified in Table 1, a listing of barriers to the adoption of energy efficiency measures, and a qualitative discussion of observations and trends.

In addition to the above four equipment types, we have included two more areas with energy efficiency opportunities: External Hardware Controls and Data Centers.

I.2.2 General Notes on Power Management

Many of the largest energy saving measures discussed in this report are related to the transition to equipment with power management (PM) features or enabling of power management features. Complete adoption of PM represents the biggest savings potential in the office equipment sector. As described above, the recent report "Electricity Used by Office Equipment and Network Equipment in the U.S." estimates that power management can save an additional 17,000 GWh/year nationally. Most of these savings would come from desktop computers, displays and copiers since the PM-enabled rate for desktop computers is low (~25%) and the power reduction from PM for displays and copiers is large (for displays, active power = 85 W, low power = 5 W; for copiers, power in auto-off is less than 10 W).

The report goes on to identify nighttime shutdown as the next biggest target area. "Furthermore, complete saturation of night shutdown for all equipment except servers, minicomputers, mainframes and faxes would reduce energy use by an extra 7 TWh/year. Most of these savings would be achieved by night shutdown of desktop computers and laser printers since power reductions by night shutdown for desktop computers and laser printers are large (low-power level for desktop computers and laser printers is 25 W) and laser printers are frequently left on at night." (Kawamoto, 2001, p. 11)

I.3 DESKTOP COMPUTERS

I.3.1 Desktop Computer Description

Energy consumption data for computers is often given on system specification sheets. It is important that actual power consumption is considered rather than rated power figures. Rated power levels (found on the computer nameplate, are generally two to three times higher than the actual power levels) to assure that an adequate electricity supply is provided.

For the purposes of this analysis, and in the Kawamoto, 2001 tables, the term "desktop computer" is used to refer to the CPU but does not include the monitor.[2] Peripherals, such as speakers, use an order of magnitude less electricity and therefore are not addressed in this report. Monitors and personal printers are significant electricity users and are considered later in this report.

The most common energy efficiency measure for computers and monitors is through "power management." Power management senses when a specified time has passed with no "activity" (usually from the keyboard or mouse) and initiates a sequence of low-power modes. Delay times usually range from a few minutes up to an hour. When activity occurs while the device is in a low-power state, it automatically wakes itself up and returns to the full-on state.

While power management is now available on most new machines[3], it is common practice for IT staff to disable PM on arrival of new equipment, in particular when the equipment is hooked up to a network. The literature finds that *less than half* of the machines in offices typically have enabled their power management controls.[4]

I.3.2 Desktop Computer Measures

- *Enable power management on desktop computers*

Energy use by desktop computers CPUs is significantly higher during the weekday 9-6 period than on nights and weekends. Because both nighttime shutdown rates for CPUs (between 45% and 65%) and baseline power management enabling rates (roughly 35%) are low, power management enabling can offer savings for desktop CPUs. Manual enabling is the only currently viable opportunity for CPUs, since widely available network enabling tools do not include CPU enabling as an option.

- *Nightime shutdown of desktop computers*

While PM enabling automates shutdown during the workday and nights/weekends, perhaps the most important way to reduce energy consumption of computers is for users to manually turn

[2] Nordman, Bruce, phone conversation, Friday, June 8, 2001.
[3] As of early 1996, EPA estimated that upwards of 70% of all new PCs and nearly 100% of all PC monitors sold had power management capability.
[4] Piette, et.al. "Measured Energy Savings and Performance of Power-Managed Personal Computers."

them off at night and on weekends – even if it is an ENERGY STAR compliant computer (ACEEE, 1996). A typical computer uses 55 watts in active power mode[5]. The average power requirement of new ENERGY STAR compliant CPU is about 25 watts in low-power mode, while a computer only draws 1.5 watts (Kawamoto, 2001, p. 23). While this is a behavioral change rather than an energy efficiency "measure" in the classic sense (i.e., a hardware fix), we feel it is worth mentioning because it is a no-cost measure available to most desktop computer users.

I.3.3 Desktop Computer Measure Barriers

Ideally, power management would transparently and universally save office equipment energy, but a variety of factors can interfere with it being fully enabled and functioning.

- Technology staff often lack familiarity with power management features or assign low priority to enabling such features.
- Hardware and/or software can conflict with power management settings. This problem is more pronounced in networked machines. Furthermore, due to high failure rate for networked equipment, Energy Solutions' experience indicates that IT staff do not consider CPU enabling to be an acceptable option for networked CPUs. Monitor enabling has a higher acceptance rate.
- Users often have misconceptions about interfering with power supply, such as the persistent myth that your computer will last longer if you never shut it off.
- The Windows NT operating system does not support power management for either the CPU or monitor. Approximately 20% of Windows operating systems are Windows NT and Windows represents 91% of the market share of operating systems.

I.3.4 Desktop Computer Observations and Trends

Another option, not considered in the tables is encouraging purchase of laptop computers (which use only 10% of the energy of desktops) instead of desktop computers. This measure is not included in the tables because laptops are twice the price of desktops and the measure is less cost effective than power management enabling or nighttime shutoff.

Technology is being developed that will likely lower the power requirements of desktop computers. Intel has developed a new power management protocol, Instantly Available PC (IAPC) that increases power management savings significantly and is purported to solve the network enabling conflicts. Intel reports that 13 computer manufacturers are now using the IAPC approach in a total of 29 models. That represents a small fraction of the PCs shipped today, but new design standards should boost that number substantially.

Another important trend is that the number of computers that cannot power down because of Windows NT is expected to drop dramatically over the next two years. Windows NT 4.0 is no longer being sold and Microsoft is phasing out software support. NT has been replaced by Windows 2000, which supports power management.

[5] Kawamoto, 2001, Appendix, Table A-4

I.4 MONITORS/DISPLAYS

I.4.1 Computer Monitor Description

Typically, more than half the energy consumption of a desktop microcomputer system is attributable to the monitors. The power consumption of a monitor in the 'on' mode depends on the screen type, size and brightness. Laptop and other technology improvements have brought energy savings to desktop computer technology. However, this has coincided with trends toward color, higher resolution and larger desktop monitors, resulting in increasing energy use by monitors.

Cathode Ray Tubes (CRTs) are the most common type of desktop monitor. Liquid Crystal Displays (LCDs) are the most popular non-CRT monitor. Because they generally perform well at lower levels of luminance (brightness) than CRTs, active matrix color LCDs consume about 10 to 20 percent as much power per square inch as color CRTs.

While ENERGY STAR labeling has led to improved energy efficiency for monitors, the labels only prescribe 'standby' and 'off' mode power consumption. When considering power management opportunities, the discussions of desktop CPUs, from above, and monitors are necessarily intertwined, because the monitor is dependent on the PC to initiate low-power modes. That is, computers with the Windows NT operating system block power management for the monitor as well as the CPU. Further, when CPU power management on a LAN causes a system lock up, IT staff will often disable all power management, including the monitor. Thus, power management enabling of monitors depends on software and hardware interaction.

Monitors can also be turned off automatically by an external control that senses activity (keyboard/mouse use or room occupancy) and turns the monitor power on and off as needed. That technology is invaluable for monitors that are connected to systems with Windows NT software. Windows NT software does not allow easy enabling of power management software. While patches exist to allow manual power management enabling, the patches require significant labor expenditure and external control devises are likely less expensive and more reliable.

I.4.2 Computer Monitor Measures

- Manually enable existing monitor PM features with short time delays.

Virtually all new monitors are capable of power management. The time delay on power management needs to be set for a short enough period to result in both daytime and nighttime power management savings. Energy Solutions' experience has shown the many monitors are set for a 30-minute or longer delay time. As a result of longer PM delay times, daytime savings are less than they could be. Ten-minute delay times work fine for most users.

- Group enabling of monitor PM features via network software (network enabling)

The US DOE has developed "EZ STAR," a free software tool that activates power management settings for computer monitor through a site's local area network. EZ star also has an audit tool that reports how many machines are already enabled and an enabling tool that allows central control of sleep settings.[6]

- Replace color CRT monitors with active matrix color LCD monitors.

LCDs are becoming more attractive options in terms of quality. However, because they cost five times more than a comparable CRT, until prices drop, using them purely as an energy saving measure will not be an option for most desktop users.

I.4.3 Computer Monitor Measure Barriers

Ideally, power management would transparently and universally save office equipment energy, but a variety of factors can interfere with it being fully enabled and functioning.

- Occasionally, hardware and/or software can conflict with power management settings for monitors and the Windows NT operating system does not support power management for either the CPU or monitor.
- Users often have misconceptions about power management (such as the persistent myth that screen savers are a part of sleep mode. While screen savers may save some energy, they do not reflect a low power mode.
- While the EPA ENERGY STAR Memorandum of Understanding requires manufacturers to ship computers enabled for power management, many customers, especially large organizations, have an "image" that they request manufacturers load onto computers prior to shipping. The image has network settings and various default settings keyed to the users' sites. If the customer's image does not include enabling power management, then the computers arrive with PM disabled.

I.4.4 Computer Monitor Observations and Trends

Load curves for monitors are similar to those for desktop computers; energy use is significantly higher during the weekdays from 9am-6pm than nights and weekends. Nighttime shutdown rates are estimated to be around 65% for monitors (Nordman 2000). Kawamoto (2001) estimates baseline power management enabling rates of roughly 65% for monitors, but experience from Energy Solutions' Office Equipment Efficiency Program has shown baseline enabling rates of 50%.

Energy use by displays and terminals has increased in the past five years due to the increase in monitor size. As mentioned above, future trends for energy use in this sector are dependent on

[6] The tools can be downloaded from: www.michrotech.doe.gov/energy/star.

relative costs and penetration of LCD monitors and power management enabling persistence for CRTs.

Another important trend is that the number of computers that cannot power down because of Windows NT is expected to drop dramatically over the next two years. Windows NT 4.0 is no longer being sold, and Microsoft is phasing out software support. NT has been replaced by Windows 2000, which does support power management.

I.5 COPIERS

I.5.1 Copier Description

Copiers use more energy per unit than any other type of office equipment. As described below, because most of the energy consumption occurs when the copier is inactive, copiers with ENERGY STAR features enabled can save considerable amounts of energy.

Most light lens copiers currently sold use heat and pressure to fuse an image to paper. Energy consumption varies significantly among copiers, with certain operating features contributing to high energy consumption of individual machines. The fastest—and biggest—machines draw the most power because they maintain the toner at a near-ready temperature for fusing. But due to their speed, they may use little energy per page.

Energy Star Tier 2 requirements, adopted in 1997, apply to standard copier models. Tier 3 requirements, adopted in 1999, apply to large format copiers designed to handle 17" x 22" paper or larger. According to the Energy Star program, copiers equipped with low-power and automatic power-off features can save 30% to 40% of the energy that would otherwise be wasted.

Results of a recent study shows that a concerted effort to fully enable ENERGY STAR copiers can achieve significant reductions. The study, by Bruce Nordman at Lawrence Berkeley Laboratory finds "that copiers use considerably more electricity (about 7 TWh/year in the U.S.) than previously estimated because so many of them are left on at night." (Nordman, 1998). Another recent study finds an 18% turn-off rate for analog copiers (Webber, 2001, p. 14).

I.5.2 Copier Opportunities

- Replace copiers lacking PM features with those having PM feature.

Since the majority of copier energy consumption occurs in inactive operation, machines that meet the ENERGY STAR criteria are significantly more efficient than those that do not. Additionally, shorter time delays, higher enabling rates, and lower 'off' power levels are expected from ENERGY STAR copiers. A 1998 report found approximately 1/3 of the copier stock ENERGY STAR compliant (Nordman, 1998, p. 20).

- Manually enable existing copier PM features

The greatest opportunity to improve on the current savings from ENERGY STAR copiers is to increase power management enabling rates. While the ENERGY STAR program is responsible for considerable electricity savings already, higher enabling rates could increase savings significantly.

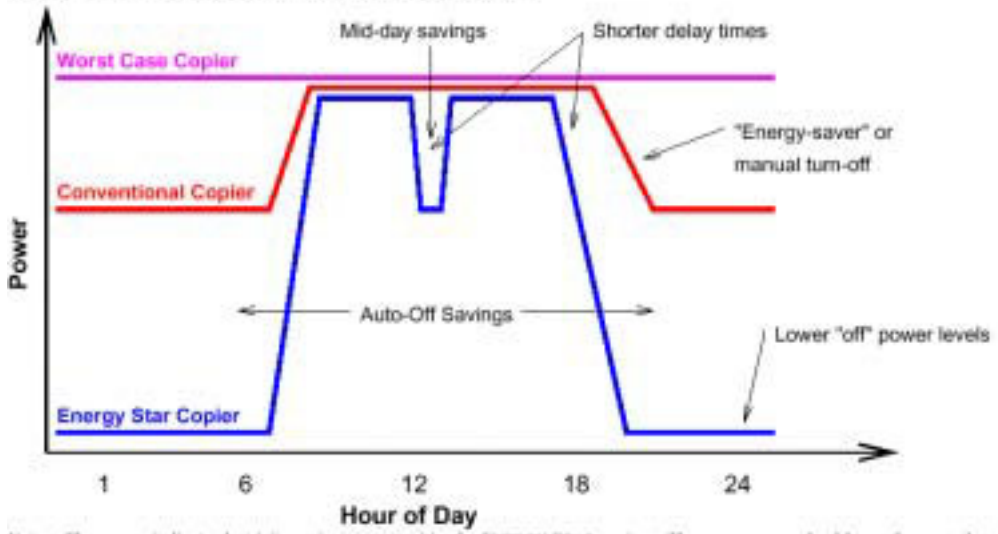
I.5.3 Copier Measure Barriers

- Sales and service personnel may disable power management. Anecdotal evidence suggests that service personnel often disable power management before customers ever use the copier and many completely disable on an inquire from the customer rather than explaining the benefits of ENERGY STAR features or altering the configuration for the customers' needs (Nordman, 1998).
- Lack of understanding of ENERGY STAR features appears to be more of a problem then user satisfaction with ENERGY STAR copiers. Nordman found a high level of satisfaction with ENERGY STAR copiers, though notes that many of the copiers surveyed in his research were relatively new and thus more reliable (Nordman, 1998. p. 18).

I.5.4 Copier Observations and Trends

The following figure, excerpted from Nordman 1998, shows load curves for different types of copiers.

Figure 1-1. Prototypical Copier Loadshapes



Notes: The arrows indicate electricity savings opportunities for ENERGY STAR copiers. These are *average* loadshapes for several copiers and days, and so do not correspond to any particular day.

