

San Francisco Bay

510 444 5050 tel 510 444 5222 fax

1999 Harrison Street Suite 1420 Oakland, CA 94612



Statewide Process Evaluation for Critical Peak Pricing (CPP) Program Final Report

CALMAC ID: SDG0283.01

Megan Campbell Director

September 2014

Table of Contents

1.	Execu	utive Summary1					
	1.1	Recommendations	9				
2.	Introd	duction	12				
	2.1	Study Limitations	13				
	2.2	Report Structure	13				
3.	Meth	ods	14				
	3.1	Research Objectives	14				
	3.2	Research Methods	14				
4.	Detai	iled Findings	24				
	4.1	CPP Rate Design and Implementation Process	24				
	4.2	Participation Characteristics	31				
	4.3	Customer Communication Analysis	33				
	4.4	Key Account Executive/Representative Findings					
	4.5	CPP Participant Survey Findings	45				
	4.6	Opt-Out CPP Participant Findings	72				
Арр	pendix	A. Data Collection Instruments	83				
Appendix B. Opt-Out Participant Interview Responses							
Арр	pendix	C. Participant Survey Topline Results	120				

TABLES OF TABLES

Table 1: Significant Differences between Large and Small/Medium Customers	8
Table 2: Drivers of Rate Satisfaction	8
Table 3. 2013 CPP Load Impact per Event	12
Table 4. Report Sections and Content Descriptions	13
Table 5. CPP Process Evaluation Tasks	14
Table 6. Rate Staff Interview Summary	14
Table 7. Account Executive/Representative Interview Summary	15
Table 8. CPP Participant Survey Completes	16
Table 9. Online Survey: Population to Sample Comparison	19
Table 10. Survey Weights by Size (PG&E Only)	19
Table 11. Opt-Out Participant Interview Disposition Summary	20
Table 12. SDG&E CPP Opt-Out Customer Database	20
Table 13. SDG&E CPP Opt-Out Disposition	20
Table 14. SCE CPP Opt-Out Customer Database	21
Table 15. SCE CPP Opt-Out Disposition	21
Table 16. PG&E CPP Opt-Out Customer Data	23
Table 17. PG&E CPP Opt-Out Disposition	23
Table 18. 2013 CPP Snapshot by IOU	24
Table 19. 2013 CPP Event Days across the IOUs	26
Table 20. Customer Size Definitions by IOU	32
Table 21. Participant Industry Type	32
Table 22. Characteristics of Opt-Out Participants (PG&E Only)	33
Table 23. Information Contained in CPP Websites and Outreach Materials	35
Table 24. Rate Benefits Marketed to Customers	36
Table 25. CPP Customers Represented by Utility	36
Table 26. Did the Rate Meet Customers' Expectations?	45
Table 27. Information Customers Would Have Liked to Know Earlier about CPP	46
Table 28. Reasons Customers Did Not Select a CRL/CRC	49
Table 29. Additional Support from Account Representatives Requested by Customers	54
Table 30. Customer Suggestions for Encouraging Energy Reduction during Events	62
Table 31. Load Reduction Strategies Used by Customers during CPP Events	64

Table 32. Customer Ratings of Potential Barriers	65
Table 33. Characteristics of Customers Who Did Not Try to Reduce Energy during Events	68
Table 34. Key Benefits of the Rate for Customers	69
Table 35. Opt-Out Interview Respondents by Time-on-Rate	72
Table 36. Opt-Out Interview Respondents by Size	73
Table 37. Interview Participants by Sector	73
Table 38. Hours of Operation	74
Table 39. Facility Ownership Type by IOU	74
Table 40. Awareness of Co-Participation Eligibility	75
Table 41. Participation in Other IOU Programs	76
Table 42. Reasons for Opting-Out (Multiple Response) (n=22)	76

TABLE OF FIGURES

Figure 1: Average Rating of Structural Barriers (Schools only)	7
Figure 2. Example Unit of Analysis	17
Figure 3. PG&E Rate Process Map	27
Figure 4. SCE Rate Process Map	28
Figure 5. SDG&E Rate Process Map	30
Figure 6. Number of Unique Participant Customer Accounts by IOU	31
Figure 7. Length of Time on CPP Rate by IOU – Participant (as of 2013)	31
Figure 8. Participant Customer Size by IOU	32
Figure 9. Ways Customers First Learned about CPP	45
Figure 10. Default vs. Opt-In Enrollment, by IOU (Self-Reported)	47
Figure 11. Customer Satisfaction with the Enrollment Process	47
Figure 12. Influence of First Year Bill Protection on Customers' Decisions to Try the Rate	48
Figure 13. Awareness of the Dual-Enrollment Option	48
Figure 14. Whether Customers Selected a Capacity Reservation Level/Charge	49
Figure 15. Whether Customers Saved Money by Selecting a CRL/CRC	50
Figure 16. Key Customer Resources for Support on CPP	51
Figure 17. Customers That Recall Discussing CPP with Their Account Representative	52
Figure 18. Usefulness of Account Representative Support in Understanding CPP	55
Figure 19. Customer Satisfaction with Account Representatives Support	56
Figure 20. Usefulness of Tools and Information on Rate (PG&E)	57
Figure 21. Usefulness of Tools and Information on Rate (SCE)	57
Figure 22. Usefulness of Tools and Information on Rate (SDG&E)	58
Figure 23. Customer Ratings of Potential Support Tools (PG&E)	59
Figure 24. Customer Ratings of Potential Support Tools (SCE)	59
Figure 25. Customer Ratings of Potential Support Tools (SDG&E)	60
Figure 26. Ways Customers Received Event Notifications in 2013	63
Figure 27. Customer Satisfaction with Event Notification Processes	64
Figure 28. Accuracy of Event Notification	66
Figure 29. Proportion of Customers with Event Day Action Plans	66
Figure 30. Customer Knowledge of Energy Use and Required Reduction during Events	67
Figure 31. Number of Customers That Tried to Reduce Energy Use on Event Days	68

Table of Figures

Figure 32. Do Customers Save Money by Participating in Events?	70
Figure 33. Satisfaction with Money Saved by Reducing Energy Use during Events	70
Figure 34. Overall Satisfaction with CPP	71

1. Executive Summary

Critical Peak Pricing (CPP) is a rate option offered to commercial and industrial (C&I) customers of San Diego Gas and Electric (SDG&E), Southern California Edison (SCE), and Pacific Gas and Electric (PG&E). Customers are encouraged to curtail their energy usage during event days called by the IOUs. During these event days, customers are subject to higher peak demand charges compared to alternate Time of Use (TOU) rates. In exchange, customers receive a lower energy (kWh) billing rate (relative to alternate TOU rates) throughout the year or billing credits, depending on the utility's rate design, during peak use months. The utilities defaulted large customers onto the rate as early as 2008. Customers can opt-out of CPP but they then must enroll in an applicable TOU rate. Some customers may also elect to opt-in to the rate if they were not automatically defaulted. SDG&E was the first to automatically default customers onto the CPP rate in 2008, followed by SCE in 2009 and PG&E beginning in 2010.

The Investor Owner Utilities (IOUs) hired Opinion Dynamics to conduct a process evaluation of the 2013 CPP rate offering with a focus on assessing the implementation and design elements and identifying ways to improve it. In 2014, the IOUs plan to default all of their commercial customers onto the CPP rate and are looking to this evaluation to help them make rate changes that will facilitate this forthcoming enrollment process. Below we present the main findings, conclusions and recommendations from this evaluation of the 2013 CPP rate.

Participant Characterization

- Number and Size: In 2013, a total of 11,264 commercial accounts were enrolled in the CPP rate across the three IOU jurisdictions (7,767 PG&E customers, 2,337 SCE customers, and 1,158 SDG&E customers). Most customers had been on the rate for at least three years. However, a quarter of PG&E's participants recently joined the rate in 2013. The majority of SDG&E and SCE participating accounts are large accounts whereas the majority of PG&E's are small/medium accounts¹.
- Industry: Based on tracking data in 2013, some industries are more likely to participate in the rate than others (see Table 18).
 - PG&E: Predominate Sector is Offices/Hotels/Finance/Services; Smallest Sector is Wholesale/Transport and Retail Stores
 - SCE: Predominate Sector is Manufacturing; Smallest Sector is Agriculture/Mining/Construction
 - SDG&E: Predominate Sector is Offices/Hotels/Finance/Services; Smallest Sector is Agriculture/Mining/Construction
- Other Unique Characteristics: From the account representatives' perspective there is variation in how customers benefit from the rate based on customer type and climate zone, but also some customers are able to save money on the rate without actually reducing any load on peak days. These customers, known as "structural winners", tend to have consistent load at all times and benefit from a reduced

¹ For SDG&E and SCE: large accounts use 200kW or more annually; medium accounts use less than 200kW but more than 20kW annually; and small accounts use less than 20kW annually. PG&E defines small and medium account differently; medium accounts use 75-199 kW annually and small accounts use less than 75 kW. For all IOUs, all large accounts were defaulted onto the rate. Medium and small accounts were allowed to opt-in to the rate.

rate throughout the year, while never reducing load on event days. It was not possible to determine the magnitude of structural winners in the rate based on the data available to the evaluation team.

Opt-Out Customers

Customers are allowed to opt-out of the rate and choose another applicable TOU rate plan. The databases from the IOUs for opt-outs differed greatly. Only PG&E was able to provide a comprehensive database of opt-out customers since the rate began which allowed for some analysis on who the opt-outs are.

PG&E Opt-Out Characteristics: Approximately 1 in 3 accounts (3,458 accounts out of 11,225²) optedout of the PG&E rate since it began. Far more large customers opted-out of the rate compared to small/medium customers that de-enrolled, which is likely because more large customers were defaulted and more small/medium customers opted into the rate voluntarily. Customers also tended to opt-out after only being on the rate for a short time. Many customers in the manufacturing, schools, and retail industries opted out however, these were also the predominate industries that defaulted. We were not able to find any major industry trends in the opt-out analysis. This suggests that while industry is important in determining whether a customer will be successful on CPP, other characteristics specific to the nature of a customer's business (i.e. size, operating hours, and health and safety regulations) appears to be more important.

Several factors impact a customers' propensity to stay on the rate. Some customers think they are unable to shed load during events while others are not motivated to try given alternative fuel sources. Some customers are also subject to their internal resource constraints. Account representatives say that customers who have an energy manager on staff are more likely to stay on the rate because they can plan and manage event load shed.

Interviews with opt-out customers indicate that the account representatives are doing a good job of communicating with customers, helping them understand the rate and determining whether the rate is the right fit for the customer. The majority of opt-out customers we interviewed said their account representative performed a rate analysis for them and recommended a different rate plan because the CPP event requirements were incompatible with the company's operations. Amongst the 22 opt-out customers we interviewed across all IOUs, the primary reason for opting out is because the customer did not think they could shed load during events.

- Reasons for not being able to shed load, included:
 - Production, safety, and comfort. Shedding load would compromise production (6 of 22) or the safety or comfort (3 of 22) of those occupying the facilities.
 - Use of alternative energy sources. Several respondents (5 of 22) said saving energy and money during peak hours is not a priority because non-IOU sources provide some electricity. Examples include photovoltaic, natural gas, dedicated generators, or a third party energy vendor like Constellation Energy.
 - Lack of central controls. Some (3 of 22) customers said the lack of central controls makes participation too labor intensive.

² This total includes 7,767 accounts currently enrolled in PG&E's rate and 3,458 that have opted-out.

Product storage requires constant load. A few businesses (2 of 22) focus on storage of goods that require constant temperature management. These businesses find it difficult to shed load. While management strategies (such as pre-cooling, or limiting the number of events in a short period) may make it more possible for these businesses to participate, any savings they may achieve are not seen as worth the risk to their product.

Design and Implementation

While the CPP rate is a statewide initiative, the IOUs vary in their design, implementation and customer communication. The IOUs also vary in terms of the number of event days called in 2013, the timing of event notification, the eligible event hours and the eligible event days. SDG&E called the fewest events in 2013 with 4 events, followed by PG&E calling 9 events and SCE calling the most with 12 events. Section 4.1 provides a detailed description of each IOU's CPP rate design and implementation processes.

- Overall Satisfaction with the Rate: Participants gave moderate to low satisfaction scores (PG&E 7.0, SCE 6.2, and SDG&E 4.9) with the CPP rate overall. Interestingly, the low overall satisfaction scores are at odds with the higher satisfaction scores that customers gave for each of the specific aspects of the rate (discussed in bullets below). When we asked why customers gave low overall ratings, most customers did not give a specific reason for their general dissatisfaction. This indicates that the overall rate satisfaction scores may be inherently low because customers are dissatisfied with the amount they pay for electricity in general as opposed to a specific experience with, or aspect of the CPP rate.
- Satisfaction among Opt-In vs. Defaulted: We found statistically different average satisfaction scores for customers depending on how they entered the rate. For PG&E, those who were defaulted onto the rate were more satisfied with the rate overall compared to opt-in customers (7.7 vs. 6.3 average overall satisfaction score). Conversely, for SCE and SDG&E, opt-in customers were more satisfied than default customers (for SCE, 7.1 vs. 4.5 average score; for SDG&E, 5.6 vs. 2.0 average score).

Enrolling Customers and Explaining the Rate Design

We asked both participants and account representatives about the enrollment process. For simplicity, the enrollment process terminology used here refers to both the communication and process for defaulted customers and the enrollment process for opt-in customers. Customers generally understand the rate structure from the enrollment process. Account representatives and bill protection are also very important to the enrollment process.

- Customer Understanding of the Rate: Almost all participants (ranging from 89%-97% depending on the IOU) indicated that the rate met their expectations, indicating that they were well-informed of the rate elements and what to expect. Among the handful of participants who had an unexpected experience, they mainly expressed that the rate was higher than expected on event days or that they did not save as much on their utility bill as they expected. Therefore, the vast majority of participants were well-informed of the rate and did not think further information at the time of enrollment was needed.
 - However, several participants offered some suggestions that would have advanced their initial understanding of the rate. Specifically, some customers suggested including more information on the options available on the rate, the potential impact on their utility bill, and more eventrelated information (i.e., when and why events may occur).

- Enrollment Process: On a scale from 0-10, participants rated their satisfaction with the enrollment process. Mean scores ranged from 6.8 to 7.9, with PG&E customers giving the highest satisfaction scores. These scores indicate that participants are moderately satisfied and there is room for improvement. One key differentiator in PG&E's enrollment process is that they often provide customers with a rate comparison with alternative TOU rates 90 days prior to default.
 - The current enrollment process across all IOUs relies heavily on account representative engagement with customers to help them understand the rate and determine if it is the right fit for their company. The account representatives are highly engaged with customers. Participant survey results show that participants from all three IOUs most commonly first heard about the rate through their account representative. The second most common source was the notification letter customers receive prior to default. For PG&E, we found no significant difference between large and small/medium customers in terms of how customers first learned about the rate. Participants typically recalled having a discussion with their account representative prior to enrolling/defaulting to determine how the rate change would affect their business.
 - Many account representatives conduct personalized outreach to help make customers aware of how the rate works and how customers can benefit from being on the rate. The account representatives interviewed for this study reported that most interaction is by phone but some PG&E account representatives mentioned that they visited customers in-person to discuss the rate.
 - Account representatives use a variety of tools to assist customers with understanding the CPP rate. Representatives do have some bill analysis tools at their disposal to assist with customer education. However, representatives think the bill analysis tools are only somewhat helpful and are not always intuitive. Many account representatives reported producing self-made customized analysis for customers and bypassing the utility's rate analysis tools.
- Enrollment Tools: Aside from the account representative interactions, customers from all IOUs on average gave only moderate usefulness scores for the various CPP support tools and information sources available to them. Support from account representatives seems to be the most useful tool of all. A notable exception to this finding is that SDG&E participants rated the usefulness of its kWickView tool even higher than the account representative support.
- Bill Protection: All customers enrolled on CPP are eligible for bill protection in their first year. Among those who defaulted into the rate, our survey results indicate that this bill protection option is effective in encouraging PG&E customers to try out the rate, but less effective for SCE and SDG&E customers. Across the IOUs, between 33% and 74% of defaulted participants said the bill protection was an important factor in their decision to stay on the rate.

Feedback on Design Elements after Enrollment

Account representatives appear to be critically important to the enrollment and educational process. They also continue this education after enrollment by answering questions for customers. Despite this, for SCE and SDG&E, the account representatives are getting only moderate satisfaction ratings indicating that there is room for improvement. Additional support for account representatives would potentially yield a large increase in customer knowledge of how to participate. There also appears to be a need for more information specifically about how the rate affects individual participants, and what else they could do.

Account Representative Satisfaction: After enrollment, account representatives also play a pivotal role in supporting participants. The majority of participants of each IOU (ranging from 64%-82%) reported

opiniondynamics.com

that they typically reach out to their account representatives when they have questions about their rate. While it was the second most common information source, relatively few customers reported that they typically use the utilities' websites to learn more about CPP.

- PG&E participants on average reported that they were highly satisfied with support from their account representatives (mean score of 8.8) and that it was very useful to their understanding of CPP (mean score of 8.6). However, SCE and SDG&E participants gave only moderate usefulness (6.9) and satisfaction (7.0) scores to their representatives.
- Continuing Educational Tools After Enrollment: Participants often requested more information on how the rate impacts their specific utility bill and how they performed on the rate each year. Specifically, they asked for information on how their specific bill would differ across other rate options and shadow billing that shows them how they financially performed on the rate versus what would have happened on another rate.
 - Both account representatives and participants indicate that they may need better tools, such as shadow bills. Account representatives across the IOUs also recommended a few additional tools to help them educate customers and determine if the rate is a good fit, including shadow billing, case studies and online tutorials. We also explored participants' interest in these potential support tools. Participants expressed that all tools would be helpful but indicated that shadow billing would be the most helpful of the three.

Event Participation, Processes and Feedback

While the CPP impact evaluation³ is the best source of information on the load impact of CPP events, the results of our process evaluation indicate that the notification process appears to be effective, and customers are taking action on event days.

- Notification: Participants are generally satisfied with event notification processes; and of the participants interviewed, almost all (86%-93%) say the right person is notified of events.
 - Notification Timing: For all three IOUs, customers are notified of events one day prior to the event. Customers were slightly less satisfied with the timing of notifications compared to the channel (satisfaction mean scores in the 8's for notification channel but in the 7's for notification timing). Notably, some of the opt-out customers also mentioned dissatisfaction with timing. We interviewed nine opt-out customers who experienced at least one event prior to opting out. Three of these nine were not happy with the amount of time they have to prepare for events, feeling as though they were called "at the last minute".
 - Notification Channel: E-mail is by far the most common channel for event notification. The majority of participants (ranging from 74% to 80%) said that e-mail is the best way to share information with them about CPP. Recall as mentioned above, that this method or channel also appears to be getting to the right person.
- Participation/Actions taken: Most participants (60%-81%) have a formal event day action plan in place. Moreover, the vast majority (ranging from 84% to 96%) of participants that recall events tried to reduce

³ Nexant. April 2014. "2013 Load Impact Evaluation of California's Statewide Non-residential Critical Peak Pricing Program". CALMAC ID SDG0274.

load. These are very high proportions and show that the rate is a good fit for existing participants and is encouraging them to take action on event days.

- The most common strategies customers use to reduce load are turning off lighting, shutting down unneeded equipment, or reducing cooling usage. Few participants reduce or reschedule production during an event.
- The majority of PG&E (99%) and SCE (90%) customers who tried to reduce load during events report that they saved money from the CPP rate as a result of actions taken. Fewer SDG&E customers, but still more than half (58%), report seeing this benefit. Among those who recall saving money by reducing energy use during events, PG&E and SCE customers report being highly satisfied on average (mean scores of 8.0 and 7.4 respectively) with the amount they saved. SDG&E customer report being only moderately satisfied (mean score of 5.9).
- Most participants (62%-76%) do not think they need any additional tools or resources for reducing energy use during CPP events. Among those who did, participants requested more help to educate their employees on why events are called and what actions to take to reduce load during events. In addition, some participants want more advanced notice of events or information about the Auto-DR program.

Barriers to Event Participation

As mentioned earlier, the majority of participants are taking action to reduce energy use on event days. Among the few participants who did not take action, most of them have been on the rate for several years and do not have the ability to adjust production or service schedules. Interestingly, none of these customers indicated that they selected a Capacity Reservation Level/Charge to protect some of their energy use from penalties during events.

We explored the participants' barriers to event participation in terms of structural, knowledge and convenience barriers.

- Structural barriers: The largest obstacles faced by current participants from all three IOUs are structural in nature. Structural barriers relate to the nature of a company's product or service. For instance, these could include the flexibility of hours of operations, health and safety regulation that prevent shutting off equipment, not having enough load to shed, or potentially adverse impacts on production and revenue streams. While in some cases changes such as adjusting event hours or the number of consecutive event days called can help customers overcome structural barriers, often IOUs cannot address structural barriers through changes to the rate's design. Of all the barriers explored in the survey, participants' abilities to adjust their product or service schedules was the largest barrier.
 - Structural barriers were particularly important for schools. For all three IOUs, and especially for PG&E and SCE, schools reported facing higher structural barriers compared to other industries. These barriers included having highly variable energy usage in different areas of a large school district's facilities (making it difficult to determine the best place to shed load during an event), inflexible operating schedules, not having enough time to notify all facilities of the event, and concerns about student and teacher comfort.

"How much of an obstacle to reducing energy	PG&E	SCE	SDG&E		
usage on event days is your facility's ability	0 to 10 scale, with 0 meaning "not at all an				
to adjust production or service schedules?"	obstacle" and 1	.0 meaning "a ve	ry big obstacle"		
Average Score (Schools)	8.6 (n=91) ↑	8.5 (n=11) 🛧	8.1 (n=13)		
Average Score (Other Industries)	6.1 (n=131)	7.0 (n=66)	7.1 (n=94)		

Note: Average scores and base do not include "don't know" responses.

↑: Difference between schools and other industries is statistically significant at the 90% confidence level

- Customer size as a barrier: Among PG&E respondents, we found that small/medium customers reported statistically greater barriers compared to large customers in two areas: (1) understanding the process for participating in events (3.3 vs. 2.1 average barrier score) and (2) the manual effort required to participate in events (5.1 vs. 4.2 average barrier score). We note that due to the smaller number of completes for SCE and SDG&E, we were unable to find statistical differences between large and small/medium customers.
- Awareness as a barrier: Account representatives said that they wrestle with customers' lack of knowledge for how to shed load during events. However, survey results indicate that participants from all three IOUs generally do not face major barriers related to knowledge of the rate or awareness of events. Customers from all three IOUs indicated that understanding the process for participating in events is not a large barrier to reducing load during events (average barrier scores ranging from 2.2 to 3.3 out of 10).
- Knowledge as a barrier: Many customers have a good understanding of what load reduction strategies they would use for events given that most participants (60%-81%) have a formal event day action plan in place. However, there is room for improvement, as many customers are not aware (27%-59%) of how much electricity they must cut during events to benefit financially from the rate.
- Barriers caused by consecutive event days: For all three IOUs', participants face challenges with being able to participate in events called on consecutive days (average barrier scores ranging from 5.3 to 6.4). In 2013, each IOU called multiple events within a few days of each other. PG&E and SCE called events on consecutive days at least once.
- Comfort as a barrier: Participants also expressed moderate concern over customer or employee satisfaction (average barrier scores ranging from 3.7 to 5.8). These barriers could be addressed by improved performance coaching from account representatives that focuses on what strategies best balance load reduction with sustained comfort.

Differences between Large and Small/Medium Customers

Within the data, we found several significant differences between large and small/medium PG&E customers. As shown below, these differences include communication preferences, interest in certain types of tools, barriers to participation, and firmographics. There are also some statistically significant differences between SCE and SDG&E customers. However, analysis is cautionary in these cases due to limited sample sizes.

Element	PG&E		SCE*		SDG&E*	
Lienen	Sm/Med	Large	Sm/Med	Large	Sm/Med	Large
Percentage with preference for email	84%	66%	100% 🛧	70%	73%	79%
communication	n=175	n=52	n=10	n=71	n=15	n=91
Average interest score for video tutorials on how the	4.1	5.7	7.3	7.3	7.2	6.8
rate works	n=175	n=52	n=10	n=71	n=15	n=91
Average interest score for "shadow billing"	7.6	8.3	8.8	8.7	8.2	7.7
Average interest score for shadow bining	n=175	n=52	n=10	n=71	n=15	n=91
Percentage that adjust work schedules to prepare	28%	15%	25%	36%	50% 🛧	23%
for event days**	n=170	n=49	n=8	n=62	n=12	n=87
Percentage that unplugged battery chargers to	21%	11%	13%	13%	33%	12%
prepare for event days**	n=170	n=49	n=8	n=62	n=12	n=87
Average barrier rating for understanding the process	3.3	2.1	5.3	3.0	1.5	2.3
for participating in events	n=175	n=52	n=10	n=71	n=15	n=91
Average barrier rating for the manual effort required	5.1个	4.2	5.0	4.5	2.7	3.8
to participate in events	n=175	n=52	n=10	n=71	n=15	n=91
Demonstrate that rept their building(a)	23%	9%	10%	35%	27%	25%
Percentage that rent their building(s)	n=175	n=52	n=10	n=71	n=15	n=91

Table 1: Significant Differe	ences between Large	and Small/Medium	Customers
	nooo bothoon Faileo	and officing moundin	odocorrioro

*Analysis does not include 4 SCE customers and 8 SDG&E customers for whom size information was not available

**Only asked of respondents who tried to reduce their energy use during events

Drivers of Satisfaction

As shown below, those who have better a understanding of participation processes, report they save money by participating, or have been on the rate for several years tend to be more satisfied with the rate overall. We also note that customers who defaulted into the program were more satisfied than those who opted-in. These customers may be more satisfied with the rate because, after trying it, they decided the rate worked for them (and thus did not opt-out). There are also some statistically significant differences in satisfaction across these characteristics for SCE and SDG&E customers. However, analysis is cautionary in these cases due to limited sample sizes.

IOU	Awareness of Reduction Amount Needed During Event		on beded vent		Time on the Rate		Progra	m Entry
	Aware	Not Aware	Yes	No	3+	<1	Default	Opt-In
PG&E	7.1	5.0	7.4	1.4	7.2	6.2	7.7	6.3
FGQL	n=166	n=31	n=192	n=16	n=138	n=61	n=110	n=105
SCE	6.6	6.0	7.2个	3.6	6.2	no respondents	4.5	7.1
	n=35	n=27	n=50	n=11	n=83	n=0	n=31	n=30
SDG&E	4.5	5.1	4.3	6.0个	4.9	6.0个	2.0	5.6个
SUGAE	n=67	n=39	n=52	n=42	n=101	n=5	n=27	n=69
↑Indicates a significant difference at the 90% confidence level								

Table 2: Drivers of Rate Satisfaction

Note: Bases differ based on survey skip design (awareness and savings categories) and the availability of data for sampling variables (time on the rate and program entry categories)

1.1 Recommendations

Given the findings above, there are several recommendations to help the IOUs monitor CPP performance, better prepare for more defaulted customers, better educate customers during the default stage, increase customer performance during events, and ultimately increase customer satisfaction with the rate. These include:

Recommendations for evaluating rate performance:

- Track and analyze opt-out customers. SCE and SDG&E should track opt-out customers since the rate inception, similar to PG&E, so that it can monitor how many customers are opting out, who is opting out, when, and why. This will help assess the performance of the rate and inform decision making on who the right customers are for this rate.
- Identify structural winners and determine course of action. Amongst current participants, the IOUs should identify "structural winners". The IOUs should analyze the participants' on-peak, off-peak and semi-peak usage along with the customer demand charges to identify structural winners and determine whether an alternative rate plan is better suited for them.

Recommendations for the IOUs to consider prior to defaulting all C&I customers onto the rate in 2014:

Analyze and segment the new customers prior to enrollment based on peak load usage. Consider conducting an analysis of the customers' load prior to enrollment and then segmenting customers into those that are likely to benefit from the rate and those that are not. Customers who do not create sufficient demand during peak times, either through inactivity or using alternative energy sources, could be identified by analyzing on-peak, off-peak and semi-peak usage. Information and education could then be targeted based on customer segments to ease the enrollment and opt-out processes.

Recommendations to better educate customers prior to default enrollment:

- Offer customized tools to help customers understand the CPP rate. Customers need tools that provide a quick and easy way to compare rate options.
 - Offer industry specific case studies: This is a good way for customers to understand how their bill could change and how they can shed load. Case studies should focus on the needs of specific facility types. The case studies should focus on how customers may overcome specific production barriers. PG&E and SCE already offer case studies.
 - Provide shadow billing to customers as they join the rate: Shadow bills allow a customer to compare their past bill with what their bills would look like on the CPP rate.
- Provide a quick tool for customers to determine if the rate is a good fit. Consider a screener survey with five key questions during the default process to determine whether customers can shed load and benefit from the rate. Another option may be to provide a quick fact sheet on the key factors that a customer should consider when deciding if they can benefit from the CPP rate.
- Provide account-specific rate comparison scenarios prior to default. One key differentiator in PG&E's enrollment process is that they often provide customers with a rate comparison of CPP with alternative TOU rates 90 days prior to default. Alternatively, SDG&E provides this information at the end of the first year on the rate, before bill protection expires. Providing this rate comparison prior to default will better educate customers on what to expect.

