BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company for Approval of its Residential Rate Design Window Proposals, including to Implement a Residential Default Time-Of-Use Rate along with a Menu of Residential Rate Options, followed by addition of a Fixed Charge Component to Residential Rates (U39E)	Application 17-12-011
And Related Matters.	Application 17-12-012 Application 17-12-013

Exhibit No. SDG&E-___

PREPARED REBUTTAL TESTIMONY OF

JEFFREY SHAUGHNESSY

ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

June 7, 2018

SDGE

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I. INTRODUCTION AND PURPOSE

The purpose of my Rebuttal Testimony is to respond to the prepared direct testimony submitted by intervening parties on May 7, 2018. Specifically, my Rebuttal Testimony responds to the rate design recommendations presented by the following parties:

(1) Office of Ratepayer Advocates ("ORA"); and

(2) California Solar & Storage Association ("CALSSA").

My testimony is organized as follows:

- **Section II – Rate Design Explanation**

All information provided in this Rebuttal Testimony is based on effective rates as of December 1, 2017,[1] consistent with SDG&E direct testimony filed December 20, 2017.

II. RATE DESIGN EXPLANATION

ORA[2] and CALSSA[3] make proposals in their direct testimony to change SDG&E's proposed rate design. This section addresses the rate components that constitute the three rates that SDG&E is proposing in this proceeding. As shown below, SDG&E's 3-Period Time-Of-Use ("TOU") Default Rate (TOU-DR-1) and 2-Period Opt-Out TOU Rate (TOU-DR-2) proposals primarily reflect changes to the commodity rate component when compared to the current tiered rate (Schedule DR), which is structurally the same as the proposed Tiered Opt-Out Rate.

[1] Advice Letter ("AL") 3130-E/E-A/E-B; references to current rates in this testimony reflect rates effective December 1, 2017.
[2] ORA *Testimony on 2018 Residential Rate Design Window Phase 2A* (May 7, 2018) ("ORA Direct Testimony"), p. 1-8.
[3] CALSSA *Prepared Direct Testimony of Brad Heavner on Behalf of the California Solar & Storage Association* (May 7, 2018) ("CALSSA Direct Testimony"), p. 4.

JS-Table 1, below, provides a breakdown of the cents per kilowatt hour ("¢/kWh") associated with the following three main components of the total rate:

1. Commodity – this rate component reflects costs for volumetric energy provided to the customer differentiated by time and season. These rates vary between the 3-Period Default TOU Rate (TOU-DR-1), 2-Period Opt-Out TOU Rate (TOU-DR-2) and Tiered Opt-Out Rate.

2. Total Rate Adjustment Component ("TRAC") – reflects adjustments to the total calculated rate for usage up to 130% of baseline allowances. The TRAC component contains cross-subsidies that lower the rates for usage up to 130% of baseline allowances, and increase the rates over 130% of baseline allowances, creating an inverted tier rate structure. TRAC rates are the same between the 3-Period Default TOU Rate (TOU-DR-1) and the Tiered Opt-Out Rate, while the TRAC component for SDG&E's proposed 2-Period Opt-Out TOU Rate (TOU-DR-2) reflects adjustments for milder TOU differentials. The tiered rate benefits in the Tiered Opt-Out rate are maintained across the TOU rates, meaning the difference between the Tier 1 and Tier 2 rate is the same. The Tiered Opt-Out Rate has an additional High Usage Charge ("HUC") for usage above 400% of baseline allowance.

3. Other – All other rate components are included in this category: transmission, distribution, Public Purpose Programs ("PPP"), Nuclear Decommissioning ("ND"), Ongoing Competition Transition Charges ("CTC"), Reliability Services ("RS"), Local Generation Charge ("LGC") and Department of Water Resources Bond Charge ("DWR-BC"). These rate components do not vary between the 3-Period Default TOU Rate (TOU-DR-1), 2-Period Opt-Out TOU Rate (TOU-DR-2), and Tiered Opt-Out Rate.

JS-Table 1: Illustrative Mass Default 3-Period TOU Rate by Component

	Commodity (¢/kWh)	+	TRAC (¢/kWh)	+	Other (¢/kWh)	=	Total (¢/kWh)
Summer							
On-Peak	38.7	+	-6.8	+	15.6	=	47.5
Off-Peak	12.4	+	-6.8	+	15.6	=	21.2
Super Off-Peak	6.3	+	-6.8	+	15.6	=	15.1
Summer Tier 2 Adjustment	0.0	+	20.2	+	0.0	=	20.2
Winter							
On-Peak	8.4	+	-0.3	+	15.6	=	23.7
Off-Peak	7.5	+	-0.3	+	15.6	=	22.8
Super Off-Peak	6.4	+	-0.3	+	15.6	=	21.7
Winter Tier 2 Adj.	0.0	+	17.1	+	0.0	=	17.1

The following sections compare the rates between the 3-Period Default TOU Rate (TOU-DR-1) Rate, 2-Period Opt-Out TOU Rate (TOU-DR-2) and the Tiered Opt-Out Rate.

