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April 8, 2016

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, D.C. 20426

Re: San Diego Gas & Electric Company, Docket No. ER16-___-000
Transmission Owner Tariff Revisions to Appendix VII and Appendix IX

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act and Sections 35.13 and 385.205 of the Federal Energy Regulatory Commission's ("Commission" or "FERC") regulations, San Diego Gas & Electric Company ("SDG&E") hereby tenders for filing proposed revisions to Appendix IX, pertaining to rate design, and Appendix VII, pertaining to Reliability Services ("RS") of SDG&E's Transmission Owner ("TO") Tariff, FERC Electric Tariff Volume No. 11 ("Filing"). The proposed revisions add a new Medium & Large Commercial/Industrial class rate associated with the Electric Vehicle-Grid Integration ("VGI") Pilot Program that the California Public Utilities Commission ("CPUC") adopted in Decision ("D.") 16-01-045. SDG&E requests that this Filing be permitted to take effect on June 7, 2016.

¹ 18 C.F.R. §§ 35.13 and 385.205.

Appendix IX of SDG&E's TO Tariff is entitled "Determination of SDG&E's End Use Customer Class Transmission Charges, Low Voltage Access Charge, and High Voltage Utility-Specific Rate, and Allocation of BTRR Applicable to High Voltage and Low Voltage Transmission Facilities."

³ Appendix VII of SDG&E's TO Tariff is entitled "Reliability Must-Run Charges for End-Users."

⁴ D.16-01-045, 2016 Cal. PUC LEXIS 67 (2016).

I. SUMMARY OF PROPOSED NATURE AND PURPOSE OF FILING

A. **Background**

As discussed more fully in the Prepared Direct Testimony of Cynthia Fang, the purpose of this Filing is to incorporate in SDG&E's TO Tariff, rate design changes and related VGI rate associated with VGI Pilot Program that the CPUC recently adopted in D.16-01-045.

Specifically, Ordering Paragraph 3.a. of D.16-01-045 summarizes the VGI Pilot Program, also referred to as the "alternative VGI program" as follows:

> The alternative VGI program terms authorizes and approves a \$45 million start-up budget, plus cost recovery through future general rate case proceedings for justified capital and operations and maintenance expenses. for [SDG&E] to implement the "2016 Vehicle VGI Pilot Program," which is patterned after the Proposed Settlement, with the additional modifications made by this decision. These additional modifications include targeting 350 electric vehicle (EV) site installations (with a minimum of 300), and targeting 3,500 EV charging stations (with a minimum of 3,000), over a three year target sign-up period. Sign-ups may extend beyond three years budget permitting, and the installation period shall extend one additional year after the sign-up period.

Ordering Paragraph 3.c. of D.16-01-045 provides that if SDG&E elects to implement the 2016 VGI Pilot Program, "SDG&E shall within 30 days of its letter of acceptance, file a Tier 2 advice letter establishing the 2016 VGI Pilot Program, and the pricing formula that goes into calculating the VGI rate."

SDG&E accepted the alternative VGI program terms on March 1, 2016 by letter to the Executive Director and filed Advice Letter 2868-E establishing the Vehicle Grid Integration Balancing Account on March 2, 2016. On March 31, 2016, SDG&E filed Advice Letter 2877-E containing Schedule VGI, Electric Vehicle-Grid Integration Pilot Program, setting forth pricing formula for calculating the VGI Rate, ⁵ and requesting an effective date of April 30, 2016.

In Advice Letter 2877-E, SDG&E described the VGI Rate as an hourly, dynamic rate that includes: (1) an hourly Base Rate; (2) an hourly Commodity Base Rate with an adjustment based on the

California Independent System Operator ("CAISO") day-ahead hourly price, an adder to reflect the system's top 150 system peak hours; (3) an hourly Distribution Base Rate with an adder to reflect the top 200 annual hours of peak demand for the individual circuit feeding the VGI charging stations; and

⁽⁴⁾ an hourly credit to encourage charging during CAISO surplus energy events.

This Filing proposes revisions to Appendices VII and IX solely to implement the VGI Pilot Program, consistent with the CPUC's directives.⁶ As discussed in the Testimony of Cynthia Fang (Exhibit No. SDG-1), the proposed VGI Pilot volumetric rates are based on and derived from SDG&E's currently-effective Medium & Large Commercial/Industrial customer class average rate.

B. Proposed Revisions to Appendix VII

"Summary of Reliability Services Retail Transmission Rates" – is revised by adding:

- "Vehicle Grid Integration Rate (3)" to the Medium & Large Commercial/Industrial class under the Customer Classes column;
- The rate of "0.00011" to "Transmission Level Energy Rates \$/kWh" (Column (A));
- Footnote (3), defining the Vehicle Grid Integration Rate as, "Volumetric rate applied to customer participants on the Vehicle Grid Integration Pilot Program."

C. Proposed Revisions to Appendix IX

Section I.B., "Derivation of SDG&E's End-Use Customer Transmission Rates," is revised by adding language to subsection 3.c. – Medium & Large Commercial/Industrial-specifying that the VGI rate is based on forecasted metered energy (kWh):

"For the rate applicable to the Vehicle Grid Integration Pilot, forecasted metered energy (kWh) shall be used for the Rate Effective Period;"

II. LIST OF DOCUMENTS SUBMITTED

This Filing consists of the following documents:

- 1. Cover letter
- 2. Attachment A Redlined Appendix VII and Appendix IX;
- 3. Attachment B Clean Appendix VII and Appendix IX;

The Commission has previously accepted SDG&E's proposed Tariff revisions to implement CPUC directives. *See, e.g.*, Letter Orders issued on: November 19, 2008 (Docket No. ER08-1560-000), March 4, 2009 (Docket No. ER09-295-000) and November 26, 2014 (Docket No. ER14-2748-000).

- 4. Attachment C Prepared Direct Testimony of Cynthia Fang on Behalf of San Diego Gas & Electric Company (Exhibit No. SDG-1);
- 5. Attachment D Statement BL⁷ for VGI Transmission rate:
- 6. Attachment E Statement BL⁸ for VGI RS rate.

III. WAIVER

SDG&E respectfully requests any waiver deemed necessary, including of the annual filing requirement set forth in section 4 of SDG&E's Reliability Services Rate Schedule (Appendix VI of SDG&E's TO Tariff), to permit the proposed VGI rate design changes and related VGI rates to take effect at this time. The proposed revisions are limited solely to implementing the CPUC-approved VGI Pilot Program. The proposed revisions do not affect any other currently-effective Transmission rates, RS rates or Base Transmission Revenue Requirements. No customers, other than the VGI customers, will be affected by the proposed revisions. There are no incremental Transmission or RS revenues for VGI at this time because SDG&E currently does not have VGI customers on VGI. Accordingly, only Statement BL reflects changes associated with adding the VGI Transmission rate VGI RS rate to the Medium & Large Commercial/Industrial customer class. No VGI revenues would affect Statements BG and BH because SDG&E does not have VGI customers. Therefore, Statements BG and BH are not included in this Filing.

For the reasons set forth above, and in the Testimony of Cynthia Fang (Exhibit No. SDG-1), SDG&E respectfully requests the Commission to find that good cause exists to grant waiver of Appendix VI of SDG&E's TO Tariff, and any other waivers deemed necessary, to permit the Filing to become effective June 7, 2016, as proposed.

IV. WAIVER OF OTHER FILING REQUIREMENTS

SDG&E believes that the data contained in this filing provide sufficient information to permit the Commission to accept this filing. To the extent the Commission deems it necessary, however, SDG&E requests waiver of the filing requirements contained in Part 35 of the Commission's regulations to permit this Filing to be made effective, as proposed.

SDG&E believes this Filing conforms to any rule of general applicability and to any FERC order specifically applicable to SDG&E. SDG&E has made copies of this letter and all

Only Statement BL is revised to reflect the addition of the VGI Transmission rate.

⁸ Only Statement BL is revised to reflect the addition of the VGI RS rate.

The Commission accepted SDG&E's TO4 Cycle 3 Informational Filing, effective January 1, 2016, in an order issued March 17, 2016 in Docket No. ER16-445 (154 FERC ¶ 61,213 (2016)), and SDG&E's RS Filing, effective January 1, 2016, by letter order issued February 10, 2016 (Docket No. ER16-546 (2016).

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enclosures available for public inspection in SDG&E's principal office located at 8330 Century Park Court, San Diego, California, 92123.

V. SERVICE

In addition to having copies of this letter and all enclosures available for public inspection in SDG&E's principal office located in San Diego, California, SDG&E has served copies of this Filing on parties on the official service list in Docket No. ER13-941, the CPUC and the California Independent System Operator.

VI. COMMUNICATIONS

Correspondence and other communications concerning this Informational Filing should be addressed to: 10

Georgetta J. Baker Senior Counsel San Diego Gas & Electric Company 8330 Century Park Court, CP32D

San Diego, CA 92123 Phone: 858-654-1668 Fax: 619-699-5027

E-mail: gbaker@semprautilities.com

Cynthia Fang Rate Strategy and Analysis Manager San Diego Gas & Electric Company 8330 Century Park Court

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E-mail: cfang@semprautilities.com

Steven Williams FERC Case Manager

San Diego Gas & Electric Company

8330 Century Park Court San Diego, CA 92123 Phone: 858-650-6158 Fax: 858-654-1788

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Jeff Stein

Transmission Revenue Manager San Diego Gas & Electric Company

8315 Century Park Court

San Diego, California 92123-1550

Tel. (858) 636-5551 Fax (858) 637-7969

istein@semprautilities.com

SDG&E requests waiver of Rule 203(b)(3) to the extent necessary to permit each of the individuals identified above to be placed on the Commission's official service list in this proceeding.

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VIII. CONCLUSION

Accordingly, SDG&E respectfully requests that the Commission accept its proposed modifications to Appendix VII and Appendix IX of SDG&E's TO Electric Tariff, effective June 7, 2016, as proposed.

Respectfully submitted,

/s/ Georgetta J. Baker

Georgetta J. Baker Attorney for San Diego Gas & Electric Company

San Diego Gas & Electric Company

RED LINE Appendix VII, Appendix IX

APPENDIX VII

Reliability Must-Run Charges for End Users¹

[SEE ATTACHED]

¹ These charges represent the rates for recovery of the RMR revenue requirement.

Summary of Reliability Services Retail Transmission Rates

		(A) Transmission Level Energy Rates	(B) Transmission Level Demand Rates	(C) Primary Level Demand Rates	(D) Secondary Level Demand Rates	
Line No.	Customer Classes	\$/kWh	\$/kW-Mo	\$/kW-Mo	\$/kW-Mo	Line No.
1	Residential	0.00013				1
2						2
3	Small Commercial	0.00014				3
4						4
5	Medium & Large Commercial/Industrial (1)	0.00001	0.04	0.04	0.04	5
<u>6</u>	Vehicle Grid Integration (3)	0.00011				<u>6</u>
<u>7</u> 6						<u>7</u> 6
7 <u>8</u>	Agricultural					<u>8</u> 7
<u>9</u> 8	Schedules PA and TOU-PA	0.00007				8 <u>9</u>
9 10	Schedules PA-T-1(1)	0.00001	0.02	0.02	0.02	<u>10</u> 9
1 <u>10</u>						1 <u>1</u> 0
1 <u>2</u> 4	Street Lighting	0.00010		F.		1 <u>2</u> 4
1 <u>3</u> 2						1 <u>3</u> 2
1 <u>4</u> 3	Standby Rate (2)		0.02	0.02	0.02	1 <u>4</u> 3

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- (1) Demand rate applied to customers monthly maximum demand.
- (2) Demand rate applied to standby customers contract demand.
- (3) Volumetric rate applied to customer participants on the Vehicle Grid Integration Pilot Program.

Wholesale RS Rate

Wholesale RS rate

\$/kWh **0.00012**

APPENDIX IX

DETERMINATION OF SDG&E'S END USE CUSTOMER CLASS TRANSMISSION CHARGES, LOW VOLTAGE ACCESS CHARGE, AND HIGH VOLTAGE UTILITY-SPECIFIC RATE, AND ALLOCATION OF BTRR APPLICABLE TO HIGH VOLTAGE AND LOW VOLTAGE TRANSMISSION FACILITIES

I. INTRODUCTION

This Appendix IX describes the method by which SDG&E:

- allocates Base Transmission Revenue Requirements (as determined in Appendix VIII) to End Use Customer classes, and designs transmission rates applicable to such End Use Customer classes assessed by SDG&E pursuant to this Transmission Owner (TO) Tariff;
- 2. allocates Base Transmission Revenue Requirements (as determined in Appendix VIII) applicable to High Voltage Transmission Facilities and Low Voltage Transmission Facilities for purposes of designing voltage-differentiated Wheeling Access Charges assessed pursuant to the ISO Tariff;
- calculates the applicable Low Voltage Access Charge to be assessed pursuant to SDG&E's TO Tariff; and
- 4. calculates a High Voltage Utility-Specific Rate.

SDG&E shall provide the California Independent System Operator Corporation (CAISO or ISO) its determination of the High Voltage Utility-Specific Rate, as updated annually pursuant to the formula rate contained in Appendix VIII of this TO Tariff, for use by the ISO to calculate the High Voltage Wheeling Access Charge assessed by the ISO pursuant to the ISO Tariff.

SDG&E shall also provide the ISO SDG&E's determination of the Low Voltage Wheeling Access Charge that is assessed by the ISO pursuant to the ISO Tariff.

A. END-USE CUSTOMER CLASSES FOR TRANSMISSION SERVICE:

The following applies only to End-Use Customers that receive transmission service over the ISO Controlled Grid through SDG&E's transmission or distribution facilities. End-Use Customers

shall take service under the following rate designations:

Residential

Small Commercial

Medium and Large Commercial/Industrial

Agricultural

Street Lighting

Stand-by Service

Rates applicable to the current Rate Effective Period shall be posted on SDG&E's OASIS, which can be accessed at www.sdge.com\toforum. The rates are also accessible through a link to SDG&E's web page that is located at the CAISO OASIS at www.caiso.com.