Co-market the automated technology program. Several opt-out customers mentioned that they do not have the internal management capacity to respond to events. To address this barrier, IOU staff or account representatives should mention the automated technology options and incentives available to new customers as they enter the rate. This would mostly help the small and medium size customers because they are less likely to have facility managers or, if they do, these managers have less time to manage event participation because they often play multiple roles at the company.

Recommendations to encourage more reduction on event days:

Customers need information to assess their performance on the rate and encourage them to be more active in the rate.

- More frequent communication on event performance throughout the year. Customers need more frequent communication regarding their event performance, i.e. how much they were able to reduce during an event, so they can determine the energy saving impact of the actions they took. They also need information automatically sent to them instead of needing to request it. Below are a few suggestions on how this could be done.
 - Provide participants with feedback on the results of their event day participation efforts within five business days of an event. Equipped with knowledge of how specific actions directly affects energy usage, customers can determine whether they need to take more action during the next event.
 - Provide monthly or quarterly feedback. The IOUs could provide customers with a simple analysis tool each month that allow customers to clearly see how they are saving on a monthly or quarterly basis.
 - All IOUs should automatically provide an annual comparison report to each participant.
- Encourage automation. The IOUs should encourage existing participants to adopt automated demand response technology. The IOUs could offer more incentives associated with the CPP rate for automated demand response equipment and proactive communication to current CPP participants about the Auto-DR program. Some customers are able to shed more load on event days but the burden of doing so manually is prohibitive. Automated energy management systems would help to reduce the resource barriers.
- Increase the quality of communication after a customers' first year on the rate. After the first year passes, customers need to review their bill to see what they need to adjust in the next year. The utilities should provide an automated report that is emailed or directly mailed to customers with this information.
- Encourage consecutive event day participation: Event participation on consecutive days is challenging for customers. The IOUs should consider whether a design change may help encourage consecutive day event load shed, such as an incentive tied to what they reduce on consecutive days. Increased communication prior to calling consecutive event days or communication around the probability of consecutive event days coming in the near future may also help customers prepare.
- Offer industry-specific energy reduction tips: Industry-specific energy reduction tips will help customers. PG&E and SDG&E already offer industry-specific tips that SCE can leverage.
- Communicate via email where possible: Participants prefer to communicate via email in terms of communications around the CPP rate. While information via the websites is good for some customers,

the IOUs should use email as the primary communication method and refer customers to information on the website via website links in email communications.

Detailed event forecast information: SCE and SDG&E should considering providing event day forecast information similar to PG&E's 5-day "Peak Day Pricing Event Forecast" that shows the probability of events (based on temperature). This may help some customers who were looking for more advanced notice of event days.

2. Introduction

This report provides findings from a process evaluation of the Statewide 2013 Critical Peak Pricing rate offering. San Diego Gas & Electric (SDG&E), Southern California Edison (SCE), and Pacific Gas & Electric (PG&E) each offer their commercial and industrial (C&I) customers access to participation in Critical Peak Pricing (CPP)⁴. CPP is a billing rate is designed to encourage customers to curtail their energy usage during event days in exchange for either a lower billing energy rate throughout the course of the year or billing credits (depending on the IOU's rate design) during peak use months.

The prime objectives of this process evaluation are to examine the implementation process of the CCP rate across the participating investor-owned utilities (IOUs), determine levels of customer understanding of the CPP rate, and establish ways to improve the implementation of the rate plan. To meet the research objectives, we conducted CPP program staff interviews⁵, account representative interviews, participant surveys, and opt-out customer interviews, as well as reviewed the rate materials (such as websites, marketing materials, and tariff sheets).

The CPP rate is both a rate and demand response initiative. It is one of several demand response programs marketed to C&I customers.

Since its inception, the CPP rate has been regularly evaluated and assessed to determine its impact on demand, as well as to explore ways to improve the implementation of the rate to improve customer participation and retention. Nexant recently published⁶ a load impact study of the California CPP rates, which found that each IOU succeeded in reducing demand across the event window and produced measureable demand reduction (see Table 3).

· · · · · · · · · · · · · · · · · · ·						
Savings	PG&E	SCE	SDG&E			
Percentage of Reduced Demand during Event Window	8.6%	5.8%	6.9%			
Demand Reduction in MW	38.4	35.5	20.2			
Note: Impacts are for the average event in 2013; impact analysis only included customers who defaulted into the rate.						

Table 3. 2013 CPP Load Impact per Event

In 2012, EnerNOC⁷ conducted a study of the price responsiveness of CPP rate participants. This effort focused on determining best practices for encouraging load reduction. Findings indicated that high-performing participants faced fewer difficulties in shifting their processes and curtailing usage, whereas most lowperforming participants were only able to take smaller steps to reduce load. These low-performing participants also noted being able to benefit from the rate without taking steps to reduce load during events, a concept

⁴ Each IOU has established utility-specific branding to advertise the rate to its customers, which we discuss in detail in Section 3. For the purposes of this report, we refer to the Critical Peak Pricing rate as "CPP" or as "the rate."

⁵ This also included utility rate department staff from PG&E. For simplicity in the report, we refer to all interviews with IOU staff regarding the CPP rate as "program staff" interviews.

⁶ Nexant. 2014. 2013 Load Impact Evaluation of California's Statewide Nonresidential Critical Peak Pricing Program.

⁷ EnerNOC, Inc. 2012. California Statewide CPP Research on Improving Customer Response.

that PG&E rate staff referred to as "structural winners." Many customers also indicated a lack of knowledge about the rate, which made it difficult to participate and reduce usage.

Recommendations from the EnerNOC study are consistent with some of the recommendations that stemmed from this 2013 process evaluation, including the following:

- Develop case studies to illustrate how customers can be successful on the rate
- Provide rate information in a variety of formats
- Create a checklist of demand response actions
- Encourage automation
- Foster upper management buy-in
- Limit multiple events in a short time frame

2.1 Study Limitations

This study was limited to the data made available for review by the IOUs. In this case, data provided for both the participant and opt-out participant surveys did not always include the same types of information. For instance, SCE and SDG&E did not provide industry information on opt-outs while PG&E did. As such, analysis for each IOU is limited to the data available.

2.2 Report Structure

Table 4 shows the sections of this report and the content contained in each.

Section	Description				
1. Executive Summary	Provides a high-level synopsis of key findings form the evaluation and provides recommendations for improving rate processes				
2. Introduction	Introduction to the CPP rate and the scope of this study				
3. Methods	Detailed methods by evaluation tasks				
4. Detailed Findings	Summary of the main findings from each evaluation task separately, including: documentation of implementation processes, review of participant databases, review of rate materials, participant surveys, out customer interviews, and account representative interviews				
Appendices	Data collection instruments and raw data results from each data collection task				

Table 4. Report Sections and Content Descriptions

3. Methods

3.1 Research Objectives

The goals of this study are to explore the following research objectives:

- Document and assess the implementation process, and identify opportunities to improve effectiveness
- Assess customer understanding of the rate, including perceptions of, and response to, curtailment requests
- Provide recommendations for improving customer responsiveness to events, and retention on the rate

3.2 Research Methods

The process evaluation of the CPP rate consisted of several activities. Table 5 summarizes the main evaluation tasks.

Task	Description			
CPP Program Staff – In-Depth Interviews	Conducted three telephone or in-person interviews with eight staff from the IOUs involved in management of the rate (five from PG&E, one from SCE, and two from SDG&E)			
Key Account Executives/ Representatives Interviews	Conducted telephone interviews with 29 account representatives involved with customers on the rate (10 from PG&E, 10 from SCE, and nine from SDG&E)			
Participant Online Survey	Fielded an online survey to CPP customers, resulting in 236 completes (representing 426 unique customer accounts); completed 102 from PG&E (227 accounts), 84 from SCE (85 accounts), and 50 from SDG&E (114 accounts)			
Opt-Out Participants – In-Depth Interviews	Conducted telephone interviews with 22 customers that opted-out of CPP (10 from PG&E, seven from SCE, and five from SDG&E)			
Rate Materials and Database Review	Reviewed rate websites and materials; reviewed available databases to characterize and understand the participant population			

Table 5. CPP Process Evaluation Tasks

We discuss each of these tasks in detail below.

3.2.1 CPP Program Staff Depth Interviews

The evaluation team conducted three interviews with eight CPP Program staff members in January 2014. Interviews were conducted with IOU staff involved in the management of various aspects of the CPP rate implementation, including representatives from management, operations, marketing, and customer-facing elements. These interviews helped to document the rate design and implementation strategy.

Utility	Number of Staff Interviewed	
PG&E	5	
SCE	1	
SDG&E	2	

Table 6. Rate Staff Interview Summary

3.2.2 Key Account Executives/Representatives Interviews

The evaluation team completed 29 interviews with account representatives in February and March 2014. These interviews helped to further document the design and implementation process. In addition, these interviews explored ways to improve the rate from the perspective of those interacting with CPP rate customers.

Utility	Number of Account Executive/Representative Interviews
PG&E	10
SCE	10
SDG&E	9

Because key account representatives interact with large commercial and industrial customers, speaking with them was key to understanding customer perceptions of the rate, as well as the challenges representatives face when interacting with customers. These interviews also aided the development of the participant and optout participant surveys, as the team learned about key challenges and drivers for CPP rate participation.

3.2.3 Participant Online Survey

In April and May 2014, Opinion Dynamics conducted an online survey of 236 customers participating in the CPP rate. These customers represented 426 unique customer accounts. Customers targeted for this evaluation effort were all on the CPP rate in 2013. We designed the survey to collect information about rate processes, understanding of the rate, barriers to event participation, and satisfaction levels with the rate. For this survey effort, the response rate was 10% across all IOUs. For PG&E, the response rate was 14%; for SCE, it was 7%; and for SDG&E, it was 13%.⁸

An important aspect of the survey's sample design was to ensure adequate representation across several important customer characteristics. In this case, the evaluation team stratified the sample base on customer utility, customer representation (e.g., service agreements per business), customer size (i.e., large or small and medium C&I customers), and length of time on the rate. We monitored the survey to ensure adequate representation of large and small/medium customers, customers with multiple accounts, and customers who have been on the rate for varying amounts of time.

Survey results are statistically significant at the $\pm 10\%$ at the 90% confidence level for each IOU. It is important to note that these precision levels apply to those questions and data points where all telephone survey respondents are included in the analysis. In many cases, we present data that pertains to a particular subset of telephone survey participants. In these situations, the precision level will be lower, given the smaller number of observations.

⁸ We calculated response rates using American Association for Public Opinion Research (AAPOR) Response Rate 1, which is the basic formula for a response rate but does not try to estimate which cases of unknown eligibility are actually eligible cases.

IOU	Number of Survey Respondents	Number of Accounts Represented by Respondents	Total CPP Accounts in Population	Relative Precision at the 90% Confidence Level
PG&E	102	227	7,767	90 +/- 5%
SCE	84	85	2,339	90 +/- 9%
SDG&E	50	114	1,158	90 +/- 7%

Table 8. CPP Participant Survey Completes

Adjustments to Survey Data

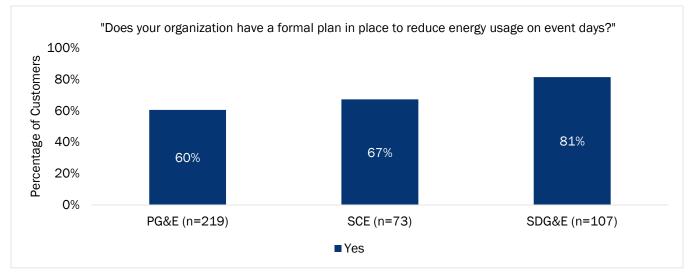
The evaluation team made two adjustments to the survey data collected in order to ensure that the results were representative of the participant population.

Unit of Analysis

Throughout the participant survey data analysis, we analyze survey data at the account level, rather than at the respondent level. In some cases, one respondent represented multiple unique customer accounts. The CPP rate often counts participation in terms of accounts and examining this data at the account level helps to put the customer contact's opinion in perspective relevant to the impact that customer contact has on the rate plan as a whole. However, the respondent level and account level both have value to the IOUs. For example, if the IOU is interested in customer barriers to event participation, it may be interested in knowing that at the respondent level but if a respondent represents 10 different accounts on the CPP rate then that respondent's barriers to participation will have more of an impact on the CPP rate than a customer that only represents one account.

The CPP EM&V staff at the IOUs met with the evaluation team to collaboratively determine the appropriate unit of analysis for this study. It was collectively decided that both units of analysis were of value to the IOUs depending on the topic in the study and whether the IOUs were going to use the data for forecasting purposes. To meet both data needs, we use the account level as the defaulted base throughout the participant survey results. However, we also analyzed the data at the respondent level and compared it to the weighted data at the account level to determine if there were any significant differences in the data. Most often, the respondent and account level analysis matched. In the few cases where the account level analysis yielded significantly different results, we note with underlined text where the findings are different so that the IOUs can determine which data point is most useful for planning purposes.

An example of this in the report is shown in the Figure below. The figure shows the proportion of customers who have an action plan to reduce energy on event days at the account level. In the findings section we note that the respondent and account level data were very similar for this topic with the exception of PG&E. At the respondent level a larger proportion of PG&E customers (78%) reported having an event day action plan. Therefore, 78% of customer contacts may have an event day action plan, but we estimate that only 60% of the accounts on the rate are affected by this plan.





Note: Base only includes customers who reported they tried to reduce energy during events in 2013.

Survey Weighting

The survey sample closely resembled the population in terms of customer size and length of time on the with the exception of PG&E. Therefore, we applied weights for PG&E customers based on the size of their facility.

Table 9 compares population data for the variables of interest to the sampled population. We discovered significant differences for PG&E when it came to customer size and industry. This difference in size is not unusual in commercial survey efforts, and is likely due to the increased likelihood that large customers have more staff or time available to complete the surveys.

Table 9. Online Survey. Population to Sample Comparison							
	PG	&E	SCE SDG&E		E		
Variables of Interest	Population	Surveyed	Population	Surveyed	Population	Surveyed	
	Accounts	Accounts	Accounts	Accounts	Accounts	Accounts	
Total Accounts	7,767	227	2,339	85	1,158	114	
Customer Size							
Large	23%	67%	79%	83%	72%	80%	
Small/Medium	77%	33%	14%	12%	21%	13%	
Unknown	0%	0%	7%	5%	6%	7%	
Length of Time on Rate							
Less than 1 Year	26%	19%	0%	0%	Unknown	4%	
1-2 Years	24%	18%	1%	2%	Unknown	4%	
3 or More Years	50%	63%	99%	98%	Unknown	89%	
Unknown	0%	0%	0%	0%	Unknown	3%	
Industry							
Offices, Hotels, Finance,	63%	22%	19%	40%	32%	11%	
Services	00%	2270	±0%	10%	02/0	±±/0	
Agriculture, Mining and Oil	6%	8%	4%	2%	1%	2%	
and Gas, Construction							
Manufacturing	5%	12%	32%	10%	12%	33%	
Entertainment, Other	5%	3%	7%	11%	12%	11%	
Services, and Government							
Schools	4%	37%	7%	12%	19%	17%	
Wholesale, Transport, and	3%	9%	17%	16%	14%	18%	
Other Utilities					_		
Retail	3%	1%	6%	10%	10%	5%	
Other or Unknown	10%	9%	7%	0%	1%	5%	

Table 9. Online Survey: Population to Sa	ample Comparison
--	------------------

While industry varies between the population and sample groups (i.e., for PG&E, schools have a disproportionate number of survey completes compared to their proportion of the population), after further analysis, we found that in many cases the differences in facility size explain the differences across industries (i.e., certain industries tended to be of certain sizes). Thus, we constructed weights only for PG&E customer size to mitigate this response bias (see Table 10).

Size	Population (A)	Surveyed (B)	Weight (A/B)			
Total Accounts	7,767	227	-			
Large	23%	67%	0.34			
Small/Medium	77%	33%	2.36			

Table 10. Survey Weights by Size (PG&E Only)

3.2.4 **Opt-Out Participant Depth Interviews**

In April and May of 2014, the evaluation team conducted 22 qualitative depth interviews with customers who were defaulted into the CPP rate and subsequently opted-out. The purpose of these in-depth interviews was to understand why customers opted-out, whether they made an informed decision, and how the rate could have better served them, if at all. The evaluation team called 267 customers across all IOUs to attempt an interview. The 22 completed in-depth interviews represent a 9.4% response rate, and were with a mix of customers who were on the rate for less than one year (12 interviews) and those who were on the rate for at least one year (10 interviews).

Total CPP Opt-Out Sample Disposition							
Time in the Rate	Time in the Rate Less than 1 Year 1-2 Years 3 Years or More Total						
Completes	12	9	1	22			
Reached out (but no response)	53	101	33	187			
Refused	18	2	6	26			
Invalid contact information	18	6	8	32			
Total	101	118	48	267			

Table 11. Opt-Out Participant Interview Disposition Summary

SDG&E Opt-Out Customers

As shown in Table 12, SDG&E provided a list of 825 accounts that opted-out of the SDG&E rate almost immediately after coming onto the rate.

Table 12. SDG&E CPP Opt-Out Customer Database									
Characteristic	Population	Phone Sample	Completes Quota	Completes					
Size	Size								
Total Accounts	825 (N)	46 (n)	10	5					
Large	70%	74%	8	4					
Small/Medium	30%	26%	2	1					
Unknown	0%	0%	0	0					
Time in the Rate	-								
Total Accounts	825 (N)	46 (n)	10	5					
Less than 1 Year	100%	100%	10	5					
1-2 Years	0%	0%	0	0					
3 Years or More	0%	0%	0	0					
Unknown	0%	0%	0	0					

SDG&E provided contact information for a random selection of 46 customers (see Table 13). After trying to contact all sample points, we completed five interviews: four with large customers, and one with a small/medium customer.

Table 13. SDG&E CPP Opt-Out Disposition				
altian	Time in the Dete			

	Table 13. 3Ddde of roptout Disposition						
Disposition	Time in the Rate						
	Less than 1 Year	1-2 Years	3 Years or More	Total			
Completes	5	-	-	5			
Reached out (but no response)	23	-	-	23			
Refused to complete	9	-	-	9			
Invalid contact information	9	-	-	9			
Total	46	0	0	46			

SCE Opt-Out Customers

As shown in Table 14, SCE provided a list of 835 customers who opted-out of the SCE CPP rate in 2013. After removing records with incorrect dates, the remaining sample with reasonable start and end dates for CPP enrollment was 57 records.

Characteristic	Population	Phone Sample	Completes Quota	Completes			
Size	Size						
Total Accounts	835 (N)	57 (n)	10	7			
Large	75%	67%	8	7			
Small/Medium	25%	33%	2	0			
Unknown	0%	0%	0	0			
Time in the Rate							
Total Accounts	835 (N)	57 (n)	10	7			
Less than 1 Year	7%	100%	10	6			
1-2 Years	0%	0%	0	1			
3 Years or More	0%	0%	0	0			
Unknown	93%	0%	0	0			

Table 14. SCE CPP Opt-Out Customer Database

As a result, we scaled the sample back to 57 customers. We called all 57 valid sample contacts in an effort to reach the 10 completes we had proposed. Ultimately, we were able to complete interviews with seven (7) large customers.

Table 15. SCE CPP Opt-Out Disposition

Time in the Rate	Less than 1 Year	1-2 Years	3 Years or More	Total
Completes	7	-	-	7
Reached out (but no response)	31	-	-	31
Refused	10	-	-	10
Invalid contact information	9	-	-	9
Total	57	0	0	57

PG&E Opt-Out Customers

As shown in

Methods

Table 16, PG&E provided a list of 3,458 accounts that opted-out of the rate since the rate began in 2010. Rate and phone contact information were available for the majority of the 3,458 PG&E accounts that opted-out of the rate. In contrast to the SCE and SDG&E opt-out data, the PG&E data offered the only opportunity to interview those who participated in the rate for one year or more. Therefore, we focused on these contacts in order to gain their perspective.

Characteristic	Population	Phone Sample	Completes Quota	Completes		
Size						
Total Accounts	3,458 (N)	2,975 (n)	10	10		
Large	83%	83%	8	8		
Small/Medium	17%	17%	2	2		
Unknown	0%	0%	0	0		
Time in the Rate						
Total Accounts	3,458 (N)	2,975 (n)	10	10		
Less than 1 Year	28%	75%	0	0		
1-2 Years	7%	18%	7	9		
3 Years or More	2%	7%	3	1		
Unknown	63%*	0%	0	0		
*While contact information v rate was not available for ma		prity of PG&E opt-out custo	omers, information for how long th	hey were on the		

Table 16. PG&E CPP Opt-Out Customer Data

Of the total sample of 2,975 phone numbers, we randomly selected a subsample of 166 (see Table 17). Using this sample, we completed interviews with eight large and two small/medium customers.

Table 17. PG&E CPP Opt-Out Disposition

Time in the Rate	1-2 Years	3 Years or More	Total
Completes	9	1	10
Reached out (but no response)	101	33	134
Refused	2	6	8
Invalid contact information	6	8	14
Total	118	48	166

3.2.5 Rate Materials and Database Review

The evaluation team reviewed participant databases provided by the IOUs to characterize customers enrolled in the CPP rate. Because data was available for PG&E opt-out customers since the rate inception, we also reviewed PG&E's data to characterize customers who have opted-out of the rate. We reviewed each IOU's CPP website, as well as materials such as fact sheets, tariffs, or rate introductory letters. Through our review, we documented the information contained in these sources, and identified potential areas of improving customer communications.

4. Detailed Findings

4.1 CPP Rate Design and Implementation Process

Critical Peak Pricing (CPP) is a rate option offered to commercial and industrial (C&I) customers SDG&E, SCE, and PG&E. For all three IOUs, large customers are defaulted into the rate and small or medium customers are able to voluntarily join the rate. CPP is a billing rate that asks customers to curtail their energy usage during event days and hours (i.e., times when the investor-owned utilities (IOUs) expect energy usage to be high). During CPP events, customers are subject to much higher rate compared to alternative time of use (TOU) rates. In exchange, customers receive a lower billing rate (relative to alternative TOU rates) throughout the year. If customers opt-out of CPP, they must enroll in an applicable TOU rate.

Customers may also elect to set and, in some cases⁹, pay for a Capacity Reservation Level (CRL), which allows customers to designate the amount of energy they want to reserve for use at the lower rate during an event. Customers will not be subject to the higher event charges or earn bill credits for usage within the CRL they set. PG&E and SCE offer this option only to large customers, while SDG&E offers this option to all enrolled customers. At this time, none of the IOUs requires customers to set a CRL.

Finally, for the first year of rate participation, all IOUs offer bill protection to encourage customers to try the rate risk-free. After their first year of participation, the IOUs compare the customer's bill with an estimated bill had they been on the alternative TOU rate. If the customer paid more on CPP than they would have on the alternative TOU rate, the IOU will rebill the customer at the alternate rate.

In Table 18, we provide a summary of the core elements of each IOU's rate. In the following sections, we provide detailed maps of each IOU's rate processes.

Rate Element	PG&E	SCE	SDG&E		
Name of CPP rate	Peak Day Pricing (PDP)	Summer Advantage Incentive (SAI)	Critical Peak Pricing (CPP)		
Number of account enrolled	7,767(1)	2,339	1,158		
Year rate began	2010	2009	2008		
Incentive type	Lower non-event period billing rate (May through Oct.)	Billing credits for non-event periods (June through Sept.)	Lower non-event period billing rate (year-round)		
Penalty for usage during events	Higher rates during events	Higher rates during events	Higher rates during events		
First year bill protection	Yes	Yes	Yes		
Eligibility					
kW usage of customers defaulted into the rate	≥200 kW maximum demand for 3 consecutive months ⁽²⁾	≥200 kW maximum demand for 3 consecutive months	≥200 kW maximum demand for summer months		
Interval/smart meter required	Yes	Yes	Yes		

Table 18. 2013 CPP Snapshot by IOU

⁹ SDG&E's rate includes a per kW charge for reserving capacity. PG&E does not have a per kW charge for reserving capacity, but does charge customers a fee for reserving usage above their peak usage during an event.

Rate Element	PG&E	SCE	SDG&E
Small/Medium customers eligible for opt-in	Yes	Yes	Yes
Default and Opt-Out Proc	esses		
Notice prior to default into rate	Yes, two notices: 60 days and 30 days prior	Yes	No; welcome package provided at time of default and customer has 45 days to opt-out
Provides rate analysis prior to default	Yes, 90 days prior (not required) ⁽³⁾	Yes, 90 days prior	No; welcome package points customers to rate analysis available on kWickView
Reminder that customer is enrolled in rate	Pre-season notification (not required) ⁽³⁾	Pre-season notification	Annual "anniversary packet"
When customers can opt-out	45 days prior to default, and any time after default	Any time	Within 45 days after defaulting OR within 45 days prior to "anniversary date" (one year later)
Events			
Number of events that are called each calendar year	9-15	12	Maximum of 18
Number of events called in 2013 (month range)	9 (June – October)	12 (July – October)	4 (August – September)
Event notification	Day-ahead by 2 p.m.	Day-ahead by 3 p.m.	Day-ahead by 3 p.m.
Notification channels	Phone, text, email, fax	Phone, text, email	Phone, text, email
Eligible event hours	2 p.m. to 6 p.m.	2 p.m. to 6 p.m.	11 a.m. to 6 p.m.
Eligible event days	Any day of the week, including holidays	Monday through Friday, excluding holidays	Any day of the week
Event day triggers	 Day-ahead forecasted temperature CAISO Alerts or emergency conditions Day-ahead price forecasts To meet annual event limits for a calendar year For testing/evaluation purposes 	 Day-ahead forecasted temperature CAISO Alerts or emergency conditions SCE system emergency Day ahead price/load forecasts 	 Day-ahead forecasted temperature and actual system load CAISO Alerts or emergency conditions SDG&E system emergency
Rate Options		1	
Capacity Reservation option	Capacity Reservation Level (CRL), large customers only	Capacity Reservation Level (CRL), large customers only	Capacity Reservation Charge (CRC), all enrolled customers
Default Capacity Reservation amount	50% of the average of the most recent 6 summer months' maximum peak demand	50% of most recent average summer peak-demand	50% of most recent maximum summer peak-demand
Event participation options	Smaller customers only: Participate in every other event for 50% of bill credit	Smaller customers only: Participate in every other event for 50% of bill credit	None
Event window options	Smaller customers only:	None	None

Rate Element	PG&E	SCE	SDG&E	
	Extended event hours (12 p.m. to 6 p.m.) for two-thirds of event charges			
Dual enrollment in other demand response programs	Yes, day-of only	Yes, day-of only	Yes, day-of only	
Notes: (1) We based participant counts on data received. PG&E provided a participant database with 11,126 entries. Of these, 7,767				

unique accounts were marked as "enrolled."
 (2) In 2013 and earlier, only PG&E Large Commercial/Industrial/Agricultural (LCIA) customers were defaulted into the rate; starting

in November 2014, small and medium business customers will be defaulted into the rate.

(3) These outreach efforts are not required by PG&E, but often occur at the discretion of PG&E.

Table 19 below presents the amount and timing of event days held in 2013 across the participating IOUs. Notably, each IOU called events on consecutive days or very close together.

	PG&E	SCE	SDG&E
Total Count of Event Days	9	12	4
	6/13/2013	7/1/2013	8/29/2013
	6/28/2013	7/3/2013	9/4/2013
	7/1/2013	8/21/2013	9/5/2013
ø	7/2/2013	8/28/2013	9/6/2013
Day	7/9/2013	8/30/2013	
ent	7/19/2013	9/4/2013	
E E	9/9/2013	9/6/2013	
Actual Event Days	9/10/2013	9/13/2013	
< <	10/18/2013	9/23/2013	
		9/30/2013	
		10/4/2013	
		10/17/2013	

Table 19. 2013 CPP Event Days across the IOUs

4.1.1 PG&E Peak Day Pricing Summary

Figure 3 below presents various processes related to PG&E's rate, Peak Day Pricing (PDP). Notably, PG&E offers two special options to small/medium customers (<200 kW max demand) who opt-in to the rate. First, these customers can elect to participate in every-other event and receive 50% of the billing credits they would normally. Second, customers may elect a six-hour event window (as opposed to four hours) in exchange for two-thirds of the event period charges.