Copier energy efficiency will likely continue to improve. The International Energy Agency project to develop a "Copier of the future," invites specifications for a network-capable, mid-speed digital photocopier that consumes less than 10 watts of energy in standby mode, enters and recovers from standby mode in less than 10 seconds, has an efficient duplexing performance and maintains traditional performance features and requirements, such as reliable, convenient copying. Ricoh submitted specifications and won the IES-DSM Award of Excellence in 1999, while Canon Inc. won the award in 2000.[7]

[7] Information about the 1999 award at http://195.178.164.205/IEAprocure/copiers/future.html and information about the 2000 award at http://www.usa.canon.com/press/091300d.html

Other copying mechanisms exist but are typically more expensive and may not have the desired features of fusing copiers. Manufacturers are currently phasing out analog models because of the demand for multifunction digital copiers. Digital copiers provide energy savings as well as reducing printing costs for medium to high volume applications where the multifunction digital copier is used as a network printer and copier (WSU, 2000, p. 2). These and other new technologies may offer options to traditional copiers in the future.

While the discussion of embedded energy is out of the scope of this report, it is important to note that the amount of energy in the paper used in copiers is greater than the still significant amount that the copiers use in direct electricity. Duplexing reduces energy used in paper production and, more importantly for the user, reduces paper supply costs. A sheet of plain paper requires between 10-20 Wh of energy to produce (ACEEE, 1996, p. 69). The energy use for imaging – printing or copying is roughly 1 Wh (Kawamoto, 2001, p. 6). Encouraging selection of copiers with good duplexing capabilities and using them will therefore contribute to an overall reduction in energy use.

I.6 PRINTERS

I.6.1 Printer Description

The operational characteristics and associated energy use of computer printers vary significantly among technologies. Impact, laser, and inkjet printers are presently available in various speeds, sizes, and levels of sophistication. The quieter, better-imaging laser printers have taken place of the impact (daisy wheel and dot matrix) printers. However, laser printers use 5-10 times more energy, both when printing and idle. Energy-efficient inkjet printers are half the cost of lasers, but have limited market share because of somewhat inferior print quality and slower printing speed. Meanwhile, relatively low prices for laser equipment and a drive for worker productivity are fueling a business trend toward personal printers, thereby increasing the total number of printers in service.

Most laser printers are now ENERGY STAR compliant (Kawamoto, 2001, p. 23). Additionally, power management enabling rates are relatively high compared to other office equipment. According to Nordman's unpublished 1999 survey, 83% of ENERGY STAR-compliant laser printers in offices have PM enabled. Other reports estimate even higher enabling rates. Printer enabling rates were found to be 96% (Webber, 2000, p.13) and earlier ENERGY STAR forecasts use a 90% enabling rate. Furthermore, unlike desktop CPUs and monitors, printer power management failure is uncommon and tends to occur when the device is in an error or user attention mode (Webber, 2001, p. 13).

For conventional laser printers without power management features, a low-cost plug in timer or printer shut down device can automatically shut off printers at night and on weekends. Such external hardware controls are discussed in the next section.

I.6.2 Printer Opportunities

- *Replace laser printers with Inkjet printers*

Impact and Inkjet printers use 5-20 percent of laser printer energy and provide good speed and quality for many applications. Another energy-saving feature of ink jet printers is their ability to print on paper that has already been used on one side. As mentioned above in the Copier discussion above, reusing paper can save energy overall and can directly reduce paper supply costs.

- *Printer Turn-off campaign.*

The simplest action to save printer energy is to shut the machine off at night. While this recommendation is particularly important for conventional printers without power management, it is important to turn off ENERGY STAR printers as well as they can draw up to 30-45 watts when in low power mode. Nighttime status for commercial usage of laser printers was estimated as 70% on (Kawamoto, 2001, p. 29).

I.6.3 Printer Measure Barriers

- For black and white high volume copies, inkjet printers still cannot compete with laser printers in terms of noise, speed, and quality.
- ENERGY STAR laser printers still draw significant energy when in low-power mode. Inkjet printers are inherently ENERGY STAR compliant because of their low power use in standby mode.
- Procedures for enabling power management are not standardized. As a result, power management enabling usually requires menu searches or an owner's manual.

I.6.4 Printer Observations and Trends

In terms of trends, the increasing call for personal printer color capability printers is leading towards an increasing demand for ink jet printers, and associated improvements in energy efficiency (adding color capability to a laser printer increases cost substantially). However, there has also been a simultaneous increase in black and white personal laser printer popularity due to the faster and quieter features of laser printing, along with reductions in cost of personal laser printers.

I.7 EXTERNAL CONTROLS

I.7.1 External Control Description

Occupancy sensors have been used for years to conserve energy in office lighting applications. The application has expanded to include other office equipment as "plug-load sensors" incorporate an occupancy sensor with a relay that is able to turn equipment that is plugged into it on or off. The plug-load sensors range from devices that control a single electrical outlet or piece of equipment, to devices that control multiple outlets and can work together with other sensors.

A typical configuration would be an occupancy sensor that works with a power strip and has several plugs that are switched by the sensor and several plugs that are not. The sensors normally use a passive infrared (PIR) or ultrasonic technology to sense movement. The PIR sensor is a line-of-sight device that senses changes in the warmth of occupants. The ultrasonic sensor does not require line-of-sight and detects movement by the changes in ultrasonic waves that it transmits and, when reflected back, receives.

Many organizations are managing their increasing plug loads by employing external control devices such as The Wattstopper ISOLe series. California utility rebate programs, such as Express Efficiency, offer rebates for such PIR or ultrasonic sensors that are used in cubicle and office applications. While such external controls are often more expensive than methods of power management enabling, they are often the only feasible option for energy efficiency for existing equipment (e.g., Windows NT systems).

I.7.2 External Control Opportunities

- *External hardware on equipment where PM enabling is not possible*

An external hardware control can be applied to office equipment for which power management enabling is not possible. For example, monitors on Windows NT and CPUs on a network may be ENERGY STAR compliant but the operating system will not allow power management enabling. If the monitor is hooked up to a plug load sensor or an external hardware devise such as Bayview Tech's Monitor Miser, the same energy savings as enabling power management could be achieved for that monitor.

Equipment maintenance costs should also decrease and equipment life extended in many situations, due to decreased run times for equipment. External hardware controls are particularly applicable for retrofitting older equipment that is not likely to be replaced soon.

- *External hardware on equipment with PM*

Even if power management is enabled, external hardware can provide nighttime shutdown that is more reliable than manual shutdown. For example, external hardware control on a copier that is left on overnight and weekends (which often occurs because no one is responsible for turning it

off) will turn the copier off after the area is unoccupied and will turn on when employees arrive for the next workday. If the copier uses 150 watts in standby mode, is off for 13 hours every weeknight and 24 hours every weekend day, the annual energy savings would be 885 kWh (the difference between 8,760 hours of continuous operation and 2,860 hours of sensor controlled operation times the 150 watts stand-by demand).

Once in place, external hardware such as plug load sensors can simultaneously accommodate a variety of equipment simultaneously, including: task lighting, computer monitors, radios, fans, calculators, heaters, heating pads, and other devices on a plug load sensor.

I.7.3 External Control MEASURE BARRIERS

- External hardware does require a capital investment. While that cost can be recouped in less than two years in most cases, cost is a barrier to marketing. For example, in the above copier example, at $0.10/kWh the annual cost savings would be $88.50. If the sensor costs $50 the pay back period would be seven months.
- The hardware requires installation by the user or by facility staff to ensure energy savings. It also requires placement attention in workspace redesign.

I.7.4 External Control Observations and Trends

External hardware controls are great for retrofitting older equipment that is not likely to be replaced soon. As Windows NT phases out, the market for hardware that controls only the monitor will shrink. The cost-effective applications of occupancy-based plug load sensors will also shrink.

I.8 DATA CENTERS

I.8.1 Data Center Description

A data center provides several functions: storage, fire protection, backup, and network connectivity via a high-capacity backbone. Data centers are generally custom-built poured concrete structures with raised floors and a dedicated cooling system. The building contains large numbers of high speed CPUs (central processing units), routers, hubs, and tape drive backups, and they require extensive cooling systems to handle the intensive heat loads generated by computer equipment.

Data centers consume an order of magnitude more energy per square foot than office space in general. They demand high quality and reliable power for computer use and for extensive cooling. Because of these needs, data centers are generally designed for 85 W/ft^2 heat load, while actual heat load is closer to 50 W/ft^2. For comparison, office space is typically about 5 W/ft^2.

I.8.2 Data Center Opportunities

- *Replace existing servers and other processors with energy-efficient versions*

Information processing equipment is rapidly changing to meet demand for smaller servers with more computing power. It is anticipated that servers and other information processing equipment will be changed every 3-4 years. Because of the short equipment life, lower power equipment can be introduced cost effectively. Power supplies for most servers are only about 60% efficient.

- *Improve HVAC efficiency of facilities housing data centers*

Energy savings can be achieved through HVAC improvements. Standard designs use inefficient computer room air conditioners (CRAC units) for cooling the servers. Efficient cooling systems use high-efficiency chillers and centralized air handlers with VSD fans. Users are more likely to go to centralized HVAC systems when CRAC units are in short supply as occurred during the recent dot.com boom.

- *Design new data centers with appropriately sized or back-up power supplies*

Backup power supply can reduce design requirements. Fuel cells or thermal storage may be options in the future. Also, recent reductions in processor energy use can reduce the sizing requirements of back-up generating equipment.

I.8.3 Data Center Measure Barriers

- Time to market and reliability are of the utmost importance to the data center industry. Therefore, there is a tendency to stick to known designs.

- The data center industry lacks experience in centralized and efficient HVAC design. Designers and customers tend to rely on proven designs, which can be constructed and operated by personnel with minimal new training. N + 2 redundancy covers errors.
- Power and cooling are not a significant part of infrastructure and operational costs. Energy costs are minimal compared to revenues.

I.8.4 Data Center Observations and Trends

A data center has constant, flat internal load shape. Electronic equipment, cooling and ventilation equipment is run 24 hours a day. The internal load grossly dominates, so there is relatively little change with hot weather associated peak system loads.

Demand for data center space is driven by migration of corporate data processing to centralized processing, server space for web customers, and increasing complexity of e-businesses (IDC, 2000). Large facilities are growing quickly because they have scaling advantages.

At the present time, two relevant estimates have been made for energy use. One is a Lawrence Berkeley National Laboratory calculation, which estimates that 445 MW are dedicated to networks and data centers in California (Aumann, 2000). Another estimate, based on custom sorted data by a PG&E account manager, put the figure for new requests for power in the PG&E service area in 2000 to be 341 MW (PG&E, 2000).

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J

DSM ASSYST MODEL DOCUMENTATION

J.1 INTRODUCTION

DSM ASSYST™ (Demand-Side Management Technology Assessment System) is a tool developed to assess the technical, economic and market potential of DSM technologies in the Residential, Commercial and Industrial sectors. Based on user specified information about base technologies, conservation technologies, load shapes, utility avoided costs, utility service rates, and economic parameters, DSM ASSYST yields numeric data for a variety of criteria. The user can then evaluate and compare technologies. DSM ASSYST allows the user to analyze each DSM technology in multiple combinations of building types, market segments, end uses, and vintages both individually and compared to other DSM technology options.

DSM ASSYST is a series of spreadsheets designed to run on Microsoft's Excel for Windows Version 4. The majority of the DSM ASSYST analysis is performed within a spreadsheet model called ASSYST. ASSYST is an input-output model. In the course of a user specified analytic run, input files are automatically brought in to ASSYST, and corresponding results files are automatically saved.

J.2 SYSTEM REQUIREMENTS

The following hardware and software was used to develop DSM ASSYST. We suggest running DSM ASSYST on a similar system.

Personal Computer:
486 PC

Hard Disk:
A hard disk with at least 10 megabytes of free space.

Memory:
8 Megabytes

Operating System:
DOS 5.0

Software:
Microsoft Windows and Excel for Windows 4.0

J.3 GETTING AROUND IN EXCEL

DSM ASSYST was written for use by trained analysts. The user should be familiar with basic spreadsheet operations in Excel for Windows and with movement within spreadsheets, copy commands, delete commands, transferring data between spreadsheet files, and running macros.

DSM ASSYST is not protected against accidental user error. As spreadsheets are extremely susceptible to the accidental overwriting of data and/or formulas, it is recommended that a copy of the model is preserved for reference.

J.4 PRE-ANALYSIS INSTRUCTIONS

J.4.1 Preliminaries

The following spreadsheet files are discussed in this manual.

ASSYST3.XLS: This is the actual DSM ASSYST spreadsheet model. ASSYST is used for the Basic Analysis, Supply Analysis and to produce input for the Market Potential Analysis.

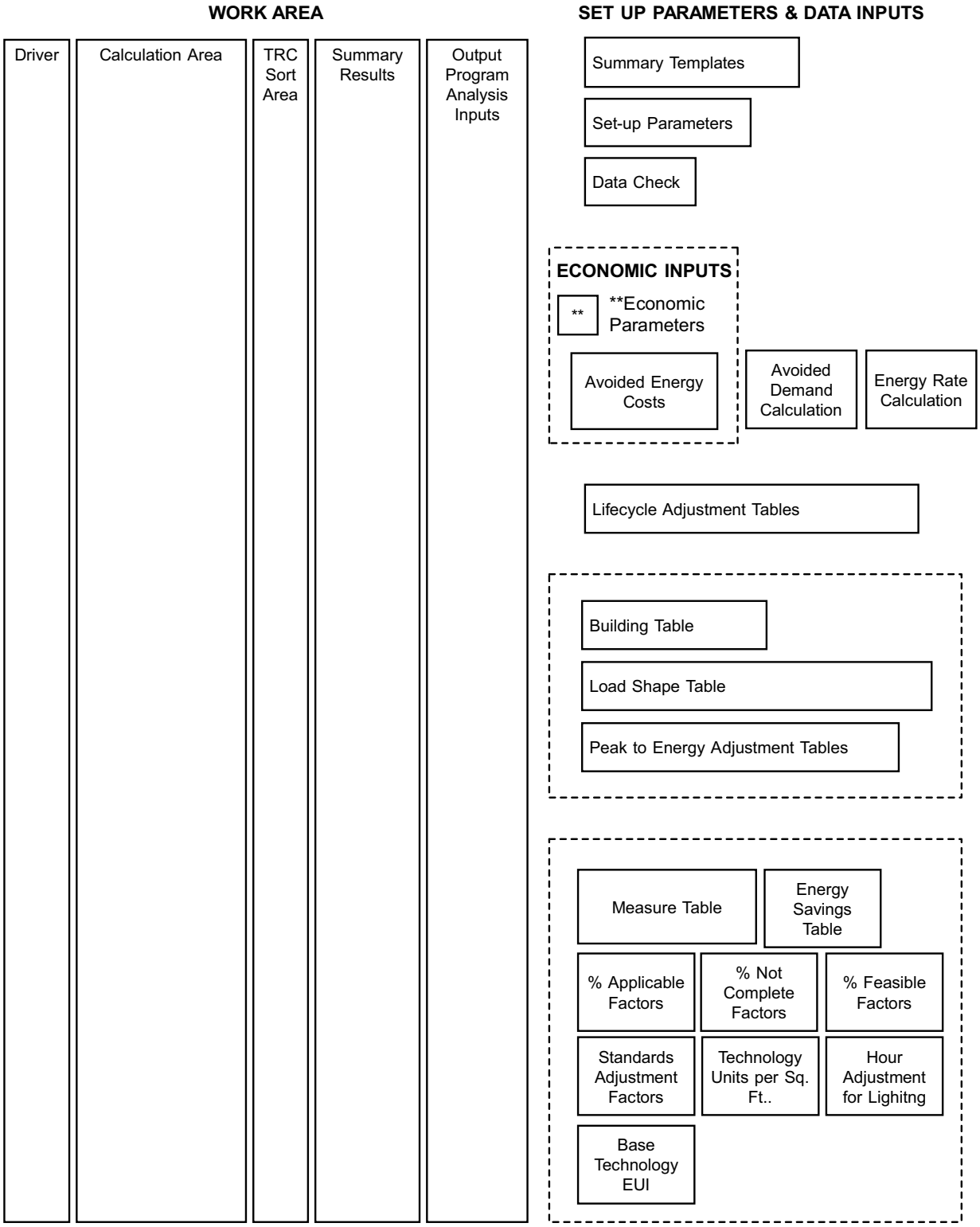
See Figure I-1 for an overview of the ASSYST spreadsheet layout.

