

**2008 Load Impact Evaluation of California
Statewide Demand Bidding Program (DBP)
for Non-Residential Customers**

Ex Post and Ex Ante Report

CALMAC Study ID SDG0237.01

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May 1, 2009

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Abstract

This report documents the estimation of ex post and ex ante load impacts for the Demand Bidding Program (“DBP”) administered by California’s three largest investor-owned utilities in 2008; and documents the development and results of ex ante load impact analyses for 2009 through 2020. During the 2008 program year, event days were called for DBP customers at both Pacific Gas and Electric Company (“PG&E”) and Southern California Edison (“SCE”). This evaluation reports the load impacts that occurred during those 2008 events at the program level, by industry type, and by local capacity area. Ex ante load impacts for 2009-2020 are also summarized.

Executive Summary

This report provides estimates of ex post load impacts that occurred during events called in 2008 under the statewide Demand Bidding Program (“DBP”) and forecasts ex ante load impacts for 2009 through 2020. While all three of California’s largest investor-owned utilities had DBP in place for 2008, event days were called only by Pacific Gas and Electric Company (“PG&E”) and Southern California Edison (“SCE”). Therefore, no ex post load results are reported for San Diego Gas and Electric’s (“SDG&E’s”) 2008 program year for DBP. The load impacts for the PG&E and SCE DBP programs were estimated using separate econometric models for each enrolled DBP customer that reflected the statistical relationships between the historical load data of each customer, and weather conditions, time-based variables, and program information.

The load profiles and percentage load impacts from the 2008 program year are used to develop ex ante load impacts for SCE and PG&E. In the case of PG&E, DBP is being integrated into the PeakChoice program. Therefore, we provided per-customer reference loads and load impacts to The Brattle Group, which undertook the enrollment forecasting for all of PG&E’s demand response programs and was responsible for developing the PeakChoice ex ante load impacts. DBP load impacts for 2009, prior to the migration of DBP customers into PeakChoice, are reported here.

The primary research questions addressed by this study are:

1. What were the DBP load impacts in 2008?
2. How were the load impacts distributed across industry groups?
3. How were the load impacts distributed across local capacity areas?
4. What were the effects of TA/TI and AutoDR on customer-level load impacts?
5. What are the forecast ex ante load impacts for 2009 through 2020?

ES.1 Resources Covered

DBP Program

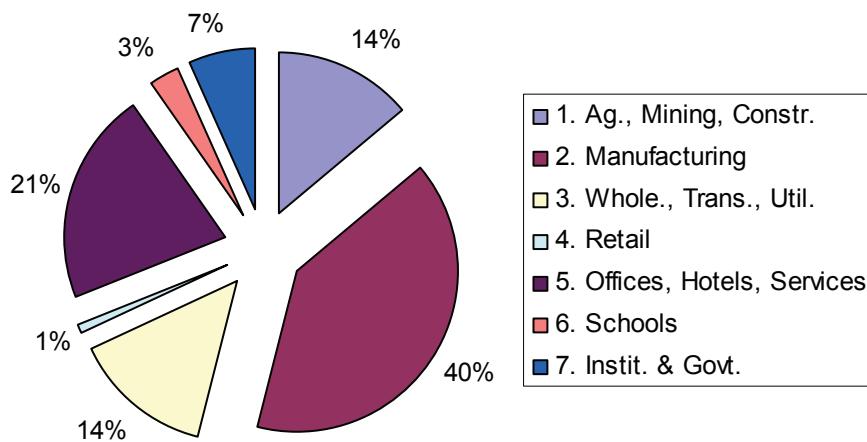
DBP, which was created in 2001, is a voluntary Internet-based demand response bidding program that provides enrolled customers with the opportunity to receive financial incentives in payment for load reductions on event days. Credits are paid based on the difference between the customers’ actual metered load during an event to a reference load, or baseline, which is calculated from each customer’s usage data prior to the event. Notice for events may be sent to the customer the day before, or the day of the event.

PG&E called one DBP event in 2008, a four-hour test event on July 9th that lasted from 2 p.m. to 6 p.m. SCE called fifteen DBP events in 2008, all lasting eight hours, from noon to 8 p.m., except for one four-hour test event.

Enrollment

Enrollment in DBP at PG&E increased from 866 customer service accounts (or agreements) in 2006 and 1,063 in 2007, to 1,165 in 2008¹, accounting for 1,382 MW of total non-coincident maximum demand.² The Manufacturing; and Offices, Hotels, Finance, and Services industry types made up the bulk of DBP enrollment at PG&E. Figure ES.1 illustrates the distribution of DBP load across the indicated industry types.

Figure ES.1 Distribution of DBP Enrollment by Industry Type – PG&E

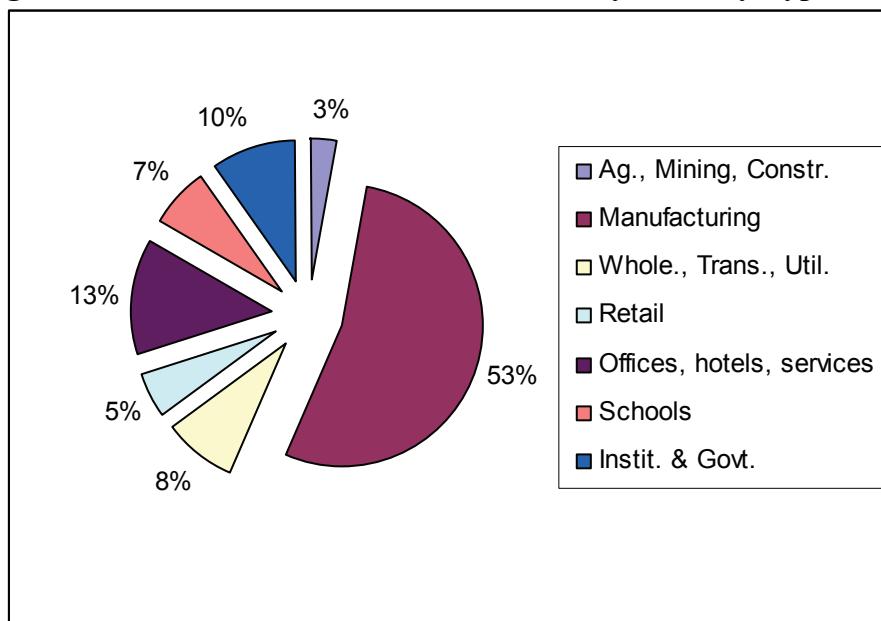


SCE's enrollment in DBP expanded modestly from 1,079 customer service accounts in 2006 and 1,222 in 2007, to 1,244 in 2008, accounting for 1,500 MW of maximum demand. Manufacturers made up more than half of the total DBP load, as shown in Figure ES.2.

¹ These numbers differ somewhat from those reported in PG&E compliance reports, due largely to definitional differences. Enrollment numbers in this report include all customer accounts that were enrolled at any time during the summer months of 2008. PG&E's program enrollments as of the end of December were 1,120 Service Agreements (SA) in 2006, 1,320 SAs in 2007, and 1,203 SAs in 2008, where the latter were estimated to provide 242 subscribed MW (*i.e.*, estimated demand reduction capability).

² That is, this value represents the sum of each customer's recorded maximum demand, regardless of when it occurred, and is designed to indicate the overall magnitude of the load enrolled in DBP. It is not an estimate of the potential demand reduction capability.

Figure ES.2 Distribution of DBP Enrollment by Industry Type – SCE



Bidding Behavior

As in previous years, only a relatively small percentage of the customer accounts enrolled in DBP submitted bids for most events. Fewer than 100 PG&E customers, representing 12 percent of the enrolled load, submitted a bid for the test event, with the total bid amount averaging 72 MW per hour. At SCE, 300 customer accounts, representing nearly half the enrolled load, submitted at least one bid during 2008. However, only 120 submitted bids for all fifteen events. The amount of load reductions bid for each event was fairly stable, at approximately 100 MW per hour.

ES.2 Evaluation Methodology

We estimated ex post load impacts using customer-level hourly load data from the months the program was in operation (*e.g.*, May through October for PG&E's year-round program). Individual-customer regression equations modeled hourly load as a function of several variables designed to control for factors affecting consumers' hourly demand levels, including:

- Seasonal and hourly time patterns (*e.g.*, year, month, day-of-week, and hour, plus various hour/day-type interactions);
- Weather (*e.g.*, cooling degree days, including hour-specific weather coefficients);
- Event indicator (dummy) variables. A series of variables was included to account for each hour of each event day, allowing us to estimate the load impacts for each hour of each event day.

DBP load impacts for each event were obtained by summing the estimated hourly event coefficients for all customers who submitted a bid for that event. The individual customer models allow the development of information on the distribution of load impacts across industry types and geographical regions, by aggregating customer load impacts for the relevant industry group or local capacity area. In addition, incremental

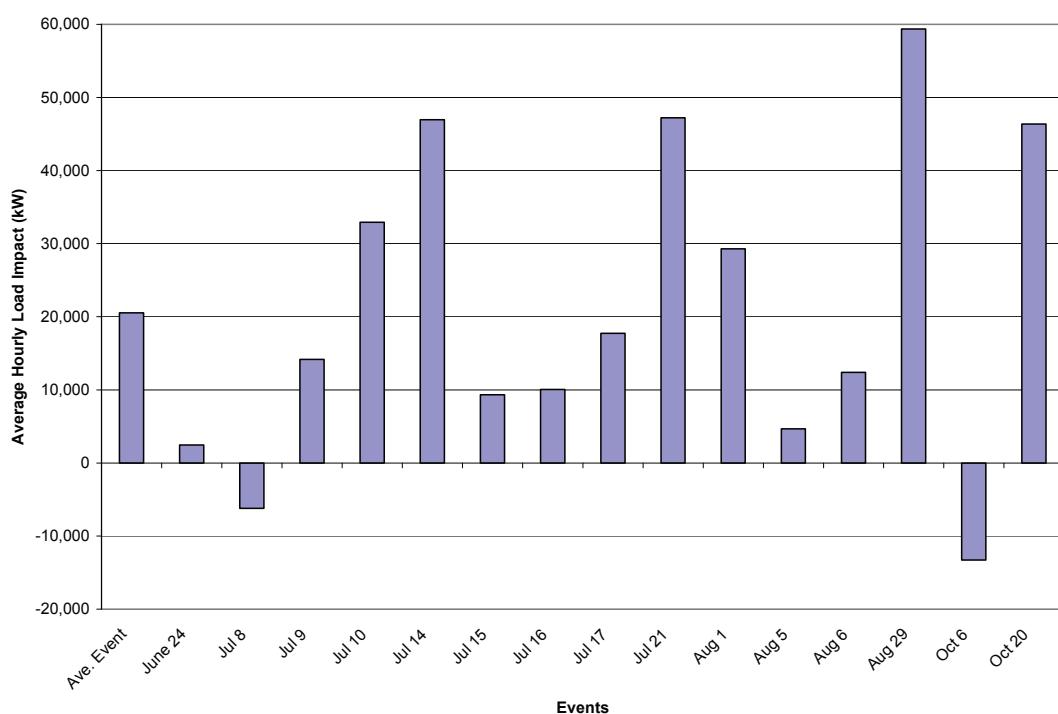
TA/TI effects on load impacts were estimated using a meta analysis, which specified percentage load impacts as a function of a series of explanatory variables that includes participation in TA/TI.

ES.3 Ex Post Load Impacts

The total program load impact for PG&E's test event averaged 31.6 MW per hour across the four event hours. Customers in the Manufacturing, and Wholesale, Transportation and Other utilities industry types accounted for the largest shares of the load impacts. Hourly load impacts ranged from 28.8 to 32.7 MW, which represented approximately 3 percent of the total DBP reference load.

The total average hourly program load impacts for SCE were approximately 21 MW across events and event hours. However, the load impacts varied considerably by event, ranging from estimated load *increases* to load impacts of nearly 60 MW (for a Friday event just prior to Labor Day, where load reductions were likely affected by the upcoming holiday). Figure ES.3 shows the average hourly load impacts for each event, and for the average.

Figure ES.3: Average Hourly DBP Load Impacts by Event – SCE



Manufacturing, and Wholesale, Transportation and Other utilities industry groups accounted for the largest shares of the load impacts. Table ES.1 provides additional detail on the reference loads, bids, and load impacts for each event. The load impacts represent less than zero (for the two load increases) to 6.4 percent of the reference load across events, averaging just over 2 percent. Load impacts as a share of submitted bids (which averaged a fairly consistent 100 MW per hour across events) averaged

approximately 40 percent for events with relatively large estimated load impacts, while they were less than 20 percent for events with smaller estimated load impacts.

Table ES.1: Average Hourly DBP Load Impacts by Event – SCE

Event	Date	Estimated Reference Load (MW)	Observed Load (MW)	Estimated Load Impact (MW)	Wtd. Ave. Temp	% Load Impact	Ave. Bid (MW)	Bid Realiz. (LI/Bid)
1	6/24/2008	908	905	2.47	79.6	0.3%	46	5%
2	7/8/2008	869	875	-6.21	80.7	-0.7%	100	-6%
3	7/9/2008*	904	890	14.16	79.2	1.6%	92	15%
4	7/10/2008*	942	910	32.92	79.0	3.5%	82	40%
5	7/14/2009	910	863	46.93	80.4	5.2%	105	45%
6	7/15/2010	904	895	9.35	81.1	1.0%	102	9%
7	7/16/2011	918	908	10.04	81.0	1.1%	92	11%
8	7/17/2012	936	919	17.73	80.2	1.9%	95	19%
9	7/21/2008*	914	867	47.20	78.8	5.2%	114	41%
10	8/1/2008*	929	899	29.29	81.6	3.2%	94	31%
11	8/5/2008*	925	921	4.67	82.6	0.5%	108	4%
12	8/6/2008*	962	950	12.40	84.2	1.3%	91	14%
13	8/29/2008*	932	873	59.38	82.3	6.4%	123	48%
14	10/6/2008	894	907	-13.29	78.1	-1.5%	145	-9%
15	10/20/2008	919	873	46.36	68.4	5.0%	110	42%
	Average	917	896	20.52	79.8	2.2%	100	21%
	Std. Dev.	22	24	21.71	3.6	2.4%	21	19%

ES.4 TA/TI and AutoDR Effects

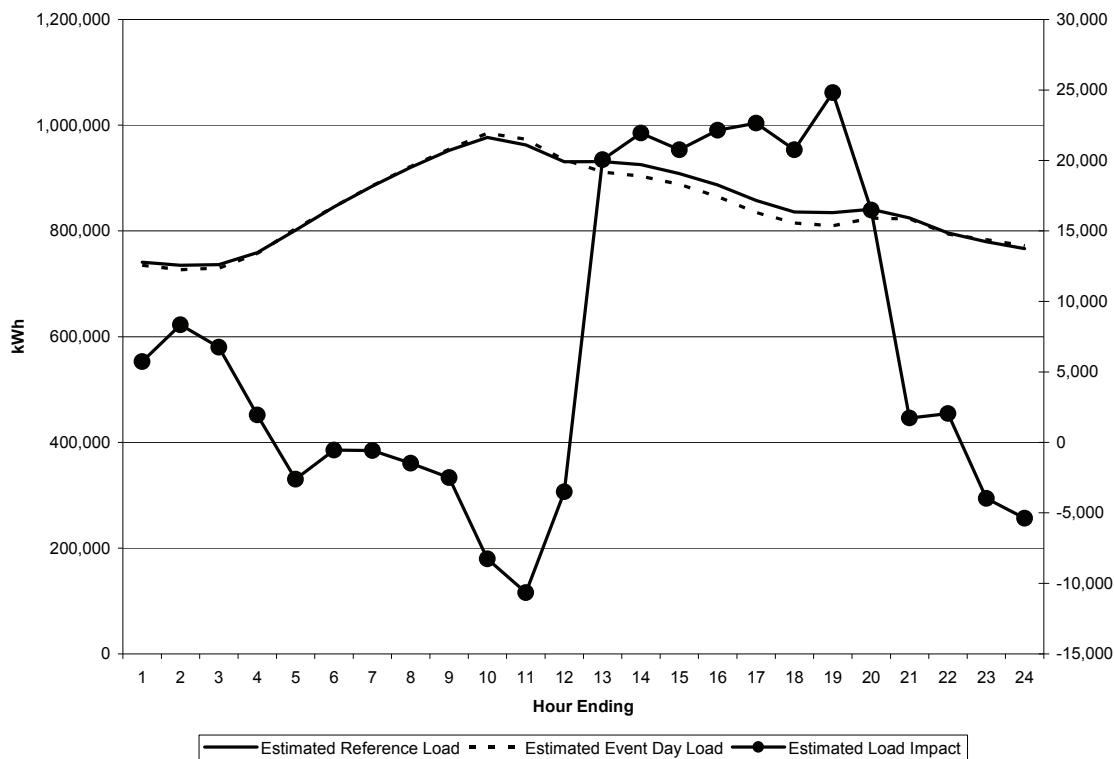
DBP customers at PG&E who participated in TA/TI produced load impacts that averaged 11.1 percent, while those participating in AutoDR had load impacts of 9.9 percent.

Comparable values for SCE were 38 percent load reductions for TA/TI participants and 2 percent load reductions for AutoDR participants. Attempts to estimate *incremental* load impact effects were hampered by the small sample sizes for the 2008 program year. For example, only 3 TA/TI participants and 12 AutoDR participants submitted bids for the PG&E test event, while 8 TA/TI participants and 2 AutoDR participants submitted bids for a DBP event at SCE. As a result of the small samples, only one estimate of incremental load impacts was statistically significant, indicating a 14.4 percentage point improvement in load response for SCE's TA/TI customers.

ES.5 Ex Ante Load Impacts

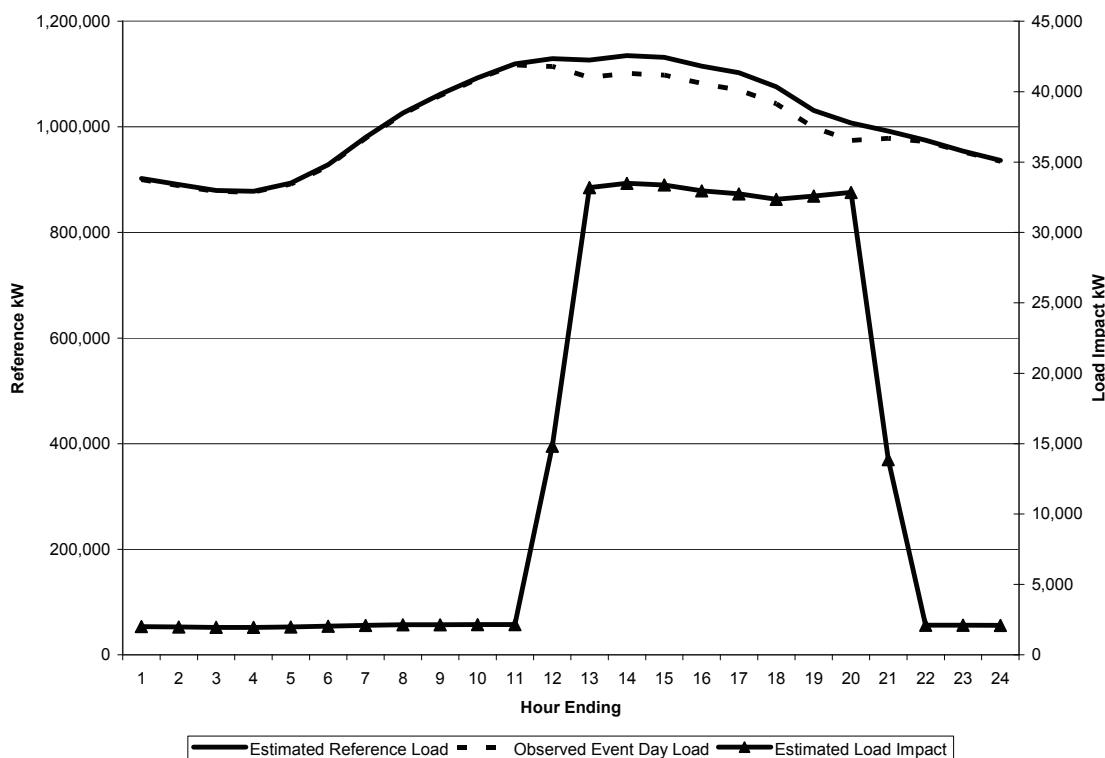
Ex ante load impacts for SCE are similar to the 2008 ex post load impacts. This occurs by design, as SCE has forecast DBP enrollments to remain flat during the forecast period. Figure ES.4 illustrates the reference loads and load impacts for the typical event day in a 1-in-2 weather year. Event-hour load impacts range from 16.5 MW to 22.6 MW, which is 2 to 3 percent of the enrolled reference load. Non-event hour load impacts average an increase of 0.8 MW, or 0.1 percent of the reference load in those hours. The load impacts are predominantly from manufacturing customers and customers in the LA Basin LCA.

**Figure ES.4: SCE DBP Ex Ante Load Impacts,
Typical Event Day in a 1-in-2 Weather Year**



For PG&E, we provided reference loads and scenarios of load impacts for scenarios defined by the weather year, size group, industry group, LCA, and event day type (typical event day and monthly peak load days), for a total of 4,992 sets of results. The percentage load impacts, which were based on results from the 2008 program year ex post load impacts, varied by industry group. The event-hour load impacts ranged from near zero percent for agriculture, mining, and construction customers to 12.3 percent for wholesale, transportation, and utility customers. The Brattle Group used our per-customer results to develop program-level load impacts for the PeakChoice program, which are described in a separate report. For the DBP program, which is in place during 2009, the program-level load impacts for the August peak day are summarized in Figure ES.5. Load impacts during the event hours range from 32.4 to 33.5 MW. The load impacts are predominantly from manufacturing and wholesale customers and customers in the Greater Bay Area LCA, or customers who are not located within an LCA.

Figure ES.5: PG&E DBP Hourly Event Day Load Impacts for the August 2009 Typical Event Day in a 1-in-2 Weather Year, Program Level



ES.6 Summary

The 2008 experience suggests that the DBP programs at PG&E were approximately 32 MW, while the load impacts at SCE averaged approximately 22 MW. However, the level of SCE load impacts was highly variable across event days, with hourly load impacts as high as 59 MW for one event day.

1. Introduction and Purpose of the Study

This report provides estimates of ex post load impacts that occurred during events called in 2008 under the statewide Demand Bidding Program (“DBP”) and forecasts the ex ante load impacts for 2009 through 2020. While all three of California’s largest investor-owned utilities had DBP in place for 2008, event days were called only by Pacific Gas and Electric Company (“PG&E”) and Southern California Edison (“SCE”). Therefore, no ex post load results are reported for San Diego Gas and Electric’s (“SDG&E’s”) 2008 program year for DBP. The load impacts for the PG&E and SCE DBP programs were estimated using separate econometric models for each enrolled DBP customer that reflected the statistical relationships between the historical load data of each customer, and weather conditions, time-based variables, and program information.

The load profiles and percentage load impacts from the 2008 program year are used to develop ex ante load impacts for SCE and PG&E. In the case of PG&E, DBP is being integrated into the PeakChoice program. Therefore, we provided per-customer reference loads and load impacts to The Brattle Group, which undertook the enrollment forecasting for all of PG&E’s demand response programs and was responsible for developing the PeakChoice ex ante load impacts.³

The primary research questions addressed by this study are:

1. What were the DBP load impacts in 2008?
2. How were the load impacts distributed across industry groups?
3. How were the load impacts distributed across local capacity areas?
4. What were the effects of TA/TI and AutoDR on customer-level load impacts?
5. What are the forecast ex ante load impacts for 2009 through 2020?

The report is organized as follows. Section 2 contains a description of the DBP programs, the enrolled customers, and the events called; Section 3 describes the methods used in the study; Section 4 contains the detailed ex post load impact results, including estimates of the incremental effect of TA/TI and AutoDR on load impacts; Section 5 describes the ex ante load impact forecast; Section 6 contains an assessment of the validity of the study; and Section 7 provides conclusions and recommendations.

Appendices contain a summary of the estimated regression equations, and detailed tables of event-specific load impacts for each program, as well as load impacts by industry group and local capacity area.

2. Description of Resources Covered in the Study

Created in 2001, DBP is a voluntary Internet-based demand response bidding program that provides enrolled customers with the opportunity to receive financial incentives in payment for load reductions on event days. Credits are paid based on the difference between the customers’ actual metered load during an event to a reference load, or baseline, calculated from each customer’s usage data prior to the event. Thus, credits are

³ See Enrollment Forecasts for PG&E’s Demand Response Programs and Ex Ante Load Impact of the PeakChoice Program, 2009-2020, The Brattle Group, April 15, 2009.

paid based on the difference between the customer's baseline for a particular hour and the customer's actual energy demand during that hour. Notice for events may be sent to the customer the day before, or the day of the event.

2.1 Program Descriptions

At PG&E, DBP is available to time-of-use customers with billed maximum demands of 200 kW or higher (less for aggregated customers) who commit to reduce load by a minimum of 50 kW in each hour during a DBP event. Eligible customers must have an interval meter which is paid for by PG&E, except for direct access customers. For aggregated customers, there must be at least one service agreement with a maximum demand of 200kW or greater for at least one or more of the past 12 billing months within each aggregated group that will be designated as the primary service agreement for the aggregated group.

The DBP program operates year-round and can be called from 12:00 p.m. to 8:00 p.m. on weekdays, excluding holidays. There is no limit to the number of days on which DBP events may be called. Notification of an event day may be provided on either a day-ahead or day-of basis. Day-ahead events are triggered with a California ISO Alert Notice for the following day, or when the California ISO's day-ahead peak demand forecast is 43,000 MW or greater. Day-of events are triggered when the California ISO issues an energy Warning. When an event day is called, enrolled customers may choose to bid a load reduction for the event or not to participate.

For events called a day ahead, the incentive payment is \$0.50 per kWh reduced below a baseline level; for events called on the same day, the incentive payment is \$0.60 per kWh. Customers must reduce load by a minimum of 50 percent of their bid amount to qualify for a credit, and they are paid for load reductions up to 150 percent of their bid amount. The hourly baseline for load reductions is calculated as the highest three usage values from the previous ten qualifying days (non-holiday, non-event weekdays). There is no penalty for failing to comply with the terms of the submitted bid. Each bid must be a minimum of two consecutive hours during the event. Bids must meet the threshold of 50kW for each hour and customers may submit only one bid for each event notification.

Although PG&E customers currently enrolled in CPP may participate in DBP, they will not receive a DBP incentive for those hours in which a DBP event and a CPP event occurred simultaneously. DBP customers may also be enrolled in the Business Energy Coalition (BEC) program, the Base Interruptible Program (BIP), the Optional Binding Mandatory Curtailment (OBMC) and/or the Scheduled Load Reduction Program (SLRP).