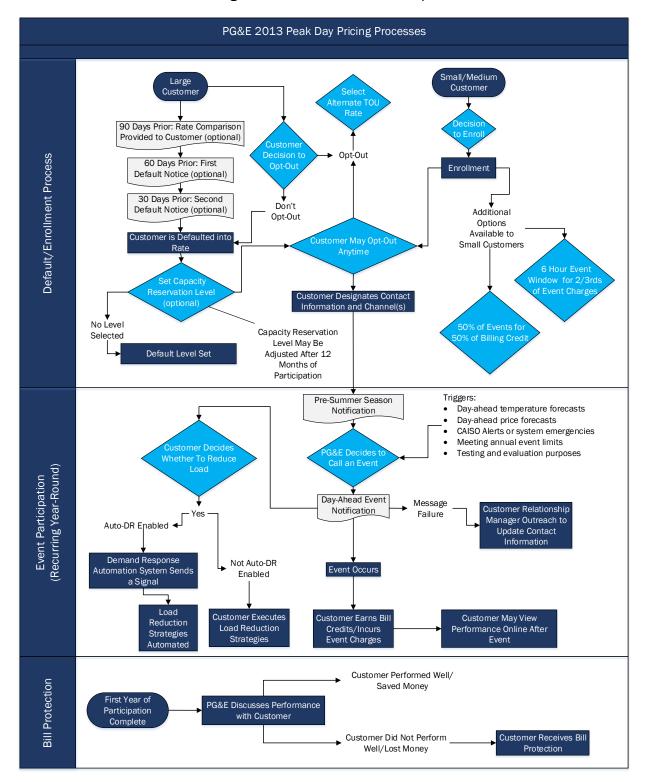
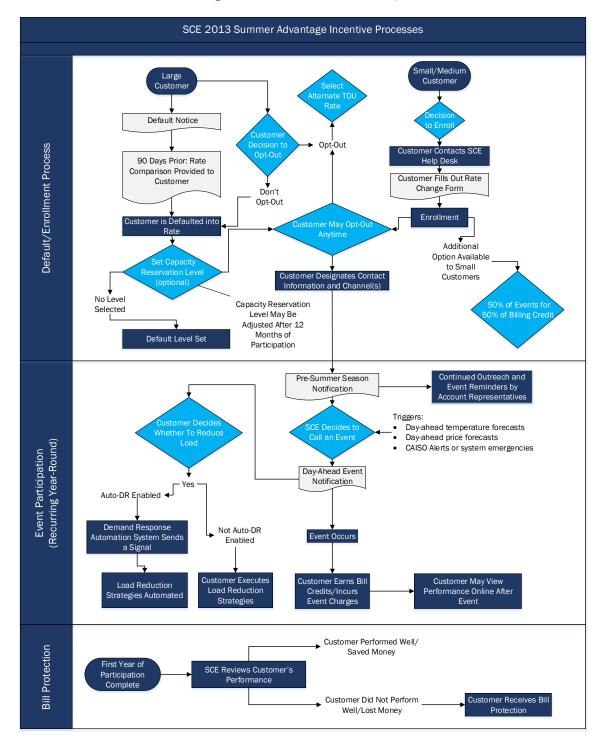


Figure 3. PG&E Rate Process Map

4.1.2 SCE Summer Advantage Incentive Summary

Figure 4 below presents various processes related to SCE's rate, Summer Advantage Incentive (SAI).

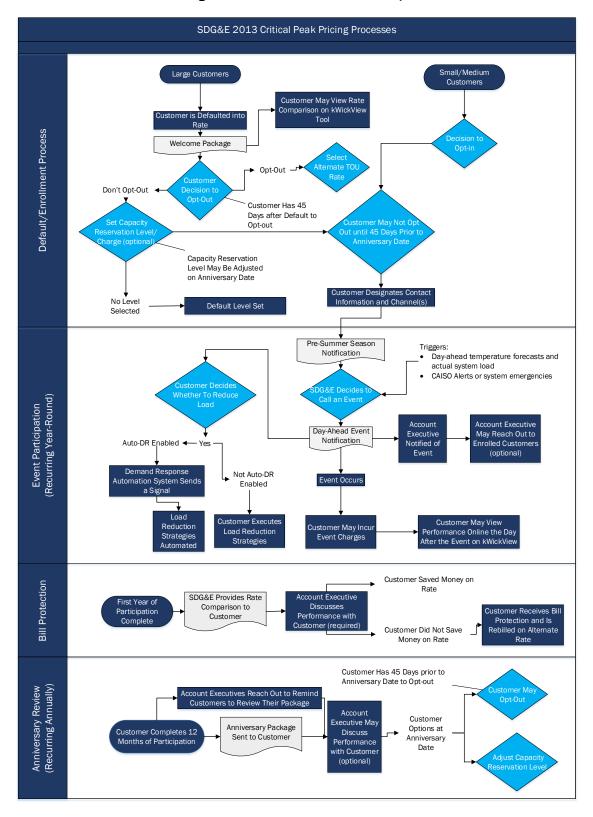




opiniondynamics.com

4.1.3 SDG&E Critical Peak Pricing Summary

Figure 5 below presents various processes related to SDG&E's rate. SDG&E sends customers an "Anniversary Packet" after each year of participation. This packet provides a form for updating contact information, and an opt-out form. Notably, after defaulting onto the rate, customers can only adjust their CRL or opt-out of their rate within 45 days prior to their anniversary date.





opiniondynamics.com

4.2 **Participation Characteristics**

The evaluation team conducted an extensive review of rate data and project files to assess the composition of current and former CPP participants.

PG&E has the most customer accounts enrolled in CPP, followed by SCE, then SDG&E (see Figure 6). Considering that most customers were defaulted onto the rate, these differences make sense, taking into account the differences in terms of the number of customers served by the respective IOUs.

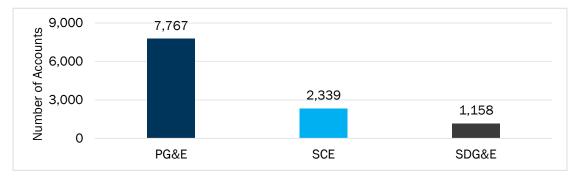
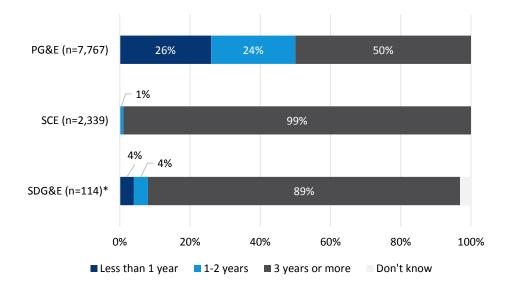


Figure 6. Number of Unique Participant Customer Accounts by IOU

The IOUs also vary in terms of the amount of time their customers have been on the rate (see Figure 7), which is due in large part to these rates beginning in different years. As of 2013, most customers from all three IOUs have been on the rate for at least one or two years.





*Data on enrollment date was not available for the SDG&E participant population; data above is based on participant survey responses.

The table below shows the differences in how the IOUs define customer size.

opiniondynamics.com

Table 20: Odstoffer Size Definitions by 100				
	SDG&E	PG&E	SCE	
Large Definition	200 kW and over	200 kW and over	200 kW and over	
	>20-199 kW			
Medium	>20-199 KW	75-199 kW	>20-199 kW	
Small	20kW or less	<75kW	20kW or less	

Table 20. Customer Size Definitions by IOU

In terms of customer size (as defined by energy usage), SDG&E and SCE customers are fairly similar, though PG&E serves far more small and medium-sized customers (see Figure 8). PG&E has a large number of medium accounts that operate as billboards and cellphone towers, which skews the number of accounts by usage category. In addition, PG&E's medium customers have more peak demand use per account than the other IOUs.

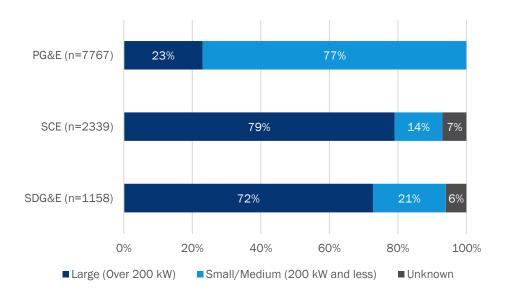


Figure 8. Participant Customer Size by IOU

Table 21 below illustrates the differences in business type segmentation among the IOUs.

Table 21. Participant Industry Type						
Industry Type	PG&E	SCE	SDG&E			
Total Accounts (N)	7,767	2,339	1,158			
Offices, Hotels, Finance, Services	63%	19%	32%			
Agriculture, Mining and Oil and Gas, Construction	6%	4%	1%			
Manufacturing	5%	32%	12%			
Entertainment, Other Services, and Government	5%	7%	12%			
Schools	4%	7%	19%			
Wholesale, Transport, Other Utilities	3%	17%	14%			
Retail Stores	3%	6%	10%			
Other or Unknown	10%	7%	1%			

Table 21. Pa	articipant	Industry Type
--------------	------------	---------------

Opt-Out Participants

Next, we explored the population characteristics of customers who opted-out of the rate. Because population data on opt-outs was only available for PG&E customers, for this section we only focus on PG&E. Some industries opted out at a higher rate than others such as manufacturing, retail and schools. However, the rates are not high enough to suggest that the decision is based on industry alone. Other characteristics specific to the nature of a given customer's business (i.e., size, operating hours, and health and safety regulations) may be more important. Table 22 summarizes the key characteristics of opt-out participants.

Characteristic	Number PG&E Customers Who Have Ever Been on the Rate (N)	Percentage That Have Opted-Out or De-Enrolled
Total Accounts (N)	11,225	31%
Customer Size		
Large (Over 200 kw)	4,380	59%
Small/Medium (200 kW or less)	6,845	13%
Length of Time on the Rate Prior to Opting-Out	•	
Less than 1 Year	2,988	32%
1-2 Years	2,106	11%
3 Years or More	3,953	2%
Unknown	2,179	100%*
Industry Type		
Manufacturing	949	58%
Retail	619	57%
Schools	798	57%
Wholesale, Transport, Other Utilities	520	48%
Entertainment, Other Services, and Government	666	43%
Agriculture, Mining and Oil and Gas, Construction	667	31%
Offices, Hotels, Finance, Services	6,035	20%
Other or Unknown	971	19%
*While contact information was available for the majority of PG&E op were on the rate was not available for many of these customers.	t-out customers, informat	ion for how long they

Table 22. Characteristics of Opt-Out Participants (PG&E Only)

4.3 Customer Communication Analysis

We reviewed the IOUs' websites and outreach materials with the following marketing-effectiveness research questions in mind:

- What information is available to customers?
- How is easy is it to understand the information provided? Is it easy to find?
- What information, if any, is missing from the website and rate materials?

Rate Information Available to Customers

The utilities' websites and rate materials contained similar and sufficient content for the majority of the basic information a customer would need. This includes information on eligibility criteria, an explanation of how the

opiniondynamics.com

Detailed Findings

rate works, the event notification process, and why or when the IOUs call events. However, we found key differences between the IOUs, and missing information in the following areas:

- Success stories of participants: PG&E and SCE provide videos or other case studies of how customers have benefited from the rate. Further, PG&E and SCE organize these case studies by industry type. SDG&E does not currently provide this information.
- Energy reduction tips: PG&E provides energy reduction tips specifically for CPP/PDP events, and provides them by customer industry type. SDG&E also provides energy reduction tips for general demand response events on the main demand response website, but does not provide a link to this information directly on the CPP website. SCE provides CPP-specific energy reduction tips in their fact sheets, but these tips are not industry-specific. Further, a link to "Event Curtailment Plans" is shown on the SCE main demand response website, but the link is broken.
- Event forecasts: PG&E provides a five-day "Peak Day Pricing Event Forecast" that shows the probability of events (based on temperature). SCE and SDG&E provide limited information on the probability of events. SCE provides links to the CAISO and Weather Channel websites for forecasted load and temperature. SDG&E provides a general five-day forecasted energy price category on the main demand response website, but does not provide CPP event forecasts.
- Setting a Capacity Reservation Level: None of the IOUs provide clear instructions on their CPP website for setting the CRL. SCE and SDG&E clearly explain the CRL on their website or fact sheets, but do not provide step-by-step instructions on how a customer can estimate their optimal CRL.

Information	PG&E	SCE	SDG&E
Introductory letter to the rate	✓	\checkmark	\checkmark
Basic rate description (i.e., event charges, lower non-event	\checkmark		
rate/bill credits)	~	\checkmark	\checkmark
Links to online tools	\checkmark	\checkmark	\checkmark
Number of events called	\checkmark	\checkmark	\checkmark
When events are called (i.e., time of year, event hours)	\checkmark	\checkmark	\checkmark
Why event are called	\checkmark	\checkmark	\checkmark
Event notification process	\checkmark	\checkmark	\checkmark
Customer support/help desk contact information	\checkmark	\checkmark	\checkmark
First year bill protection	\checkmark	\checkmark	\checkmark
Opt-in instructions for non-defaulted customers	\checkmark	\checkmark	×
Success stories of participants	\checkmark	\checkmark	×
Forecasts of potential event days	\checkmark	•	•
Energy reduction tips	\checkmark	•	•
Dual enrollment options	×	\checkmark	×
Options for small customers	(1)	\checkmark	n/a
Capacity reservation level option	(1)	•	•
Instructions for updating contact information	(1)	(2)	\checkmark
Links to forms (i.e., setting capacity reservation level, opting- out)	(1)	(2)	\checkmark
Legend: ✓: Included in website or materials reviewed ●: Included, but with limited information available to customers ×: Not included in website or materials reviewed Notes:			
 (1) Not available directly on the website, but customers are of Day Pricing tool to opt-out; it is possible additional forms a but the evaluation team cannot access the tool at this time (2) Forms may be available within online tools, but the evaluation tools at this time. 	are availat	ole withi	n this tool,

Table 23. Information Contained in CPP Websites and Outreach Materials

Benefits of the Rate Presented in the Website and Marketing Materials

We explored the benefits of CPP promoted by the IOUs, and compared them to the perceived benefits reported by respondents to the participant survey. Overall, the IOUs are doing a good job of focusing on the CPP benefits that customers care about the most. All three IOUs touch on the most important benefit reported by customers—saving money on their energy bills. While the IOUs differ in the other benefits mentioned, these benefits are typically of lower priority for customers.

Rate Benefit			ebsite or aterials	Percent of Customers that Mentioned Benefit in Participant Survey*		
Rate Denenit	PG&E	SCE	SDG&E	PG&E (n=227)	SCE (n=85)	SDG&E (n=114)
Lower energy costs during non- event periods	\checkmark	~	\checkmark	67%**	56%	80%
Environmental benefits	\checkmark	\checkmark	×	24%	9%	<1%
Grid stability/reliability	\checkmark	\checkmark	×	<1%	1%	2%
Reduces long term energy costs to community/helping the community	\checkmark	×	\checkmark	<1%	0%	3%
Better energy management	×	×	\checkmark	<1%	6%	<1%
*Multiple response; based on responses to survey question SAT1. **Based on question P1.						

Table 24. Rate Benefits Marketed to Customers

4.4 Key Account Executive/Representative Findings

We conducted in-depth interviews with 29 corporate account representatives across the IOUs to understand customer perceptions regarding the rate, customer education, and key challenges and drivers for rate participation. We conducted these interviews over the course of two weeks in February and March of 2014. These 29 account representatives represent a large number of CCP customer accounts.

IOU	Number of Account Representative Interviewed	Number of CPP Accounts Represented
PG&E	10	709
SCE	10	970
SDG&E	9	470

Table 25. CPP Customers Represented by Utility

PG&E

We selected 10 account representatives at random from a database of 138 account representatives provided to us by PG&E. The respondents we interviewed had, on average, more than 13 years of experience working as account representatives for PG&E. According to the data provided by PG&E, the number of accounts they represented ranged from 13 to 340. Account representatives mainly worked with commercial and industrial customers, but some also worked with agriculture and government sectors.

SDG&E

We selected 10 account representatives at random from a database of 12 CPP account representatives provided by SDG&E. The respondents we interviewed had, on average, eight years of experience working as account representatives. Each one manages 20 to 260 customer accounts, mainly in the industrial and commercial sectors. Additionally, all of them also work with customers for other demand response and energy efficiency programs.

SCE

We selected 10 account representatives at random from a database of 76 account representatives provided to us by SCE. The respondents we interviewed had, on average, eight years of experience working as account representatives. Each one manages anywhere from 300 to 700 customer accounts. They mainly manage

opiniondynamics.com

customers in the industrial and commercial sectors. Additionally, nine of them also work with customers for other demand response and energy efficiency programs.

4.4.1 Overarching Findings

Based on our interviews, we identified some overarching findings across the IOUs, and present these below. In later sections, we present the findings for each IOU.

- Account representatives are highly engaged with customers. Account representatives reported a high level of engagement with customers, especially when customers default into the CPP rate. They expressed that their responsibilities related to the CPP rate are to educate customers on the rate, help customers analyze potential cost savings from the rate, and identify strategies to curtail energy use. Furthermore, many account representatives reported conducting personalized outreach to help make customers aware of event days. As a result, account representatives believe that the rate is very visible to most customers.
- Account representatives use a variety of tools to assist customers with understanding the CPP rate. Representatives think the bill analysis tools are somewhat helpful, but are not always intuitive. Across all three IOUs, some representatives perform their own custom bill analyses instead of using the rate's packaged analysis tools. Further, some representatives use their own tools because they claim the rate's analysis tools are not always accurate, and do not provide industry-specific tips that can best help their customers with understanding the CPP rate.
- Rate comprehension is mixed. Account representatives indicated that customer understanding of the CPP rate varies, resulting in alternate outreach approaches to customers. Some aspects of the rate tend to be particularly confusing, such as understanding how a customer bill will change, how to set a capacity reservation, and the CPP jargon and nuanced terminology. CPP terminology varies by IOU; therefore, understanding terminology is especially an issue for large customers with accounts in multiple IOU territories.
- There is variation in how customers benefit from the CPP rate. The greatest variation is by industry, with industrial customers tending to benefit greatly from the rate because they can shift load, whereas retail, high-tech, and public facilities, such as airports, are the least likely to reduce load on peak days. There is also some variation by climate zone, as businesses in cooler regions might be able to respond to event days with fewer negative effects than businesses in warmer regions are able to. Additionally, some customers are able to reduce energy costs on this rate without actually reducing any load on peak days. Account representatives referred to these customers as "structural winners". These customers tend to have consistent load at all times, and benefit from a reduced rate throughout the year, but never reduce load on event days (e.g., small telecommunications accounts and hotels).

Account representatives provided a broad range of suggestions to improve the effectiveness of the CPP/PDP rate and the satisfaction of customers who are on the rate.

More incentives for automated demand response equipment. The representatives expressed this as one of the biggest barriers to more effective participation in the CPP rate. Some customers are able to shed more load on event days, but the burden of doing so manually is prohibitive. Automated energy management systems would help to reduce the burden. Account representatives also suggested including an option that would offer higher incentives for customers who are willing to install technology that automates customer response to events.

- Offer customized tools and industry-specific information to help customers understand the CPP rate. Account representatives suggested the creation of shadow bills (which compare a customer's bill on CPP to what it would have been on an alternative TOU rate) and hypothetical analyses of similar companies for each major industry. Many representatives mentioned that this would be a good way for customers to understand how their bill could change and how they can shed load. Representatives also noted that case study rate analyses for specific industries and businesses of various types could also be helpful to customers. These types of tools could provide a quick and easy way to compare results, and could encourage customers to become more active.
- Increase quality of communication. Many large accounts are customers of multiple utilities. Standardizing language and communication processes used to talk about demand response programs among all IOUs would greatly reduce confusion and ease communications.

4.4.2 PG&E Findings

Account Management and Communication – Peak Day Pricing Rate Option

Initial Outreach

All of the PG&E representatives indicated that they invested significantly more time in managing and communicating with their customers about the rate when they first became eligible for participation. Most representatives performed an analysis for each of their customers before they defaulted on the rate, to determine if they would be eligible to save money. When the analysis indicated that a customer would be unlikely to save money, the representatives helped them opt-out of the rate.

However, when a representative determined that a customer was likely or very likely to save money on the rate, they typically conducted significant educational activities, either by phone or in person, to ensure that their customers understood the rate before defaulting into it. Because account representatives explained the rate to each customer prior to default, they did not think there was much difference between opt-in and default customers. In the vast majority of cases, the customers were presented with information and a recommendation to either opt-out or default. Therefore, they were making a conscious decision, and the experience felt more like opting-in than defaulting. The representatives did note that this was possible because their customers are large assigned accounts, and that the process will be very different for smaller customers due to the larger volume of customers.

Event Notification

While customer communication early on regarding the rate was conducted primarily over the phone or in person, once the customer had participated in a few event days and the representative felt they understood the rate and their bills, the representatives generally cut back communication with their customers about the rate significantly. Most representatives (6 of 10) always reached out to their customers by phone or email to inform them when events days were scheduled, as a courtesy beyond the automatic event notification. While two more representatives also did so, it was only for certain customers who they felt might need more assistance. Two of the six representative checked in with customers by phone after an event to review how they had been able to respond, although he acknowledged that this level of contact may be too much for some customers. Another representative emailed customers a snapshot of the weather forecast on weeks where it seemed likely that an event would be called. All of the 10 representatives thought that the event notification system was effective.

Detailed Findings

The greatest communication challenge that the representatives are currently facing is maintaining an accurate list of contacts for customers on the PDP rate. Another challenge they face is that some of their customers also have accounts in other regions. Each IOU uses different terminology to describe their demand response programs and rates. Customers find it confusing to have to learn the different terms that are associated with the rate in each IOU territory.

Bill Analysis Tools & Communication

Two representatives reported thinking the savings analysis provided at the end of the year for each customer is not timely enough to be effective. Based on the timing of PG&E events in 2013 (between June and October), the delay a customer might have experienced between participating and the end-of-year report ranged from two to six months. Both of these representatives conduct their own analysis at the end of the event season to provide more immediate feedback on how the customer had performed.

The feedback from representatives on the "InterAct" bill analysis tool was mixed, with some finding it very helpful (4 of 10) and reported using it regularly, while others said it was somewhat helpful (4 of 10).

Rate Awareness and Understanding – Peak Day Pricing Rate Option

In terms of customers' initial reaction to PDP, representatives identify two types of customers: those who are receptive to the idea (whether or not they ultimately decided to go on the rate), and those who have an inherent aversion to the idea of demand response, and therefore have an initial negative reaction to the rate. The vast majority of customers fall in the former category, while the latter category consists of industries that require reliable access to high-quality power, such as the biotech or high-tech industries.

Because of the extensive PDP-oriented outreach they performed, all of the representatives thought that PDP customers are aware of the rate and understand how it functions to a certain degree. For example, they may not understand exactly how their bill is calculated but they understand what they have to do to participate and save money on the rate.

For the most part, the representatives also felt that their customers are somewhat sophisticated in their understanding of demand response more generally, and the range of demand response programs for which they are eligible. One exception is those customers who have an inherent aversion to demand response, and therefore invest very little time understanding the details of associated rates or programs.

Although customer understanding of the rate is high, the representatives did identify a few areas that tend to cause confusion. Both the capacity reservation system and the choice of peak hours are topics that are more difficult for their customers to grasp.

It is important to note that the customers represented in these interviews are large, assigned accounts that have existing relationships between their account managers and, often, energy specialists on the customer's staff. These characteristics make communicating the specifics of the PDP rate much easier. Furthermore, the trust that has been established in the account manager-customer relationship increases the likelihood that a customer will sign up for the rate. Several account representatives made the point that as smaller businesses begin to default on to the rate, communication will become more challenging, in that similar relationships have not been established with the smaller customers.

Rate Participation and Barriers – Peak Day Pricing Rate Option

PG&E representatives clearly identified three types of customers, each realizing varying benefits from PDP. The first type of customer is the ideal customer for a demand response program. It is a customer who is able

opiniondynamics.com

and willing to curtail use during events, and in doing so, sheds load and saves money over the long term. This customer category typically includes schools, some manufacturing facilities, and some office buildings.

The second type of customer is one who is not likely to participate voluntarily in the PDP rate. They are unable to curtail usage, and will pay more over time on the PDP rate. This category typically includes retail stores, biotech companies, and high-tech companies.

The third type of customer is one who uses enough energy during off-peak hours that even if they make no effort to respond to event days, they will still save money in the long term on the rate. These customers may be called "structural winners". In interviews, we identified that certain accounts within the telecommunication industry in particular have the potential to be structural winners, such as billboards and repeater towers. One representative indicated that he had one customer who was so sure of their ability to save money on the rate without responding to event days, that they enrolled on the rate, but declined any form of event day notification.

One barrier that may prevent customers from being able to participate on the rate is a lack of ability to shed load automatically. Three of the 10 respondents said that their customers would have an easier time participating if they had an energy management system that allowed for automatic event day response.

Suggestions – Peak Day Pricing Rate Option

The respondents had a broad range of suggestions to improve the effectiveness of the PDP rate, and the satisfaction of customers on the rate.

- Real-time metering. Currently, most large accounts have access to 15-minute interval data, but they do not have access to the data until the following day. Real-time usage data would allow a customer to test curtailment strategies while observing their data as they shut down various equipment at their facility.
- More incentives for automated demand response equipment. The representatives expressed this as one of the biggest barriers to more effective participation in the PDP rate. Some customers are able to shed more load on event days, but the burden of doing so manually is prohibitive. Automated energy management systems would help to reduce the burden.
- Standardize language. Many large accounts are customers of multiple utilities. It would greatly reduce confusion and ease communications if the IOUs standardized the language used to talk about demand response programs.

4.4.3 SDG&E Findings

Account Management and Communication – Critical Peak Pricing Rate Option

Initial Outreach

At SDG&E, the primary role of account representatives related to CPP¹⁰ is to communicate rate benefits to customers and identify strategies to shift and reduce load. They have a good understanding of how the rate is

¹⁰ For the purposes of this report, all IOU staff working with customers are referred to as "account representatives."

structured, and can explain the rate's value to customers. All of the SDG&E account representatives interviewed reported that they are in constant communication with their customers. When customers are defaulted, they perform a rate analysis and advise their customers on how to meet their goals.

All of the representatives initially interact with customers via telephone or email; occasionally, representatives conduct in-person visits. When customers are defaulted onto the rate, most representatives (7 of 9) contact the customer's energy or facility manager, if applicable, to discuss load reduction strategies. Additionally, one representative invites the customer's financial manager to join the discussion.

Event Notification

One day prior to an event, customers receive an automated email or phone notification. Most representatives (8 of 9) said they also personally call their customers to make sure they are prepared for the event. The greatest communication challenge during event days that the representatives currently face is maintaining an accurate list of contacts for customers on the rate. Additionally, representatives wrestle with customers' lack of knowledge around how to shed load during events.

Bill Analysis Tools & Communication

Most representatives (6 of 9) communicate with CPP customers using "kWickview" and a spreadsheet for fast updates. Out of the six representatives who use "kWickview," three use their own analytical tools in addition to SDG&E's packaged tools. Other tools are often needed to communicate rate information to customers.

Six representatives reported communicating with customers right after events to explain how their bill was impacted, while three report waiting until the end of the year for the annual anniversary package. Six representatives reported the method of analysis timed around events is the best tool for communicating the rate benefits to customers.

All account representatives said communication about the specific details of the rate is completed via telephone and email. Two representatives mentioned they occasionally do site visits because some customers find it hard to understand graphics and representations.

Rate Awareness and Understanding – Critical Peak Pricing Rate Option

Representatives reported that the CPP rate is highly visible to customers. Customers receive rate information through different channels, including bill inserts, online customer accounts, and the representative's rate analysis. Representatives think customers are aware of their rate. However, representatives said customers are somewhat confused about how the rate is structured and how it compares to their previous rate plan. Some reasons why the rate is confusing include: 1) the complexity of the rate's structure; 2) the various ways to shed load; 3) how to determine the capacity reservation charge; and 4) confusing terminology (such as "on-/off-/partial-peak periods).

Customers' understanding of why events are called and how their rates are influenced by the number of events called varies. Representatives said half of their customers have a good understanding of how the electrical power system works, but that the other half needs detailed explanation. Among customers who do not understand the electrical grid, half of them show minimal interest in learning how the grid functions, and only want to know how to reduce their electricity bill.

Most representatives (7 of 9) say customer reaction to the rate is positive if customers are easily able to shed load. On the other hand, two account representatives say customers have reacted negatively to the rate because they did not understand why events happened and/or they were not able to shed load.

Most representatives (8 of 9) reported that customers are aware that they can participate in multiple demand response programs.

Suggestions for improving the quality of communication around events and bill analysis included making the website more user-friendly, providing access to video tutorials online, and incorporating graphics in the usage analysis.

Rate Participation and Barriers – Critical Peak Pricing Rate Option

Most representatives (8 of 9) say the customers who benefit most are industrial or manufacturing facilities, as they are able to shift load easier than others. Further, most representatives (7 of 9) say commercial and retail businesses benefit the least, due to their inability to shed load during events.

Most representatives (7 of 9) mentioned that many customers have difficulty with event participation because they cannot shed load without compromising production. One representative said that despite providing an energy usage analysis, a customer still did not understand how much load shed was needed to get the rate benefit. This particular phenomenon is more common in smaller businesses that do not have an energy manager on staff.

Suggestions – Critical Peak Pricing Rate Option

Representatives had a broad range of suggestions to improve both the effectiveness of the rate and customer satisfaction.

- Create shadow bills and hypothetical analyses of similar companies for each major industry. Many representatives mentioned that this would be a good way for customers to understand how their bill could change and how they can shed load.
- Let customers select specific hours of curtailment. Asking all customers to shed load over an extended period of time is more difficult than having several customers shed load at different times.
- Conduct an analysis on customers who are eligible but not enrolled, in order to increase participation rates and load shed on event days.
- Offer more frequent customer and account representative trainings and workshops.
- Include an option that offers higher incentives for customers who are willing to install technology that automates customer response to events.

4.4.4 SCE Findings

Account Management and Communication – Summer Advantage Incentive Rate Option

Initial Outreach

At SCE, account managers spend a significant amount of time reaching out to customers who have recently defaulted onto the rate. They also reported to have close, but briefer, contact with those customers who have been on the rate for several years. All of the representatives have a good understanding of how the SAI rate is structured, as well as its value to customers. Every respondent mentioned that their primary role is to identify and perform an analysis on every assigned customer, to see if they benefit from the rate and to help prepare them for events.

opiniondynamics.com

Detailed Findings

All of the representatives initially interact with customers via telephone or email. One representative reported conducting in person visits alongside an SCE site specialist for further assistance. When customers are defaulted into the rate, most representatives (9 of 10) contact the customer. Only two mentioned that the contact information for new participants is often incorrect.