B. DERIVATION OF SDG&E'S END-USE CUSTOMER TRANSMISSION RATES:

The transmission rate components of SDG&E's End-Use Customer rates are determined as follows:

- 1. Allocate the Base Transmission Revenue Requirements applicable to End Use Customers (BTRREU) under the TO Tariff as calculated pursuant to the formula rate contained in Appendix VIII of SDG&E's TO Tariff among End-Use Customer rate classes based upon the most recent 5-year coincident peak data averaged by month to derive the 12-month average coincident peak data adjusted to reflect distribution losses to the transmission level.
- 2. To mitigate the impact of rate increases to Street Lighting and Stand-by Service classes, the rates effective October 1, 2003, for these customer classes shall be limited to a 100% rate increase under the otherwise applicable rate design.
 Beginning with rates that become effective July 1, 2004, SDG&E shall design transmission rates applicable to Street Lighting and Stand-by Service classes based on total cost of service without such mitigation measures. The revenue requirement under-recovery attributable to this mitigation measure that occurs

- during the first Rate Effective Period shall be allocated among other customer classes in proportion to these classes' respective contribution to SDG&E's 12-month average coincident peak excluding the contribution to such coincident peak from Street Lighting and Stand-by Service classes.
- Divide the results of the allocation described paragraph "1", as adjusted by paragraph "2" above, by the appropriate forecast End Use Customer billing determinants applicable to the Rate Effective Period to determine the transmission prices for the respective End Use Customer classes. End Use Customer classes shall be determined in accordance with SDG&E's CPUC tariffs. The billing determinants used to design transmission rates applicable to End Use Customer classes shall be as follows:
 - a. Residential forecast metered energy (kWh) for the Rate Effective Period;
 - b. Small Commercial
 – forecast metered energy (kWh) for the Rate Effective
 Period;
 - c. Medium and Large Commercial/Industrial forecast metered maximum non coincident peak demand (kW), forecast metered maximum monthly demand, forecast seasonally differentiated peak period demands (kW), and forecast seasonally differentiated monthly coincident peak demands (kW), with seasons, as determined in accordance with SDG&E's CPUC Tariff, for the Rate Effective Period. For the rate applicable to the Vehicle Grid Integration Pilot, forecasted metered energy (kWh) shall be used for the Rate Effective Period;
 - d. Agricultural forecast metered (kWh) for tariff for the Rate Effective Period for all applicable tariffs except tariff PA-T-1; for tariff PA-T-1 forecast metered maximum non coincident demand (kW) for the Rate Effective Period; and
 - e. Street Lighting forecast energy (kWh) used by all lamps in service for the

Rate Effective Period;

Stand-by Service – contract demands (kW) applicable to Stand-by Service for the Rate Effective Period.

For the Medium and Large Commercial/Industrial class of customers, a portion of the allocated revenue requirement shall be recovered through a maximum non coincident demand charge and the remaining portion of the allocated revenue requirement shall be recovered through either a seasonally-differentiated peak period demand charge (e.g., 11:00 a.m. to 6:00 p.m. summer and 5:00 p.m. to 8:00 p.m. winter) or a seasonally-differentiated coincident peak demand charge. The rate design methodology is delineated below in paragraph "4".

- 4. The rate design for the recovery of allocated revenue requirements for the Medium and Large Commercial/Industrial Class is as follows:
 - a. For Rate Schedule AD, the maximum non-coincident demand charge shall be determined as the revenue requirement allocated to the Medium and Large Commercial/Industrial Class described in paragraph "1", as adjusted by paragraph "2" above, divided by the forecast metered maximum non coincident peak demand (kW) for the Rate Effective Period.
 - b. For the Rate Schedules listed below,¹ the maximum non-coincident demand charge, described in paragraph "4.a" above, shall be reduced by 10%.
 - c. For Rate Schedules AY-TOU, AL-TOU, and DG-R the residual 10% of revenue referenced in paragraph "4.b" above shall be recovered through a seasonally-differentiated peak period demand charge.

The maximum non-coincident demand charge is being reduced by 10 percent for: Schedules AY-TOU, AL-TOU, DG-R and A6-TOU. All of SDG&E's currently-effective rate schedules are available at the following website: http://www.sdge.com/regulatory/currentEffectiveTariffs.shtml

- d. For Rate Schedule A6-TOU, the residual 10% of revenue referenced in paragraph "4.b" above shall be recovered through a seasonallydifferentiated coincident peak demand charge.
- C. ALLOCATION OF SDG&E'S BASE TRANSMISSION REVENUE REQUIREMENTS AND DERIVATION OF UTILITY SPECIFIC HIGH VOLTAGE TRANSMISSION RATE AND LOW VOLTAGE RATES APPLICABLE TO LOW VOLTAGE WHEELING ACCESS CHARGE:
- 1. The Base Transmission Revenue Requirements applicable to Wheeling Access Charges pursuant to the ISO Tariff (hereinafter referred to as the "BTRR_{ISO}") shall be allocated among the following:
 - a) High Voltage (HV) Transmission Facilities
 - b) Low Voltage (LV) Transmission Facilities

 The Transmission Revenue Balancing Account Adjustment (TRBAA) shall be allocated between High Voltage and Low Voltage Transmission.
- 2. The HV Utility Specific transmission rate shall be derived by taking the High Voltage Transmission Revenue Requirements ("HVTRR") and dividing it by SDG&E's total retail forecast kWh billing determinants (adjusted for distribution losses) applicable during the Rate Effective Period.
- 3. SDG&E's Low Voltage Access Charge and Low Voltage Wheeling Access
 Charge shall be derived by taking the Low Voltage Transmission Revenue
 Requirements ("LVTRR") and dividing it by SDG&E's Gross Load forecast
 applicable during the Rate Effective Period.

San Diego Gas & Electric Company

BLACKLINE Appendix VII, Appendix IX

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7				u u		7
8	Agricultural					8
9	Schedules PA and TOU- PA	0.00007	04 ST			9
10	Schedules PA-T-1(1)	0.00001	0.02	0.02	0.02	10
11	-					11
12	Street Lighting	0.00010	5	=		12
13	8	U				13
14	Standby Rate (2)		0.02	0.02	0.02	14

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- (1) Demand rate applied to customers monthly maximum demand.
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Wholesale RS Rate

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The transmission rate components of SDG&E's End-Use Customer rates are determined as follows:

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- 2. To mitigate the impact of rate increases to Street Lighting and Stand-by Service classes, the rates effective October 1, 2003, for these customer classes shall be limited to a 100% rate increase under the otherwise applicable rate design.
 Beginning with rates that become effective July 1, 2004, SDG&E shall design transmission rates applicable to Street Lighting and Stand-by Service classes based on total cost of service without such mitigation measures. The revenue requirement under-recovery attributable to this mitigation measure that occurs

- during the first Rate Effective Period shall be allocated among other customer classes in proportion to these classes' respective contribution to SDG&E's 12-month average coincident peak excluding the contribution to such coincident peak from Street Lighting and Stand-by Service classes.
- Divide the results of the allocation described paragraph "1", as adjusted by paragraph "2" above, by the appropriate forecast End Use Customer billing determinants applicable to the Rate Effective Period to determine the transmission prices for the respective End Use Customer classes. End Use Customer classes shall be determined in accordance with SDG&E's CPUC tariffs. The billing determinants used to design transmission rates applicable to End Use Customer classes shall be as follows:
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 - d. Agricultural forecast metered (kWh) for tariff for the Rate Effective Period for all applicable tariffs except tariff PA-T-1; for tariff PA-T-1 forecast metered maximum non coincident demand (kW) for the Rate Effective Period; and
 - e. Street Lighting forecast energy (kWh) used by all lamps in service for the

Rate Effective Period;

Stand-by Service – contract demands (kW) applicable to Stand-by Service for the Rate Effective Period.

For the Medium and Large Commercial/Industrial class of customers, a portion of the allocated revenue requirement shall be recovered through a maximum non coincident demand charge and the remaining portion of the allocated revenue requirement shall be recovered through either a seasonally-differentiated peak period demand charge (e.g., 11:00 a.m. to 6:00 p.m. summer and 5:00 p.m. to 8:00 p.m. winter) or a seasonally-differentiated coincident peak demand charge. The rate design methodology is delineated below in paragraph "4".

- 4. The rate design for the recovery of allocated revenue requirements for the Medium and Large Commercial/Industrial Class is as follows:
 - a. For Rate Schedule AD, the maximum non-coincident demand charge shall be determined as the revenue requirement allocated to the Medium and Large Commercial/Industrial Class described in paragraph "1", as adjusted by paragraph "2" above, divided by the forecast metered maximum non coincident peak demand (kW) for the Rate Effective Period.
 - b. For the Rate Schedules listed below,¹ the maximum non-coincident demand charge, described in paragraph "4.a" above, shall be reduced by 10%.
 - c. For Rate Schedules AY-TOU, AL-TOU, and DG-R the residual 10% of revenue referenced in paragraph "4.b" above shall be recovered through a seasonally-differentiated peak period demand charge.

The maximum non-coincident demand charge is being reduced by 10 percent for: Schedules AY-TOU, AL-TOU, DG-R and A6-TOU. All of SDG&E's currently-effective rate schedules are available at the following website: http://www.sdge.com/regulatory/currentEffectiveTariffs.shtml

- d. For Rate Schedule A6-TOU, the residual 10% of revenue referenced in paragraph "4.b" above shall be recovered through a seasonally-differentiated coincident peak demand charge.
- C. ALLOCATION OF SDG&E'S BASE TRANSMISSION REVENUE
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- 2. The HV Utility Specific transmission rate shall be derived by taking the High Voltage Transmission Revenue Requirements ("HVTRR") and dividing it by SDG&E's total retail forecast kWh billing determinants (adjusted for distribution losses) applicable during the Rate Effective Period.
- 3. SDG&E's Low Voltage Access Charge and Low Voltage Wheeling Access Charge shall be derived by taking the Low Voltage Transmission Revenue Requirements ("LVTRR") and dividing it by SDG&E's Gross Load forecast applicable during the Rate Effective Period.

San Diego Gas & Electric Company

ATTACHMENT C (EXHIBIT NO. SDG-1)

Prepared Direct Testimony of

Cynthia Fang on Behalf of San Diego Gas & Electric Company

Docket No. ER16-___-000 Exhibit No. SDG-1

UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

San Diego Gas & Electric Company) Docket No. ER16-___-000

PREPARED DIRECT TESTIMONY OF

CYNTHIA FANG

ON BEHALF OF

SAN DIEGO GAS & ELECTRIC COMPANY

CYNTHIA FANG

ON BEHALF OF

PREPARED DIRECT TESTIMONY OF

SAN DIEGO GAS & ELECTRIC COMPANY

Q1. Please state your name, position and place of employment.

A1. My name is Cynthia Fang, and I am the Rate Strategy and Analysis Manager in the Customer Pricing department for San Diego Gas & Electric Company ("SDG&E"). My business address is 8330 Century Park Court, San Diego, CA 92123-1530.

- Q2. Please summarize your education.
- A2. 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.
- Q3. Please describe your current responsibilities as well as prior work experience before coming to SDG&E.
- A3. My primary responsibilities include overseeing the electric load analysis, electric demand forecasting and electric rate strategy for SDG&E as well as 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.

I have previously submitted testimony and testified before the California Public Utilities Commission ("CPUC") and submitted testimony before the Federal Energy Regulatory Commission ("Commission" or "FERC") 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.

I. ORGANIZATION OF TESTIMONY 1 2 **Q4**. How is your testimony organized? 3 A4. My testimony is organized into the following sections: 4 I. Organization of Testimony; 5 II. Introduction and Purpose of Testimony; 6 III. Development of SDG&E's Volumetric Rates for Vehicle Grid Integration 7 ("VGI") Pilot Customers; 8 IV. Revisions to Appendix VII; 9 V. Revisions to Appendix IX; 10 VI. Revisions to Statements to Reflect Inclusion of Rates for VGI Pilot Customers; 11 and 12 VII. Summary 13 II. INTRODUCTION AND PURPOSE OF TESTIMONY 14 Q5. What is the purpose of your testimony? 15 A5. The purpose of my testimony is to present proposed volumetric Transmission and 16 Reliability Services ("RS") rate for use by participants in SDG&E's VGI Pilot Program, 17 recently approved by the CPUC in Decision (D.) 16-01-045. My testimony also presents 18 proposed conforming revisions to SDG&E FERC Electric Tariff, Volume 11, Appendix 19 VII ("Appendix VII") and Appendix IX ("Appendix IX"). Specifically my testimony 20 proposes the following: 21 Volumetric rate for the recovery of Transmission and RS costs, consistent with 1) 22 the recently CPUC-approved VGI Pilot Program; 23 2) Conforming revisions to Appendix VII and Appendix IX; and 24 3) Revisions to the Statement BL included and accepted in Docket No. ER16-445 25 (Transmission) and the Statement BL included and accepted in Docket No. ER16-26 546 (RS) to reflect the inclusion of Transmission and RS rates for participants on 27 SDG&E's VGI Pilot Program.

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III. DEVELOPMENT OF SDG&E'S VOLUMETRIC RATES FOR VGI PILOT CUSTOMERS

A. Development of VGI Pilot Volumetric Rates

 Q6. Please describe how the VGI Pilot Volumetric rates were developed in the instant filing.

A6.

Consistent with the CPUC approval in D.16-01-045, the Medium & Large Commercial/Industrial ("M/L C&I") class average rate provides the basis for the VGI Pilot volumetric rates. As such the VGI Pilot volumetric rates, found in Statement BL, Page 1 (Attachment D for Transmission rates, reflecting a rate of \$0.03195 kWh and Attachment E for RS rates, reflecting a rate of \$0.00011/kWh, were developed by simply dividing the M/L C&I class allocated revenues by the class's Billing Determinants. This produces a straightforward energy rate, which SDG&E proposes to use as a means of recovering Transmission and RS costs from participants on the VGI Pilot Program.