SCE's DBP program design is similar to PG&E's, with two exceptions: Enrolled customers are required to commit to a minimum load reduction of 30 kW (versus 50 kW at PG&E); and bidding customers are paid for load reductions up to 200 percent of their bid amount. DBP participants may also participate in CPP. However, if a DBP event is called on the same day as a CPP event, CPP has priority, in that consumers are charged CPP prices and are prohibited from bidding and receiving DBP payments for load reductions during the CPP event hours.

2.2 Participant Characteristics

2.2.1 Development of Customer Groups

In order to assess differences in load impacts across customer types, the program participants were categorized according to eight industry types. The industry groups are defined according to their applicable two-digit NAICS codes:⁴

1. Agriculture, Mining and Oil and Gas, Construction: 11, 21, 23
2. Manufacturing: 31-33
3. Wholesale, Transport, other Utilities: 22, 42, 48-49
4. Retail stores: 44-45
5. Offices, Hotels, Finance, Services: 51-56, 62, 72
6. Schools: 61
7. Institutional/Government: 71, 81, 92
8. Other or unknown

In addition, each utility provided information regarding the CAISO Local Capacity Area (LCA) in which the customer resides (if any).⁵ In order to derive results at the industry group or LCA level, we added the load impacts from the applicable customer-level regression results.

2.2.2 Program Participants by Type

The following sets of tables summarize the characteristics of the participating customer accounts, including customer size—categorized by maximum demand—as well as industry type, for PG&E and SCE.

Table 2.1 shows DBP enrollment by industry group for PG&E. Enrollment in DBP increased from 866 customer service accounts in 2006 and 1,063 in 2007 to 1,165 service accounts in 2008, which accounted for 1,382 MW of non-coincident maximum demand.⁶ The Manufacturing; and Offices, Hotels, Finance, and Services industry types made up the bulk of DBP enrollment at PG&E.

⁴ SCE provided SIC codes in place of NAICS codes. The industry groups were therefore defined according the following SIC codes: 1 = under 2000; 2 = 2000 to 3999; 3 = 4000 to 5199; 4 = 5200 to 5999; 5 = 6000 to 8199; 6 = 8200 to 8299; 7 = 8300 and higher.

⁵ Local Capacity Area (or LCA) refers to a CAISO-designated load pocket or transmission constrained geographic area for which a utility is required to meet a Local Resource Adequacy capacity requirement. There are currently seven LCAs within PG&E's service area, 3 in SCE's service territory and 1 in SDG&E's service territory. In addition, there are many accounts not located within any specific LCA. These are categorized here as being in an Other LCA region.

⁶ That is, the value is the sum of each customer's recorded maximum demand, regardless of when it occurred.

Table 2.1: DBP Enrollees by Industry Group – PG&E

Industry type	Sum of				Ave. Size (kW)
	Count	Sum of Max kW	Mean kWh	% of Max kW	
1. Ag., Mining, Constr.	147	190,872	144,516	14%	1,298
2. Manufacturing	314	555,037	352,086	40%	1,768
3. Whole., Trans., Util.	215	196,194	95,467	14%	913
4. Retail	42	11,366	6,269	1%	271
5. Offices, Hotels, Services	317	295,288	183,772	21%	932
6. Schools	47	42,852	22,433	3%	912
7. Instit. & Govt.	83	90,333	51,807	7%	1,088
TOTAL	1,165	1,381,941	856,351		1,186

Table 2.2 shows comparable information on enrollment for SCE. SCE's enrollment in DBP expanded modestly from 1,079 service accounts in 2006 and 1,222 in 2007 to 1,244 service accounts in 2008, which accounted for 1,500 MW of maximum demand. Manufacturers made up more than half of the enrolled load.

Table 2.2: DBP Enrollees by Industry Group – SCE

Industry type	Sum of				Ave. Size (kW)
	Count	Sum of Max kW	Mean kWh	% of Max kW	
1. Ag., Mining, Constr.	35	44,113	27,889	3%	1,260
2. Manufacturing	327	799,990	517,738	53%	2,446
3. Whole., Trans., Util.	225	126,323	75,313	8%	561
4. Retail	161	79,629	52,690	5%	495
5. Offices, Hotels, Services	239	200,372	129,247	13%	838
6. Schools	170	101,217	48,097	7%	595
7. Instit. & Govt.	87	146,779	115,498	10%	1,687
TOTAL	1,244	1,498,423	966,471		1,205

Tables 2.3 and 2.4 show DBP enrollment by local capacity area for PG&E and SCE respectively.

Table 2.3: DBP Enrollees by Local Capacity Area – PG&E

Local Capacity Area	Sum of Max % of Max Ave. Size			
	Count	kW	kWh	(kW)
1 Greater Bay Area	532	480,163	35%	903
2 Greater Fresno	48	52,584	4%	1,096
3 Humboldt	7	13,653	1%	1,950
4 Kern	48	40,958	3%	853
5 Northern Coast	76	54,995	4%	724
6 Sierra	361	674,997	49%	1,870
7 Stockton	60	36,057	3%	601
8 Not in Any LCA	33	28,533	2%	865
Total	1,165	1,381,941		1,186

Table 2.4: DBP Enrollees by Local Capacity Area – SCE

Local Capacity Area	Sum of Max % of Max Ave. Size			
	Count	kW	kW	(kW)
LA Basin	967	898,162	60%	929
Outside LA Basin	59	73,692	5%	1,249
Ventura	138	128,264	9%	929
Other	80	398,305	27%	4,979
TOTAL	1,244	1,498,423		1,205

Tables 2.5 shows the number of PG&E DBP enrollees who submitted a bid for the test event. Only a small portion of enrollees submitted a bid for the PG&E test event.

Table 2.5: DBP Bidding Behavior – PG&E

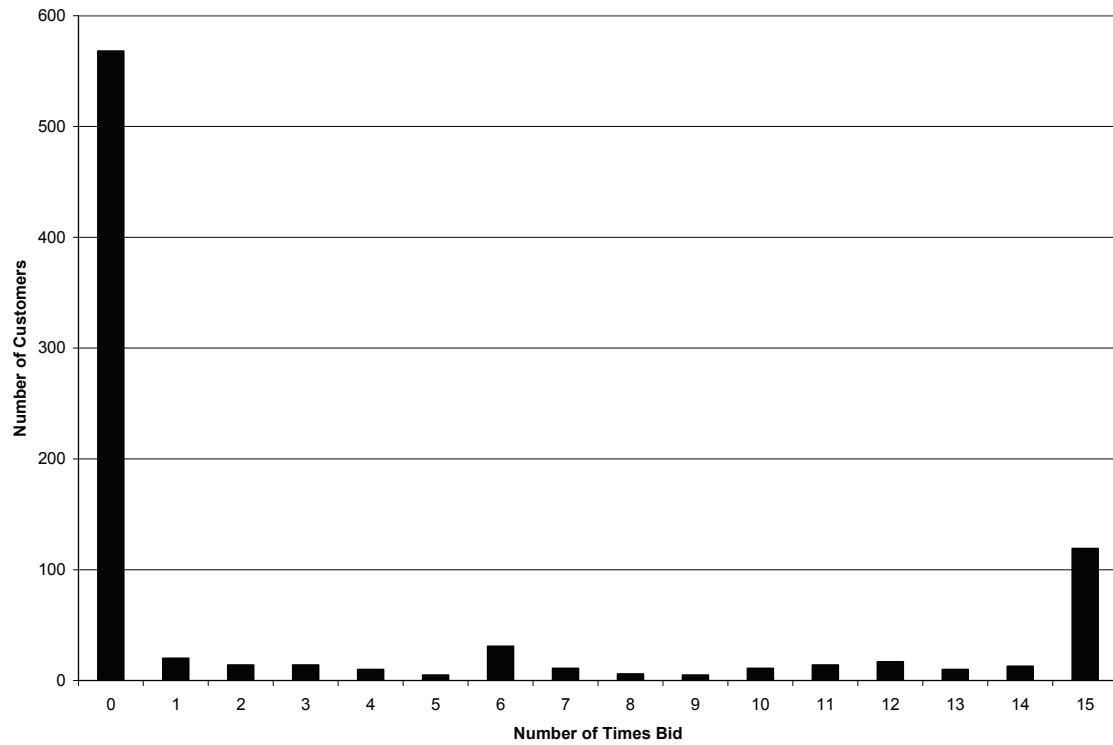
Industry type	% of Enrolled		
	# Bidders	Sum of Max kW	Max kW
1. Ag., Mining, Constr.	9	19,654	10%
2. Manufacturing	28	100,665	18%
3. Whole., Trans., Util.	26	41,128	21%
4. Retail	3	1,857	16%
5. Offices, hotels, services	19	29,738	10%
6. Schools	1	1,543	4%
7. Instit. & Govt.	8	6,184	7%
TOTAL	96	201,095	15%

Table 2.6 shows the number of SCE DBP enrollees who submitted at least one bid for a DBP event. A quarter of the SCE enrollees, making up nearly half the enrolled load, submitted a bid for at least one event. However, as shown in Figure 2.1, most submitted only a few bids. About 120 enrollees submitted bids for all events.

Table 2.6: DBP Bidding Behavior – SCE

Industry type	% of Enrolled		
	# Bidders	Sum of Max kW	Max kW
1. Ag., Mining, Constr.	7	9,089	21%
2. Manufacturing	107	476,412	59%
3. Whole., Trans., Util.	48	50,423	40%
4. Retail	25	23,199	29%
5. Offices, hotels, services	50	48,227	24%
6. Schools	46	21,001	20%
7. Instit. & Govt.	17	77,208	52%
TOTAL	300	705,559	47%

Figure 2.1: DBP Bidding by Number of Bids – SCE



2.3 Event Days

PG&E called only one DBP event in 2008, a four-hour test event on July 9th that lasted from 2:00 p.m. to 6:00 p.m. SCE called fifteen DBP events in 2008, as shown in Table 2.7. The first event was a four-hour test event, while the remaining events were eight hours in duration. DBP events that coincided with CPP events are indicated by an asterisk. SDG&E did not call any DBP events.

Table 2.7: SCE DBP Event Days in 2008

Event Date	Event Trigger	Event Hours
June 24, 2008	Test Event	12:00 : 16:00
July 8, 2008	Heat Rate Exceeded	12:00 : 20:00
July 9, 2008*	Heat Rate Exceeded	12:00 : 20:00
July 10, 2008*	Heat Rate Exceeded	12:00 : 20:00
July 14, 2008	Heat Rate Exceeded	12:00 : 20:00
July 15, 2008	Heat Rate Exceeded	12:00 : 20:00
July 16, 2008	Heat Rate Exceeded	12:00 : 20:00
July 17, 2008	Heat Rate Exceeded	12:00 : 20:00
July 21, 2008*	Heat Rate Exceeded	12:00 : 20:00
August 1, 2008*	Heat Rate Exceeded	12:00 : 20:00
August 5, 2008*	Heat Rate Exceeded	12:00 : 20:00
August 6, 2008*	Heat Rate Exceeded	12:00 : 20:00
August 29, 2008*	Heat Rate Exceeded	12:00 : 20:00
October 6, 2008	Heat Rate Exceeded	12:00 : 20:00
October 20, 2008	Heat Rate Exceeded	12:00 : 20:00

3. Study Methodology

3.1 Overview

We estimated ex post load impacts using customer-level hourly demand data from the program months (*e.g.*, May through October for PG&E's year-round DBP program). The regression equation models hourly load as a function of a set of predictors designed to control for factors affecting consumers' hourly demand levels, such as:

- Seasonal and hourly time patterns (*e.g.*, year, month, day-of-week, and hour, plus various hour/day-type interactions);
- Weather (*e.g.*, cooling degree days, including hour-specific weather coefficients);
- Event variables. A series of dummy variables was included to account for each hour of each event day, allowing us to estimate the load impacts for all hours across the event days.

The models use the *level* of hourly demand as the dependent variable and a separate equation is estimated for each enrolled customer. As a result, the coefficients on the event day/hour variables are direct estimates of the ex post load impacts. For example, a

DBP hour 14 event coefficient of -100 would mean that the customer reduced load by 100 kWh during hour 14 of that event day relative to its normal usage in that hour.⁷ Weekends and holidays were excluded from the estimation database.⁷

3.2 Description of Methods

3.2.1 Regression Model

The model shown below was separately estimated for each enrolled customer.

$$\begin{aligned}
 Q_t = & a + \sum_{Evt=1}^N \sum_{i=1}^{24} (b_{Evt,i}^{DBP} \times h_{i,t} \times DBP_t) + b^{MornLoad} \times MornLoad_t + \sum_{i=13}^{18} (b_i^{CPP} \times h_{i,t} \times CPP_t) \\
 & + \sum_{i=1}^{24} (b_i^{CDD} \times h_{i,t} \times CDD_t) + \sum_{i=1}^{24} (b_i^{SUM} \times h_{i,t} \times SUM_t) + \sum_{i=2}^{24} (b_i^{MON} \times h_{i,t} \times MON_t) \\
 & + \sum_{i=2}^{24} (b_i^{FRI} \times h_{i,t} \times FRI_t) + \sum_{i=2}^{24} (b_i^h \times h_{i,t}) + \sum_{i=2}^5 (b_i^{DTYPE} \times DTTYPE_{i,t}) \\
 & + \sum_{i=6}^{10} (b_i^{MONTH} \times MONTH_{i,t}) + e_t
 \end{aligned}$$

In this equation, Q_t represents the customer's hourly demand; the b 's are estimated parameters; DBP_t is a dummy variable equal to one on DBP event days; $h_{i,t}$ is a dummy variable for hour i ; $MornLoad_t$ is the day's average load from hours 1 through 10; CPP_t is equal to one on CPP event days for customers enrolled in CPP⁸; CDD_t is cooling degree days⁹; SUM_t is a variable defining non-summer according to an approximate school calendar¹⁰; MON_t is a dummy variable for Monday; FRI_t is a dummy variable for Friday; $DTTYPE_{i,t}$ is a series of dummy variables for each day of the week; $MONTH_{i,t}$ is a series of dummy variables for the months of June through October; and e_t is the error term. The "morning load" variable was used in lieu of a more formal autoregressive structure in order to adjust the model to account for the level of load on a particular day. Because of the autoregressive nature of the morning load variable, no further correction for serial correlation was performed in these models.

⁷ Including weekends and holidays would require the addition of variables to capture the fact that load levels and patterns on weekends and holidays can differ greatly from those of non-holiday weekdays. Because event days do not occur on weekends or holidays, the exclusion of these data does not affect the model's ability to estimate ex post load impacts.

⁸ These variables are only included in the SCE model. They account for the overlap that occurred in DBP and CPP event days in 2008, which can affect load impact estimates because customers may enrolled in both DBP and CPP. The variables were not necessary for PG&E because the only DBP event in 2008 was also a CPP event. That is, we add load impacts for only bidding customers, and customers who are in CPP cannot submit DBP bids.

⁹ Cooling degree days are defined as $\text{MAX}[0, (\text{maxT} + \text{minT}) / 2 - 65]$, where maxT is the maximum daily temperature in degrees Fahrenheit and minT is the minimum daily temperature.

¹⁰ For PG&E, this variable is equal to one for dates before June 14th and after August 26th (the model includes data from May through October). For SCE, it is equal to one for dates after August 24th (the model includes data from June through October).

Separate models were estimated for each customer. The load impacts were aggregated across customers to arrive at program-level load impacts and results by industry group and local capacity area (LCA). In addition, a “meta-analysis” of the customer-level results is performed to assess the load impacts associated with customers participating in the TA/TI and AutoDR programs.

PG&E only called one event (a test event), which was also a CPP event day. This overlap in event days eliminated the need to account for CPP/DBP program overlap when estimating the models. However, when aggregating the DBP load impacts, we did not include load impacts for customers who were in both CPP and DBP. (CPP takes precedence over DBP, and the CPP event window encompassed the entire DBP event window.) For both PG&E and SCE, load impacts were aggregated over only customers who submitted a bid for a given event. However, the reference loads are aggregated over all enrolled customers.

3.2.2 Development of Uncertainty-Adjusted Load Impacts

The Load Impact Protocols require the estimation of uncertainty-adjusted load impacts. In the case of *ex post* load impacts, the parameters that constitute the load impact estimates are not estimated with certainty. Therefore, we base the uncertainty-adjusted load impacts on the variances associated with the estimated load impacts.

Specifically, we add the variances of the estimated load impacts across the customers who submit a bid for the event in question. These aggregations were performed at either the program level, by industry group, or by LCA. The uncertainty-adjusted scenarios were then simulated under the assumption that each hour’s load impact is normally distributed with the mean equal to the sum of the estimated load impacts and the standard deviation equal to the square root of the sum of the variances of the errors around the estimates of the load impacts. Results for the 10th, 30th, 70th, and 90th percentile scenarios are generated from these distributions.

4. Detailed Study Findings

The following sub-sections describe the ex post load impact results on a detailed level for each utility.

4.1 PG&E

4.1.1 Average Hourly Load Impacts by Industry Group and LCA

Table 4.1 summarizes average hourly DBP load impacts at the program level and by industry group for PG&E’s test event, which occurred on July 9th.¹¹ Across the four event hours, the average hourly load impact was 31.6 MW. Manufacturing, and Wholesale, Transportation and other Utilities industry groups accounted for the largest shares of the load impacts. Table 4.2 summarizes load impacts by local capacity area, showing that the highest share of the load impacts came from outside of the seven LCAs.

¹¹ That date was also a CPP event, so that the DBP load impacts exclude the load impacts of DBP enrollees who were also CPP enrollees, and who might have otherwise submitted a DBP bid and reduced load in the DBP event.

Table 4.1: Average Hourly Load Impacts – PG&E DBP, by Industry Group

Industry type	Estimated Reference Load (kW)	Observed Load (kW)	Estimated Load Impact (kW)	Wtd. Ave. Temp.	% LI
1. Ag., Mining, Constr.	151,648	151,768	-120	101	-0.1%
2. Manufacturing	400,637	388,352	12,285	96	3.1%
3. Whole., Trans., Util.	102,957	90,311	12,646	97	12.3%
4. Retail	10,008	9,686	322	96	3.2%
5. Offices, Hotels, Services	282,378	278,047	4,331	91	1.5%
6. Schools	30,831	30,265	566	88	1.8%
7. Instit. & Govt.	75,996	74,438	1,557	96	2.0%
TOTAL	1,054,456	1,022,867	31,588		3.0%

Table 4.2: Average Hourly Load Impacts – PG&E DBP, by LCA

Local Capacity Area	Estimated Reference Load (kW)	Observed Load (kW)	Estimated Load Impact (kW)	Wtd. Ave. Temp.	% LI
1 Greater Bay Area	424,246	415,692	8,554	90.12	2.0%
2 Greater Fresno	41,670	41,582	88	105.51	0.2%
3 Humboldt	6,690	3,258	3,431	70.58	51.3%
4 Kern	26,947	22,667	4,281	107.50	15.9%
5 Northern Coast	40,370	38,332	2,038	96.14	5.0%
6 Sierra	16,691	16,651	40	100.21	0.2%
7 Stockton	15,239	14,731	508	102.58	3.3%
8 Not in Any LCA	482,603	469,955	12,648	97.96	2.6%
Total	1,054,456	1,022,867	31,588		3.0%

4.1.2 Hourly Load Impacts

Tables 4.3a and 4.3b present hourly PG&E DBP load impacts at the program and per customer levels (respectively) in the manner required by the Protocols. Although DBP load impacts were estimated from the individual customer regressions of only those enrolled customers who submitted a bid on the test event, the reference loads and observed loads in the table reflect all customers enrolled in DBP. Hourly load impacts ranged from 29 to 34 MW, which represent approximately 3 percent of the total DBP reference load for enrolled customers.

The top portion of Figure 4.1 illustrates the reference load and observed load for the DBP test event. The lower portion of the figure displays the estimated load impacts (which are labeled on the right y-axis). Figure 4.2 illustrates the uncertainty-adjusted load impacts, where the 50 percent line represents the load impact values shown in Figure 4.1. The 10th and 90th percentile values lie about 19 to 22 percent below and above the estimated load impact.

The full set of tables required by the Protocols, including event-specific tables for each industry group and local capacity area, are in the Excel file attached as an Appendix to this report.

Table 4.3a: Aggregate DBP Hourly Load Impacts for July 9, 2008 Event Day – PG&E

Hour Ending	Estimated Reference Load (kWh/hour)	Observed Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (°F)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	886,620	885,138	1,482	77	-4,861	-1,114	1,482	4,078	7,825
2	872,102	871,862	240	76	-6,104	-2,356	240	2,835	6,583
3	868,077	868,961	-884	74	-7,227	-3,479	-884	1,712	5,460
4	870,162	872,104	-1,942	73	-8,285	-4,537	-1,942	654	4,402
5	888,751	889,005	-254	72	-6,597	-2,850	-254	2,342	6,089
6	929,520	928,892	628	71	-5,715	-1,967	628	3,224	6,972
7	973,805	969,883	3,922	72	-2,421	1,327	3,922	6,518	10,266
8	1,027,346	1,019,786	7,560	73	1,216	4,964	7,560	10,155	13,903
9	1,053,272	1,044,492	8,780	76	2,437	6,185	8,780	11,376	15,124
10	1,073,715	1,066,256	7,459	81	1,116	4,864	7,459	10,055	13,803
11	1,102,239	1,097,786	4,453	85	-1,890	1,858	4,453	7,049	10,797
12	1,099,633	1,096,160	3,473	89	-2,870	878	3,473	6,069	9,817
13	1,078,903	1,076,065	2,838	92	-3,506	242	2,838	5,433	9,181
14	1,076,239	1,062,788	13,451	94	7,108	10,855	13,451	16,047	19,794
15	1,076,041	1,041,918	34,123	96	27,780	31,528	34,123	36,719	40,467
16	1,064,185	1,031,488	32,697	96	26,354	30,101	32,697	35,293	39,040
17	1,051,685	1,020,968	30,717	96	24,374	28,121	30,717	33,313	37,060
18	1,025,911	997,096	28,815	95	22,472	26,220	28,815	31,411	35,159
19	996,727	983,525	13,202	93	6,858	10,606	13,202	15,797	19,545
20	980,522	975,470	5,052	90	-1,292	2,456	5,052	7,647	11,395
21	972,790	973,667	-877	86	-7,220	-3,473	-877	1,719	5,466
22	967,419	971,785	-4,366	83	-10,709	-6,962	-4,366	-1,770	1,977
23	946,212	946,171	41	81	-6,303	-2,555	41	2,636	6,384
24	927,825	929,988	-2,164	79	-8,507	-4,759	-2,164	432	4,180
Daily	Reference Energy Use (kWh)	Estimated Event Day Energy Use (kWh)	Change in Energy Use (kWh)	Cooling Degree Hours (Base 75 oF)	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
					10th	30th	50th	70th	90th
Daily	23,809,702	23,621,255	188,447	215.0	n/a	n/a	n/a	n/a	n/a

Table 4.3b: Per Customer DBP Hourly Load Impacts for July 9, 2008 Event Day – PG&E

Hour Ending	Estimated Reference Load (kWh/hour)	Observed Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (°F)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	761	760	1	77	-4	-1	1	4	7
2	749	748	0	76	-5	-2	0	2	6
3	745	746	-1	74	-6	-3	-1	1	5
4	747	749	-2	73	-7	-4	-2	1	4
5	763	763	0	72	-6	-2	0	2	5
6	798	797	1	71	-5	-2	1	3	6
7	836	833	3	72	-2	1	3	6	9
8	882	875	6	73	1	4	6	9	12
9	904	897	8	76	2	5	8	10	13
10	922	915	6	81	1	4	6	9	12
11	946	942	4	85	-2	2	4	6	9
12	944	941	3	89	-2	1	3	5	8
13	926	924	2	92	-3	0	2	5	8
14	924	912	12	94	6	9	12	14	17
15	924	894	29	96	24	27	29	32	35
16	913	885	28	96	23	26	28	30	34
17	903	876	26	96	21	24	26	29	32
18	881	856	25	95	19	23	25	27	30
19	856	844	11	93	6	9	11	14	17
20	842	837	4	90	-1	2	4	7	10
21	835	836	-1	86	-6	-3	-1	1	5
22	830	834	-4	83	-9	-6	-4	-2	2
23	812	812	0	81	-5	-2	0	2	5
24	796	798	-2	79	-7	-4	-2	0	4
Daily	Reference Energy Use (kWh)	Estimated Event Day Energy Use (kWh)	Change in Energy Use (kWh)	Cooling Degree Hours (Base 75 oF)	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
	20,438	20,276	162	215.0	n/a	n/a	n/a	n/a	n/a

Figure 4.1: DBP Load Impacts – PG&E

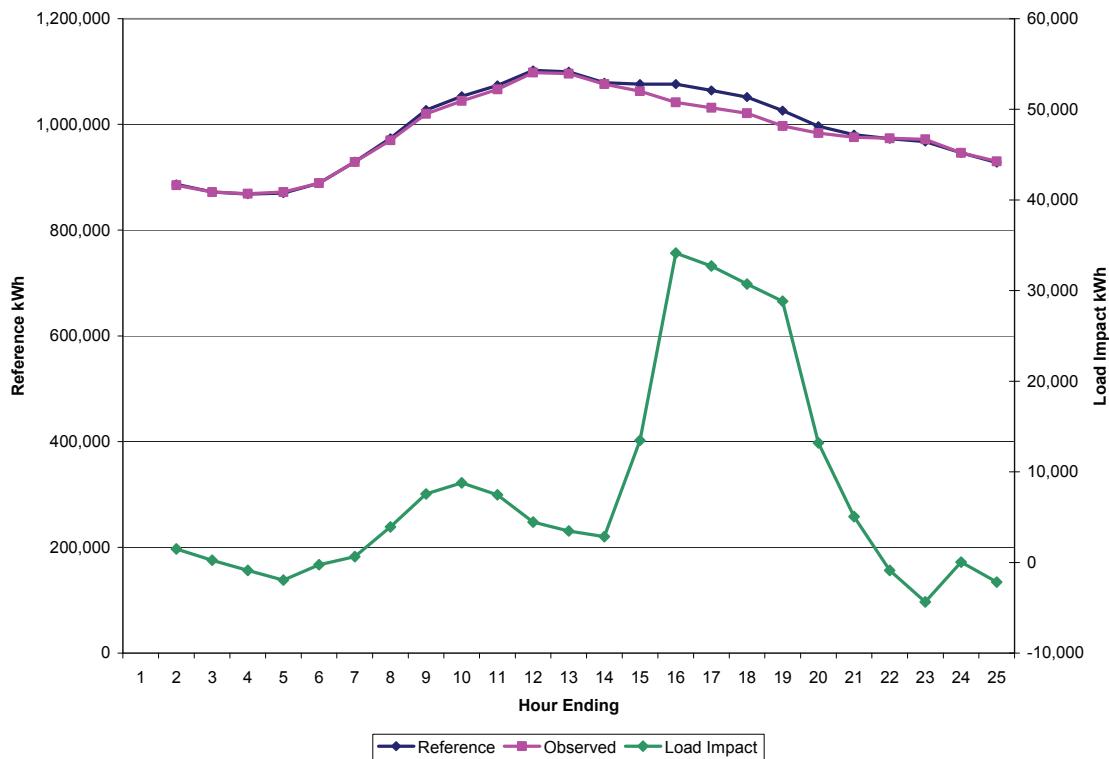
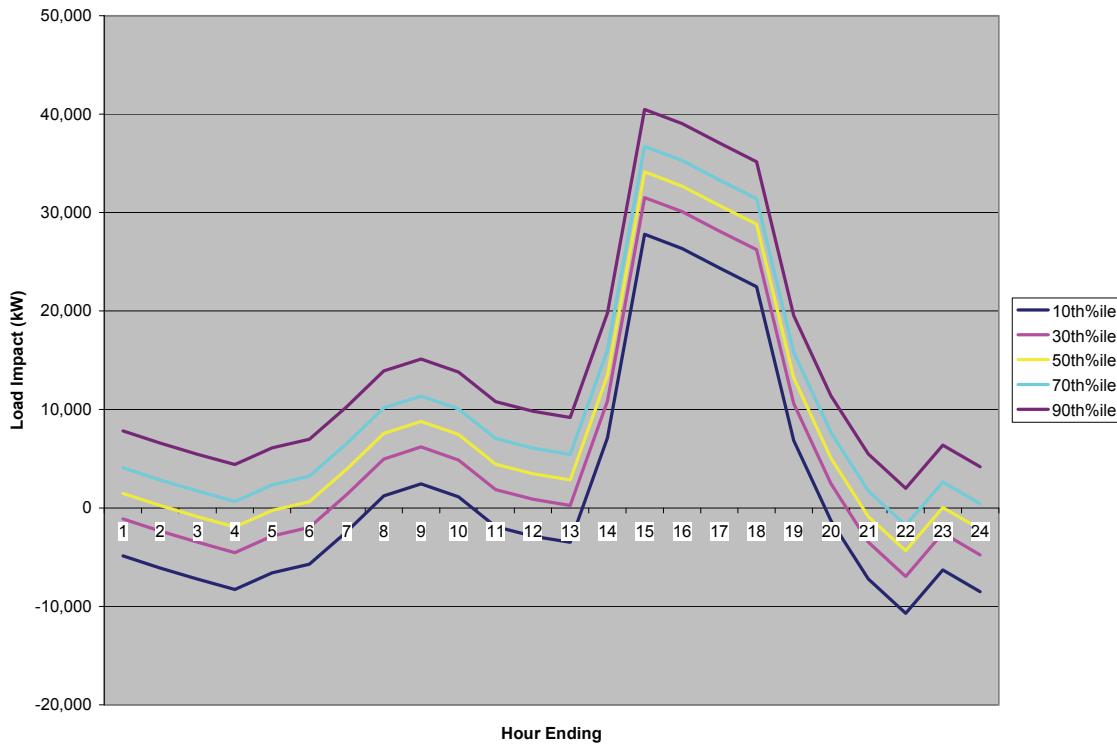


Figure 4.2: Uncertainty-Adjusted DBP Load Impacts – PG&E



4.1.3 Effect of TA/TI and AutoDR on Load Impacts

In order to examine the effect of TA/TI and AutoDr on load impacts, we conducted a “meta-analysis” that attempted to determine the drivers of differences in the estimated load impacts across customers and events.