The ASSYST work area consists of the Driver area (Columns A through E), the Calculation area (Columns F through BT), the TRC Sort area (Column BU through BY), the Summary Results area (Columns CA through CV), and the ASSYST output that are inputs for the Market Potential Analysis (Column CX through DS). The work area expands or contracts to the number of rows necessary to perform and report the analysis. The number of rows are governed by the number of rows in the Driver. An 8 megabyte ram PC can handle approximately 400 rows of analysis at one time.

The other portion of ASSYST consists of set up parameters and data inputs. This area occupies Columns EU through HH. All data and formulas in this section of the model are spatially relative and therefore it is imperative that no rows or columns are added or deleted from the model.

ASSYST is completely macro driven and will automatically import Drivers, Economic Inputs, Building Based Inputs and Technology Based Inputs and will automatically name and output results. Users have full access to all algorithms and intermediary results in ASSYST for analytic inquiry and quality control purposes, yet never need to work within the ASSYST directly. **Do not save ASSYST.**

Figure J-1
Overview of Technical Potential Spreadsheet



BATCHXYZ.XLS: The BATCHXYZ file is the main file that guides the DSM ASSYST analytic process. BATCHXYZ first translates user defined characteristics into the names of files that are needed to perform each DSM ASSYST analytic run. These characteristics may take the form of market segments, end uses, sectors, vintages, and types of analysis. BATCHXYZ then works in conjunction with DSM ASSYST macros to guide DSM ASSYST through the analytic process. The BATCHXYZ spreadsheet automatically names input and output files that will be called upon by the DSM ASSYST Macro.

Figure I-2. is the Map of the BATCHXYZ File. Columns A through J are for the user to specify characteristics. Column A is for the type of analysis (BASIC or SUPPLY). Column B is for Sector (RES, COM, or IND). Column C is for Vintage (EXISTING or NEW). Column D is for End Use. End Use names can reflect how the end uses are defined (e.g. ALL, CONDITIONING, COOLING, HEATING, LIGHTING, REFRIGERATION, HVAC, etc.) Column E is for Segment (0 through 9). Column G is for identifying the input Batch # (1 through 9). Column H is for identifying the output Batch # (1 through 9). Separating the input and output Batch numbers allows use of the same input files for economic sensitivity analysis while maintaining means of labeling output files differently. Column I is for the utility building data file name. Column J is for the utility economic data file name. These two files usually have a three letter utility name abbreviation plus a number. The number is useful in identifying different building sectors or sets of economic input data such as alternative avoided costs. Shaded Columns K through U are the names of files that DSM ASSYST will import, create and/or use in the analytic process.

Figure J-2
Map of the BATCHXYZ File

INPUT AREA	FILE NAMES CREATED FROM INPUTS
Column A-J	Column K-U

ASSYST will run all rows of run characteristics defined in the BATCHXYZ starting with Row 5 until it reaches a row in Column A with no data. Each row of characteristics is used for a separate run of ASSYST.

ASMAC2B.XLM: This is the macro file that contains the macros that run DSM ASSYST. These macros manage data movement, including opening and saving files, and oversee all the analytic processes.

M_*.XLS Technology Input Files: These files contain sets of tables with technology based input data which are loaded into ASSYST. Names for the M_ files are derived in the BATCHXYZ. M_B*.XLS files contain data for the Basic Analysis and M_S*.XLS files contain data for the Supply Analysis. For a more detailed description of these tables, refer to Section 10.

D_*.XLS Drivers: The first five columns of the work area within ASSYST contain information that informs the model of technologies being analyzed, end uses, building types and segment context. This information is used to operate the lookup tables and thereby specify which parameters are to be used in the analysis. Names for the D_ files are derived in the BATCHXYZ. D_B*.XLS files are used for the Basic Analysis and D_S*.XLS files are used for the Supply Analysis. For a more detailed description of these files, refer to Section 11.

BLD_*.XLS Building Files: These files contain the Building Tables, Load Shape Tables, and Peak to Load Shape Tables. Names for the BLD_ files are derived in the BATCHXYZ. For a more detailed description of these files, refer to Section 9.

ECO_*.XLS Economic Parameters Files: These files contain utility specific economic parameters including discount rates, inflation rates, technology implementation rates, avoided cost tables, and customer rates. Names for the ECO_ files are derived in the BATCHXYZ. For a more detailed description of these files, refer to Section 8.

B_*.XLS Basic Output Files: These files contain the results from the Basic Analysis. Names for the B_ files are derived in the BATCHXYZ.

S_*.XLS Supply Output Files: These files contain the results from the Supply Analysis. Names for the S_ files are derived in the BATCHXYZ.

POSTBAT.XLS: This ,file is used to control post ASSYST processing of Supply Output and the Market Potential Analysis. The file contains the names of Supply Output files and Program Input and Output files. Supply Output file names are listed in Column A and the Program Input names are listed in Column D. The Supply Output File names can be found in BATCHXYZ and can be copied.

POSTBAT works similar to BATCHXYZ. It starts running at Row 6 and continues until it encounters a row without data. Post Supply Analysis and Program Analysis are completely independent and are run by separate macros.

POSTBAT will automatically name Program Output file based on the names of Program Input files by changing the first letter "P" (P_*.XLS) to an "O" (e.g. O_*.XLS). The algorithm to create the output name is located in the shaded Column F.

PENWORK.XLS: This file is used for the final portion of the market potential analysis. For a more detailed description of this file, refer to Section 5.3.

IB_*.XLS : These files are produced in Basic ASSYST and are inputs for the P_*.XLS Program Input Files. For a more detailed description of how these files are used, refer to Section I.5.3.

IS_*.XLS : These files are produced in Supply ASSYST and are inputs for the P_*.XLS Program Input Files. For a more detailed description of how these files are used, refer to Section I.5.3.

P_*.XLS Program Input Files: These files are produced in ASSYST and are inputs for the final portion of the Market Potential Analysis. For a more detailed description of how these files are used, refer to Section I.5.3.

O_*.XLS Program Output Files: These files are output from PENWORK and contain the results of the Market Potential Analysis. For a more detailed description of how these files are used, refer to Section I.5.3.

TR_*.XLS TRC Files: These files contain the TRC Sort resulting from the Basic Analysis. These files are used to establish the Driver order used in the Supply Analysis. For a more detailed description of how these files are used, refer to Section I.5.

J.4.2 Installation Procedure

1. Load Microsoft Excel for Windows on your computer and make sure it is running properly.

2. On your hard drive or network, set up a system of sub directories. Although sub directories are not necessarily needed, we recommend them for file management purposes. We recommend:

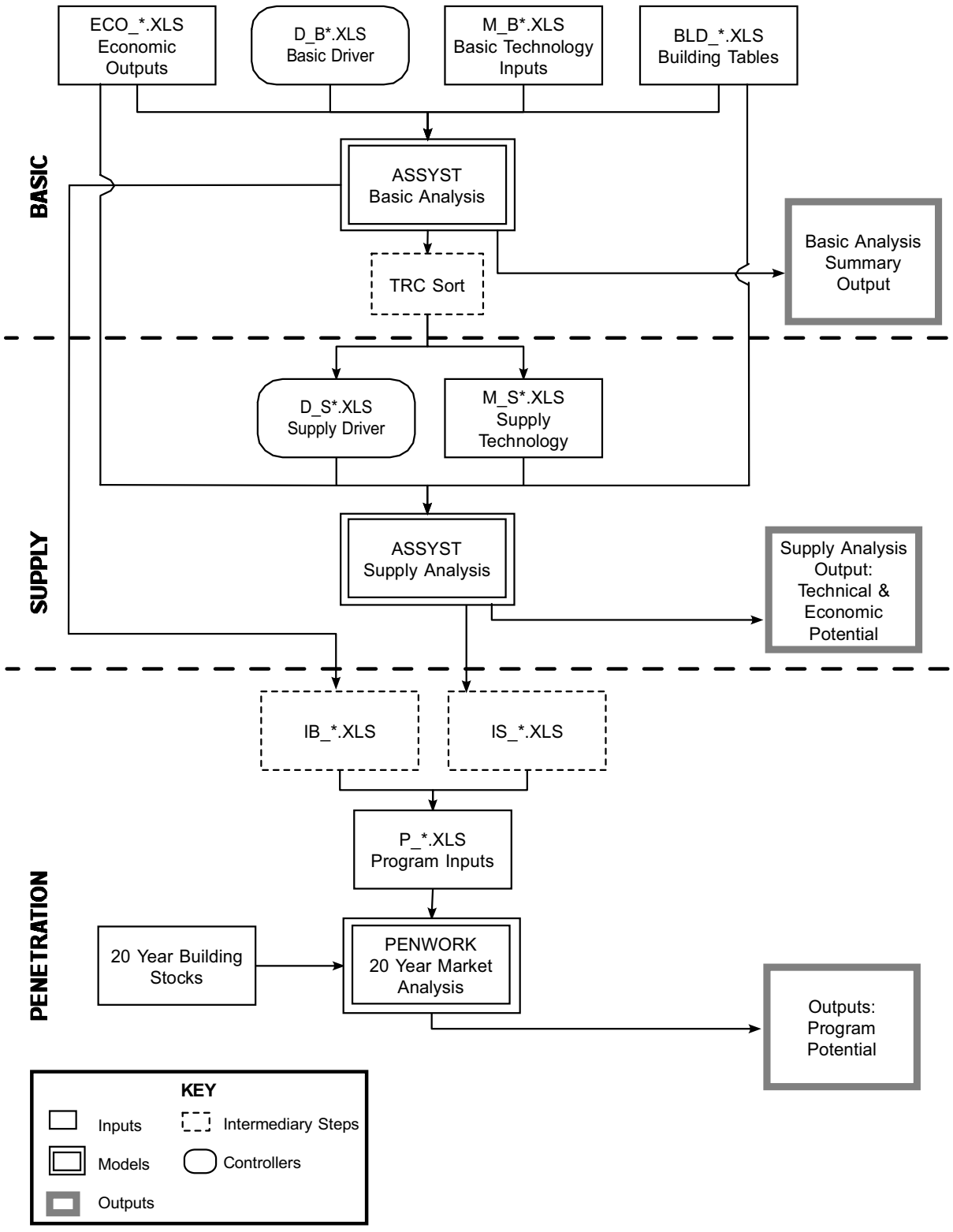
   - One sub directory that contains the ASSYST, BATCHXYZ, ASMACH, PENWORK, and POSTBAT files.
   - Residential, Commercial, Industrial data contained in separate sub directories.
   - Batch numbers assigned to different runs to help distinguish them. We advise keeping different batches in different sub directories.
   - Use other sub directories as desired.

3. Load DSM ASSYST files on your hard drive or network using sub directories as appropriate.

J.5 METHODOLOGY AND OPERATION

For a flow chart of the DSM ASSYST Analytic Flow, see Figure I-3.

Figure J-3
DSM ASSYST Analytic Flow



J.5.1 Basic Analysis

In the Basic Analysis each technology is assessed individually by comparing it to a base case. Comparisons are made at a high degree of segmentation. The segmentation may include, but is not limited to sector, building type, end use, vintage and geographic area.

Four types of information, contained within four spreadsheet files, are automatically brought into the ASSYST model. These files must be prepared by the user prior to running ASSYST. These files are the appropriate versions of:

ECO_*.XLS economic parameters file containing utility rates paid by customers, avoided costs and other utility specific economic parameters,

BLD_*.XLS building file containing square footage or number of households and load shape data,

M_B*.XLS measure file containing technology based inputs for the Basic Analysis, and

D_B*.XLS driver file containing information that drives the analysis process.

Preparation of the input files is discussed in later sections.

Outputs of the Basic Analysis include a B_*.XLS Summary Basic Output spreadsheet file that contains an assessment of how much energy and demand each technology will save relative to the base case within each segment. In addition, the summary contains cost data, savings fractions, before and after EUIs or UECs, service life, the levelized costs of implementing the technology, and results of economic tests including the TRC test, participant test and customer payback.

DSM ASSYST also produces a TR_*.XLS file that contains all the measures that were assessed in the Basic Analysis sorted in the highest to lowest TRC order within each segmentation. This file serves as a guide for the implementation or stacking order that will be used in the Supply Analysis. This will be discussed in more detail in the next section.

Finally, the Basic ASSYST produces measure level information that can be screened and combined into program inputs. The Basic ASSYST output containing this information is found in IB_*.XLS files. Use of the IB_*XLS files will be discussed in more detail in Section 5.3.

J.5.2 Supply Analysis

In the Supply Analysis each technology, within each market segment, is stacked, or implemented, such that all energy savings are realized from preceding technologies prior to the implementation of all subsequent technologies. The stacking order generally follows the TRC sort order, highest to lowest, resulting from the Basic Analysis.

Three types of input changes are required when moving from the Basic Analysis to the Supply Analysis.

1. For the Supply Drivers, D_S*.XLS, technologies must be listed in the order that they will be implemented within each market segment. Although the TRC sort provided in TR_*.XLS files is a useful guide, the user must make sure that the order is logical. Some measures may need to appear in a different order and other measures may need to be eliminated from the analysis. For example, if a SEER 12 air conditioner has a higher TRC than a SEER 11 unit, the SEER 12 unit will be implemented first leaving no savings potential for the SEER 11 unit. Thus, the SEER 11 unit should be excluded from the Supply Driver.