B. Allocation of Costs to SDG&E's Retail Customer Classes

Q7. What statement shows the results of allocating authorized Transmission and RS revenue requirements to each customer class?

A7. Statement BL deals with customer class cost allocations. However, SDG&E does not propose any changes to the methodology used to allocate Transmission or RS costs to each customer class with this proposed volumetric rate for participants on the VGI Pilot Program. Statement BL, page 3, in Attachment D, shows the amount of authorized Transmission revenues allocated to each customer class. Statement BL, page 5, in Attachment E shows the amount of authorized RS revenues allocated to each customer class. These allocations have not changed for any customer class as a result of the calculation of the VGI Pilot Transmission and RS rates because VGI currently does have any customers.

C. Rate Design Change

Q8. Is SDG&E proposing any rate design changes in this proceeding?

 A8. Yes, SDG&E is proposing one rate design change. Specifically, SDG&E is proposing to include new volumetric Transmission and RS rates that would be available only to participants on the VGI Pilot Program. No other rate design changes are being proposed in this proceeding.

1	Q9.	Please describe the rate classes that are affected by SDG&E's proposal to create
2		new VGI Pilot Transmission and RS rates.
3	A9.	The only customers impacted by the inclusion of the new VGI Pilot rates will be the VGI
4		Pilot customers.
5		D. VGI Pilot Customer Rate Design and Customer Rate Increase Impacts
6	Q10.	How does SDG&E propose to design the rates related to the VGI Pilot?
7	A10.	With the exception of adding the VGI Pilot volumetric rates, as explained above,
8		SDG&E is proposing no additional changes to its currently-effective (a) Transmission
9		rates that the Commission approved in Docket No. ER16-445 on March 17, 2016,
10		effective January 1, 2016, or (b) RS rates that the Commission approved in Docket No.
11		ER16-546 on February 10, 2016, effective January 1, 2016.
12	Q11.	What are the proposed retail and wholesale rates, by rate class that SDG&E is
13		seeking approval in the instant filing?
14	A11.	SDG&E is seeking approval solely for the VGI rate for the retail Transmission and RS
15		rates. Specifically, Attachment D, Statement BL, page 1, line 17 shows the VGI rate for
16		Transmission rates and Attachment E, Statement BL, page 1, line 6 shows the VGI rate
17		for RS rates. As noted, the remaining Transmission and RS rates are unchanged.
18		SDG&E is proposing no changes to wholesale rates.
19	Q12.	In deriving the VGI volumetric rate, did you recognize the fact that customers can
20		be served at different voltage levels?
21	A12.	No. VGI customers will only receive electric services at the secondary level at the meter
22		pedestal and charging stations. Therefore, SDG&E did not calculate different rates by
23		voltage level.
24	IV.	REVISIONS TO APPENDIX VII
25	Q13.	Are you proposing any revisions to SDG&E Appendix VII?
26	A13.	Yes. I am proposing the following tariff sheet revision to SDG&E Appendix VII.
27		• Appendix VII – Added the "Vehicle Grid Integration" rate, a volumetric RS rate,
28		to the table as a subset of the M/L C&I class.
29	Q14.	Are you including complete Appendix VII at this time to incorporate these
30		revisions?

1	A14.	Yes, Attachment A provides a redline version of Appendix VII and Attachment B
2		provides a clean version of Appendix VII that reflect the revisions discussed above.
3	V.	REVISION TO APPENDIX IX
4	Q15.	Are you proposing any revisions to SDG&E Rate Design, set forth in Appendix IX?
5	A15.	Yes. I am proposing a revision to Section I.B.3.c. of Appendix IX.
6	Q16.	What is the revision and why are you proposing it?
7	A16.	Section I.B.3. lists the End-Use Customer classes taking Transmission service from
8		SDG&E while also providing details on the determinants used to develop Transmission
9		rates for each class. Subsection I.B.3.c. pertains to the Medium and Large
10		Commercial/Industrial customer class. SDG&E proposes to add the following sentence
11		to the Medium and Large Commercial/Industrial class in Section B.3.c. to clarify that the
12		VGI rate is based on forecasted metered energy (kWh):
13		"For the rate applicable to the Vehicle Grid Integration Pilot, forecasted
14		metered energy (kWh) shall be used for the Rate Effective Period;"
15	Q17.	Are you including a complete Appendix IX at this time to incorporate all
16		conforming and substantive revisions?
17	A17.	Yes. Attachment A contains a redline version of Appendix IX and Attachment B
18		contains a clean version of Appendix IX, reflecting the revision to Section I.B.3.c., as
19		discussed above.
20 21	VI.	REVISIONS TO STATEMENTS TO REFLECT INCLUSION OF RATES FOR VGI PILOT CUSTOMERS
22	Q18.	Please describe the revisions made to Statements BL, BG, and BH presented in
23		Attachment D for Transmission rates and Attachment E for RS rates.
24	A18.	Attachment D presents revisions to Statement BL for Transmission rates and Attachment
25		E presents revisions to Statement BL for RS rates. As described above, Statement BL is
26		revised to reflect the inclusion of rates for VGI Pilot customers.
27	Q19.	Were there any revisions made to the Statements BG or BH?
28	A19.	No. The Statements BG and BH SDG&E presented in Docket Nos. ER16-445 and
29		ER16-546 for Transmission and RS rates, respectively, are unchanged. These Statements
30		do not change from the introduction of VGI Pilot rates at this time because SDG&E
31		currently does not have customers for the VGI Pilot. Accordingly, because there are no

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revenues to present for the VGI Pilot in Statements BG or BH, SDG&E has not included these Statements in this Filing.

Q20. Are you requesting any waivers in this proceeding?

A20. Yes. I am requesting a waiver of the annual filing requirement set forth in section 4. of SDG&E's Reliability Services Rate Schedule (Appendix VI of SDG&E's TO Tariff) to permit SDG&E to make this proposed limited revision to the RS Tariff at this time to accommodate the CPUC-approved VGI Pilot Program, and any other waivers the Commission may deem appropriate to permit this Filing to become effective as proposed.

VII. SUMMARY

Q21. What is your testimony recommending?

- A21. My testimony recommends that FERC approve SDG&E's VGI Pilot Transmission and RS rates, proposed for SDG&E's VGI Pilot customers only. SDG&E proposes that these new volumetric rates for VGI Pilot customers become effective June 7, 2016, to permit timely implementation of the CPUC-approved VGI Pilot Program.
- **Q22.** Does this conclude your testimony?
- 16 A22. Yes, it does.

VERIFICATION

State of California)
County of San Diego)

Cynthia Fang, being first duly sworn, on oath, says that she is the Cynthia Fang, identified in the foregoing Prepared Direct Testimony; that she prepared or caused to be prepared such testimony on behalf of San Diego Gas & Electric Company; that the answers appearing therein are true to the best of her knowledge and her belief; and that if asked the questions appearing therein, her answers would, under oath, be the same.

Zynthia Fang

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of San Sugu



(Seal of Notary)

San Diego Gas & Electric Company

ATTACHMENT D

Statement BL for VGI Transmission Rate

Statement BL SAN DIEGO GAS AND ELECTRIC COMPANY

Rate Design Information

Summary of Transmission Rates

Rate Effective Period - Twelve Months Ending December 31, 2016

			(A)		(B)		(C)		(D)		
				Transmission		Primary		Secondary			
		Tra	Transmission		Level		Level		Level		
Line		En	ergy Rates	Dem	and Rates	Demand Rates		Demand Rates			Line
No.	Customer Classes		\$/kWh	\$/k	:W-Mo		\$/kW-Mo	\$	\$/kW-Mo	Reference	No.
1	Residential	\$	0.03894							Statement BL, Page BL-4, Line 7	1
2	Residential	Ф	0.03654							Statement BL, Fage BL-4, Line /	2
3	Small Commercial	\$	0.04028							Statement BL, Page BL-5, Line 7	3
4	5u. 55	Ψ	0.0.020							Statement BE, Tage BE e, Eme	4
5	Medium & Large Commercial/Industrial										5
6	Non-Coincident Demand (100%) ¹			\$	12.00	\$	12.13	\$	12.55	Statement BL, Page BL-6, Lines 37; 36; 35	6
7											7
8	Non-Coincident Demand (90%) ²			\$	10.80	\$	10.92	\$	11.30	Statement BL, Page BL-7 Lines 9; 8; 7	8
9											9
10	Maximum On-Peak Period Demand ³										10
11	Summer ⁵			\$	1.94	\$	1.96	\$	2.03	Statement BL, Page BL-9, Lines 41; 40; 39	11
12	Winter ⁵			\$	0.59	\$	0.59	\$	0.61	Statement BL, Page BL-10, Lines 39; 38; 37	12
13											13
14	Maximum Demand at the Time of System Peak ⁴										14
15	Summer ⁵			\$	2.35	\$	2.37	\$	-	Statement BL, Page BL-11, Lines 42; 41; 40	15
16	Winter ⁵			\$	0.64	\$	0.64	\$	-	Statement BL, Page BL-12, Lines 41; 40; 39	16
17	Vehicle Grid Integration Pilot Program (Schedule VGI)	\$	0.03195							Statement BL, Page BL-13, Line 7	17
18											18
19	Agricultural (Schedules PA and TOU-PA)	\$	0.02040							Statement BL, Page BL-14, Line 7	19
20	,										20
21	Agricultural (Schedule PA-T1) 1			_							21
22	Non-Coincident Demand (100%)			\$	4.63	\$	4.68	\$	4.83	Statement BL, Page BL-15, Lines 36; 35; 34	22
23	Charact Listains	¢.	0.02002							Ctatament DI Dave DI 1/ II. 7	23
24 25	Street Lighting	\$	0.02902							Statement BL, Page BL-16, Line 7	24 25
26	Standby			\$	5.36	\$	5.41	\$	5.61	Statement BL, Page BL-17, Lines 37; 36; 35	26
20	Standby			Ф	3.30	Ф	3.41	Þ	3.01	Statement DL, Fage DL-1/, Lines 3/, 30, 33	20
	NOTES.							<u> </u>			

NOTES:

- Non-Coincident Demand (NCD) (100%) rates are applicable to the following California Public Utilities Commission (CPUC) tariffs: Schedules AD and PA-T-1.
- NCD (90%) rates are applicable to the following CPUC tariffs: Schedules AY-TOU, AL-TOU, DG-R, and A6-TOU.
- Maximum On-Peak Demand rates are applicable to the following CPUC tariffs: Schedules AY-TOU, AL-TOU, and DG-R.
- Maximum Demand at the Time of System Peak rates are applicable to the following CPUC tariff: Schedule A6-TOU.
- Summer May-Oct; Winter Nov-Apr.

Statement BL

SAN DIEGO GAS AND ELECTRIC COMPANY

Transmission Revenue Data to Reflect Changed Rates

Medium & Large Commercial/Industrial Customers - Summary of Revenues Rate Effective Period - Twelve Months Ending December 31, 2016

Line No.	Description		(A) Jan-16		(B) Feb-16		(C) Mar-16		(D) Apr-16		(E) May-16		(F) Jun-16		(G)	Reference 5	Line No.
110.	Bescription										,					reservate	110.
1	Energy:																1
2	Commodity Sales (kWh)		806,963,765		782,041,552		771,005,238		775,707,508		804,427,595		835,839,811			Page BG-6, Line 2	2
3	Commodity Revenues (\$)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-			Page BG-6, Line 4	3
4																	4
5	Non-Coincident Demand (100%)1:																5
6	Demand (kW)		12,362		12,246		12,341		11,842		12,221		12,716			Page BG-6, Line 10	6
7	Revenues at Changed Rates (\$)	\$	155,080	\$	153,618	\$	154,809	\$	148,555	\$	153,310	\$	159,524			Page BG-6, Line 24	7
8																	8
9	Non-Coincident Demand (90%) 2:																9
10	Demand (kW)		2,054,555	<u> </u>	1,996,441		1,970,567		1,977,805	_	2,049,370		2,134,415			Page BG-7, Line 6	10
11	Revenues at Changed Rates (\$)	\$	23,031,646	\$	22,385,496	\$	22,097,743	\$	22,173,982	\$	22,974,689	\$	23,932,941	1		Page BG-7, Line 20	11
12																	12
13	Maximum On-Peak Period Demand 3:																13 14
14 15	Demand (kW)		1,660,318		1,624,286		1,608,116		1,603,868		1,822,833		1,909,454	4		Page BG-8, Line 6	15
16	Revenues at Changed Rates (\$)	\$	1,000,318	\$	984,366	6	974,567	6	971,992	6	3,674,777	6				Page BG-8, Line 6 Page BG-8, Line 20	16
17	Revenues at Changed Rates (3)	Ф	1,000,203	Þ	984,300	3	974,307	3	9/1,992	J	3,074,777)	3,849,402	4		rage bG-8, Line 20	17
18	Maximum Demand																18
19	at the Time of System Peak 4:																19
20	Demand (kW)		89,830		77,506		72,133		81,487		91,013		85,486			Page BG-9, Line 6	20
21	Revenues at Changed Rates (\$)	\$	57,491	e	49,604	•	46,165	•	52,152	•	214,157	•	201,153	4		Page BG-9, Line 0	21
22	Revenues at Changed Rates (3)	Ф	37,491	Þ	49,004	3	40,103	3	32,132	J	214,137)	201,133	4		rage BG-9, Line 20	22
23	Total Revenues at Changed Rates:	s	24,250,420	\$	23,573,084	•	23,273,284	\$	23,346,680	\$	27,016,932	e	28,143,020			Page BG-9, Line 28	23
23	Total Revenues at Changed Rates.	Φ	24,230,420	φ	23,373,004	Ψ	23,273,204	Ψ	23,340,000	٠	27,010,732	φ	20,143,020	ŧ		rage BG-7, Line 26	23
Line			(A)		(B)		(C)		(D)		(E)		(F)		(G)		Line
No.	Description		Jul-16		Aug-16		Sep-16		Oct-16		Nov-16		Dec-16		Total	Reference 5	No.
24	Energy:																24
25	Commodity Sales (kWh)		899,708,532		881,327,324		951,386,527		858,675,091		829,663,454		802,075,681		9,998,822,077	Page BG-6, Line 26	25
26	Commodity Revenues (\$)		-		-		-		-		-		-		-	Page BG-6, Line 28	26
27	(,)																27
28	Non-Coincident Demand (100%) 1:																28
29	Demand (kW)		13,298		13,447		14,739		13,063		12,089		11,698		152,062	Page BG-6, Line 34	29
30	Revenues at Changed Rates (\$)	\$	166,824	\$	168,683	\$	184,893	\$	163,874	\$	151,650	\$	146,751	\$	1,907,569	Page BG-6, Line 48	30
31																	31
32	Non-Coincident Demand (90%) 2:																32
33	Demand (kW)		2,295,711		2,249,985		2,427,769		2,192,234		2,111,113		2,040,957		25,500,922	Page BG-7, Line 26	33
34	Revenues at Changed Rates (\$)	\$	25,739,572	\$	25,228,268	\$	27,220,801	\$	24,580,789	\$	23,664,110	\$	22,877,750	\$	285,907,788	Page BG-7, Line 40	34
35																	35
36	Maximum On-Peak																36
37	Period Demand 3:																37
38	Demand (kW)		2,049,311		2,011,614		2,168,524		1,960,105		1,702,816		1,646,325		21,767,569	Page BG-8, Line 26	38
39	Revenues at Changed Rates (\$)	\$	4,131,349	\$	4,055,353	\$	4,371,678	\$	3,951,513	\$	1,031,958	\$	997,722	\$	30,000,880	Page BG-8, Line 40	39
40			·														40
41	Maximum Demand			1		1		1		1				1			41

NOTES:

44

42 at the Time of System Peak 4:

46 Total Revenues at Changed Rates:

Demand (kW)

Non-Coincident Demand (NCD) (100%) rates are applicable to the following California Public Utilities Commission (CPUC) tariffs: Schedules AD and PA-T-1.

