

Application of SAN DIEGO GAS & ELECTRIC  
COMPANY (U 902 E) For Authority To  
Update Marginal Costs, Cost Allocation,  
And Electric Rate Design.

Application: 15-04-012  
Exhibit No.: SDG&E-09

**PREPARED DIRECT TESTIMONY OF**  
**LESLIE WILLOUGHBY**  
**ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY IN**  
**SUPPORT OF SECOND AMENDED APPLICATION**

**CHAPTER 9**

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

**February 9, 2016**



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1 **PREPARED DIRECT TESTIMONY OF**  
2 **LESLIE WILLOUGHBY IN SUPPORT OF SECOND AMENDED APPLICATION**

3 **CHAPTER 9**

4 **I. OVERVIEW AND PURPOSE**

5 The purpose of my testimony is to propose changes to San Diego Gas & Electric  
6 Company’s (“SDG&E”) current Critical Peak Pricing (“CPP”) triggers. My specific proposal is  
7 to align the CPP Default (“CPP-D”) trigger with other demand response triggers, such as the  
8 Smart Pricing Program (“SPP”)<sup>1</sup> and Peak Time Rebate (“PTR”).<sup>2</sup> My testimony proposes  
9 modifying the CPP triggers in order to:

- 10 • Allow the CPP-D trigger to be reached when load reduction is needed;
- 11 • Enable day-ahead CPP-D<sup>3</sup> event decisions before 2:30 p.m.; and
- 12 • Add transparency to the SPP trigger and align the triggers for all of SDG&E’s  
13 dynamic rate schedules.

14 The current CPP-D trigger is based on the actual system load the day prior to an event,  
15 which has limited SDG&E in its ability to call CPP events on system peak days. SDG&E  
16 proposes changing the CPP-D trigger so that it will be based on a system load forecast on a day-  
17 ahead basis. In addition, SDG&E proposes to add a system load forecast criteria to the SPP rate  
18 trigger, so that it is consistent with the CPP-D trigger. SDG&E also proposes minor changes to

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<sup>1</sup> SPP rates are applicable to residential as Schedules TOU-DR and EECC-TOU-DR-P, small agricultural as Schedule TOU-PA and EECC-TOU- PA-P, and small commercial as Schedule TOU-A and EECC-TOU-A-P. Rate schedules with “P” (or Plus) on the end are commodity schedules that include an event day component.

<sup>2</sup> SDG&E proposes to gradually reduce PTR credits in this proceeding, toward the eventual elimination of the PTR credit. (See Chapter 2, Direct Testimony of Christopher Swartz.) The adjustments proposed in this testimony would align all demand response triggers, including PTR, for the remaining time period in which PTR is still in effect.

<sup>3</sup> CPP-D currently applies to non-residential customers with demand expected to equal or exceed 20 kW.

1 the SPP, CPP-D and PTR triggers in order to reconcile minor differences between those rate  
2 schedules. Minor changes include adding language to include test events to CPP-D tariffs and  
3 removing price references from both the SPP and PTR triggers. SDG&E proposes no change in  
4 this proceeding to the number of CPP-D events that are called annually.

5 SDG&E witness Cynthia Fang (Chapter 1) presents SDG&E's proposal to change its  
6 CPP periods. The proposed modifications to the CPP triggers presented herein incorporate  
7 SDG&E's proposed CPP period hours of 2 p.m. to 6 p.m. as described in Ms. Fang's testimony.

8 My testimony is organized as follows:

9 **Section II – Background:** provides the regulatory background of the requested trigger  
10 changes.

11 **Section III – The Current CPP-D Trigger Has Not Always Been Reached on Days**  
12 **with High System Loads:** presents SDG&E's proposal to replace the requirement for the day-  
13 ahead actual system load at 2:30 p.m. to be greater than 3,837 MW with the requirement that the  
14 forecasted system load be greater than 4,000 MW so that SDG&E will be better able to call CPP  
15 events when the system is expected to peak.

16 **Section IV – The Current Trigger Prevents CPP Events from Being Called Before**  
17 **2:30 P.M.:** recommends that a day-ahead time constraint of 2:30 p.m. be eliminated.