A. Commodity Rate Comparison

Both ORA[4] and CALSSA[5] address the TOU and seasonal differentials proposed by SDG&E. The TOU and seasonal differentials are based on the most recent commodity cost study from SDG&E's 2016 General Rate Case ("GRC") Phase 2 (A.15-04-012), and are currently used in effective rates. The seasonal differential reflects the higher cost of electricity in the summer months. ORA notes that the seasonal differential (the differential between SDG&E's proposed Tier 2 summer rate and Tier 2 winter rate) for SDG&E's rates has increased compared to the seasonal differential before SDG&E's 2016 GRC Phase 2 was implemented on

[4] ORA Direct Testimony, p. 1-8.
[5] CALSSA Direct Testimony, p. 3-4.

December 1, 2017.[6] This change is due to the reduction in the number of months classified as "summer" from six months (May through October) to five months (June through October).

In order to mitigate a larger seasonal differential from its GRC Phase 2 commodity cost study and reduce seasonal bill volatility for customers, SDG&E already reduces the seasonal differential by 25%.[7] This is reflected in the total rates based on the 2012 GRC Phase 2 Decision (D.14-01-002), which was not changed in the 2016 GRC Phase 2 Decision (D.17-08-030), but was updated to reflect the shorter summer and longer winter seasonal change.[8]

CALSSA believes the proposed winter TOU differentials are too mild (i.e., differences between winter on-to-off-peak TOU differentials are not as big as differences between summer on-to-off-peak TOU differentials). In fact, the proposed winter TOU differentials are milder because the cost basis for the commodity rates does not include any Marginal Generation Capacity Costs ("MGCC") in the winter months. CALSSA recommends that SDG&E's rates not include any MGCC in the super off-peak period. In fact, SDG&E already does not include any MGCC in the super off-peak period. All MGCC is currently allocated to only the summer on-peak and off-peak hours, and none to the summer super-off peak or any of the winter TOU periods. Currently, SDG&E uses its most recent commodity cost study for the basis of TOU and seasonal differentials. Neither ORA or CALSSA provide an alternative cost basis to support

[6] ORA Direct Testimony, p. 1-8.
[7] ORA incorrectly states in footnote 34 "[F]or TOU rates, SDG&E applies the full seasonal commodity differential (i.e. they do not adjust this by 25%)." ORA Direct Testimony, p. 1-10. SDG&E does not adjust the commodity rates, rather it adjusts the total rates to reflect the 25% reduction in the seasonal difference. This adjustment off of the cost-based difference between summer and winter rates is made in TRAC such that the difference between the summer and winter Tier 2 rates is reduced by 25% compared to the fuller seasonal difference in the commodity rates.
[8] SDG&E's 2012 GRC P2 Decision D.14-01-002 at p. 37 Remaining Uncontested Issues "Setting the Summer/Winter total rate differential at 75% of commodity rate differential for residential tiered rate schedules." This was not modified in SDG&E's 2016 GRC P2 Decision D.17-08-030. ORA refers to the 75% differential as a 25% adjustment, with the same result.

their proposals to change the TOU or seasonal differentials. Also, it should be noted that TOU and seasonal differentials are regularly subject to examination in SDG&E's GRC Phase 2 proceedings.

JS-Table 2, below, presents the differences in ₵/kWh between the three TOU period commodity rates, which are the basis for the differences between SDG&E's proposed TOU rates and the Opt-Out Tiered Rate.

JS-Table 2: Illustrative Commodity Rate Comparison

	Commodity (₵/kWh)		
	3-Period Default TOU	**2-Period Opt-Out TOU**	**Opt-Out Tiered**
Summer			
On-Peak	38.7	38.7	18.0
Off-Peak	12.4	10.1	
Super Off-Peak	6.3		
Summer Tier 2 Adj.	0.0	0.0	0.0
Winter			
On-Peak	8.4	8.4	7.4
Off-Peak	7.5	7.0	
Super Off-Peak	6.4		
Winter Tier 2 Adj.	0.0	0.0	0.0

The TOU rates are created from differences in pricing by time period in the commodity rate, whereas the Tiered Opt-Out Rate is the weighted average seasonal rate.