91,157

214,497 \$

100.088

235,513 \$

88,712

208,745 \$

\$ 32,012,886 \$ 28,904,921 \$ 24,908,629 \$ 24,081,055 \$

95.174

60,911 \$

91,925

58,832 \$

² NCD (90%) rates are applicable to the following CPUC tariffs: Schedules AY-TOU, AL-TOU, DG-R, and A6-TOU.

95,708

225,207 \$

Maximum On-Peak Demand rates are applicable to the following CPUC tariffs: Schedules AY-TOU, AL-TOU, and DG-R.

30,262,952 \$ 29,666,799

- Maximum Demand at the Time of System Peak rates are applicable to the following CPUC tariff: Schedule A6-TOU.
- ⁵ Reference data found in Statement BG.

Revenues at Changed Rates (\$)

42

43

44 45

46

Page BG-9, Line 34

Pages BG-9, Line 48

Page BG-9, Line 56

1.060.220

1,624,428

319,440,665

Statement BL SAN DIEGO GAS AND ELECTRIC COMPANY

Rate Design Information

Allocation of Base Transmission Revenue Requirements (BTRR) Based on 12 CPs Rate Effective Period - Twelve Months Ending December 31, 2016 (\$1,000)

		(A)	(B)	(C)		
Line	Custom or Classes	Total 12 CPs @ Transmission Level ²	Percentages ³	Allocated Base Transmission Revenue Requirement	Dofonou oo	Line
No.	Customer Classes	Transmission Level	reicemages	Requirement	Reference	No.
1 2	Total Base Transmission Revenue Requirement ¹			716,366	Statement BK1, Page 1, Line 21	1 2
3	Allocation of BTRR Based on 12-CP:					3
4	Residential	16,754,356	41.76%	\$ 299,144	Statement BL, Page BL-19, Line 2	4
5	Small Commercial	4,343,919	10.83%	\$ 77,559	Statement BL, Page BL-19, Line 3	5
6	Medium & Large Commercial/Industrial	17,892,894	44.60%	\$ 319,472	Statement BL, Page BL-19, Line 8	6
7	Agricultural	361,626	0.90%	\$ 6,457	Statement BL, Page BL-19, Line 14	7
8	Street Lighting Revenues	147,620	0.37%	\$ 2,636	Statement BL, Page BL-19, Line 16	8
9	Standby Revenues	621,561	1.55%	\$ 11,098	Statement BL, Page BL-19, Line 21	9
10						10
11	Total	40,121,977	100.00%	\$ 716,366	Sum Lines 4 Through 9	11
12					-	12
13	Total	40,121,977		\$ 716,366	Line 11	13

NOTES:

This sheet is not part of the TO4 Formula Excel Spreadsheet Model and was created solely to provide a summary of all the TO4 Retail Base Transmission Revenue Requirement components including those items that were not contemplated by the TO4 Formula Excel Spreadsheet Model, namely the FERC Audit Adjustment from FERC Docket No. FA 12-8-000, the Interest True-Up Adjustment from January 2015 - December 2015 for the TO3-Final True-Up Adjustment, and an Error Correction adjustment applicable to depreciation expense.

² Statement BL, Page BL-18, Column D.

³ Statement BL, Page BL-18, Column E.

Statement BL SAN DIEGO GAS AND ELECTRIC COMPANY

Rate Design Information

Residential Customers ¹

Rate Effective Period - Twelve Months Ending December 31, 2016 (\$1,000)

Line No.	Description	Derivation of Commodity Rate & Proof of Revenues Calculation	Reference ²	Line No.
1 2	Residential - Allocated Transmission Revenue Requirement	\$ 299,144	Statement BL, Page BL-3, Line 4	1 2
3 4	Residential - Billing Determinants (MWh)	7,681,377	Statement BG, Page BGWP-1, Line 6	3 4
5	Residential - Energy Rate per kWh	\$ 0.0389441	Line 1 / Line 3	5 6
7 8	Residential - Energy Rate per kWh - Rounded	\$ 0.03894	Line 5, Rounded to 5 Decimal Places	7 8
9 10	Proof of Revenues	\$ 299,113	Line 7 x Line 3	9 10
11	Difference	\$ 31	Line 1 Less Line 9	11

NOTES:

Schedules DR, DR-LI, DR-TOU, DR-SES, DM, DS, DT, DT-RV, TOU-DR, EV-TOU and EV-TOU-2.

The following California Public Utilities Commission (CPUC) tariffs are offered to residential customers:

² Reference data found in Statements BG and BL.

Rate Design Information

Small Commercial Customers ¹

Rate Effective Period - Twelve Months Ending December 31, 2016 (\$1,000)

Line No.	Description	Derivation of Commodity Rate & Proof of Revenues Calculation		Reference ²	Line No.
1 2 3	Small Commercial - Allocated Transmission Revenue Requirement Small Commercial - Billing Determinants (MWh)	\$	77,559 1,925,682	Statement BL, Page BL-3, Line 5 Statement BG, Page BGWP-1, Line 7	1 2 3
4 5 6 7	Small Commercial - Energy Rate per kWh Small Commercial - Energy Rate per kWh - Rounded	\$	0.0402763 0.04028	Line 1 / Line 3 Line 5, Rounded to 5 Decimal Places	4 5 6 7
8 9 10 11	Proof of Revenues Difference	\$	77,566	Line 7 x Line 3 Line 1 Less Line 9	8 9 10 11

¹ The following California Public Utilities Commission (CPUC) tariffs are offered to small commercial customers: Schedules A, A-TC, A-TOU, and TOU-A.

² Reference data found in Statements BG and BL.

Rate Design Information

Medium & Large Commercial/Industrial Customers ¹
Rate Effective Period - Twelve Months Ending December 31, 2016 (\$1,000)

		Derivation of			
		Commodity Rate &			
Line		Proof of Revenues			Line
No.	Description	Calculation		Reference ²	No.
1	Med & Lrg. C/I - Demand Revenue Requirement	\$	319,472	Statement BL, Page BL-3, Line 6	1
2				, 6	2
3	Demand Determinants (with Transmission LF Adjustment)				3
4	Used to Allocate Total Class Revenues to Voltage Level (MW) ²				4
5	Secondary		21,081	Statement BL, Page BL-20, Line 29, Col. D	5
6	Primary		4,157	Statement BL, Page BL-20, Line 30, Col. D	6
7	Transmission		1,381	Statement BL, Page BL-20, Line 31, Col. D	7
8	Total		26,619	Sum Lines 5; 6; 7	8
9					9
10	Allocation Factors Per Above to Allocate				10
11	Demand Revenue Requirements to Voltage Level				11
12	Secondary		79.20%	Line 5 / Line 8	12
13	Primary		15.62%	Line 6 / Line 8	13
14	Transmission		5.19%	Line 7 / Line 8	14
15	Total		100.00%	Sum Lines 12; 13; 14	15
16					16
17	Allocation of Revenue Requirements to Voltage Level	6	252.007	1. 1 1. 10	17
18	Secondary	\$	253,007	Line 1 x Line 12	18
19 20	Primary Transmission	\$ \$	49,891	Line 1 x Line 13 Line 1 x Line 14	19 20
20	Total	\$	16,574 319,472	Sum Lines 18; 19; 20	20
22	Total	Þ	319,472	Suiii Lilies 18, 19, 20	22
23	Demand Determinants by Voltage Level @ Meter Level (MW)				23
24	Secondary		20,159	Statement BL, Page BL-20, Line 29, Col. B	24
25	Primary		4,112	Statement BL, Page BL-20, Line 30, Col. B	25
26	Transmission		1,381	Statement BL, Page BL-20, Line 31, Col. B	26
27	Total		25.653	Sum Lines 24; 25; 26	27
28			.,	, , , ,	28
29	Demand Rate by Voltage Level @ Meter				29
30	Secondary	\$	12.55037	Line 18 / Line 24	30
31	Primary	\$	12.13220	Line 19 / Line 25	31
32	Transmission	\$	11.99834	Line 20 / Line 26	32
33					33
34	Demand Rate by Voltage Level @ Meter (Rounded)				34
35	Secondary	\$	12.55	Line 30, Rounded to 2 Decimal Places	35
36	Primary	\$	12.13	Line 31, Rounded to 2 Decimal Places	36
37	Transmission	\$	12.00	Line 32, Rounded to 2 Decimal Places	37
38	D 0 0D				38
39	Proof of Revenues		252.000	1: 24 1: 25	39
40	Secondary	\$	253,000	Line 24 x Line 35	40
41	Primary	\$	49,882	Line 25 x Line 36	41
42 43	Transmission Total	\$	16,577	Line 26 x Line 37	42 43
_	Total	3	319,458	Sum Lines 40; 41; 42	
44 45	Difference	e	14	Line 1 Less Line 43	44 45
43	Difference	Þ	14	Line I Less Line 45	43
	MOTEC.				

The following California Public Utilities Commission (CPUC) tariffs are offered to Medium and Large Commercial/Industrial customers: Schedules AD, AY-TOU, AL-TOU, DG-R, A6-TOU, and OL-TOU. No demand rates are applicable to schedule OL-TOU per CPUC Decision D.09-09-036.

Reference data found in Statement BL.

Rate Design Information

Medium & Large Commercial/Industrial Customers Rate Effective Period - Twelve Months Ending December 31, 2016

(\$1,000)

			1		
		Comi	erivation of modity Rate &		
Line			f of Revenues	2	Line
No.	Description	C	alculation	Reference ³	No.
	90% of Total Medium and Large Commercial/Industrial NCD Rates ¹		90.00%		1
2	Secondary	\$	11.29500	Line 1 x Statement BL, Page BL-7, Line 35	2
3	Primary	\$	10.91700	Line 1 x Statement BL, Page BL-7, Line 36	3
4	Transmission	\$	10.80000	Line 1 x Statement BL, Page BL-7, Line 37	4
5				-	5
6	90% of Total Medium and Large Commercial/Industrial NCD Rates (Rounded)				6
7	Secondary	\$	11.30	Line 2, Rounded to 2 Decimal Places	7
8	Primary	\$	10.92	Line 3, Rounded to 2 Decimal Places	8
9	Transmission	\$	10.80	Line 4, Rounded to 2 Decimal Places	9
10				ŕ	10
11	Pertaining to Schedules @ 90% NCD with Maximum On-Peak Period Demand ²				11
12	•				12
13	NCD Determinants by Voltage Level @ Meter Level (MW)				13
14	Secondary		20,009	Statement BL, Page BL-20, Line 14, Col. B	14
15	Primary		3,909	Statement BL, Page BL-20, Line 15, Col. B	15
16	Transmission		229	Statement BL, Page BL-20, Line 16, Col. B	16
17	Total		24,147	Sum Lines 14; 15; 16	17
18			/	, ,	18
19	Annual Revenues from 100% of Total Med. & Lrg. Comm./Ind. NCD Rates				19
20	Secondary	\$	251,115	Line 14 x Statement BL, Page BL-7, Line 35	20
21	Primary	\$	47,414	Line 15 x Statement BL, Page BL-7, Line 36	21
22	Transmission	\$	2,746	Line 16 x Statement BL, Page BL-7, Line 37	22
23	Total	\$	301,275	Sum Lines 20; 21; 22	23
24	1000	Ψ.	301,270	54111 211145 20, 21, 22	24
25	Annual Revenues from 90% of Total Med. & Lrg. Comm./Ind. NCD Rates				25
26	Secondary	\$	226,104	Line 7 x Line 14	26
27	Primary	\$	42,684	Line 8 x Line 15	27
28	Transmission	\$	2,472	Line 9 x Line 16	28
29	Total	\$	271,259	Sum Lines 26; 27; 28	29
30	Total	Þ	271,239	Sum Lines 20, 27, 28	30
	Revenue Reallocation to Maximum On-Peak Period Demand				31
31		\$	25.011	Line 20 Less Line 26	31
33	Secondary	\$	25,011	Line 20 Less Line 26 Line 21 Less Line 27	33
34	Primary Transmission	\$	4,730 275	Line 21 Less Line 27 Line 22 Less Line 28	34
35	Total	\$	30.016		35
33	1 Otal	\$	30,016	Sum Lines 32; 33; 34	33

¹ 90% NCD Rates are applicable to the following California Public Utilities Commission (CPUC) tariffs: Schedules AY-TOU, AL-TOU, DG-R, and A6-TOU.