18 **Section V – New Regulatory Reporting Requirements:** discusses new reporting  
19 obligations regarding demand response resources.

20 **Section VI – Updating the SPP Trigger will Increase Transparency and Align the**  
21 **Triggers for All SDG&E Dynamic Rates:** presents SDG&E's proposal to change the SPP  
22 trigger.

23 **Section VII – Summary and Conclusions:** puts forth my concluding remarks.

1           **Section VIII – Statement of Qualifications:** presents my witness qualifications.

2   **II.    BACKGROUND**

3           Customers enrolled on CPP-D and SPP Plus rates experience increased electric rates for  
4 up to 18 event days a year, when loads are especially high. CPP rates are designed to motivate  
5 customers who receive commodity services from the utility to reduce electricity consumption  
6 during high electric demand or when reduced load is needed for other reasons through  
7 commodity price signals on those event days. CPP rates can provide an effective load  
8 management tool when load reductions are needed beyond what would be addressed through  
9 time-of-use (“TOU”) rates.

10           Dynamic rates such, as CPP, are now available to all SDG&E customers who receive  
11 commodity services from the utility, medium and large commercial and industrial (“M/L C&I”),  
12 small commercial, agricultural and residential customers. In this testimony, customers enrolled  
13 in commodity rates EECC-CPP-D (for M/L C&I) or EECC-CPP-D-AG (for medium and large  
14 Agricultural) are referred to as CPP-D customers. CPP-D became the default commodity rate for  
15 eligible medium and large non-residential customers in 2008. Prior to 2008, CPP rates were  
16 offered on an opt-in (voluntary) basis. At that time, a maximum of 13 CPP event days could be  
17 called during a calendar year. The CPP trigger was a combination of actual system load  
18 conditions by 2:30 p.m. the day before and the forecasted high temperature for Miramar weather  
19 station at 2 p.m. the day prior. The rate and trigger were modified in the 2008 General Rate Case  
20 Phase 2 (“GRC P2”)<sup>4</sup> to: (1) reduce the CPP design day criteria<sup>5</sup> down from 13 to 9, (2) create  
21 the Capacity Reservation Charge (“CRC”), (3) increase the maximum number of CPP events

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<sup>4</sup> Decision (“D.”) 08-02-034, issued on February 29, 2008, approving Application (“A.”) 07-01-047.

<sup>5</sup> CPP design days refer to the number of event days that are used to design the CPP rate.

1 from 13 to 18, and (4) update the trigger with a higher system load. Those customers defaulted  
2 onto CPP-D in 2008 were provided one year of bill protection; however, SDG&E did not call  
3 any CPP events in 2008, and as such bill protection was extended to a second year for these  
4 customers.<sup>6</sup>

5 D.12-12-004 approved SDG&E's Smart Pricing Program which included a critical peak  
6 pricing rate for small commercial customers (EECC-TOU-A-P), a voluntary critical peak pricing  
7 rate for residential customers (EECC-TOU-DR-P) and a voluntary critical peak pricing rate for  
8 small agriculture customers (EECC-TOU-PA-P), collectively referred to in my testimony as SPP  
9 Plus rates.

10 Schedule PTR was approved in D.08-02-034. Residential customers enrolled in this  
11 schedule can earn a bill credit on event days if their energy use is lower than their customer  
12 reference level. SDG&E modified PTR in 2014 converting it from a default program to an  
13 optional, opt-in program, where residential customers are required to sign up for event alert  
14 notifications, such as emails and/or texts. Those customers then receive bill credits for load  
15 reductions achieved during PTR program events.<sup>7</sup> The PTR program is marketed to SDG&E  
16 customers as the Reduce Your Use Rewards ("RYU") program.

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<sup>6</sup> CPP bill protection was extended by D.09-09-036, which adopted a settlement between SDG&E, the Division of Ratepayer Advocates (now referred to as the Office of Ratepayer Advocates), Utility Consumers' Action Network, Federal Executive Agencies, Building Owners and Managers Association, California City-County Street Light Association, California Farm Bureau Federation, and the City of San Diego in SDG&E's 2009 Rate Design Window Application 08-11-014.

<sup>7</sup> Advice Letter 2571-E, filed on January 27, 2014 in compliance with D.13-07-003. Advice Letter 2571-E was approved on February 27, 2014, effective May 1, 2014.

