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")¹ 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:

¹ 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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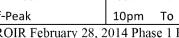


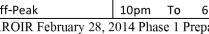












No tiers.²

TOU rate for the recovery of commodity costs;

distribution customer and demand costs; and

Based on SDG&E's current TOU period definitions,³ 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.4

Demand differentiated monthly service fee ("DDMSF") for the recovery of

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

| Max kW range | Customer Costs | Distribution Demand | Proposed Monthly |
|-----------------|-----------------------|---------------------|------------------------|
| | (\$/month) | Costs (\$/month) | 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 |

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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 |

G&E current TOU periods are presented in the table below

| SEGRED 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 | То | 6am | | | | | All hours |

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

R February 28, 2014 Phase 1 Prepared Direct Testimony of Cynthia Fang, at p. CF-43.

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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 | VALUE - VALUE | | |
| 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 | | A CONTRACT C | |
| 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 | www.cohinintah.movicohinintah.com | | |
| On-Peak | cents/kWh | 12.4 | 12.4 |
| Semi-Peak | cents/kWh | 11.3 | 11.3 |
| Off-Peak | cents/kWh | 9.7 | 9.7 |

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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. 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

⁵ 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.

⁶ 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.