

Application: A.18-02-_____

Exhibit SDGE

Witness: Jennifer W. Summers

DIRECT TESTIMONY OF
JENNIFER W. SUMMERS
ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY



BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

FEBRUARY 28, 2018

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1 **DIRECT TESTIMONY OF**
2 **JENNIFER W. SUMMERS**

3 **I. INTRODUCTION**

4 The purpose of my direct testimony is three pronged: (1) to discuss the procurement
5 methodology San Diego Gas & Electric Company (“SDG&E”) has utilized to date in its
6 procurement of energy storage resources in response to California Assembly Bill (“AB”) 2514;
7 (2) to discuss the procurement methodology SDG&E will employ in its 2018 solicitation cycle
8 for energy storage resources that meet California Public Utilities Commission (“Commission”)
9 mandates other than resources procured specifically for AB 2514 and AB 2868; and (3) to
10 discuss SDG&E’s local capacity reliability (“LCR”) need within SDG&E’s service territory, to
11 the extent the distributed energy storage systems and microgrid services to the public sector
12 (“AB 2868 investments”) provide LCR.

13 **II. ENERGY STORAGE PROCUREMENT METHODOLOGY**

14 **A. 2014 and 2016 Energy Storage Solicitation Procurement Methodology for AB**
15 **2514 Resources**

16 In December 2010, the Commission opened a rulemaking to implement the provisions of
17 AB 2514, which directs load serving entities (“LSEs”) to procure viable and cost-effective
18 energy storage systems.¹ Within this rulemaking, the Commission issued Decision (“D.”)13-10-
19 040 (the “Energy Storage Decision”) in October 2013, creating an Energy Storage Framework
20 and Design Program and requiring the investor-owned utilities (“IOUs”) to file procurement
21 applications with proposals for procuring energy storage resources biennially, starting in 2014
22 and ending in 2020.² To date, SDG&E has employed a procurement methodology in its 2014

¹ Rulemaking (“R.”) 10-12-007.

² D.13-10-040, ordering paragraphs (“OP”) 2-4 at 77 (procurement applications must be filed in 2014, 2016, 2018 and 2020).

1 and 2016 solicitations that support the guiding principles outlined in the Energy Storage
2 Decision.³ In both its 2014 and 2016 energy storage solicitation cycles, SDG&E primarily
3 utilized a two-pronged approach to procure energy storage, a competitive request for offer
4 (“RFO”) solicitation process consistent with its Long Term Procurement Plan (“LTPP”), and a
5 request for proposal (“RFP”) process similar to that used for the purchase of other utility
6 distribution reliability assets.

7 **B. 2018 Energy Storage Solicitation Procurement Methodology**

8 In the 2018 energy storage solicitation cycle, SDG&E will continue to employ a
9 procurement methodology that supports the guiding principles in the Energy Storage Decision,
10 procuring resources intended to further: (1) optimization of the grid, including peak reduction,
11 contribution to reliability needs or deferment of transmission and distribution upgrade
12 investments; (2) the integration of renewable energy; and (3) the reduction of greenhouse gas
13 emissions.⁴ Additionally, on January 11, 2018, the Commission adopted eleven interim rules to
14 direct the utilities on how to promote the ability of storage resources to realize their full
15 economic value when they are capable of providing multiple benefits and services to the electric
16 system.⁵ As of January 11, 2018, SDG&E will reflect these eleven rules in all procurement
17 processes in which energy storage is procured.⁶

18 Acquisition of the AB 2868 investment resources sought in this application will be
19 conducted by SDG&E’s supply management group, as further described in the testimony of

³ For additional details on the outcome of these procurement cycles, please see the testimony of Don Balfour.

⁴ D.13-10-040 at 9-10.

⁵ D.18-01-003 at 2.

⁶ *Id.*, Appendix A at 1-2.

1 Stephen T Johnston.⁷ However, there are other Commission mandates apart from AB 2514 and
2 AB 2868 in which energy storage resources are eligible resources, and SDG&E has held, or is
3 scheduled to hold, solicitations in 2018 for these resources. For these other energy storage
4 resources, SDG&E will run competitive solicitations from its Electric & Fuel Procurement
5 (“E&FP”) group. The following SDG&E solicitations are currently planned or in process and
6 are open to energy storage resources: a resource adequacy (“RA”) solicitation is anticipated in
7 2018 for 2019 RA, a distribution deferral solicitation, an integrated distributed energy resources
8 (“IDER”) solicitation, and a demand response auction mechanism (“DRAM”) solicitation. The
9 latter three solicitations were held in January 2018.