The TA/TI program has two parts: technical assistance (TA) in the form of energy audits, and technology incentives (TI). The objective of the TA portion of the program is to subsidize customer energy audits so that they can identify ways to participate in DR. The TI portion of the program then provides incentive payments for the installation of equipment or control software supporting DR.

The AutoDR program helps customers to activate DR strategies, such as managing lighting in heating, ventilation, and air conditioning (HVAC) systems, whereby electrical usage can be automatically reduced or even eliminated during times of high electricity prices or electricity system emergencies.

Each observation within the database used for this analysis represents a service account’s average percentage load response during each event. Specifically, the dependent variable is calculated by averaging the event-hour load impact coefficients from the service account-specific regression models and dividing the result by the estimated average reference load for each service account and event. The average reference load is calculated by adding the average estimated load impact back into the average observed load in the event hours. We limited the database to include only service accounts and

events in which the customer submitted a bid. In addition, to prevent the results from being driven by outliers, we restricted the analysis to include only percentage changes in load in the range of -100 to +100 percent.¹²

The explanatory variables in this analysis included the following:

- *Industry group indicator variables*, which provide estimates of the difference in load impacts by industry group.
- *Average usage*, which provides an estimate of whether percentage load impacts differ with the size of the service account. The variable is equal to the average hourly usage during non-holiday weekdays of program months.
- *TA/TI indicator variable*, which provides an estimate of the difference in load response for service accounts who participated in the TA/TI technology incentives program.
- *AutoDR indicator variable*, which provides an estimate of the difference in load response for service accounts with AutoDR technology in place.

Table 4.4 summarizes the number of service accounts by industry group for TA/TI and AutoDR. PG&E had only one DBP event day in 2008.

Table 4.4: TA/TI and AutoDR Participation by Industry Group – PG&E

Industry Group	Number of TA/TI Service Accounts	Number of AutoDR Service Accounts
1. Ag., Mining, Constr.	0	0
2. Manufacturing	1	1
3. Whole., Trans., Util.	0	2
4. Retail	1	2
5. Offices, hotels, services	1	5
6. Schools	0	0
7. Institutional/Government	0	2
Total	3	12

As, Table 4.4 shows, only three TA/TI service accounts and twelve AutoDR service accounts submitted bids for the DBP event in 2008. Because of the relatively small samples, it may not be possible to reach general conclusions about the level of success for these programs. Perhaps reflecting the small sample size, our statistical model was unable to identify a statistically significant effect of TA/TI or AutoDR. That is, while the estimates from the model indicated that TA/TI improves load response by 3.8 percentage points and AutoDR *reduces* load response by 20.2 percentage points, neither result was statistically significantly different from zero. Note that the *overall* load response (as opposed to the *incremental* load response) for TA/TI customers was 11.1 percent of the

¹² A value of this magnitude might occur, for example, in a case where a service account's observed load during an event is very low, and the estimated load reduction is also small, and likely not significant. Such extreme observations provide little meaningful information on typical load impacts.

average event-hour reference load; while AutoDR customers reduced load by 9.9 percent of their average event-hour reference load.

4.2 SCE

4.2.1 Average Hourly Load Impacts by Industry Group and LCA

Table 4.5 summarizes average hourly reference loads and load impacts at the program level for each of SCE's DBP events. Asterisks are used to indicate days on which CPP events were simultaneously called. Across all events, the average hourly load impact was approximately 21 MW. However, the load impacts varied considerably by event, ranging from estimated load *increases* for two events, to load reductions of nearly 60 MW. Load impacts averaged about 2 percent of the total reference load.

The table also shows average hourly bid amounts for each event. These are reasonably consistent across events, at about 100 MW. As a result, bid realization rates (estimated load impacts as a percentage of bid amounts), shown in the final column, vary widely. On the six event days with estimated load impacts exceeding about 30 MW, realization rates averaged around 40 percent. However, for the remaining events, they were less than 20 percent.

Table 4.5: Average Hourly Load Impacts by Event – SCE DBP

Event	Date	Estimated Reference Load (MW)	Observed Load (MW)	Estimated Load Impact (MW)	Wtd. Ave. Temp	% Load Impact	Ave. Bid (MW)	Bid Realiz. (LI/Bid)
1	6/24/2008	908	905	2.47	79.6	0.3%	46	5%
2	7/8/2008	869	875	-6.21	80.7	-0.7%	100	-6%
3	7/9/2008*	904	890	14.16	79.2	1.6%	92	15%
4	7/10/2008*	942	910	32.92	79.0	3.5%	82	40%
5	7/14/2009	910	863	46.93	80.4	5.2%	105	45%
6	7/15/2010	904	895	9.35	81.1	1.0%	102	9%
7	7/16/2011	918	908	10.04	81.0	1.1%	92	11%
8	7/17/2012	936	919	17.73	80.2	1.9%	95	19%
9	7/21/2008*	914	867	47.20	78.8	5.2%	114	41%
10	8/1/2008*	929	899	29.29	81.6	3.2%	94	31%
11	8/5/2008*	925	921	4.67	82.6	0.5%	108	4%
12	8/6/2008*	962	950	12.40	84.2	1.3%	91	14%
13	8/29/2008*	932	873	59.38	82.3	6.4%	123	48%
14	10/6/2008	894	907	-13.29	78.1	-1.5%	145	-9%
15	10/20/2008	919	873	46.36	68.4	5.0%	110	42%
	Average	917	896	20.52	79.8	2.2%	100	21%
	Std. Dev.	22	24	21.71	3.6	2.4%	21	19%

*Indicates coincident CPP event day.

Tables 4.6 and 4.7 summarize average hourly load impacts for the average event by industry group and LCA. Manufacturing, and wholesale, transportation and other utilities customers accounted for the largest shares of the load impacts. By region, the highest share of the average load impact came from the LA Basin.

Table 4.6: Average Hourly Load Impacts (kW) – SCE DBP, by Industry Group

Industry Type	Estimated Reference Load (kW)	Observed Load (kW)	Estimated Load Impact (kW)	Wtd. Ave. Temp	% LI
1 Agriculture, mining & construction	26,389	26,304	85	79	0.3%
2 Manufacturing	486,495	469,671	16,823	78	3.5%
3 Wholesale, transport, other utilities	60,739	58,495	2,244	85	3.7%
4 Retail stores	54,300	54,232	68	82	0.1%
5 Offices, hotels, finance, services	124,271	123,793	478	78	0.4%
6 Schools	30,612	30,212	400	84	1.3%
7 Institutional/government	133,710	133,292	418	85	0.3%
TOTAL	916,516	895,999	20,517		2.2%

Table 4.7: Average Hourly Load Impacts – SCE DBP, by LCA

Local Capacity Area	Estimated Reference Load (kW)	Observed Load (kW)	Estimated Load Impact (kW)	Wtd. Ave. Temp	% LI
1 LA Basin	503,962	489,877	14,085	79	2.8%
2 Outside LA Basin	63,215	62,680	536	94	0.8%
3 Ventura	93,633	93,355	278	82	0.3%
4 Other/Unknown	255,706	250,088	5,618	77	2.2%
TOTAL	916,516	895,999	20,517		2.2%

4.2.2 Hourly Load Impacts

Tables 4.8a and 4.8b present hourly load impacts at the program and per customer levels (respectively) for the average DBP event in the manner required by the Protocols. The reference loads and observed loads in the table reflect all customers enrolled in DBP. Load impacts reflect only customers that submitted bids. Hourly load impacts for the average event remain relatively constant at 20 to 24 MW until the last hour, in which the load impact drops to 14 MW. These load impacts represent about 2 percent of the total enrolled DBP reference load.

Table 4.8a: Aggregate DBP Hourly Load Impacts for Average Event Day in 2008 – SCE

Hour Ending	Estimated Reference Load (kWh/hour)	Observed Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (°F)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	787,531	781,704	5,827	67	-16,021	-3,113	5,827	14,767	27,675
2	777,400	768,591	8,809	66	-13,022	-124	8,809	17,742	30,640
3	774,034	766,968	7,066	65	-14,765	-1,867	7,066	15,999	28,897
4	774,324	771,779	2,545	65	-19,286	-6,388	2,545	11,478	24,376
5	796,037	797,295	-1,258	64	-23,089	-10,191	-1,258	7,675	20,573
6	839,206	838,036	1,170	64	-20,661	-7,763	1,170	10,103	23,001
7	883,729	882,274	1,455	64	-20,376	-7,478	1,455	10,388	23,286
8	927,146	926,838	308	66	-21,523	-8,625	308	9,241	22,139
9	958,980	960,002	-1,022	69	-22,853	-9,955	-1,022	7,911	20,809
10	984,775	991,192	-6,417	72	-28,248	-15,350	-6,417	2,516	15,414
11	1,003,704	1,012,609	-8,905	75	-30,736	-17,838	-8,905	29	12,927
12	989,854	992,393	-2,539	78	-24,370	-11,472	-2,539	6,394	19,292
13	951,891	932,520	19,371	80	-2,461	10,437	19,371	28,304	41,202
14	952,218	930,903	21,315	81	-516	12,382	21,315	30,249	43,147
15	948,454	928,148	20,306	82	-1,526	11,373	20,306	29,239	42,138
16	936,620	914,461	22,159	82	327	13,226	22,159	31,092	43,991
17	915,243	892,602	22,641	81	809	13,707	22,641	31,574	44,472
18	888,889	868,448	20,442	80	-1,390	11,508	20,442	29,375	42,273
19	869,678	846,034	23,644	78	1,813	14,711	23,644	32,577	45,475
20	869,133	854,877	14,256	75	-7,575	5,323	14,256	23,189	36,087
21	880,850	879,999	852	72	-20,980	-8,082	852	9,785	22,683
22	867,359	866,544	815	71	-21,016	-8,118	815	9,748	22,646
23	841,395	846,867	-5,473	70	-27,304	-14,406	-5,473	3,460	16,358
24	819,122	825,372	-6,251	69	-28,082	-15,184	-6,251	2,682	15,580
Daily	Reference Energy Use (kWh)	Estimated Event Day Energy Use (kWh)	Change in Energy Use (kWh)	Cooling Degree Hours (Base 75 oF)	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
	21,237,573	21,076,458	161,115	43.1	n/a	n/a	n/a	n/a	n/a

Table 4.8b: Per Customer DBP Hourly Load Impacts for Average Event Day in 2008 – SCE

Hour Ending	Estimated Reference Load (kWh/hour)	Observed Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (°F)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	732	727	5	67	-15	-3	5	14	26
2	723	715	8	66	-12	0	8	16	28
3	720	713	7	65	-14	-2	7	15	27
4	720	718	2	65	-18	-6	2	11	23
5	740	741	-1	64	-21	-9	-1	7	19
6	780	779	1	64	-19	-7	1	9	21
7	822	820	1	64	-19	-7	1	10	22
8	862	862	0	66	-20	-8	0	9	21
9	892	893	-1	69	-21	-9	-1	7	19
10	916	922	-6	72	-26	-14	-6	2	14
11	933	942	-8	75	-29	-17	-8	0	12
12	921	923	-2	78	-23	-11	-2	6	18
13	885	867	18	80	-2	10	18	26	38
14	886	866	20	81	0	12	20	28	40
15	882	863	19	82	-1	11	19	27	39
16	871	850	21	82	0	12	21	29	41
17	851	830	21	81	1	13	21	29	41
18	827	808	19	80	-1	11	19	27	39
19	809	787	22	78	2	14	22	30	42
20	808	795	13	75	-7	5	13	22	34
21	819	818	1	72	-20	-8	1	9	21
22	807	806	1	71	-20	-8	1	9	21
23	782	788	-5	70	-25	-13	-5	3	15
24	762	768	-6	69	-26	-14	-6	2	14
Daily	Reference Energy Use (kWh)	Estimated Event Day Energy Use (kWh)	Change in Energy Use (kWh)	Cooling Degree Hours (Base 75 oF)	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
	19,750	19,600	150	43.1	n/a	n/a	n/a	n/a	n/a

The top portion of Figure 4.3 illustrates the reference load and observed load for the average DBP event. The bottom portion of Figure 4.3 displays the estimated load impacts (scale is presented on the right y-axis) for the average DBP event. Figure 4.4 shows the relatively wide variability of estimated load impacts across events.

Figure 4.3: DBP Load Impacts – SCE

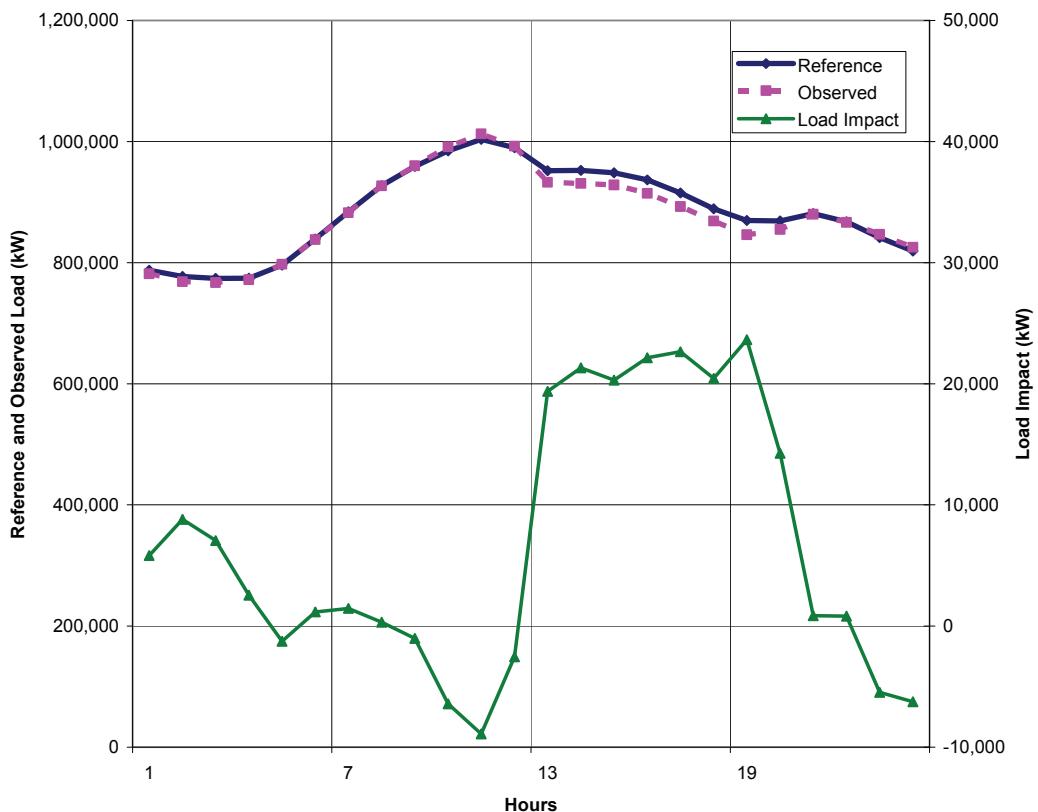
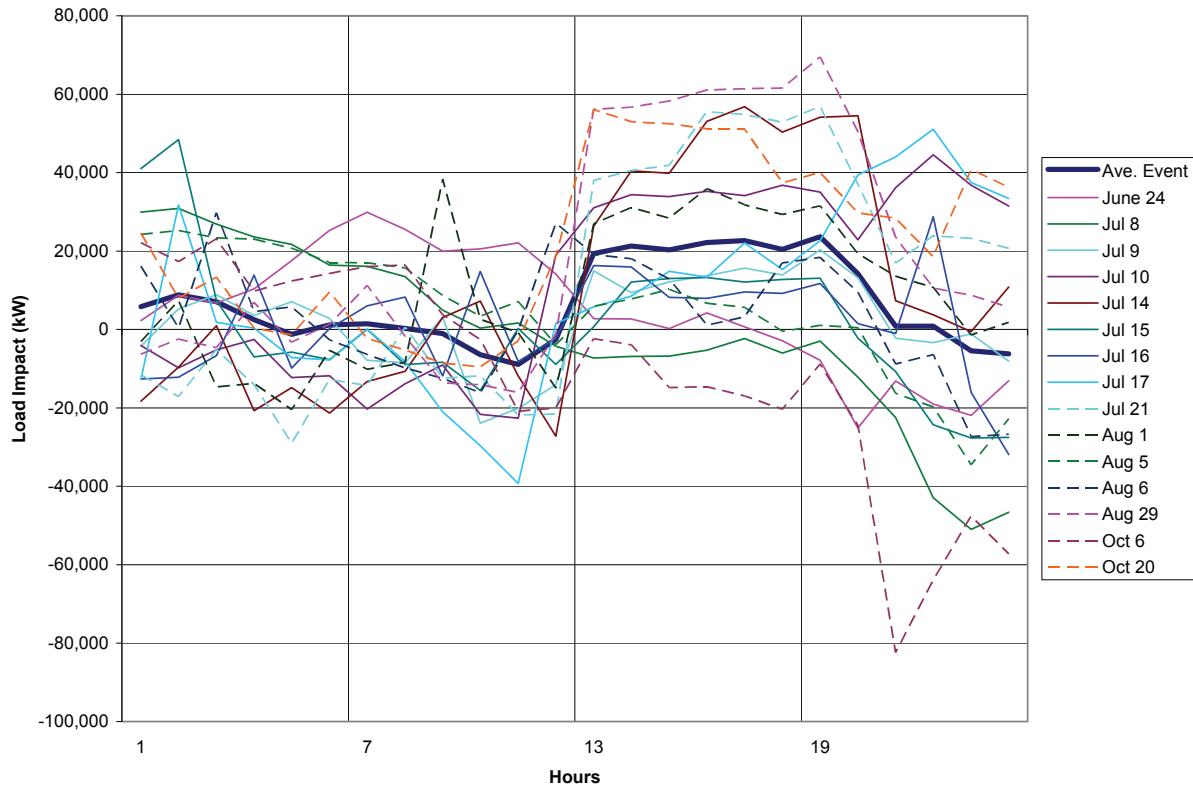


Figure 4.4: DBP Hourly Load Impacts by Event – SCE



The next sub-section illustrates observed loads on several event days and surrounding non-event days.

4.2.3 Observed Event-Day Loads

To investigate the nature of the varying estimated load impacts across SCE DBP events, the following figures illustrate observed load data for a selection of event days and averages of nearby non-event days of similar day of week. Figure 4.5 shows observed loads for two Monday event days (July 14 and 21) for which relatively large load impacts of about 46 MW were estimated, along with an average load for non-event Mondays in July and August. Although the average Monday load does not necessarily represent an accurate reference load for purposes of measuring load impacts, it does provide an indication that large load reductions occurred on the two event days.

**Figure 4.5: SCE Enrolled DBP Load – Events 5 and 9 (Mondays)
(Estimated Load Impact – 46 MW)**

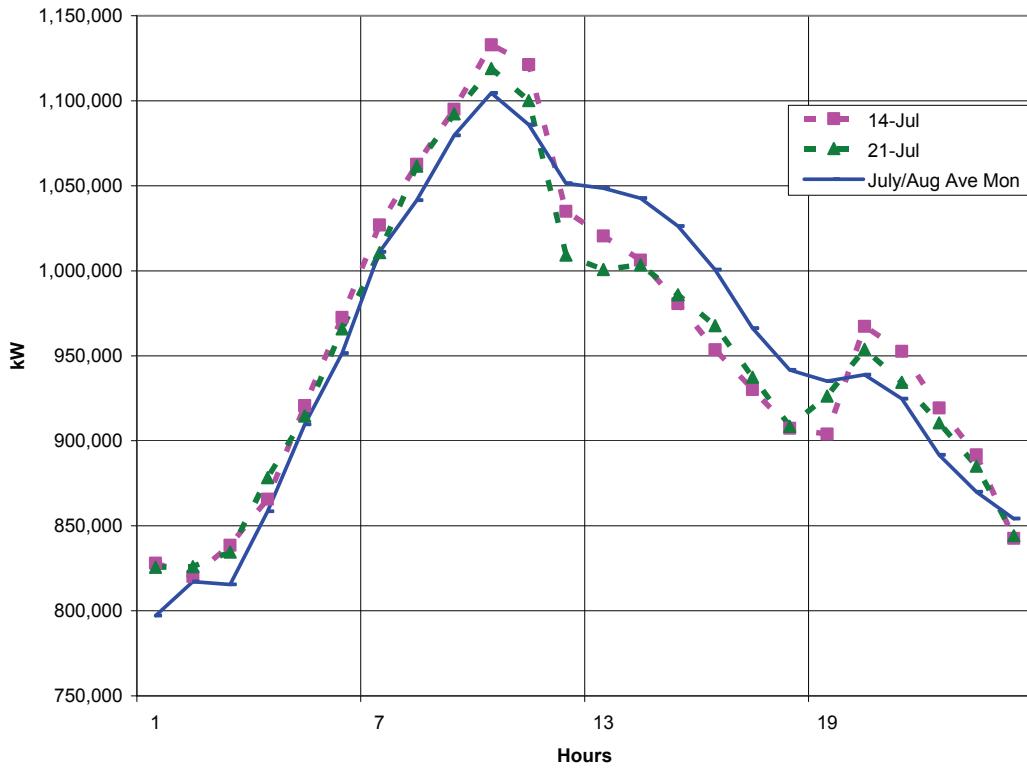
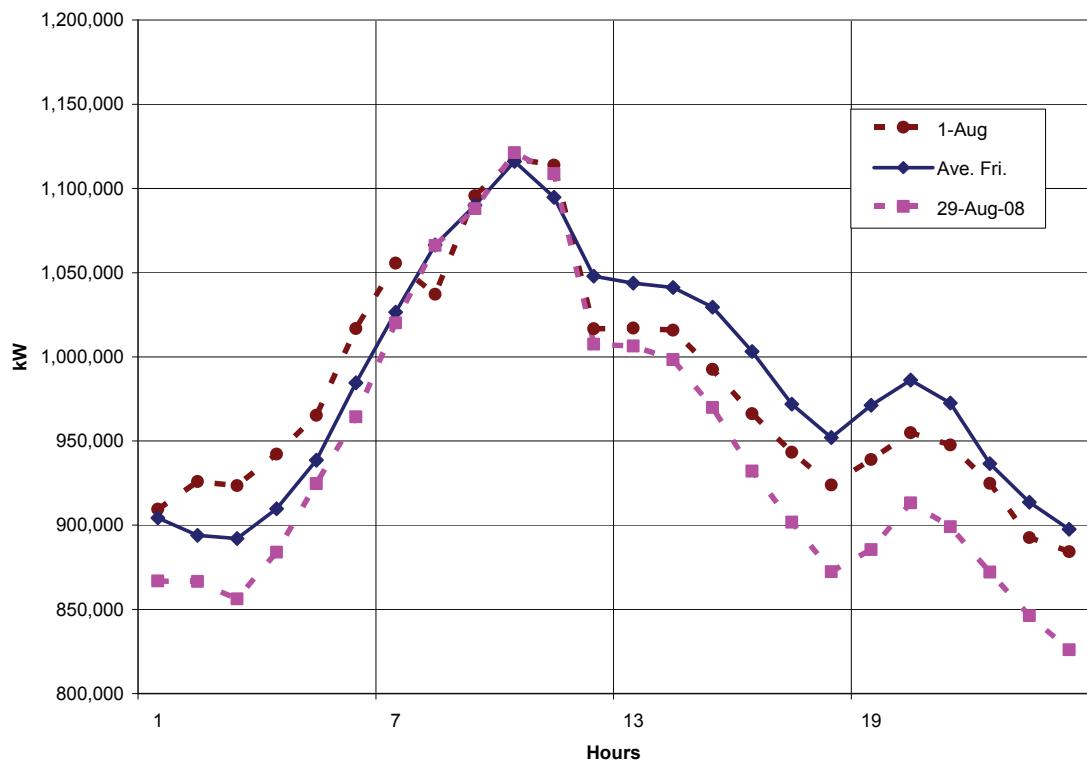
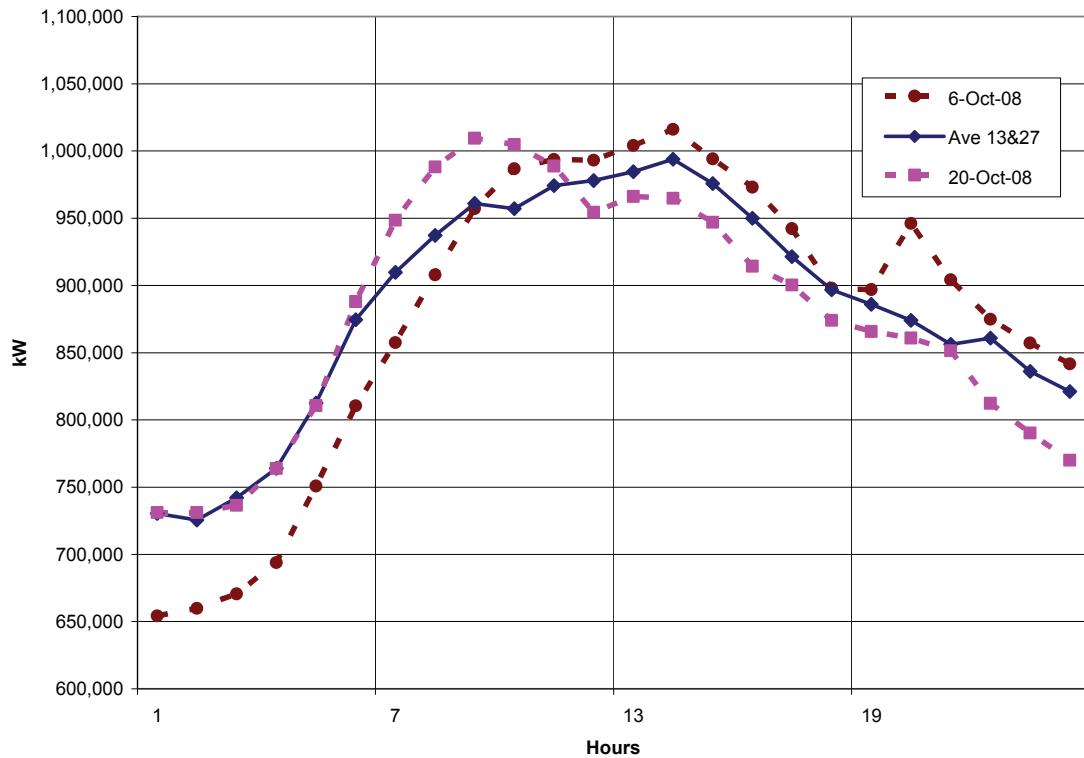


Figure 4.6 shows loads for two Friday events (August 1 and 29) that also had relatively large load impacts, along with an average of other non-event Fridays in July and August. Again, the load reductions are evident, although the large load reductions on the 29th are likely partially related to pre-holiday scaling back of some customers (the following Monday was Labor Day). Finally, Figure 4.7 shows loads for the last two events, which occurred on Mondays in October. To the extent that the average of the two other Mondays in October adequately represents a reasonable reference load, the loads indicate why a load increase was estimated on October 6 (unlike other event days, the load does not begin to decline in hour 12, and increases substantially in the last hour of the event), whereas a large load reduction was estimated on October 20.