2. Once the Supply stacking order is established, energy savings must concur. In the Basic Analysis the energy savings matrixes found in the M_B*.XLS files are developed assuming that each technology will be compared against a base case technology. In the Supply Analysis, after each technology is implemented, it becomes the base case for the next technology in the stacking order. Some technologies do not affect the percent energy savings of other technologies. For example, a 10% savings fraction from insulation is not affected by a higher efficiency water heater. The amount of energy savings will be reduced because there is less energy available to save, but the 10% savings fraction will still be relevant. However, if a high efficiency water heater with a savings fraction of 15% is implemented followed by a super high efficiency water heater with a savings fraction of 25%, the change in savings must be recalculated. This is because the high efficiency model becomes the base case for the super high efficiency model. The formula for converting the energy savings is:

   New Savings Fraction = 1- ((1-Saving Fraction(higher))/(1-Saving Fraction(lower)))

   = 1- ((1 - .25)/(1 - .15))

   Hence, the savings fraction for the super efficient water heater in the M_S*.XLS file should be reduced from 25% to 11.8%

1. All costs in the M_S*.XLS technology input files need to be incremental. In the example above, if the base case cost is $200, the high efficiency model cost is $300 and the super high efficiency model cost is $450, then in the M_S*.XLS technology input file cost should be calculated as follows.

Technology	Actual Cost	Base Cost	Incremental Cost	Cost used for Supply Analysis
Base Heater	$200	$200	$0	$0
High Eff. Heater	$300	$200	$100	$100
Super Eff. Heater	$450	$300	$150	$150

Note: In the Supply Analysis, for all measures, the "Initial Cost" and "Replace Cost " (Column K and L in the M_*.XLS files) should both equal 1 for "full".

Output from the Supply Analysis is the full technical and economic potential plus energy and demand supply curves.

Finally, the Supply ASSYST model produces measure-level information that can be screened and combined into program inputs. The Supply ASSYST output containing this information is found in IS_*.XLS files. Use of the IS_*XLS files is discussed in more detail in Section 5.3 below.

J.5.3 Market Potential Analysis

The Market (or Program) Potential Analysis module of ASSYST is a separate input-output model designed to calculate the costs and net energy and demand savings from DSM programs under a variety of marketing scenarios. The program module evaluates each DSM measure in each market segment. Using a stock accounting algorithm over a period of 20 years, the market module first calculates the number of customers for whom the measure will apply. Second, the model calculates the number of informed customers based on the amount of money spent on advertising. Third, the model calculates the number of customers who will implement the technology based on their Benefit/Cost ratio. Finally, the model compares the number of customers that implement the technology due to the program with those who would take the technology anyway (naturally occurring). Per unit energy and demand savings are applied to the net number of customers (total minus naturally occurring) over the twenty year period. After completing the analysis, the results are automatically summed across measures to provide program level costs and savings for 20 years, and formatted for input into Integrated Resource Planning models.

Using The Market Potential Module:

1. Screen measure level outputs from the ASSYST Program Analysis Input files (IB_*.XLS or IS_*.XLS). Determine which measures in which segment are appropriate for DSM programs. The macro "program building" (ctrl "p") will automatically copy the desired block of measure data, from Row 6 until the first blank Row, Columns A through U. It will then place the data in a user defined Program Input file (P_*.XLS), appending it to the existing measure data, or starting at Row 23. Use an existing Program Input file (P_.XLS) as a template and remove the unwanted data (from col. A to U, at Row 23). A separate Program Input file (P_*.XLS) should be made for each separate program.

   The choice of whether to take energy savings and demand savings data from the basic output (IB_*.XLS) or the supply output (IS_*.XLS) is left to the discretion of the analyst. The basic output may tend to overestimate program savings potential because it does not account for measure interaction. The supply output may tend to underestimate program

potential due to the supply stacking methodology that assumes full implementation of each applicable measure prior to adding subsequent measures within a segment. This results in reduced energy savings potential for the subsequent measures. The analyst may also choose some value between the extremes.

2. For each measure, set the technology/market segment specific parameters. See Figure I-4 Map of Program Input File for parameter locations.

   Incentive: The incentive can be set at a specific level (e.g., $10, "10") or as a percent of some other value(e.g. 30% of the customer cost , "=L23/K23*.3"). The units are $/sq. ft. or $/household.

   Technology Acceptance Curve Parameters:
   MAX: This parameter determines the highest possible annual acceptance rate for the technology.
   MID: This parameter determines the inflexion point of the curve. It is generally one over the Benefit/Cost ratio that will give the value of 1/2 the maximum value.
   FIT: This parameter determines the general shape of the curve.

3. Set the program specific parameters.

   Administration Budgets: This is the amount of money spent each year on administration. These costs have no impact on the number of customers who will participate but should reflect the actual cost of administration to enable accurate cost analysis.

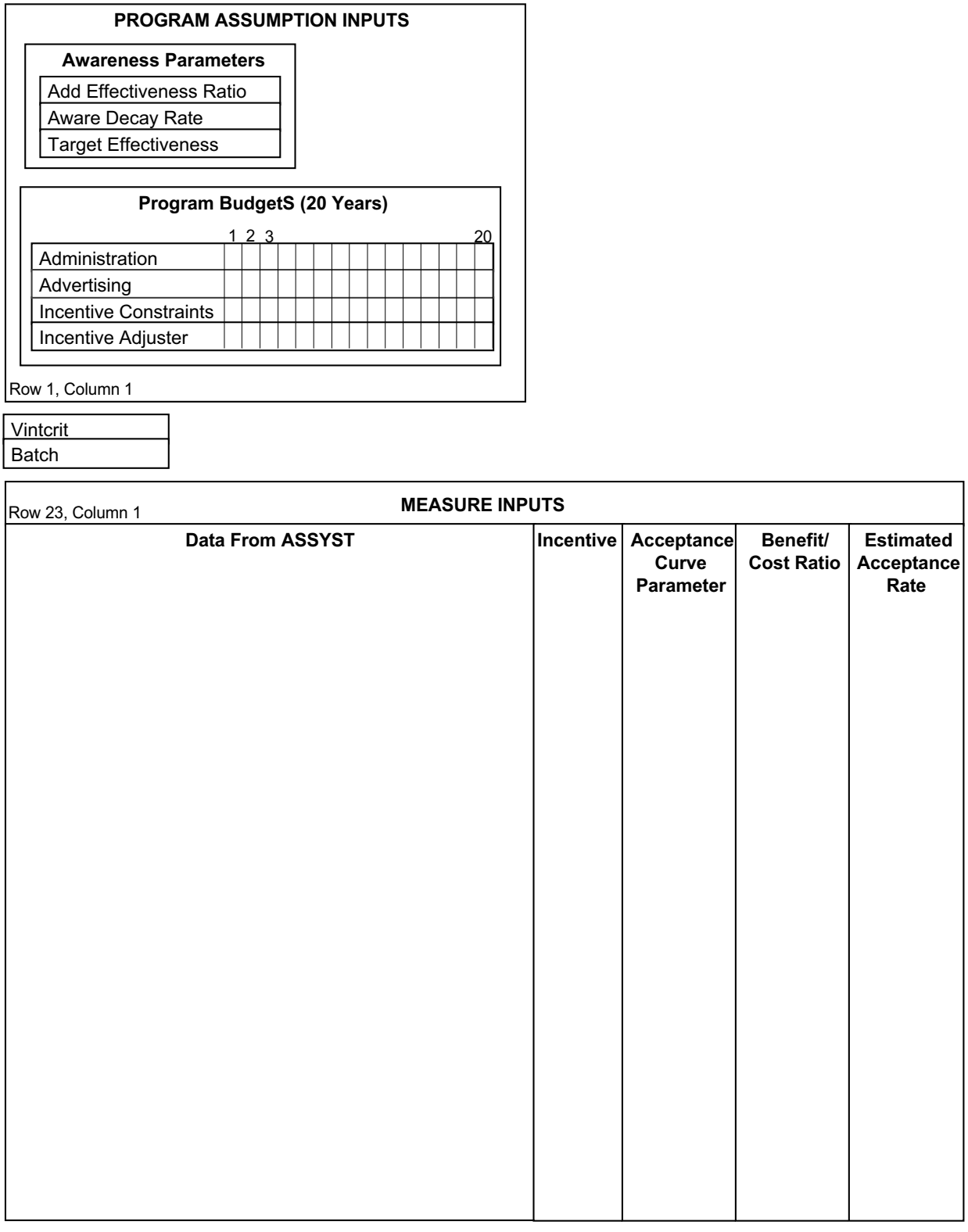
   Advertising Budgets: This is the amount of money spent each year on advertising. The advertising budget affects the number of new customers who are informed about the program each year.

   Advertising Effective Ratio: This coefficient represents an estimate of the amount of advertising budget required to inform one household or one square foot of commercial space about the program. The units are $/sq ft or $/household, depending on the sector being modeled.

   Awareness Decay Rate: This parameter represents an estimate of the rate of annual decay in customers' awareness of the measures.

   Target Effectiveness: This parameter controls how effectively advertising dollars are being directed toward eligible customers. The value should be set between "0" and "1". A value of "0" means that the money spent on advertising is not targeted and is informing all the applicable building stock at the same rate independent of whether the stock is eligible for measure implementation. A value of "1" indicates that all money spent on advertising is directed toward customers who have building stock that is eligible for measure implementation.

Figure J-4
Map of Program Input File



Incentive Constraint: This parameter adjusts the number of households or square feet that can receive incentives. The default value for this parameter is "1". The parameter is input for each year and can be used when incentive payments are expected to exceed the program budget. A value of ".5" means that half the households or square footage will be able to receive the incentive. Determining a set of values for this parameter may require an iterative process.

Incentive Adjuster: This parameter will adjust the incentive amount. The default value for this parameter is "1". The incentive for each measure is set at the measure-level as discussed above in Section 5.3.2. This parameter is input for each year and can be used to model changes in incentive level over time. A value of "2" will double the incentive, a value of "0" can be used to turn the incentive off.

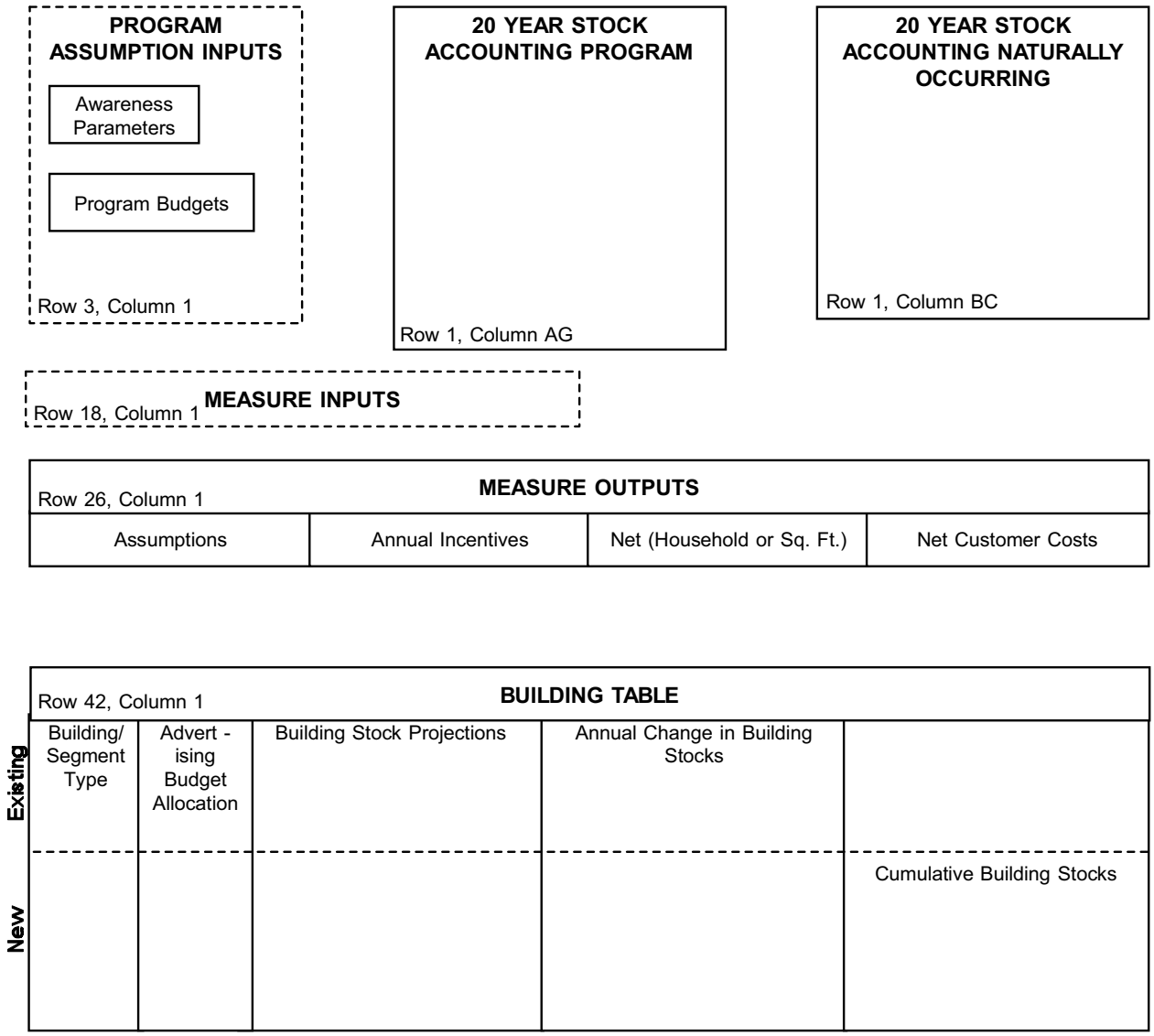
Vintcrit: This parameter tells the model which segment code is the start of new construction buildings.

Batch: This parameter is for the user to keep track of their model run.

4. Update the building table in PENWORK.XLS. This table contains the number of households and/or square footage values from the starting year through the following 20 years. The values for existing buildings are the cumulative and decayed existing building stock. The values for new buildings are the number of new buildings for each year. Buildings should appear listed by ascending Segment code number. The Segment code will be calculated automatically based on the Segment/Section and the building number. Column E contains the Advertising Budget Allocation which restricts the amount of total advertising budget for specific building types. For example, setting the values to 0.95 for single-family homes and 0.05 for multi-family homes will result in the advertising budget split such that 95% of the advertising budget will be used to inform single-family customers and 5% will be used to inform multi-family customers. The default Advertising Budget Allocation values should be the portion of square footage or households of each building type relative to the total for the segment. See Figure I-5 Map of PENWORK for an overview of the PENWORK module.