10 SDG&E employs competitive solicitations in accordance with SDG&E’s most recent
11 LTTP.⁸ SDG&E generally follows the established RFO process outlined in its LTTP:⁹ (a)
12 analysis to determine portfolio need and the best products to fill that need; (b) creation of RFO
13 documents; (c) preparation of bid evaluation criteria; (d) RFO distribution to the market; (e)
14 evaluation of RFO bids to determine the best fit for SDG&E’s portfolio; and (f) contract
15 negotiation. Throughout the RFO process SDG&E confers with its Procurement Review Group
16 (“PRG”) and is overseen by an Independent Evaluator to ensure fairness and equity in the RFO
17 process.¹⁰

⁷ References to testimony herein are to the prepared direct testimony served in support of this application.

⁸ SDG&E 2014 Long Term Procurement Plan, Advice Letter 2850-E-A, Attachment B, approved in D.15-10-031 (effective February 19, 2016).

⁹ *Id.* at Attachment B, section II.A.5.b., sheet nos. 54-56, Procurement Contracting Methods and Practices, Long-Term Transactions.

¹⁰ *See* D.06-05-039, Finding of Fact 20 at 77-78.

1 SDG&E recognizes that Commission mandates are not mutually exclusive, and where
2 applicable, SDG&E will seek Commission approval for energy storage resources to count toward
3 multiple mandates. For example, the Energy Storage Decision states that energy storage projects
4 procured in other Commission proceedings, such as LTPP or the Renewables Portfolio Standard
5 (“RPS”) Program, may be applied toward an AB 2514 target, provided these resources meet the
6 requirements outlined in the Energy Storage Procurement and Design Program.¹¹ Ratepayer
7 savings are achieved when a resource can be applied toward multiple mandates, and in its 2018
8 solicitation cycle, SDG&E will continue to assess this benefit as part of its qualitative evaluation,
9 within its evaluation criteria, to determine the “best fit” resources for its portfolio.

10 **III. DISCUSSION ON LCR RESOURCE NEED FOR AB 2868 INVESTMENTS**

11 LCR is defined as the amount of generating capacity that is needed in a local capacity
12 area to reliably serve the load located within this area.¹² As discussed below, a need for
13 incremental LCR resources exists within SDG&E’s service territory. The necessary amount of
14 local capacity required to serve SDG&E’s service territory is determined each year as part of the
15 Commission’s RA proceeding, based on studies undertaken by the California Independent
16 System Operator Corporation (“CAISO”), which the Commission adopts in its annual June
17 decision.¹³ Other Commission proceedings also inform SDG&E’s LCR needs, such as the

¹¹ D.13-10-040, Appendix A at 4. Note that SDG&E’s pending Preferred Resources application, A.17-04-017, contains 83.5 MW of energy storage resources that SDG&E seeks to apply toward two Commission authorizations; its LCR target (D.14-03-004) and Energy Storage Decision implementing AB 2514 target (D.13-10-040).

¹² CAISO, *2018 Local Capacity Technical Analysis Final Report and Study Results*, (May 1, 2017) at 22. Available at: <http://www.caiso.com/Documents/Final2018LocalCapacityTechnicalReport.pdf>

¹³ D.17-06-027, OP 1 at 33.

1 LTPP. Together, the CAISO studies and Commission authorizations can overlap and support
2 each other, as they do here, as both recognize a LCR deficiency within SDG&E’s local area.