B. TRAC Rate Comparison

The TRAC rates for the 3-Period Default TOU Rate (TOU-DR-1) and Opt-Out Tiered Rate are the same. These TRAC rates are set based on a Commission-approved specified total rate tier differential, which is currently a 1:1.75 relationship between Tier 1 (up to 130% of baseline) and Tier 2 (above 130% of baseline).

The TRAC rates for the 2-Period Opt-Out TOU Rate (TOU-DR-2) are different in the summer to create milder differentials in the total rate. Specifically, the on-peak summer rate is reduced by having a lower TRAC and the off-peak rate is increased by having a higher TRAC rate, bringing the on-to-off-peak differentials closer together. JS-Table 3, below, presents the differences between the three TRAC rates.

JS-Table 3: Illustrative TRAC Rate Comparison

	TRAC (¢/kWh)		
	3-Period Default TOU	**2-Period Opt-Out TOU**	**Opt-Out Tiered**
Summer			
On-Peak	-6.8	-10.4	-6.8
Off-Peak	-6.8	-5.5	
Super Off-Peak	-6.8		
Summer Tier 2 Adj.	20.2	20.2	20.2
Winter			
On-Peak	-0.3	-0.3	-0.3
Off-Peak	-0.3	-0.3	
Super Off-Peak	-0.3		
Winter Tier 2 Adj.	17.1	17.1	17.1

C. All Other Rate Comparison

Other than Commodity and TRAC components, no other rate component differs between the 3-Period Default TOU Rate (TOU-DR-1), 2-Period Opt-Out TOU Rate (TOU-DR-2) and Opt-Out Tiered Rate, as presented in JS-Table 4, below. Additionally, no other rate component varies by TOU period.

JS-Table 4: Illustrative Other Rate Comparison

	Other Rate Components (₵/kWh)		
	3-Period Default TOU	2-Period Opt-Out TOU	Opt-Out Tiered
Summer			
On-Peak	15.6	15.6	15.6
Off-Peak	15.6	15.6	
Super Off-Peak	15.6		
Summer Tier 2 Adj.	0.0	0.0	0.0
Winter			
On-Peak	15.6	15.6	15.6
Off-Peak	15.6	15.6	
Super Off-Peak	15.6		
Winter Tier 2 Adj.	0.0	0.0	0.0

D. Total Rate Comparison

The result of adding the Commodity, TRAC and Other rate components addressed in JS-Table-2, JS Table-3 and JS Table-4 result in the Total Rates presented in JS-Table 5, below.

JS-Table 5: Illustrative Total Rate Comparison

	Total Rate (₵/kWh)		
	3-Period Default TOU	2-Period Opt-Out TOU	Opt-Out Tiered
Summer			
On-Peak	47.5	43.8	26.8
Off-Peak	21.2	20.2	
Super Off-Peak	15.1		
Summer Tier 2 Adj.	20.2	20.2	20.2
Winter			
On-Peak	23.7	23.7	22.7
Off-Peak	22.8	22.3	
Super Off-Peak	21.7		
Winter Tier 2 Adj.	17.1	17.1	17.1

CALSSA takes issues with the difference between seasonal super off-peak rates.[9] As explained above, these differences are due to maintaining the tiered rate structure of the Opt-Out Tiered Rate. That is, the difference between the Tier 2 rate and Tier 1 rate is the same between both TOU rates and the Tiered Opt-Out Rate, as presented to JS-Table 6.