5. Enter the names of the Program Input files P_*.XLS into the POSTBAT.XLS spreadsheet Column D. Copy down the formula in Column F that creates the O_*.XLS name.
6. Run ASMAC2B.XLM: "pen_run" macro.
7. Review results in O_*.XLS files.

Figure J-5
Map of PENWORK



J.6 PREPARING FOR ANALYSIS

1. Compile all necessary input data. This includes the preparation of Economic Parameter Input Files (ECO_*.XLS), Building Input Files (BLD_*.XLS), Technology Input Files (M_*.XLS) and Drivers (D_*.XLS). **Note: All input tables that are brought into ASSYST function as lookup tables. Exact spatial relationships within these files must be maintained for ASSYST to work properly.**

2. Set up a BATCHXYZ file such that it contains the elements of the analysis that you are interested in running. The first analytic run should start on Row 5 and each subsequent analytic run should be on succeeding row until all are entered. DSM ASSYST will evaluate each analytic segment from Row 5 until there is a blank Row.

3. Check the ASMACH .XLM macro file to make sure that all parts of the analysis that are engaged are pertinent to the analysis being performed. A more detailed description of ASMACH is found in Section 12.
4. If running Supply Curve Analysis on the back end of the Supply Output and/or if running the Market Analysis, set up the POSTBAT.XLS file as described in Section 4.
5. Make sure all input files are in the current sub-directory and are closed.
6. Make as much memory available to EXCEL as possible by entering expanded windows mode, close unnecessary applications or other methods available to you.

J.7 SIMPLE OPERATIONS: RUNNING DSM ASSYST START TO FINISH

The following steps assume a first time run of the entire process. Excel must have access to the proper sub-directory at all times, that is, the directory where the files to be analyzed are located.

1. Open ASSYST3.XLS, BATCHXYZ.XLS, and ASMAC2B.XLM.
2. Set BATCHXYZ to run the Basic Analysis as described in Section 4. Confirm that Excel has access to the directory with the files that you intend to run.
3. Run the ASSYST macro by pressing (Ctrl "a"). Evaluate the Basic Output as desired.
4. Evaluate the results of the TRC Sort in the TR_*.XLS file. Build Drivers (D_S*.XLS) and Technology Input Files (M_S*.XLS) for the Supply Analysis.
5. Set BATCHXYZ to run the Supply Analysis.
6. Run the ASSYST macro by pressing (Ctrl "a"). Supply Outputs and Program Analysis Inputs will be generated.
7. Close ASSYST to make room on the system. **DO NOT SAVE ASSYST.**
8. Open the Program Analysis Input files (I_*.XLS) and a Program Input file (P_.XLS). Create Program Input files (P_.XLS) by combining the desired measures into programs. The macro (Ctrl "p") moves the block of data in (I_*.XLS) from row 6 until a blank row into a user defined Program Input file (P_.XLS). Set the technology and program parameters. Close these files after completing.
9. Open POSTBAT and place Supply Output file names in Column A and the Program Input names in Column D.
10. Close BATCHXYZ.
11. Run the Supply_Curve_Sort macro by pressing (Ctrl "c"). This will provide further evaluation of the Supply Output including supply curve sorts for both energy and demand. Evaluate further as desired.
12. Open PENWORK.

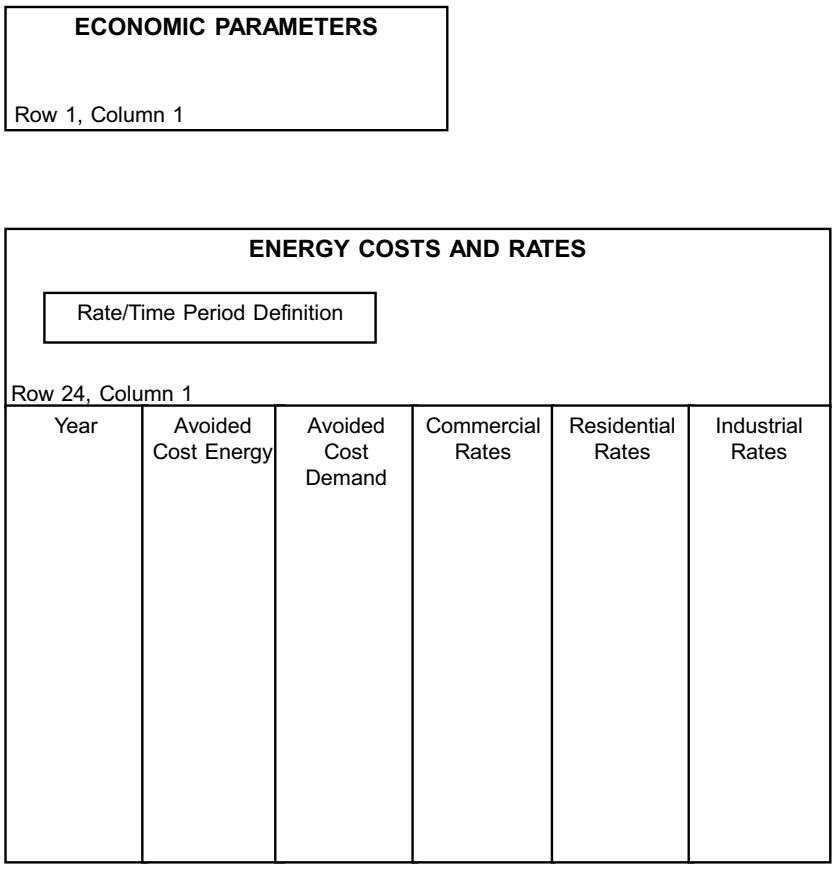
13. Run the Pen_Run macro by pressing (Ctrl "q"). This provides the Market Potential under each of the program scenarios specified by P_*.XLS. Summarize and evaluate further as desired.

Note: Basic and Supply Analysis can be run within the same BATCHXYZ run if Supply Technology Input Files and Drivers are already built and will not change due to changes in the Basic TRC sort.

J.8 ECONOMIC PARAMETER INPUTS (ECO_*.XLS)

The following inputs are general economic parameters. These data and their locations are shown in Figure 8-1 Map of Economic Parameter Inputs.

Figure J-6
Map of Economic Parameter Inputs



J.8.1 Economic Parameters

Utility Name: This cell is informational and used in the Data Check.

Sector: This cell is informational and used in the Data Check.

Batch #: This cell is informational and used in the Data Check.

Utility Discount Rate (UTIL_DISC_RATE): This is the discount rate that the utility uses to do net present value analysis when considering cost streams over the life of projects.

Customer Discount Rate (CUST_DISC_RATE): This is the discount rate that utility customers would use when calculating the net present value of savings from reduced energy bills resulting from energy conservation.

General Inflation Rate (INFLATION_RATE): Projected inflation rate.

Base Year (BASE_YEAR): This is the year to which all cost and benefits are normalized. It is also the first year for data in the Avoided Cost and Rate Tables. In the model delivered, the Base Year is 1992.

Start Year (START_YEAR): This is the first year of the analysis. Changing the Start Year changes the 20-year period over which the cost and benefit streams are calculated. The Start Year can not be earlier than the Base Year.

Difference: This is the calculated difference between the Start Year and the Base Year.

Utility Line Loss Rate: The percentage of energy lost through line losses.

J.8.2 Energy Costs and Rates Table

Type: Used to identify separate runs for sensitivity analysis.

Energy Units: Used to specify type of currency per kWH.

Demand Units: Used to specify type of currency per kW.

Rate/Time Period Data: Rate/Time period data is to identify what the five available rate/time periods are by name, by abbreviation and how many hours are in each. The Monthly Adjustment for Rates is the number of mouths the monthly demand change will be multiplied times.

Avoided Energy Costs by Rate/Time Period: Columns B through F contain projected avoided cost of energy by rate/time period over time. Entries should be made in nominal monetary units (e.g., dollars). DSM ASSYST will discount the values to the Base Year as part of the analysis.

Avoided Demand Costs by Rate/Time Period: Columns G through K contain projected avoided cost of demand by rate/time period over time. Entries should be made in nominal monetary units (e.g., dollars). DSM ASSYST will discount the values to the Base Year as part of the analysis.

Energy Rate Projections by Time Period: Columns L through P contain projected energy cost by rate/time period over time. Entries should be made in nominal monetary units (e.g., dollars). DSM ASSYST will discount the values to the Base Year as part of the analysis.

Monthly Demand Rate Projections by Time Period: Columns Q through U contain projected monthly demand charges by rate/time period over time. Entries should be made in nominal monetary units (e.g., dollars). DSM ASSYST will discount the values to the Base Year as part of the analysis.

J.9 BUILDING TABLES (BLD_*.XLS)

The following inputs are shown in Figure I-7 Map of Building Tables.

J.9.1 Building Table

The Building Table allows the user to specify up to 10 building segments and up to 14 different types of buildings in each segment. Building types are defined by row and segments are defined by column. Units used for the analysis of the residential sector are number of households. Units used for the analysis of the commercial or industrial sectors are square feet or square meters. The matrix bound by Columns D through M and Rows 8 through 21 contains values. The matrix bound by Columns N through W and Rows 8 through 21 contains definitions of those values. Typically, segments are used to define geographic differences and vintage differences. For example, Segments 1 - 4 may be used to define the number of existing households in four separate utility sub regions and Segment "0" can be used to define the total number of existing households in the utility. Segments 5 - 9 can be used in the same manner for the number of new households.

Header information at the top of the building table is particularly important for keeping track of which building table should be used in which analysis. The Batch # is a useful way to signify the difference between commercial and residential sectors.

Figure J-7
Map of Building Tables

BUILDING TABLE Row 1, Column 1	
Number of Households or Sq. Ft. by Building Type by Segment	Building Type Definitions by Segment

LOADSHAPES BY BUILDING TYPE Row 24, Column 1								
End Use 1	End Use 2	End Use 3	End Use 4	End Use 5	End Use 6	End Use 7	End Use 8	End Use 9

PEAK TO ENERGY RELATIONSHIP TABLE BY BUILDING TYPE Row 44, Column 1								
End Use 1	End Use 2	End Use 3	End Use 4	End Use 5	End Use 6	End Use 7	End Use 8	End Use 9

J.9.2 Load Shape Table

The Load Shape Table specifies what portion of energy is used in each rate time period, by building type and end use. The Proportional Energy Use must sum to 1 for each building type within each end use.

The end use order is typically, though users may specify whatever order they prefer:

Order	Commercial/Industrial	Residential
1	Lighting	Heating
2	Exterior Lighting	Air Conditioning
3	Cooling	Cooking
4	Heating	Refrigerator/Freezer
5	Ventilation	DHW
6	Refrigeration	Clothes washer
7	DHW	Misc.
8	Process	Lighting
9		Dishwasher

This order can change so long as there is consistency between the order and the numbering of end uses in the Technology Input Table (Section 10).

J.9.3 Peak-to-Energy Relationship Table

The Peak-to-Energy Relationship Table is comprised of factors that associate the average demand, as can be calculated from the load shape, to the actual demand for each market segment or building type, for each rate time period, for each end use, coincident with the utility's peak.

To calculate the values, average the demand for each market segment, for each rate-time period, for each end use. Next, divide the actual demand during the utility's peak time period for the end-use for the market segment by the average demand of the same end-use, market segment, and time period. For example, if average demand for high-rise office cooling during the hours that constitutes the summer peak rate-time period is 0.80 kW/Sq. Ft. and the actual demand for high-rise office cooling is 1.20 kW/Sq/ Ft., then the Peak-to-Energy factor is 1.20 divided by 0.80, or 1.5.

End uses are listed in the same order as in the Load Shape Table above.

J.9.4 Customer Coincident Peak-to-Energy Relationship Table

The Customer Coincident Peak-to-Energy Relationship Table is comprised of factors that associate the average demand, as can be calculated from the load shape, to the actual demand

coincident with the customer's peak usage for each market segment or building type, for each rate time period, for each end use,.

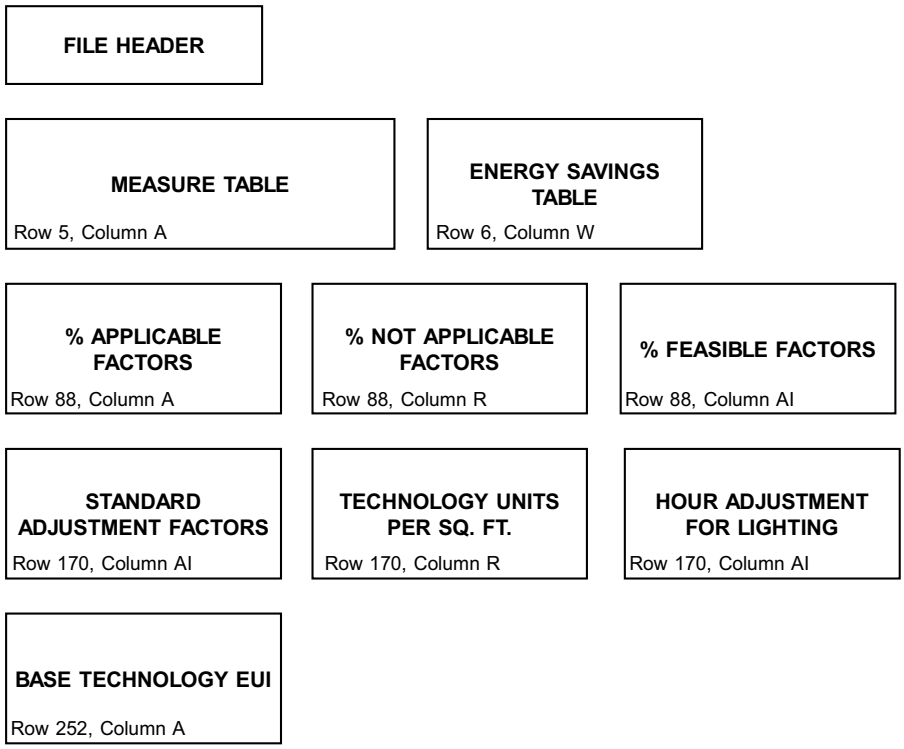
End uses are listed in the same order as in the Load Shape Table.

J.10 TECHNOLOGY-BASED INPUTS (M_*.XLS)

The following technology-based input tables operate as a set and are referenced by the same Measure Numbers. The Measure Numbers, including the Base Technology Measure Numbers, must all be in progressive sequential order for the "look-up" functions to operate properly.

See Figure I-10 for a Map of a DSM Technology Input file.

Figure J-8
Map of Measure Input File



J.10.1 Measure Input Table (M)

DSM Measure Input Tables contain the following data.

Measure Number: Contains the number by which the measure will be referred.

Measure: A brief description or title of the DSM technology.