3 **A. LCR Need as Determined by the CAISO**

4 The Energy Storage Decision requires reference to CAISO needs studies for local needs,
5 if available.¹⁴ CAISO publishes a number of planning documents that provide input into the
6 local resource needs within SDG&E’s service territory. Specifically, the Local Capacity
7 Technical Study is conducted by the CAISO to determine the minimum capacity needed in each
8 identified transmission constrained “load pocket” or local capacity area for reliable grid
9 operations.¹⁵

10 The draft *2022 Local Capacity Technical Analysis Final Report and Study Results* is the
11 most recent CAISO study on SDG&E’s LCR needs. This study was released on May 3, 2017,
12 and shows a 71 megawatt (“MW”) deficiency in SDG&E’s LCR area.¹⁶ The CAISO examines
13 the needs of the Los Angeles Basin area and the San Diego-Imperial Valley area¹⁷ in a
14 coordinated study, as each area provides support to the other area if needed, while the study also
15 ensures that each area has the resources needed to satisfy its own reliability need.¹⁸ This study

¹⁴ D.13-10-040, Appendix A at 8.

¹⁵ CAISO, *2019 Local Capacity Area Technical Study Final Manual* (December 2017) at 3. Available at: <https://www.caiso.com/Documents/2019LocalCapacityRequirementsFinalStudyManualdocx.pdf>

¹⁶ CAISO, *2022 Local Capacity Technical Analysis Final Report and Study Results* (May 3, 2017) at 68. Available at: <http://www.caiso.com/Documents/Final2022Long-TermLocalCapacityTechnicalReport.pdf>

¹⁷ *See id.* at 63-64 (finding that transmission tie lines forming a boundary around the Greater San Diego-Imperial Valley area include lines in Imperial Valley (North Gila, El Centro and La Rosita) and is within SDG&E’s LCR area). Available at: <http://www.caiso.com/Documents/Final2022Long-TermLocalCapacityTechnicalReport.pdf>

¹⁸ *Id.* at 67.

1 determines the 71 MW deficiency in 2022 is part of the resource capacity needed for reliable
2 load serving capability within the overall San Diego-Imperial Valley area.

3 **B. LCR Need as Determined by Commission Proceedings.**

4 For a complete picture on SDG&E's LCR need, one must look at both the energy storage
5 proceeding¹⁹ and LTPP proceeding.²⁰ These two proceedings outline SDG&E's need for LCR
6 resources by 2022 as a result of the retirement of San Onofre Nuclear Generating Station
7 ("SONGS"). SONGS is located in a critical spot between the SDG&E and Southern California
8 Edison ("SCE") service territories, and it provided energy, capacity and ancillary services to both
9 service territories.²¹

10 Initially, based on CAISO analysis, the 2014 Track 4 decision in the LTPP proceeding²²
11 authorized SDG&E to procure between 500 and 800 MW of capacity by the end of 2021 to meet
12 the need stemming from the retirement of SONGS.²³ Of this capacity, 25 MW is to be energy
13 storage resources consistent with the Loading Order of the Energy Action Plan,²⁴ and at least 175
14 MW is to be preferred resources or energy storage. In 2015, the Commission approved
15 SDG&E's application for 600 MW of local capacity from a power purchase tolling agreement
16 ("PPTA") with Carlsbad Energy Center, LLC, a natural gas-fired, simple cycle peaking facility

¹⁹ R.10-12-007.

²⁰ R.12-03-014.

²¹ D.14-03-004 at 22.

²² *Id.*

²³ *Id.* OP 2 at 143.

²⁴ See State of California, *Energy Action Plan II Implementation Roadmap for Energy Policies* (September 21, 2005) at 2 (describes the loading order, or priority sequencing, of energy resources to meet increasing energy needs. These are: energy efficiency, demand response, renewable resources, distributed generation and combined heat and power. To the extent these resources are unable to satisfy the need, clean and efficient fossil-fired generation is listed as the final option). Available at http://www.energy.ca.gov/energy_action_plan/2005-09-21_EAP2_FINAL.PDF

1 (D.15-05-051, the “Carlsbad Decision”). The Carlsbad Decision conditioned approval on
2 SDG&E by reducing capacity for Carlsbad Energy Center, LLC, from 600 MW to 500 MW,
3 with 100 MW of residual procurement consisting of preferred resources or energy storage.