1 **III. THE CURRENT CPP-D TRIGGER HAS NOT ALWAYS BEEN REACHED ON**  
2 **DAYS WITH THE HIGH SYSTEM LOADS**

3 The current trigger for the CPP-D rate requires both the forecasted temperature at  
4 Miramar to be greater than 84 degrees and the actual system load on the day before the event to  
5 reach or exceed 3,837 megawatts (“MW”) by 2:30 p.m.<sup>8</sup> However, SDG&E’s load patterns have  
6 changed since this trigger was created, and experience has shown that the current trigger does not  
7 necessarily allow for SDG&E to call CPP-D events on days that the system is peaking. In both  
8 2012 and 2013, the SDG&E system load on the day before the annual system peak day was  
9 significantly lower than the load on the annual system peak day. In 2012, the actual system load  
10 the day before the annual peak day at 2:30 p.m. was only 3,717 MW, so the trigger condition was  
11 not reached. In 2013, the system load the day before the annual peak day was only 3,713 MW,  
12 so again the trigger was not reached. In order to be effective, the CPP-D trigger must be reached  
13 on the day before high system load days and especially on the day before the annual system peak  
14 day. Table LW-1 shows 4 additional dates on which the system peak load exceeded 4,100 MW  
15 but the CPP-D trigger system load condition was not met.

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<sup>8</sup> The 3,837 value only applies to CPP events on Tuesday-Saturday. For events on Sunday, Monday and holidays the system load must reach 3,472 MW by 2:30 p.m. The 84 degrees value applies to CPP events on Monday-Friday. For events on Saturday, Sunday, or Holidays, the forecasted temperature must be 86 degrees or higher.

Table LW-1				
Day Prior to Event Date	Day Prior to Event MW at 2:30pm	Event Date	Event Day Actual Peak MW	Forecast for Event Date MW
8/29/2013	3,713	8/30/2013	4,604*	4,030
9/13/2012	3,717	9/14/2012	4,591*	4420
9/2/2013	3,591	9/3/2013	4,400	4265
9/5/2011	2,677	9/6/2011	4,320	4010
9/30/2012	3,532	10/1/2012	4,177	4410
8/9/2012	3,825	8/10/2012	4,137	4145
Note: CPP events were not actually called on the "event dates" in the table above. Event date represents a potential event date.				
* denotes the annual system peak day.				

1 Consistent with the above chart, SDG&E proposes to replace the requirement for the day-  
2 ahead actual system load at 2:30 p.m. to be greater than 3,837 MW with the requirement that the  
3 forecasted system load be greater than 4,000 MW. SDG&E receives this forecast daily and  
4 provides it to its Demand Response team during the months of May through October, which are  
5 SDG&E's summer season. The average of the system peak loads on the 9th highest system load  
6 day in 2012, 2013, and 2014 was 4,067 MW. As Table LW-1 shows, the load forecast for  
7 September 5, 2011 was 4,010 MW. Therefore, rather than a threshold of 4,067 MW, SDG&E  
8 recommends that the trigger be set at 4,000 MW to allow for forecast error.

9 The specific trigger language SDG&E proposes for its CPP-D tariffs is provided below:<sup>9</sup>

10 A maximum of eighteen (18) CPP Events can be triggered on any day of the  
11 week, year round. CPP Events shall be effective from 2:00p.m. – 6:00 p.m.<sup>10</sup> A  
12 CPP Event may be triggered if the day-ahead system load forecast for the  
13 potential event day is greater than 4,000 MW. Events may also be triggered in

<sup>9</sup> The language about the maximum number of events is contained within special condition 16 of CPP-D and remains in special condition 16. SPP does not list the hours of operation and the maximum number of events in their trigger sections. It has separate special conditions that contain that information. PTR also lists the hours of operation separately and the maximum number of events does not apply.

<sup>10</sup> SDG&E's proposal to change the hours of its CPP period from 11 a.m. – 6 p.m. to 2 p.m. – 6 p.m. is included in the testimony of Ms. Fang (Chapter 1).



