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



# **TABLE OF CONTENTS**

I.	OVERVIEW AND PURPOSE	. 1
II.	PROPOSED RATES FOR EXPERIMENTAL TOU PILOT	. 1
III.	SUMMARY AND CONCLUSION	. 4
IV.	OUALIFICATIONS	. 5

#### 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:

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

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- 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

TOU rate for the recovery of commodity costs;

- 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.4
  - Table CF-1: SDG&E February 28 Proposed Optional TOU Proposal

Max kW range	Customer Costs (S/month)	Distribution Demand Costs (\$/month)		
Up to 3kW	\$14.56	\$13.29	961416	\$27.84
3 kW up to 6 kW	\$14.56	\$33.97		\$48.53
6 kW and above	\$14.56	\$65.15		\$79.71

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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.

SDG&E current 100 periods are presented in the table below.								
Summer (May - October)								
	Weekd	ays						Weekends/Holidays
On-Peak	11am	То	6pm					N/A
Semi-Peak	6am	То	11am	And	6pm	to	10pm	N/A
Off-Peak	10pm	To	6am					All hours

Winter (November - April)								
	Weekd	ays						Weekends/Holidays
On-Peak	5pm	То	8pm					N/A
Semi-Peak	6am	То	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.

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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		
Standard Non-CARE					
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

that, upon approval of its proposal for a super off-peak period available to all TOU rate

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. 5 SDG&E proposed

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

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

- 1 | the application of DDMSF. 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.

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

		Optional TOU	Experimental TOU		
Standard Non-CARE					
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		

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#### III. SUMMARY AND CONCLUSION

This concludes my prepared supplemental testimony.

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

#### IV. QUALIFICATIONS

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

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

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