JS-Table 6: Illustrative Total Rate Comparison between Tier 1 and Tier 2

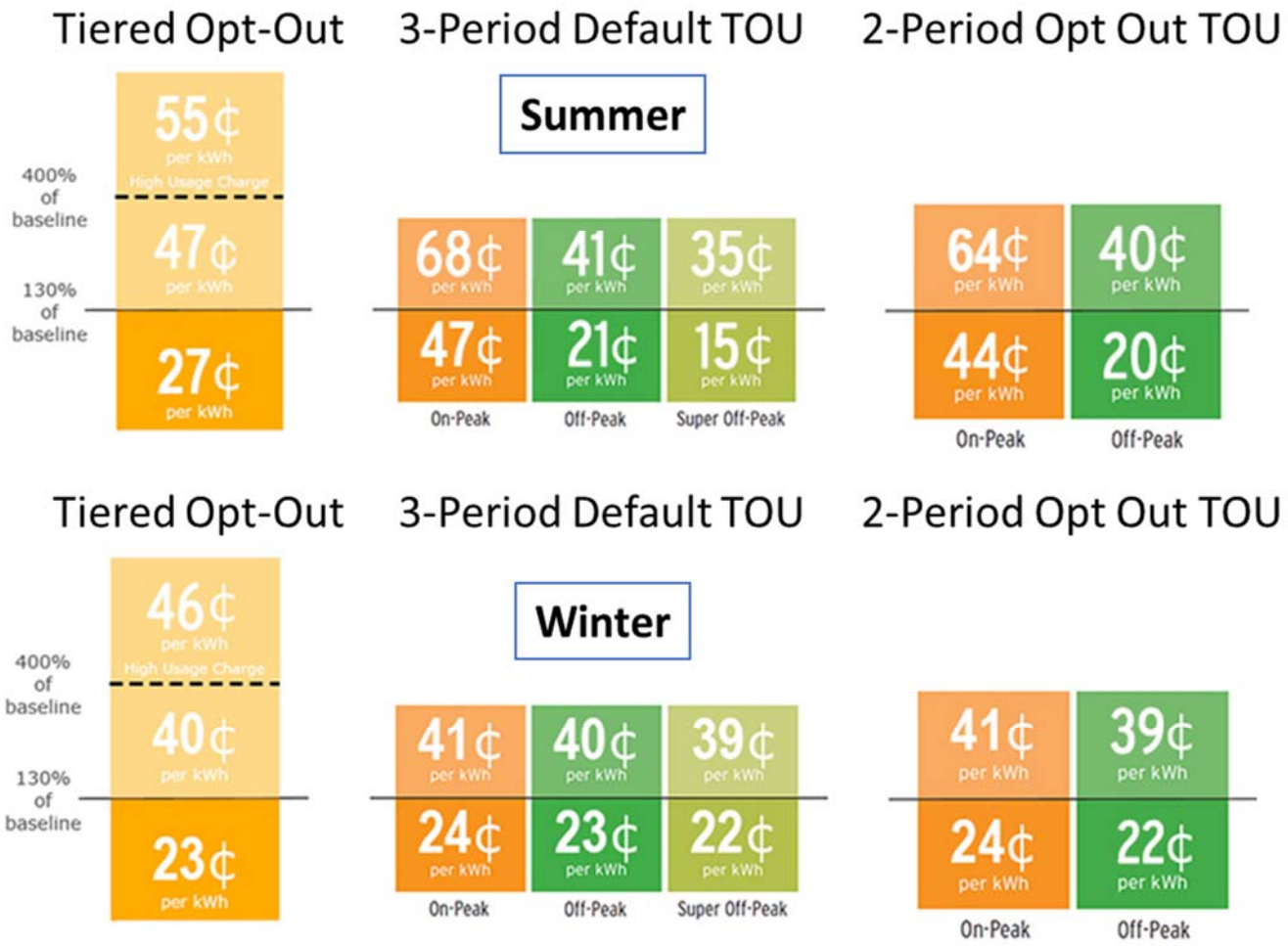
	3-Period Default TOU			2-Period Opt-Out TOU			Tiered Opt-Out		
	Tier 1	**Tier 2**	**Difference**	**Tier 1**	**Tier 2**	**Difference**	**Tier 1**	**Tier 2**	**Difference**
Summer									
On-Peak	47.5	67.6	**20.2**	43.8	64.0	**20.2**	26.8	46.9	**20.2**
Off-Peak	21.2	41.3	**20.2**	20.2	40.4	**20.2**			
Super Off-Peak	15.1	35.2	**20.2**						

	3-Period Default TOU			2-Period Opt-Out TOU			Tiered Opt-Out		
	Tier 1	**Tier 2**	**Difference**	**Tier 1**	**Tier 2**	**Difference**	**Tier 1**	**Tier 2**	**Difference**
Winter									
On-Peak	23.7	40.8	**17.1**	23.7	40.8	**17.1**	22.7	39.8	**17.1**
Off-Peak	22.8	39.9	**17.1**	22.3	39.4	**17.1**			
Super Off-Peak	21.7	38.8	**17.1**						

Is important to note that the proposed TOU rates still have tiers, like the Tiered Opt-Out Rate. As shown in JS-Table 2, the differences in TOU and seasonal rates is created from the commodity component. The result of the total rate differences reflects the TRAC rate component shown in JS-Table 3 that maintains the tier differences across all three rates. Presented differently, JS-Table 7 shows the illustrative total rates for the three rates discussed in this testimony.

[9] CALSSA Direct Testimony, p. 3.

JS-Table 7: Illustrative Total Rates



This concludes my Rebuttal Testimony.