1 response to high forecasted temperatures, extreme conditions, and emergencies.  
2 Whenever the California Independent System Operator has issued an alert or  
3 warning notice, the California Independent System Operator shall be entitled to  
4 request that the utility, at its discretion, call a program event pursuant to this  
5 Schedule. Events may also be triggered for testing/evaluation purposes. If two  
6 CPP events are cancelled, the two cancelled CPP Events will be credited as one  
7 (1) CPP event towards the maximum number CPP Events that can be called  
8 during the year.

9 **IV. THE CURRENT TRIGGER PREVENTS CPP EVENTS FROM BEING CALLED**  
10 **BEFORE 2:30 P.M.**

11 Since the trigger criteria for the CPP event day includes the day-ahead actual system load  
12 at 2:30 p.m., a final decision about whether or not to call an event cannot be made until 2:30 p.m.  
13 on the day before an event. Having the flexibility to call events earlier in the day would allow  
14 SDG&E to notify customers of events sooner and plan accordingly. Therefore, SDG&E  
15 recommends that a day-ahead time constraint of 2:30 p.m. be eliminated and replaced with the  
16 requirement that the forecasted system load on a day-ahead basis be greater than 4,000 MW.

17 **V. NEW REGULATORY REPORTING REQUIREMENTS**

18 Recent regulatory rulings are playing a role in how the electric investor-owned utilities  
19 (“IOUs”) utilize their Demand Response (“DR”) resources. In January 2015, the California  
20 Public Utilities Commission (“Commission”) issued Resolution E-4708 requiring SDG&E,  
21 Southern California Edison Company (“SCE”) and Pacific Gas and Electric Company (“PG&E”)  
22 to report:

23 [B]oth the forecast and actual trigger conditions, the highest price of a  
24 generating resource that is part of the Utilities’ portfolio that was dispatched,  
25 the actual value that met the trigger criteria, and certain confidential contract  
26 information. The Commission finds that this additional information is needed  
27 to improve transparency of the Utilities’ administration of demand response  
28 programs, and to support future Commission analysis of any instances in

1 which a demand response program was economic to dispatch but the utility  
2 instead decided to utilize a non-demand response resource.<sup>11</sup>

3 Additionally, Ordering Paragraph (“OP”) 1 of D.14-05-025 adopted the Office of  
4 Ratepayer Advocates’ (“ORA”) proposal that requires the IOUs to “provide weekly exception  
5 reporting to the Commission’s Energy Division and ORA to identify and describe each  
6 occurrence when a demand response program was economic to dispatch but the utility decided to  
7 utilize a non-demand response resource instead.”<sup>12</sup> The goals of these Commission directives are  
8 to improve the transparency of the utilities’ administration of their DR programs and the dispatch  
9 decisions of those programs. SDG&E’s proposal to use the day-ahead system load forecast is  
10 consistent with this directive.

11 **VI. UPDATING THE SPP TRIGGER WILL INCREASE TRANSPARENCY AND**  
12 **ALIGN THE TRIGGERS FOR ALL SDG&E DYNAMIC RATES**

13 Currently, the SPP trigger does not specify a system load value above which events may  
14 be called. SDG&E proposes to add very similar triggering language to SPP Plus rates as  
15 proposed for CPP-D.<sup>13</sup> The proposed triggering language for SDG&E’s Demand Response  
16 programs is similar, but not identical because each program has small nuances that warrant  
17 slightly different language. Adding more specific criteria to the SPP trigger will add  
18 transparency to the event calling process. In addition, aligning the triggers will provide  
19 consistency for the CPP-D, SPP Plus and PTR tariffs, which is important because both the CPP-  
20 D and SPP Plus rates are critical peak pricing rates. The goal of the trigger for all these tariffs is  
21 to be able to call event days when it is needed.

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<sup>11</sup> Resolution E-4708, at pp. 1-2.

<sup>12</sup> D.14-05-025, at OP 1.

<sup>13</sup> If SDG&E’s proposals are approved, the tariffs impacted by the language proposed herein and the changes to those tariffs will be provided in an advice letter filing made when implementing a final Commission decision in this proceeding.

