

Supplemental Filing of SAN DIEGO GAS &  
ELECTRIC COMPANY (U 902E) In Support of  
Responses to Questions and Related Testimony  
Pursuant to Phase 1 Assigned Commissioner's  
Ruling.

Rulemaking 12-06-013 Phase 1

**PREPARED SUPPLEMENTAL TESTIMONY OF**  
**CYNTHIA FANG**  
**CHAPTER 3**  
**ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY**  
**BEFORE THE PUBLIC UTILITIES COMMISSION**  
**OF THE STATE OF CALIFORNIA**

**March 21, 2014**



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**PREPARED SUPPLEMENTAL TESTIMONY OF**

**CYNTHIA FANG**

**(CHAPTER 3)**

**I. OVERVIEW AND PURPOSE**

The purpose of this supplemental testimony is to provide the rates for the experimental Time-Of-Use (“TOU”) pilot presented in the supplemental testimony of SDG&E witness Leslie Willoughby (Chapter 2), specifically, two experimental TOU rate offerings that would differ from San Diego Gas & Electric’s (“SDG&E”) proposed optional TOU offering (as presented in my prepared direct testimony in Phase 1 of this proceeding submitted on February 28, 2014) by having shorter summer on-peak periods of four hours. The TOU rates for the experimental TOU pilot are consistent with SDG&E’s proposed optional TOU rate included in SDG&E’s proposal for residential rates effective January 1, 2015 and roadmap for residential rates through 2018, which were submitted on February 28, 2014 Phase 1 direct testimony pursuant to the Assigned Commissioner’s Ruling (“ACR”) that was issued on February 13, 2014 (“Ruling”), requiring California investor-owned utilities (“IOUs”)<sup>1</sup> to submit Phase 1 rate change proposals for post-2014 residential rates in Rulemaking (“R.”) 12-06-013, *Order Instituting Rulemaking on the Commission’s Own Motion to Conduct a Comprehensive Examination of Investor Owned Electric Utilities’ Residential Rate Structures, the Transition to Time Varying and Dynamic Rates, and Other Statutory Obligations* (“RROIR”).

**II. PROPOSED RATES FOR EXPERIMENTAL TOU PILOT**

SDG&E’s proposal for residential rates effective January 1, 2015 and roadmap for residential rates through 2018, as presented in my February 28, 2014 direct testimony, included a proposed optional TOU rate characterized by the following:

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<sup>1</sup> The IOUs referred to herein are Pacific Gas and Electric Company (“PG&E”), Southern California Edison Company (“SCE”) and SDG&E.

- TOU rate for the recovery of commodity costs;
- Demand differentiated monthly service fee (“DDMSF”) for the recovery of distribution customer and demand costs; and
- No tiers.<sup>2</sup>

Based on SDG&E’s current TOU period definitions,<sup>3</sup> the illustrative rates are presented for 2015 in Table CF-1 below. Table CF-13 in my direct testimony reflected illustrative DDMSF rates for 2018 which differ from the 2015 rates presented in subsequent tables in this testimony.<sup>4</sup>

**Table CF-1: SDG&E February 28 Proposed Optional TOU Proposal**

Max kW range	Customer Costs (\$/month)	Distribution Demand Costs (\$/month)	Proposed Monthly Service Fee (\$/month)
Up to 3kW	\$14.56	\$13.29	\$27.84
3 kW up to 6 kW	\$14.56	\$33.97	\$48.53
6 kW and above	\$14.56	\$65.15	\$79.71

  

TOU Period		Commodity Rate	Residual UDC Rate + DWR-BC	Total Energy Rate
On-Peak: Summer	\$/kWh	0.15061	0.04570	0.19631
Semi-Peak: Summer	\$/kWh	0.10540	0.04570	0.15110
Off-Peak: Summer	\$/kWh	0.07464	0.04570	0.12034
On-Peak: Winter	\$/kWh	0.07874	0.04570	0.12444
Semi-Peak: Winter	\$/kWh	0.06719	0.04570	0.11289
Off-Peak: Winter	\$/kWh	0.05117	0.04570	0.09687

<sup>2</sup> RROIR February 28, 2014 Phase 1 Prepared Direct Testimony of Cynthia Fang, at p. CF-43.

<sup>3</sup> SDG&E current TOU periods are presented in the table below.

<b>Summer (May - October)</b>		
	<b>Weekdays</b>	<b>Weekends/Holidays</b>
On-Peak	11am To 6pm	N/A
Semi-Peak	6am To 11am And 6pm to 10pm	N/A
Off-Peak	10pm To 6am	All hours

<b>Winter (November - April)</b>		
	<b>Weekdays</b>	<b>Weekends/Holidays</b>
On-Peak	5pm To 8pm	N/A
Semi-Peak	6am To 5pm And 8pm to 10pm	N/A
Off-Peak	10pm To 6am	All hours

<sup>4</sup> RROIR February 28, 2014 Phase 1 Prepared Direct Testimony of Cynthia Fang, at p. CF-49.