Event Notification

One day prior to an event, customers receive an automated email or phone call notification. Most representatives (7 of 10) said they personally call or email their customers to make sure they are aware and have a strategy to reduce load the following day. The greatest communication challenges that representatives face are getting the right person in the facility on the phone, and communicating strategies for how to shed load. One representative also mentioned difficulty working with some smaller customers who are not as comfortable discussing their electricity usage and bills.

Bill Analysis Tools

Representatives discussed the bill analysis tools they use. One account representative mentioned that it is easier to analyze a customer's energy usage through SCE EnergyManager instead of the standard "My Account" tool because it provides the customer with a visual representation of their consumption. There were several suggestions mentioned to improve the current tool, including an analysis tool that is faster and more accessible so the customers can do it themselves. One representative suggested a tool that allows them to provide customers with 12 months of 15-minute historic interval data.

Most representatives (8 of 10) track customers using a reporting template through the internal CRM system and interact with customers throughout the year, while two others reported waiting until the end of the year to deliver customers' annual anniversary report. One representative mentioned that the CRM reports are not refreshed often enough, making customer-tracking difficult.

Rate Awareness and Understanding

All representatives reported that the rate is very visible to customers. Customers have various explanatory tools and methods at their disposal, including customers' actual electricity bills, their website account, and the rate analyses performed by representatives.

Most representatives (8 of 10) mentioned that they need to give an in-depth explanation on how the rate works and why events are called. After an initial conversation, customers typically feel somewhat comfortable with how the rate works, but some customers are still confused. Some of the reasons for this include: 1) lack of knowledge on how the grid works, and 2) uncertainty around the best strategy to reduce load.

Representatives gave mixed responses when asked how customers reacted to the rate, and satisfaction seems tied to customers' understanding of how to shed load during an event. Half of those interviewed said they get positive feedback from the customers who have a good understanding of when and how they need to shed load. On the other hand, a few (3 of 10) representatives had customers that were upset about the rate because they were unable to shed load when the events were called.

Most account representatives (7 of 10) reported that customers were aware of their eligibility to participate in multiple demand response programs. Typically, they communicate this type of information to the customer as soon as they perform an analysis on their facility.

Rate Participation and Barriers

Almost every representative (9 of 10) mentioned that customers who benefit the most from the rate are industrial and manufacturing companies. It is easier for these types of customers to curtail load, as they can shift timing of production. Additionally, they tend to have an energy manager on staff who advises them on the details of how and when to shed load.

Most representatives (9 of 10) mentioned that the customers who benefit the least from the rate are retail, commercial, and some public facilities, which are types of customers that tend to be less capable of shifting load.

Half of the representatives (5 of 10) suggested that SCE should consider encouraging customers to install automated technology for events. This would mostly help small- and medium-size customers because they are less likely to have facility managers, or if they do, these managers have less to manage during event participation because they often play multiple roles at the company. Another suggestion mentioned by a few representatives (3 of 10) was to provide case study rate analyses for specific industries and businesses of various sizes. This tool would help both consumers and account representatives have a quick and easy way to compare results.

Suggestions

SCE account representatives had a broad range of suggestions to improve effectiveness and customer satisfaction.

- Increase the quality of communication with customers who move out of the First Year Bill Protection. After the first year passes, customers need to review the analysis to see what they need to adjust, and make sure they are prepared for the following year.
- Provide representatives with a better and simpler analysis tool for which customers can clearly see how they are saving on a monthly basis (similar to the annual package, but on a monthly basis).
- Come up with a better and simpler method of explaining to customers how being on the SAI rate affects their bill.
- Target customers who will benefit being on the rate. Representatives said there is a large number of customers who have defaulted onto the rate and do not benefit because they are unable to shed load.
- Make the website and marketing tools more user-friendly.
- Increase the flow of communication between the billing department and the account representatives, so representatives can move customers off the rate quicker if it does not benefit them.
- Encourage customers to install automated technology for events. This would mostly help small- and medium-size customers, because they are less likely to have facility managers, or if they do, these managers have less to manage during event participation because they often play multiple roles at the company.
- Provide case study rate analyses for specific industries and businesses of various sizes. This tool would provide a quick and easy way to compare results.

4.5 **CPP Participant Survey Findings**

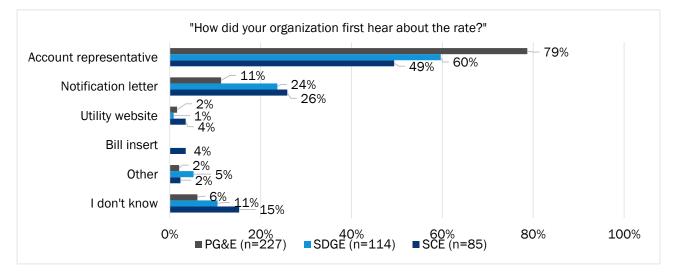
4.5.1 Rate Processes

Enrollment and Options Available to Customers

Marketing and Outreach

Account representatives are the primary outreach channel for CPP, as customers from all three IOUs most often mentioned that they first heard about the rate through their account representative (see Figure 9). The second most common source was the notification letter customers receive prior to default. This suggests that account representatives are doing a good job of identifying customers who will default into the rate, and reaching out to them to discuss it before they receive their notice.





Participants generally think they receive a good introduction to the rate when they first enroll. Specifically, the vast majority of customers indicated that the rate met their expectations (see Table 26), and that there was typically nothing they would have preferred to know earlier (see Table 27).

Table 26. Did the Rate Meet Customers	'Expectations?
---------------------------------------	----------------

"Has your experience with the rate matched how it was described to you?"	PG&E (n=227)	SCE (n=85)	SDG&E (n=114)
	Mult	iple Response	
Rate met customers' expectations	220 (97%)	76 (89%)	111 (97%)
Impact on Utility Bill			
Unexpected negative impact on utility bill/event rate higher than expected	5	2	1
Did not realize as much utility bill savings as expected	1	2	2
Other Rate Processes			
Still does not fully understand the rate	3	1	-
Company was not as good of a fit for the rate as expected	1	1	1
Did not realize they could opt-out of the rate	1	-	-

Detailed Findings

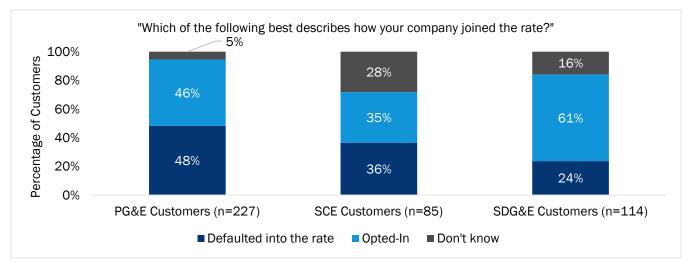
"Has your experience with the rate matched how it was described to you?"	PG&E (n=227)	SCE (n=85)	SDG&E (n=114)
	Mult	iple Response	
The rate changed without the company knowing about it	-	1	-
Other Responses			
Generally dissatisfied with the rate	-	1	-
No response provided	-	2	-
Don't know	-	1	-
Note: Multiple response; frequencies in the table are not weighted			

Table 27. Information Customers Would Have Liked to Know Earlier about CPP

"Is there anything about CPP processes that you would have liked	PG&E (n=227)	SCE (n=85)	SDG&E (n=114)
to have known or understood earlier?"		iple Respons	· · · · ·
Nothing	204 (90%)	68 (80%)	83 (73%)
Impact on Utility Bill		<u> </u>	
The impact of the rate on their utility bill	8	1	2
Event day vs. non-event day rates	1	3	6
The potential bill savings that could be realized	1	-	1
Options Available/Alternative Rates			
Comparison of bills between CPP/PDP rate and alternative rates	6	1	1
Alternative rates/programs	2	-	-
That the rate was an opt-out rate	2	-	-
Better general understanding of the rate	1	4	2
The options available on the rate	1	-	-
Dual participation options	-	1	-
Capacity Reservation Level/Charge	-	-	7
Event-Related Processes			
When events are likely to occur (seasons, event triggers, etc.)	3	2	12
The number of events that would be called annually	2	-	-
How event notification works	-	2	-
That events could be called on consecutive days	-	1	-
Did not know that the rate changed to year-round	-	1	-
Potential Rate Benefits			
The impact of the rate on the environment	2	-	-
Potential benefits of the rate	-	1	-
Other Responses			
The rate is not a good fit for their company	3	1	-
Other	1	2	1
Note: Multiple response; frequencies are not weighted.			

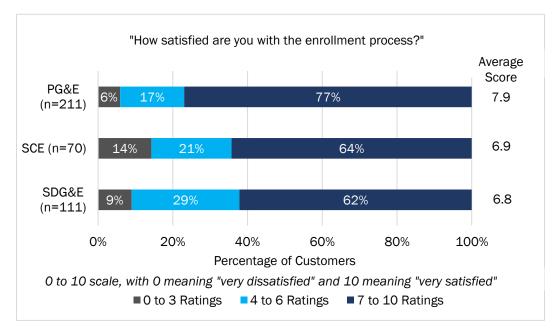
Enrollment and Time on the Rate

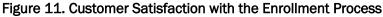
PG&E and SCE customers were evenly split between those who report they were defaulted onto the rate and those who opted-in. Interestingly, most of SDG&E's participating customers think they opted-in to the rate (see Figure 10). This information is self-reported from customers and not based on program records. It is possible that customers could have thought they opted-in to the rate but were actually defaulted. However, this information is provided to highlight how customers think they entered the rate plan.





PG&E customers are highly satisfied with the enrollment process. SCE and SDG&E customers were only moderately satisfied on average, though the majority gave scores of 7 or greater (see Figure 11).



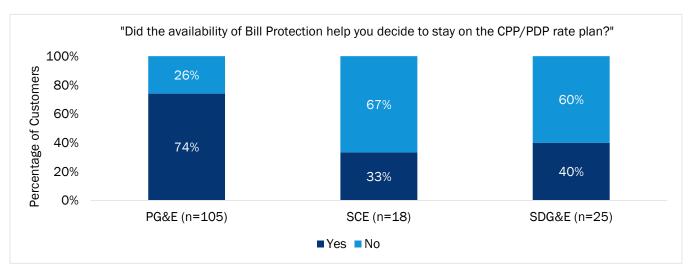


Note: Base does not include "don't know" responses.

Options Available to Customers

As described earlier in Section 4.1, all customers enrolled on CPP are eligible for bill protection in their first year. Among those who defaulted into the rate, our survey results indicate that this bill protection option is effective in encouraging PG&E customers to try out the rate, but fewer SCE and SDG&E customers indicated that this was so (see Figure 12).

Respondent and account level data were very similar for this topic with the exception of SDG&E. At the respondent level more than half (9 of 16, or 56%) of defaulted SDG&E customer contacts reported that Bill Protection helped them decide to stay on the rate compared to only 40% at the account level. This means that the default requirement was influential to half of the CPP customer contacts but it was not influential to a few contacts who represent multiple CPP accounts.





Note: Base does not include "don't know" responses to this question; further, base only includes customers who reported they were defaulted into the rate

Customers who enroll in CPP are often also eligible to participate in other "day-of" demand response programs. However, a large proportion (more than half) of customers across all three IOUs were unaware of the dual-enrollment option (see Figure 13).

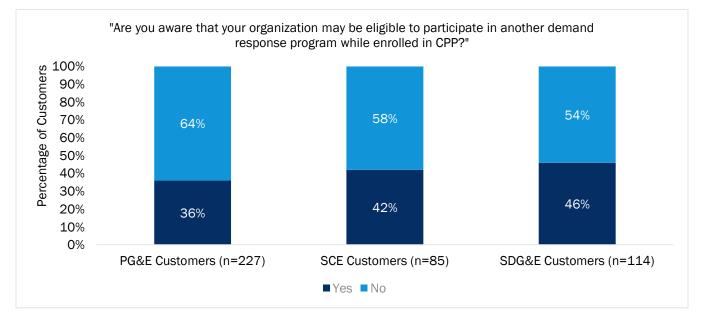


Figure 13. Awareness of the Dual-Enrollment Option

opiniondynamics.com

Most large customers from all three IOUs did not select a Capacity Reservation Level/Capacity Reservation Charge (see Figure 14). Interestingly, several large PG&E and SCE customers are not aware that they have this option (see Table 28). For SDG&E, many decided that selecting a CRL was not necessary based on an analysis of their energy use.

Respondent and account level data were very similar for this topic with the exception of PG&E. At the respondent level, 45% of PG&E's large customer contacts selected a CRL compared to 25% of accounts. Therefore, while almost half of PG&E's large customer contacts have selected a CRL, we estimate that only about 25% of accounts on the rate are affected by the CRL.

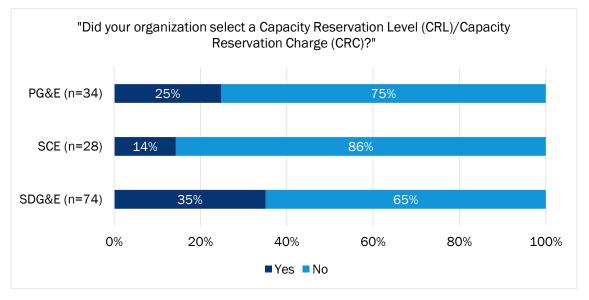


Figure 14. Whether Customers Selected a Capacity Reservation Level/Charge

Note: Base only includes large customers and does not include "don't know" responses

Response	PG&E (n=77)	SCE (n=24)	SDG&E (n=48)
	Mu	Itiple Respo	nse
Does not work well for schools	27 (35%)	1	-
Not aware of the CRL/CRC option	5	7	-
Energy use varies too widely	1	-	-
Have not discussed the option	-	1	-
Does not understand how it works	-	1	3
Not needed based on energy use	-	-	28 (58%)
Cost for reserving capacity not worthwhile	-	-	3
Did not want an additional charge	-	-	1
Other	1	-	1
Don't know	37 (48%)	13 (54%)	11 (23%)
Note: Multiple response; PG&E frequencies are not weighted "no" in Figure 14 above; base only includes large customers not include those who "do not know" if they selected one).			•

Table 28. Reasons Customers Did Not Select a CRL/CRC

We present some highlights from large customers who chose not to select a CRL/CRC below. <u>We note that at the respondent level, two large PG&E customers who represent many CPP accounts reported that the CRL does not work well for schools.</u>

"As schools, our consumption varies widely depending on whether or not kids are there." (PG&E Customer)

"This was not described to me, and I didn't know it was an option." (SCE Customer)

"After running many...analyses on a few accounts, we found that we received the most benefit from zero reservation. Our operating hours and summer shutdown probably are large factors." (SDG&E Customer)

Finally, many customers who set a CRL/CRC save money by using this option (see Figure 15).

Respondent and account level data were very similar for this topic with the exception of SDG&E. At the respondent level, 6 out of 14 SDG&E customer contacts (or 43%) saved money from selecting a CRC. But more accounts have saved money than respondents. At the account level, 54% saved money from the CRC (14 out of 26). Therefore, looking at this data at the account level shows that the majority of SDG&E accounts on CPP are financially benefitting from selecting a CRC.

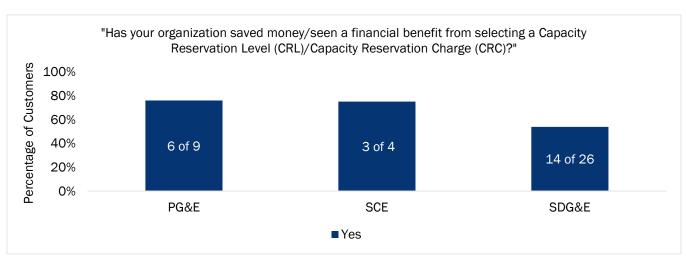


Figure 15. Whether Customers Saved Money by Selecting a CRL/CRC

Note: Base contains a small number of respondents and only includes large respondents who reported selecting a CRL/CRC

Customer Support Processes

Support from Account Representatives

After enrollment, account representatives also play a pivotal role in supporting CPP participants. The majority of participants reported that they typically reach out to their account representatives when they have questions about their rate (see Figure 16). While it was the second most common information source, relatively few customers reported that they typically use the utilities' websites to learn more about CPP.

opiniondynamics.com

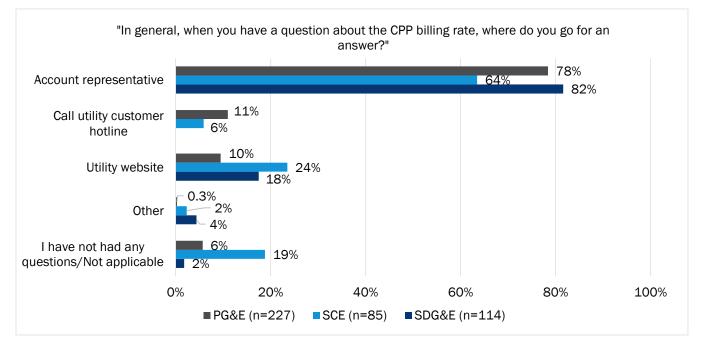
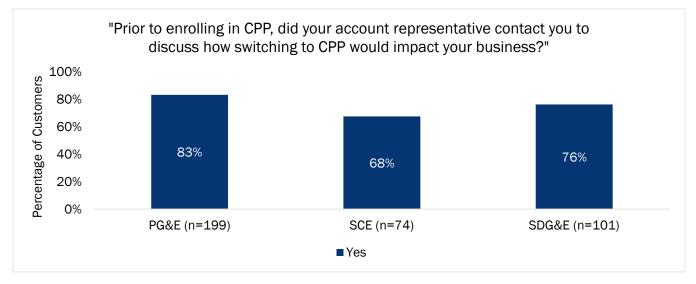


Figure 16. Key Customer Resources for Support on CPP

Further, customers typically recalled having a discussion with their account representative prior to enrolling/defaulting to determine how the rate would affect their business (see Figure 17). PG&E and SCE provide customers with a rate comparison with alternative TOU rates 90 days prior to default. SDG&E provides this at the time of default.





Note: Base only includes customers who were aware that they had an account representative assigned to them.¹¹

Most respondents feel they receive adequate support from their account representative regarding CPP (see

¹¹ Most PG&E (87%, or 199 of 227), SCE (87%, or 74 of 85), and SDG&E customers (89%, or 101 of 114) are aware that they have an account representative assigned to them who can support them regarding CPP.

Table 29). Among those who would like additional support, PG&E and SDG&E customers most often requested more information on how the rate impacts their utility bill. A few PG&E and SDG&E customers mentioned that they must request an annual comparison report to receive it, and would prefer to have it provided automatically. SCE customers who requested more support most often wanted general, non-technical explanations of rate processes.

"Is there anything that your account representative	PG&E	SCE	SDG&E				
could provide to make participation in CPP easier	(n=203)*	(n=74)	(n=101)				
for your organization?"	Multiple Response						
No/Nothing	185 (82%)	58 (78%)	78 (77%)				
Support Understanding Rate's Impact on Utility Bill							
Comparison of rate vs. alternative rates	3	1	12				
Annual review of rate impact on utility bill	2	-	9				
Explanation of potential rate benefits	2	-	-				
Estimates of savings from the rate	1	-	-				
Managing dual enrollment	-	1	-				
Comparison of peak vs. off-peak rates	-	1	-				
Explanation of Rates Processes							
General refresher/review of the rate	2	4	1				
Information on opting-out	2	1	-				
Notification of changes to rate processes	-	1	-				
Representative could be more knowledgeable of							
the rate	-	-	1				
Explanation of event triggers	-	-	2				
Supporting/Improving Performance							
Review of event performance	3	-	-				
Industry-specific load reduction strategies	-	2	-				
More support on event performance	-	-	1				
Other CPP Support							
Event notification support	1	1	-				
Confirm enrollment in the rate	1	-	-				
Support with energy monitoring	-	-	1				
Assistance with analysis tool	-	-	2				
Other Non-CPP Support							
Call or visit from representative (general)	1	1	-				
Support in reducing energy costs in general	-	-	1				
Other Feedback							
Other	-	2	1				
Generally dissatisfied with the rate	-	1	-				
Generally dissatisfied with representative	-	1	-				
Don't know	-	-	1				
Note: Multiple response; frequencies are not weighted; bas	se only includes c	ustomers who	were aware				
that they were assigned an account representative.							
*Weighted base for PG&E is 199, n=203 because table is not weighted.							

Table 29. Additional Support from Account Representatives Requested by Customers

Detailed Findings

Specific examples of additional support requested by customers are below:

"An easy-to-understand cost comparison report of participation vs. nonparticipation in the program for an individual account." (PG&E Customer)

"Translating information into an understandable format—it's fine to read information online, but unless you have an explanation related to your account, it isn't as useful." (SCE Customer)

"Routine production of a SDG&E annual CPP result comparison vs. the otherwise applicable tariff (OAT) study would be great—the comparison study currently has to be specially requested." (SDG&E Customer)

PG&E customers on average reported that support from their account representatives was very useful to their understanding of CPP. However, SCE and SDG&E customers gave only moderate CPP usefulness scores to their representatives on average, though the majority gave scores of 7 or greater (see Figure 18). Customers gave similar scores for their overall satisfaction with account representative support (see Figure 19). The vast majority of customers who gave account representative satisfaction scores or usefulness scores of 3 or lower (out of 10) did not request any additional support from account representatives.

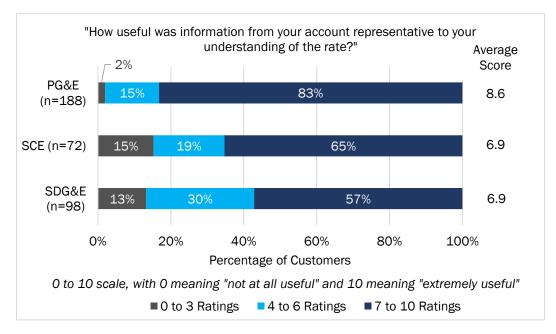


Figure 18. Usefulness of Account Representative Support in Understanding CPP

Note: Base does not include "don't know/not applicable" responses or customers who were not aware of their assigned account representative.

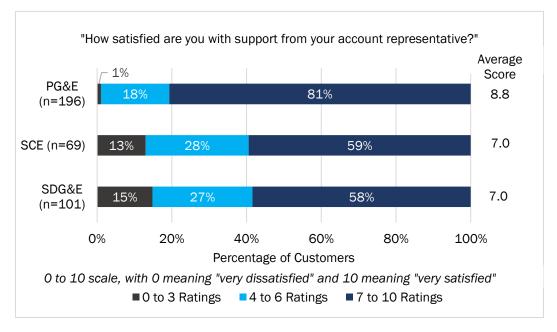
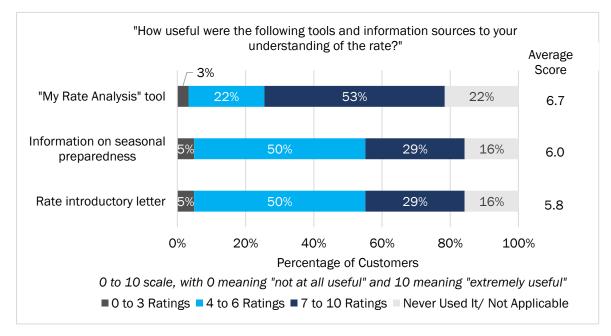


Figure 19. Customer Satisfaction with Account Representatives Support

Note: Base does not include "don't know/not applicable" responses or customers who were not aware of their assigned account representative.

Usefulness of Other Information and Support Tools

Aside from account representative support (see Figure 18 and Figure 19 above), customers from all three IOUs were only moderately satisfied with the usefulness of other tools and information they received. The letter provided to customers explained how to participate in the rate, as well as information on seasonal preparedness, ranked lowest on average compared to the other support tools (see Figure 20 through Figure 22 below).



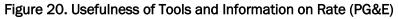
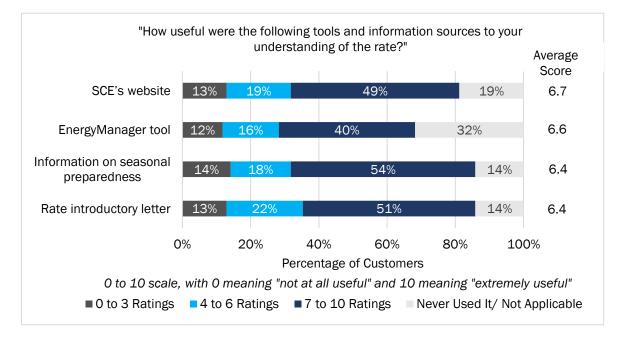


Figure 21. Usefulness of Tools and Information on Rate (SCE)



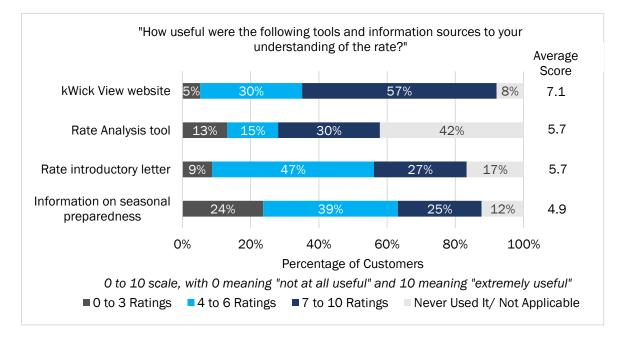
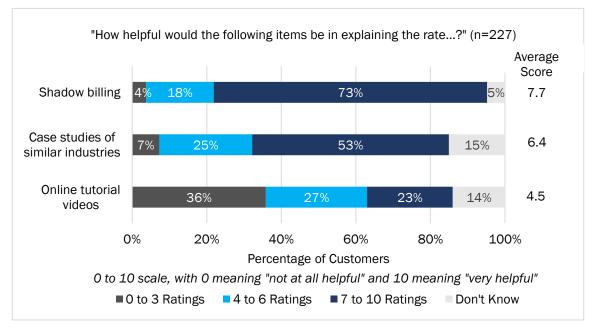


Figure 22. Usefulness of Tools and Information on Rate (SDG&E)

Improving Customer Support

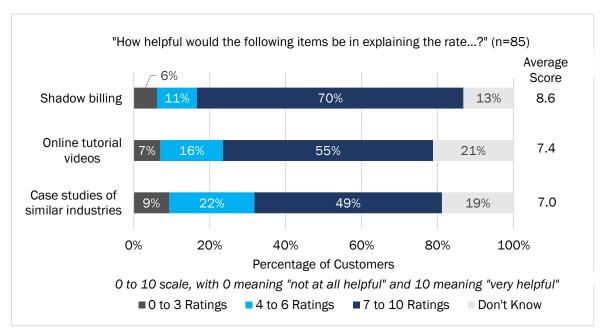
Account representatives suggested a few support tools to better explain the rate to customers. We explored how helpful these suggested tools would be to participants' understanding of the rate. Customers from all IOUs report that "shadow billing" would be the most helpful tool in understanding CPP (see Figure 23, Figure 24, and Figure 25). Shadow billing refers to allowing customers to compare their utility bill on CPP with what their bill would have been within the same period on an alternative TOU rate.

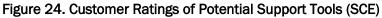
Respondent and account level data were very similar for this topic with the exception of PG&E. At the respondent level, more PG&E customer contacts want online tutorials (average score of 6.4 out of 10; n=88) than the account level (mean score of 4.5). This means that if PG&E started giving online tutorials, the majority of customer contacts would like it but they would not represent that many CPP accounts on the rate.





Note: Average scores do not include "don't know" responses.





Note: Average scores do not include "don't know" responses.

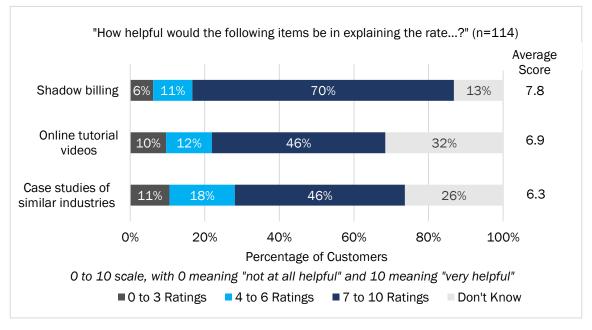


Figure 25. Customer Ratings of Potential Support Tools (SDG&E)

Note: Average scores do not include "don't know" responses.

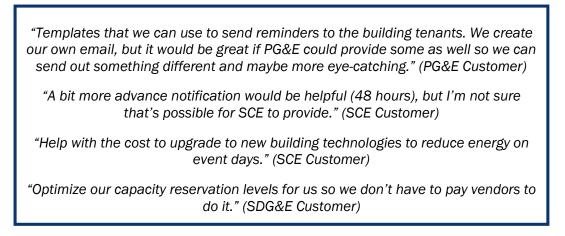
Finally, while customers were interested in tools for improving their understanding of the rate (as shown above), most customers do not need any additional tools or resources for reducing energy use during events (see

Table 30). Among those who did, PG&E and SDG&E customers typically requested more education on rate processes, especially helping stakeholders within their facilities better understand why events are called and what event participation means for the facility. SCE customers who had suggestions were particularly interested in having event notifications provided further in advance. Several SDG&E customers requested more support from their account representative. Some respondents from all three IOUs were interested in participating in the Auto-DR program, which offers a technical audit of the customer's facility and incentives for installing energy management technology.