² 90% NCD Rates and Maximum On-Peak Period Demand charges are applicable to the following California Public Utilities Commission (CPUC) tariffs: Schedules AY-TOU, AL-TOU, and DG-R.

³ Reference data found in Statement BL.

Rate Design Information

Medium & Large Commercial/Industrial Customers Rate Effective Period - Twelve Months Ending December 31, 2016 (\$1,000)

		T		
Line No.	Description	Derivation of Commodity Rate & Proof of Revenues Calculation	Reference ²	Line No.
	•			
1	Pertaining to Schedules @ 90% NCD with			1
2	Maximum Demand at Time of System Peak ¹			2
3				3
4	NCD Determinants by Voltage Level (a) Meter Level (MW)			4
5	Secondary	-	Statement BL, Page BL-20, Line 22, Col. B	5
6	Primary	202	Statement BL, Page BL-20, Line 23, Col. B	6
7	Transmission	1,153	Statement BL, Page BL-20, Line 24, Col. B	7
8	Total	1,354	Sum Lines 5; 6; 7	8
9				9
10	Annual Revenues from 100% of Total Med. & Lrg. Comm./Ind. NCD Rates			10
11	Secondary	\$ -	Line 5 x Statement BL, Page BL-7, Line 35	11
12	Primary	\$ 2,445	Line 6 x Statement BL, Page BL-7, Line 36	12
13	Transmission	\$ 13,830	Line 7 x Statement BL, Page BL-7, Line 37	13
14	Total	\$ 16,275	Sum Lines 11; 12; 13	14
15				15
16	Annual Revenues from 90% of Total Med. & Lrg. Comm./Ind. NCD Rates			16
17	Secondary	\$ -	Statement BL, Page BL-8, Line 7 x Line 5	17
18	Primary	\$ 2,201	Statement BL, Page BL-8, Line 8 x Line 6	18
19	Transmission	\$ 12,447	Statement BL, Page BL-8, Line 9 x Line 7	19
20	Total	\$ 14,648	Sum Lines 17; 18; 19	20
21				21
22	Revenue Reallocation to Maximum Demand at the Time of System Peak			22
23	Secondary	\$ -	Line 11 Less Line 17	23
24	Primary	\$ 244	Line 12 Less Line 18	24
25	Transmission	\$ 1,383	Line 13 Less Line 19	25
26	Total	\$ 1,627	Sum Lines 23; 24; 25	26
		,		
		I .		1

^{90%} NCD Rates and Maximum Demand at Time of System Peak charges are applicable to the following California Public Utilities Commission (CPUC) tariff: Schedule A6-TOU.

² Reference data found in Statement BL.

SAN DIEGO GAS AND ELECTRIC COMPANY Rate Design Information

Medium & Large Commercial/Industrial Customers

Rate Effective Period - Twelve Months Ending December 31, 2016 (\$1,000)

		1			1
		_ n	erivation of		
			modity Rate &		
Line			of of Revenues		Line
-				D 0 4	
No.	Description	(Calculation	Reference ⁴	No.
1	Revenue Reallocation to Maximum				1
	On-Peak Period Demands ¹	\$	30,016	Statement BL, Page BL-8, Line 35	2
3	Oll-Feak Fellou Delilalius	3	30,016	Statement BL, Page BL-8, Line 33	3
-	C Mariana O. Barla Baria I Barra da				4
	Summer Maximum On-Peak Period Demands				
	by Voltage Level @ Meter Level (MW) ²		0.500	a	5
6	Secondary		9,593	Statement BL, Page BL-20, Line 36, Col. B	6
7	Primary		2,115	Statement BL, Page BL-20, Line 37, Col. B	7
8	Transmission		214	Statement BL, Page BL-20, Line 38, Col. B	8
9	Total		11,922	Sum Lines 6; 7; 8	9
10					10
	Summer Maximum On-Peak Period Demands				11
	by Voltage Level @ Transmission Level (MW)				12
13	Secondary		10,032	Statement BL, Page BL-20, Line 36, Col. D	13
14	Primary		2,138	Statement BL, Page BL-20, Line 37, Col. D	14
15	Transmission		214	Statement BL, Page BL-20, Line 38, Col. D	15
16	Total		12,384	Sum Lines 13; 14; 15	16
17					17
18	Summer Maximum On-Peak Period Allocation to Voltage Levels				18
19	Secondary		81.01%	Line 13 / Line 16	19
20	Primary		17.26%	Line 14 / Line 16	20
21	Transmission		1.73%	Line 15 / Line 16	21
22	Total		100.00%	Sum Lines 19; 20; 21	22
23					23
24	Share of Total Revenue Allocation to Summer Peak Period		80.00%		24
25					25
26	Revenues for Summer Maximum				26
27	On-Peak Period Demand Rates				27
28	Secondary	\$	19,452	Line 2 x Line 24 x Line 19	28
29	Primary	\$	4,146	Line 2 x Line 24 x Line 20	29
30	Transmission	\$	415	Line 2 x Line 24 x Line 21	30
31	Total	\$	24,013	Sum Lines 28; 29; 30	31
32			•		32
33	Summer Maximum On-Peak Period Demand Rates ³		\$/kW		33
34	Secondary	s	2.02765	Line 28 / Line 6	34
35	Primary	\$	1.96021	Line 29 / Line 7	35
36	Transmission	\$	1.94272	Line 30 / Line 8	36
37	Tunishingsion	Ψ	1.772/2	Line 50 / Line 6	37
38	Summer Maximum On-Peak Period Demand Rates (Rounded)		\$/kW		38
39	Secondary	\$	2.03	Line 34, Rounded to 2 Decimal Places	39
40	Primary	\$	1.96	Line 35, Rounded to 2 Decimal Places	40
41	Transmission	\$	1.94	Line 36, Rounded to 2 Decimal Places	41
42	1141131111331011	Φ	1.94	Line 30, Rounded to 2 Decimal Flaces	42
72					72
					1

- Revenues reallocated from NCD to recovery from Maximum On-Peak Period Demands for the following California Public Utilities Commission (CPUC) tariffs: Schedules AY-TOU, AL-TOU, and DG-R.
- Summer Maximum On-Peak Period Determinants for the following CPUC tariffs: Schedules AY-TOU, AL-TOU, and DG-R.
- Summer Maximum On-Peak Period Demand Charges for the following CPUC tariffs: Schedules AY-TOU, AL-TOU, and DG-R.
- Reference data found in Statement BL.

Rate Design Information

Medium & Large Commercial/Industrial Customers Rate Effective Period - Twelve Months Ending December 31, 2016

(\$1,000)

Line No.	Description	Derivation of Commodity Rate & Proof of Revenues Calculation	Reference ³	Line No.
NO.	Description	Calculation	Reference	NO.
1	Winter Maximum On-Peak Period Demands			1
2	by Voltage Level @ Meter Level (MW) 1			2
3	Secondary	7,891	Statement BL, Page BL-20, Line 41, Col. B	3
4	Primary	1,768	Statement BL, Page BL-20, Line 42, Col. B	4
5	Transmission	187	Statement BL, Page BL-20, Line 43, Col. B	5
6	Total	9,846	Sum Lines 3; 4; 5	6
7				7
8	Winter Maximum On-Peak Period Demands			8
9	by Voltage Level @ Transmission Level (MW)			9
10	Secondary	8,252	Statement BL, Page BL-20, Line 41, Col. D	10
11	Primary	1,787	Statement BL, Page BL-20, Line 42, Col. D	11
12	Transmission	187	Statement BL, Page BL-20, Line 43, Col. D	12
13	Total	10,226	Sum Lines 10; 11; 12	13
14				14
15	Winter Maximum On-Peak Period Allocation to Voltage Levels	00 500/	7: 10/7: 10	15
16	Secondary	80.70%		16
17 18	Primary Transmission	17.48% 1.83%		17 18
19	Total	1.83%		19
20	Total	100.00%	Suiii Lines 10, 17, 18	20
21	Share of Total Revenue Allocation to Winter Peak Period	20.00%		21
22	Share of Total Revenue Allocation to whiter reak renou	20.00%		22
	Revenues for Winter Maximum			23
24	On-Peak Period Demand Rates			24
25	Secondary	\$ 4,844	Statement BL, Page BL-10, Line 2 x Line 21 x Line 16	25
26	Primary	\$ 1,049	Statement BL, Page BL-10, Line 2 x Line 21 x Line 17	26
27	Transmission	\$ 110	Statement BL, Page BL-10, Line 2 x Line 21 x Line 18	27
28	Total	\$ 6,003	Sum Lines 25; 26; 27	28
29				29
30	Winter Maximum On-Peak Period Demand Rates 2	\$/kW		30
31	Secondary	\$ 0.61387	Line 25 / Line 3	31
32	Primary	\$ 0.59351	Line 26 / Line 4	32
33	Transmission	\$ 0.58765	Line 27 / Line 5	33
34				34
35				35
36	Winter Maximum On-Peak Period Demand Rates (Rounded)	\$/kW		36
37	Secondary	\$ 0.61	Line 31, Rounded to 2 Decimal Places	37
38	Primary	\$ 0.59	Line 32, Rounded to 2 Decimal Places	38
39	Transmission	\$ 0.59	Line 33, Rounded to 2 Decimal Places	39
40 41				40
41	Proof of Revenues			41 42
42	Secondary	\$ 24,288	(Page BL-10, Line 6 x Page BL-10, Line 39) + (Line 3 x Line 37)	42
44	Primary	\$ 24,288	(Page BL-10, Line 7 x Page BL-10, Line 40) + (Line 4 x Line 38)	44
45	Transmission	\$ 525	(Page BL-10, Line 8 x Page BL-10, Line 40) + (Line 4 x Line 38)	45
46	Total	\$ 30,001	Sum Lines 43; 44; 45	46
47		55,001	5 m 2 m 2 m 3 , 1 , 1 5	47
48	Difference	\$ 15	Statement BL, Page BL-10, Line 2 Less Line 46	48
49	Sincione	13	,	49
			+	

Winter Maximum On-Peak Period Determinants for the following California Public Utilities Commission (CPUC) tariffs: Schedules AY-TOU, AL-TOU, and DG-R.

Winter Maximum On-Peak Period Demand Charges for the following CPUC tariffs: Schedules AY-TOU, AL-TOU, and DG-R.

Reference data found in Statement BL.

Rate Design Information

Medium & Large Commercial/Industrial Customers Rate Effective Period - Twelve Months Ending December 31, 2016 (\$1,000)

		D	erivation of		
			modity Rate &		
Line		Proc	of of Revenues		Line
No.	Description	(Calculation	Reference ⁴	No.
1	Revenue Reallocation to Maximum Demands at the Time of System Peak ¹	\$	1,627	Statement BL, Page BL-9, Line 26	1
2			-		2
3	Summer Maximum Demands at the Time of System Peak				3
4	by Voltage Level @ Meter Level (MW) ²				4
5	Secondary		-	Statement BL, Page BL-20, Line 49, Col. B	5
6	Primary		84	Statement BL, Page BL-20, Line 50, Col. B	6
7	Transmission		468	Statement BL, Page BL-20, Line 51, Col. B	7
8	Total		552	Sum Lines 5; 6; 7	8
9					9
10	Summer Maximum Demands at the Time of System Peak				10
11	by Voltage Level @ Transmission Level (MW)			Contract DI Dece DI 10 I in 40 C.1 D	11
12	Secondary		-	Statement BL, Page BL-18, Line 49, Col. D	12
13	Primary		85	Statement BL, Page BL-18, Line 50, Col. D	13
14	Transmission		468	Statement BL, Page BL-18, Line 51, Col. D	14 15
15	Total		553	Sum Lines 12; 13; 14	
16 17	C M. in D I th. Tim C				16
18	Summer Maximum Demands at the Time of				17 18
19	System Peak Allocation to Voltage Levels (MW) Secondary		0.00%	Line 12 / Line 15	19
20	Primary		15.37%	Line 13 / Line 15	20
21	Transmission		84.63%	Line 14 / Line 15	21
22	Total		100.00%	Sum Lines 19; 20; 21	22
23	1000		100.0070	Sum Emes 17, 20, 21	23
24	Share of Total Revenue Allocation to Summer				24
25	Maximum Demand at the Time of System Peak		80.00%		25
26	The of System Found		00.0070		26
27	Revenues for Summer Maximum				27
28	Demand at the Time of System Peak Rates				28
29	Secondary	\$	_	Line 1 x Line 25 x Line 19	29
30	Primary	\$	200	Line 1 x Line 25 x Line 20	30
31	Transmission	\$	1,101	Line 1 x Line 25 x Line 21	31
32	Total	\$	1,302	Sum Lines 29; 30; 31	32
33			-		33
34	Summer Maximum Demand at the Time of System Peak Rates ³		\$/kW		34
35	Secondary	\$	-	Line 29 / Line 5	35
36	Primary	\$	2.37291	Line 30 / Line 6	36
37	Transmission	\$	2.35433	Line 31 / Line 7	37
38					38
39	Summer Maximum Demand at the Time of System Peak Rates (Rounded)		\$/kW		39
40	Secondary	\$	-	Line 35, Rounded to 2 Decimal Places	40
41	Primary	\$	2.37	Line 36, Rounded to 2 Decimal Places	41
42	Transmission	\$	2.35	Line 37, Rounded to 2 Decimal Places	42
43					43

- Revenues to be reallocated from NCD to recovery from Maximum Demand at the time of System Peak for the following California Public Utilities Commission (CPUC) tariff: Schedule A6-TOU.
- Summer Maximum Demand at the time of System Peak Determinants for the following CPUC tariff: Schedule A6-TOU. Summer Maximum Demand at the time of System Peak Demand Charges for the following CPUC tariff: Schedule A6-TOU.
- Reference data found in Statement BL.