Savings Units: The engineering units in which energy savings are associated.

Cost Units: The units by which the technology is priced.

Unit Equipment Cost: The cost of the DSM technology. This can either be wholesale or retail but the user should know which it is and it should be consistent in the application of costs. (For the Supply Analysis this should be entered as the incremental cost).

Unit Labor Cost: This is the cost of installing the technology. (For the Supply Analysis this should be entered as the incremental cost).

Incremental Lifetime O&M Cost: These values are used to account for the discrepancies between the O&M cost of the DSM technology relative to the base case technology. This value can be positive (if the measure costs more to operate and maintain than the base technology) or negative (if the measure costs less to operate and maintain than the base technology). Although O&M is generally accounted for on an annual basis, this value should reflect the discounted sum of the annual incremental O&M cost over the life of the technology.

Cost Multiplier: This factor allows the user to increase the cost of a measure without changing the cost in the cost fields. This factor can be used for scenario analysis. The default value should be "1".

Cost Units Per Savings Units: This factor reconciles the differences between cost units and savings units, should they be different thereby making them multiplicative. The default value for this factor is "1."

Service Life: This is the expected life of the measure. If the Service Life is less than 100, the model assumes that the units are years. If the Service Life is over 100, the model assumes that the units are hours. All measures are analyzed over a 20-year period.

Initial Cost (Full = 1, Incremental = 0): This is a toggle switch that tells ASSYST whether to consider the measure a retrofit or replace-on-burnout measure. The toggle should be set to "1" for retrofit measures and the full cost of the measure will be used. The toggle may be set to "0" if the measure is a replace-on-burnout measure and the user wants the initial cost to be the incremental cost between the measure and the base case. (This toggle must be set to "1" for the Supply Analysis.)

Replacement Cost (Full = 1, Incremental = 0): When a measure has a service life of less than 20 years and needs to be replaced one or more times over the 20-year period of analysis, this toggle switch tells DSM ASSYST whether to apply the full cost of replacing the measure or the incremental cost of replacing the measure. The toggle is usually set to the same value as it is in the Initial Cost. (This toggle must be set to "1" for the Supply Analysis.)

Full Unit Cost: This is the sum of the Unit Equipment Cost, the Unit Labor Cost, and the Incremental Lifetime O&M Cost and is automatically calculated.

Relative Energy Reduction Factors (by rate time period): These five columns allow the user to allocate each measure's incremental energy and demand savings to the appropriate rate time period thus affecting load shifting. The default value equals "1" indicating that energy savings resulting from the measure occur in the same pattern as base case energy use (e.g., a value of "1" would mean that a 20% energy savings would yield a savings of 20% of the base case energy for the time covered in the rate-time period). If the marginal savings are to occur in a different pattern than the base energy use pattern, then these factors allow the user to change the proportional savings. For example, if the energy savings in a particular rate-time period are 90% of what would be expected (e.g. 18% instead of 20%), then the factor should be "0.9". These factors are closely tied to the definition of energy savings found in the ENERGY_SAVINGS table (see Section 10.2) because they can potentially alter the weighted average savings for the measure.

End Use: This is a numerical value corresponding to the end use for each measure. Numbers should correspond to the end uses as numbered in the load shape portion of the Building Table and Peak-To-Energy Relationship Table.

Implementation Type 1= 1 time, 2= turnover: This informs PENWORK how to treat the implementation of the technology. Generally "1" is used for retrofit applications such as shell measures and "2" is used for replace-on-burnout applications.

J.10.2 Energy Saving (ENERGY_SAVINGS)

The Energy Savings table contains the estimated annual energy savings for each measure by market segment or building type. In the Basic Analysis the energy savings are in relation to the base case. In the Supply Analysis the energy savings are in relation to previous technologies in the stacking order. See Section 5.2 for more details.

Care must be taken in defining energy savings for measures whose energy savings patterns do not follow the base case energy usage (e.g., variable speed drives, occupancy sensors & load shifting strategies). The use of Relative Energy Reduction Factors (see Section 10.1) may produce an annual weighted average energy savings different from the energy savings value input. One possible approach may lie in setting the energy savings to the maximum savings level. This should only be done with awareness of how the energy savings were originally calculated. For example, a Variable Speed Drive may save 30% off peak and -5% on peak. The energy savings can be set at 30% with the awareness that the annual energy savings will actually be less. Documenting the approach is important for repeatability.

J.10.3 Applicable Factors (APPLICABLE)

The % Applicable Factors table contains the fraction of the floorspace or households that is applicable for conversion to the DSM technology for each market segment or building type. It generally corresponds to the saturation of the base case technology.

J.10.4 Not Complete Factors (NOT_COMPLETE)

The % Not Complete Factors table contains the fraction of the applicable floorspace or households that has not yet been converted to the particular energy-efficiency technology. The % Not Complete Factors are arranged by measure and market segment or building type.

J.10.5 Feasible Factors (FEASIBLE)

The % Feasible Factors table contains the fraction of the applicable floorspace or households that is technically feasible for conversion to the DSM technology from an engineering perspective. The % Feasible Factors are arranged by measure and market segment or building type.

J.10.6 Standards Adjustment Factors (EUI_ADJUST)

The Standards Adjustment Factors table allows the user to adjust EUIs or UECs to account for efficiency improvements due to existing or anticipated regulations. These factors can also be used to adjust base EUIs and UECs to account for changing market conditions that would result in higher base technology energy efficiencies. The Standards Adjustment Factors are arranged by measure and market segment or building type.

J.10.7 Technology Units per square foot (units_per)

The Technology Units per square foot table contains information about how many measure costing units are found in each square foot or household of each market segment or building type (e.g. tons/sq. ft.). The measure units are the same as those specified in Cost Units in the Measure Input Table.

J.10.8 Hour Adjustment for Lighting (LIGHT)

The Hour Adjustment for Lighting table gives estimates of the annual hours of operation for measures whose service lives are expressed in hours.

J.10.9 Base Technology EUIs (BASE_TECH_EUI)

The Base Technology EUIs table contains the energy consumption of each base technology by market segment or building type. Commercial units are kWH/ square foot. Residential units are UEC or kWH/ per household.

J.11 DRIVERS (D_*.XLS)

The first five columns of ASSYST's calculation area contain data that informs the model about which technologies are being analyzed, for what end uses, for which building types and in what segment (usually geographical) context. This information is used to operate the lookup tables and thereby specify which parameters are to be used in the analysis. Header material further directs ASSYST as to what type of analysis is being performed (BASIC, SUPPLY, PEN), what sector is being analyzed (COM, RES, IND) and what fuel type (ELEC, GAS) is being analyzed. Other information included in the header is the utility name, batch number and vintage. The Segment can be entered into the header and automatically be changed below. For data location, see Figure I-9 Map of Driver.

Figure J-9
Map of Driver

HEADER INFORMATION				
Building Segment	Building Number	End Use	Base Number	Measure Number
Column A	Column B	Column C	Column D	Column E

Column A specifies the building Segment. ASSYST is set up to handle 10 segments. The segment can be specified in the header and all cells in this column will change automatically, or each line can be changed manually.

Column B specifies the Building Type. Building Type numbers should correspond to those established in the Building Table.

Column C specifies the End Use. End Use is associated with the Measure and is read into the driver from the Measure Input Table.

Column D specifies the Base Number. Each DSM technology has a base case technology against which it is compared.

Column E specifies the Measure Number. The Measure number is the identifier by which the DSM technology or system is referred. Base case technologies also have a Measure Number. Measure numbers generally appear in sequential order in the Basic Analysis and must appear in stacking order in the Supply Analysis.

When constructing a Basic Driver (D_B*.XLS), start with a base case, then list all the measures (technologies) related to that base case, then list the next base case and its corresponding measures until you have listed all of the possible technologies to be analyzed for a building type. Do the same for the next building type until you have a full set of relevant measures and base cases for all building types.

When constructing a Supply Driver (D_S*.XLS), under each base case list relevant measure numbers in the Supply stacking order. See Section 5.2 for more detail.

J.12 THE MACRO ASMAC2B.XLM

There is seldom a reason for the user to open the macro file or edit DSM ASSYST macros. If there is a reason to adapt the macros, it should be done by someone familiar with Excel macros.

The primary macro for running DSM ASSYST is the ASSYST macro found in Column A. Sometimes a user may choose to disable part of the ASSYST macro when it is not relevant to the analysis being performed. This can be done by removing the "=" sign before the run statement. The "=" can be replaced when the user wants to re-enable the macro.

Do **NOT** save ASMAC2B.XLM when exiting.

DSM ASSYST Macros:

ASSYST (a) = Runs ASSYST. Reads the BATCHXYZ and directs other macros to perform their functions.

pen_run (q) = Runs the market potential analysis, for each program, in batch mode from POSTBAT.

Supply_Curve_Sort (c) = Aggregates supply analysis results in the supply output files and creates energy and demand supply curves. Runs in batch mode from POSTBAT.

program_building (p) = Copies measure data from an I_*.XLS file and places it in a user defined P_*.XLS file. This macro must be executed from within an I_*.XLS file.

Selected Sub-routine Macros

Output_Summary (o) = Takes summary data and places them in new file.

TRC_Sort (t) = Sorts data in from the Basic Analysis in order of highest to lowest TRC within each segment.

Output_ANNTP = Creates I_*.XLS files from ASSYST data.

K

SEGMENT AND END USE SUMMARY POTENTIALS

APPENDIX K

BUILDING TYPE AND END USE SUMMARY OF POTENTIALS

Utility	Bldg Type	End Use	Total GWh	GWh Potentials							Total MW	MW Potentials						
				Technical	Economic	Max Ach	100% Ach	50% Ach	Curr Ach	Nat Occur		Technical	Economic	Max Ach	100% Ach	50% Ach	Curr Ach	Nat Occur
PG&E	College	Cooling	145.7	20.6%	15.8%	6.6%	5.2%	3.6%	1.8%	0.2%	112.0	20.7%	15.8%	6.4%	4.9%	3.4%	1.7%	0.2%
PG&E	College	Indoor Lighting	319.4	31.8%	8.6%	16.7%	9.5%	7.4%	4.9%	0.6%	34.7	40.7%	9.0%	17.8%	10.1%	7.8%	5.2%	0.6%
PG&E	College	Office Equipment	36.2	49.9%	30.8%						3.6	26.5%	19.5%					
PG&E	College	Outdoor Lighting	13.6	8.8%	8.8%	0.6%	0.6%	0.5%	0.5%	0.4%	0.3	7.8%	7.8%					
PG&E	College	Refrigeration	1.8								0.3							
PG&E	College	Ventilation	91.9	2.5%	0.7%	0.2%	0.2%	0.1%	0.1%	0.0%	11.9	2.2%	0.7%	0.2%	0.2%	0.1%	0.1%	0.0%
PG&E	College	Other	89.5								6.8							
PG&E	FoodStore	Cooling	457.6	25.3%	19.7%	13.7%	10.2%	8.8%	6.0%	1.7%	177.9	21.8%	16.2%	11.2%	7.7%	6.3%	3.7%	0.8%
PG&E	FoodStore	Indoor Lighting	1,147.5	20.9%	14.1%	13.4%	12.3%	11.2%	8.9%	2.0%	179.5	31.6%	14.6%	13.8%	12.6%	11.5%	9.1%	2.1%
PG&E	FoodStore	Office Equipment	38.7	53.1%	32.3%						5.5	23.8%	18.7%					
PG&E	FoodStore	Outdoor Lighting	114.9	16.9%	15.0%	7.0%	6.2%	5.5%	4.6%	1.7%	3.7	11.6%	11.6%	4.9%	4.1%	3.4%	2.6%	0.5%
PG&E	FoodStore	Refrigeration	2,845.4	33.9%	33.7%	27.7%	16.6%	11.5%	8.3%	2.9%	404.8	22.7%	22.7%	18.5%	10.0%	6.4%	4.4%	1.4%
PG&E	FoodStore	Ventilation	427.8	2.1%	2.1%	0.6%	0.6%	0.5%	0.3%	0.0%	57.6	2.1%	2.1%	0.6%	0.6%	0.5%	0.3%	0.0%
PG&E	FoodStore	Other	1,604.3								175.6							
PG&E	Hospital	Cooling	994.0	21.6%	20.5%	11.9%	9.9%	8.3%	4.6%	0.9%	723.4	20.9%	19.8%	11.3%	9.2%	7.6%	4.0%	0.6%
PG&E	Hospital	Indoor Lighting	1,176.8	27.3%	23.6%	20.8%	19.5%	18.1%	15.2%	4.1%	232.0	31.7%	25.2%	22.2%	20.7%	19.1%	15.9%	4.2%
PG&E	Hospital	Office Equipment	61.8	52.4%	31.7%						8.0	23.5%	18.4%					
PG&E	Hospital	Outdoor Lighting	39.1	11.9%	11.4%	3.2%	3.2%	3.2%	3.0%	2.0%	0.6	6.2%	6.2%					
PG&E	Hospital	Refrigeration	16.3								2.3							
PG&E	Hospital	Ventilation	339.6	5.2%	5.2%	2.5%	2.4%	2.3%	2.1%	1.4%	57.0	2.8%	2.8%	1.1%	1.0%	0.9%	0.8%	0.4%
PG&E	Hospital	Other	2,176.2								300.3							
PG&E	Hotel	Cooling	54.7	27.5%	21.2%	11.1%	8.1%	5.2%	2.4%	0.3%	42.0	27.7%	21.4%	10.8%	7.8%	5.0%	2.2%	0.2%
PG&E	Hotel	Indoor Lighting	253.9	37.5%	29.9%	23.4%	21.3%	20.1%	18.0%	6.4%	54.9	41.6%	30.2%	23.7%	21.5%	20.3%	18.1%	6.4%
PG&E	Hotel	Office Equipment	10.9	45.4%	33.0%						1.8	22.0%	18.3%					
PG&E	Hotel	Outdoor Lighting	29.8	15.3%	9.2%	0.3%	0.3%	0.3%	0.3%	0.2%	0.2	14.6%	8.7%					
PG&E	Hotel	Refrigeration	29.1								4.1							
PG&E	Hotel	Ventilation	55.6	2.6%	0.3%	0.1%	0.1%	0.1%	0.0%	0.0%	9.1	2.3%	0.3%	0.1%	0.1%	0.1%	0.0%	0.0%
PG&E	Hotel	Other	301.6								45.6							
PG&E	Miscellaneous	Cooling	573.1	20.1%	15.2%	5.8%	5.4%	4.8%	3.5%	1.1%	391.9	17.8%	13.0%	4.2%	3.8%	3.2%	2.0%	0.5%
PG&E	Miscellaneous	Indoor Lighting	559.0	37.6%	9.6%	10.9%	7.9%	7.7%	7.6%	1.9%	56.2	48.1%	9.6%	10.9%	7.9%	7.7%	7.6%	1.9%
PG&E	Miscellaneous	Office Equipment	36.1	53.4%	16.0%						4.2	25.4%	9.4%					
PG&E	Miscellaneous	Outdoor Lighting	138.7	18.1%	16.3%	4.1%	4.1%	4.1%	4.0%	2.5%	0.6	10.8%	9.6%					
PG&E	Miscellaneous	Refrigeration	63.3								9.0							
PG&E	Miscellaneous	Ventilation	608.1	3.4%	1.1%	0.2%	0.1%	0.1%	0.1%	0.0%	65.4	2.5%	0.6%	0.1%	0.1%	0.1%	0.0%	0.0%
PG&E	Miscellaneous	Other	2,132.4								150.2							
PG&E	Office	Cooling	1,716.9	20.8%	17.6%	9.7%	7.1%	4.9%	2.5%	0.3%	1,616.2	20.5%	17.4%	9.2%	6.6%	4.4%	2.2%	0.3%
PG&E	Office	Indoor Lighting	3,744.3	34.1%	22.5%	20.1%	19.1%	17.9%	14.8%	3.7%	889.8	47.2%	24.2%	21.4%	20.3%	19.0%	15.8%	4.0%
PG&E	Office	Office Equipment	753.3	52.1%	35.7%						126.1	29.4%	21.9%					
PG&E	Office	Outdoor Lighting	320.1	12.3%		2.0%	2.0%	2.0%	1.9%	1.3%	2.1	8.5%						
PG&E	Office	Refrigeration	8.1								1.2							
PG&E	Office	Ventilation	1,088.6	9.1%	9.1%	5.9%	5.8%	5.7%	5.2%	1.9%	190.0	3.7%	3.7%	2.0%	1.9%	1.8%	1.5%	0.6%
PG&E	Office	Other	2,469.4								410.8							
PG&E	Restaurant	Cooling	206.6	23.1%	14.8%	9.5%	9.0%	7.8%	5.9%	1.0%	96.8	20.0%	11.7%	7.0%	6.5%	5.3%	3.8%	0.6%
PG&E	Restaurant	Indoor Lighting	321.6	30.9%	23.3%	22.4%	17.8%	15.6%	11.1%	2.2%	52.2	42.5%	23.6%	22.7%	17.9%	15.7%	11.1%	2.2%
PG&E	Restaurant	Office Equipment	11.1	53.0%	30.8%						1.6	23.0%	17.9%					
PG&E	Restaurant	Outdoor Lighting	83.2	22.4%	19.5%	4.3%	4.3%	4.2%	4.0%	2.3%	2.0	12.8%	12.8%					
PG&E	Restaurant	Refrigeration	266.2								37.9							
PG&E	Restaurant	Ventilation	147.1	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	21.6	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PG&E	Restaurant	Other	932.9								106.1							
PG&E	Retail	Cooling	277.8	18.4%	10.8%	4.4%	3.8%	3.0%	1.8%	0.2%	213.7	17.3%	9.7%	3.3%	2.7%	2.0%	1.1%	0.1%
PG&E	Retail	Indoor Lighting	1,740.2	20.7%	16.7%	17.0%	13.4%	11.5%	7.8%	1.1%	382.6	24.7%	17.0%	17.3%	13.6%	11.6%	7.9%	1.2%
PG&E	Retail	Office Equipment	51.4	53.3%	30.4%						8.0	23.6%	18.1%					
PG&E	Retail	Outdoor Lighting	241.7	18.5%	12.7%	2.8%	2.8%	2.8%	2.7%	1.7%	2.2	12.3%	8.1%					
PG&E	Retail	Refrigeration	41.5								5.9							

