

Application No. 16-03-____
Exhibit No.: (SDG&E-____)

**SECOND REVISED PREPARED DIRECT TESTIMONY
OF CYNTHIA FANG
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY**

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

JUNE 22, 2016



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1 **PREPARED DIRECT TESTIMONY**

2 **OF CYNTHIA FANG**

3 **ON BEHALF OF SDG&E**

4 **I. INTRODUCTION**

5 The purpose of my prepared direct testimony is to present San Diego Gas & Electric
6 Company's ("SDG&E") cost recovery proposal for the energy storage systems that SDG&E
7 intends to procure pursuant to Decisions ("D.") 13-10-040, D.14-10-045, and D.16-01-032. My
8 testimony also will address SDG&E's cost recovery proposal for energy storage projects
9 SDG&E intends to procure through its 2016 energy storage procurement solicitations, as
10 explained in the accompanying testimony of Joshua Gerber.

11 SDG&E requests the Commission approve the cost recovery proposal described in my
12 testimony below.

13 **II. COST RECOVERY**

14 **A. Background**

15 In adopting the Energy Storage Procurement Framework and Design program, D.13-10-
16 040 established Energy Storage Procurement Targets for Southern California Edison Company
17 ("SCE"), Pacific Gas and Electric Company ("PG&E"), and SDG&E, collectively "IOUs," for
18 the biennial periods commencing in 2014, 2016, 2018, and 2020 as well as a total procurement
19 target for the 2014 through 2020 planning period. In addition, the Energy Storage Procurement
20 Framework and Design Program requires that the IOU's biennial procurement applications
21 include a request for cost recovery authorization.¹

¹ D.13-10-040, Appendix A, Section 3(d).

1 On October 22, 2014, the California Public Utilities Commission (“Commission”) issued
2 D.14-10-045 approving SDG&E’s initial 2014 *Application for Approval of its Energy Storage*
3 *Procurement Framework and Programs as Required by Decision 13-10-040* (Application (“A.”)
4 14-02-006). D.14-10-045 approved, among other things, the IOU-proposed cost recovery
5 mechanisms for energy storage procurement through existing ratemaking mechanisms for the
6 December 2014 solicitation cycle, with the exception of:

- 7 • Power Charge Indifference Adjustment (“PCIA”) extension beyond 10 years,
8 pending further evaluation of the PCIA methodology for energy storage,² and
- 9 • Combined generation/distribution energy storage.³

10 As noted above, while D.14-10-045 provided the bulk of storage-related cost recovery
11 determinations, further cost recovery issues are still being addressed in pending proceedings
12 before the Commission. Very recently, in D.16-01-032, the Commission stated that:

13 We *defer* the resolution of the request for extension of the Power Charge
14 Indifference Adjustment mechanism for market/“bundled” energy storage
15 contracts beyond 10 years *until the Commission has addressed the Joint*
16 *PCIA mechanism filed with the IOU’s 2014 storage contracts on*
17 *December 1, 2015*. The Joint PCIA mechanism is expected to address the
18 mechanisms of the PCIA in terms of how it should be applied when
19 dealing with non-generation resources.⁴

20 By way of background, D.14-10-045 approved the PCIA cost recovery mechanism to
21 recover above-market costs associated with departing load for “bundled” energy storage services
22 procured via the 2014 solicitation, and it also required that the IOUs submit for Commission
23 approval a “Joint IOU Protocol” proposal for a PCIA methodology to determine the potential

² D.14-10-045 at 49 and COL 32.

³ D.14-10-045 at 40, these two outstanding issues do not affect my proposal for 2016 storage project cost recovery set forth below.

⁴ D.16-01-032 at 49 (emphases added).

1 above-market stranded cost of bundled service storage procured in the 2014-2016 solicitation.⁵
2 SDG&E coordinated with the other IOU's to develop the proposed Joint IOU Protocol, but did
3 not procure bundled service storage with a generation/market function that would rely on PCIA
4 cost recovery during the 2014 cycle, nor does it propose to do so in the 2016 procurement cycle.

5 **B. Proposal for Storage Project Costs**

6 First, as described in detail in the prepared direct testimony of witness Patrick Charles for
7 the 2016 procurement cycle, SDG&E will pursue storage through two distinct solicitations. The
8 first is a 2016 Preferred Resources Local Capacity Requirement ("LCR") Request for Offer
9 ("RFO") Seeking Local and Flexible Capacity through All Domains: transmission, distribution
10 and customer. In that RFO, SDG&E is soliciting offers for up to 140 MW of energy storage to
11 meet local capacity needs. In D.13-03-029, the Commission authorized SDG&E to implement
12 the Local Generation Charge ("LGC") rate component, which is designed to recover new
13 generation costs for local reliability that are deemed to be subject to CAM policy adopted in
14 D.06-07-029 and D.11-05-005. The LGC is a per kilowatt hour non-bypassable charge to all
15 benefiting customers, including all bundled service, Direct Access ("DA") and Community
16 Choice Aggregation ("CCA") customers.

17 Second, as described in the testimony of Patrick Charles, the second solicitation is a 2016
18 Distribution Reliability/Power Quality Solicitation by which SDG&E intends to solicit up to 4
19 MW of utility owned energy storage systems via a competitive Request for Proposal ("RFP")
20 process to potentially (1) enable some measure of distribution capacity deferral, and (2) address
21 reliability or provide outage management support. The prepared direct testimony of Randall

⁵ D.14-10-045, Ordering Paragraph 1(3) at 118 and Conclusion of Law 24 at 115. Identical Joint IOU Protocol Proposals have already been filed as part of SCE application A.15-12-003 and PG&E application A.15-12-004.

1 Nicholson (Chapter 3) discusses how the energy storage projects procured through this second
2 solicitation will be serving a distribution reliability function.

3 **III. CONCLUSION**

4 This concludes my prepared direct testimony.

5

1 **IV. STATEMENT OF 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 Rate Strategy and Analysis Manager in the Customer Pricing
4 Department of San Diego Gas and Electric (“SDG&E”). My primary responsibilities include
5 overseeing the electric load analysis, electric demand forecasting and electric rate strategy for
6 SDG&E as well as the development of cost-of-service studies, determination of revenue
7 allocation and electric rate design methods, analysis of ratemaking theories, and preparation of
8 various regulatory filings. I began work at SDG&E in May 2006 as a Regulatory Economic
9 Advisor and have held positions of increasing responsibility in the Electric Rate Design group.
10 Prior to joining SDG&E, I was employed by the Minnesota Department of Commerce, Energy
11 Division, as a Public Utilities Rates Analyst from 2003 through May 2006.

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

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