1 Similar to the CPP-D proposed language above, SDG&E's proposed trigger for the SPP

2 Plus tariffs is provided below:

3 A RYU Event may be triggered if the day-ahead system load forecast for the  
4 potential event day is greater than 4,000 MW. Events may also be triggered in  
5 response to high forecasted temperatures, extreme conditions, and emergencies.  
6 Whenever the California Independent System Operator has issued an alert or  
7 warning notice, the California Independent System Operator shall be entitled to  
8 request that the utility, at its discretion, call a program event pursuant to this  
9 Schedule. Events may also be triggered for testing/evaluation purposes. If two  
10 CPP events are cancelled, the two cancelled RYU Events will be credited as one  
11 (1) RYU event towards the maximum number RYU Events that can be called  
12 during the year.

13 The current PTR trigger permits a PTR event to be called whenever a CPP-D event is  
14 called and, in addition, allows events to be called on a day-of basis. There are other additional  
15 triggers listed in the PTR tariff that will become duplicative of the reference to the CPP-D trigger  
16 if the proposed changes to the CPP-D trigger are adopted. Therefore, SDG&E proposes to  
17 simplify the PTR trigger by removing the redundant language and price reference. The proposed  
18 PTR trigger language is provided below:

19 A PTR Event may be triggered if the day-ahead system load forecast for the  
20 potential event day is greater than 4,000 MW. Events may also be triggered in  
21 response to high forecasted temperatures, extreme conditions, and emergencies.  
22 Whenever the California Independent System Operator has issued an alert or  
23 warning notice, the California Independent System Operator shall be entitled to  
24 request that the utility, at its discretion, call a program event pursuant to this  
25 Schedule. Events may also be triggered for testing/evaluation purposes.

26 To avoid repetition and simplify the process of updating triggers, the PTR trigger will refer to the  
27 same language as the CPP-D trigger. Since there are no penalties to customers participating in  
28 PTR, SDG&E plans to keep the current option in the PTR trigger to call a day-of PTR event.

1 **VII. SUMMARY AND CONCLUSION**

2           SDG&E proposes to change the language to its CPP, SPP and PTR triggers so that it can  
3 more easily call events on its system peak days. The current trigger has not allowed SDG&E to  
4 call a CPP-D event on its system peak day for two of the last three years. By using a system load  
5 forecast, SDG&E will be better able to call CPP events when the system is expected to peak.  
6 SDG&E also proposes to align the language for CPP, SPP Plus and PTR tariffs so that its rates  
7 are consistent.

8           This concludes my prepared direct testimony.

1 **VIII. WITNESS QUALIFICATIONS**

2 My name is Leslie Willoughby. My business address is 8306 Century Park Court, San  
3 Diego, California 92123. I am employed by San Diego Gas & Electric Company (“SDG&E”) as  
4 Electric Load Analysis Manager in the Customer Pricing Department. In my current position, I  
5 am responsible for managing and conducting load and energy research analysis.

6 I attended San Diego State University in San Diego, CA, where I graduated with a  
7 Bachelor of Science in Business Administration in 1983. I continued to attend San Diego State  
8 University where I graduated with an MA in Economics in 1989. In 1990, I was employed by  
9 SDG&E to work in the Load Research Section of the Marketing Department as an Associate  
10 Economic Analyst. Over the past 25 years I have held positions of increasing responsibility  
11 within the company that have included Load and Energy Research.

12 I have previously testified before the Commission.

**APPENDIX – GLOSSARY OF ACRONYMS**

Commission	California Public Utilities Commission
CPP	Critical Peak Pricing
CPP-D	Default CPP
CRC	Capacity Reservation Charge
DR	Demand Response
GRC P2	General Rate Case Phase 2
IOUs	Investor-Owned Utilities
M/L C&I	Medium and Large Commercial and Industrial
MW	Megawatts
OP	Ordering Paragraph
ORA	Office of Ratepayer Advocates
PG&E	Pacific Gas & Electric Company
PTR	Peak Time Rebate
RYU	Reduce Your Use
SCE	Southern California Edison Company
SDG&E	San Diego Gas & Electric Company
SPP	Smart Pricing Program
SPP Plus	Smart Pricing Program Plus, commodity rate schedules with an event day component (i.e., EECC-TOU-DR-P, EECC-TOU- PA-P, and EECC-TOU-A-P)
TOU	Time of Use