APPENDIX K

BUILDING TYPE AND END USE SUMMARY OF POTENTIALS

Utility	Bldg Type	End Use	Total GWh	GWh Potentials							Total MW	MW Potentials						
				Technical	Economic	Max Ach	100% Ach	50% Ach	Curr Ach	Nat Occur		Technical	Economic	Max Ach	100% Ach	50% Ach	Curr Ach	Nat Occur
PG&E	Retail	Ventilation	172.5	3.5%	3.5%	1.4%	1.4%	1.3%	1.0%	0.2%	33.6	2.5%	2.5%	0.5%	0.5%	0.5%	0.3%	0.0%
PG&E	Retail	Other	598.3								92.1							
PG&E	School	Cooling	26.9	20.6%	12.3%	3.8%	3.5%	2.6%	1.5%	0.1%	27.6	19.6%	11.4%	2.8%	2.4%	1.8%	1.0%	0.1%
PG&E	School	Indoor Lighting	493.8	24.9%	5.0%	12.2%	6.1%	4.5%	3.0%	0.4%	106.4	36.5%	5.5%	13.8%	6.8%	5.0%	3.3%	0.4%
PG&E	School	Office Equipment	21.5	51.4%	22.7%						3.3	25.3%	13.1%					
PG&E	School	Outdoor Lighting	50.0	15.4%	14.0%	4.1%	4.1%	4.1%	3.9%	2.4%	0.3	7.9%	7.2%					
PG&E	School	Refrigeration	25.9								3.7							
PG&E	School	Ventilation	79.5	2.3%	0.3%	0.1%	0.1%	0.1%	0.0%	0.0%	18.4	2.3%	0.3%	0.1%	0.1%	0.1%	0.0%	0.0%
PG&E	School	Other	150.1								22.6							
PG&E	Warehouse	Cooling	158.9	26.0%	13.6%	6.6%	6.2%	4.4%	2.8%	0.4%	113.0	23.8%	11.3%	4.4%	4.0%	3.0%	2.0%	0.3%
PG&E	Warehouse	Indoor Lighting	501.5	39.5%	8.3%	14.1%	6.7%	5.8%	4.5%	1.0%	80.6	52.6%	8.4%	14.3%	6.8%	5.9%	4.5%	1.0%
PG&E	Warehouse	Office Equipment	42.9	53.9%	23.3%						6.0	26.1%	13.3%					
PG&E	Warehouse	Outdoor Lighting	118.5	9.3%	9.2%	2.0%	2.0%	2.0%	1.9%	1.3%	4.1	5.9%	5.9%					
PG&E	Warehouse	Refrigeration	366.8								52.2							
PG&E	Warehouse	Ventilation	259.8	3.3%	3.3%	1.5%	1.3%	1.2%	0.9%	0.1%	36.2	2.5%	2.5%	0.8%	0.7%	0.6%	0.4%	0.0%
PG&E	Warehouse	Other	1,887.2								212.3							
SCE	College	Cooling	232.9	20.6%	16.0%	3.3%	3.0%	2.4%	1.5%	0.2%	112.6	20.6%	16.1%	3.0%	2.6%	2.1%	1.3%	0.1%
SCE	College	Indoor Lighting	285.8	28.6%	21.0%	15.9%	9.4%	7.6%	5.4%	0.9%	58.6	38.8%	22.5%	17.4%	10.1%	8.1%	5.7%	0.9%
SCE	College	Office Equipment	30.4	51.6%	32.1%						4.5	26.5%	19.8%					
SCE	College	Outdoor Lighting	22.7	20.2%	18.9%	0.4%	0.4%	0.4%	0.4%	0.3%	0.1	19.3%	18.1%					
SCE	College	Refrigeration	42.3								5.7							
SCE	College	Ventilation	166.4	16.4%	16.4%	12.2%	12.1%	11.8%	10.3%	2.4%	34.3	6.1%	6.1%	3.8%	3.7%	3.6%	3.0%	0.7%
SCE	College	Other	251.1								36.0							
SCE	FoodStore	Cooling	577.8	24.3%	19.6%	12.6%	9.8%	8.8%	6.4%	2.5%	220.0	21.3%	16.5%	10.8%	8.0%	7.0%	4.7%	1.3%
SCE	FoodStore	Indoor Lighting	948.4	30.8%	20.9%	20.9%	18.8%	17.0%	13.1%	2.3%	131.9	44.7%	21.5%	21.5%	19.1%	17.3%	13.3%	2.3%
SCE	FoodStore	Office Equipment	40.2	53.4%	32.6%						5.6	23.8%	18.7%					
SCE	FoodStore	Outdoor Lighting	172.5	15.7%	12.1%	2.7%	2.7%	2.7%	2.6%	2.0%	0.5	10.1%	7.4%					
SCE	FoodStore	Refrigeration	1,838.2	54.6%	54.2%	43.9%	28.1%	19.7%	14.3%	5.4%	245.5	36.5%	36.5%	29.6%	17.1%	10.9%	7.5%	2.4%
SCE	FoodStore	Ventilation	172.3	6.4%	6.4%	2.0%	1.8%	1.4%	0.9%	0.1%	21.2	6.4%	6.4%	2.0%	1.8%	1.4%	0.9%	0.1%
SCE	FoodStore	Other	188.6								18.4							
SCE	Hospital	Cooling	822.9	22.3%	21.4%	11.1%	10.2%	8.4%	4.5%	1.1%	329.4	21.7%	20.8%	10.5%	9.7%	7.8%	4.0%	0.6%
SCE	Hospital	Indoor Lighting	1,045.2	17.7%	15.7%	14.3%	12.9%	11.7%	9.4%	2.2%	196.0	21.7%	17.2%	15.7%	13.9%	12.6%	10.1%	2.3%
SCE	Hospital	Office Equipment	56.8	52.1%	31.4%						9.6	23.5%	18.3%					
SCE	Hospital	Outdoor Lighting	34.7	12.0%	11.1%	3.0%	3.0%	3.0%	2.9%	2.2%	0.2	6.2%	5.8%					
SCE	Hospital	Refrigeration	37.7								5.0							
SCE	Hospital	Ventilation	231.0	16.8%	16.8%	11.5%	11.4%	11.2%	10.2%	3.6%	47.2	6.0%	6.0%	3.6%	3.5%	3.4%	3.0%	1.0%
SCE	Hospital	Other	934.7								122.7							
SCE	Hotel	Cooling	329.0	22.9%	15.1%	5.7%	5.4%	4.5%	2.9%	0.3%	210.2	19.8%	12.0%	2.8%	2.5%	1.9%	1.2%	0.1%
SCE	Hotel	Indoor Lighting	664.7	34.0%	28.4%	18.0%	16.5%	16.2%	15.9%	6.5%	83.2	38.4%	28.8%	18.3%	16.7%	16.3%	16.0%	6.5%
SCE	Hotel	Office Equipment	9.8	48.8%	35.9%						1.3	22.2%	18.9%					
SCE	Hotel	Outdoor Lighting	55.4	14.6%	11.9%	0.4%	0.4%	0.4%	0.4%	0.3%	0.2	13.8%	11.2%					
SCE	Hotel	Refrigeration	113.6								15.2							
SCE	Hotel	Ventilation	85.2	4.0%	1.4%	0.9%	0.9%	0.9%	0.8%	0.1%	10.2	2.7%	0.7%	0.3%	0.3%	0.3%	0.2%	0.0%
SCE	Hotel	Other	505.4								44.3							
SCE	Miscellaneous	Cooling	1,138.5	21.1%	18.5%	9.3%	5.6%	4.7%	3.2%	1.2%	569.2	19.1%	16.5%	7.9%	4.2%	3.3%	1.9%	0.5%
SCE	Miscellaneous	Indoor Lighting	1,565.2	40.0%	14.9%	18.4%	11.8%	10.8%	9.3%	2.6%	303.8	48.2%	15.1%	18.9%	12.0%	11.0%	9.4%	2.6%
SCE	Miscellaneous	Office Equipment	38.5	49.2%	14.3%						6.7	25.3%	8.9%					
SCE	Miscellaneous	Outdoor Lighting	425.4	17.7%	17.5%	4.1%	4.1%	4.1%	4.0%	3.0%	4.3	10.4%	10.2%					
SCE	Miscellaneous	Refrigeration	20.8								2.8							
SCE	Miscellaneous	Ventilation	495.0	6.9%	0.4%	0.8%	0.7%	0.7%	0.5%	0.0%	102.5	3.5%	0.4%	0.3%	0.3%	0.2%	0.2%	0.0%
SCE	Miscellaneous	Other	506.1								68.8							
SCE	Office	Cooling	1,707.3	18.8%	13.1%	6.6%	4.4%	3.2%	2.0%	0.3%	765.3	17.8%	12.2%	5.7%	3.4%	2.3%	1.2%	0.2%
SCE	Office	Indoor Lighting	3,589.4	30.8%	20.8%	19.4%	17.8%	16.4%	13.2%	2.8%	853.0	42.1%	22.2%	20.5%	18.9%	17.4%	14.0%	3.1%
SCE	Office	Office Equipment	816.3	52.1%	35.7%						136.7	29.4%	21.9%					