	PG&E	SCE	SDG&E
"From your perspective, what tools or resources could [UTILITY] provide to	(n=227)	(n=85)	(n=114)
make it easier for your organization to reduce energy on event days?"	Mu	Itiple Respon	se
No other tools or resources	173 (76%)	53 (62%)	77 (68%)
Education/Support Regarding Rate Processes			
Help educating employees/tenants/stakeholders about rates and events	8	1	5
General review of the rate	3	-	-
Better explanation of different rate levels	2	-	-
Support with online tools	-	-	2
More information on when events are called	1	-	-
Support setting Capacity Reservation Level/Charge	1	-	5
Changes to Rate Design			
Earlier notification	2	6	1
Changes to number/frequency of events called	2	1	1
Other notification process improvements	2	1	-
Reduce charge during events	2	-	-
Increase bill reduction	1	-	-
Performance Coaching			
Regular review of event performance	6	1	3
More support on load reduction best practices	3	4	-
Real-time monitoring of energy use during events	1	-	3
Help understanding required load reduction during events	-	-	1
Comparison of energy usage to see if savings occurred	-	1	1
Shadow Billing/Rate Comparison			
Rate comparisons	2	-	-
Additional bill information	1	-	-
Clear explanation of benefits/savings from participating	-	2	-
Technical Assistance/Technology Incentives			
TA/TI or Auto-DR	2	5	2
Other			
Generally dissatisfied with the rate	6	1	1
Structural barriers to reducing consumption during events	5	4	3
More support from account representative	1	-	10
Other	5	2	-
Don't know	-	6	-
Note: Multiple response; frequencies are not weighted.	1		

Table 30. Customer Suggestions for Encouraging Energy Reduction during Events

Specific example of tools and resources that customers request are below:



Event Notification and Event Participation Process

Email is by far the most common channel for event notification (see Figure 26). About two-thirds of PG&E and SDG&E customers receive notifications in more than one way (60% and 68%, respectively). Less than half (41%) of SCE respondents are notified in more than one way. Further, this finding aligns with customers' preferred method for communications from the IOUs. Specifically, the majority of customers from PG&E (80%), SCE (74%), and SDG&E (79%) reported that email is the best way to share information with them about CPP.

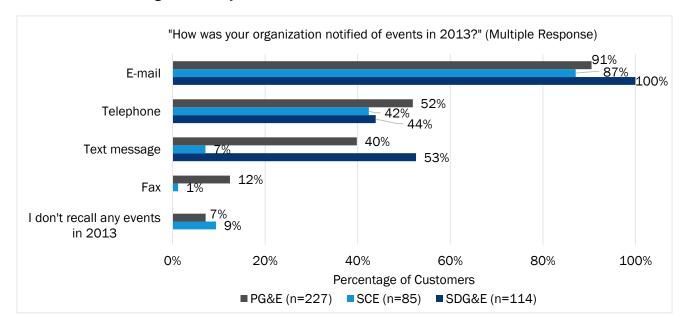
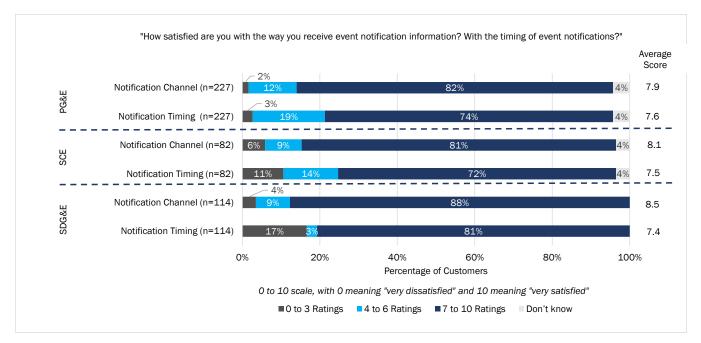
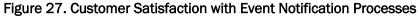


Figure 26. Ways Customers Received Event Notifications in 2013

Customers were generally highly satisfied with the event notification processes. However, customers were slightly less satisfied with the timing of notifications (though it was still high, on average, as shown in Figure 27). As shown earlier in

Table 30, several SCE customers requested earlier notification.





Note: Average scores do not include "don't know" responses.

The majority of participants that recall events tried to reduce energy use on event days (see Figure 31). The most common strategies customers use to reduce load are turning off non-essential equipment and lighting (see Table 31). Typically, respondents did not reduce or reschedule production during an event. Among those who recalled events and tried to reduce load, the majority of PG&E (90%, n=203), two-thirds of SCE (82%, n=65), and the vast majority of SDG&E (91%, n=107) respondents complete more than one of the actions.

Table 51. Edd Reddellon Strategies 53cd by Sustemers during of T Events				
"To prepare for these event days, did your organization take any of the following actions to	PG&E (n=227)	SCE (n=85)	SDG&E (n=114)	
reduce energy usage?"	Multiple Response			
Turned off non-essential equipment	80%	56%	82%	
Turned off non-essential indoor/outdoor lighting	73%	54%	62%	
Raised cooling thermostat settings	28%	38%	51%	
Reduced or rescheduled production during events	15%	18%	25%	
Unplugged battery chargers	6%	2%	0%	
Adjusted work schedules	5%	11%	12%	
Pre-cooled work areas	3%	4%	8%	
Nothing	3%	4%	8%	
l don't know	0%	5%	2%	
Do not recall events in 2013	7%	9%	0%	
Did not try to reduce energy use on event days	4%	14%	6%	

4.5.2 Barriers for Event Participation

The largest obstacles faced by participants from all three IOUs are structural in nature, relating to the company's product or service. Of all the barriers explored in the survey, barriers related to the customers' abilities to adjust their product or service schedules had the highest average rating (see Table 32). Customers face low to moderate barriers related to the convenience of participation, such as being able to participate in events called on consecutive days and concerns about customer or employee satisfaction. We note that nearly a third of PG&E customers responded that barriers regarding customers and employee satisfaction were "not applicable" to their business. Given the large percentages of Don't Know and Not Applicable responses to the barrier questions in the survey, we include these percentages in the table below. Each IOU's survey respondent size in the table below should be adjusted by the "Don't Know and Not Applicable" percentages to determine the actual respondent size included in each average score calculation.

"How much of an obstacle have the following been to your organization's ability to reduce energy usage on event days?" 0 to 10 scale, with 0 meaning "not at all an obstacle" and 10 meaning "a very big obstacle"	Barrier Type	Data Shown	PG&E Customers (n=227)	SCE Customers (n=85)	SDG&E Customers (n=114)
Facility's ability to adjust production or service schedules	Structural	Average Score	7.1	7.2	7.2
		% Don't know	0.5%	4.7%	0.0%
		% Not Applicable	1.8%	4.7%	6.1%
Ability to participate in multiple, consecutive event days		Average Score	5.3	6.4	6.4
	Convenience	% Don't know	0.3%	9.4%	0.0%
		% Not Applicable	0.3%	2.4%	7.9%
Concerns about customer satisfaction		Average Score	5.1	5.8	5.6
	Convenience	% Don't know	0.2%	8.2%	0.9%
		% Not Applicable	29.9%	5.9%	10.5%
Amount of manual effort required to participate in events	Convenience	Average Score	4.9	4.6	3.7
		% Don't know	0.2%	7.1%	6.1%
		% Not Applicable	1.9%	2.4%	2.6%
	Convenience	Average Score	4.2	5.0	3.7
Concerns about employee satisfaction Concerns about employee satisfaction		% Don't know	0.2%	7.1%	0.9%
		% Not Applicable	28.7%	7.1%	7.9%
Finding available staff to manage event convert participation	Convenience	Average Score	3.9	4.0	3.5
		% Don't know	0.2%	5.9%	0.0%
		% Not Applicable	4.3%	3.5%	7.0%
Understanding of the process for	Knowledge	Average Score	3.0	3.3	2.2
participating in events		% Don't know	1.6%	7.1%	0.0%
participating in events		% Not Applicable	0.5%	4.7%	7.9%

Note: Average scores do not include "don't know" or "not applicable" responses.

Participants from all three IOUs also do not face major barriers related to knowledge of the rate or awareness of events. Customers from all three IOUs indicated that understanding the process for participating in events is not a large barrier to reducing load during events (see Table 32 above). Further, the vast majority of customers are aware of when events occur. Specifically, the majority of customers from all three IOUs report that the correct person received event notifications in 2013 (see Figure 28 below). The few who did not recall the correct person receiving notifications typically did not recall any events in 2013.

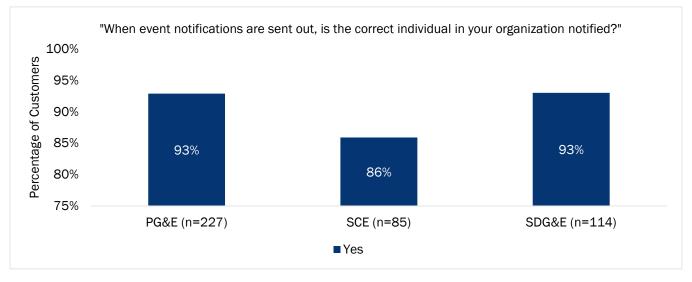


Figure 28. Accuracy of Event Notification

Further, many customers have a good understanding of what load reduction strategies they would use, having a formal event day action plan in place (see Figure 29).

Respondent and account level data were very similar for this topic with the exception of PG&E. We note that at the respondent level a larger proportion of PG&E customers (78%) reported having an event day action plan. Therefore, 78% of customer contacts have an event day action plan, but this only impacts 60% of the accounts on the rate.

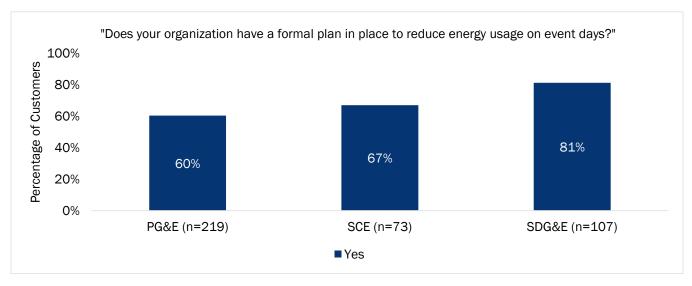


Figure 29. Proportion of Customers with Event Day Action Plans

Note: Base only includes customers who reported they tried to reduce energy during events in 2013.

However, some customers may benefit from having a better understanding of how much they need to reduce during events. Most customers from all three IOUs know how much electricity their business uses each month.

Nonetheless, some PG&E and SDG&E customers, and more than half of SCE customers, do not know how much load they need to reduce during an event to avoid penalties (see Figure 30).

The respondent and account level analysis produced similar results with the exception of PG&E. At the respondent level, 56% of PG&E customer contacts were aware of how much electricity they must reduce during events compared to 73% of accounts. Therefore, roughly half of the CPP customer contacts are aware of how much they need to save representing three-quarters of the CPP accounts.

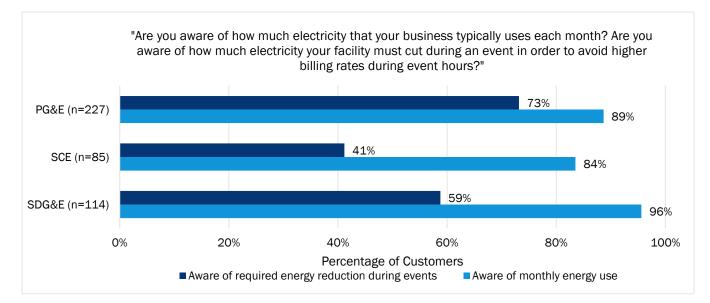


Figure 30. Customer Knowledge of Energy Use and Required Reduction during Events

Barriers Faced by Customers Who Did Not Try to Reduce Energy Use during Events

As mentioned earlier, the vast majority of respondents who recall events tried to reduce energy use on event days (see Figure 31).

The respondent and account level analysis produced similar results with the exception of PG&E. At the respondent level, 88% of PG&E customer contacts tried to reduce their energy usage during events compared to 96% of accounts. Therefore, 88% of the PG&E customer contacts tried to reduce usage representing 96% of the CPP accounts.

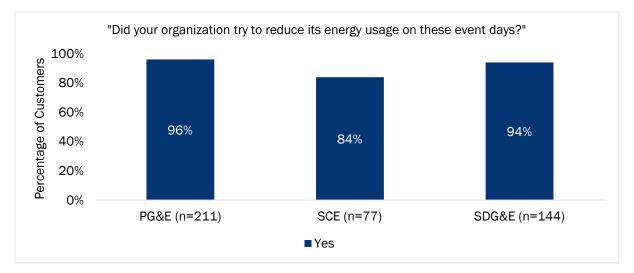


Figure 31. Number of Customers That Tried to Reduce Energy Use on Event Days

Note: Base only includes customers who recalled events in 2013.

We identified several trends among customers who reported they did not try to reduce energy use on event days, though these trends vary by IOU. For all three IOUs, these customers most often have been on the rate for several years. Further, these customers face the same barriers as those who tried to reduce, but our findings suggest that these barriers are more intense for this subgroup. For SDG&E, all four customers rated the intensity of these barriers as "10 out of 10." Interestingly, none of these customers indicated that they selected a Capacity Reservation Level/Charge to protect some of their energy use from penalties during events.

Characteristic	PG&E (n=8)	SCE (n=12)	SDG&E (n=4)
Size	Small/Medium (5 of 8)	Large (9 of 12)	Mixed (2 Medium, 2 Large)
Industry	 Offices/Hotels/Services (3 of 8) Agriculture (2 of 8) 	Schools (5 of 12)	Offices/Hotels/Services (3 of 4)
Time in Rate	3 years or more (5 of 8)	3 years or more (12 of 12)	3 years or more (4 of 4)
Top Barriers (average score)*	 Ability to adjust production or service schedules (10.0, n=8) Ability to participate in multiple, consecutive events (9.8, n=7) Concerns about customer satisfaction (9.2, n=4) 	 Ability to adjust production or service schedules (8.2, n=11) Ability to participate in multiple, consecutive events (7.3, n=11) Concerns about customer satisfaction (6.6, n=11) 	 Ability to adjust production or service schedules (10.0, n=4) Ability to participate in multiple, consecutive events (10.0, n=4) Concerns about customer satisfaction (10.0, n=4)

*Average barrier scores do not include "don't know/not applicable" responses.

4.5.3 Drivers for Rate and Event Participation

The financial benefits of reducing energy bills was by far the most commonly reported benefit to the rate. However, several customers also mentioned socially oriented benefits such as conservation, grid stability, and increasing awareness among the community about saving energy.

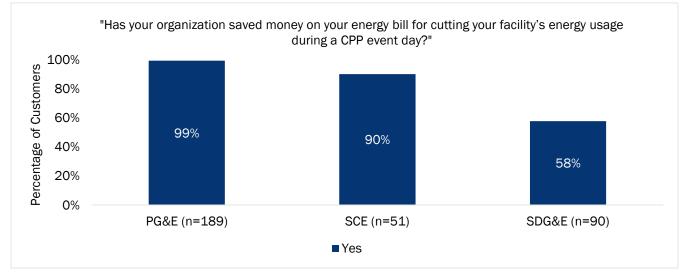
We note that at the respondent level, considerably fewer PG&E customer contacts reported seeing benefits regarding saving energy/conservation/helping the environment (6 of 102 respondents) or employee/tenant/community awareness of conservations efforts (4 of 102 respondents). This means that while there were only a few respondents who mentioned these benefits, they represented a large number of accounts on the CPP rate.

		SCE	SDG&E
"What are the main benefits of the rate for your business?"	(n=227)	(n=85)	(n=114)
	Mu	Itiple Respon	se
Lower energy bills/reduced energy costs/saving money	153 (67%)	48 (56%)	91 (80%)
No benefits/not sure if there are benefits	16	12	16
Environmental/Community Benefits			
Saving energy/conservation/helping the environment	54 (24%)	8	1
Employee/tenant/community awareness of conservation efforts	36 (16%)	-	-
Helping the grid/avoiding rolling blackouts	2	1	2
Reduced energy consumption	2	-	-
Helping the community	2	-	3
Other Benefits			
Able to reallocate the money saved on energy to other areas of their business	1	1	-
Better financial management	1	-	-
Stable energy rates	-	2	1
Ability to adjust energy usage	-	1	-
Getting the best rate for their company	-	1	-
Other Feedback			
Generally satisfied with the rate	6	-	2
Generally dissatisfied with the rate	7	-	-
Other	3	4	-
Don't know	16	13	3
Note: Multiple response; frequencies are not weighted.			

Table 34. Key Benefits of the Rate for Customers

The vast majority of PG&E and SCE customers who tried to reduce their energy use during events report that they saved money from the CPP rate. However, only about half of SDG&E customers report seeing this benefit (see Figure 32). Among those who recall saving money by reducing energy use during events, PG&E and SCE customers report being highly satisfied on average with the amount they saved. SDG&E customer report being only moderately satisfied (see Figure 33).

We note that at the respondent level a larger proportion of SDG&E customers (69%) think they have saved money on the rate. Therefore, a few of the customers representing a large number of accounts do not think they have saved money and are bringing down overall proportion at the account level.





Note: Base only includes customers who recalled events in 2013 and tried to reduce energy on event days; base does not include "don't know" responses.

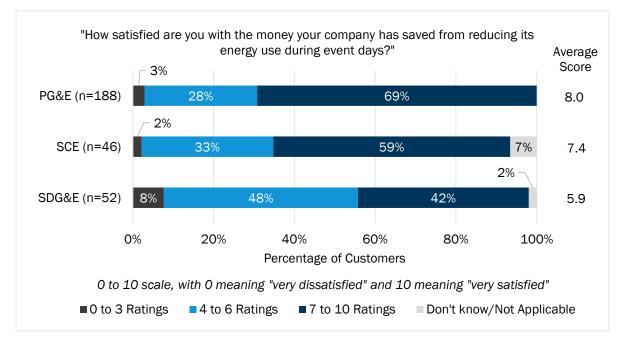


Figure 33. Satisfaction with Money Saved by Reducing Energy Use during Events

Note: Base only includes customers who recalled events in 2013, tried to reduce energy on event days, and report saving money by reducing energy use during events; average scores do not include "don't know" responses.

4.5.4 Rate Satisfaction

PG&E and SCE customers were satisfied with the rate overall. However, SDG&E customers reported relatively moderate satisfaction on average (see Figure 34).

opiniondynamics.com

We note that at the respondent level overall satisfaction with the CPP rate among PG&E customers is slightly lower (average score of 6.5 out of 10; n=91). Meaning that there a few customers who represent a large number of accounts that are very satisfied with the CPP rate overall and are raising the mean score at the account level.

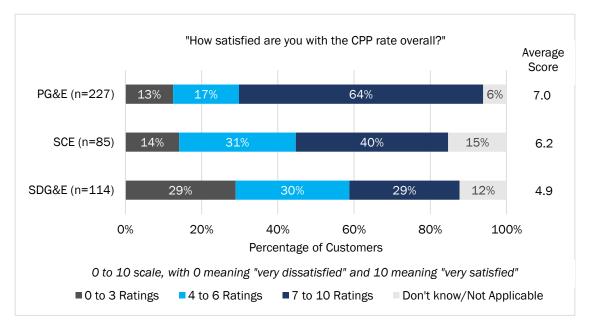


Figure 34. Overall Satisfaction with CPP

Survey responses revealed the following drivers of satisfaction among PG&E respondents:

- The more satisfied a respondent was with the information from their account representative, the more satisfied they were with the rate (moderate correlation of 0.4)
- Among the 24 PG&E customers who gave satisfaction scores less than 4, we noted the following trends:
 - Almost two-thirds (14 of 24) report that they see no benefits from the rate
 - More than a third (9 of 24) mentioned that they could not stop their operations during events, or that it would be more costly for them to shut down

Survey responses revealed the following drivers of satisfaction among SCE respondents:

- Satisfaction with the following tools and information generally lead to greater satisfaction with the rate (moderate correlations of 0.6): (1) the EnergyManager tool; (2) the SCE website; (3) the rate introductory letter; and information on seasonal preparedness
- Among the 12 SCE customers who gave satisfaction scores less than 4, we noted the following trends:
 - All but one were large customers
 - More than half (7 of 12) report that they see no benefits from the rate
 - Nearly half of the large customers (5 of 11) were not aware of the Capacity Reservation option

opiniondynamics.com

Survey responses revealed the following drivers of satisfaction among SDG&E respondents:

- The more satisfied a respondent was with the rate introductory letter they received, the more satisfied they were with the rate (moderate correlation of 0.5)
- Among the 33 SDG&E customers who gave satisfaction scores less than 4, we noted the following trends:
 - The vast majority (27 of 33) were large customers
 - Nearly half (16 of 33) report that they did not benefit from the rate, or were unsure if they benefited
 - About a third (10 of 33) were dissatisfied that events could be called on weekends

4.6 **Opt-Out CPP Participant Findings**

While interviewing opt-out customers, we asked why they chose to opt-out or de-enroll, and what changes could be made to encourage participation in the rate. We discussed four main topic areas, listed below.

- Barriers to Event Participation. What specific reasons prevented participation?
- Incentives and Rate Processes. What is the customer's opinion of incentive levels and the participation process?
- Drivers for Event Decision-Making. What factors are involved when customers are deciding if and how to respond to an event?
- Suggestions for Improvement. How do customers think that the program should change to increase the likelihood of participation?

In the sections below, we discuss the results of each of these areas, both across the IOUs and within each specific IOU territory.

The 22 opt-out customers varied in by sector, time-on-program, and size. As described above in the methods section, we concentrated on different time-on-rate categories for each IOU; SCE and SDG&E contacts were exclusively less than one year, and PG&E contacts were one year or more. Table 35 describes the totals per time-on-rate category. About half of the interviews were conducted with customers who immediately opted-out of the rate (less than one year on the rate).

• •	
Time in the Program	Completes
Less than 1 Year	11
1-2 Years	10
3 Years or More	1
Unknown	0
Total Accounts	22

Table 35. Opt-Out Interview Respondents by Time-on-Rate

We interviewed primarily large customers.

Participating IOU	Large	Medium/Small	Total		
PG&E	8	2	10		
SCE	7	0	7		
SDG&E	4	1	5		
Total	19	3	22		

Table 36. Opt-Out Interview Respondents by Size

We interviewed a variety of industry sectors, although schools, commercial office space, manufacturing facilities, and water treatment facilities were the most represented. As noted earlier in the report, based on our survey findings, schools face particularly large structural barriers. Thus, it makes sense that schools would be one of the most represented sectors in our opt-out sample. The completed interviews represent a wide range of specific sector concerns and energy requirements.

Table 37. Interview Farticipants by Sector					
Facility Type	PGE	SCE	SDG&E	Total	
School/Educational Facility	2	4	0	6	
Commercial Office	2	0	1	3	
Manufacturing	1	1	0	2	
Water & Wastewater Treatment	1	0	1	2	
Retail – Single Tenant	0	0	1	1	
Food Processing	1	0	0	1	
Healthcare/Hospital	1	0	0	1	
Green House	0	1	0	1	
High Tech	1	0	0	1	
Warehouse	0	1	0	1	
Cold Storage	0	0	1	1	
Charging Station for Industrial Lead Acid Batteries	1	0	0	1	
Energy Generation – Natural Gas	0	0	1	1	
Total	10	7	5	22	

Table 37. Interview Participants by Sector

Overall, the active hours for respondent business operations correspond with normal expected peak activity (see Table 38). However, those within SCE's territory were more likely to report morning hours. This is likely because most (4 of 7) SCE respondents represented schools or educational facilities.

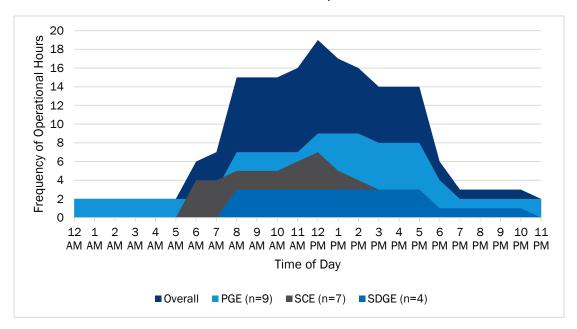


Table 38. Hours of Operation

While most (14 of 22) respondents own their facilities, a large proportion (7 of 22) rent. Despite this, no respondents cited a lack of ownership of their facility as a barrier to participation.

Table 33. Facility Ownership Type by 100					
Ownership Type	PGE	SCE	SDGE	Total	
Own	5	6	3	14	
Rent	4	1	2	7	
Refused/Missing	1	0	0	1	
Total	10	7	5	22	

Table 39. Facility Ownership Type by IOU

Almost half (9 of 22, Table 40) of respondents claimed to be aware of the ability to participate in CPP/PDP while also participating in another demand response program. However, few respondents (3 of 22,

Table 41) claimed participation in other DR programs. Two PG&E customers claimed participation in the Capacity Bidding Program, and one SCE customer claimed involvement with the Summer Discount Program.

Awareness	PGE	SCE	SDGE	Total
Yes	4	1	4	9
No	4	4	1	9
Missing	2	2	0	4
Total	10	7	5	22

Table 40. Awareness of Co-Participation Eligibility

Programs	PGE	SCE	SDGE	Total	
Capacity Bidding	2	0	0	2	
Summer Discount Program	0	1	0	1	
Don't know	2	0	1	3	
None	6	6	4	16	
Total	10	7	5	22	

Table 41. Participation in Other IOU Programs

4.6.1 Overarching Findings

Based on our interviews, we identified some overarching findings across the IOUs, which we present below. In later sections, we present the findings for each IOU.

Table 42 summarizes the reasons for why customers opted-out of the rate.

Reason	PGE	SCE	SDGE	Total
Production/operation prohibits load shed	4	1	1	6
Alternate energy source (third-party vendor or alternate generation)	1	3	1	5
Account representative advice	3	0	1	4
Lack of centralized energy controls	1	1	1	3
Must maintain comfort/safety of tenants/guests/patients	2	1	0	3
Unaware of automatic default for some time	0	2	0	2
Storage requires constant climate control/refrigeration	0	1	1	2
No financial benefit	1	0	0	1
Participating in alternate demand program	1	0	0	1
Use little energy during peak rate hours	0	0	1	1
Air quality regulations prohibit on-site generator	0	1	0	1
Enrolled in Capacity Bidding Program	1	0	0	1
High effort/low reward	1	0	0	1
Understanding complex pricing structure	1	0	0	1

Table 42. Reasons for Opting-Out (Multiple Response) (n=22)

Barriers to Event Participation

The primary rationale for not participating in events include the following:

- Production, safety, and comfort. The most common barriers cited are that shedding load would compromise production (6 of 22) or the safety or comfort (3 of 22) of those occupying the facilities.
- Alternative energy sources. Several respondents (5 of 22) also said saving energy and money during peak hours is not a priority because non-IOU sources provide some electricity. Examples include photovoltaic, natural gas, dedicated generators, or a third-party energy vendor like Constellation Energy. While not all of these could be described as "structural winners", they are unlikely to contribute load shed.
- Lack of central controls. Some (3 of 22) customers said the lack of central lighting controls makes participation too labor-intensive. An energy management system that allows automated load-shed would help these customers successfully manage events.

Storage requires constant load. Some businesses (2 of 22) focus on storage of goods that require constant environmental management. These businesses find it difficult to shed load. While management strategies (such as pre-cooling, or limiting the number of events in a short period) may make it more possible for these businesses to participate, any savings they may achieve are not seen as worth the risk to their merchandise.

Incentives and Rate Processes

- Account representatives are effective communicators. Most (14 of 17) customers who had a rate analysis or energy audit said their account representative performed it. Some customers (4 of 22, all being large) cited account representatives as being the preferred method of communication. It is worth noting that large customers have existing relationships with their account managers. Small/medium customers may have a different experience.
- More rate options. Half (11 of 22) of the respondents were knowledgeable about their current rate plan, and none said it did not meet their current needs. The most common of these current plans is time-of-use (6 of 22). While customers are looking for a better rate to switch to in the future (11 of 22), they are not considering CPP. This is likely due to the barriers that prevent them from shedding adequate load during CPP events, as described above.
- Few demonstrate lack of CPP event awareness. A few participants (2 of 22) said they were surprised when the first events were called, because they had not known they had been automatically defaulted to the rate.

Drivers for Event Decision-Making

- Rate analysis or energy audits inform customer decisions. Most respondents claimed to have had a rate analysis or energy audit (17 of 22). Among those that received an analysis, most said the analysis influenced their decision (12 of 18). In many cases (4 of 18), the account representative had subsequently recommended that they not participate, due to incompatibilities with their operations.
- Short notice. Several respondents (9 of 22) reported taking some kind of action during events before they opted-out. Among those who remember having taken action, some (3 of 9) customers felt as if the events were called "at the last minute."

Suggestions

Suggestions for improving the rate varied widely.

- Case studies or tailored information. Some (5 of 22) respondents suggested that the rate should focus on the needs of their specific facility type, although the types of facilities they were referring to varied from schools to warehouses to manufacturing. Case studies of similar businesses, or help with finding solutions to specific production barriers, may help these customers successfully participate.
- Encourage automation. Some customers would be able to shed load on event days, but the burden of doing so manually is prohibitive. Automated energy management systems would help to reduce this burden.
- Additional tools to understand the rate plan. A few (3 of 22) respondents asked for tools to understand their bills more effectively, like bill comparisons or shadow bills. Other suggestions for information

include clarifying the event history (1 of 22), a progress report on savings achieved per event (1 of 22), or rate information specific to their facility type (1 of 22).