4 The Commission issued the Energy Storage Decision in response to AB 2514 in the
5 energy storage proceeding, setting SDG&E’s initial energy storage procurement target at 165
6 MW;²⁵ and subsequently issued a distributed energy storage authorization of up to approximately
7 166 MW, in response to AB 2868.²⁶ These energy storage targets overlap with SDG&E’s Track
8 4 authorization (which includes energy storage resources); and the Commission has determined
9 that energy storage resources are useful in meeting future LCR needs.²⁷ SDG&E has also
10 previously used a strategy to procure energy storage resources that simultaneously satisfy a
11 storage mandate while meeting LCR needs.²⁸

12 In 2017 SDG&E applied to the Commission seeking approval of 83.5 MW of energy
13 storage resources in furtherance of its LCR need.²⁹ This application is currently pending
14 Commission approval and if approved, SDG&E will have procured 644 MW of its authorized
15 700 MW minimum.³⁰ This results in a minimum of 56 MW of additional LCR resources needed
16 online by the end of 2021.

²⁵ D.13-10-040 at 15.

²⁶ D.17-04-017, OP 1 at 66.

²⁷ D.14-03-004 at 60-61.

²⁸ A.16-03-003 at 5, *approved*, D.16-09-007.

²⁹ A.17-04-017 at 7.

³⁰ To date, SDG&E has procured 500 MW in Carlsbad Energy Center, LLC, and procured 144 MW of preferred resources or energy storage (83.5 MW of pending energy storage resources, 5 MW of pending preferred resources, 18.5 MW approved by D.16-12-041 and 37.5 MW approved by Resolution E-4798).

1 **IV. SDG&E DISCUSSION ON LCR RESOURCE TIMING**

2 To the extent the AB 2868 investments proposed within this application provide LCR,
3 SDG&E requests that the Commission authorize SDG&E to count up to 27.5 MW of LCR
4 resources toward SDG&E's 56 MW of LCR resource authorization needed online by the end of
5 2021. While the CAISO's anticipated 71 MW deficiency in 2022 is distinct from the
6 Commission's determination in the Track 4 Decision, it also shows a future LCR deficiency that
7 SDG&E is proactively managing. CAISO studies are updated annually based on resources and
8 constraints known at the time of modeling. If these AB 2868 investments are approved, they
9 would be factored into future CAISO modeling efforts toward potential deficiencies. The 2022
10 CAISO study shows a future growing LCR deficiency based on the resources and constraints
11 known in 2017, and evidences a future LCR deficiency. The Track 4 Decision is the
12 Commission's authorization to bring LCR resources online by the end of 2021. These resources
13 are anticipated to be online by the end of 2019 and 2020, which is within the necessary
14 timeframe to meet SDG&E's LCR need.

15 Thus, Commission procurement authorization and current CAISO studies both support
16 bringing additional LCR resources online by the end of 2021. To the extent the AB 2868
17 investments provide LCR, SDG&E would seek to apply qualifying capacity toward its remaining
18 LCR requirement.

19 **V. CONCLUSION AND SUMMARY**

20 In sum, SDG&E requests that the Commission authorize SDG&E to count up to 27.5
21 MW from the AB 2868 investments toward SDG&E's 56 MW of remaining LCR resource
22 authorization needed online by the end of 2021, to the extent these resources provide LCR.
23 SDG&E also requests approval of its 2018 procurement methodology set forth in this testimony.
24 This concludes my prepared direct testimony.

1 **VI. STATEMENT OF QUALIFICATIONS**

2 My name is Jennifer W. Summers and my business address is 8315 Century Park Ct., San
3 Diego, CA 92123. I am currently a Principal Commercial Energy Policy Advisor in the Electric
4 and Fuel Procurement department for San Diego Gas & Electric Company. I am primarily
5 responsible for policy behind SDG&E's procurement related programs, and am experienced with
6 running solicitations for renewable resources. I have been in this role for approximately one year
7 and employed by SDG&E for approximately three years. Prior to my role in Electric and Fuel
8 Procurement, I worked in Regulatory Affairs and managed procurement-related California
9 Public Utilities Commission proceedings, such as the Renewables Procurement Standard
10 proceeding, the Greenhouse Gas rulemaking proceeding and SDG&E's Green Tariff Shared
11 Renewables program.

12 Prior to joining SDG&E, I worked as an attorney for approximately eight years, primarily
13 focused on representing plaintiffs in consumer class actions. I received my Bachelor of Arts
14 from the University of California, San Diego, and my Juris Doctorate from California Western
15 School of Law. I am a licensed attorney in California.

16 I have not previously testified before the California Public Utilities Commission.