**Figure 4.6: SCE Enrolled DBP Load – Events 10 and 13 (Fridays)
(Estimated Load Impacts – 29 and 59 MW)**



**Figure 4.7: SCE Enrolled DBP Load – Events 14 and 15 (Mondays)
(Estimated Load Impacts –13 and 46 MW)**



4.2.4 Effect of TA/TI and AutoDR on Load Impacts

We used the method described in Section 4.1.3 to examine the effect of TA/TI and AutoDr on load impacts for SCE's DBP customers.

Table 4.9 summarizes the number of service accounts by industry group for TA/TI and AutoDR. Table 4.10 provides the distribution of TA/TI and AutoDR service accounts by event day.

Table 4.9: TA/TI and AutoDR Participation by Industry Group – SCE

Industry Group	Number of TA/TI Service Accounts	Number of AutoDR Service Accounts
1. Ag., Mining, Constr.	0	0
2. Manufacturing	3	0
3. Whole., Trans., Util.	0	0
4. Retail	2	2
5. Offices, hotels, services	2	0
6. Schools	0	0
7. Institutional/Government	1	0
Total	8	2

Table 4.10: TA/TI and AutoDR Participation by Event Day – SCE

Event Date	Number of TA/TI Service Accounts	Number of AutoDR Service Accounts
June 24, 2008	5	1
July 8, 2008	5	1
July 9, 2008	3	1
July 10, 2008	4	0
July 14, 2008	4	1
July 15, 2008	3	1
July 16, 2008	2	1
July 17, 2008	3	1
July 21, 2008	4	1
August 1, 2008	5	1
August 5, 2008	4	1
August 6, 2008	4	1
August 29, 2008	4	1
October 6, 2008	6	2
October 20, 2008	4	2

As shown in Table 4.10, few service accounts had TA/TI or AutoDR in place during the 2008 program year. Specifically, a maximum of six TA/TI service accounts bid in any one event (on October 6, 2008), while at most two AutoDR service accounts submitted bids. As was the case with the PG&E findings above, the small sample size raises concerns about the ability to reach general conclusions from the results presented here.

For these service accounts, we found that the TA/TI improved load response by 14.4 percentage points (the estimate is statistically significant). The overall load reduction for the TA/TI service accounts was 37.6 percent of their average event-hour reference load.

For AutoDR, we found an improvement in load response of 1.6 percentage points, but the estimate was not statistically significant. The overall load reduction for the AutoDR customer was 1.9 percent of its average event-hour reference load.

5. Ex Ante Load Impacts

This section documents the preparation of ex ante forecasts for 2009 to 2020 of reference loads and load impacts for the Demand Bidding Programs offered by PG&E and SCE.¹³ PG&E is migrating DBP into its PeakChoice Best Efforts program. The overall load impacts for the PeakChoice Program are described in a separate report prepared by The Brattle Group. In this report, we describe the per-customer ex ante load impacts that we developed as an input into Brattle's study and the DBP load impacts for 2009, prior to the migration of DBP customers into PeakChoice.

¹³ SDG&E does not plan to offer DBP in future years.

The forecasts of load impacts were developed in two primary stages. First, estimates of reference loads and percentage load impacts were developed based on the ex post load impact evaluations. Second, for SCE we combined the simulated reference loads and load impacts with forecasts of program enrollment to develop forecasts of load impacts. Separate forecasts were developed by *customer size, industry type* (according to NAICS or SIC codes), and CAISO *Local Capacity Area*, as well as by the event day-types required by the Protocols. SCE's enrollment forecast is for stable enrollments near 2008 program levels, as specified in their 2008 Application for Approval of Demand Response Programs, Goals, and Budgets for 2009-2011.

The following subsections describe the nature of the ex ante load impact forecasts required, the methods used to produce them, detailed study findings, and recommendations.

5.1 Ex Ante Load Impact Requirements

The DR Load Impact Evaluation Protocols require that hourly load impact forecasts for event-based DR resources must be reported by the following factors (in addition to the customer size, customer type, and LCA factors noted above):

- For a typical event day in each year; and
- For the monthly system peak load day in each month for which the resource is available;

under both:

- 1-in-2 weather-year conditions, and
- 1-in-10 weather-year conditions.

at both:

- the program level (*i.e.*, in which only the program in question is called), and
- the portfolio level (*i.e.*, in which all demand response programs are called).

5.2 Description of Methods

This section describes methods used to develop relevant groups of customers, to develop reference loads for the relevant customer types and event day-types, and to develop percentage load impacts for a typical event day.

5.2.1 Development of Customer Groups

Customer accounts were assigned to one of three size groups, eight industry types (defined in Section 2.2), and LCA based on information provided by the utilities. The three size groups were the following:

- Small – maximum demand less than 20 kW;
- Medium – maximum demand between 20 and 200 kW;
- Large – maximum demand greater than 200 kW.

The size definition was based on the tariff on which the customer is served. For example, a tariff may require that a customer's monthly peak demand exceeds 20kW for three out of the previous twelve months. Each utility provided the ability to associate customers with an LCA. PG&E mapped each distribution feeder to one of its seven LCAs, while SCE based its mapping on a combination of substations and zip codes.

5.2.2 Development of Reference Loads and Load Impacts

Reference loads and load impacts for all of the above factors were developed in the following series of steps:

1. Define data sources
2. Simulate reference loads by cell
3. Calculate forecast percentage load impacts by cell
4. Apply percentage load impacts to the reference loads
5. Scale the reference loads using enrollment forecasts

Each of these steps is described below.

Define data sources

While PG&E is migrating DBP participants to PeakChoice Best Efforts Program, the basic design of the program under the new heading is largely unchanged. Similarly, no major changes are proposed for SCE's DBP program. Because of this, there is a close link between the results of the ex post analyses and the ex ante load impacts. That is, the historical customer loads serve as the source of the ex ante reference loads and the historical percentage load impacts serve as the source of the ex ante load impacts. There is no need to convert historical load impacts to price elasticities because the price signal is not expected to change. This contrasts with our CPP/PDP ex ante load impact study, in which elasticity estimates were developed to account for significant changes in event day prices in the forecast period.

SCE had 15 DBP event days in program year 2008, which provides ample data for estimating the level and variability of load impacts across event days. In contrast, PG&E called only one DBP test event in 2008. PG&E also called only one test event in 2007, but called 32 DBP event days in 2006. We compared the reference loads and load impacts from 2006 (with many event days) to those of 2008 and determined that the industry-specific load profiles and pattern of load impacts was sufficiently different that the 2008 load impact estimates provided a better indication of the load impacts during the forecast period. That the profiles changed is not surprising given that enrollment in PG&E's DBP program increased from 726 during the 2006 program year to 1,165 during the 2008 program year.

Simulate reference loads

For each program, we estimated regression equations for each customer account, using data for 2008. The purpose of these equations was to simulate reference loads by customer type for the various scenarios required by the Protocols (*e.g.*, the typical event day in a 1-in-2 weather year).

These equations were similar in design to the ex post load impact equations described in Section 3.2. There was one primary difference between the ex post and ex ante regression models: the ex ante models excluded the morning-usage variable. While this variable is useful for increasing accuracy in estimating ex post load impacts for particular

events, it complicates the use of the equations in ex ante simulation. That is, it requires one to separately simulate the level of the morning load.

The definitions of the 1-in-2 and 1-in-10 weather years differed by utility, as shown in Table 5.1.

Table 5.1: Weather Year Definitions by Utility

Utility	1-in-2 Weather Year	1-in-10 Weather Year
PG&E	2004	2003
SCE	2002	1998

For SCE, we developed separate load profiles at three levels of aggregation for each size category: all enrolled customers; by industry group; and by LCA. These correspond to the reporting levels required in the Protocols. This method is feasible because SCE did not provide enrollments by cell (*i.e.*, combinations of industry groups and LCAs). That is, SCE only specified that 1,100 customers are forecast to be enrolled, with the distribution of those customers corresponding to that of the currently enrolled customers.

For PG&E, we developed per-customer load profiles for all interactions of size group, industry group, and LCA so that Brattle could apply these to enrollment forecasts for those cells. Because of small sample sizes, we pooled all of the customer load profiles across LCAs to arrive at a set of simulation coefficients that was common to each size and industry group combination. Differences in the load profiles across LCAs were solely due to differences in the weather conditions used in the simulations.

Calculate forecast percentage load impacts

The percentage load impacts were developed separately for each industry group and were based on the 2008 ex post load impact estimates. For PG&E, we estimated the percentage load impacts during event and non-event hours, with the *enrolled* reference load serving as the denominator. The use of enrolled loads in place of loads of customers who submit bids embeds the assumption that future bidding patterns match historical bidding patterns. In addition, because Brattle forecasts enrollments but not bidding behavior, the results that we delivered to them needed to be expressed on a per enrolled customer basis.

The load impacts for SCE were estimated for each hour of the event days. This was made possible because all of the non-test events were of the same length, and the historical event window exactly matched the forecast event window (from noon to 8 p.m.).

Apply percentage load impacts to reference loads for each event scenario. In this step, the percentage load impacts were applied to the reference loads for each scenario to produce all of the required reference loads, estimated event-day loads, and scenarios of load impacts.

Apply forecast enrollment to produce program-level load impacts. For PG&E's program, The Brattle Group produced load impacts by industry group, LCA, and at the program level by applying the results in the previous step to the enrollment forecasts. The per-customer reference loads and load impacts were first scaled to match the expected size of customers in the enrollment forecast and then multiplied by the number of enrolled customers to obtain cell-level results. Program-level results were obtained by aggregating results across cells.

For SCE, we simply scaled the results for all levels of reporting by the ratio of the 1,100 customers assumed to be enrolled during all forecast years to the number of customers in the estimation sample. SCE did not distinguish between program-level and portfolio-level enrollments in its forecast.

5.3 Detailed Findings

This section summarizes the ex ante load impacts for each program.

5.3.1 SCE Forecast Load Impacts

Figure SCE DBP 1 shows the forecast load impacts for SCE's DBP program on a typical event day in a 1-in-2 weather year. Because SCE did not vary its enrollment forecast across years, this figure illustrates the load impacts in all years. Event-hour load impacts range from 16.5 MW to 22.6 MW, which is 2 to 3 percent of the enrolled reference load. Non-event hour load impacts average an increase of 0.8 MW, or 0.1 percent of the reference load in those hours.

Figure SCE DBP 2 shows the uncertainty adjusted load impacts for the same typical event day in a 1-in-2 weather year. Notice that the range is quite large, with event-hour load impacts in the 90th percentile scenario exceeding 40 MW, and event-hour load impacts in the 10th percentile scenario that are near zero. This reflects the broad range of outcomes observed in the ex post load impacts, as shown in Table 4.5 and Figure 4.4.

**Figure SCE DBP 1: SCE DBP Ex Ante Load Impacts,
Typical Event Day in a 1-in-2 Weather Year**



Figures SCE DBP 3 and 4 show how the load impacts are distributed by industry group and LCA, respectively. Approximately 81 percent of the load impacts are attributed to manufacturing customers; and approximately 80 percent of the load impacts are attributed to customers in the LA Basin LCA.

Note that load impacts do not vary significantly across the monthly peak load days, as the percentage load reductions were assumed to vary by industry group, but did not vary across months.

The Appendix contains the tables required by the Protocols.

**Figure SCE DBP 2: Uncertainty-Adjusted SCE DBP Ex Ante Load Impacts,
Typical Event Day in a 1-in-2 Weather Year**

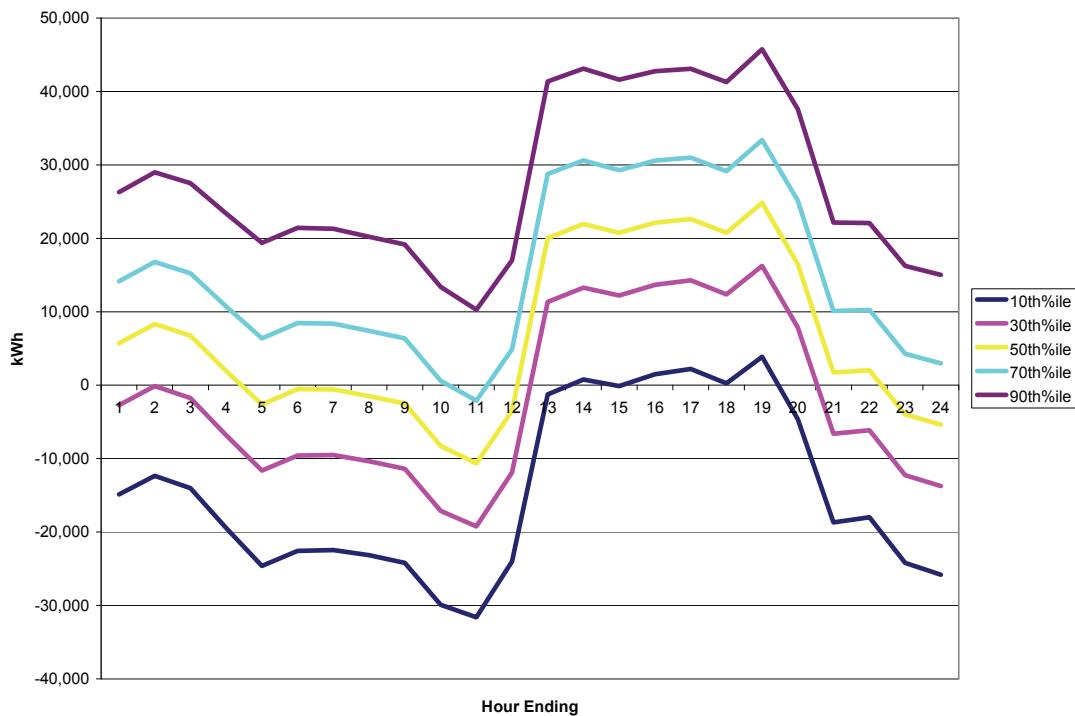


Figure SCE DBP 3: Share of SCE DBP Ex Ante Load Impacts by Industry Group

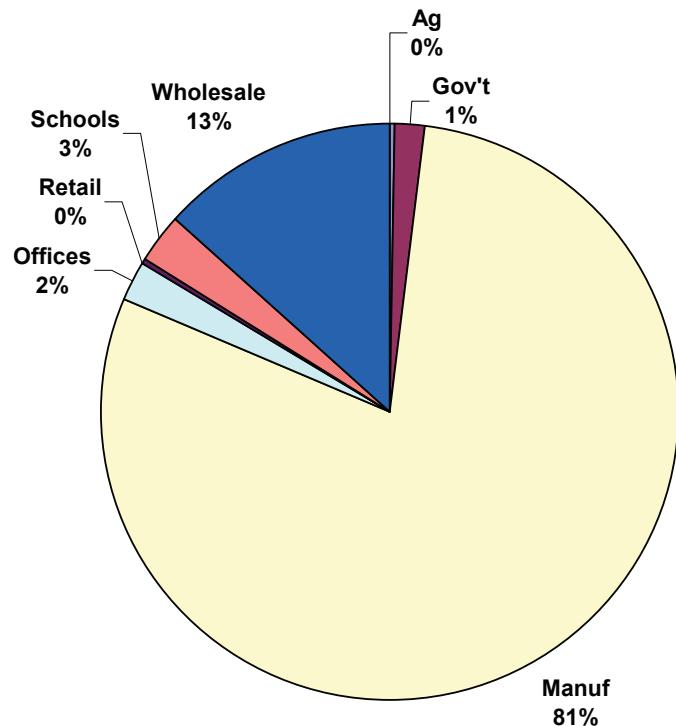
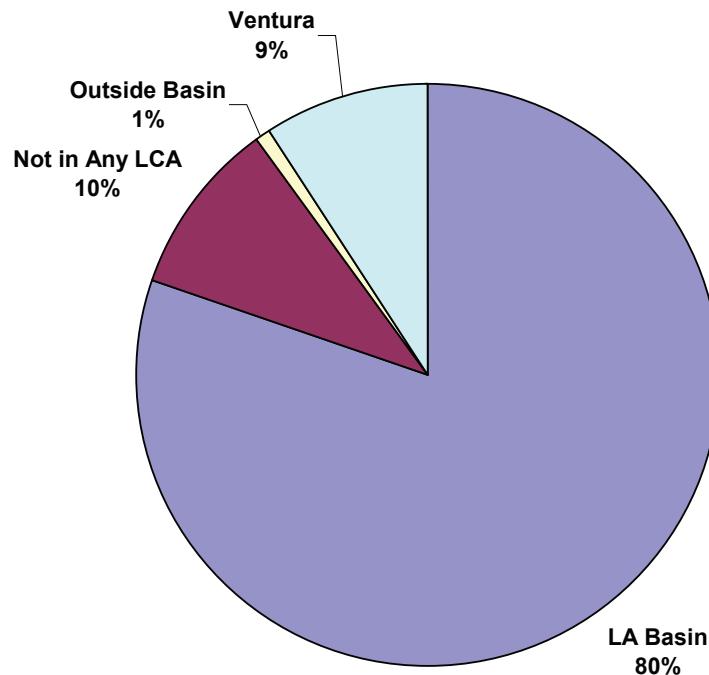


Figure SCE DBP 4: Share of SCE DBP Ex Ante Load Impacts by LCA



5.3.2 PG&E Forecast Load Impacts

The per-customer load impacts for PG&E were distinguished by industry group and three types of hours: event hours (hours ending 13 to 20), hours adjacent to events (hours ending 12 and 21), and all other non-event hours. Table 5.2 shows the percentage load impacts that were assumed for each industry group and hour type, with a positive number indicating a load reduction. The percentages are relative to the estimated reference loads for each customer. Notice that the largest percentage load impacts are produced by the wholesale, transportation and utilities industry group. The high percentage load impact is likely due to the presence of water utilities, which are typically highly demand responsive.

The load impact percentages in Table 5.2 are applied to all of the scenarios and do not vary across forecast years. The *level* of the load impacts will vary by weather year (1-in-2 or 1-in-10) or day type (typical event day or monthly peak days) as the scale of the reference load changes.

Table 5.2: Percentage Load Impacts by Industry Group and Hour Type

Industry Group	Event Hours (HE 13 to 20)	Adjacent Hours (HE 12, 21)	Other hours (HE 1-11, 22-24)
1. Ag., Mining, Constr.	-0.1%	-0.3%	0.0%
2. Manufacturing	3.1%	1.9%	0.5%
3. Whole., Trans., Util.	12.3%	3.4%	0.3%
4. Retail	3.2%	1.2%	-0.5%
5. Offices, hotels, services	1.5%	0.7%	-0.2%
6. Schools	1.8%	1.2%	0.3%
7. Institutional/Government	2.0%	0.4%	0.1%

These load impacts were used in combination with the simulated reference loads to develop a database containing 4,992 sets of results (8 industry groups x 8 LCAs x 3 size groups x 2 weather years x 13 day types = 4,992). Using this database, The Brattle Group developed results for the PeakChoice Best Efforts Program by scaling the results to the program, LCA and industry group levels using their enrollment forecast. The results of this forecast are described in a separate report by The Brattle Group.

DBP does not merge into PeakChoice Best Efforts until 2010. The ex ante load impacts that occur for the DBP program prior to the migration (also created by The Brattle Group using our per-customer load impacts) are illustrated in the figures below.

Figure PG&E DBP 1: Hourly Event Day Load Impacts for the August 2009 Typical Event Day in a 1-in-2 Weather Year, Program Level

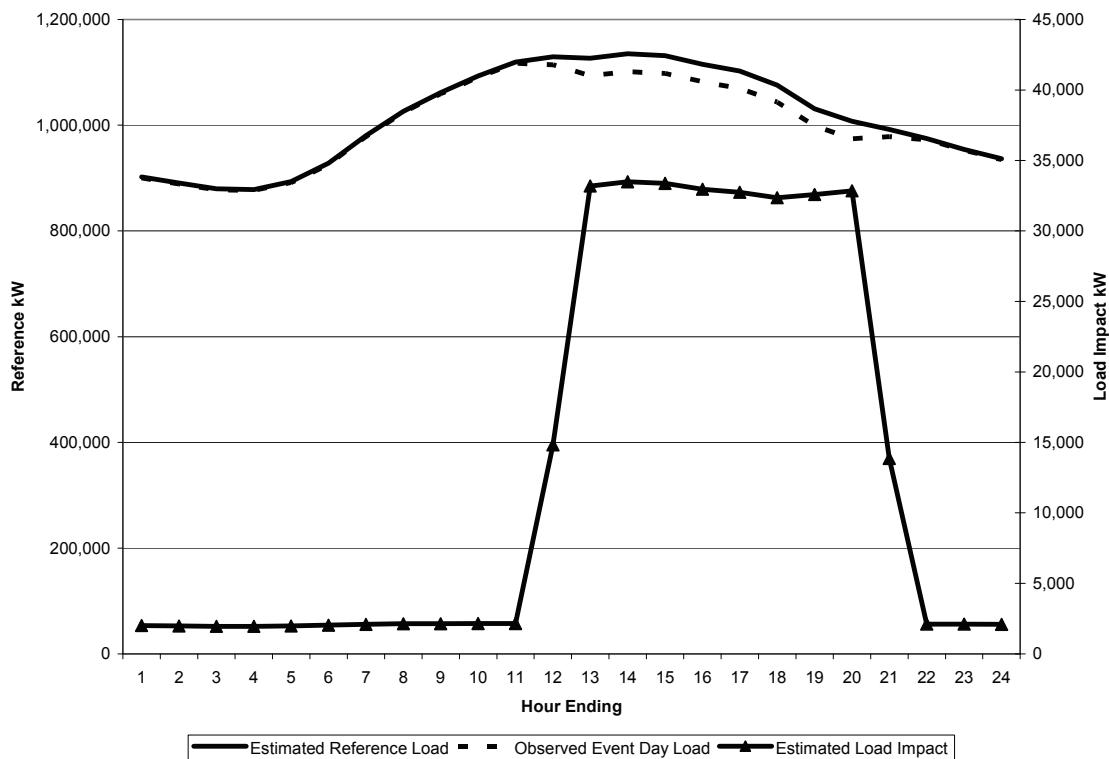
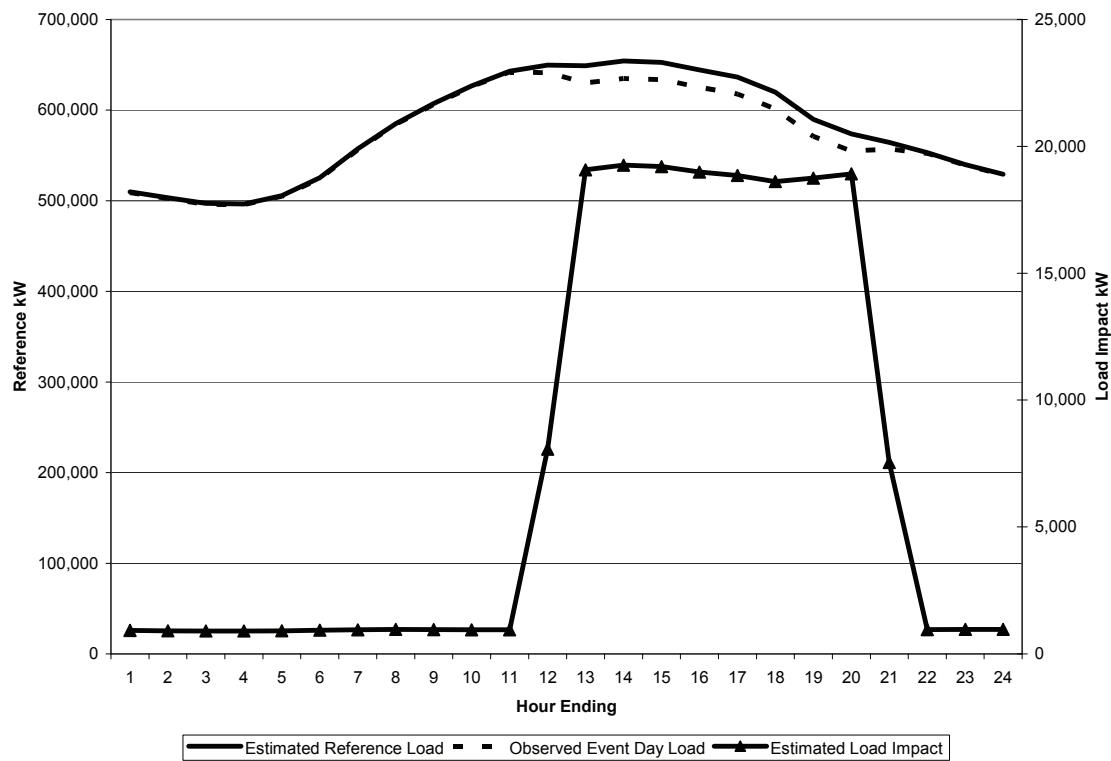


Figure PG&E DBP 1 shows the forecast program-level load impacts for the DBP program on the peak day in August 2009 of a 1-in-2 weather year. Event-hour load impacts range from 32.4 MW to 33.5 MW, which is 2.9 to 3.3 percent of the enrolled reference load. In the hours adjacent to the event hours, the load impacts are slightly less than half of the event-hour load impact (averaging 14.3 MW), while the load impacts in all other non-event hour load impacts average 2.1 MW, or 0.2 percent of the reference load.