Identify and remove unlikely participants by usage patterns. Participants who do not create sufficient demand during peak time, either through inactivity or by using alternative energy sources, could be identified by analyzing on-peak, off-peak, and semi-peak usage, and could be approached about switching to a more appropriate TOU alternative.

4.6.2 PG&E Findings

Respondents within PG&E's service territory represent a wide range of facility types, including schools, commercial office space, healthcare, wastewater treatment, and manufacturing. Findings from these respondents include the following:

Barriers to Event Participation

- Production, safety, and comfort. The most-cited primary reason for de-enrollment was production or operation constraints (4 of 10), as well as maintaining the comfort and safety of tenants (2 of 10).
- Alternative energy sources. One respondent said they receive direct access to electricity through a third party, and that they pay less for energy from this direct-access source than through PG&E.
- Lack of central controls. One respondent claimed that the lack of central lighting controls makes participation too labor-intensive. An energy management system that allows automated load-shed would help this customer to manage events successfully.
- Capacity Bidding. One respondent participates in Capacity Bidding, and thus does not participate in the CPP rate.

Incentives and Rate Processes

- More cost-effective rates. Half (5 of 10) of the respondents are knowledgeable about their current rate plan, and none said it did not meet their current needs.
- Account representatives are influential. Most (7 of 8) who had a rate analysis or energy audit said their account representative performed it. Among PG&E respondents who provided suggestions regarding communication, a few (2 of 6) cited account representatives as being the preferred method of communication. A few (3 of 10) respondents cited their account representative as being influential in their decision to de-enroll.

Drivers for Event Decision-Making

- Rate analysis or energy audits inform customer decisions. Most respondents claimed to have had a rate analysis or energy audit (8 of 10). Among those that received an analysis, most (5 of 8) said the analysis was helpful. In some cases (3 of 10), the account representative had subsequently recommended that they not participate, due to incompatibilities with their operations.
- Short notice. Some respondents (3 of 10) reported taking some kind of action during events before they opted-out. Among those who remember having taken action, a few (2 of 5) felt as if they did not have enough time to prepare.

Suggestions for Rate Improvement from Customers

While only a few PG&E customers had suggestions for rate improvement, their suggestions included:

- Alternative communication methods. One respondent suggested a call or text instead of an email to notify them of events. Offering multiple channels for event notification reduces the chance that an event will take respondents by surprise.
- Encourage automation. One customer would be able to shed load on event days, but the burden of doing so manually is prohibitive. Automated energy management systems would help to reduce this burden.
- Acknowledge performance. One respondent suggested that they receive a progress report on savings achieved per event, and a day-after report that describes degree of compliance. This would not remove central production or safety/comfort barriers, but may help motivate customers to find ways around other less-central challenges.
- Identify and remove unlikely participants by usage patterns. Participants using alternative energy sources could be identified, either through communication with the account representative or by analyzing on-peak, off-peak, and semi-peak usage, and then could be approached about switching to a more appropriate TOU alternative.

4.6.3 SCE Findings

Respondents within SCE territory represent a wide range of facility types, but the most common were schools (4 of 7). Others include manufacturing, a green house, and a warehouse. This effort was not designed to offer a proportional representation of all rate-payers, but these respondents do represent a variety of barriers and concerns.

Barriers to Event Participation

- Alternate energy sources. While respondents with alternative sources of energy appear within each IOU, most (3 of 5) are within SCE territory. Sources include a power generation plant on site, photovoltaic installations, and a third-party supplier. It is not likely that these companies would shed load through the CPP rate plan.
- Production. One respondent said shedding load would compromise production, and not allow them to conduct business.
- Lack of central controls. One respondent claimed that the lack of central lighting controls makes participation too labor-intensive. This customer needs an automated energy management system to shed load during events.
- Storage requires constant load. One respondent requires constant environmental management for product storage. Management strategies (such as pre-cooling, or limiting the number of events in a short period) may make it more possible for this businesses to participate. However, the customer may not consider the savings to be worth the risk to their merchandise.

Incentives and Rate Processes

- More cost-effective rates. Most (5 of 7) respondents were knowledgeable about their current rate plan, and none said it did not meet their current needs. All five respondents reported that they were on a time-of-use rate. While customers are looking for a better rate to switch to in the future (6 of 7), they do not see the CPP rate as that plan. This is likely due to the barriers mentioned previously.
- Account representatives are effective communicators. Among those who had a rate analysis or energy audit conducted (4 of 7), most (3 of 4) respondents said it was performed by their account representative. One respondent cited account representatives as being the preferred method of communication.
- Lack of rate awareness. A few participants (2 of 7) said they were surprised when the first events were called, because they had not known they had been automatically defaulted to the rate. This comment was unique to SCE respondents.

Drivers for Event Decision-Making

Rate analysis or energy audits inform customer decisions. Most respondents claimed to have had a rate analysis or energy audit (4 of 7). Among those that received an analysis, half said the analysis influenced their decision (2 of 4).

Suggestions for Rate Improvement from Customers

Suggestions for rate improvement varied widely.

- Case studies or tailored information. Four respondents suggested that the rate should focus on the needs of their specific facility type, although the types of facilities they were referring to varied from schools (2) to warehouses (1) to manufacturing (1). Case studies of similar businesses, or help with finding solutions to specific production barriers, may help these customers successfully participate.
- Encourage automation. One respondent would be able to shed load on event days, but the burden of doing so manually is prohibitive. Automated energy management systems would help to reduce this burden.
- Additional tools to understand the rate plan. Some (3 of 7) respondents asked for tools to understand their bills more effectively, like bill comparisons or shadow bills. This did not occur among respondents from other IOUs.
- Identify and remove unlikely participants by usage patterns. Participants who do not create sufficient demand during peak time, either through inactivity or using alternative energy sources, could be identified by analyzing on-peak, off-peak, and semi-peak usage, and could be approached about switching to a more appropriate TOU alternative.
- Longer access to bill protection. Some (3 of 7) suggested that they would benefit from longer access to bill protection. We report this here to fully capture respondents' feedback, but this is likely not a good design change for the rate, as it would likely increase free ridership.

4.6.4 SDG&E Findings

Respondents within SDG&E territory represent a wide range of facility types, including commercial office space, wastewater treatment, retail, cold storage, and energy production. These likely do not represent a proportional sample of all SDG&E ratepayers, but do represent a variety of barriers and concerns.

- Lack of peak usage. One customer, a movie theater, does not hit peak operational hours until evening off-peak hours. The minimal usage that they have at peak rate hours is unlikely to be reduced.
- Production. One respondent said shedding load would compromise production, and not allow them to conduct business.
- Lack of central controls. One respondent claimed that the lack of central lighting controls makes participation too labor-intensive. An energy management system would facilitate automated load-shed and help this customer successfully manage events.
- Storage requires constant load. One respondent requires constant environmental management for product storage. While management strategies (such as pre-cooling, or limiting the number of events in a short period) may make it more possible for this businesses to participate, any savings they may achieve are not seen as worth the risk to their merchandise.
- Alternate energy sources. One respondent claimed to be less concerned about saving peak energy because they generate energy on-site using natural gas. This customer is unlikely to shed load.

Incentives and Rate Processes

- More cost-effective rates. Most were not aware of their current rate. Two respondents named their rates, one as "A6" and the other as "DGR." Both said their current rates meet their needs, but are also looking for a better rate if it is available. They do not see the CPP rate as that plan, likely due to the barriers that prevent them from shedding adequate load during CPP events.
- Account representatives are effective communicators. Few respondents had any suggestions for better communication, but one said the account representative is their preferred channel. One also claimed that the account representative's advice was one reason for their decision to de-enroll.
- Limited participation can prevent any participation. One customer, calculated that they could participate in four events without affecting business. This respondent considered four to be too few events to make the rate cost-effective, and so they do not participate in any events.

Drivers for Event Decision-Making

Rate analysis or energy audits inform customer decisions. SDG&E is the only IOU in which all respondents claimed to have had a rate analysis or energy audit (5 of 5), and all but one claimed to have had an analysis by their account representative. Most said the analysis influenced their decision (3 of 5).

Suggestions for Rate Improvement from Customers

While only a few SDG&E customers had suggestions for rate improvement, their suggestions included:

- Encourage automation. One respondent would be able to shed load on event days, but the burden of doing so manually is prohibitive. Automated energy management systems would facilitate participation.
- Identify and remove unlikely participants by usage patterns. Participants who do not create sufficient demand during peak time, either through inactivity or by using alternative energy sources, could be identified by analyzing on-peak, off-peak, and semi-peak usage, and could be approached about switching to a more appropriate TOU alternative.
- Options for event participation. Customers who require consistent power either cannot participate in enough events to make the rate financially attractive, or cannot deal with the disruption caused by repeated events within a short timeframe. Offering options that limit the number of events they must participate in may give businesses the flexibility to take more actions in a smaller number of events.
- Longer access to bill protection. One respondent suggested that they would benefit from longer access to bill protection. We report this here to fully capture respondents' feedback, but this is likely not a good design change for the rate, as it would likely increase free ridership

This section includes the following data collection instruments used in the California Critical Peak Pricing Process Evaluation:

- Program Staff Interview Guide
- Key Account Representatives/Executives Interview Guide
- Participant Survey
- Opt-out Participant Survey

California Critical Peak Pricing Program Process Evaluation Program Staff Interview Guide

January 10, 2014

Opinion Dynamics will conduct interviews with the PG&E, SCE and SDG&E CPP program managers, as well as any relevant program staff, that actively work on the day-to-day implementation of these programs in order to understand the program theory, development, challenges, and successes. To this end, the Evaluation Team will inquire about program design, execution strategy, and challenges for the program, and obtain necessary background information to effectively evaluate the research questions. These interviews will also be an opportunity to document the program rationale, goals, and implementation strategies across the Utilities. These interviews will be conducted in January 2014.

Introduction and Program Background

1. Can you describe your role and responsibilities in the Critical Peak Pricing (CPP) program?

2. Can you briefly describe how your program operates?

3. Approximately, how many customers does your program currently serve? How many of these customers are defaulted into the program and how many opt-in? How many customers that are defaulted in decide to opt-out? Have you had any opt-in customers decide to opt-out? How long do customers typically participate in the program?

4. Besides the California Statewide CPP Research on Improving Customer Response report submitted in December 2012. To your knowledge have there been any other efforts, internal or otherwise, to evaluate the CPP programs? What were the outcomes of those efforts? Is there anything that you think should be investigated further?

Program Marketing

1. What types of information and marketing materials are provided to customers? What program information has most benefited customers? In your view, what is the most effective method for communicating enrollment and program information to the customer? Have customers suggested additional channels for selling the program than through Account Representatives?

Account Representatives

1. Can you talk a bit about the role of Account Representatives? What are their key responsibilities and have these responsibilities changed as the program has evolved? Have they fulfilled their responsibilities?

2. What type of interaction and communication takes place between Account Representatives and customers? How well is this process working? What, if anything, could be done to help Account Representatives more effectively engage customers? What feedback, if any, have you received from customers about their interactions with Account Representatives related to the CPP program?

Program Participation and Barriers

1. How well do customers understand the program? How do customers learn about the program? How satisfied are customers with the program enrollment process, support from their Account Representative, program incentives, and the process for participating in events

2. Are all participating customers aware that they are program participants? Are customers aware that they are eligible to participate in multiple DR programs, like Technical Assistance and Technology Incentive (TA&TI)? Do customers seem at all confused about the program?

3. How many customers typically participate in a CPP event? Do customers have sufficient time to prepare for events? What information is provided to customers prior to an event and how are customers typically notified? Does this delivery method seem to be effective?

4. Do customers have specific plans in place to take action during events? What do customers typically do to reduce load during CPP events? What is the customer reaction to the CPP program? Does it seem to affect customer comfort levels? What additional tools or resources could help customers become more responsive during events?

5. What are the common barriers to participation experienced by customers? Are certain types of customers more or less likely to participate in events and in the program overall? Are certain industries more likely to participate in events and in the program overall? How much does experiencing a CPP event affect the likelihood of opting out of the program? What can be done to limit or discourage customers from opting out of the CPP program? What resources or strategies can be leveraged to re-engage opt-out customers in the CPP program?

Program Design

1. Are there any potential program design changes like incentive level changes, changes to the number of events called, event hours, or changes in triggering strategies, that could improve customer performance during CPP events?

2. Would customer participation increase if there was a payment tier? Should program incentive levels be consistent across participating IOUs?

California Critical Peak Pricing Program Process Evaluation Key Account Representatives/Executives Interview Guide

February 18, 2014

Opinion Dynamics will conduct interviews with the PG&E, SCE and SDG&E CPP key account representatives/executives who will help us to understand customer perceptions regarding the programs and approaches to educating customers about the program. In addition, these interviews will also help us effectively develop our quantitative survey with customers by learning about key challenges and drivers for program participation. These interviews will be conducted in late February 2014.

Introduction

Hi, my name is _______ with Opinion Dynamics Corporation. [UTILITY NAME] recently hired us to conduct an evaluation of the CPP rate program. They suggested that we start the evaluation by interviewing a few of their key account executive/representatives who have experience with customers on this rate/program. I have a few questions regarding your experience with CPP customers, which should take about 10-15 minutes. Is now a good time? [IF NOT, SCHEDULE A TIME]

1. Can you describe your role as an account representative/executives and your responsibilities in the Critical Peak Pricing (CPP) rate program? How long have you been in this role? What other programs do you work with as a part of your duties as an account representative?

2. Can you briefly describe your understanding of the CPP rate and its value to customers?

3. How many total commercial customers do you manage (an estimate is fine)? Among them, approximately, what percentage are enrolled in the CPP rate?

4. How do you track and manage your CPP customers? How do you typically interact and communicate with them? Do you apply alternative approaches to handling and communicating with defaulted in customers versus opt-in customers?

Rate Awareness and Understanding

1. How visible is the CPP rate to customers? Are customers aware that they are eligible to participate in multiple DR programs? Do customers seem at all confused about the rate?

2. How well do customers understand the rate's functions and its offerings? Do customers seem to understand how the rates and events work (if not, what specifically do they have trouble with)?

3. How do you communicate program specifics to customers? What are the barriers to communicating information about the CPP rate to customers? How can the utility better communicate with customers for this rate?

4. Are there certain types of customers or industries that benefit more from the rate than others? If yes, please explain?

5. How well do the tools (CRC, bill protection and/or analysis tools) help customers decide what is right for them in the CPP program? What else can [Utility Name] provide to help customers gain the most value from the CPP program?

Rate Participation and Barriers

1. Can you briefly describe customer reaction to the CPP rate? What do customers have the most difficulty with in participating in the rate? Is there any information or outreach that could better engage customers in the rate?

2. What information is provided to customers prior to an event and how are customers typically notified? Does this delivery method seem to be effective? What additional tools or resources could help customers become more responsive during events?

3. SDG&E ONLY: SDG&E recently had an event on February 7th. What was your experience with customers during this event?

4. Is there anything else that you would like to mention regarding this program before we finish up?

Thank you and have a great day!

California Critical Peak Pricing Program Process Evaluation Program Participant Online Survey Instrument April 3, 2014-DRAFT

Opinion Dynamics will conduct an online survey with the PG&E, SCE and SDG&E CPP customers who are active participants in the CPP rate to gain feedback on program operations, processes, communication, and ways to enhance customer engagement. The survey will also explore event participation including key barriers and the decision-making. The survey will be sent to a random and representative sample of customers who have participated in the rate since its inception. Survey responses will be monitored to ensure the surveyed sample represents the population in terms of how long they have been on the rate. Data will be analyzed based on when customers enrolled in the rate to account for the fact that some customers have been on the rate for 3 years or more and may not recall the enrollment process but can answer questions around Events (99% of SCE's participants and 50% of PG&E's participants have been on the rate for 3 or more years, SDG&E's participant data did not include the enrollment date however the majority enrolled in 2008).

The table below lists the high-level survey objectives for participants in the California Critical Peak Pricing rate and identifies the areas in the survey that cover these objectives.

Categories	High Level Research Objectives		
Screener	Identifying a person familiar with the rate		
CPP Enrollment Awareness & Information Feedback	How participants enrolled; How they became aware of the program; How useful information sources and tools have been		
CPP Account Representative Interaction	Assessing participant interaction with account representatives		
CPP Process	Customer awareness and use of specific aspects of the rate, including Bill Protection and Capacity Reservation Level/Capacity Reservation Charge		
CPP Event Participation	Understanding the process of event participation, including the notification process, actions taken to participate in events, and perception of benefits associated with participation		
Barriers to event	Understanding and rating various barriers to event participation and		
participation	opportunities to overcome barriers		
Customer Satisfaction	Satisfaction levels with various CPP rate elements		
Firmographics	Customer firmographics		

Table 1. Research Objectives

Below is the draft scripting for the study's email invitation, survey landing page, and survey programming.

E-mail Invitation

	PG&E.PDP.Survey@opiniondynamics.com	
From: Opinion Dynamics,	SCE.CPP.Survey@opiniondynamics.com	
	SDG&E.CPP-D.Survey@opiniondynamics.com	
	ATTN: Survey on PG&E Peak Day Pricing Rate	
Subject:	ATTN: Survey on SCE Critical Peak Pricing Rate	
	ATTN: Survey on SDG&E Critical Peak Pricing Rate	

E-mail Text: Dear [Customer Name],

Opinion Dynamics, an independent research firm, is conducting an evaluation on behalf of [UTILITY] and the California Public Utility Commission, of the...

- [IF PG&E CUSTOMER: Peak Day Pricing (PDP) rate. Peak Day Pricing asks customers to curtail their energy usage during event days, when energy prices are significantly higher, in exchange for billing credits that are applied to their base rate plan from May through October.
- [IF SCE CUSTOMER: Summer Advantage Initiative or Critical Peak Pricing (CPP) rate. The Summer Advantage Initiative asks customers to curtail their energy usage during event days in exchange for credits on their bill from June through September, when electricity costs are likely to be highest.
- [IF SDG&E CUSTOMER: Critical Peak Pricing (CPP-D) rate. Critical Peak Pricing asks customers to curtail their energy usage during event days in exchange for a lower billing rate throughout the course of the year and customers who reduce their energy usage receive credits on their bill.

As a part of this evaluation, we are conducting an online survey with [Critical Peak Pricing/Peak Day Pricing] rate customers. Responses will be combined for analysis purposes and results will not be released in any way that would reveal an individual respondent. Your feedback is incredibly important and greatly appreciated!

Please click on the link below to take this short survey:

[INSERT UNIQUE URL TO SURVEY]

If you are not the appropriate contact for this survey, please forward this e-mail to the person most knowledgeable about the [Critical Peak Pricing/Peak Day Pricing] rate in your organization.

Please note that you do not have to complete the entire survey at once. If you close your browser and then go back into the survey at a later time, the survey will pick up from where you left off. Additionally, you may go back to previous questions to modify your responses, if needed. If you have any questions regarding this survey, please feel free to reach out to your [UTILITY] account representative.

Landing Page

[PROGRAMMING NOTES: Include Opinion Dynamics logo and relevant utility logo at the top, left corner of the page.]

opiniondynamics.com

Thank you for taking a few minutes to complete this survey about [UTILITY]'s [RATE NAME] rate! Opinion Dynamics is conducting this survey on behalf of [UTILITY] and the California Public Utility Commission to collect feedback from customers on their experience with the [RATE NAME] rate. Your responses are incredibly valuable and will help enhance the customer experience.

[IF MULTACCT_FL=1] Our records indicate that you may be responsible for several different accounts. For this survey, please think about your typical experience with the [RATE NAME] rate.

This survey should take 10 minutes to complete. Your company and name will be kept confidential and the results of this survey will be reported in aggregate.

Survey Instrument

[PROGRAMMING NOTES: Please include a "Process Bar" at the top of each page. Include only one question per page unless otherwise noted. Include Opinion Dynamics logo and appropriate utility logo on each page.] [RATE NAME should be Critical Peak Pricing for SDG&E and SCE and Peak Day Pricing for PG&E]

Screener

- S1. How would you rate your familiarity with the [RATE NAME] billing rate? Would you say you are...
 - 1. Not at all familiar [THANK & TERMINATE]
 - 2. Slightly familiar [THANK & TERMINATE]
 - 3. Somewhat familiar
 - 4. Moderately familiar
 - 5. Extremely familiar

CPP Enrollment Awareness and Information Sources

The next few questions refer back to when your organization first enrolled in the [RATE NAME] rate plan.

- E1. Which of the following best describes how your company joined the rate?
 - 1. The company was automatically enrolled/defaulted into the rate
 - 2. The company contacted [UTILITY] and asked to join the rate
 - 8. I don't know how my company joined the rate

[ASK ONLY SDGE CUSTOMERS]

- E1a. How long has your company been on the rate?
 - 1. Less than 1 year
 - 2. 1-2 years
 - 3. 3 years or more
 - 8. Don't know
- M1. How did your organization first hear about the [RATE NAME] rate?
 - 1. Notification Letter
 - 2. [UTILITY]'s website
 - 3. Bill insert
 - 4. Account Representative
 - 00. Other, please describe:
 - 98. I don't know
- M3. Has your experience with the program matched how it was described to you?
 - 1. Yes
 - 2. No

[ASK IF M3=2]

M4. Please describe how your experience with the program varied from what was described to you. [OPEN END]

00. (OPEN END)

- M5. Is there anything about the [RATE NAME] rate plan processes that you would have liked to have known or understood earlier? If so, please describe. [OPEN END]
 - 00. (OPEN END)
 - 96. Nothing

[ASK IF SDG&E Customer]

M6. How useful were the following tools and information sources to your understanding of the rate?

	Not Useful At All										Extremely Useful	Never Used It/Not applicable
Scale Point	0	1	2	3	4	5	6	7	8	9	10	96
a. SDG&E's kWick View website, where you can see your company's energy usage												
b. SDG&E's Rate Analysis Tool on the "My Account" website, a tool to compare how your company would perform on different rate plans												
c. The letter your company initially received that provided instructions for how to participate in the rate												
d. Information from your account representative												
e. The information you received about seasonal preparedness for events												

[ASK IF SCE Customer]

max. How useful were the following tools and information sources to your understanding of the rat	M7.	How useful were the following tools and information sources	to your understanding of the rate
---	-----	---	-----------------------------------

	Not Useful At All										Extremely Useful	Never Used It/Not applicable
Scale Point	0	1	2	3	4	5	6	7	8	9	10	96
a. SCE's EnergyManager tool												
b. SCE's website												
c. The letter your company initially received that provided instructions for how to participate in the rate												
d. Information from your account representative												
e. The information you received about seasonal preparedness for events												

[ASK IF PG&E Customer]

M8.	How useful were the following tools and information sources	to your understanding of the rate?

	Not Useful At All										Extremely Useful	Never Used It/Not applicable
Scale Point	0	1	2	3	4	5	6	7	8	9	10	96
a. PG&E's "My Rate Analysis" tool												
b. The letter your company initially received that provided instructions for how to participate in the rate												
c. Information from your account representative												
d. The information you received about seasonal preparedness for events												

M9. [UTILITY] is looking for ways to help customers understand how they can benefit from the [RATE NAME] billing rate. How helpful would the following items be in explaining the rate?

	0 – Not helpful at all	1	2	3	4	5	6	7	8	9	10 – Very helpful	98 – Don't know
a. Online tutorial videos of how the [RATE NAME] rate works												
b. Case studies of businesses in similar industries who have found success on the [RATE NAME] rate												
c. Shadow bills, where customers can compare												

	0 – Not helpful at all	1	2	3	4	5	6	7	8	9	10 – Very helpful	98 – Don't know
their past bills with what their bills would look like on the [RATE NAME] rate												

M14. What is the best way for [UTILITY] to share information with you about the [RATE NAME] rate?

- 1. E-mail
- 2. Direct mail/newsletter
- 3. Bill insert
- 4. Text message
- 5. Website
- 6. Social media messages
- 7. Phone call from Account Representative
- 00 Other, please describe:
- M15. In general, when you have a question about the [RATE NAME] billing rate, where do you go for an answer? Please select all that apply. [MULTIPLE RESPONSE]
 - 1. [UTILITY] website
 - 2. Call [UTILITY] customer hotline
 - 3. [UTILITY] Account Representative
 - 00. Other, please describe:
 - 96. I have not had any questions/Not applicable

CPP Account Representative Interaction & Information Sources

- AR1. Are you aware that [UTILITY] has assigned an account representative to help your organization with questions about service and issues related to the [RATE NAME] billing rate?
 - 1. Yes
 - 2. No [SKIP TO P1]
 - 8. Don't know [SKIP TO P1]
- AR2. Prior to enrolling in the [RATE NAME] billing rate, did your [UTILITY] account representative contact you to discuss how switching to the [RATE NAME] rate would impact your business?
 - 1. Yes
 - 2. No
- AR4. Is there anything that your [UTILITY] account representative could provide to make participation in the [RATE NAME] rate easier for your organization? [OPEN END]
 - 00. (OPEN END)
 - 96. No/Nothing

Process: Bill Protection

- P1. In the first year that customers are enrolled in the [RATE NAME] rate, they are offered "Bill Protection," which guarantees that customers will not pay more than what they would have paid on their base rate plan had they not enrolled in the [RATE NAME] rate plan. Did the availability of Bill Protection help you decide to stay on the CPP/PDP rate plan?
 - 1. Yes
 - 2. No
 - 8. Don't know

Process: Capacity Reservation Level/Charge

[ASK P3-5 IF SCE or PG&E Customer]

- P3. Upon enrollment in [RATE NAME], your organization was given the chance to select a Capacity Reservation Level (CRL), which allows customers to reserve a prescribed level of electricity in advance to avoid paying event charges on electricity used during events. Did your organization select a Capacity Reservation Level (CRL)?
 - 1. Yes
 - 2. No
 - 8. Don't know

[ASK IF P3=2]

P4. Can you explain why your organization decided not to select a Capacity Reservation Level? [OPEN END]

00. (OPEN END)

[ASK IF P3=1]

- P5. Has your organization saved money from selecting a Capacity Reservation Level (CRL)?
 - 1. Yes
 - 2. No
 - 8. Don't know

[ASK P6-8 IF SDG&E Customer]

- P6. Upon enrollment in [RATE NAME], your organization was given the chance to select a Capacity Reservation Charge (CRC), which allows customers to reserve a prescribed level of electricity in advance to avoid paying event charges on electricity used during events. Did your organization select a Capacity Reservation Charge (CRC)?
 - 1. Yes
 - 2. No
 - 8. Don't know

[ASK IF P6=2]

P7. Can you explain why your organization decided not to select a Capacity Reservation Charge? [OPEN END]

00. (OPEN END)

[ASK IF P6=1]

- P8. Has your organization seen a financial benefit from selecting a Capacity Reservation Charge (CRC)?
 - 1. Yes
 - 2. No
 - 8. Don't know

CPP Event Participation

Now, we would like to ask you about your awareness of and participation in [RATE NAME] events. As a reminder, [RATE NAME] Events are days when [UTILITY] asks customers to limit their use of electricity.

[FOR EP1: PG&E = 9 days; SCE = 12 days; SDG&E = 4 days]

- EP1. Customers on the [RATE NAME] rate were asked to reduce their energy usage on [2013 NUMBER OF EVENT DAYS] specific days in 2013. How was your organization notified of these events? Please select all that apply. [MULTIPLE RESPONSE]
 - 1. Telephone
 - 2. E-mail
 - 3. Text message
 - 4. Fax
 - 96. I don't recall any events in 2013
 - 00. Other way, please describe:

[IF EP1=96, SKIP TO EP5]

- EP2. When event notifications are sent out, is the correct individual in your organization notified?
 - 1. Yes
 - 2. No
 - 8. Don't know
- EP4. Did your organization try to reduce its energy usage on these event days?
 - 1. Yes
 - 2. No [SKIP TO EP11]
 - 8. Don't know [SKIP TO EP11]
- EP5. Does your organization have a formal plan in place to reduce energy usage on event days?
 - 1. Yes
 - 2. No
 - 8. Don't know
- EP7. To prepare for these event days, did your organization take any of the following actions to reduce energy usage? Please select all that apply. [MULTIPLE RESPONSE]
 - 1. Turned off non-essential indoor/outdoor lighting
 - 2. Turned off non-essential equipment
 - 3. Raised cooling thermostat settings
 - 4. Pre-cooled work areas
 - 5. Reduced or rescheduled production during events
 - 6. Unplugged battery chargers
 - 7. Only used pre-charged equipment
 - 8. Adjusted work schedules
 - 00. Other energy saving action, please describe:
 - 96. Nothing
 - 98. Don't know
- EP11. Are you aware of how much electricity that your business typically uses each month?
 - 1. Yes
 - 2. No
 - 8. Don't know

[SKIP IF EP11 = 2 or 8]

- EP11a. Are you aware of how much electricity your facility must cut during an event in order to avoid higher billing rates during event hours?
 - 1. Yes
 - 2. No
 - 8. Don't know
- EP9. Has your organization saved money on your energy bill for cutting your facility's energy usage during a [RATE NAME] Event Day?
 - 1. Yes
 - 2. No
 - 8. Don't know
- EP12. From your perspective, what tools or resources could [UTILITY] provide to make it easier for your organization to reduce energy on Event days? [OPEN END]
 - 00. (OPEN END)
 - 96. No other tools or resources

Barriers to Event Participation

Next, we would like to ask you about potential obstacles related to your organization's ability to participate in CPP/PDP Event days. Participation in event days involves taking actions to cut energy use throughout your facility.