Rate Design Information

Medium & Large Commercial/Industrial Customers Rate Effective Period - Twelve Months Ending December 31, 2016

(\$1,000)

		T			
		I	Derivation of		
			nmodity Rate &		
Line			of of Revenues		Line
No.	Description		Calculation	Reference ³	No.
	Winter Maximum Demands at the Time of System Peak				1
	by Voltage Level @ Meter Level (MW)1				2
3	Secondary		-	Statement BL, Page BL-20, Line 54, Col. B	3
4	Primary		69	Statement BL, Page BL-20, Line 55, Col. B	4
5	Transmission		440	Statement BL, Page BL-20, Line 56, Col. B	5
6	Total		508	Sum Lines 3; 4; 5	6
7					7
	Winter Maximum Demands at the Time of System Peak				8
	by Voltage Level @ Transmission Level (MW)				9
10	Secondary		-	Statement BL, Page BL-20, Line 54, Col. D	10
11	Primary		69	Statement BL, Page BL-20, Line 55, Col. D	11
12	Transmission		440	Statement BL, Page BL-20, Line 56, Col. D	12
13	Total		509	Sum Lines 10; 11; 12	13
14					14
	Winter Maximum Demands at the Time of				15
	System Peak Allocation to Voltage Levels				16
17	Secondary		0.00%	Line 10 / Line 13	17
18	Primary		13.56%	Line 11 / Line 13	18
19	Transmission		86.44%	Line 12 / Line 13	19
20	Total		100.00%	Sum Lines 17; 18; 19	20
21					21
	Share of Total Revenue Allocation to Winter		20.000/		22
	Maximum Demand at the Time of System Peak		20.00%		23
24	D C D IW: A M :				24
	Revenues for Proposed Winter Maximum Demand at the Time of System Peak Rates				25 26
27	Secondary	s	_	Statement BL, Page BL-12, Line 1 x Line 23 x Line 17	27
28	Primary	\$	44	Statement BL, Page BL-12, Line 1 x Line 23 x Line 17 Statement BL, Page BL-12, Line 1 x Line 23 x Line 18	28
29	Transmission	\$	281	Statement BL, Page BL-12, Line 1 x Line 23 x Line 18 Statement BL, Page BL-12, Line 1 x Line 23 x Line 19	29
30	Total	S	325	Sum Lines 27; 28; 29	30
31	Total	Φ	323	Sum Lines 27, 20, 27	31
32	Winter Maximum Demand at the Time of System Peak Rates ²		\$/kW		32
33	Secondary	\$	⊅/KW	Line 27 / Line 3	33
34	Primary	\$	0.64378	Line 27 / Line 3 Line 28 / Line 4	34
35	Transmission	\$	0.63994	Line 29 / Line 5	35
36	Hallshilssion	٥	0.03994	Line 25 / Line 3	36
37					37
38	Winter Maximum Demand at the Time of System Peak Rates (Rounded)		\$/kW		38
39	Secondary	\$		Line 33, Rounded to 2 Decimal Places	39
40	Primary	\$	0.64	Line 34, Rounded to 2 Decimal Places	40
41	Transmission	s	0.64	Line 35, Rounded to 2 Decimal Places	41
42		1		,	42
43					43
	Proof of Revenues				44
45	Secondary	\$	-	(Page BL-12, Line 5 x Page BL-12, Line 40) + (Line 3 x Line 39)	45
46	Primary	\$	244	(Page BL-12, Line 6 x Page BL-12, Line 41) + (Line 4 x Line 40)	46
47	Transmission	\$	1,381	(Page BL-12, Line 7 x Page BL-12, Line 42) + (Line 5 x Line 41)	47
48	Total	\$	1,624	Sum Lines 45; 46; 47	48
49					49
50	Difference	e \$	3	Statement BL, Page BL-12, Line 1 Less Line 48	50
51					51
		1			

- Winter Maximum Demand at the time of System Peak Determinants for the following California Public Utilities Commission (CPUC) tariff: Schedule A6-TOU.
- Winter Maximum Demand at the time of System Peak Demand Charges for the following CPUC tariff: Schedule A6-TOU.
- Reference data found in Statement BL.

Rate Design Information

Vehicle Grid Integration (VGI) Pilot Customers ¹
Rate Effective Period - Twelve Months Ending December 31, 2016 (\$1,000)

Line No. Description	Derivation of Commodity Rate & Proof of Revenues Calculation	Reference ²	Line No.
1 VGI Pilot - Allocated Transmission Revenue Requirement 2 VGI Pilot - Billing Determinants (MWh) 4 VGI Pilot - Energy Rate per kWh 6 VGI Pilot - Energy Rate per kWh - Rounded 8 Proof of Revenues 10 11 Difference	\$ 319,472 9,998,822 \$ 0.0319510 \$ 0.03195 \$ 319,462 e \$ 10	Statement BL, Page BL-3, Line 6 Statement BG, Page BGWP-1, Lines 8-10 Line 1 / Line 3 Line 5, Rounded to 5 Decimal Places Line 7 x Line 3 Line 1 Less Line 9	1 2 3 4 5 6 7 8 9 10

The California Public Utilities Commission (CPUC) tariff offered to customers participating on the Vehicle Grid Integration (VGI) Pilot: Schedule VGI

² Reference data found in Statements BG and BL.

Rate Design Information Agricultural Customers

Rate Effective Period - Twelve Months Ending December 31, 2016 (\$1,000)

Line		Derivation of Commodity Rate & Proof of Revenues			Line
No.	Description	C	Calculation	Reference ²	No.
1	Allocated Agricultural Transmission Revenue Requirement	\$	6,457	Statement BL, Page BL-3, Line 7, Col. C	1
2					2
3	Billing Determinants (MWh)		316,511	Statement BG, Page BGWP-1, Lines 11 and 12	3
4					4
5	Energy Rate per kWh	\$	0.0203997	Line 1 / Line 3	5
6					6
7	Energy Rate per kWh - Rounded	\$	0.02040	Line 5, Rounded to 5 Decimal Places	7
8					8
9					9
10	Schedules PA and TOU-PA Billing Determinants (MWh)		83,162	Statement BG, Page BGWP-1, Line 11	10
11					11
12	Annual Revenues from Schedules PA and TOU-PA Energy Rates	\$	1,697	Line 7 x Line 10	12
13					13
14	Revenue Allocated to Schedule PA-T-1 Non-Coincident Demand Charges	\$	4,760	Line 1 Less Line 12	14
			_		

The following California Public Utilities Commission (CPUC) tariffs are offered to Agriculture customers: Schedules PA, TOU-PA and PA-T-1. No demand rates are applicable to Schedules PA and TOU-PA, as shown on this page, Page BL-13.

² Reference data found in Statements BG and BL.

SAN DIEGO GAS AND ELECTRIC COMPANY

Rate Design Information Agricultural Customers

Rate Effective Period - Twelve Months Ending December 31, 2016 (\$1,000)

				$\overline{}$
		Derivation of		
		Commodity Rate &		
Line		Proof of Revenues		Line
No.	Description	Calculation	Reference ³	No.
1	Agriculture - Demand Revenue Requirement	\$ 4,760	Statement BL, Page BL-15, Line 14	1
2	Agriculture - Demand Revenue Requirement	\$ 4,700	Statement BE, 1 age BE-13, Eme 14	2
	N. G.; il (B. IB) (12)			
3	Non-Coincident Demand Determinants ²	0.54	0	3
4	Secondary	874	Statement BL, Page BL-18, Line 62, Col. D	4
5	Primary	157	Statement BL, Page BL-18, Line 63, Col. D	5
6	Transmission	-	Statement BL, Page BL-18, Line 64, Col. D	6
7	Total	1,031	Sum Lines 4; 5; 6	7
8				8
9	Allocation Factors Per Above to Allocate			9
10	Demand Revenue Requirements to Voltage Level			10
11	Secondary	84.77%	Line 4 / Line 7	11
12	Primary	15.23%	Line 5 / Line 7	12
13	Transmission	0.00%	Line 6 / Line 7	13
14	Total	100.00%	Sum Lines 11; 12; 13	14
15				15
16	Allocation of Revenue Requirements to Voltage Level			16
17	Secondary	\$ 4,035	Line 1 x Line 11	17
18	Primary	\$ 725	Line 1 x Line 12	18
19	Transmission	\$ -	Line 1 x Line 13	19
20	Total	\$ 4,760	Sum Lines 17; 18; 19	20
21				21
22	Schedule PA-T-1 Demand Determinants by Voltage Level @ Meter Level (MW)			22
23	Secondary	836	Statement BL, Page BL-20, Line 62, Col. B	23
24	Primary	155	Statement BL, Page BL-20, Line 63, Col. B	24
25	Transmission	_	Statement BL, Page BL-20, Line 64, Col. B	25
26	Total	991	Sum Lines 23; 24; 25	26
27			, ,	27
28	Non-Coincident Demand Rate by Voltage Level @ Meter			28
29	Secondary	\$ 4.82707	Line 17 / Line 23	29
30	Primary	\$ 4.68177	Line 18 / Line 24	30
31	Transmission	\$ 4.63175	Line 19 / Line 25	31
32	Tunginggion	Ψ 1.05175	Eme 17 / Eme 25	32
33	Non-Coincident Demand Rate by Voltage Level @ Meter (Rounded)			33
34	Secondary	\$ 4.83	Line 29. Rounded to 2 Decimal Places	34
35	Primary	\$ 4.68	Line 30, Rounded to 2 Decimal Places	35
36	Transmission	\$ 4.63	Line 31, Rounded to 2 Decimal Places	36
37	Tunginggivii	4.03	Line 31, Rounded to 2 Decimal 1 idees	37
38	Proof of Revenues			38
39	Secondary	\$ 4,038	Line 23 x Line 34	39
40	Primary	\$ 725	Line 24 x Line 35	40
40	Transmission	\$ /23 \$ -	Line 24 x Line 35 Line 25 x Line 36	40
41	Total	\$ 4,762	Sum Lines 39; 40; 41	41
42	Total	φ 4,/62	Suiii Lilies 39, 40, 41	42
43	Difference	¢ (2)	Line 1 Less Line 42	43
44	Difference	\$ (2)	Line 1 Less Line 42	44

The following California Public Utilities Commission (CPUC) tariffs are offered to Agriculture customers: Schedules PA, TOU-PA and PA-T-1. No demand rates are applicable to Schedules PA and TOU-PA, as shown in Page BL-13.

Non-Coincident Demand (100%) rates applicable to the following CPUC tariff: Schedule PA-T-1.

Reference data found in Statement BL.

Rate Design Information

Street Lighting Customers ¹

Rate Effective Period - Twelve Months Ending December 31, 2016 (\$1,000)

Line No.	Description	Derivation of Commodity Rate & Proof of Revenues Calculation		Reference ²	
1 2	Street Lighting - Allocated Transmission Revenue Requirement	\$	2,636	Statement BL, Page BL-3, Line 8	1 2
3 4	Street Lighting - Billing Determinants (MWh)		90,832	Statement BG, Page BGWP-1, Line 13	3
5 6	Street Lighting - Energy Rate per kWh	\$	0.0290174	Line 1 / Line 3	5 6
7 8	Street Lighting - Energy Rate per kWh - Rounded	\$	0.02902	Line 5, Rounded to 5 Decimal Places	7 8
9	Proof of Revenues	\$	2,636	Line 3 x Line 7	9
10	Difference	\$	(0)	Line 1 Less Line 9	10 11

¹ The following California Public Utilities Commission (CPUC) tariffs are offered to street lighting customers: Schedules DWL, OL-1, OL-2, LS-1, LS-2, and LS-3.

² Reference data found in Statements BG and BL.

Rate Design Information Standby Customers

Rate Effective Period - Twelve Months Ending December 31, 2016 (\$1,000)

		l			
		Der	ivation of		
		-	Surcharge &		
Line			of Revenues		Line
No.	Description	Ca	lculation	Reference 1	No.
	P. C.				
1	Standby - Demand Revenue Requirement	\$	11,098	Statement BL, Page BL-3, Line 9	1
2					2
3	Demand Determinants (with Transmission LF Adjustment)				3
4	Used to Allocate Total Class Revenues to Voltage Level (MW) 1				4
5	Secondary		120	Statement BL, Page BL-18, Line 69, Col. D	5
6	Primary		1,247	Statement BL, Page BL-18, Line 70, Col. D	6
7	Transmission		705	Statement BL, Page BL-18, Line 71, Col. D	7
8	Total		2,072	Sum Lines 5; 6; 7	8
9					9
10	Allocation Factors Per Above to Allocate				10
11	Demand Revenue Requirements to Voltage Level				11
12	Secondary		5.79%	Line 5 / Line 8	12
13	Primary		60.18%	Line 6 / Line 8	13
14	Transmission		34.03%	Line 7 / Line 8	14
15	Total		100.00%	Sum Lines 12; 13; 14	15
16	All of CD D is a Mile I I				16
17	Allocation of Revenue Requirements to Voltage Level	e.	(42	Line 1 - Line 12	17
18 19	Secondary	\$ \$	643	Line 1 x Line 12 Line 1 x Line 13	18 19
20	Primary Transmission	\$	6,679 3,776	Line 1 x Line 13 Line 1 x Line 14	20
20	Total	\$	11.098	Sum Lines 18; 19; 20	20
22	Total	Ф	11,098	Sum Lines 18, 19, 20	22
23	Demand Determinants By Voltage Level @ Meter (MW)				23
24	Secondary		115	Statement BL, Page BL-18, Line 69, Col. B	24
25	Primary		1,234	Statement BL, Page BL-18, Line 70, Col. B	25
26	Transmission		705	Statement BL, Page BL-18, Line 71, Col. B	26
27	Total		2.053	Sum Lines 24; 25; 26	27
28			_,	2 2 2 ., 2 ., 2 .	28
29	Demand Rate By Voltage Level @ Meter				29
30	Secondary	\$	5.61316	Line 18 / Line 24	30
31	Primary	\$	5.41210	Line 19 / Line 25	31
32	Transmission	\$	5.35827	Line 20 / Line 26	32
33					33
34	Demand Rate By Voltage Level @ Meter (Rounded)				34
35	Secondary	\$	5.61	Line 30, Rounded to 2 Decimal Places	35
36	Primary	\$	5.41	Line 31, Rounded to 2 Decimal Places	36
37	Transmission	\$	5.36	Line 32, Rounded to 2 Decimal Places	37
38					38
39	Proof of Revenues				39
40	Secondary	\$	642	Line 24 x Line 35	40
41	Primary	\$	6,676	Line 25 x Line 36	41
42	Transmission	\$	3,777	Line 26 x Line 37	42
43	Total	\$	11,096	Sum Lines 40; 41; 42	43
44	D:00	ď		Line 1 Leveline 42	44
45	Difference	3	2	Line 1 Less Line 43	45

Reference data found in Statement BL.