Figure PG&E DBP 2 shows the portfolio-level load impacts that match the scenario used to illustrate the program-level load impacts shown in Figure PG&E DBP 1. That is, these represent the impacts would occur if all DR programs are called at the same time. Notice that the level of the load impacts drops from 32.9 MW to 19 MW. The percentage load impacts are essentially unchanged relative to the program-level load impacts. This is because both the reference load and the load impacts are reduced to account for customers who are allocated to the other DR programs (*e.g.*, CPP).

Figure PG&E DBP 3 shows the program-level uncertainty adjusted load impacts for the same peak month day in a 1-in-2 weather year. Event-hour load impacts in the 90th percentile scenario are approximately 44 MW, and event-hour load impacts in the 10th percentile scenario are approximately 22 MW.

Figure PG&E DBP 2: Hourly Event Day Load Impacts for the August 2009 Typical Event Day in a 1-in-2 Weather Year, Portfolio Level



**Figure PG&E DBP 3: Uncertainty-Adjusted Ex Ante Load Impacts,
August 2009 Typical Event Day in a 1-in-2 Weather Year, Program Level**

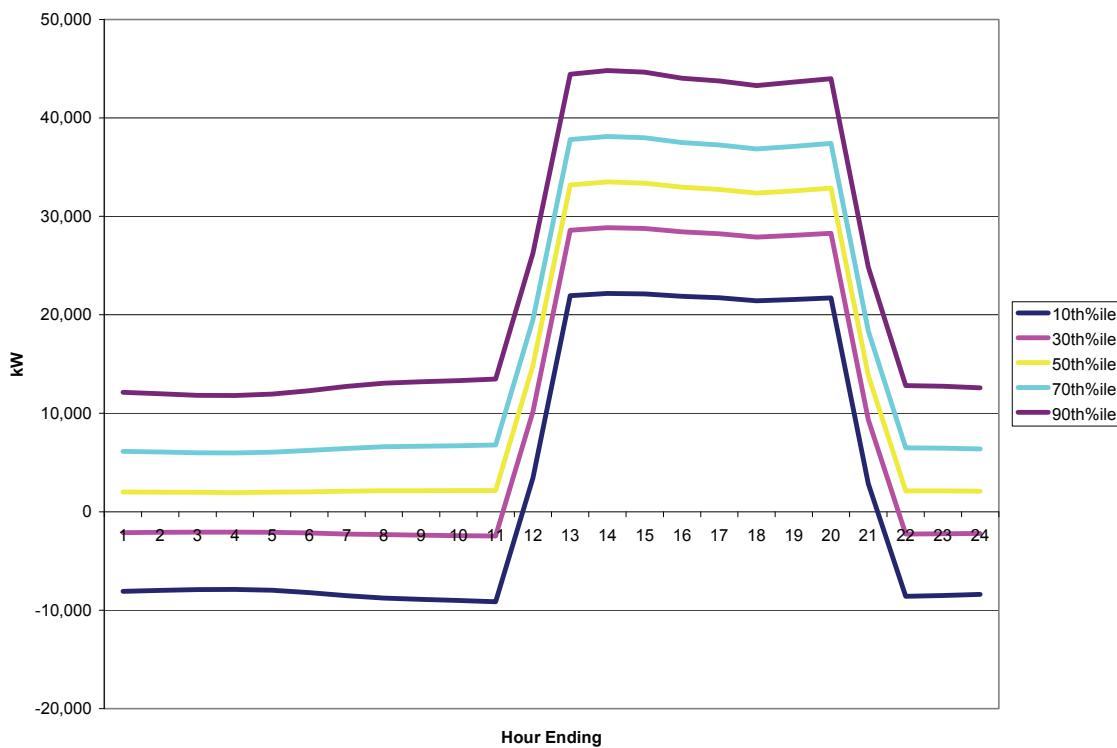


Figure PG&E DBP 4: Share of Load Impacts by Industry Group for the August 2009 Peak Day in a 1-in-2 Weather Year

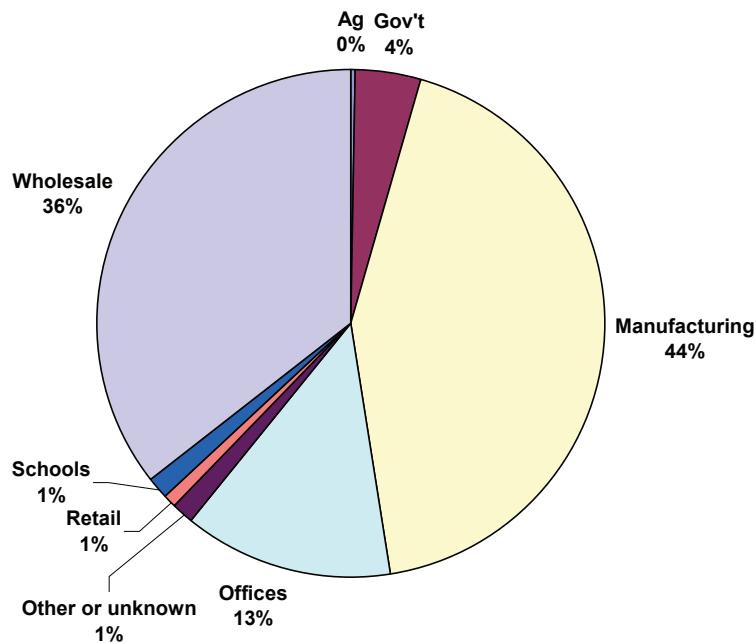
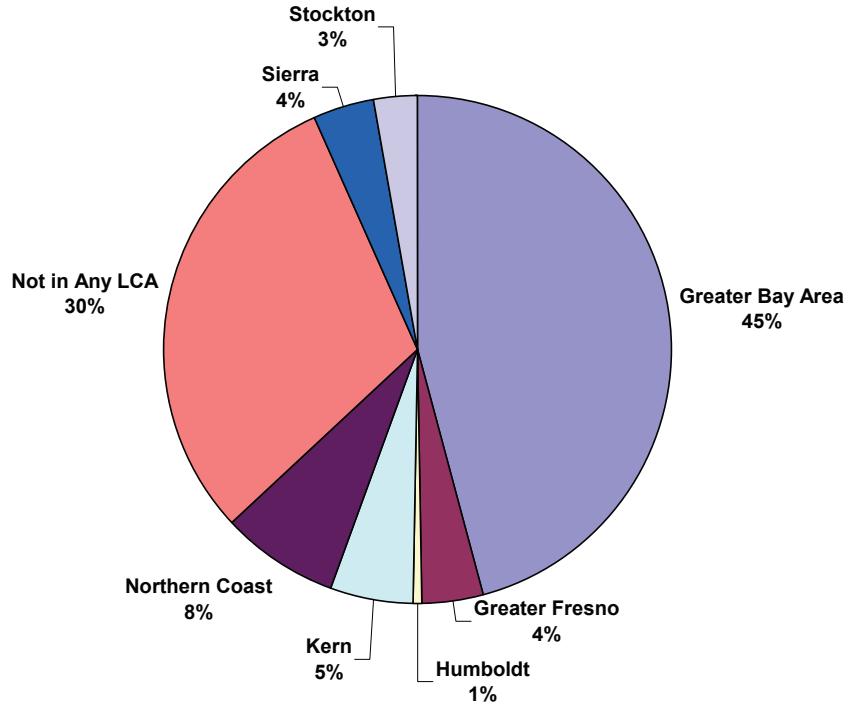


Figure PG&E DBP 5: Share of Load Impacts by LCA for the August 2009 Peak Day in a 1-in-2 Weather Year

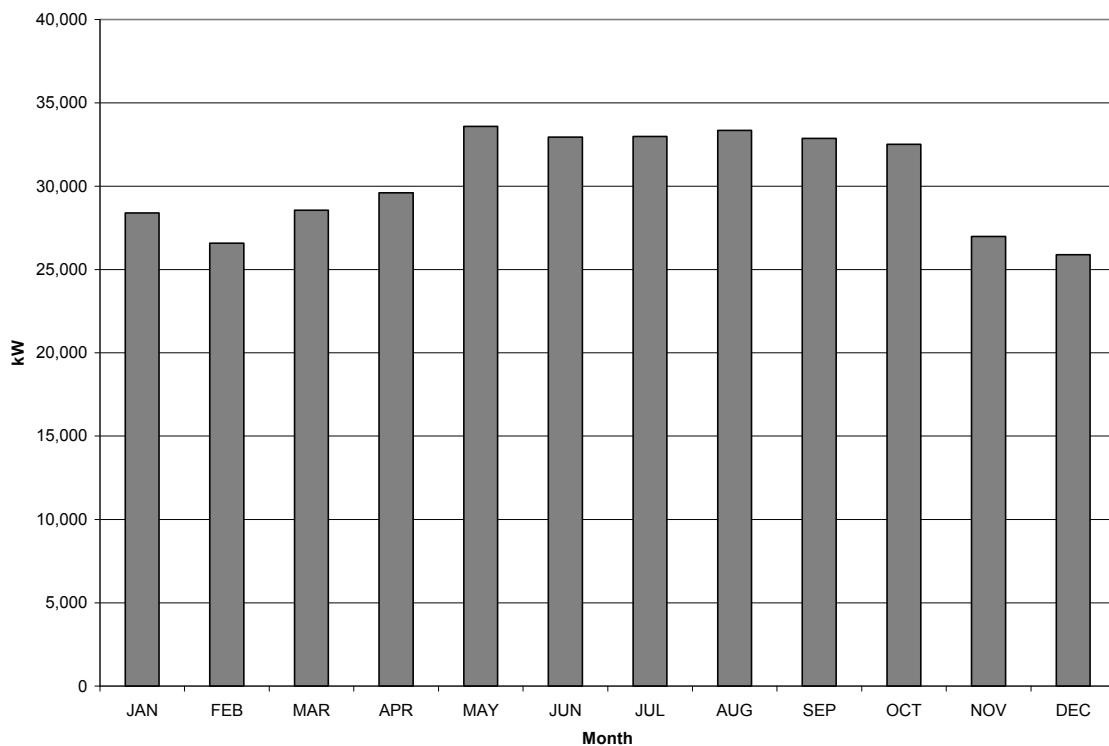


Figures PG&E DBP 4 and 5 show the distribution of load impacts by industry group and LCA, respectively. Manufacturing and wholesale customers together account for 80 percent of the load impacts by industry group; and approximately 45 percent of the load impacts are attributed to customers in the Greater Bay Area LCA, with the next largest share of load impacts attributed to customers who are not in an LCA.

Figure PG&E DBP 6 shows the monthly peak day results for 2009, assuming a 1-in-2 weather year. As expected, load impacts are highest in the summer months.

The Appendix contains the tables required by the Protocols.

Figure PG&E DBP 6: Average Event-Hour Load Impacts by 2009 Monthly Peak Day for a 1-in-2 Weather Year



6. Validity Assessment

In previous studies of DBP load impacts, we used group-level data to examine load impacts. This method had the advantage of limiting the analysis to estimating a manageable number of models, but did not allow us to account precisely for customer enrollment in other programs (primarily CPP) or customer-specific bidding behavior.

We adopted a different approach in the present study. Specifically, we estimated customer-specific regression models that properly accounted for each customer's bidding behavior and enrollment in other DR programs. Although this method has some significant advantages (properly accounting for bidding behavior and allowing the results to be summarized according to any observed customer characteristic without requiring the estimation of a new model), it does require that many models are estimated. This prevents a detailed examination of each customer's model. In addition, in order to facilitate post-processing the results, it is important to use a uniform model structure across all of the customers in a program.

Therefore, our primary concern with respect to the validity of the findings is regarding the appropriateness of the model specification that is used. We believe that the most significant issue in an ex post analysis of load impacts is the risk of omitted variable bias. Loads levels may change for reasons that cannot be easily known to the analyst. For example, it is not uncommon for manufacturing customers to shut down operations for

one to two weeks. Such actions can bias the estimates for the other included variables if variables are not included to explicitly account for such a “shut down.” It is possible that with more time and resources, we could have discovered a model specification that better accounted for factors that affect load, which may lead to improved estimates of load response. That said, the estimates contained in this study appear to be reasonable, giving us no reason to believe that a bias exists in the overall findings.

7. Recommendations

Two areas exist in which this study could potentially be improved. First, as described in Section 6, refinements to the customer-specific model specifications could be explored. Second, the estimates of the effect of the TA/TI and AutoDR programs will be improved as time passes. As customers are added to these programs over time, a sufficient sample size will become available to reach valid conclusions regarding the effect of these programs on load impacts.

Appendix A: SCE DBP Ex Ante Load Impact Tables

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2009
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	758,476	752,617	5,859	74	-15,212	-2,763	5,859	14,481	26,930
2	747,649	739,170	8,479	72	-12,542	-123	8,479	17,080	29,500
3	747,094	740,251	6,843	71	-14,249	-1,788	6,843	15,474	27,936
4	766,467	764,500	1,968	70	-19,670	-6,886	1,968	10,822	23,605
5	807,137	809,775	-2,638	69	-24,789	-11,702	-2,638	6,426	19,513
6	847,902	848,458	-556	68	-22,620	-9,585	-556	8,472	21,508
7	885,168	885,743	-575	69	-22,450	-9,526	-575	8,376	21,300
8	917,882	919,360	-1,478	72	-23,104	-10,327	-1,478	7,371	20,148
9	948,128	950,622	-2,494	77	-24,089	-11,330	-2,494	6,342	19,100
10	972,800	981,033	-8,233	83	-29,798	-17,057	-8,233	592	13,333
11	954,715	965,287	-10,572	89	-31,346	-19,072	-10,572	-2,071	10,202
12	918,603	922,058	-3,454	93	-23,695	-11,737	-3,454	4,828	16,787
13	918,311	898,536	19,775	95	-1,245	11,174	19,775	28,376	40,795
14	912,473	890,841	21,632	97	755	13,089	21,632	30,174	42,508
15	899,609	879,054	20,555	95	-109	12,100	20,555	29,011	41,219
16	881,239	859,242	21,997	92	1,490	13,606	21,997	30,388	42,504
17	852,910	830,385	22,525	91	2,193	14,206	22,525	30,845	42,857
18	833,594	812,886	20,708	89	237	12,331	20,708	29,084	41,179
19	832,954	808,181	24,773	86	3,865	16,218	24,773	33,328	45,680
20	842,489	825,970	16,520	82	-4,633	7,864	16,520	25,175	37,673
21	829,408	827,666	1,742	78	-18,796	-6,662	1,742	10,146	22,280
22	801,530	799,471	2,059	76	-18,105	-6,192	2,059	10,310	22,223
23	785,708	789,719	-4,011	75	-24,388	-12,349	-4,011	4,328	16,367
24	773,391	778,825	-5,434	74	-26,037	-13,864	-5,434	2,997	15,169
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,435,640	20,279,650	155,990	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Average per Enrolled Customer
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2009
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Southern California Edison
Average per Enrolled Customer
Demand Bidding Program (DBP)
JUL monthly peak
All
All
All
2009
1-in-2 (2002)
Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	691	685	5	74	-14	-3	5	13	25
2	681	673	8	72	-11	0	8	16	27
3	680	674	6	71	-13	-2	6	14	25
4	698	696	2	70	-18	-6	2	10	21
5	735	738	-2	69	-23	-11	-2	6	18
6	772	773	-1	68	-21	-9	-1	8	20
7	806	807	-1	69	-20	-9	-1	8	19
8	836	837	-1	72	-21	-9	-1	7	18
9	864	866	-2	77	-22	-10	-2	6	17
10	886	893	-7	83	-27	-16	-7	1	12
11	870	879	-10	89	-29	-17	-10	-2	9
12	837	840	-3	93	-22	-11	-3	4	15
13	836	818	18	95	-1	10	18	26	37
14	831	811	20	97	1	12	20	27	39
15	819	801	19	95	0	11	19	26	38
16	803	783	20	92	1	12	20	28	39
17	777	756	21	91	2	13	21	28	39
18	759	740	19	89	0	11	19	26	38
19	759	736	23	86	4	15	23	30	42
20	767	752	15	82	-4	7	15	23	34
21	755	754	2	78	-17	-6	2	9	20
22	730	728	2	76	-16	-6	2	9	20
23	716	719	-4	75	-22	-11	-4	4	15
24	704	709	-5	74	-24	-13	-5	3	14
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	18,612	18,470	142	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: AUG monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2009
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	707,924	702,455	5,469	71	-14,198	-2,579	5,469	13,516	25,135
2	710,802	702,742	8,061	69	-11,924	-117	8,061	16,239	28,046
3	715,077	708,527	6,550	68	-13,639	-1,711	6,550	14,811	26,738
4	743,866	741,956	1,910	66	-19,090	-6,683	1,910	10,503	22,909
5	791,211	793,797	-2,586	65	-24,300	-11,471	-2,586	6,299	19,128
6	836,824	837,372	-549	65	-22,325	-9,459	-549	8,362	21,227
7	884,616	885,191	-574	65	-22,436	-9,520	-574	8,371	21,287
8	924,099	925,587	-1,488	67	-23,260	-10,397	-1,488	7,421	20,284
9	957,467	959,986	-2,519	71	-24,326	-11,442	-2,519	6,405	19,289
10	978,291	986,570	-8,279	76	-29,966	-17,153	-8,279	595	13,408
11	958,683	969,299	-10,616	80	-31,476	-19,152	-10,616	-2,080	10,244
12	933,440	936,950	-3,510	84	-24,078	-11,926	-3,510	4,906	17,058
13	932,069	911,997	20,071	86	-1,264	11,341	20,071	28,801	41,406
14	927,624	905,633	21,991	90	768	13,307	21,991	30,675	43,214
15	911,702	890,870	20,832	92	-110	12,262	20,832	29,401	41,773
16	891,929	869,665	22,264	92	1,508	13,771	22,264	30,757	43,020
17	862,705	839,921	22,784	91	2,218	14,369	22,784	31,199	43,350
18	840,930	820,040	20,890	88	239	12,440	20,890	29,340	41,541
19	834,502	809,683	24,819	84	3,873	16,248	24,819	33,390	45,765
20	844,726	828,163	16,563	79	-4,646	7,885	16,563	25,242	37,773
21	830,624	828,879	1,744	76	-18,824	-6,672	1,744	10,161	22,312
22	801,601	799,542	2,059	75	-18,106	-6,192	2,059	10,311	22,225
23	786,413	790,427	-4,014	73	-24,410	-12,360	-4,014	4,332	16,382
24	770,439	775,852	-5,413	72	-25,937	-13,811	-5,413	2,985	15,111
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,377,563	20,221,105	156,458	118.4	n/a	n/a	n/a	n/a	n/a

Utility:	Southern California Edison									
Type of Results:	Average per Enrolled Customer									
DR Program:	Demand Bidding Program (DBP)									
Day Type:	AUG monthly peak									
Size Group:	All									
Industry Group:	All									
Local Capacity Area:	All									
Forecast Year:	2009									
Weather Year:	1-in-2 (2002)									
Impact Level:	Program-level impacts									
		Number of Accounts Called/Notified of Event:		1,098						
		Number of Accounts Enrolled:		1,098						
Hour Ending		Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
1		645	640	5	71	-13	-2	5	12	23
2		647	640	7	69	-11	0	7	15	26
3		651	645	6	68	-12	-2	6	13	24
4		677	676	2	66	-17	-6	2	10	21
5		721	723	-2	65	-22	-10	-2	6	17
6		762	763	0	65	-20	-9	0	8	19
7		806	806	-1	65	-20	-9	-1	8	19
8		842	843	-1	67	-21	-9	-1	7	18
9		872	874	-2	71	-22	-10	-2	6	18
10		891	899	-8	76	-27	-16	-8	1	12
11		873	883	-10	80	-29	-17	-10	-2	9
12		850	853	-3	84	-22	-11	-3	4	16
13		849	831	18	86	-1	10	18	26	38
14		845	825	20	90	1	12	20	28	39
15		830	811	19	92	0	11	19	27	38
16		812	792	20	92	1	13	20	28	39
17		786	765	21	91	2	13	21	28	39
18		766	747	19	88	0	11	19	27	38
19		760	737	23	84	4	15	23	30	42
20		769	754	15	79	-4	7	15	23	34
21		756	755	2	76	-17	-6	2	9	20
22		730	728	2	75	-16	-6	2	9	20
23		716	720	-4	73	-22	-11	-4	4	15
24		702	707	-5	72	-24	-13	-5	3	14
		Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily		18,559	18,416	142	118.4	n/a	n/a	n/a	n/a	n/a

Utility:	Southern California Edison									
Type of Results:	Aggregate Impact									
DR Program:	Demand Bidding Program (DBP)									
Day Type:	JUL monthly peak									
Size Group:	All									
Industry Group:	All									
Local Capacity Area:	All									
Forecast Year:	2010									
Weather Year:	1-in-2 (2002)									
Impact Level:	Program-level impacts									
		Number of Accounts Called/Notified of Event:		1,098						
		Number of Accounts Enrolled:		1,098						
Hour Ending		Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
1		758,476	752,617	5,859	74	-15,212	-2,763	5,859	14,481	26,930
2		747,649	739,170	8,479	72	-12,542	-123	8,479	17,080	29,500
3		747,094	740,251	6,843	71	-14,249	-1,788	6,843	15,474	27,936
4		766,467	764,500	1,968	70	-19,670	-6,886	1,968	10,822	23,605
5		807,137	809,775	-2,638	69	-24,789	-11,702	-2,638	6,426	19,513
6		847,902	848,458	-556	68	-22,620	-9,585	-556	8,472	21,508
7		885,168	885,743	-575	69	-22,450	-9,526	-575	8,376	21,300
8		917,882	919,360	-1,478	72	-23,104	-10,327	-1,478	7,371	20,148
9		948,128	950,622	-2,494	77	-24,089	-11,330	-2,494	6,342	19,100
10		972,800	981,033	-8,233	83	-29,798	-17,057	-8,233	592	13,333
11		954,715	965,287	-10,572	89	-31,346	-19,072	-10,572	-2,071	10,202
12		918,603	922,058	-3,454	93	-23,695	-11,737	-3,454	4,828	16,787
13		918,311	898,536	19,775	95	-1,245	11,174	19,775	28,376	40,795
14		912,473	890,841	21,632	97	755	13,089	21,632	30,174	42,508
15		899,609	879,054	20,555	95	-109	12,100	20,555	29,011	41,219
16		881,239	859,242	21,997	92	1,490	13,606	21,997	30,388	42,504
17		852,910	830,385	22,525	91	2,193	14,206	22,525	30,845	42,857
18		833,594	812,886	20,708	89	237	12,331	20,708	29,084	41,179
19		832,954	808,181	24,773	86	3,865	16,218	24,773	33,328	45,680
20		842,489	825,970	16,520	82	-4,633	7,864	16,520	25,175	37,673
21		829,408	827,666	1,742	78	-18,796	-6,662	1,742	10,146	22,280
22		801,530	799,471	2,059	76	-18,105	-6,192	2,059	10,310	22,223
23		785,708	789,719	-4,011	75	-24,388	-12,349	-4,011	4,328	16,367
24		773,391	778,825	-5,434	74	-26,037	-13,864	-5,434	2,997	15,169
		Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily		20,435,640	20,279,650	155,990	173.3	n/a	n/a	n/a	n/a	n/a

Utility:

Southern California Edison
Average per Enrolled Customer
Demand Bidding Program (DBP)
JUL monthly peak
All
All
All
2010
1-in-2 (2002)
Program-level impacts

Type of Results:

DR Program:

Day Type:

Size Group:

Industry Group:

Local Capacity Area:

Forecast Year:

Weather Year:

Impact Level:

Number of Accounts Called/Notified of Event:	1,098
Number of Accounts Enrolled:	1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	691	685	5	74	-14	-3	5	13	25
2	681	673	8	72	-11	0	8	16	27
3	680	674	6	71	-13	-2	6	14	25
4	698	696	2	70	-18	-6	2	10	21
5	735	738	-2	69	-23	-11	-2	6	18
6	772	773	-1	68	-21	-9	-1	8	20
7	806	807	-1	69	-20	-9	-1	8	19
8	836	837	-1	72	-21	-9	-1	7	18
9	864	866	-2	77	-22	-10	-2	6	17
10	886	893	-7	83	-27	-16	-7	1	12
11	870	879	-10	89	-29	-17	-10	-2	9
12	837	840	-3	93	-22	-11	-3	4	15
13	836	818	18	95	-1	10	18	26	37
14	831	811	20	97	1	12	20	27	39
15	819	801	19	95	0	11	19	26	38
16	803	783	20	92	1	12	20	28	39
17	777	756	21	91	2	13	21	28	39
18	759	740	19	89	0	11	19	26	38
19	759	736	23	86	4	15	23	30	42
20	767	752	15	82	-4	7	15	23	34
21	755	754	2	78	-17	-6	2	9	20
22	730	728	2	76	-16	-6	2	9	20
23	716	719	-4	75	-22	-11	-4	4	15
24	704	709	-5	74	-24	-13	-5	3	14
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	18,612	18,470	142	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: AUG monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2010
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	707,924	702,455	5,469	71	-14,198	-2,579	5,469	13,516	25,135
2	710,802	702,742	8,061	69	-11,924	-117	8,061	16,239	28,046
3	715,077	708,527	6,550	68	-13,639	-1,711	6,550	14,811	26,738
4	743,866	741,956	1,910	66	-19,090	-6,683	1,910	10,503	22,909
5	791,211	793,797	-2,586	65	-24,300	-11,471	-2,586	6,299	19,128
6	836,824	837,372	-549	65	-22,325	-9,459	-549	8,362	21,227
7	884,616	885,191	-574	65	-22,436	-9,520	-574	8,371	21,287
8	924,099	925,587	-1,488	67	-23,260	-10,397	-1,488	7,421	20,284
9	957,467	959,986	-2,519	71	-24,326	-11,442	-2,519	6,405	19,289
10	978,291	986,570	-8,279	76	-29,966	-17,153	-8,279	595	13,408
11	958,683	969,299	-10,616	80	-31,476	-19,152	-10,616	-2,080	10,244
12	933,440	936,950	-3,510	84	-24,078	-11,926	-3,510	4,906	17,058
13	932,069	911,997	20,071	86	-1,264	11,341	20,071	28,801	41,406
14	927,624	905,633	21,991	90	768	13,307	21,991	30,675	43,214
15	911,702	890,870	20,832	92	-110	12,262	20,832	29,401	41,773
16	891,929	869,665	22,264	92	1,508	13,771	22,264	30,757	43,020
17	862,705	839,921	22,784	91	2,218	14,369	22,784	31,199	43,350
18	840,930	820,040	20,890	88	239	12,440	20,890	29,340	41,541
19	834,502	809,683	24,819	84	3,873	16,248	24,819	33,390	45,765
20	844,726	828,163	16,563	79	-4,646	7,885	16,563	25,242	37,773
21	830,624	828,879	1,744	76	-18,824	-6,672	1,744	10,161	22,312
22	801,601	799,542	2,059	75	-18,106	-6,192	2,059	10,311	22,225
23	786,413	790,427	-4,014	73	-24,410	-12,360	-4,014	4,332	16,382
24	770,439	775,852	-5,413	72	-25,937	-13,811	-5,413	2,985	15,111
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,377,563	20,221,105	156,458	118.4	n/a	n/a	n/a	n/a	n/a

Utility:

Southern California Edison
Average per Enrolled Customer
Demand Bidding Program (DBP)
AUG monthly peak
All
All
All
2010
1-in-2 (2002)
Program-level impacts

Type of Results:

DR Program:

Day Type:

Size Group:

Industry Group:

Local Capacity Area:

Forecast Year:

Weather Year:

Impact Level:

Number of Accounts Called/Notified of Event:	1,098
Number of Accounts Enrolled:	1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	645	640	5	71	-13	-2	5	12	23
2	647	640	7	69	-11	0	7	15	26
3	651	645	6	68	-12	-2	6	13	24
4	677	676	2	66	-17	-6	2	10	21
5	721	723	-2	65	-22	-10	-2	6	17
6	762	763	0	65	-20	-9	0	8	19
7	806	806	-1	65	-20	-9	-1	8	19
8	842	843	-1	67	-21	-9	-1	7	18
9	872	874	-2	71	-22	-10	-2	6	18
10	891	899	-8	76	-27	-16	-8	1	12
11	873	883	-10	80	-29	-17	-10	-2	9
12	850	853	-3	84	-22	-11	-3	4	16
13	849	831	18	86	-1	10	18	26	38
14	845	825	20	90	1	12	20	28	39
15	830	811	19	92	0	11	19	27	38
16	812	792	20	92	1	13	20	28	39
17	786	765	21	91	2	13	21	28	39
18	766	747	19	88	0	11	19	27	38
19	760	737	23	84	4	15	23	30	42
20	769	754	15	79	-4	7	15	23	34
21	756	755	2	76	-17	-6	2	9	20
22	730	728	2	75	-16	-6	2	9	20
23	716	720	-4	73	-22	-11	-4	4	15
24	702	707	-5	72	-24	-13	-5	3	14
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	18,559	18,416	142	118.4	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2011
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	758,476	752,617	5,859	74	-15,212	-2,763	5,859	14,481	26,930
2	747,649	739,170	8,479	72	-12,542	-123	8,479	17,080	29,500
3	747,094	740,251	6,843	71	-14,249	-1,788	6,843	15,474	27,936
4	766,467	764,500	1,968	70	-19,670	-6,886	1,968	10,822	23,605
5	807,137	809,775	-2,638	69	-24,789	-11,702	-2,638	6,426	19,513
6	847,902	848,458	-556	68	-22,620	-9,585	-556	8,472	21,508
7	885,168	885,743	-575	69	-22,450	-9,526	-575	8,376	21,300
8	917,882	919,360	-1,478	72	-23,104	-10,327	-1,478	7,371	20,148
9	948,128	950,622	-2,494	77	-24,089	-11,330	-2,494	6,342	19,100
10	972,800	981,033	-8,233	83	-29,798	-17,057	-8,233	592	13,333
11	954,715	965,287	-10,572	89	-31,346	-19,072	-10,572	-2,071	10,202
12	918,603	922,058	-3,454	93	-23,695	-11,737	-3,454	4,828	16,787
13	918,311	898,536	19,775	95	-1,245	11,174	19,775	28,376	40,795
14	912,473	890,841	21,632	97	755	13,089	21,632	30,174	42,508
15	899,609	879,054	20,555	95	-109	12,100	20,555	29,011	41,219
16	881,239	859,242	21,997	92	1,490	13,606	21,997	30,388	42,504
17	852,910	830,385	22,525	91	2,193	14,206	22,525	30,845	42,857
18	833,594	812,886	20,708	89	237	12,331	20,708	29,084	41,179
19	832,954	808,181	24,773	86	3,865	16,218	24,773	33,328	45,680
20	842,489	825,970	16,520	82	-4,633	7,864	16,520	25,175	37,673
21	829,408	827,666	1,742	78	-18,796	-6,662	1,742	10,146	22,280
22	801,530	799,471	2,059	76	-18,105	-6,192	2,059	10,310	22,223
23	785,708	789,719	-4,011	75	-24,388	-12,349	-4,011	4,328	16,367
24	773,391	778,825	-5,434	74	-26,037	-13,864	-5,434	2,997	15,169
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,435,640	20,279,650	155,990	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Average per Enrolled Customer
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2011
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Southern California Edison
Average per Enrolled Customer
Demand Bidding Program (DBP)
JUL monthly peak
All
All
All
2011
1-in-2 (2002)
Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	691	685	5	74	-14	-3	5	13	25
2	681	673	8	72	-11	0	8	16	27
3	680	674	6	71	-13	-2	6	14	25
4	698	696	2	70	-18	-6	2	10	21
5	735	738	-2	69	-23	-11	-2	6	18
6	772	773	-1	68	-21	-9	-1	8	20
7	806	807	-1	69	-20	-9	-1	8	19
8	836	837	-1	72	-21	-9	-1	7	18
9	864	866	-2	77	-22	-10	-2	6	17
10	886	893	-7	83	-27	-16	-7	1	12
11	870	879	-10	89	-29	-17	-10	-2	9
12	837	840	-3	93	-22	-11	-3	4	15
13	836	818	18	95	-1	10	18	26	37
14	831	811	20	97	1	12	20	27	39
15	819	801	19	95	0	11	19	26	38
16	803	783	20	92	1	12	20	28	39
17	777	756	21	91	2	13	21	28	39
18	759	740	19	89	0	11	19	26	38
19	759	736	23	86	4	15	23	30	42
20	767	752	15	82	-4	7	15	23	34
21	755	754	2	78	-17	-6	2	9	20
22	730	728	2	76	-16	-6	2	9	20
23	716	719	-4	75	-22	-11	-4	4	15
24	704	709	-5	74	-24	-13	-5	3	14
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	18,612	18,470	142	173.3	n/a	n/a	n/a	n/a	n/a

Utility:	Southern California Edison									
Type of Results:	Aggregate Impact									
DR Program:	Demand Bidding Program (DBP)									
Day Type:	AUG monthly peak									
Size Group:	All									
Industry Group:	All									
Local Capacity Area:	All									
Forecast Year:	2011									
Weather Year:	1-in-2 (2002)									
Impact Level:	Program-level impacts									
		Number of Accounts Called/Notified of Event:		1,098						
		Number of Accounts Enrolled:		1,098						
Hour Ending		Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
1		707,924	702,455	5,469	71	-14,198	-2,579	5,469	13,516	25,135
2		710,802	702,742	8,061	69	-11,924	-117	8,061	16,239	28,046
3		715,077	708,527	6,550	68	-13,639	-1,711	6,550	14,811	26,738
4		743,866	741,956	1,910	66	-19,090	-6,683	1,910	10,503	22,909
5		791,211	793,797	-2,586	65	-24,300	-11,471	-2,586	6,299	19,128
6		836,824	837,372	-549	65	-22,325	-9,459	-549	8,362	21,227
7		884,616	885,191	-574	65	-22,436	-9,520	-574	8,371	21,287
8		924,099	925,587	-1,488	67	-23,260	-10,397	-1,488	7,421	20,284
9		957,467	959,986	-2,519	71	-24,326	-11,442	-2,519	6,405	19,289
10		978,291	986,570	-8,279	76	-29,966	-17,153	-8,279	595	13,408
11		958,683	969,299	-10,616	80	-31,476	-19,152	-10,616	-2,080	10,244
12		933,440	936,950	-3,510	84	-24,078	-11,926	-3,510	4,906	17,058
13		932,069	911,997	20,071	86	-1,264	11,341	20,071	28,801	41,406
14		927,624	905,633	21,991	90	768	13,307	21,991	30,675	43,214
15		911,702	890,870	20,832	92	-110	12,262	20,832	29,401	41,773
16		891,929	869,665	22,264	92	1,508	13,771	22,264	30,757	43,020
17		862,705	839,921	22,784	91	2,218	14,369	22,784	31,199	43,350
18		840,930	820,040	20,890	88	239	12,440	20,890	29,340	41,541
19		834,502	809,683	24,819	84	3,873	16,248	24,819	33,390	45,765
20		844,726	828,163	16,563	79	-4,646	7,885	16,563	25,242	37,773
21		830,624	828,879	1,744	76	-18,824	-6,672	1,744	10,161	22,312
22		801,601	799,542	2,059	75	-18,106	-6,192	2,059	10,311	22,225
23		786,413	790,427	-4,014	73	-24,410	-12,360	-4,014	4,332	16,382
24		770,439	775,852	-5,413	72	-25,937	-13,811	-5,413	2,985	15,111
		Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily		20,377,563	20,221,105	156,458	118.4	n/a	n/a	n/a	n/a	n/a

Utility:

Southern California Edison
Average per Enrolled Customer
Demand Bidding Program (DBP)
AUG monthly peak
All
All
All
2011
1-in-2 (2002)
Program-level impacts

Type of Results:

DR Program:

Day Type:

Size Group:

Industry Group:

Local Capacity Area:

Forecast Year:

Weather Year:

Impact Level:

Number of Accounts Called/Notified of Event:	1,098
Number of Accounts Enrolled:	1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	645	640	5	71	-13	-2	5	12	23
2	647	640	7	69	-11	0	7	15	26
3	651	645	6	68	-12	-2	6	13	24
4	677	676	2	66	-17	-6	2	10	21
5	721	723	-2	65	-22	-10	-2	6	17
6	762	763	0	65	-20	-9	0	8	19
7	806	806	-1	65	-20	-9	-1	8	19
8	842	843	-1	67	-21	-9	-1	7	18
9	872	874	-2	71	-22	-10	-2	6	18
10	891	899	-8	76	-27	-16	-8	1	12
11	873	883	-10	80	-29	-17	-10	-2	9
12	850	853	-3	84	-22	-11	-3	4	16
13	849	831	18	86	-1	10	18	26	38
14	845	825	20	90	1	12	20	28	39
15	830	811	19	92	0	11	19	27	38
16	812	792	20	92	1	13	20	28	39
17	786	765	21	91	2	13	21	28	39
18	766	747	19	88	0	11	19	27	38
19	760	737	23	84	4	15	23	30	42
20	769	754	15	79	-4	7	15	23	34
21	756	755	2	76	-17	-6	2	9	20
22	730	728	2	75	-16	-6	2	9	20
23	716	720	-4	73	-22	-11	-4	4	15
24	702	707	-5	72	-24	-13	-5	3	14
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	18,559	18,416	142	118.4	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2012
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	758,476	752,617	5,859	74	-15,212	-2,763	5,859	14,481	26,930
2	747,649	739,170	8,479	72	-12,542	-123	8,479	17,080	29,500
3	747,094	740,251	6,843	71	-14,249	-1,788	6,843	15,474	27,936
4	766,467	764,500	1,968	70	-19,670	-6,886	1,968	10,822	23,605
5	807,137	809,775	-2,638	69	-24,789	-11,702	-2,638	6,426	19,513
6	847,902	848,458	-556	68	-22,620	-9,585	-556	8,472	21,508
7	885,168	885,743	-575	69	-22,450	-9,526	-575	8,376	21,300
8	917,882	919,360	-1,478	72	-23,104	-10,327	-1,478	7,371	20,148
9	948,128	950,622	-2,494	77	-24,089	-11,330	-2,494	6,342	19,100
10	972,800	981,033	-8,233	83	-29,798	-17,057	-8,233	592	13,333
11	954,715	965,287	-10,572	89	-31,346	-19,072	-10,572	-2,071	10,202
12	918,603	922,058	-3,454	93	-23,695	-11,737	-3,454	4,828	16,787
13	918,311	898,536	19,775	95	-1,245	11,174	19,775	28,376	40,795
14	912,473	890,841	21,632	97	755	13,089	21,632	30,174	42,508
15	899,609	879,054	20,555	95	-109	12,100	20,555	29,011	41,219
16	881,239	859,242	21,997	92	1,490	13,606	21,997	30,388	42,504
17	852,910	830,385	22,525	91	2,193	14,206	22,525	30,845	42,857
18	833,594	812,886	20,708	89	237	12,331	20,708	29,084	41,179
19	832,954	808,181	24,773	86	3,865	16,218	24,773	33,328	45,680
20	842,489	825,970	16,520	82	-4,633	7,864	16,520	25,175	37,673
21	829,408	827,666	1,742	78	-18,796	-6,662	1,742	10,146	22,280
22	801,530	799,471	2,059	76	-18,105	-6,192	2,059	10,310	22,223
23	785,708	789,719	-4,011	75	-24,388	-12,349	-4,011	4,328	16,367
24	773,391	778,825	-5,434	74	-26,037	-13,864	-5,434	2,997	15,169
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,435,640	20,279,650	155,990	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Average per Enrolled Customer
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2012
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Southern California Edison
Average per Enrolled Customer
Demand Bidding Program (DBP)
JUL monthly peak
All
All
All
2012
1-in-2 (2002)
Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	691	685	5	74	-14	-3	5	13	25
2	681	673	8	72	-11	0	8	16	27
3	680	674	6	71	-13	-2	6	14	25
4	698	696	2	70	-18	-6	2	10	21
5	735	738	-2	69	-23	-11	-2	6	18
6	772	773	-1	68	-21	-9	-1	8	20
7	806	807	-1	69	-20	-9	-1	8	19
8	836	837	-1	72	-21	-9	-1	7	18
9	864	866	-2	77	-22	-10	-2	6	17
10	886	893	-7	83	-27	-16	-7	1	12
11	870	879	-10	89	-29	-17	-10	-2	9
12	837	840	-3	93	-22	-11	-3	4	15
13	836	818	18	95	-1	10	18	26	37
14	831	811	20	97	1	12	20	27	39
15	819	801	19	95	0	11	19	26	38
16	803	783	20	92	1	12	20	28	39
17	777	756	21	91	2	13	21	28	39
18	759	740	19	89	0	11	19	26	38
19	759	736	23	86	4	15	23	30	42
20	767	752	15	82	-4	7	15	23	34
21	755	754	2	78	-17	-6	2	9	20
22	730	728	2	76	-16	-6	2	9	20
23	716	719	-4	75	-22	-11	-4	4	15
24	704	709	-5	74	-24	-13	-5	3	14
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	18,612	18,470	142	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: AUG monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2012
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	707,924	702,455	5,469	71	-14,198	-2,579	5,469	13,516	25,135
2	710,802	702,742	8,061	69	-11,924	-117	8,061	16,239	28,046
3	715,077	708,527	6,550	68	-13,639	-1,711	6,550	14,811	26,738
4	743,866	741,956	1,910	66	-19,090	-6,683	1,910	10,503	22,909
5	791,211	793,797	-2,586	65	-24,300	-11,471	-2,586	6,299	19,128
6	836,824	837,372	-549	65	-22,325	-9,459	-549	8,362	21,227
7	884,616	885,191	-574	65	-22,436	-9,520	-574	8,371	21,287
8	924,099	925,587	-1,488	67	-23,260	-10,397	-1,488	7,421	20,284
9	957,467	959,986	-2,519	71	-24,326	-11,442	-2,519	6,405	19,289
10	978,291	986,570	-8,279	76	-29,966	-17,153	-8,279	595	13,408
11	958,683	969,299	-10,616	80	-31,476	-19,152	-10,616	-2,080	10,244
12	933,440	936,950	-3,510	84	-24,078	-11,926	-3,510	4,906	17,058
13	932,069	911,997	20,071	86	-1,264	11,341	20,071	28,801	41,406
14	927,624	905,633	21,991	90	768	13,307	21,991	30,675	43,214
15	911,702	890,870	20,832	92	-110	12,262	20,832	29,401	41,773
16	891,929	869,665	22,264	92	1,508	13,771	22,264	30,757	43,020
17	862,705	839,921	22,784	91	2,218	14,369	22,784	31,199	43,350
18	840,930	820,040	20,890	88	239	12,440	20,890	29,340	41,541
19	834,502	809,683	24,819	84	3,873	16,248	24,819	33,390	45,765
20	844,726	828,163	16,563	79	-4,646	7,885	16,563	25,242	37,773
21	830,624	828,879	1,744	76	-18,824	-6,672	1,744	10,161	22,312
22	801,601	799,542	2,059	75	-18,106	-6,192	2,059	10,311	22,225
23	786,413	790,427	-4,014	73	-24,410	-12,360	-4,014	4,332	16,382
24	770,439	775,852	-5,413	72	-25,937	-13,811	-5,413	2,985	15,111
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,377,563	20,221,105	156,458	118.4	n/a	n/a	n/a	n/a	n/a

Utility:	Southern California Edison									
Type of Results:	Average per Enrolled Customer									
DR Program:	Demand Bidding Program (DBP)									
Day Type:	AUG monthly peak									
Size Group:	All									
Industry Group:	All									
Local Capacity Area:	All									
Forecast Year:	2012									
Weather Year:	1-in-2 (2002)									
Impact Level:	Program-level impacts									
		Number of Accounts Called/Notified of Event:		1,098						
		Number of Accounts Enrolled:		1,098						
Hour Ending		Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
1		645	640	5	71	-13	-2	5	12	23
2		647	640	7	69	-11	0	7	15	26
3		651	645	6	68	-12	-2	6	13	24
4		677	676	2	66	-17	-6	2	10	21
5		721	723	-2	65	-22	-10	-2	6	17
6		762	763	0	65	-20	-9	0	8	19
7		806	806	-1	65	-20	-9	-1	8	19
8		842	843	-1	67	-21	-9	-1	7	18
9		872	874	-2	71	-22	-10	-2	6	18
10		891	899	-8	76	-27	-16	-8	1	12
11		873	883	-10	80	-29	-17	-10	-2	9
12		850	853	-3	84	-22	-11	-3	4	16
13		849	831	18	86	-1	10	18	26	38
14		845	825	20	90	1	12	20	28	39
15		830	811	19	92	0	11	19	27	38
16		812	792	20	92	1	13	20	28	39
17		786	765	21	91	2	13	21	28	39
18		766	747	19	88	0	11	19	27	38
19		760	737	23	84	4	15	23	30	42
20		769	754	15	79	-4	7	15	23	34
21		756	755	2	76	-17	-6	2	9	20
22		730	728	2	75	-16	-6	2	9	20
23		716	720	-4	73	-22	-11	-4	4	15
24		702	707	-5	72	-24	-13	-5	3	14
		Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily		18,559	18,416	142	118.4	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2013
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	758,476	752,617	5,859	74	-15,212	-2,763	5,859	14,481	26,930
2	747,649	739,170	8,479	72	-12,542	-123	8,479	17,080	29,500
3	747,094	740,251	6,843	71	-14,249	-1,788	6,843	15,474	27,936
4	766,467	764,500	1,968	70	-19,670	-6,886	1,968	10,822	23,605
5	807,137	809,775	-2,638	69	-24,789	-11,702	-2,638	6,426	19,513
6	847,902	848,458	-556	68	-22,620	-9,585	-556	8,472	21,508
7	885,168	885,743	-575	69	-22,450	-9,526	-575	8,376	21,300
8	917,882	919,360	-1,478	72	-23,104	-10,327	-1,478	7,371	20,148
9	948,128	950,622	-2,494	77	-24,089	-11,330	-2,494	6,342	19,100
10	972,800	981,033	-8,233	83	-29,798	-17,057	-8,233	592	13,333
11	954,715	965,287	-10,572	89	-31,346	-19,072	-10,572	-2,071	10,202
12	918,603	922,058	-3,454	93	-23,695	-11,737	-3,454	4,828	16,787
13	918,311	898,536	19,775	95	-1,245	11,174	19,775	28,376	40,795
14	912,473	890,841	21,632	97	755	13,089	21,632	30,174	42,508
15	899,609	879,054	20,555	95	-109	12,100	20,555	29,011	41,219
16	881,239	859,242	21,997	92	1,490	13,606	21,997	30,388	42,504
17	852,910	830,385	22,525	91	2,193	14,206	22,525	30,845	42,857
18	833,594	812,886	20,708	89	237	12,331	20,708	29,084	41,179
19	832,954	808,181	24,773	86	3,865	16,218	24,773	33,328	45,680
20	842,489	825,970	16,520	82	-4,633	7,864	16,520	25,175	37,673
21	829,408	827,666	1,742	78	-18,796	-6,662	1,742	10,146	22,280
22	801,530	799,471	2,059	76	-18,105	-6,192	2,059	10,310	22,223
23	785,708	789,719	-4,011	75	-24,388	-12,349	-4,011	4,328	16,367
24	773,391	778,825	-5,434	74	-26,037	-13,864	-5,434	2,997	15,169
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,435,640	20,279,650	155,990	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Average per Enrolled Customer
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2013
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Southern California Edison
Average per Enrolled Customer
Demand Bidding Program (DBP)
JUL monthly peak
All
All
All
2013
1-in-2 (2002)
Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	691	685	5	74	-14	-3	5	13	25
2	681	673	8	72	-11	0	8	16	27
3	680	674	6	71	-13	-2	6	14	25
4	698	696	2	70	-18	-6	2	10	21
5	735	738	-2	69	-23	-11	-2	6	18
6	772	773	-1	68	-21	-9	-1	8	20
7	806	807	-1	69	-20	-9	-1	8	19
8	836	837	-1	72	-21	-9	-1	7	18
9	864	866	-2	77	-22	-10	-2	6	17
10	886	893	-7	83	-27	-16	-7	1	12
11	870	879	-10	89	-29	-17	-10	-2	9
12	837	840	-3	93	-22	-11	-3	4	15
13	836	818	18	95	-1	10	18	26	37
14	831	811	20	97	1	12	20	27	39
15	819	801	19	95	0	11	19	26	38
16	803	783	20	92	1	12	20	28	39
17	777	756	21	91	2	13	21	28	39
18	759	740	19	89	0	11	19	26	38
19	759	736	23	86	4	15	23	30	42
20	767	752	15	82	-4	7	15	23	34
21	755	754	2	78	-17	-6	2	9	20
22	730	728	2	76	-16	-6	2	9	20
23	716	719	-4	75	-22	-11	-4	4	15
24	704	709	-5	74	-24	-13	-5	3	14
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	18,612	18,470	142	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: AUG monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2013
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	707,924	702,455	5,469	71	-14,198	-2,579	5,469	13,516	25,135
2	710,802	702,742	8,061	69	-11,924	-117	8,061	16,239	28,046
3	715,077	708,527	6,550	68	-13,639	-1,711	6,550	14,811	26,738
4	743,866	741,956	1,910	66	-19,090	-6,683	1,910	10,503	22,909
5	791,211	793,797	-2,586	65	-24,300	-11,471	-2,586	6,299	19,128
6	836,824	837,372	-549	65	-22,325	-9,459	-549	8,362	21,227
7	884,616	885,191	-574	65	-22,436	-9,520	-574	8,371	21,287
8	924,099	925,587	-1,488	67	-23,260	-10,397	-1,488	7,421	20,284
9	957,467	959,986	-2,519	71	-24,326	-11,442	-2,519	6,405	19,289
10	978,291	986,570	-8,279	76	-29,966	-17,153	-8,279	595	13,408
11	958,683	969,299	-10,616	80	-31,476	-19,152	-10,616	-2,080	10,244
12	933,440	936,950	-3,510	84	-24,078	-11,926	-3,510	4,906	17,058
13	932,069	911,997	20,071	86	-1,264	11,341	20,071	28,801	41,406
14	927,624	905,633	21,991	90	768	13,307	21,991	30,675	43,214
15	911,702	890,870	20,832	92	-110	12,262	20,832	29,401	41,773
16	891,929	869,665	22,264	92	1,508	13,771	22,264	30,757	43,020
17	862,705	839,921	22,784	91	2,218	14,369	22,784	31,199	43,350
18	840,930	820,040	20,890	88	239	12,440	20,890	29,340	41,541
19	834,502	809,683	24,819	84	3,873	16,248	24,819	33,390	45,765
20	844,726	828,163	16,563	79	-4,646	7,885	16,563	25,242	37,773
21	830,624	828,879	1,744	76	-18,824	-6,672	1,744	10,161	22,312
22	801,601	799,542	2,059	75	-18,106	-6,192	2,059	10,311	22,225
23	786,413	790,427	-4,014	73	-24,410	-12,360	-4,014	4,332	16,382
24	770,439	775,852	-5,413	72	-25,937	-13,811	-5,413	2,985	15,111
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,377,563	20,221,105	156,458	118.4	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Average per Enrolled Customer
 DR Program: Demand Bidding Program (DBP)
 Day Type: AUG monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2013
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Southern California Edison
Average per Enrolled Customer
Demand Bidding Program (DBP)
AUG monthly peak
All
All
All
2013
1-in-2 (2002)
Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	645	640	5	71	-13	-2	5	12	23
2	647	640	7	69	-11	0	7	15	26
3	651	645	6	68	-12	-2	6	13	24
4	677	676	2	66	-17	-6	2	10	21
5	721	723	-2	65	-22	-10	-2	6	17
6	762	763	0	65	-20	-9	0	8	19
7	806	806	-1	65	-20	-9	-1	8	19
8	842	843	-1	67	-21	-9	-1	7	18
9	872	874	-2	71	-22	-10	-2	6	18
10	891	899	-8	76	-27	-16	-8	1	12
11	873	883	-10	80	-29	-17	-10	-2	9
12	850	853	-3	84	-22	-11	-3	4	16
13	849	831	18	86	-1	10	18	26	38
14	845	825	20	90	1	12	20	28	39
15	830	811	19	92	0	11	19	27	38
16	812	792	20	92	1	13	20	28	39
17	786	765	21	91	2	13	21	28	39
18	766	747	19	88	0	11	19	27	38
19	760	737	23	84	4	15	23	30	42
20	769	754	15	79	-4	7	15	23	34
21	756	755	2	76	-17	-6	2	9	20
22	730	728	2	75	-16	-6	2	9	20
23	716	720	-4	73	-22	-11	-4	4	15
24	702	707	-5	72	-24	-13	-5	3	14
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	18,559	18,416	142	118.4	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2014
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	758,476	752,617	5,859	74	-15,212	-2,763	5,859	14,481	26,930
2	747,649	739,170	8,479	72	-12,542	-123	8,479	17,080	29,500
3	747,094	740,251	6,843	71	-14,249	-1,788	6,843	15,474	27,936
4	766,467	764,500	1,968	70	-19,670	-6,886	1,968	10,822	23,605
5	807,137	809,775	-2,638	69	-24,789	-11,702	-2,638	6,426	19,513
6	847,902	848,458	-556	68	-22,620	-9,585	-556	8,472	21,508
7	885,168	885,743	-575	69	-22,450	-9,526	-575	8,376	21,300
8	917,882	919,360	-1,478	72	-23,104	-10,327	-1,478	7,371	20,148
9	948,128	950,622	-2,494	77	-24,089	-11,330	-2,494	6,342	19,100
10	972,800	981,033	-8,233	83	-29,798	-17,057	-8,233	592	13,333
11	954,715	965,287	-10,572	89	-31,346	-19,072	-10,572	-2,071	10,202
12	918,603	922,058	-3,454	93	-23,695	-11,737	-3,454	4,828	16,787
13	918,311	898,536	19,775	95	-1,245	11,174	19,775	28,376	40,795
14	912,473	890,841	21,632	97	755	13,089	21,632	30,174	42,508
15	899,609	879,054	20,555	95	-109	12,100	20,555	29,011	41,219
16	881,239	859,242	21,997	92	1,490	13,606	21,997	30,388	42,504
17	852,910	830,385	22,525	91	2,193	14,206	22,525	30,845	42,857
18	833,594	812,886	20,708	89	237	12,331	20,708	29,084	41,179
19	832,954	808,181	24,773	86	3,865	16,218	24,773	33,328	45,680
20	842,489	825,970	16,520	82	-4,633	7,864	16,520	25,175	37,673
21	829,408	827,666	1,742	78	-18,796	-6,662	1,742	10,146	22,280
22	801,530	799,471	2,059	76	-18,105	-6,192	2,059	10,310	22,223
23	785,708	789,719	-4,011	75	-24,388	-12,349	-4,011	4,328	16,367
24	773,391	778,825	-5,434	74	-26,037	-13,864	-5,434	2,997	15,169
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,435,640	20,279,650	155,990	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Average per Enrolled Customer
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2014
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Southern California Edison
Average per Enrolled Customer
Demand Bidding Program (DBP)
JUL monthly peak
All
All
All
2014
1-in-2 (2002)
Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	691	685	5	74	-14	-3	5	13	25
2	681	673	8	72	-11	0	8	16	27
3	680	674	6	71	-13	-2	6	14	25
4	698	696	2	70	-18	-6	2	10	21
5	735	738	-2	69	-23	-11	-2	6	18
6	772	773	-1	68	-21	-9	-1	8	20
7	806	807	-1	69	-20	-9	-1	8	19
8	836	837	-1	72	-21	-9	-1	7	18
9	864	866	-2	77	-22	-10	-2	6	17
10	886	893	-7	83	-27	-16	-7	1	12
11	870	879	-10	89	-29	-17	-10	-2	9
12	837	840	-3	93	-22	-11	-3	4	15
13	836	818	18	95	-1	10	18	26	37
14	831	811	20	97	1	12	20	27	39
15	819	801	19	95	0	11	19	26	38
16	803	783	20	92	1	12	20	28	39
17	777	756	21	91	2	13	21	28	39
18	759	740	19	89	0	11	19	26	38
19	759	736	23	86	4	15	23	30	42
20	767	752	15	82	-4	7	15	23	34
21	755	754	2	78	-17	-6	2	9	20
22	730	728	2	76	-16	-6	2	9	20
23	716	719	-4	75	-22	-11	-4	4	15
24	704	709	-5	74	-24	-13	-5	3	14
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	18,612	18,470	142	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: AUG monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2014
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	707,924	702,455	5,469	71	-14,198	-2,579	5,469	13,516	25,135
2	710,802	702,742	8,061	69	-11,924	-117	8,061	16,239	28,046
3	715,077	708,527	6,550	68	-13,639	-1,711	6,550	14,811	26,738
4	743,866	741,956	1,910	66	-19,090	-6,683	1,910	10,503	22,909
5	791,211	793,797	-2,586	65	-24,300	-11,471	-2,586	6,299	19,128
6	836,824	837,372	-549	65	-22,325	-9,459	-549	8,362	21,227
7	884,616	885,191	-574	65	-22,436	-9,520	-574	8,371	21,287
8	924,099	925,587	-1,488	67	-23,260	-10,397	-1,488	7,421	20,284
9	957,467	959,986	-2,519	71	-24,326	-11,442	-2,519	6,405	19,289
10	978,291	986,570	-8,279	76	-29,966	-17,153	-8,279	595	13,408
11	958,683	969,299	-10,616	80	-31,476	-19,152	-10,616	-2,080	10,244
12	933,440	936,950	-3,510	84	-24,078	-11,926	-3,510	4,906	17,058
13	932,069	911,997	20,071	86	-1,264	11,341	20,071	28,801	41,406
14	927,624	905,633	21,991	90	768	13,307	21,991	30,675	43,214
15	911,702	890,870	20,832	92	-110	12,262	20,832	29,401	41,773
16	891,929	869,665	22,264	92	1,508	13,771	22,264	30,757	43,020
17	862,705	839,921	22,784	91	2,218	14,369	22,784	31,199	43,350
18	840,930	820,040	20,890	88	239	12,440	20,890	29,340	41,541
19	834,502	809,683	24,819	84	3,873	16,248	24,819	33,390	45,765
20	844,726	828,163	16,563	79	-4,646	7,885	16,563	25,242	37,773
21	830,624	828,879	1,744	76	-18,824	-6,672	1,744	10,161	22,312
22	801,601	799,542	2,059	75	-18,106	-6,192	2,059	10,311	22,225
23	786,413	790,427	-4,014	73	-24,410	-12,360	-4,014	4,332	16,382
24	770,439	775,852	-5,413	72	-25,937	-13,811	-5,413	2,985	15,111
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,377,563	20,221,105	156,458	118.4	n/a	n/a	n/a	n/a	n/a