B1. Please think about the potential obstacles that your company has faced when trying to reduce its energy usage during an Event day. How much of an obstacle have the following been to your organization's ability to reduce energy usage on Event days?

	0 – Not an obstacle at all	1	2	3	4	5	6	7	8	9	10 – A very big obstacle	98. DK	97. N/A
a. Understanding of the process for participating in events													
b. Finding available staff to manage event participation													
c. Amount of manual effort required to participate in events													
d. Your facility's ability to adjust production or service schedules													
e. Concerns about employee satisfaction													
f. Concerns about customer satisfaction													
h. Ability to participate in multiple, consecutive event days													

B5. Are there any other obstacles to participating in events that you would like to share? [OPEN END]

00. (OPEN END)

96. No other obstacles

Customer Satisfaction

Next, we would like to ask you about your satisfaction with the [RATE NAME] billing rate.

- SAT1. What are the main benefits of the rate for your business? [OPEN END] 00. (OPEN END)
- SAT2. How satisfied are you with ...?

	0 – Very dissatisfied	1	2	3	4	5	6	7	8	9	10- Very Satisfied	98 DK
a. The enrollment process												
b. Support from your [UTILITY] Account Representative												
c. The way you receive event notification information (email/text/phone)												
d. The timing of the notifications (i.e., when you are notified)												
e. The [RATE NAME] rate overall												
f. [ASK IF EP9=1] The money your company has saved from reducing its energy use during event days												

Firmographics

Finally, we would like to collect some information about the characteristics of your organization.

- FOa. Thinking about all of the ways your business uses electricity, what do you think uses the most electricity in your facility?
 - 1. Lighting
 - 2. Heating and Cooling
 - 3. Water heating
 - 4. Motors
 - 5. Process measures (e.g., pumps and/or compressed air)
 - 6. Refrigeration equipment
 - 7. Office equipment, computers, or servers
 - 00. Other, please describe:
 - 98. I don't know
- F0b. Thinking about your company's energy use, does your company consistently use the same amount of electricity 24 hours a day, 7 days a week?
 - 1. Yes
 - 2. No
 - 8. Don't know

- F1. What is the approximate square footage of your typical facility? If your company has multiple locations in [UTILITY]'s territory, please give the approximate total square footage of all of them combined.
 - 1. 50,000 square feet or less
 - 2. 50,001 to 100,000 square feet
 - 3. 100,001 to 200,000 square feet
 - 4. 200,001 to 300,000 square feet
 - 5. 300,001 to 500,000 square feet
 - 6. 500,001 to 1,000,000 square feet
 - 7. More than 1,000,000 square feet
 - 98. Don't Know
- F2. How many employees do you have at your company? Please give the approximate total that work in [UTILITIES'] territory.
 - 1. 10 or less
 - 2. 11 to 20
 - 3. 21 to 50
 - 4. 51 to 100
 - 5. 101 to 500
 - 6. 500 or more
 - 8. Don't Know
- F3. Does your company market itself as "green"?
 - 1. Yes
 - 2. No
 - 8. Don't Know
- F4. Which of the following best describes your business?
 - 01. Biotech
 - 02. Commercial Office Multi Tenant
 - 03. Commercial Office Single Tenant
 - 04. Dairy
 - 05. Food Processing
 - 06. Greenhouse
 - 07. Healthcare/Hospital
 - 08. High Tech
 - 09. Hospitality
 - 10. Manufacturing
 - 11. Mineral & Chemicals
 - 12. Petroleum
 - 13. Retail Multi Tenant
 - 14. Retail Single Tenant
 - 15. School/Educational Facility
 - 16. Warehouse
 - 17. Water & Wastewater Treatment
 - 18. Winery
 - 00. Other type of business, please describe:
 - 98. Don't Know

- F5. Does your organization primarily own or rent its location(s) in [UTILITY] territory?
 - 1. Own
 - 2. Rent
 - 8. Don't Know
- F6. During which hours of the day is your business the busiest?
 - 1. 6:00 AM 12:00 noon
 - 2. 12:00 noon 6:00 PM
 - 3. 6:00 PM 10:00 PM
 - 4. 10:00 PM 6:00 AM
 - 5. 8:00 AM 5:00 PM
 - 6. Consistently busy at all times of the day
 - 96. Other please describe:
 - 98. Don't Know
- R5. Are you aware that your organization may be eligible to participate in another demand response program while enrolled in [UTILITY]'s [RATE NAME] billing rate?
 - 1. Yes
 - 2. No
- R6. Is there anything else that you would like to share with [UTILITY] to help improve the [RATE NAME] rate for its customers?
 OO. (OPEN END)
 96. No

End of Survey Message

Opinion Dynamics and [UTILITY] thanks you for your feedback. Have a great day!

California Critical Peak Pricing Program Process Evaluation Program Opt-Out Participant Interview Guide

April 8, 2014 - DRAFT

Opinion Dynamics will conduct depth interviews with the PG&E, SCE and SDG&E CPP customers who have decided to opt-out of the rate. This interview guide is designed to support a deeper dive into the motivations of CPP customers who have opted out of the rate. In this respect, interviews will use their best discretion to determine when to probe for more detail about customer decisions. Overall, the objective of this study better understand why customers opt out of CPP, determine if their decisions are rational and well informed, and understand their preferred avenues of communication. Approximately 30 in-depth interviews will be completed across the IOUs and these interviews will be conducted in April 2014.

The table below lists the high-level objectives identifies the areas in the guide that cover these objectives.

Categories	High Level Research Objectives
Screener	Identifying correct person in the business to speak about the CPP rate
Respondent	Profile respondent characteristics
Characterization	
Reasons for Opting-out of	Reviews potential reasons customers may be likely to opt out of the CPP rate,
CPP Rate	in addition to identifying ways to enhance participant retention
Firmographics	Customer firmographics

Research Objectives

Appendix A. Data Collection Instruments

Screener

Hello, my name is [INTERVIEWER NAME] and I'm calling from Opinion Dynamics on behalf of [UTILITY] and the California Public Utilities Commission. We are contacting you to get feedback on your experiences with the ...

- [IF PG&E CUSTOMER: Peak Day Pricing (PDP) rate. Peak Day Pricing asks customers to curtail their energy usage during event days, when energy prices are significantly higher, in exchange for billing credits that are applied to their base rate plan from May through October
- [IF SCE CUSTOMER: Summer Advantage Initiative or Critical Peak Pricing (CPP) rate. The Summer Advantage Initiative asks customers to curtail their energy usage during event days in exchange for credits on their bill from June through September, when electricity costs are likely to be highest.
- [IF **SDG&E** CUSTOMER: Critical Peak Pricing (CPP-D) rate. Critical Peak Pricing charges a higher rate for electricity billed during critical peak hours in exchange for a lower billing rate throughout the course of the year.]
- S1. According to our records, your organization was billed on the [UTILITY & RATE NAME], but opted out of the rate/unenrolled from the rate and is now billed on another rate plan. May I please speak with the person most knowledgeable about your organization's decision to change to another rate?
 - 1. (Yes)
 - 2. (No) [DETERMINE IF THERE IS SOMEONE ELSE THAT IS KNOWLEDGEABLE/THANK & TERMINATE]
 - 3. (Don't know) [THANK & TERMINATE]
 - 4. (Refused) [THANK & TERMINATE]
- S2. Great! We would like to talk to you about your experience with the CPP rate and your decision to opt-out. If you are eligible, you will receive a \$50 VISA gift card as a token of our appreciation for your time and feedback.

Respondent Characterization

RC1. Thinking about your organization, how much of a priority is saving energy? Please explain. [PROBE: How much of a priority is saving on your utility bills? Please explain. Does your organization have other priorities or concerns regarding saving energy or costs?]

[ASK IF CUSTOMER HAS MORE THAN ONE LOCATION OR MULTIPLE ACCOUNTS]

RC2. According to our data, your organization has either more than one location or has multiple [UTILITY] accounts. Are all of your locations on the same billing rate? [PROBE: If not, have you experienced any difficulty managing different billing rates across your locations? Have you had any trouble communicating information about event days across your locations?]

Reasons for Opting-out of the CPP Rate

[NOTE: When referring to the billing rate, use CPP for SCE and SDG&E customers and use PDP for PG&E customers.]

- RP1. What was the primary reason your organization decided to opt-out of/unenroll from the CPP/PDP rate?
- RP2. What were the other factors that led to your decision to leave the CPP/PDP rate? [PROBE: How about... Lack of knowledge about the rate? Understanding of the rate details and operation? Understanding of how to respond to an Event day notification? Event day preparation? Impact of event days on business operations? Billing rate? Incentives/Billing credits?]
- RP3. Prior to opting out/unenrolling in the [RATE NAME] rate, did your organization review your facility's energy usage or receive a rate analysis? [INTERVIEWER NOTE: Consider customer size It may be possible that smaller customers may not have had access to this info from Account Representatives, but may have gotten it from the IOU website.]
 [PROBE:
 If so, did you gather the information or did your account representative provide the rate analysis information?
 How helpful was this information?
 Did it affect your company's decision to stay on the rate?]
- RP4. When did your organization decide to opt-out of/unenroll from the CPP/PDP rate? [PROBE: Did your organization decide to opt-out right after enrollment in the rate? After the first event? After a series of consecutive event days?]
- RP5. Do you recall what rate plan your business is currently on?
 [IF YES PROBE: What is the name of the plan? Can you describe how this rate plan differs from the CPP rate?

Is this plan meeting the needs of your business? Are you planning to switch plans in the near future?] [IF NO PROBE: Can you describe how this rate plan differs from the CPP rate? Is this plan meeting the needs of your business? Are you planning to switch plans in the near future?]

RP6. While enrolled in the CPP/PDP rate, do you recall any [RATE NAME] events being called? If so, did your organization take action to limit or reduce energy usage during these event hours? [IF YES PROBE:

Can you explain how your organization prepared for the event?

Did you have enough time to prepare for the event?

Has event day participation affected your employees' comfort level or the comfort level of your customers?

Has participation in event days affected your organization's production or work schedule? Is there anything that could help your organization participate in event days?]

[IF NO PROBE:

What barriers prevented your organization from participating in event days?

Were you concerned that participating in an event would affect production or your organization's work schedule?

Were you concerned that participating in an event would affect the comfort level of your employees or customers?

Is there anything that could have helped your organization participate in event days?]

RP7. Would more information about event days, rate credits and penalties, and tips for reducing energy usage during events have been helpful to your organization? [PROBE:

More awareness of the rate?

Tools to help with understanding your bill like "Bill Comparisons/Shadow bills" (i.e., where customers can see their current bill and what their bill would look like if they were on the CPP rate)? Longer access to bill protection? Any other tools that could make participation in events easier?]

- RP8. The IOUs are trying to determine what they could do to help customers stay on the CPP/PDP rate. You just told me about activities or items that could have been helpful to your company. What could have your utility done to help your company stay on the CPP/PDP rate?
- RP9. Do you have any suggestions for better ways to communicate information about the CPP/PDP rate to customers?
 - [PROBE:

What kind of marketing or information delivery methods (i.e., website, letter, phone call, or e-mail) would have been more effective in delivering information about the program?]

Firmographics

We are almost done. I just have a few questions about your organization.

F1. Is your company currently enrolled in any [UTILITY] programs? If so, which ones? [MULTIPLE RESPONSE UP TO 9]

PG&E	SCE	SDG&E
Base Interruptible Program	□ Base Interruptible Program (BIP)	Base Interruptible Program
Capacity Bidding Program	□ Capacity Bidding Program with "Day- Of" Option	Capacity Bidding
Demand Bidding Program	Demand Bidding	 Energy Assessment Solutions (EAS-TI)
□ Aggregator Managed Portfolio	 Aggregator Managed Portfolio with "Day-Of" Option 	Summer Saver Program
□ SmartAC	□ Agricultural and Pumping Interruptible (AP-I)	Technology Incentives
Business Area Networking (HAN)	🗆 Auto DR	Permanent Load Shifting
Scheduled Load Reduction Program	□ AC-Cycling	
 Optional Binding Mandatory Curtailment Plan 	Summer Discount Plan (SDP)	
Other - Please describe:	□ Other - Please describe:	□ Other - Please describe:

- F2. Were you aware that your organization may have been eligible to participate in another demand response program while enrolled in the CPP/PDP12 rate?
- F3. What type of business do you run? [DON'T READ]
 - 01. Biotech
 - 02. Commercial Office Multi Tenant
 - 03. Commercial Office- Single Tenant
 - 04. Dairy
 - 05. Food Processing
 - 06. Greenhouse
 - 07. Healthcare/Hospital
 - 08. High Tech
 - 09. Hospitality
 - 10. Manufacturing
 - 11. Mineral & Chemicals
 - 12. Petroleum
 - 13. Retail Multi Tenant
 - 14. Retail Single Tenant
 - 15. School/Educational Facility
 - 16. Warehouse
 - 17. Water & Wastewater Treatment
 - 18. Winery

¹² NOTE: When referring to the billing rate, use CPP for SCE and SDG&E customers and use PDP for PG&E customers.

- 96. Other please specify
- 98. (Don't Know)
- 99. (Refused)
- F4. Does your organization own or rent your primary location?
 - 1. Own
 - 2. Rent
 - 98. (Don't Know)
 - 99. (Refused)
- F5. During which hours of the day is your business the busiest?
 - 1. 6:00 AM 12:00 noon
 - 2. 12:00 noon 6:00 PM
 - 3. 6:00 PM 10:00 PM
 - 4. 10:00 PM 6:00 AM
 - 5. 8:00 AM 5:00 PM
 - 96. Other please specify
 - 98. (Don't Know)
 - 99. (Refused)

F6. Finally, in order to thank you for your participation in this interview and send a \$50 VISA gift card, may I please have your mailing address? [RECORD ADDRESS]

00. (OPEN END)

Those are all the questions that I had. [UTILITY] thanks you for your feedback. Have a great day!

Appendix B. Opt-Out Participant Interview Responses

This section presents the results of the California Critical Peak Pricing opt-out customer in-depth interviews, both overall and by each participating utility.

Note that these responses result from open-ended interviews. Some questions or probes were not asked of respondents for whom they were not relevant, if they had already been addressed in another part of the conversation, or if the respondent did not have time to answer.

Respondent Characterization

RC1. Thinking about your organization...

How much of a priority is saving energy?

Received Analysis	PGE	SCE	SDGE	Total
High Priority	10	6	5	21
Not a high priority	0	1	0	1
Total	10	7	5	22

How much of a priority is saving on your utility bills?

Received Analysis	PGE	SCE	SDGE	Total
High Priority	10	6	4	20
Not a high priority	0	1	1	2
Total	10	7	5	22

Does your organization have other priorities or concerns regarding saving energy or costs?]

Received Analysis	PGE	SCE	SDGE	Total
No	3	4	2	9
Operating hours/Production/Service	3	0	2	5
Cost is higher priority than Energy	1	0	0	1
Dedicated Energy Manager Position	1	0	0	1
Environmental concerns	1	0	0	1
Other non-IOU energy source	1	3	1	5
Total	10	7	5	22

RC2. According to our data, your organization has either more than one location or has multiple [UTILITY] accounts.

Are all of your locations on the same billing rate?

Received Analysis	PGE	SCE	SDGE	Total
Yes	1	0	0	1
No	7	6	5	18
Don't know	1	0	0	1
N/A - Manages only one SCE account	1	1	0	2
Total	10	7	5	22

If not, have you experienced any difficulty managing different billing rates across your locations? Have you had any trouble communicating information about event days across your locations?

Received Analysis	PGE	SCE	SDGE	Total
Yes	0	1	2	3
No	5	5	3	13
Don't know	1	0	0	1
N/A - Manages only one SCE account/location	2	1	0	3
Missing	2	0	0	2
Total	10	7	5	22

Reasons for Opting-Out of the CPP Rate

RP1. What was the primary reason your organization decided to opt-out of/un-enroll from the CPP/PDP rate?

Primary reason for opt-out	PGE	SCE	SDGE	Total
Production/operation prohibits load shed	4	1	1	6
Alternate energy source (3rd party vendor or alternate generation)	1	3	1	5
Lack of centralized energy controls	1	1	1	3
Must maintain comfort/safety of tenants/guests/patients	2	1	0	3
Storage requires constant climate control/refrigeration	0	1	1	2
No Financial Benefit	1	0	0	1
Participating in alternate demand program	1	0	0	1
Use little energy during peak rate hours	0	0	1	1
Total	10	7	5	22

RP2. What were the other factors that led to your decision to leave the CPP/PDP rate?

Other reasons for opt out	PGE	SCE	SDGE	Total
None	4	4	4	12
Account Representative Advice	3	0	1	4
Unaware of automatic default for some time	0	2	0	2
Air quality regulations prohibit on-site generator	0	1	0	1
Enrolled in Capacity Bidding	1	0	0	1
High effort/ Low reward	1	0	0	1
Understanding complex pricing structure	1	0	0	1
Total	10	7	5	22

RP3. Prior to opting out/unenrolling in the [RATE NAME] rate...

Did your organization review your facility's energy usage or receive a rate analysis?

Received Analysis	PGE	SCE	SDGE	Total
Yes	8	4	5	17
No	1	3	0	4
Missing	1	0	0	1
Total	10	7	5	22

If so, did you gather the information or did your account representative provide the rate analysis information?

Rate/Energy Usage Analyst	PGE	SCE	SDGE	Total
Account Representative only	6	2	2	10
Account Representative and Internal	0	0	2	2
Account Representative and 3rd party	1	1	0	2
Internal only	0	1	0	1
3rd party only	0	0	1	1
Don't know	1	0	0	1
Missing	1	0	0	1
N/A - Did not receive analysis	1	3	0	4
Total	10	7	5	22

How helpful was this information?

Was Analysis Helpful?	PGE	SCE	SDGE	Total
Helpful	5	3	4	12
Not helpful	0	0	0	0
N/A - Did not receive analysis	1	3	0	4
Missing	4	1	1	6
Total	10	7	5	22

Did it affect your company's decision to stay on the rate?

Analysis Influenced Opt-Out	PGE	SCE	SDGE	Total
Yes	2	2	3	7
No	2	0	1	3
N/A - Did not receive analysis	1	3	0	4
Missing	5	2	1	8
Total	10	7	5	22

RP4. When did your organization decide to opt-out of/unenroll from the CPP/PDP rate?

Time-on-rate Self Report – per database	PGE	SCE	SDGE	Total
Less than 1 year	0	5	3	8
1-2 years	5	2	0	7
At least 2 years - specific time unknown	0	0	2	2
3 years or more	1	0	0	1
Don't know	4	0	0	4
Total	10	7	5	22

Table. Time-on-Rate: Self-Report vs. Database

Time-on-rate	SDG&E Completes		PG&E Completes		SCE Completes		Total C	ompletes
	Database	Self- Report	Database	Self- Report	Database	Self- Report	Database	Self-Report
Total Accounts	5	5	10	10	7	7	22	22
Less than 1 year	5	3	0	0	6	5	11	8
1-2 years	0	0	9	5	1	2	10	7
3 years or more	0	0	1	1	0	0	1	1

RP5. Do you recall...

What rate plan your business is currently on?

Rate Plan - Self Report	PGE	SCE	SDGE	Total
Time of Use	0	5	0	5
A-10	1	0	0	1
A-1	1	0	0	1
15.7	1	0	0	1
A6	0	0	1	1
DGR	0	0	1	1
Multiple	1	0	0	1
Don't know	5	2	3	10
Missing	1	0	0	1
Total	10	7	5	22

Is this plan meeting the needs of your business?

Current rate meeting needs?	PGE	SCE	SDGE	Total
Yes	6	4	2	12
No	0	0	0	0
Don't know	2	3	3	8
Missing	2	0	0	2
Total	10	7	5	22

Are you planning to switch plans in the near future?

Changing rate plan soon?	PGE	SCE	SDGE	Total
Yes	3	6	2	11
No	1	0	0	1
Don't know	3	1	3	7
Missing	3	0	0	3
Total	10	7	5	22

RP6. While enrolled in the CPP/PDP rate...

Do you recall any [RATE NAME] events being called?

Remember Events	PGE	SCE	SDGE	Total
Yes	4	4	5	13
No	5	3	0	8
Missing	1	0	0	1
Total	10	7	5	22

Can you explain how your organization prepared for the event?

Actions taken during Events	PGE	SCE	SDGE	Total
Did not take action	1	1	2	4
Shut off some lights	0	1	1	2
Shut off specific equipment/measures	1	1	0	2
Backup generator	0	1	0	1
Notify site manager	1	0	0	1
Reduced production	1	0	0	1
Shut off some lights and AC	0	0	1	1
Total shutdown	0	0	1	1
MISSING	1	0	0	1
N/A - Do not remember events	5	3	0	8
Total	10	7	5	22

Did you have enough time to prepare for the event?

Enough time to prepare for Events?	PGE	SCE	SDGE	Total
Yes	1	3	2	6
No	2	0	1	3
N/A - Do not remember events	5	3	0	8
N/A - Did not take action	1	1	2	4
Missing	1	0	0	1
Total	10	7	5	22

Has event day participation affected your employees' comfort level or the comfort level of your customers?

Events affect comfort?	PGE	SCE	SDGE	Total
Yes	1	3	2	6
No	2	0	1	3
N/A - Do not remember events	5	3	0	8
N/A - Did not take action	1	1	2	4
Missing	1	0	0	1
Total	10	7	5	22

Has participation in event days affected your organization's production or work schedule?

Events affect work schedule?	PGE	SCE	SDGE	Total
Yes	1	0	0	1
No	2	3	3	8
N/A - Do not remember events	5	3	0	8
N/A - Did not take action	1	1	2	4
Missing	1	0	0	1
Total	10	7	5	22

Is there anything that could help your organization participate in event days?

Event Suggestions	PGE	SCE	SDGE	Total
No	1	2	2	5
Investing capital on more energy efficiency measurements	1	0	0	1
More notice might help shift operating hours	0	0	1	1
Don't know	1	0	0	1
N/A - Do not remember events	5	3	0	8
Missing	2	2	2	6
Total	10	7	5	22

RP7. Would more information about event days, rate credits and penalties, and tips for reducing energy usage during events have been helpful to your organization? What information do you want?

Desired information or changes	PGE	SCE	SDGE	Total
Nothing	5	1	4	10
Longer access to bill protection	0	3	1	4
Tools to help with understanding your bill like "Bill Comparisons/Shadow bills"	0	3	0	3
More awareness of the rate	1	1	0	2
Clarify Event History	0	0	1	1
Day after analysis of how well they did	1	0	0	1
Industry specific rate information*	0	1	0	1
Any - General	0	1	0	1
Missing	3	0	0	3
Total	10	10	6	26

(Multiple Response)

* School/Educational facility

RP8. The IOUs are trying to determine what they could do to help customers stay on the CPP/PDP rate. You just told me about activities or items that could have been helpful to your company. What could have your utility done to help your company stay on the CPP/PDP rate?

Suggestions	PGE	SCE	SDGE	Total
Nothing	6	2	3	11
Specific savings plan for their facility	1	1	0	2
Compete with direct access rates	1	0	0	1
Increase financial benefit	0	0	1	1
More flexible timeframe	0	1	0	1
Notify of rate change when auto-enrolled	0	1	0	1
Don't know/Missing	2	2	1	5
Total	10	7	5	22

RP9. Do you have any suggestions for better ways to communicate information about the CPP/PDP rate to customers?

Suggestions	PGE	SCE	SDGE	Total
Nothing	2	2	1	5
Tailor advice to specific facility/industry*	0	3	0	3
Account Representative calls are preferred	0	1	1	2
Account representative was very effective	2	0	0	2
Current communications were very effective	1	0	1	2
Clarify complexity of rate plan	1	0	0	1
Clarify Event History	0	0	1	1
Generally increase feedback	1	0	0	1
Text or Call instead of email event notification	1	0	0	1
Don't know/Missing	2	1	1	4
Total	10	7	5	22

*Two Schools, one Manufacturing

Firmographics

F1. Is your company currently enrolled in any [UTILITY] programs? If so, which ones?

Programs	PGE	SCE	SDGE	Total
Capacity Bidding	2	0	0	2
Summer Discount Program	0	1	0	1
Don't know	2	0	1	3
None	6	6	4	16
Total	10	7	5	22

F2. Were you aware that your organization may have been eligible to participate in another demand response program while enrolled in the CPP/PDP13 rate?

Awareness	PGE	SCE	SDGE	Total
Yes	4	1	4	9
No	4	4	1	9
Missing	2	2	0	4
Total	10	7	5	22

F3. What type of business do you run?

Facility Type	PGE	SCE	SDGE	Total
School/Educational Facility	2	4	0	6
Commercial Office	2	0	1	3
Manufacturing	1	1	0	2
Water & Wastewater Treatment	1	0	1	2
Retail – Single Tenant	0	0	1	1
Food Processing	1	0	0	1
Healthcare/Hospital	1	0	0	1
Green House	0	1	0	1
High Tech	1	0	0	1
Warehouse	0	1	0	1
Cold storage	0	0	1	1
Charging station for industrial lead acid batteries	1	0	0	1
Energy Generation - Natural Gas	0	0	1	1
Total	10	7	5	22

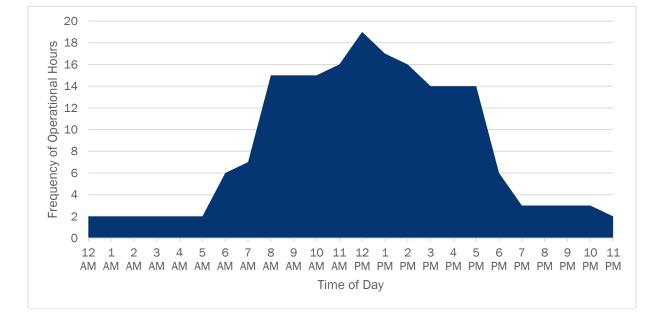
¹³ NOTE: When referring to the billing rate, use CPP for SCE and SDG&E customers and use PDP for PG&E customers.

Appendix B. Opt-Out Interview Responses

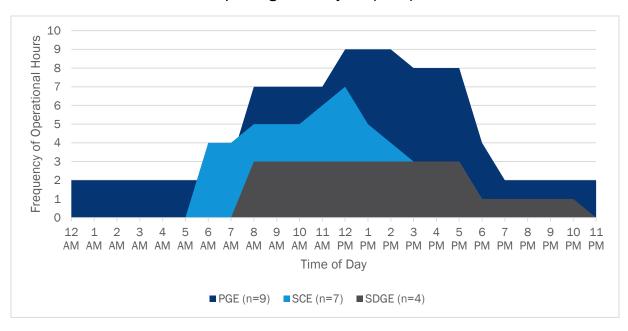
F4. Does your organization own or rent your primary location?

Ownership Type	PGE	SCE	SDGE	Total
Own	5	6	3	14
Rent	4	1	2	7
Refused/Missing	1	0	0	1
Total	10	7	5	22

F5. During which hours of the day is your business the busiest?



Operating Hours - Overall (n=20)



Operating Hours - By IOU (n=20)

This section presents the results of the California Critical Peak Pricing Online Participant Survey by each participating utility.

Screener

S1. How would you rate your familiarity with the [RATE NAME] billing rate? Would you say you are...

Despense	PG&E		SCE		SDG&E	
Response.	Frequency	Percent	Frequency	Percent	Frequency	Percent
Somewhat familiar	38	17%	27	32%	15	13%
Moderately familiar	67	30%	41	48%	48	42%
Extremely familiar	122	54%	17	20%	51	45%

CPP Enrollment Awareness and Information Sources

The next few questions refer back to when your organization first enrolled in the [RATE NAME] rate plan.

E1. Which of the following best describes how your company joined the rate?

Response	PG&E		SCE		SDG&E	
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent
The company was automatically enrolled/defaulted into the rate	110	48%	31	36%	27	24%
The company contacted [Utility] directly and asked to join the rate	105	46%	30	35%	69	61%
I don't know how my company joined the rate	12	5%	24	28%	18	16%

E1a. How long has your company been on the rate?

Posponso	PG&E		SCE		SDG&E	
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent
Less than 1 year	61	27%	-	0%	5	4%
1-2 years	28	12%	2	2%	5	4%
3 years or more	138	61%	83	98%	101	89%
l don't know	-	0%	-	0%	3	3%

M1. How did your organization first hear about the [RATE NAME] rate?

Response PG&E SCE SDG&E			SCE	SDG&E
-------------------------	--	--	-----	-------

	Frequency	Percent	Frequency	Percent	Frequency	Percent
Notification Letter	26	11%	22	26%	27	24%
Utility's Website	4	2%	3	4%	1	1%
Bill Insert	0	0%	3	4%	0	0%
Account Representative	179	79%	42	49%	68	60%
Other	5	2%	2	2%	6	5%
l don't know	14	6%	13	15%	12	11%

M3. Has your experience with the program matched how it was described to you?