SDG&E’s rates for the experimental TOU pilot would be based on the proposed optional TOU offering, with the only modification being to reflect the shortened summer on-peak TOU period in the summer on-peak period rate. The summer on-peak period energy rate is adjusted to reflect the recovery of equivalent costs through the shorter four-hour summer on-peak period. The illustrative rates for the experimental TOU pilot are presented below in Table CF-2.

**Table CF-2: Rates for Experimental TOU Pilot**

		Optional TOU	Experimental TOU
<b>Standard Non-CARE</b>			
DDMSF			
0 to <3 kW	\$/Month	27.84	27.84
3 to <6 kW	\$/Month	48.53	48.53
6+ kW	\$/Month	79.71	79.71
Summer Energy			
On-Peak	cents/kWh	19.6	31.0
Semi-Peak	cents/kWh	15.1	15.1
Off-Peak	cents/kWh	12.0	12.0
Winter Energy			
On-Peak	cents/kWh	12.4	12.4
Semi-Peak	cents/kWh	11.3	11.3
Off-Peak	cents/kWh	9.7	9.7

As discussed in my February 28, 2014 direct testimony, SDG&E’s proposal to change TOU periods in its 2015 Rate Design Window (“RDW”) Application (“A.”) A.14-01-027 includes a proposal to change the current off-peak period to a super off-peak period that was previously available only to electric vehicle rates, for all TOU rate offerings.<sup>5</sup> SDG&E proposed that, upon approval of its proposal for a super off-peak period available to all TOU rate schedules, there be a super off-peak period exemption for the DDMSF, that is, demand during the super off-peak period would be excluded from the determination of maximum demand for

<sup>5</sup> RROIR February 28, 2014 Phase 1 Prepared Direct Testimony of Cynthia Fang, at p. CF-21.

1 the application of DDMSF.<sup>6</sup> Table CF-3 below provides illustrative rates for SDG&E's  
2 proposed Experimental TOU pilot under SDG&E's 2015 RDW proposed TOU period  
3 definitions.

4 **Table CF-3: Rates for Experimental TOU Pilot with 2015 RDW TOU Periods**

		Optional TOU	Experimental TOU
<b>Standard Non-CARE</b>			
DDMSF*			
0 to <3 kW	\$/Month	27.84	27.84
3 to <6 kW	\$/Month	48.53	48.53
6+ kW	\$/Month	79.71	79.71
Summer Energy			
On-Peak	cents/kWh	17.9	27.9
Semi-Peak	cents/kWh	15.2	15.2
Super Off-Peak	cents/kWh	11.1	11.1
Winter Energy			
On-Peak	cents/kWh	11.3	11.3
Semi-Peak	cents/kWh	10.0	10.0
Super Off-Peak	cents/kWh	8.7	8.7

5  
6 **III. SUMMARY AND CONCLUSION**

7 This concludes my prepared supplemental testimony.

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<sup>6</sup> RROIR February 28, 2014 Phase 1 Prepared Direct Testimony of Cynthia Fang, at p. CF-43.

1 **IV. QUALIFICATIONS**

2 My name is Cynthia S. Fang and my business address is 8330 Century Park Court, San  
3 Diego, California 92123. I am the Electric Rates Manager in the General Rate Case and  
4 Revenue Requirements Department of San Diego Gas and Electric (SDG&E). My primary  
5 responsibilities include the development of cost-of-service studies, determination of revenue  
6 allocation and electric rate design methods, analysis of ratemaking theories, and preparation of  
7 various regulatory filings. I began work at SDG&E in May 2006 as a Regulatory Economic  
8 Advisor and have held positions of increasing responsibility in the Electric Rate Design group.  
9 Prior to joining SDG&E, I was employed by the Minnesota Department of Commerce, Energy  
10 Division, as a Public Utilities Rates Analyst from 2003 through May 2006.

11 In 1993, I graduated from the University of California at Berkeley with a Bachelor of  
12 Science in Political Economics of Natural Resources. I also attended the University of  
13 Minnesota where I completed all coursework required for a Ph.D. in Applied Economics.

14 I have previously submitted testimony before the Federal Energy Regulatory Commission  
15 and have submitted testimony and testified before the California Public Utilities Commission  
16 regarding SDG&E's electric rate design and other regulatory proceedings. In addition, I have  
17 previously submitted testimony and testified before the Minnesota Public Utilities Commission  
18 on numerous rate and policy issues applicable to the electric and natural gas utilities.