Rate Design Information

Summary of Proof of Revenues

Rate Effective Period - Twelve Months Ending December 31, 2016 (\$1,000)

		(A)	(B)	(C)		
Line		Total Revenues Per Cost of	Total Revenues Per Rate			Line
No.	Customer Classes	Service Study	Design	Difference	Reference ¹	No.
1	Residential	\$ 299,144	\$ 299,113	\$ 31	(A): Statement BL, Page BL-3, Line 4	1
2	Residential	Ψ 2//,144	2)),113	Φ 31	(B): Statement BL, Page BL-4, Line 9	2
3	Small Commercial	77,559	77,566	(7)	(A): Statement BL, Page BL-3, Line 5	3
4					(B): Statement BL, Page BL-5, Line 9	4
5	Medium and Large Commercial/Industrial	319,472	319,441	32	(A): Statement BL, Page BL-3, Line 6	5
					(B): Statement BL, Page BL-7, Line 43, - (Statement BL, Page BL-	
6					11, Line 48 + Statement BL, Page BL-12, Line 50)	6
8	Agricultural	6,457	6,459	(2)	(A): Statement BL, Page BL-3, Line 7	7
9		3,107	0,.09	(-)	(B): Statement BL, Page BL-15, Line 13 + Page BL-16, Line 42	8
10	Street Lighting	2,636	2,636	(0)	(A): Statement BL, Pages BL-3, Line 8	9
11	G. 11	44.000	11.006		(B): Statement BL, Page BL-17, Line 9	10
12	Standby	11,098	11,096	2	(A): Statement BL, Page BL-3, Line 9	11
13	Crond Total	\$ 716.266	¢ 716 211	Φ 55	(B): Statement BL, Page BL-17, Line 43	12
14	Grand Total	\$ 716,366	\$ 716,311	\$ 55	Sum Lines 1 through 12	13

Reference data found in Statement BL.

Rate Design Information

Development of 12-CP Allocation Factors

Rate Effective Period - Twelve Months Ending December 31, 2016

	(A)	(B)	(C)	$(D) = (B) \times (C)$	(E)		
Line		5-year Average Of 12 CPs Kilowatt @	Transmission	5-year Average Of 12 CPs Kilowatt @	D. C	Reference ¹	Line
No.	Customer Class	Meter Level	Loss Factors	Transmission Level	Ratio	Reference	No.
1	Five-year Average - 12-CP Allocation Factors:						1
2	Residential	16,022,144	1.0457	16,754,356	41.76%	Statement BB, Page BB-1, Line 1	2
	Small Commercial	4,154,078	1.0457	4,343,919	10.83%	Statement BB, Page BB-1, Line 2	3
4	Medium & Large Commercial/Industrial			, ,		, 5	4
5	Secondary	12,681,960	1.0457	13,261,525	33.05%	Statement BB, Page BB-1, Line 4	5
6	Primary	3,282,796	1.0108	3,318,250	8.27%	Statement BB, Page BB-1, Line 5	6
7	Transmission	1,313,118	1.0000	1,313,118	3.27%	Statement BB, Page BB-1, Line 6	7
8	Total Med. & Large Comm./Ind.	17,277,874	1.0356	17,892,894	44.60%	Sum Lines 5; 6; 7	8
9							9
10	Agricultural						10
11	Secondary	318,945	1.0457	333,521	0.83%	, 5	11
12	Primary	27,805	1.0108	28,105	0.07%	Statement BB, Page BB-1, Line 11	12
13	Transmission	-	1.0000	-	0.00%	Statement BB, Page BB-1, Line 12	13
14	Total Agricultural	346,750	1.0429	361,626	0.90%	Sum Lines 11; 12; 13	14
15							15
	Street Lighting	141,169	1.0457	147,620	0.37%	Statement BB, Page BB-1, Line 15	16
17	Standby						17
18	Secondary	34,351	1.0457	35,921	0.09%	, 5	18
19	Primary	370,228	1.0108	374,226	0.93%	Statement BB, Page BB-1, Line 18	19
20	Transmission	211,414	1.0000	211,414	0.53%	Statement BB, Page BB-1, Line 19	20
21	Total Standby	615,993	1.0090	621,561	1.55%	Sum Lines 18; 19; 20	21
22							22
23	System Total	38,558,008		40,121,977	100.00%	Sum Lines 2; 3; 8; 14; 16; 21	23

Reference data found in Statement BB.

Statement BL SAN DIEGO GAS AND ELECTRIC COMPANY Rate Design Information Development of 12-CP Allocation Factors Rate Effective Period - Twelve Months Ending December 31, 201

Line No.	(A) Customer Class	(B) Forecast Demand Determinants Megawatt @ Meter Level	(C) Transmission Loss Factors 1	(D) = (B) x (C) Forecast Demand Determinants Megawatt @ Transmission Level	(E)	Reference ²	Line No.
1 2 3 4	Forecast Demand Determinants for Medium & Large Commercial/Industrial Customers Non-Coincident Demand Determinants Pertaining to Customers on Schedule AD @ 100% NCD Rate						1 2 3 4
5	Secondary	150	1.0457	157	98.74%	Statement BG, Page BGWP-1, Line 42	5
6	Primary	2	1.0108	2	1.26%	Statement BG, Page BGWP-1, Line 43	6
7	Transmission	-	1.0000	-	0.00%	Statement BG, Page BGWP-1, Line 44	7
8	Total	152		159	100.00%	Sum Lines 5; 6; 7	8
10 11 12 13	Non-Coincident Demand Determinants Pertaining to Customers on Schedules AL-TOU, AY-TOU, DGR @ 90% NCD Rate with Maximum On-Peak Period Demand						10 11 12 13
14	Secondary	20,009	1.0457	20,924	83.35%	Statement BG, Page BGWP-2, Line 69	14
15	Primary	3,909	1.0108	3,951	15.74%	Statement BG, Page BGWP-2, Line 70	15
16	Transmission	229	1.0000	229	0.91%	Statement BG, Page BGWP-2, Line 71	16
17	Total	24,147		25,104	100.00%	Sum Lines 14; 15; 16	17
18	Non Coincident Demand Determinants Besteining 4-						18
19 20 21 22	Non-Coincident Demand Determinants Pertaining to Customers on Schedule A6-TOU @ 90% NCD Rate with Maximum Demand at the Time of System Peal					a	19 20 21 22
22	Secondary Primary	202	1.0457 1.0108	204	0.00% 15.03%	Statement BG, Page BGWP-3, Line 105 Statement BG, Page BGWP-3, Line 106	22
24	Transmission	1,153	1.0000	1,153	84.97%	Statement BG, Page BGWP-3, Line 107	24
25	Total	1,354	1.0000	1,357	100.00%	Sum Lines 22; 23; 24	25
26				,			26
27	Total Non-Coincident Demand Determinants for						27
28	Medium & Large Commercial/Industrial Customers						28
29	Secondary	20,159	1.0457	21,081	79.20%	Sum Lines 5; 14; 22	29
30	Primary	4,112	1.0108	4,157	15.62%	Sum Lines 6; 15; 23	30
31 32	Transmission Total	1,381 25,653	1.0000	1,381 26,619	5.19%	Sum Lines 7; 16; 24 Sum Lines 29; 30; 31	31 32
33	Total	23,033		20,019	100.00%	Sum Lines 29, 30, 31	33
34 35	Maximum On-Peak Period Demand Determinants Summer						34 35
36	Secondary	9,593	1.0457	10,032	81.01%	Statement BG, Page BGWP-2, Line 79	36
37	Primary	2,115	1.0108	2,138	17.26%	Statement BG, Page BGWP-2, Line 80	37
38 39	Transmission Total	214 11,922	1.0000	214 12,384	1.73%	Statement BG, Page BGWP-2, Line 81 Sum Lines 36; 37; 38	38 39
40	Winter	11,922		12,304	100.0076	Suiti Ellies 30, 37, 38	40
41	Secondary	7,891	1.0457	8,252	80.70%	Statement BG, Page BGWP-2, Line 79	41
42	Primary	1,768	1.0108	1,787	17.48%	Statement BG, Page BGWP-2, Line 80	42
43	Transmission	187	1.0000	187	1.83%	Statement BG, Page BGWP-2, Line 81	43
44	Total	9,846		10,226	100.00%	Sum Lines 41; 42; 43	44
45							45
46 47	Maximum Demand at the Time of System Peak Determinants						46 47
48	System Peak Determinants Summer						48
49	Secondary	-	1.0457	-	0.00%	Statement BG, Page BGWP-3, Line 115	49
50	Primary	84	1.0108	85	15.37%	Statement BG, Page BGWP-3, Line 116	50
51	Transmission	468	1.0000	468	84.63%	Statement BG, Page BGWP-3, Line 117	51
52	Total	552		553	100.00%	Sum Lines 49; 50; 51	52
53	Winter		10:55		0.0001	Con and a power and a second	53
54 55	Secondary Primary	- 69	1.0457 1.0108	- 69	0.00% 13.56%	Statement BG, Page BGWP-3, Line 115 Statement BG, Page BGWP-3, Line 116	54 55
56	Transmission	440	1.0108	440	86.44%	Statement BG, Page BGWP-3, Line 117 Statement BG, Page BGWP-3, Line 117	56
57	Total	508	1.0000	509	100.00%	Sum Lines 54; 55; 56	57
58	****	300		307			58
59	Forecast Demand Determinants for Agricultural Customers						59
60	Non-Coincident Demand Determinants Pertaining to						60
61	Customers on Schedule PA-T-1 @ 100% Non-Coincident Demand Rate						61
62	Secondary	836	1.0457	874	84.77%	Statement BG, Page BGWP-4, Line 157	62
63 64	Primary Transmission	155	1.0108 1.0000	157	15.23% 0.00%	Statement BG, Page BGWP-4, Line 158	63 64
65	Total	991	1.0000	1,031	100.00%	Statement BG, Page BGWP-4, Line 159 Sum Lines 62; 63; 64	65
66	1000	991		1,031	100.00%	Juni Lines 02, 03, 04	66
67	Forecast Demand Determinants for Standby Customers						67
68	Contracted Demand Determinants						68
69	Secondary	115	1.0457	120	5.79%	Statement BG, Page BGWP-4, Line 167	69
70	Primary	1,234	1.0108	1,247	60.18%	Statement BG, Page BGWP-4, Line 168	70
71	Transmission	705	1.0000	705	34.03%	Statement BG, Page BGWP-4, Line 169	71
72	Total	2,053		2,072	100.00%	Sum Lines 69; 70; 71	72
	NOTES:						Ш.

NOTES:
1 LF = Transmission Loss Factor: Secondary Level = 1.0457; Primary Level = 1.0108; Transmission Level = 1.0000.
2 Reference data found in Statement BG.

San Diego Gas & Electric Company

ATTACHMENT E

Statement BL for VGI RS Rate

Statement BL SAN DIEGO GAS AND ELECTRIC COMPANY 2016 Reliability Service - Rate Design Information

Summary of Reliability Service Retail and Wholesale Rates

			(a)		(b)		(c)		(d)		
Line No.	Customer Classes	Ene	nsmission Level ergy Rates \$/kWh	D	ransmission Level emand Rates \$/kW-Mo	D	Primary Level Demand Rates \$/kW-Mo	D	Secondary Level emand Rates \$/kW-Mo	Reference	Line No.
1	Residential	\$	0.00013							Statement BL, Page 7, Line 15	1
2 3 4	Small Commercial	\$	0.00014							Statement BL, Page 8, Line 15	2 3 4
5 6	Medium & Large Commercial/Industrial ¹ Vehicle Grid Integration Pilot Program (Schedule VGI)	\$ \$	0.00001 0.00011	\$	0.04	\$	0.04	\$	0.04	Statement BL, Page 9, Lines 9, 36, 35, 34 Statement BL, Page 10, Line 15	5
7 8	Agricultural (Schedules PA, TOU-PA and PA-T-1)										7 8
9 10	Schedules PA and TOU-PA Schedule PA-T-1	\$ \$	0.00007 0.00001	\$	0.02	\$	0.02	\$	0.02	Statement BL, Page 11, Line 15 Statement BL, Page 12, Lines 9, 36, 35, 34	9 10
11 12 13	Street Lighting	\$	0.00010							Statement BL, Page 13, Line 15	11 12 13
14	Standby Rate ²			\$	0.02	\$	0.02	\$	0.02	Statement BL, Page 14, Lines 24, 23, 22	14 15
	Wholesale	\$	0.00012							Statement BL, Page 2, Line 7	16

For Medium & Large Commercial/Industrial customers under California Public Utilities Commission tariff Schedule DG-R, the demand rate is applied to customers' monthly maximum ¹ demand.

² Demand rate applied to standby customers' contract demand.