Posponso	PG&E		SCE		SDG&E	
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	220	97%	76	89%	111	97%
No	7	3%	9	11%	3	3%

[ASK IF M3=2]

M4. Please describe how your experience with the program varied from what was described to you. [OPEN END]

Response	PG&E (n=227)	SCE (n=85)	SDG&E (n=114)	
	Multiple Response			
Program met customer's expectations	97%	89%	97%	
Impact on Utility Bill				
Unexpected negative impact on utility bill/event rate higher than expected	3	2	1	
Did not realize as much utility bill savings as expected	1	1	2	

M5. Is there anything about the [RATE NAME] rate plan processes that you would have liked to have known or understood earlier? If so, please describe. [OPEN END]

Response	PG&E (n=227)	SCE (n=85)	SDG&E (n=114)
	Mult	iple Respon	se
Nothing	204 (90%)	68 (80%)	83 (73%)
Options Available/Alternative Rates			
Comparison of bills between CPP/PDP rate and alternative rates	6	1	1
Alternative rates/programs	2	-	-
That the rate was an opt-out rate	2	-	-
Better general understanding of the rate	1	4	2
The options available on the rate	1	-	-
Dual participation options	-	1	-

Response	PG&E (n=227)	SCE (n=85)	SDG&E (n=114)
		iple Respon	se
Capacity Reservation Level/Charge	-	-	7
Impact on Utility Bill			
The impact of the rate on their utility bill	8	1	2
Event day vs. non-event day rates	1	3	6
The potential bill savings that could be realized	1	-	1
Event-Related Processes			•
When events are likely to occur (seasons, event triggers, etc.)	3	2	12
The number of events that would be called annually	2	-	-
How event notification works	-	2	-
That events could be called on consecutive days	-	1	-
Did not know that the program changed from to year-round	-	1	-
Potential Program Benefits		L	
The impact of the rate on the environment	2	-	-
Potential benefits of the program	-	1	-
Other Responses	·		
The rate is not a good fit for their company	3	1	-
Other	1	2	1
Note: Multiple response; frequencies are not weighted	•	•	•

[ASK IF SDG&E Customer]

M6. How useful were the following tools and information sources to your understanding of the rate?

Scale Point	Not Usef 0.:		Somewha		Extremel		Never Use applic 90	able
	Frequency	Percent	 Frequency	4-6 Frequency Percent		7-10 Frequency Percent		Percent
a. SDG&E's kWick View website, where you can see your company's energy usage	6	5.1%	34	28.6%	65	54.7%	Frequency 9	7.9%
b. SDG&E's Rate Analysis Tool on the "My Account" website, a tool to compare how your company would perform on different rate plans	15	12.6%	17	14.3%	34	28.6%	48	42.1%
c. The letter your company initially received that provided instructions for how to participate in the rate	10	8.4%	54	45.5%	31	26.1%	19	16.7%
d. Information from your account representative	15	12.6%	29	24.4%	62	52.2%	8	7%
e. The information you received about seasonal preparedness for events	27	22.7%	45	37.9%	28	23.6%	14	12.3%

[ASK IF SCE Customer]

M7. How useful were the following tools and information sources to your understanding of the rate?

Scale Point	Not Useful At All	Somewhat useful	Extremely Useful	Never Used It/Not applicable
	0-3	4-6	7-10	96

	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
a. SCE's EnergyManager tool	10	11.8%	14	16.5%	34	40%	27	31.8%
b. SCE's website	11	12.9%	16	18.8%	42	49.4%	16	18.8%
c. The letter your company initially received that provided instructions for how to participate in the rate	11	12.9%	19	22.4%	43	50.6%	12	14.1%
d. Information from your account representative	15	17.6%	15	17.6%	48	56.5%	7	8.2%
e. The information you received about seasonal preparedness for events	12	14.1%	15	17.6%	46	54.1%	12	14.1%

[ASK IF PG&E Customer]

M8. How useful were the following tools and information sources to your understanding of the rate?

Scale Point	Not Usef	ul At All	I Somewhat us		Extremel		Never Used It/Not applicable	
	0-:	3	4-(6	7-1	7-10		5
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
a. PG&E's "My Rate Analysis" tool	7	3.4%	50	22.7%	120	54%	49	22%
b. The letter your company initially received that provided instructions for how to participate in the rate	11	5%	114	51.3%	66	29.7%	36	16%
c. Information from your account representative	14	6.2%	30	13.5%	159	71.6%	24	11%
d. The information you received about seasonal preparedness for events	16	7.1%	117	52.8%	79	35.8%	15	1%

M9. [UTILITY] is looking for ways to help customers understand how they can benefit from the [RATE NAME] billing rate. How helpful would the following items be in explaining the rate?

Scale Point	Not Usef		Somewha		Extremely		Don't	
	0-3		4-6		7-10		96	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
a. Online tutorial videos of how the [RATE NAME] rate works	98	23.8%	90	21.7%	152	36.9%	73	17.6%
b. Case studies of businesses in similar industries who have found success on the [RATE NAME] rate	37	8.8%	95	23.1%	214	51.6%	68	16.5%
c. Shadow bills, where customers can compare their past bills with what their bills would look like on the [RATE NAME] rate	17	4.1%	17	14.2%	311	73.2%	36	8.5%

M14. What is the best way for [UTILITY] to share information with you about the [RATE NAME] rate?

Pooponoo	PG	i&E	S	CE	SDG&E	
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent
Email	181	80%	63	74%	90	79%
Direct Mail/Newsletter	5	2%	6	7%	3	1%
Bill Insert	3	1%	3	4%	0	0%
Text message	0	0%	0	0%	0	0%
Website	0	0%	1	1%	1	1%
Social Media messages	0	0%	0	0%	0	0%
Phone call from Account Representative	37	16%	10	12%	20	18%
Other	0	0%	2	2%	0	0%

M15. In general, when you have a question about the [RATE NAME] billing rate, where do you go for an answer? Please select all that apply. [MULTIPLE RESPONSE]

	PG&E		S	CE	SDG&E	
Response	Frequency	Percent (n=227)	Frequency	Percent (n=85)	Frequency	Percent (n=114)
Utility Account Representative	178	78%	54	64%	93	82%
Utility Website	22	10%	20	24%	20	18%
Call Utility customer hotline	25	11%	5	6%	0	0%
I have not had any questions/Not applicable	13	6%	16	19%	2	2%
Other	1	0%	2	2%	5	4%

CPP Account Representative Interaction & Information Sources

AR1. Are you aware that [UTILITY] has assigned an account representative to help your organization with questions about service and issues related to the [RATE NAME] billing rate?

Response	PG&E		S	CE	SDG&E	
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	199	87%	74	87%	101	89%
No	27	12%	8	9%	13	11%
l don't know	1	0%	3	4%	0	0%

AR2. Prior to enrolling in the [RATE NAME] billing rate, did your [UTILITY] account representative contact you to discuss how switching to the [RATE NAME] rate would impact your business?

Response	PG&E		S)E	SDG&E	
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	166	83%	50	68%	77	76%
No	33	17%	24	32%	24	24%

AR4. Is there anything that your [UTILITY] account representative could provide to make participation in the [RATE NAME] rate easier for your organization? [OPEN END]

Response	PG&E (n=203)*	SCE (n=74)	SDG&E (n=101)
	Mu	Itiple Respon	se
No/Nothing	185 (82%)	58 (78%)	78 (77%)
Support Understanding Rate's Impact on Utility Bill			
Comparison of rate versus alternative rates	3	1	12
Annual review of rate impact on utility bill	2	-	9
Explanation of potential program benefits	2	-	-
Estimates of savings from the rate	1	-	-
Managing dual enrollment	-	1	-

Response	PG&E (n=203)*	SCE (n=74)	SDG&E (n=101)			
	Mu	Itiple Respon	Se			
Comparison of peak vs. off-peak rates	-	1	-			
Explanation of Rates Processes						
General refresher/review of the rate	2	4	1			
Information on opting out	2	1	-			
Notification of changes to rate processes	-	1	-			
Representative could be more knowledgeable of						
the rate	-	-	1			
Explanation of event triggers	-	-	2			
Supporting Improving Performance						
Review of event performance	3	-	-			
Industry-specific load reduction strategies	-	2	-			
More support on event performance	-	-	1			
Note: Multiple response; frequencies are not weighted; base only includes customers who were aware that they were assigned an account representative *Weighted base for PG&E is 199, n=203 because table is not weighted						

Process: Bill Protection

P1. In the first year that customers are enrolled in the [RATE NAME] rate, they are offered "Bill Protection," which guarantees that customers will not pay more than what they would have paid on their base rate plan had they not enrolled in the [RATE NAME] rate plan. Did the availability of Bill Protection help you decide to stay on the CPP/PDP rate plan?

Response	PG&E		SCE		SDG&E	
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	172	76%	25	29%	59	52%
No	36	16%	26	31%	29	25%
l don't know	19	8%	34	40%	26	23%

Process: Capacity Reservation Level/Charge

[ASK P3-5 IF SCE or PG&E Customer]

P3. Upon enrollment in [RATE NAME], your organization was given the chance to select a Capacity Reservation Level (CRL), which allows customers to reserve a prescribed level of electricity in advance to avoid paying event charges on electricity used during events. Did your organization select a Capacity Reservation Level (CRL)?

Pachanco	PG	&E	SCE		
Response	Frequency	Percent	Frequency	Percent	
Yes	42	21%	5	6%	
No	128	56%	32	38%	
l don't know	58	25%	48	56%	

[ASK IF P3=2]

P4. Can you explain why your organization decided not to select a Capacity Reservation Level? [OPEN END]

Response	PG&E (n=119)	SCE (n=32)	SDG&E (n=59)
	Mult	ple Respor	nse
Does not work well for schools	48 (40%)	1	-
Not aware of the CRL/CRC option	12 (10%)	7 (22%)	-
Did not need it (not-specific)	9	2	-
Have not discussed the option	1	1	-
Not needed based on energy use	1	-	34 (58%)
Energy use varies too widely	1	-	1
Does not understand how it works	-	2	3
Cannot reduce energy use at all	-	-	1
Cost for reserving capacity not worthwhile	-	-	5
Currently uses CRL/CRC	-	-	1
Did not want an additional charge	-	-	1
Other	1	-	1
Don't know	47	19	11
Refused	-	-	1
Note: Multiple response; frequencies are not weighted; base or did not select a CRL/CRC (does not include those who "do not			eported they

[ASK IF P3=1]

P5. Has your organization saved money from selecting a Capacity Reservation Level (CRL)?

Pachanco	PG	&E	S	SCE	
Response	Frequency	Percent	Frequency	Percent	
Yes	14	37%	9	90%	
No	22	59%	0	0%	
l don't know	1	4%	1	10%	

[ASK P6-8 IF SDG&E Customer]

P6. Upon enrollment in [RATE NAME], your organization was given the chance to select a Capacity Reservation Charge (CRC), which allows customers to reserve a prescribed level of electricity in advance to avoid paying event charges on electricity used during events. Did your organization select a Capacity Reservation Charge (CRC)?

Poepopeo	SDG&E		
Response	Frequency	Percent	
Yes	34	30%	
No	59	52%	
l don't know	21	18%	

[ASK IF P6=2]

P7. Can you explain why your organization decided not to select a Capacity Reservation Charge? [OPEN END]

Response	PG&E (n=119)	SCE (n=32)	SDG&E (n=59)
	Mult	iple Respor	nse
Does not work well for schools	48 (40%)	1	-
Not aware of the CRL/CRC option	12 (10%)	7 (22%)	-
Did not need it (not-specific)	9	2	-
Have not discussed the option	1	1	-
Not needed based on energy use	1	-	34 (58%)
Energy use varies too widely	1	-	1
Does not understand how it works	-	2	3
Cannot reduce energy use at all	-	-	1
Cost for reserving capacity not worthwhile	-	-	5
Currently uses CRL/CRC	-	-	1
Did not want an additional charge	-	-	1
Other	1	-	1
Don't know	47	19	11
Refused	-	-	1
Note: Multiple response; frequencies are not weighted; base or did not select a CRL/CRC (does not include those who "do not			eported they

[ASK IF P6=1]

P8. Has your organization seen a financial benefit from selecting a Capacity Reservation Charge (CRC)?

Response	SDG&E		
Response	Frequency	Percent	
Yes	19	56%	
No	8	24%	
l don't know	7	21%	

CPP Event Participation

Now, we would like to ask you about your awareness of and participation in [RATE NAME] events. As a reminder, [RATE NAME] Events are days when [UTILITY] asks customers to limit their use of electricity.

[FOR EP1: PG&E = 9 days; SCE = 12 days; SDG&E = 4 days]

EP1. Customers on the [RATE NAME] rate were asked to reduce their energy usage on [2013 NUMBER OF EVENT DAYS] specific days in 2013. How was your organization notified of these events? Please select all that apply. [MULTIPLE RESPONSE]

	PG&E		SCE		SDG&E	
Response	Frequency	Percent (n=227)	Frequency	Percent (n=85)	Frequency	Percent (n=114)
E-mail	205	91%	74	87%	114	100%
Telephone	118	52%	36	42%	50	44%
Text message	90	40%	6	7%	60	53%
Fax	28	12%	1	1%	0	0%
I don't recall any events in 2013	16	7%	8	9%	0	0%

[IF EP1=96, SKIP TO EP5]

EP2. When event notifications are sent out, is the correct individual in your organization notified?

Poeneneo	PG&E		SCE		SDG&E	
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	211	100%	73	95%	106	93%
No	0	0%	2	3%	0	0%
l don't know	0	0%	2	3%	8	7%

EP4. Did your organization try to reduce its energy usage on these event days?

Response	PG&E		SCE		SDG&E	
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	203	96%	65	84%	107	94%
No	8	4%	12	16%	4	4%
l don't know	0	0%	65	84%	3	3%

EP5. Does your organization have a formal plan in place to reduce energy usage on event days?

Poepopeo	PG	&E	SCE		SDG&E	
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	132	60%	49	67%	87	81%
No	85	39%	21	29%	20	19%
l don't know	1	1%	3	4%	0	0%

EP7. To prepare for these event days, did your organization take any of the following actions to reduce energy usage? Please select all that apply. [MULTIPLE RESPONSE]

	PG	&E	S	CE	SDG&E	
Response	Frequency	Percent (n=219)	Frequency	Percent (n=73)	Frequency	Percent (n=107)
Turned off non-essential equipment	187	86%	49	67%	93	87%
Turned off non-essential indoor/outdoor lighting	172	79%	47	64%	71	66%
Raised cooling thermostat settings	65	30%	33	45%	58	54%
Reduced or rescheduled production during events	66	30%	24	33%	39	36%
Adjusted work schedules	54	25%	26	36%	27	25%
Pre-cooled work areas	42	19%	12	16%	24	22%
Unplugged battery chargers	41	19%	9	12%	15	14%
Only used pre-charged equipment	13	6%	4	6%	8	8%
Nothing	8	4%	7	10%	0	0%
l don't know	1	0%	5	7%	2	2%

EP11. Are you aware of how much electricity that your business typically uses each month?

Response	PG	PG&E		Œ	SDG&E	
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	201	89%	71	84%	109	96%
No	13	6%	11	13%	4	4%
l don't know	13	6%	3	4%	1	1%

[SKIP IF EP11 = 2 or 8]

EP11a. Are you aware of how much electricity your facility must cut during an event in order to avoid higher billing rates during event hours?

Response	PG	PG&E		E	SDG&E	
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	166	83%	35	49%	67	61%
No	31	15%	27	38%	39	36%
l don't know	4	2%	9	13%	3	3%

EP9. Has your organization saved money on your energy bill for cutting your facility's energy usage during a [RATE NAME] Event Day?

Poepopeo	PG	PG&E		CE	SDG&E		
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Yes	166	83%	35	49%	67	61%	
No	31	15%	27	38%	39	36%	
l don't know	4	2%	9	13%	3	3%	

EP12. From your perspective, what tools or resources could [UTILITY] provide to make it easier for your organization to reduce energy on Event days? [OPEN END]

Response	PG&E (n=227)	SCE (n=85)	SDG&E (n=114)
		Itiple Respor	
No other tools or resources	173 (76%)	53 (62%)	77 (68%)
Education/Support Regarding Rate Processes			
Help educating employees/tenants/stakeholders about rates and events	8	1	5
General review of the program	3	-	-
Better explanation of different rate levels	2	-	-
Support with online tools	-	-	2
More information on when events are called	1	-	-
Support setting Capacity Reservation Level/Charge	1	-	5
Changes to Rate Design			
Earlier notification	2	6	1
Changes to number/frequency of events called	2	1	1
Other notification process improvements	2	1	-
Reduce charge during events	2	-	-
Increase bill reduction	1	-	-
Performance Coaching			
Regular review of event performance	6	1	3
More support on load reduction best practices	3	4	-
Real-time monitoring of energy use during events	1	-	3
Help understanding required load reduction during events	-	-	1
Comparison of energy usage to see if savings occurred	-	1	1
Shadow Billing/Rate Comparison			
Rate comparisons	2	-	-
Additional bill information	1	-	-
Clear explanation of benefits/savings from participating	-	2	-
Technical Assistance/Technology Incentives			
TA/TI or Auto-DR	2	5	2

Response	PG&E	SCE	SDG&E
	(n=227)	(n=85)	(n=114)
	Mu	Itiple Respor	nse
Note: Multiple response; frequencies are not weighted	•		

Barriers to Event Participation

Next, we would like to ask you about potential obstacles related to your organization's ability to participate in CPP/PDP Event days. Participation in event days involves taking actions to cut energy use throughout your facility.

B1. Please think about the potential obstacles that your company has faced when trying to reduce its energy usage during an Event day. How much of an obstacle have the following been to your organization's ability to reduce energy usage on Event days?

Scale point	Not Usef	ful At All	Somewha	t useful	Extremely	/ Useful	Don't kno Applic	
	0-3		4-6		7-1	0	96	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
a. Understanding of the process for participating in events	238	55.8%	118	27.7%	47	11%	24	5.6%
b. Finding available staff to manage event participation	196	46.1%	81	18.9%	123	28.8%	26	8.2%
c. Amount of manual effort required to participate in events	170	40%	98	23%	135	31.7%	32	5.3%
d. Your facility's ability to adjust production or service schedules	68	16%	83	19%	255	60%	20	4.7
e. Concerns about employee satisfaction	148	34.8%	90	21.2%	100	23.4%	87	20.5%
f. Concerns about customer satisfaction	114	26.7%	66	15.4%	153	36%	93	22%

Scale point	Not Useful At All		Somewhat useful		Extremely Useful		Don't kno Applice	
	0-3		4-6	6	7-10		96	;
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
h. Ability to participate in multiple, consecutive event days	135	31.8%	69	16.3%	201	47.2%	21	4.7%

B5. Are there any other obstacles to participating in events that you would like to share? [OPEN END]

Response	PG&E (n=227)	SCE (n=85)	SDG&E (n=114)
inesponse		Itiple Respon	
No other obstacles	141 (62%)	62 (73%)	70 (61%)
Structural Barriers			
Structural barriers related to schools	58 (26%)	5	5
Inflexible operating hours	5	4	3
Would not be able to meet demand/deadline	5	2	-
Cannot shut down certain systems/facility	4	1	1
Health & safety/regulatory requirements	3	-	9
Unpredictable energy use	1	-	-
Costs more to participate	2	-	-
Not enough load available to shed	-	-	2
Convenience/Resource Barriers	•	•	
Notification not early enough/not enough time to prepare	46 (20%)	1	-
Concerns about comfort/customer satisfaction	3	1	1
Cannot participate in consecutive event days/too many events	1	2	-
Cannot participate and meet needs of staff or other stakeholders	-	2	-
Lack of staff resources to manage event participation	-	1	5
Lack of energy management equipment/automation	-	-	1
Knowledge/Awareness Barriers			
Lack of awareness of event in some facilities within organization	46 (20%)	-	-
Lack of knowledge on how to reduce load	1	-	-
Lack of support from program staff/representative	1	-	-
Additional Barriers			
Energy use controlled by customers/clients/tenants	2	-	-
Issue with the notification system	-	1	-
Cannot participate on weekends	-	-	10
Equipment failure	-	-	5

Response	PG&E (n=227)	SCE (n=85)	SDG&E (n=114)
	Μι	Itiple Respon	se
Difficulty getting other staff/employees to participate	-	-	3
Incentives not enough	-	-	2
CPP events occur when energy is needed the most	-	-	1
Other	•		
Generally dissatisfied with rate	1	2	-
Opted out of the program	-	-	1
Other	2	3	-
Don't know	-	1	-
Note: Multiple response; frequencies are not weighted			•

Customer Satisfaction

Next, we would like to ask you about your satisfaction with the [RATE NAME] billing rate.

SAT1. What are the main benefits of the rate for your business? [OPEN END]

Response	PG&E (n=227)	SCE (n=85)	SDG&E (n=114)
	Mu	Itiple Respor	ISE
Lower energy bills/reduced energy costs/saving money	153 (67%)	48 (56%)	91 (80%)
No benefits/not sure if there are benefits	16	12	16
Environmental/Community Benefits			
Saving energy/conservation/helping the environment	54 (24%)	8	1
Employee/tenant/community awareness of conservation efforts	36 (16%)	-	-
Helping the grid/avoiding rolling blackouts	2	1	2
Reduced energy consumption	2	-	-
Helping the community	2	-	3
Other Benefits			
Able to reallocate the money saved on energy to other areas of their business	1	1	-
Better financial management	1	-	-
Stable energy rates	-	2	1
Ability to adjust energy usage	-	1	-
Getting the best rate for their company	-	1	-
Note: Multiple response; frequencies are not weighted			

SAT2. How satisfied are you with...?

Scale point	Not Usef			Somewhat useful		Useful	Don't know/Not Applicable	
	0-3		4-6		7-10		96	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
a. The enrollment process	238	55.8%	118	27.7%	47	11%	24	5.6%
b. Support from your Utility Account Representative	196	46.1%	81	18.9%	123	28.8%	26	8.2%
c. The way you receive event notification information (email/text/phone	170	40%	98	23%	135	31.7%	32	5.3%
d. The timing of the notifications (i.e., when you are notified)	68	16%	83	19%	255	60%	20	4.7
e. The [RATE NAME] rate overall	148	34.8%	90	21.2%	100	23.4%	87	20.5%
f. [ASK IF EP9=1] The money your company has saved from reducing its energy use during event days	114	26.7%	66	15.4%	153	36%	93	22%

Firmographics

Finally, we would like to collect some information about the characteristics of your organization.

FOa. Thinking about all of the ways your business uses electricity, what do you think uses the most electricity in your facility?

Response	PG&	E.	SC	SCE SDG&E		i&E
Nesponse	Frequency	Percent	Frequency	Percent	Frequency	Percent
Lighting	4	2%	10	12%	7	6%
Heating and Cooling	129	57%	31	36%	48	42%
Water Heating	0	0%	1	1%	0	0%
Motors	39	17%	18	21%	13	11%
Process measures (e.g., pumps and/or compressed air)	26	11%	12	14%	25	22%
Refrigeration equipment	28	12%	5	6%	4	4%
Office equipment, computers, or servers	0	0%	3	4%	7	6%
Other	0	0%	3	4%	10	9%

Response	PG&	E	S	SCE SDG		i&E
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent
l don't know	1	0%	2	2%	0	0%

FOb. Thinking about your company's energy use, does your company consistently use the same amount of electricity 24 hours a day, 7 days a week?

Response	P	G&E	S	CE	SDG&E		
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Yes	27	12%	20	24%	13	11%	
No	199	88%	64	75%	101	89%	
l don't know	0	0%	1	1%	0	0%	

F1. What is the approximate square footage of your typical facility? If your company has multiple locations in [UTILITY]'s territory, please give the approximate total square footage of all of them combined.

Response	PG	&E	SC	E	SDG&E		
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent	
50,000 square feet or less	52	23%	18	21%	14	12%	
50,001 to 100,000 square feet	11	5%	15	18%	12	11%	
100,001 to 200,000 square feet	12	5%	8	9%	12	11%	
200,001 to 300,000 square feet	6	3%	5	6%	6	5%	
300,001 to 500,000 square feet	9	4%	3	4%	22	19%	
500,001 to 1,000,000 square feet	7	3%	5	6%	4	4%	
More than 1,000,000 square feet	106	47%	19	22%	41	36%	
l don't know	23	10%	12	14%	3	3%	

F2. How many employees do you have at your company? Please give the approximate total that work in [UTILITIES'] territory.

Response	PG	&E	SC	Ξ	SDG&E		
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
10 or less	25	11%	8	9%	5	4%	
11 to 20	19	8%	3	4%	4	4%	
21 to 50	16	7%	9	11%	5	4%	
51 to 100	22	10%	18	21%	27	24%	
101 to 500	40	17%	28	33%	25	22%	
500 or more	104	46%	17	20%	48	42%	
l don't know	1	0%	2	2%	5	4%	

F3. Does your company market itself as "green"?

Response	P	G&E	S	CE	SDG	&E
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	38	17%	26	31%	43	38%
No	170	75%	44	52%	63	55%
l don't know	20	9%	15	18%	8	7%

F4. Which of the following best describes your business?

Despense	PG	&E	S	CE	SDG	i&E
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent
Biotech	1	1%	2	2%	15	13%
Commercial Office - Multi Tenant	8	4%	1	1%	8	7%
Food Processing	10	4%	3	4%	2	2%
Healthcare/Hospital	3	1%	1	1%	1	1%
High Tech	3	1%	2	2%	16	14%
Hospitality	7	3%	1	1%	5	4%
Manufacturing	10	4%	5	6%	7	6%
Mineral & amp; Chemicals	5	2%	13	15%	1	1%
Petroleum	5	2%	2	2%	7	6%
Retail - Multi Tenant	0	0%	2	2%	2	2%
Retail - Single Tenant	29	13%	1	1%	7	6%
School/Educational Facility	101	44%	19	22%	18	16%
Warehouse	3	1%	15	18%	8	7%
Water & amp; Wastewater Treatment	5	2%	3	4%	1	1%
Winery	1	0%	2	2%	3	3%
Municipality/Government	3	1%	2	2%	11	10%
Printing/Media	2	1%	1	1%	2	2%
Agriculture/Composting/Recycling (other/unspecified)	19	8%	10	12%	15	13%
Other	6	3%	2	2%	8	7%
l don't know	4	2%	1	1%	2	2%

F5. Does your organization primarily own or rent its location(s) in [UTILITY] territory?

Response	PG	i&E	SC	CE SDG&		&E
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent
Own	180	79%	56	66%	85	75%
Rent	45	20%	28	33%	28	25%
l don't know	2	1%	1	1%	1	1%

F6. During which hours of the day is your business the busiest?

Boononco	PG	&E	SC	Ξ	SDG	i&E
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent
Other, please describe:	23	10%	11	13%	10	9%
6:00 AM - 12:00 noon	26	11%	15	18%	10	9%
12:00 noon - 6:00 PM	40	18%	5	6%	28	25%
6:00 PM - 10:00 PM	0	0%	3	4%	2	2%
10:00 PM - 6:00 AM	1	0%	1	1%	48	42%
8:00 AM - 5:00 PM	114	50%	28	33%	16	14%
Consistently busy at all times of the day	22	10%	20	24%	10	9%

R5. Are you aware that your organization may be eligible to participate in another demand response program while enrolled in [UTILITY]'s [RATE NAME] billing rate?

Response	P	G&E	SCE		SDG	&E
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	82	36%	36	42%	52	46%
No	145	64%	49	58%	62	54%

R6. Is there anything else that you would like to share with [UTILITY] to help improve the [RATE NAME] rate for its customers? [Multiple Response]

Response	PG&E (n=227)	SCE (n=85)	SDG&E (n=114)
Nothing else	211 (93%)	68 (80%)	96 (84%)
Satisfied with account representative	4	1	-
Good job/good rate	3	-	-
Not sure what the benefits of the rate are	3	-	-
Participation is difficult for their industry	1	-	-
Would like more options (general)	1	-	-
Discontinue the program	1	-	-
Dissatisfied with utility's service	1	2	-
Would like more support from account representative	1	2	-
Other commentary aside from improving rate	1	6	1
Great customer service	1	_	-

Response	PG&E (n=227)	SCE (n=85)	SDG&E (n=114)
Clearer explanation of required load reduction	-	1	-
Energy bill too complicated	-	1	-
Wants to enroll more meters in CPP	-	-	3
Would like to opt-out from the rate	-	1	1
Would like performance report sent to them	-	-	2
Increase rewards/incentives for reducing energy	-	-	1
Earlier notification would be helpful	-	-	1
Issues participating when CPP and other DR programs are called on the same day	-	-	1
Web tool to edit notification contact information and preferences	-	-	5
Different rate structure/make rate adjustments for schools	-	2	-
Collaboration between schools on load reduction strategies	-	1	-
Clearer explanation of program benefits	-	1	-
Dissatisfied with the rate	-	2	3
Clearer explanation of penalties for not reducing	-	1	-
Improve website stability	-	1	-

End of Survey Message

Opinion Dynamics and [UTILITY] thanks you for your feedback. Have a great day!

For more information, please contact:

Megan Campbell Director

858 270 5010 tel 858 270 5011 fax mcampbell@opiniondynamics.com

7590 Fay Avenue Suite 204B La Jolla, CA 92037



Boston | Headquarters 617 492 1400 tel

617 497 7944 fax

1000 Winter St

800 966 1254 toll free

Waltham, MA 02451

San Francisco Bay

510 444 5050 tel 510 444 5222 fax

1999 Harrison St Suite 1420 Oakland, CA 94612 Madison, WI

608 819 8828 tel

608 819 8825 fax

2979 Triverton Pike Suite 102 Fitchburg, Wi 53711

Orem, UT

510 444 5050 tel 510 444 5222 fax

206 North Orem Blvd Orem, UT 84057