Utility:

Southern California Edison
Average per Enrolled Customer
Demand Bidding Program (DBP)
AUG monthly peak
All
All
All
2014
1-in-2 (2002)
Program-level impacts

Type of Results:

DR Program:

Day Type:

Size Group:

Industry Group:

Local Capacity Area:

Forecast Year:

Weather Year:

Impact Level:

Number of Accounts Called/Notified of Event:	1,098
Number of Accounts Enrolled:	1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	645	640	5	71	-13	-2	5	12	23
2	647	640	7	69	-11	0	7	15	26
3	651	645	6	68	-12	-2	6	13	24
4	677	676	2	66	-17	-6	2	10	21
5	721	723	-2	65	-22	-10	-2	6	17
6	762	763	0	65	-20	-9	0	8	19
7	806	806	-1	65	-20	-9	-1	8	19
8	842	843	-1	67	-21	-9	-1	7	18
9	872	874	-2	71	-22	-10	-2	6	18
10	891	899	-8	76	-27	-16	-8	1	12
11	873	883	-10	80	-29	-17	-10	-2	9
12	850	853	-3	84	-22	-11	-3	4	16
13	849	831	18	86	-1	10	18	26	38
14	845	825	20	90	1	12	20	28	39
15	830	811	19	92	0	11	19	27	38
16	812	792	20	92	1	13	20	28	39
17	786	765	21	91	2	13	21	28	39
18	766	747	19	88	0	11	19	27	38
19	760	737	23	84	4	15	23	30	42
20	769	754	15	79	-4	7	15	23	34
21	756	755	2	76	-17	-6	2	9	20
22	730	728	2	75	-16	-6	2	9	20
23	716	720	-4	73	-22	-11	-4	4	15
24	702	707	-5	72	-24	-13	-5	3	14
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	18,559	18,416	142	118.4	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2015
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	758,476	752,617	5,859	74	-15,212	-2,763	5,859	14,481	26,930
2	747,649	739,170	8,479	72	-12,542	-123	8,479	17,080	29,500
3	747,094	740,251	6,843	71	-14,249	-1,788	6,843	15,474	27,936
4	766,467	764,500	1,968	70	-19,670	-6,886	1,968	10,822	23,605
5	807,137	809,775	-2,638	69	-24,789	-11,702	-2,638	6,426	19,513
6	847,902	848,458	-556	68	-22,620	-9,585	-556	8,472	21,508
7	885,168	885,743	-575	69	-22,450	-9,526	-575	8,376	21,300
8	917,882	919,360	-1,478	72	-23,104	-10,327	-1,478	7,371	20,148
9	948,128	950,622	-2,494	77	-24,089	-11,330	-2,494	6,342	19,100
10	972,800	981,033	-8,233	83	-29,798	-17,057	-8,233	592	13,333
11	954,715	965,287	-10,572	89	-31,346	-19,072	-10,572	-2,071	10,202
12	918,603	922,058	-3,454	93	-23,695	-11,737	-3,454	4,828	16,787
13	918,311	898,536	19,775	95	-1,245	11,174	19,775	28,376	40,795
14	912,473	890,841	21,632	97	755	13,089	21,632	30,174	42,508
15	899,609	879,054	20,555	95	-109	12,100	20,555	29,011	41,219
16	881,239	859,242	21,997	92	1,490	13,606	21,997	30,388	42,504
17	852,910	830,385	22,525	91	2,193	14,206	22,525	30,845	42,857
18	833,594	812,886	20,708	89	237	12,331	20,708	29,084	41,179
19	832,954	808,181	24,773	86	3,865	16,218	24,773	33,328	45,680
20	842,489	825,970	16,520	82	-4,633	7,864	16,520	25,175	37,673
21	829,408	827,666	1,742	78	-18,796	-6,662	1,742	10,146	22,280
22	801,530	799,471	2,059	76	-18,105	-6,192	2,059	10,310	22,223
23	785,708	789,719	-4,011	75	-24,388	-12,349	-4,011	4,328	16,367
24	773,391	778,825	-5,434	74	-26,037	-13,864	-5,434	2,997	15,169
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,435,640	20,279,650	155,990	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Average per Enrolled Customer
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2015
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Southern California Edison
Average per Enrolled Customer
Demand Bidding Program (DBP)
JUL monthly peak
All
All
All
2015
1-in-2 (2002)
Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	691	685	5	74	-14	-3	5	13	25
2	681	673	8	72	-11	0	8	16	27
3	680	674	6	71	-13	-2	6	14	25
4	698	696	2	70	-18	-6	2	10	21
5	735	738	-2	69	-23	-11	-2	6	18
6	772	773	-1	68	-21	-9	-1	8	20
7	806	807	-1	69	-20	-9	-1	8	19
8	836	837	-1	72	-21	-9	-1	7	18
9	864	866	-2	77	-22	-10	-2	6	17
10	886	893	-7	83	-27	-16	-7	1	12
11	870	879	-10	89	-29	-17	-10	-2	9
12	837	840	-3	93	-22	-11	-3	4	15
13	836	818	18	95	-1	10	18	26	37
14	831	811	20	97	1	12	20	27	39
15	819	801	19	95	0	11	19	26	38
16	803	783	20	92	1	12	20	28	39
17	777	756	21	91	2	13	21	28	39
18	759	740	19	89	0	11	19	26	38
19	759	736	23	86	4	15	23	30	42
20	767	752	15	82	-4	7	15	23	34
21	755	754	2	78	-17	-6	2	9	20
22	730	728	2	76	-16	-6	2	9	20
23	716	719	-4	75	-22	-11	-4	4	15
24	704	709	-5	74	-24	-13	-5	3	14
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	18,612	18,470	142	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: AUG monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2015
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	707,924	702,455	5,469	71	-14,198	-2,579	5,469	13,516	25,135
2	710,802	702,742	8,061	69	-11,924	-117	8,061	16,239	28,046
3	715,077	708,527	6,550	68	-13,639	-1,711	6,550	14,811	26,738
4	743,866	741,956	1,910	66	-19,090	-6,683	1,910	10,503	22,909
5	791,211	793,797	-2,586	65	-24,300	-11,471	-2,586	6,299	19,128
6	836,824	837,372	-549	65	-22,325	-9,459	-549	8,362	21,227
7	884,616	885,191	-574	65	-22,436	-9,520	-574	8,371	21,287
8	924,099	925,587	-1,488	67	-23,260	-10,397	-1,488	7,421	20,284
9	957,467	959,986	-2,519	71	-24,326	-11,442	-2,519	6,405	19,289
10	978,291	986,570	-8,279	76	-29,966	-17,153	-8,279	595	13,408
11	958,683	969,299	-10,616	80	-31,476	-19,152	-10,616	-2,080	10,244
12	933,440	936,950	-3,510	84	-24,078	-11,926	-3,510	4,906	17,058
13	932,069	911,997	20,071	86	-1,264	11,341	20,071	28,801	41,406
14	927,624	905,633	21,991	90	768	13,307	21,991	30,675	43,214
15	911,702	890,870	20,832	92	-110	12,262	20,832	29,401	41,773
16	891,929	869,665	22,264	92	1,508	13,771	22,264	30,757	43,020
17	862,705	839,921	22,784	91	2,218	14,369	22,784	31,199	43,350
18	840,930	820,040	20,890	88	239	12,440	20,890	29,340	41,541
19	834,502	809,683	24,819	84	3,873	16,248	24,819	33,390	45,765
20	844,726	828,163	16,563	79	-4,646	7,885	16,563	25,242	37,773
21	830,624	828,879	1,744	76	-18,824	-6,672	1,744	10,161	22,312
22	801,601	799,542	2,059	75	-18,106	-6,192	2,059	10,311	22,225
23	786,413	790,427	-4,014	73	-24,410	-12,360	-4,014	4,332	16,382
24	770,439	775,852	-5,413	72	-25,937	-13,811	-5,413	2,985	15,111
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,377,563	20,221,105	156,458	118.4	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Average per Enrolled Customer
 DR Program: Demand Bidding Program (DBP)
 Day Type: AUG monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2015
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Southern California Edison
Average per Enrolled Customer
Demand Bidding Program (DBP)
AUG monthly peak
All
All
All
2015
1-in-2 (2002)
Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	645	640	5	71	-13	-2	5	12	23
2	647	640	7	69	-11	0	7	15	26
3	651	645	6	68	-12	-2	6	13	24
4	677	676	2	66	-17	-6	2	10	21
5	721	723	-2	65	-22	-10	-2	6	17
6	762	763	0	65	-20	-9	0	8	19
7	806	806	-1	65	-20	-9	-1	8	19
8	842	843	-1	67	-21	-9	-1	7	18
9	872	874	-2	71	-22	-10	-2	6	18
10	891	899	-8	76	-27	-16	-8	1	12
11	873	883	-10	80	-29	-17	-10	-2	9
12	850	853	-3	84	-22	-11	-3	4	16
13	849	831	18	86	-1	10	18	26	38
14	845	825	20	90	1	12	20	28	39
15	830	811	19	92	0	11	19	27	38
16	812	792	20	92	1	13	20	28	39
17	786	765	21	91	2	13	21	28	39
18	766	747	19	88	0	11	19	27	38
19	760	737	23	84	4	15	23	30	42
20	769	754	15	79	-4	7	15	23	34
21	756	755	2	76	-17	-6	2	9	20
22	730	728	2	75	-16	-6	2	9	20
23	716	720	-4	73	-22	-11	-4	4	15
24	702	707	-5	72	-24	-13	-5	3	14
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	18,559	18,416	142	118.4	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2016
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	758,476	752,617	5,859	74	-15,212	-2,763	5,859	14,481	26,930
2	747,649	739,170	8,479	72	-12,542	-123	8,479	17,080	29,500
3	747,094	740,251	6,843	71	-14,249	-1,788	6,843	15,474	27,936
4	766,467	764,500	1,968	70	-19,670	-6,886	1,968	10,822	23,605
5	807,137	809,775	-2,638	69	-24,789	-11,702	-2,638	6,426	19,513
6	847,902	848,458	-556	68	-22,620	-9,585	-556	8,472	21,508
7	885,168	885,743	-575	69	-22,450	-9,526	-575	8,376	21,300
8	917,882	919,360	-1,478	72	-23,104	-10,327	-1,478	7,371	20,148
9	948,128	950,622	-2,494	77	-24,089	-11,330	-2,494	6,342	19,100
10	972,800	981,033	-8,233	83	-29,798	-17,057	-8,233	592	13,333
11	954,715	965,287	-10,572	89	-31,346	-19,072	-10,572	-2,071	10,202
12	918,603	922,058	-3,454	93	-23,695	-11,737	-3,454	4,828	16,787
13	918,311	898,536	19,775	95	-1,245	11,174	19,775	28,376	40,795
14	912,473	890,841	21,632	97	755	13,089	21,632	30,174	42,508
15	899,609	879,054	20,555	95	-109	12,100	20,555	29,011	41,219
16	881,239	859,242	21,997	92	1,490	13,606	21,997	30,388	42,504
17	852,910	830,385	22,525	91	2,193	14,206	22,525	30,845	42,857
18	833,594	812,886	20,708	89	237	12,331	20,708	29,084	41,179
19	832,954	808,181	24,773	86	3,865	16,218	24,773	33,328	45,680
20	842,489	825,970	16,520	82	-4,633	7,864	16,520	25,175	37,673
21	829,408	827,666	1,742	78	-18,796	-6,662	1,742	10,146	22,280
22	801,530	799,471	2,059	76	-18,105	-6,192	2,059	10,310	22,223
23	785,708	789,719	-4,011	75	-24,388	-12,349	-4,011	4,328	16,367
24	773,391	778,825	-5,434	74	-26,037	-13,864	-5,434	2,997	15,169
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,435,640	20,279,650	155,990	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Average per Enrolled Customer
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2016
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Southern California Edison
Average per Enrolled Customer
Demand Bidding Program (DBP)
JUL monthly peak
All
All
All
2016
1-in-2 (2002)
Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	691	685	5	74	-14	-3	5	13	25
2	681	673	8	72	-11	0	8	16	27
3	680	674	6	71	-13	-2	6	14	25
4	698	696	2	70	-18	-6	2	10	21
5	735	738	-2	69	-23	-11	-2	6	18
6	772	773	-1	68	-21	-9	-1	8	20
7	806	807	-1	69	-20	-9	-1	8	19
8	836	837	-1	72	-21	-9	-1	7	18
9	864	866	-2	77	-22	-10	-2	6	17
10	886	893	-7	83	-27	-16	-7	1	12
11	870	879	-10	89	-29	-17	-10	-2	9
12	837	840	-3	93	-22	-11	-3	4	15
13	836	818	18	95	-1	10	18	26	37
14	831	811	20	97	1	12	20	27	39
15	819	801	19	95	0	11	19	26	38
16	803	783	20	92	1	12	20	28	39
17	777	756	21	91	2	13	21	28	39
18	759	740	19	89	0	11	19	26	38
19	759	736	23	86	4	15	23	30	42
20	767	752	15	82	-4	7	15	23	34
21	755	754	2	78	-17	-6	2	9	20
22	730	728	2	76	-16	-6	2	9	20
23	716	719	-4	75	-22	-11	-4	4	15
24	704	709	-5	74	-24	-13	-5	3	14
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	18,612	18,470	142	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: AUG monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2016
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	707,924	702,455	5,469	71	-14,198	-2,579	5,469	13,516	25,135
2	710,802	702,742	8,061	69	-11,924	-117	8,061	16,239	28,046
3	715,077	708,527	6,550	68	-13,639	-1,711	6,550	14,811	26,738
4	743,866	741,956	1,910	66	-19,090	-6,683	1,910	10,503	22,909
5	791,211	793,797	-2,586	65	-24,300	-11,471	-2,586	6,299	19,128
6	836,824	837,372	-549	65	-22,325	-9,459	-549	8,362	21,227
7	884,616	885,191	-574	65	-22,436	-9,520	-574	8,371	21,287
8	924,099	925,587	-1,488	67	-23,260	-10,397	-1,488	7,421	20,284
9	957,467	959,986	-2,519	71	-24,326	-11,442	-2,519	6,405	19,289
10	978,291	986,570	-8,279	76	-29,966	-17,153	-8,279	595	13,408
11	958,683	969,299	-10,616	80	-31,476	-19,152	-10,616	-2,080	10,244
12	933,440	936,950	-3,510	84	-24,078	-11,926	-3,510	4,906	17,058
13	932,069	911,997	20,071	86	-1,264	11,341	20,071	28,801	41,406
14	927,624	905,633	21,991	90	768	13,307	21,991	30,675	43,214
15	911,702	890,870	20,832	92	-110	12,262	20,832	29,401	41,773
16	891,929	869,665	22,264	92	1,508	13,771	22,264	30,757	43,020
17	862,705	839,921	22,784	91	2,218	14,369	22,784	31,199	43,350
18	840,930	820,040	20,890	88	239	12,440	20,890	29,340	41,541
19	834,502	809,683	24,819	84	3,873	16,248	24,819	33,390	45,765
20	844,726	828,163	16,563	79	-4,646	7,885	16,563	25,242	37,773
21	830,624	828,879	1,744	76	-18,824	-6,672	1,744	10,161	22,312
22	801,601	799,542	2,059	75	-18,106	-6,192	2,059	10,311	22,225
23	786,413	790,427	-4,014	73	-24,410	-12,360	-4,014	4,332	16,382
24	770,439	775,852	-5,413	72	-25,937	-13,811	-5,413	2,985	15,111
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,377,563	20,221,105	156,458	118.4	n/a	n/a	n/a	n/a	n/a

Utility:	Southern California Edison									
Type of Results:	Average per Enrolled Customer									
DR Program:	Demand Bidding Program (DBP)									
Day Type:	AUG monthly peak									
Size Group:	All									
Industry Group:	All									
Local Capacity Area:	All									
Forecast Year:	2016									
Weather Year:	1-in-2 (2002)									
Impact Level:	Program-level impacts									
		Number of Accounts Called/Notified of Event:		1,098						
		Number of Accounts Enrolled:		1,098						
Hour Ending		Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
1		645	640	5	71	-13	-2	5	12	23
2		647	640	7	69	-11	0	7	15	26
3		651	645	6	68	-12	-2	6	13	24
4		677	676	2	66	-17	-6	2	10	21
5		721	723	-2	65	-22	-10	-2	6	17
6		762	763	0	65	-20	-9	0	8	19
7		806	806	-1	65	-20	-9	-1	8	19
8		842	843	-1	67	-21	-9	-1	7	18
9		872	874	-2	71	-22	-10	-2	6	18
10		891	899	-8	76	-27	-16	-8	1	12
11		873	883	-10	80	-29	-17	-10	-2	9
12		850	853	-3	84	-22	-11	-3	4	16
13		849	831	18	86	-1	10	18	26	38
14		845	825	20	90	1	12	20	28	39
15		830	811	19	92	0	11	19	27	38
16		812	792	20	92	1	13	20	28	39
17		786	765	21	91	2	13	21	28	39
18		766	747	19	88	0	11	19	27	38
19		760	737	23	84	4	15	23	30	42
20		769	754	15	79	-4	7	15	23	34
21		756	755	2	76	-17	-6	2	9	20
22		730	728	2	75	-16	-6	2	9	20
23		716	720	-4	73	-22	-11	-4	4	15
24		702	707	-5	72	-24	-13	-5	3	14
		Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily		18,559	18,416	142	118.4	n/a	n/a	n/a	n/a	n/a