APPENDIX K

BUILDING TYPE AND END USE SUMMARY OF POTENTIALS

			Total	GWh Potentials							Total	MW Potentials						
Utility	Bldg Type	End Use	GWh	Technical	Economic	Max Ach	100% Ach	50% Ach	Curr Ach	Nat Occur	MW	Technical	Economic	Max Ach	100% Ach	50% Ach	Curr Ach	Nat Occur
SCE	Office	Outdoor Lighting	701.1	12.3%		2.0%	2.0%	2.0%	1.9%	1.5%	4.7	8.4%						
SCE	Office	Refrigeration	10.8								1.4							
SCE	Office	Ventilation	1,049.5	15.5%	15.5%	11.3%	11.2%	10.9%	9.7%	2.8%	183.1	5.5%	5.5%	3.5%	3.4%	3.2%	2.8%	0.8%
SCE	Office	Other	1,381.8								229.9							
SCE	Restaurant	Cooling	259.3	22.7%	14.7%	9.1%	8.4%	6.9%	5.2%	1.5%	69.2	19.3%	11.3%	6.7%	6.0%	4.5%	3.0%	0.6%
SCE	Restaurant	Indoor Lighting	449.6	38.6%	29.6%	17.3%	10.5%	9.4%	7.9%	2.2%	72.4	52.2%	29.9%	17.6%	10.6%	9.5%	8.0%	2.2%
SCE	Restaurant	Office Equipment	15.9	51.4%	29.7%						2.9	23.0%	17.7%					
SCE	Restaurant	Outdoor Lighting	248.3	27.3%	9.1%	2.5%	2.5%	2.5%	2.4%	1.6%	1.4	16.3%	4.9%					
SCE	Restaurant	Refrigeration	589.3								78.7							
SCE	Restaurant	Ventilation	359.1	2.4%	2.4%	0.6%	0.4%	0.3%	0.1%	0.0%	73.7	2.4%	2.4%	0.6%	0.4%	0.3%	0.1%	0.0%
SCE	Restaurant	Other	448.2								50.5							
SCE	Retail	Cooling	554.8	19.7%	9.7%	4.0%	3.7%	3.2%	2.3%	0.4%	188.9	17.9%	7.8%	2.4%	2.0%	1.6%	1.0%	0.1%
SCE	Retail	Indoor Lighting	1,914.6	23.7%	20.5%	21.7%	16.5%	14.2%	9.1%	1.0%	360.8	28.0%	20.8%	22.0%	16.7%	14.3%	9.2%	1.0%
SCE	Retail	Office Equipment	55.7	51.7%	29.4%						9.8	23.6%	17.9%					
SCE	Retail	Outdoor Lighting	421.1	20.1%	10.4%	2.1%	2.1%	2.1%	2.0%	1.5%	3.8	13.7%	6.6%					
SCE	Retail	Refrigeration	77.8								10.4							
SCE	Retail	Ventilation	470.2	6.8%	6.8%	3.8%	3.7%	3.6%	3.2%	1.5%	105.3	3.4%	3.4%	1.5%	1.4%	1.3%	1.1%	0.4%
SCE	Retail	Other	462.5								61.0							
SCE	School	Cooling	174.0	18.9%	11.4%	4.0%	3.5%	2.1%	1.0%	0.1%	117.7	17.1%	9.5%	2.2%	1.7%	1.0%	0.5%	0.0%
SCE	School	Indoor Lighting	545.6	28.2%	16.5%	13.2%	7.2%	5.5%	3.7%	0.5%	95.0	38.3%	17.7%	14.3%	7.8%	5.9%	4.0%	0.5%
SCE	School	Office Equipment	21.8	47.1%	20.1%						3.4	25.3%	12.4%					
SCE	School	Outdoor Lighting	207.9	15.6%	15.4%	4.2%	4.2%	4.2%	4.1%	3.0%	0.6	8.1%	8.0%					
SCE	School	Refrigeration	18.5								2.5							
SCE	School	Ventilation	146.6	11.1%	11.1%	3.6%	3.5%	3.3%	2.3%	0.2%	31.6	4.9%	4.9%	1.1%	1.1%	1.0%	0.7%	0.1%
SCE	School	Other	104.2								12.7							
SCE	Warehouse	Cooling	46.8	23.8%	12.0%	6.1%	4.7%	3.1%	1.7%	0.1%	15.8	20.9%	9.1%	3.4%	2.0%	1.2%	0.6%	0.0%
SCE	Warehouse	Indoor Lighting	1,070.9	32.0%	17.7%	18.5%	14.2%	12.1%	8.1%	0.9%	262.5	40.0%	18.1%	18.8%	14.4%	12.3%	8.2%	0.9%
SCE	Warehouse	Office Equipment	53.0	50.3%	21.1%						10.2	26.2%	12.7%					
SCE	Warehouse	Outdoor Lighting	66.0	9.5%	8.8%	1.8%	1.8%	1.8%	1.8%	1.4%	0.2	6.1%	5.5%					
SCE	Warehouse	Refrigeration	204.6								27.3							
SCE	Warehouse	Ventilation	58.6	24.9%	24.9%	16.4%	16.0%	15.2%	12.8%	2.3%	14.6	12.8%	12.8%	6.2%	5.8%	5.3%	4.1%	0.7%
SCE	Warehouse	Other	404.1								69.4							
SDG&E	College	Cooling	48.7	15.1%	8.0%	2.0%	1.9%	1.2%	0.6%	0.0%	23.5	14.0%	6.8%	0.9%	0.9%	0.6%	0.3%	0.0%
SDG&E	College	Indoor Lighting	74.1	27.6%	16.6%	12.6%	6.3%	4.7%	3.2%	0.4%	15.2	38.3%	18.3%	14.2%	7.1%	5.2%	3.5%	0.5%
SDG&E	College	Office Equipment	7.7	51.6%	32.1%						1.1	26.5%	19.8%					
SDG&E	College	Outdoor Lighting	6.7	9.8%	9.7%	0.5%	0.5%	0.5%	0.5%	0.4%	0.0	8.8%	8.8%					
SDG&E	College	Refrigeration	13.7								1.8							
SDG&E	College	Ventilation	56.5	7.0%	4.6%	4.0%	3.9%	3.8%	3.0%	0.3%	11.7	2.6%	1.5%	1.2%	1.2%	1.1%	0.9%	0.1%
SDG&E	College	Other	177.3								25.4							
SDG&E	FoodStore	Cooling	85.9	26.8%	21.6%	13.5%	10.9%	9.2%	6.2%	2.2%	26.1	24.4%	19.2%	12.0%	9.5%	7.8%	4.8%	1.2%
SDG&E	FoodStore	Indoor Lighting	222.2	33.1%	23.8%	23.3%	21.5%	19.7%	15.4%	2.9%	30.9	46.3%	24.4%	23.8%	21.9%	20.0%	15.7%	2.9%
SDG&E	FoodStore	Office Equipment	8.7	53.4%	32.6%						1.2	23.8%	18.7%					
SDG&E	FoodStore	Outdoor Lighting	42.0	12.9%	7.6%	2.2%	2.2%	2.2%	2.1%	1.6%	0.1	7.9%	3.7%					
SDG&E	FoodStore	Refrigeration	414.7	52.3%	51.9%	42.1%	26.9%	18.9%	13.7%	5.2%	55.4	34.9%	34.9%	28.3%	16.3%	10.4%	7.2%	2.3%
SDG&E	FoodStore	Ventilation	43.5	5.5%	5.5%	1.7%	1.5%	1.2%	0.7%	0.1%	5.3	5.5%	5.5%	1.7%	1.5%	1.2%	0.7%	0.1%
SDG&E	FoodStore	Other	58.9								5.7							
SDG&E	Hospital	Cooling	191.9	17.6%	13.5%	7.2%	6.2%	4.9%	3.1%	0.8%	118.2	15.9%	11.8%	5.8%	4.8%	3.5%	1.9%	0.3%
SDG&E	Hospital	Indoor Lighting	325.1	26.8%	13.9%	12.9%	11.7%	10.7%	8.7%	1.8%	61.0	29.8%	15.1%	13.9%	12.5%	11.4%	9.2%	1.9%
SDG&E	Hospital	Office Equipment	15.7	52.1%	31.4%						2.6	23.5%	18.3%					
SDG&E	Hospital	Outdoor Lighting	11.1	20.4%	19.8%	2.8%	2.8%	2.8%	2.7%	2.0%	0.0	15.2%	14.9%					
SDG&E	Hospital	Refrigeration	17.6								2.4							
SDG&E	Hospital	Ventilation	85.8	17.7%	17.7%	10.4%	10.3%	10.2%	9.6%	5.7%	17.5	6.4%	6.4%	3.3%	3.3%	3.2%	2.9%	1.6%
SDG&E	Hospital	Other	376.0								49.4							
SDG&E	Hotel	Cooling	114.7	26.1%	18.6%	7.5%	7.0%	5.8%	3.7%	0.3%	73.3	21.6%	14.1%	3.3%	2.8%	2.2%	1.3%	0.1%

APPENDIX K

BUILDING TYPE AND END USE SUMMARY OF POTENTIALS

			Total	GWh Potentials							Total	MW Potentials						
Utility	Bldg Type	End Use	GWh	Technical	Economic	Max Ach	100% Ach	50% Ach	Curr Ach	Nat Occur	MW	Technical	Economic	Max Ach	100% Ach	50% Ach	Curr Ach	Nat Occur
SDG&E	Hotel	Indoor Lighting	145.8	40.9%	33.0%	20.9%	19.1%	18.6%	18.0%	7.7%	18.2	50.3%	33.8%	21.6%	19.5%	18.8%	18.2%	7.8%
SDG&E	Hotel	Office Equipment	3.7	48.8%	35.9%						0.5	22.2%	18.9%					
SDG&E	Hotel	Outdoor Lighting	24.2	9.0%	7.6%	0.4%	0.4%	0.4%	0.4%	0.3%	0.1	8.2%	6.9%					
SDG&E	Hotel	Refrigeration	48.1								6.4							
SDG&E	Hotel	Ventilation	41.3	2.2%	0.2%	0.4%	0.3%	0.3%	0.3%	0.0%	4.9	1.5%	0.2%	0.1%	0.1%	0.1%	0.1%	0.0%
SDG&E	Hotel	Other	167.7								14.7							
SDG&E	Miscellaneous	Cooling	158.8	19.2%	14.1%	4.8%	4.4%	3.9%	3.0%	0.9%	79.4	16.9%	11.8%	3.1%	2.7%	2.2%	1.4%	0.3%
SDG&E	Miscellaneous	Indoor Lighting	268.6	35.8%	13.2%	13.6%	10.3%	8.6%	5.5%	0.6%	52.1	43.7%	13.7%	14.1%	10.6%	8.9%	5.6%	0.7%
SDG&E	Miscellaneous	Office Equipment	6.0	49.2%	14.3%						1.0	25.3%	8.9%					
SDG&E	Miscellaneous	Outdoor Lighting	74.8	26.7%	25.9%	3.6%	3.6%	3.6%	3.4%	2.5%	0.8	20.2%	19.7%					
SDG&E	Miscellaneous	Refrigeration	3.7								0.5							
SDG&E	Miscellaneous	Ventilation	99.9	7.0%	3.2%	0.7%	0.7%	0.7%	0.5%	0.1%	20.7	3.5%	1.2%	0.3%	0.3%	0.2%	0.2%	0.0%
SDG&E	Miscellaneous	Other	139.3								18.9							
SDG&E	Office	Cooling	353.9	15.3%	10.5%	5.2%	3.1%	2.2%	1.3%	0.1%	235.1	14.5%	9.8%	4.5%	2.3%	1.5%	0.8%	0.1%
SDG&E	Office	Indoor Lighting	999.3	27.2%	16.3%	14.6%	13.7%	12.7%	10.4%	2.6%	235.0	38.3%	17.7%	15.8%	14.8%	13.7%	11.2%	2.8%
SDG&E	Office	Office Equipment	221.6	51.9%	35.5%						38.6	29.4%	21.8%					
SDG&E	Office	Outdoor Lighting	207.1	10.4%	8.5%	1.7%	1.7%	1.7%	1.7%	1.3%	0.9	6.7%	5.4%					
SDG&E	Office	Refrigeration	6.9								0.9							
SDG&E	Office	Ventilation	373.9	13.1%	13.1%	9.2%	9.1%	9.0%	8.1%	2.6%	117.3	5.0%	5.0%	3.0%	3.0%	2.9%	2.5%	0.8%
SDG&E	Office	Other	486.2								80.1							
SDG&E	Restaurant	Cooling	48.0	24.4%	15.6%	9.9%	9.0%	7.4%	5.6%	1.4%	25.6	21.1%	12.2%	7.4%	6.5%	4.9%	3.3%	0.6%
SDG&E	Restaurant	Indoor Lighting	103.5	29.9%	4.8%	4.8%	4.0%	3.5%	2.4%	0.4%	16.7	36.9%	4.9%	5.0%	4.1%	3.5%	2.5%	0.4%
SDG&E	Restaurant	Office Equipment	3.3	51.4%	29.7%						0.6	23.0%	17.7%					
SDG&E	Restaurant	Outdoor Lighting	58.3	14.6%	11.5%	4.7%	4.7%	4.7%	4.5%	3.1%	0.3	5.4%	3.6%					
SDG&E	Restaurant	Refrigeration	136.2								18.2							
SDG&E	Restaurant	Ventilation	95.9	1.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	19.7	1.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%
SDG&E	Restaurant	Other	150.2								16.9							
SDG&E	Retail	Cooling	113.0	17.0%	8.4%	3.2%	2.8%	2.2%	1.3%	0.1%	63.8	15.9%	7.1%	2.0%	1.7%	1.2%	0.7%	0.1%
SDG&E	Retail	Indoor Lighting	500.9	26.7%	20.4%	21.3%	17.5%	15.4%	11.1%	1.2%	94.4	30.2%	20.7%	21.6%	17.6%	15.5%	11.2%	1.3%
SDG&E	Retail	Office Equipment	13.6	51.7%	29.4%						2.4	23.6%	17.9%					
SDG&E	Retail	Outdoor Lighting	115.9	20.0%	18.7%	3.3%	3.3%	3.3%	3.2%	2.4%	1.1	13.7%	12.8%					
SDG&E	Retail	Refrigeration	16.0								2.1							
SDG&E	Retail	Ventilation	113.0	3.6%	3.6%	2.3%	2.2%	2.2%	1.8%	0.3%	25.3	1.8%	1.8%	0.7%	0.7%	0.7%	0.5%	0.1%
SDG&E	Retail	Other	99.0								13.1							
SDG&E	School	Cooling	47.6	14.9%	8.9%	3.0%	2.7%	1.6%	0.7%	0.0%	32.2	13.6%	7.6%	1.7%	1.4%	0.8%	0.4%	0.0%
SDG&E	School	Indoor Lighting	121.8	38.8%	29.4%	20.7%	12.0%	9.8%	6.4%	0.6%	21.2	46.8%	30.3%	21.6%	12.5%	10.2%	6.7%	0.6%
SDG&E	School	Office Equipment	4.5	47.1%	20.1%						0.7	25.3%	12.4%					
SDG&E	School	Outdoor Lighting	50.1	13.5%	13.1%	4.3%	4.3%	4.3%	4.1%	3.1%	0.1	5.9%	5.6%					
SDG&E	School	Refrigeration	3.9								0.5							
SDG&E	School	Ventilation	43.3	7.8%	7.8%	2.5%	2.5%	2.4%	1.7%	0.1%	9.3	3.4%	3.4%	0.8%	0.8%	0.7%	0.5%	0.0%
SDG&E	School	Other	58.1								7.1							
SDG&E	Warehouse	Cooling	8.3	28.8%	14.3%	8.4%	6.1%	3.5%	1.7%	0.1%	5.7	25.8%	11.3%	5.5%	3.2%	1.7%	0.8%	0.0%
SDG&E	Warehouse	Indoor Lighting	173.9	23.9%	11.4%	11.7%	9.1%	7.7%	5.3%	0.8%	42.6	32.7%	11.8%	12.1%	9.4%	7.9%	5.4%	0.8%
SDG&E	Warehouse	Office Equipment	8.2	50.3%	21.1%						1.6	26.2%	12.7%					
SDG&E	Warehouse	Outdoor Lighting	11.9	22.5%	18.6%	1.3%	1.3%	1.3%	1.3%	1.0%	0.0	19.5%	16.1%					
SDG&E	Warehouse	Refrigeration	12.4								1.7							
SDG&E	Warehouse	Ventilation	14.2	15.9%	15.9%	10.5%	10.2%	9.8%	8.2%	1.5%	3.5	8.2%	8.2%	4.0%	3.7%	3.4%	2.6%	0.5%
SDG&E	Warehouse	Other	74.7								12.8							