Utility:	Southern California Edison									
Type of Results:	Aggregate Impact									
DR Program:	Demand Bidding Program (DBP)									
Day Type:	JUL monthly peak									
Size Group:	All									
Industry Group:	All									
Local Capacity Area:	All									
Forecast Year:	2017									
Weather Year:	1-in-2 (2002)									
Impact Level:	Program-level impacts									
		Number of Accounts Called/Notified of Event:		1,098						
		Number of Accounts Enrolled:		1,098						
Hour Ending		Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
1		758,476	752,617	5,859	74	-15,212	-2,763	5,859	14,481	26,930
2		747,649	739,170	8,479	72	-12,542	-123	8,479	17,080	29,500
3		747,094	740,251	6,843	71	-14,249	-1,788	6,843	15,474	27,936
4		766,467	764,500	1,968	70	-19,670	-6,886	1,968	10,822	23,605
5		807,137	809,775	-2,638	69	-24,789	-11,702	-2,638	6,426	19,513
6		847,902	848,458	-556	68	-22,620	-9,585	-556	8,472	21,508
7		885,168	885,743	-575	69	-22,450	-9,526	-575	8,376	21,300
8		917,882	919,360	-1,478	72	-23,104	-10,327	-1,478	7,371	20,148
9		948,128	950,622	-2,494	77	-24,089	-11,330	-2,494	6,342	19,100
10		972,800	981,033	-8,233	83	-29,798	-17,057	-8,233	592	13,333
11		954,715	965,287	-10,572	89	-31,346	-19,072	-10,572	-2,071	10,202
12		918,603	922,058	-3,454	93	-23,695	-11,737	-3,454	4,828	16,787
13		918,311	898,536	19,775	95	-1,245	11,174	19,775	28,376	40,795
14		912,473	890,841	21,632	97	755	13,089	21,632	30,174	42,508
15		899,609	879,054	20,555	95	-109	12,100	20,555	29,011	41,219
16		881,239	859,242	21,997	92	1,490	13,606	21,997	30,388	42,504
17		852,910	830,385	22,525	91	2,193	14,206	22,525	30,845	42,857
18		833,594	812,886	20,708	89	237	12,331	20,708	29,084	41,179
19		832,954	808,181	24,773	86	3,865	16,218	24,773	33,328	45,680
20		842,489	825,970	16,520	82	-4,633	7,864	16,520	25,175	37,673
21		829,408	827,666	1,742	78	-18,796	-6,662	1,742	10,146	22,280
22		801,530	799,471	2,059	76	-18,105	-6,192	2,059	10,310	22,223
23		785,708	789,719	-4,011	75	-24,388	-12,349	-4,011	4,328	16,367
24		773,391	778,825	-5,434	74	-26,037	-13,864	-5,434	2,997	15,169
		Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily		20,435,640	20,279,650	155,990	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Average per Enrolled Customer
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2017
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Southern California Edison
Average per Enrolled Customer
Demand Bidding Program (DBP)
JUL monthly peak
All
All
All
2017
1-in-2 (2002)
Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	691	685	5	74	-14	-3	5	13	25
2	681	673	8	72	-11	0	8	16	27
3	680	674	6	71	-13	-2	6	14	25
4	698	696	2	70	-18	-6	2	10	21
5	735	738	-2	69	-23	-11	-2	6	18
6	772	773	-1	68	-21	-9	-1	8	20
7	806	807	-1	69	-20	-9	-1	8	19
8	836	837	-1	72	-21	-9	-1	7	18
9	864	866	-2	77	-22	-10	-2	6	17
10	886	893	-7	83	-27	-16	-7	1	12
11	870	879	-10	89	-29	-17	-10	-2	9
12	837	840	-3	93	-22	-11	-3	4	15
13	836	818	18	95	-1	10	18	26	37
14	831	811	20	97	1	12	20	27	39
15	819	801	19	95	0	11	19	26	38
16	803	783	20	92	1	12	20	28	39
17	777	756	21	91	2	13	21	28	39
18	759	740	19	89	0	11	19	26	38
19	759	736	23	86	4	15	23	30	42
20	767	752	15	82	-4	7	15	23	34
21	755	754	2	78	-17	-6	2	9	20
22	730	728	2	76	-16	-6	2	9	20
23	716	719	-4	75	-22	-11	-4	4	15
24	704	709	-5	74	-24	-13	-5	3	14
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	18,612	18,470	142	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: AUG monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2017
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	707,924	702,455	5,469	71	-14,198	-2,579	5,469	13,516	25,135
2	710,802	702,742	8,061	69	-11,924	-117	8,061	16,239	28,046
3	715,077	708,527	6,550	68	-13,639	-1,711	6,550	14,811	26,738
4	743,866	741,956	1,910	66	-19,090	-6,683	1,910	10,503	22,909
5	791,211	793,797	-2,586	65	-24,300	-11,471	-2,586	6,299	19,128
6	836,824	837,372	-549	65	-22,325	-9,459	-549	8,362	21,227
7	884,616	885,191	-574	65	-22,436	-9,520	-574	8,371	21,287
8	924,099	925,587	-1,488	67	-23,260	-10,397	-1,488	7,421	20,284
9	957,467	959,986	-2,519	71	-24,326	-11,442	-2,519	6,405	19,289
10	978,291	986,570	-8,279	76	-29,966	-17,153	-8,279	595	13,408
11	958,683	969,299	-10,616	80	-31,476	-19,152	-10,616	-2,080	10,244
12	933,440	936,950	-3,510	84	-24,078	-11,926	-3,510	4,906	17,058
13	932,069	911,997	20,071	86	-1,264	11,341	20,071	28,801	41,406
14	927,624	905,633	21,991	90	768	13,307	21,991	30,675	43,214
15	911,702	890,870	20,832	92	-110	12,262	20,832	29,401	41,773
16	891,929	869,665	22,264	92	1,508	13,771	22,264	30,757	43,020
17	862,705	839,921	22,784	91	2,218	14,369	22,784	31,199	43,350
18	840,930	820,040	20,890	88	239	12,440	20,890	29,340	41,541
19	834,502	809,683	24,819	84	3,873	16,248	24,819	33,390	45,765
20	844,726	828,163	16,563	79	-4,646	7,885	16,563	25,242	37,773
21	830,624	828,879	1,744	76	-18,824	-6,672	1,744	10,161	22,312
22	801,601	799,542	2,059	75	-18,106	-6,192	2,059	10,311	22,225
23	786,413	790,427	-4,014	73	-24,410	-12,360	-4,014	4,332	16,382
24	770,439	775,852	-5,413	72	-25,937	-13,811	-5,413	2,985	15,111
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,377,563	20,221,105	156,458	118.4	n/a	n/a	n/a	n/a	n/a

Utility:	Southern California Edison									
Type of Results:	Average per Enrolled Customer									
DR Program:	Demand Bidding Program (DBP)									
Day Type:	AUG monthly peak									
Size Group:	All									
Industry Group:	All									
Local Capacity Area:	All									
Forecast Year:	2017									
Weather Year:	1-in-2 (2002)									
Impact Level:	Program-level impacts									
		Number of Accounts Called/Notified of Event:		1,098						
		Number of Accounts Enrolled:		1,098						
Hour Ending		Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
1		645	640	5	71	-13	-2	5	12	23
2		647	640	7	69	-11	0	7	15	26
3		651	645	6	68	-12	-2	6	13	24
4		677	676	2	66	-17	-6	2	10	21
5		721	723	-2	65	-22	-10	-2	6	17
6		762	763	0	65	-20	-9	0	8	19
7		806	806	-1	65	-20	-9	-1	8	19
8		842	843	-1	67	-21	-9	-1	7	18
9		872	874	-2	71	-22	-10	-2	6	18
10		891	899	-8	76	-27	-16	-8	1	12
11		873	883	-10	80	-29	-17	-10	-2	9
12		850	853	-3	84	-22	-11	-3	4	16
13		849	831	18	86	-1	10	18	26	38
14		845	825	20	90	1	12	20	28	39
15		830	811	19	92	0	11	19	27	38
16		812	792	20	92	1	13	20	28	39
17		786	765	21	91	2	13	21	28	39
18		766	747	19	88	0	11	19	27	38
19		760	737	23	84	4	15	23	30	42
20		769	754	15	79	-4	7	15	23	34
21		756	755	2	76	-17	-6	2	9	20
22		730	728	2	75	-16	-6	2	9	20
23		716	720	-4	73	-22	-11	-4	4	15
24		702	707	-5	72	-24	-13	-5	3	14
		Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily		18,559	18,416	142	118.4	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2018
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	758,476	752,617	5,859	74	-15,212	-2,763	5,859	14,481	26,930
2	747,649	739,170	8,479	72	-12,542	-123	8,479	17,080	29,500
3	747,094	740,251	6,843	71	-14,249	-1,788	6,843	15,474	27,936
4	766,467	764,500	1,968	70	-19,670	-6,886	1,968	10,822	23,605
5	807,137	809,775	-2,638	69	-24,789	-11,702	-2,638	6,426	19,513
6	847,902	848,458	-556	68	-22,620	-9,585	-556	8,472	21,508
7	885,168	885,743	-575	69	-22,450	-9,526	-575	8,376	21,300
8	917,882	919,360	-1,478	72	-23,104	-10,327	-1,478	7,371	20,148
9	948,128	950,622	-2,494	77	-24,089	-11,330	-2,494	6,342	19,100
10	972,800	981,033	-8,233	83	-29,798	-17,057	-8,233	592	13,333
11	954,715	965,287	-10,572	89	-31,346	-19,072	-10,572	-2,071	10,202
12	918,603	922,058	-3,454	93	-23,695	-11,737	-3,454	4,828	16,787
13	918,311	898,536	19,775	95	-1,245	11,174	19,775	28,376	40,795
14	912,473	890,841	21,632	97	755	13,089	21,632	30,174	42,508
15	899,609	879,054	20,555	95	-109	12,100	20,555	29,011	41,219
16	881,239	859,242	21,997	92	1,490	13,606	21,997	30,388	42,504
17	852,910	830,385	22,525	91	2,193	14,206	22,525	30,845	42,857
18	833,594	812,886	20,708	89	237	12,331	20,708	29,084	41,179
19	832,954	808,181	24,773	86	3,865	16,218	24,773	33,328	45,680
20	842,489	825,970	16,520	82	-4,633	7,864	16,520	25,175	37,673
21	829,408	827,666	1,742	78	-18,796	-6,662	1,742	10,146	22,280
22	801,530	799,471	2,059	76	-18,105	-6,192	2,059	10,310	22,223
23	785,708	789,719	-4,011	75	-24,388	-12,349	-4,011	4,328	16,367
24	773,391	778,825	-5,434	74	-26,037	-13,864	-5,434	2,997	15,169
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,435,640	20,279,650	155,990	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Average per Enrolled Customer
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2018
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Southern California Edison
Average per Enrolled Customer
Demand Bidding Program (DBP)
JUL monthly peak
All
All
All
2018
1-in-2 (2002)
Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	691	685	5	74	-14	-3	5	13	25
2	681	673	8	72	-11	0	8	16	27
3	680	674	6	71	-13	-2	6	14	25
4	698	696	2	70	-18	-6	2	10	21
5	735	738	-2	69	-23	-11	-2	6	18
6	772	773	-1	68	-21	-9	-1	8	20
7	806	807	-1	69	-20	-9	-1	8	19
8	836	837	-1	72	-21	-9	-1	7	18
9	864	866	-2	77	-22	-10	-2	6	17
10	886	893	-7	83	-27	-16	-7	1	12
11	870	879	-10	89	-29	-17	-10	-2	9
12	837	840	-3	93	-22	-11	-3	4	15
13	836	818	18	95	-1	10	18	26	37
14	831	811	20	97	1	12	20	27	39
15	819	801	19	95	0	11	19	26	38
16	803	783	20	92	1	12	20	28	39
17	777	756	21	91	2	13	21	28	39
18	759	740	19	89	0	11	19	26	38
19	759	736	23	86	4	15	23	30	42
20	767	752	15	82	-4	7	15	23	34
21	755	754	2	78	-17	-6	2	9	20
22	730	728	2	76	-16	-6	2	9	20
23	716	719	-4	75	-22	-11	-4	4	15
24	704	709	-5	74	-24	-13	-5	3	14
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	18,612	18,470	142	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: AUG monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2018
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	707,924	702,455	5,469	71	-14,198	-2,579	5,469	13,516	25,135
2	710,802	702,742	8,061	69	-11,924	-117	8,061	16,239	28,046
3	715,077	708,527	6,550	68	-13,639	-1,711	6,550	14,811	26,738
4	743,866	741,956	1,910	66	-19,090	-6,683	1,910	10,503	22,909
5	791,211	793,797	-2,586	65	-24,300	-11,471	-2,586	6,299	19,128
6	836,824	837,372	-549	65	-22,325	-9,459	-549	8,362	21,227
7	884,616	885,191	-574	65	-22,436	-9,520	-574	8,371	21,287
8	924,099	925,587	-1,488	67	-23,260	-10,397	-1,488	7,421	20,284
9	957,467	959,986	-2,519	71	-24,326	-11,442	-2,519	6,405	19,289
10	978,291	986,570	-8,279	76	-29,966	-17,153	-8,279	595	13,408
11	958,683	969,299	-10,616	80	-31,476	-19,152	-10,616	-2,080	10,244
12	933,440	936,950	-3,510	84	-24,078	-11,926	-3,510	4,906	17,058
13	932,069	911,997	20,071	86	-1,264	11,341	20,071	28,801	41,406
14	927,624	905,633	21,991	90	768	13,307	21,991	30,675	43,214
15	911,702	890,870	20,832	92	-110	12,262	20,832	29,401	41,773
16	891,929	869,665	22,264	92	1,508	13,771	22,264	30,757	43,020
17	862,705	839,921	22,784	91	2,218	14,369	22,784	31,199	43,350
18	840,930	820,040	20,890	88	239	12,440	20,890	29,340	41,541
19	834,502	809,683	24,819	84	3,873	16,248	24,819	33,390	45,765
20	844,726	828,163	16,563	79	-4,646	7,885	16,563	25,242	37,773
21	830,624	828,879	1,744	76	-18,824	-6,672	1,744	10,161	22,312
22	801,601	799,542	2,059	75	-18,106	-6,192	2,059	10,311	22,225
23	786,413	790,427	-4,014	73	-24,410	-12,360	-4,014	4,332	16,382
24	770,439	775,852	-5,413	72	-25,937	-13,811	-5,413	2,985	15,111
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,377,563	20,221,105	156,458	118.4	n/a	n/a	n/a	n/a	n/a

Utility:	Southern California Edison									
Type of Results:	Average per Enrolled Customer									
DR Program:	Demand Bidding Program (DBP)									
Day Type:	AUG monthly peak									
Size Group:	All									
Industry Group:	All									
Local Capacity Area:	All									
Forecast Year:	2018									
Weather Year:	1-in-2 (2002)									
Impact Level:	Program-level impacts									
		Number of Accounts Called/Notified of Event:		1,098						
		Number of Accounts Enrolled:		1,098						
Hour Ending		Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
1		645	640	5	71	-13	-2	5	12	23
2		647	640	7	69	-11	0	7	15	26
3		651	645	6	68	-12	-2	6	13	24
4		677	676	2	66	-17	-6	2	10	21
5		721	723	-2	65	-22	-10	-2	6	17
6		762	763	0	65	-20	-9	0	8	19
7		806	806	-1	65	-20	-9	-1	8	19
8		842	843	-1	67	-21	-9	-1	7	18
9		872	874	-2	71	-22	-10	-2	6	18
10		891	899	-8	76	-27	-16	-8	1	12
11		873	883	-10	80	-29	-17	-10	-2	9
12		850	853	-3	84	-22	-11	-3	4	16
13		849	831	18	86	-1	10	18	26	38
14		845	825	20	90	1	12	20	28	39
15		830	811	19	92	0	11	19	27	38
16		812	792	20	92	1	13	20	28	39
17		786	765	21	91	2	13	21	28	39
18		766	747	19	88	0	11	19	27	38
19		760	737	23	84	4	15	23	30	42
20		769	754	15	79	-4	7	15	23	34
21		756	755	2	76	-17	-6	2	9	20
22		730	728	2	75	-16	-6	2	9	20
23		716	720	-4	73	-22	-11	-4	4	15
24		702	707	-5	72	-24	-13	-5	3	14
		Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily		18,559	18,416	142	118.4	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2019
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	758,476	752,617	5,859	74	-15,212	-2,763	5,859	14,481	26,930
2	747,649	739,170	8,479	72	-12,542	-123	8,479	17,080	29,500
3	747,094	740,251	6,843	71	-14,249	-1,788	6,843	15,474	27,936
4	766,467	764,500	1,968	70	-19,670	-6,886	1,968	10,822	23,605
5	807,137	809,775	-2,638	69	-24,789	-11,702	-2,638	6,426	19,513
6	847,902	848,458	-556	68	-22,620	-9,585	-556	8,472	21,508
7	885,168	885,743	-575	69	-22,450	-9,526	-575	8,376	21,300
8	917,882	919,360	-1,478	72	-23,104	-10,327	-1,478	7,371	20,148
9	948,128	950,622	-2,494	77	-24,089	-11,330	-2,494	6,342	19,100
10	972,800	981,033	-8,233	83	-29,798	-17,057	-8,233	592	13,333
11	954,715	965,287	-10,572	89	-31,346	-19,072	-10,572	-2,071	10,202
12	918,603	922,058	-3,454	93	-23,695	-11,737	-3,454	4,828	16,787
13	918,311	898,536	19,775	95	-1,245	11,174	19,775	28,376	40,795
14	912,473	890,841	21,632	97	755	13,089	21,632	30,174	42,508
15	899,609	879,054	20,555	95	-109	12,100	20,555	29,011	41,219
16	881,239	859,242	21,997	92	1,490	13,606	21,997	30,388	42,504
17	852,910	830,385	22,525	91	2,193	14,206	22,525	30,845	42,857
18	833,594	812,886	20,708	89	237	12,331	20,708	29,084	41,179
19	832,954	808,181	24,773	86	3,865	16,218	24,773	33,328	45,680
20	842,489	825,970	16,520	82	-4,633	7,864	16,520	25,175	37,673
21	829,408	827,666	1,742	78	-18,796	-6,662	1,742	10,146	22,280
22	801,530	799,471	2,059	76	-18,105	-6,192	2,059	10,310	22,223
23	785,708	789,719	-4,011	75	-24,388	-12,349	-4,011	4,328	16,367
24	773,391	778,825	-5,434	74	-26,037	-13,864	-5,434	2,997	15,169
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,435,640	20,279,650	155,990	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Average per Enrolled Customer
 DR Program: Demand Bidding Program (DBP)
 Day Type: JUL monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2019
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

Southern California Edison
Average per Enrolled Customer
Demand Bidding Program (DBP)
JUL monthly peak
All
All
All
2019
1-in-2 (2002)
Program-level impacts

Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	691	685	5	74	-14	-3	5	13	25
2	681	673	8	72	-11	0	8	16	27
3	680	674	6	71	-13	-2	6	14	25
4	698	696	2	70	-18	-6	2	10	21
5	735	738	-2	69	-23	-11	-2	6	18
6	772	773	-1	68	-21	-9	-1	8	20
7	806	807	-1	69	-20	-9	-1	8	19
8	836	837	-1	72	-21	-9	-1	7	18
9	864	866	-2	77	-22	-10	-2	6	17
10	886	893	-7	83	-27	-16	-7	1	12
11	870	879	-10	89	-29	-17	-10	-2	9
12	837	840	-3	93	-22	-11	-3	4	15
13	836	818	18	95	-1	10	18	26	37
14	831	811	20	97	1	12	20	27	39
15	819	801	19	95	0	11	19	26	38
16	803	783	20	92	1	12	20	28	39
17	777	756	21	91	2	13	21	28	39
18	759	740	19	89	0	11	19	26	38
19	759	736	23	86	4	15	23	30	42
20	767	752	15	82	-4	7	15	23	34
21	755	754	2	78	-17	-6	2	9	20
22	730	728	2	76	-16	-6	2	9	20
23	716	719	-4	75	-22	-11	-4	4	15
24	704	709	-5	74	-24	-13	-5	3	14
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	18,612	18,470	142	173.3	n/a	n/a	n/a	n/a	n/a

Utility: Southern California Edison
 Type of Results: Aggregate Impact
 DR Program: Demand Bidding Program (DBP)
 Day Type: AUG monthly peak
 Size Group: All
 Industry Group: All
 Local Capacity Area: All
 Forecast Year: 2019
 Weather Year: 1-in-2 (2002)
 Impact Level: Program-level impacts

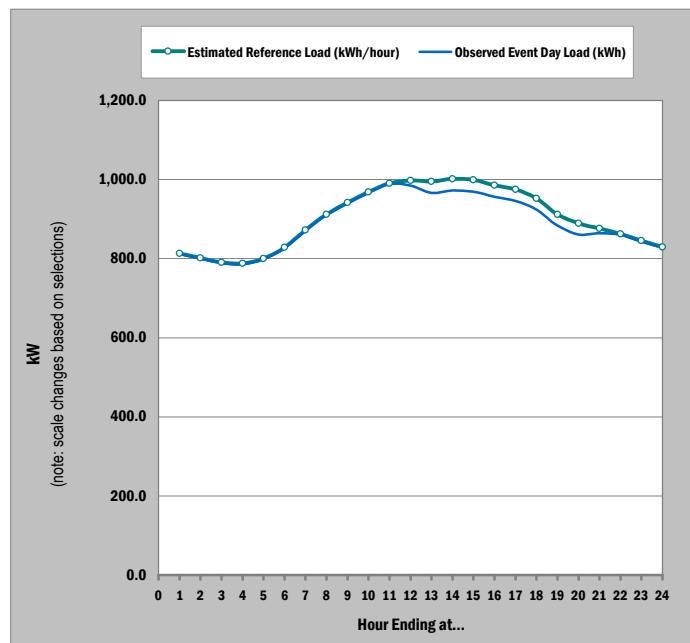
Number of Accounts Called/Notified of Event: 1,098
 Number of Accounts Enrolled: 1,098

Hour Ending	Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr) - Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	707,924	702,455	5,469	71	-14,198	-2,579	5,469	13,516	25,135
2	710,802	702,742	8,061	69	-11,924	-117	8,061	16,239	28,046
3	715,077	708,527	6,550	68	-13,639	-1,711	6,550	14,811	26,738
4	743,866	741,956	1,910	66	-19,090	-6,683	1,910	10,503	22,909
5	791,211	793,797	-2,586	65	-24,300	-11,471	-2,586	6,299	19,128
6	836,824	837,372	-549	65	-22,325	-9,459	-549	8,362	21,227
7	884,616	885,191	-574	65	-22,436	-9,520	-574	8,371	21,287
8	924,099	925,587	-1,488	67	-23,260	-10,397	-1,488	7,421	20,284
9	957,467	959,986	-2,519	71	-24,326	-11,442	-2,519	6,405	19,289
10	978,291	986,570	-8,279	76	-29,966	-17,153	-8,279	595	13,408
11	958,683	969,299	-10,616	80	-31,476	-19,152	-10,616	-2,080	10,244
12	933,440	936,950	-3,510	84	-24,078	-11,926	-3,510	4,906	17,058
13	932,069	911,997	20,071	86	-1,264	11,341	20,071	28,801	41,406
14	927,624	905,633	21,991	90	768	13,307	21,991	30,675	43,214
15	911,702	890,870	20,832	92	-110	12,262	20,832	29,401	41,773
16	891,929	869,665	22,264	92	1,508	13,771	22,264	30,757	43,020
17	862,705	839,921	22,784	91	2,218	14,369	22,784	31,199	43,350
18	840,930	820,040	20,890	88	239	12,440	20,890	29,340	41,541
19	834,502	809,683	24,819	84	3,873	16,248	24,819	33,390	45,765
20	844,726	828,163	16,563	79	-4,646	7,885	16,563	25,242	37,773
21	830,624	828,879	1,744	76	-18,824	-6,672	1,744	10,161	22,312
22	801,601	799,542	2,059	75	-18,106	-6,192	2,059	10,311	22,225
23	786,413	790,427	-4,014	73	-24,410	-12,360	-4,014	4,332	16,382
24	770,439	775,852	-5,413	72	-25,937	-13,811	-5,413	2,985	15,111
	Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily	20,377,563	20,221,105	156,458	118.4	n/a	n/a	n/a	n/a	n/a

Utility:	Southern California Edison									
Type of Results:	Average per Enrolled Customer									
DR Program:	Demand Bidding Program (DBP)									
Day Type:	AUG monthly peak									
Size Group:	All									
Industry Group:	All									
Local Capacity Area:	All									
Forecast Year:	2019									
Weather Year:	1-in-2 (2002)									
Impact Level:	Program-level impacts									
Number of Accounts Called/Notified of Event:					1,098					
Number of Accounts Enrolled:					1,098					
Hour Ending		Estimated Reference Load (kWh/hour)	Estimated Event Day Load (kWh)	Estimated Impact (kWh/hour)	Weighted Average Temperature (oF)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
1		645	640	5	71	-13	-2	5	12	23
2		647	640	7	69	-11	0	7	15	26
3		651	645	6	68	-12	-2	6	13	24
4		677	676	2	66	-17	-6	2	10	21
5		721	723	-2	65	-22	-10	-2	6	17
6		762	763	0	65	-20	-9	0	8	19
7		806	806	-1	65	-20	-9	-1	8	19
8		842	843	-1	67	-21	-9	-1	7	18
9		872	874	-2	71	-22	-10	-2	6	18
10		891	899	-8	76	-27	-16	-8	1	12
11		873	883	-10	80	-29	-17	-10	-2	9
12		850	853	-3	84	-22	-11	-3	4	16
13		849	831	18	86	-1	10	18	26	38
14		845	825	20	90	1	12	20	28	39
15		830	811	19	92	0	11	19	27	38
16		812	792	20	92	1	13	20	28	39
17		786	765	21	91	2	13	21	28	39
18		766	747	19	88	0	11	19	27	38
19		760	737	23	84	4	15	23	30	42
20		769	754	15	79	-4	7	15	23	34
21		756	755	2	76	-17	-6	2	9	20
22		730	728	2	75	-16	-6	2	9	20
23		716	720	-4	73	-22	-11	-4	4	15
24		702	707	-5	72	-24	-13	-5	3	14
		Energy Use (kWh)	Event Day Energy Use	Energy Use (kWh)	Degree Hours	Uncertainty Adjusted Impact (kWh/hour) - Percentiles				
Daily		18,559	18,416	142	118.4	n/a	n/a	n/a	n/a	n/a

Appendix B: PG&E DBP Ex Ante Load Impact Tables

Program: DBP
Month: August-09
Weather Year: 1-in-2
Day Type: August Peak
LCR Area: All
Industry: All
Size: All
Forecast Type: Individual



Number of Accounts Enrolled: 1,152 (at End of Month in Which Event Occurred)

Hour Ending	Estimated Reference Load (kWh/hour)	Observed Event Day Load (kWh)	Estimated Load Impact (kWh/hour)	Weighted Average Temperature (°F)	Uncertainty Adjusted Impact (kWh/hr)- Percentiles				
					10th%ile	30th%ile	50th%ile	70th%ile	90th%ile
1	813	812	2	66	-7	-2	2	6	11
2	802	800	2	65	-7	-2	2	6	11
3	790	789	2	64	-7	-2	2	5	11
4	788	786	2	63	-7	-2	2	5	11
5	800	798	2	62	-7	-2	2	5	11
6	829	827	2	62	-7	-2	2	6	11
7	873	871	2	62	-8	-2	2	6	11
8	912	910	2	63	-8	-2	2	6	12
9	942	940	2	66	-8	-2	2	6	12
10	968	966	2	70	-8	-2	2	6	12
11	991	989	2	74	-8	-2	2	6	12
12	998	985	13	78	3	9	13	17	23
13	995	966	29	82	19	25	29	33	39
14	1,002	973	29	86	19	25	29	33	39
15	999	970	29	88	19	25	29	33	39
16	985	957	29	89	19	25	29	33	39
17	975	946	29	89	19	25	29	33	38
18	952	924	28	88	19	24	28	32	38
19	912	884	29	85	19	25	29	33	38
20	889	861	29	81	19	25	29	33	39
21	877	864	12	76	3	8	12	16	22
22	862	860	2	73	-8	-2	2	6	11
23	845	844	2	71	-8	-2	2	6	11
24	830	828	2	69	-7	-2	2	6	11
					Uncertainty Adjusted Impact (kWh/hour)- Percentiles				
Daily	21,630	21,347	282	92	53	189	282	376	512