Statement BL SAN DIEGO GAS AND ELECTRIC COMPANY 2016 Reliability Service - Rate Design Information Wholesale Customers (\$000)

Line No.	Customer Classes	Derivation of Energy Based Rate & Proof of Revenues Calculation	Reference	
1 2 3 4 5 6 7 8 9 10	Total RS Revenue Requirements Total Billing Determinants (MWH) Rate Per kWh @ Meter Level Primary Level Adjustment Factor Rate Per kWh @ Primary Level Wholesale Billing Determinants (MWH) @ Meter Level Total Wholesale Revenues	\$ 2,487 20,013,263 \$ 0.00012 1.0108 \$ 0.00012 37 \$ 0.00	Statement BK, Page 1, Line 18 Statement BD, Page 1, Line 13, Col. A Line 1 / Line 3 Loss Adjustment Factor Line 5 / Line 6, Rounded to 5 Decimal Places Statement BD, Page 1, Line 13, Col. B Line 7 x Line 9	1 2 3 4 5 6 7 8 9 10
14 15 16	Total RS Revenue Requirements Less: Wholesale Revenues RS Revenues Applicable to Retail RS Demand Revenues RS Energy Revenues Total RS Revenues Applicable to Retail	\$ 2,487 \$ 0.00 \$ 2,487 \$ 2,348 \$ 139 \$ 2,487	Line 1 Line 11 Line 12 - Line 13 Statement BK, Page 2, Line 5, Col. A Statement BK, Page 2, Line 11, Col. A - Line 11 Line 16 + Line 17	12 13 14 15 16 17 18

Rate Design Information

SAN DIEGO GAS AND ELECTRIC COMPANY

Allocation of Demand Costs Component of Reliability Service (RS) Revenues

Based on 12 CP Method @ Transmission Level (\$000)

		(a)	(b)	(c) = Line 13 (a) x (b)		
Line No.	Customer Classes	Demand Costs Component of RS Revenue Requirements	Allocation Ratios Based on 12 CP From Statement BB	Allocation of Revenue Requirements Based on 12 CP	Reference	Line No.
		•				
1	Residential Customers		41.76%	\$ 981	Line 13, Col. A x Line 1, Col. B	1
2						2
3	Small Commercial		10.83%	254	Line 13, Col. A x Line 3, Col. B	3
4						4
5	Medium-Large Commercial/Industrial		44.60%	1,047	Line 13, Col. A x Line 5, Col. B	5
6						6
7	Agricultural (Schedules PA, TOU-PA and PA-T-1)		0.90%	21	Line 13, Col. A x Line 7, Col. B	7
8						8
9	Street Lighting		0.37%	9	Line 13, Col. A x Line 9, Col. B	9
10						10
11	Standby Revenues		1.55%	36	Line 13, Col. A x Line 11, Col. B	11
12						12
13	Grand Total	\$ 2,348	100.00%	\$ 2,348	Sum Lines 1 thru 11, Col. B	13

Rate Design Information

SAN DIEGO GAS AND ELECTRIC COMPANY

Allocation of Energy Costs Component of Reliability Service (RS) Revenues

Based on Energy Sales @ Transmission Level (\$000)

		(a)	(b)	(c)	(d)		
Line No.	Customer Classes	Energy Costs Component of RS Revenue Requirements	Energy Sales @ Transmission Level; From Statement BD	Allocation Percentages Based on Energy Sales	Allocation of Revenue Requirements Based on Energy	Reference	Line No.
1	Residential Customers		8,032,416	38.57%	\$ 53	Line 13, Col. A x Line 1, Col. C	1
2							2
3	Small Commercial		2,013,686	9.67%	13	Line 13, Col. A x Line 3, Col. C	3
4							4
5	Medium-Large Commercial/Industrial		10,354,572	49.72%	69	Line 13, Col. A x Line 5, Col. C	5
6			220.050	1.500/	2	1: 12 0 1 4 1: 7 0 1 0	6
0	Agricultural (Schedules PA, TOU-PA and PA-T-1)		329,950	1.58%	2	Line 13, Col. A x Line 7, Col. C	9
8 9	Stroot Lighting		94,983	0.46%	1	Line 12 Col Av Line 0 Col C	8 9
10	Street Lighting		94,983	0.40%	1	Line 13, Col. A x Line 9, Col. C	10
11	Standby Revenues		_	0.00%	_	Line 13, Col. A x Line 11, Col. C	11
12	Standby Revenues		_	0.0070	_	Line 13, Coi. A & Line 11, Coi. C	12
13	Grand Total	\$ 139	20,825,607	100.00%	\$ 139	Sum Lines 1 thru 11	13
			,,				

Rate Design Information

SAN DIEGO GAS AND ELECTRIC COMPANY

Allocation of Reliability Service (RS) Revenues Requirements Based on Energy Sales and 12 CP Methodology @ Transmission Level (\$000)

		(a)	(b)	(c) = (a) + (b)	(d) = (c) / (c) Line 13		
Line		Demand Related RS Revenue	Energy Related RS Revenue	Total RS Revenue			Line
No.	Customer Classes	Requirements	Requirements	Requirements	(%)	Reference	No.
1 2	Residential Customers	\$ 981	\$ 53	\$ 1,034	41.58%	Statement BL, Pages 3 & 4, Line 1	1 2
3 4	Small Commercial	254	13	268	10.76%	Statement BL, Pages 3 & 4, Line 3	3 4
5	Medium-Large Commercial/Industrial	1,047	69	1,116	44.88%	Statement BL, Pages 3 & 4, Line 5	5 6
7 8	Agricultural (Schedules PA, TOU-PA and PA-T-1)	21	2	23	0.94%	Statement BL, Pages 3 & 4, Line 7	7 8
9 10	Street Lighting Customers	9	1	9	0.37%	Statement BL, Pages 3 & 4, Line 9	9 10
11 12	Standby Customers	36	-	36	1.46%	Statement BL, Pages 3 & 4, Line 11	11 12
13	Grand Total	\$ 2,348	\$ 139	\$ 2,487	100.00%	Sum Lines 1 thru 11	13

Statement BL SAN DIEGO GAS AND ELECTRIC COMPANY 2016 Reliability Service - Rate Design Information Proof of Revenues (\$000)

		(a)		(b)	(c)		
Line		Total Rever Allocated Ba On 12 CPs	sed	Total Revenues At Changed Rates			Line
No.	Customer Classes	Energy Sa	es		Difference	Reference	No.
1 2	Residential Customers	\$ 1,)34	\$ 999	\$ 36	Statement BL, Pages 5, Line 1, Col. C; Statement BL, Page 7, Line 11	1 2
3	Small Commercial Customers	\$	268	270	(2)	Statement BL, Page 5, Line 3, Col. C; Statement BL, Page 8, Line 11	3
4 5 6	Medium-Large Commercial/Industrial Customers	\$ 1,	116	1,126	(10)	Statement BL, Page 5, Line 5, Col. C; Statement BL, Page 9, Line 44	4 5 6
7 8	Agricultural Customers (Schedules PA, TOU-PA and PA-T-1)	\$	23	28	(4)	Statement BL, Page 5, Line 7, Col. C; Statement BL, Page 10, Line 19 and Page 11, Line 44	7 8
9	Street Lighting Customers	\$	9	9	0	Statement BL, Page 5, Line 9, Col. C; Statement BL, Page 12, Line 11	9
	Standby Customers	\$	36	41	(5)	Statement BL, Page 5, Line 11, Col. C; Statement BL, Page 13, Line 30	11
12	G. Im. I	Φ 2	105	* 2.472			12
13	Grand Total	\$ 2,	187	\$ 2,472	\$ 15		13

Statement BL SAN DIEGO GAS AND ELECTRIC COMPANY 2016 Reliability Service - Rate Design Information Residential Customers¹ (\$000)

Line No.	Customer Classes	Co	Derivation of mmodity Rate & pof of Revenues Calculation	Reference	Line No.
1 2	RS Revenues Allocated to Residential Customers	\$	1,034	Statement BL, Page 5, Line 1, Col. C	1 2
3	Billing Determinants - Residential Customer Class @ MWH:		7,681,377	Statement BD, Page 2, Line 1, Col. A	3
5	Residential Energy Rate Per kWh	\$	0.0001346	Line 1 / Line 3	5
6	Residential Ellergy Rate For KWII	Ψ	0.0001540	Ellie 17 Ellie 3	6
	Residential Energy Rate Per kWh - Rounded	\$	0.00013	Line 5 Rounded to 5 Decimal places	7
8 9	Total Class Revenues @ Proposed Rates	\$	999	Line 3 x Line 7	8 9
10	Title D	Φ.	000	1. 0	10
11 12	Total Class Revenues @ Proposed Rates	\$	999	Line 9	11 12
13	Difference	\$	36	Line 1 - Line 11	13
14					14
15	Total Residential Rate	\$	0.00013	Line 7	15

¹ Residential customers include the following California Public Utilities Commission (CPUC) tariffs: DR, DR-LI, DR-TOU, DR-SES, DM, DS, DT, DT-RV, TOU-DR, EV-TOU, EV-TOU-2.

Statement BL SAN DIEGO GAS AND ELECTRIC COMPANY 2016 Reliability Service - Rate Design Information Small Commercial Customers¹ (\$000)

Line No.	Customer Classes	Com Proc	erivation of modity Rate & f of Revenues Calculation	Reference	Line No.
1 2	RS Revenues Allocated to Small Commercial Customers	\$	268	Statement BL, Page 5, Line 3, Col. C	1 2
3	Billing Determinants - Small Commercial @ MWH:		1,925,682	Statement BD, Page 2, Line 2, Col. A	3 4
5	Rate Per kWh Calculation	\$	0.0001390	Line 1 / Line 3	5
7 8	Rate Per kWh Calculation - Rounded	\$	0.00014	Line 5 Rounded to 5 Decimal places	7 8
9	Total Class Revenues @ Proposed Rates	\$	270	Line 3 x Line 7	9
11 12	Total Class Revenues @ Proposed Rates	\$	270	Line 9	11 12
13	Difference	\$	(2)	Line 1 - Line 11	13
14 15	Total Small Commercial Rate	\$	0.00014	Line 7	14 15

¹ Small commercial customers include the following California Public Utilities Commission (CPUC) tariffs: A, A-TC, A-TOU, and TOU-A.

Statement BL SAN DIEGO GAS AND ELECTRIC COMPANY 2016 Reliability Service - Rate Design Informatio Medium and Large Commercial Customers (\$000)

Line No.	Customer Classes	Derivation of Commodity Rate & Proof of Revenues Calculation	Reference	Line No.
	Total RS Revenues Allocated to Medium & Large Commercial Customer	\$ 1,116	Statement BL, Page 5, Line 5, Col. C	1
2 3 4	Medium & Large Commercial RS Revenues Related to Energy	\$ 69	Statement BL, Page 5, Line 5, Col. B	2 3 4
5	Total Energy Sales (MWh)	9,998,822	Statement BD, Page 2, Line 7, Col. A	5
7 8	Energy Rate Per Unit @ \$/kWh	\$ 0.0000069	Line 3 / Line 5	7 8
9 10	Energy Rate Per Unit @ \$/kWh (Rounded)	\$ 0.00001	Line 7 Rounded to 5 Decimal places	9
11 12	Total RS Revenues Related to Energy @ Proposed Rate:	\$ 100	Line 5 x Line 9	11 12
13 14 15	Medium & Large Commercial RS Revenues Related to Demana	\$ 1,047	Statement BL, Page 5, Line 5, Col. A	13 14 15
	Allocation of Class Demand Revenue Requirements to Voltage Level: ² RS Revenues @ Secondary Level - 19.19% RS Revenues @ Primary Level - 15.62%	\$ 829 164	Line 14 x Statement BL, Page 16, Line 30, Col. E Line 14 x Statement BL, Page 16, Line 31, Col. E	16 17 18
19 20 21	RS Revenues @ Transmission Level - 5.19% Total Class Revenues Related to Demanc	\$ 1,047	Line 14 x Statement BL, Page 16, Line 32, Col. E Sum Lines 17; 18; & 19	19 20 21
21 22 23	<u>Demand Determinants By Voltage Level @ Meter (Monthly Max-Demand): MW</u> Secondary	20,159	Statement BL, Page 17, Line 14	21 22 23
24 25 26	Primary Transmission Total	4,112 1,381 25,653	Statement BL, Page 17, Line 15 Statement BL, Page 17, Line 16 Sum Lines 23; 24; & 25	24 25 26
27 28	Demand Rate By Voltage @ Meter \$/kW	23,033	Suii Lines 25, 24, & 25	27 28
29 30	Secondary Primary	\$ 0.04114 \$ 0.03977	Line 17 / Line 23 Line 18 / Line 24	29 30
31 32	Transmission	\$ 0.03934	Line 19 / Line 25	31 32
33 34 35	Demand Rate By Voltage @ Meter (Rounded) \$/kW Secondary Primary	\$ 0.04 \$ 0.04	Line 29 Rounded to 2 Decimal places Line 30 Rounded to 2 Decimal places	33 34 35
36 37	Transmission	\$ 0.04	Line 31 Rounded to 2 Decimal places	36 37
38 39	Proof of Revenue Calculations Secondary	\$ 806	Line 23 x Line 34	38 39
40 41	Primary Transmission	164 55	Line 24 x Line 35 Line 25 x Line 36	40 41
42	Total Class Revenues Related to Demand @ Proposed Rate:	\$ 1,026	Sum Lines 39; 40; & 41	42
44 45 46	Total Class RS Revenues @ Proposed Rate: Difference	\$ 1,126 \$ 10	Line 11 + Line 42 Line 44 - Line 1	44 45 46
40	Difference	φ 10	Line 44 - Line 1	40

¹ Medium-Large commercial customers include the following California Public Utilities Commission (CPUC) tariffs: AD, AY-TOU, AL-TOU, A6-TOU, DG-R, and OL-TOU.

² On lines 17-19, the percentages shown in the reference column are based on ratios developed from the 12-CP Allocation Factors demands shown on Statement BL, page 15, lines 30-32, column (d). In developing the ratios, the demand determinants were converted to transmission level by applying the following loss fact a) Secondary = 1.0457; b) Primary = 1.0108; and c) Transmission = 1.0000

Statement BL SAN DIEGO GAS AND ELECTRIC COMPANY 2016 Reliability Service - Rate Design Information Vehicle Grid Integration (VGI) Pilot Customers¹ (\$000)

Line No.	Customer Classes	Con Prod	Perivation of amodity Rate & of of Revenues Calculation	Reference	Line No.
1 2	RS Revenues Allocated to VGI Pilot	\$	1,116	Statement BL, Page 5, Line 5, Col. C	1 2
3 4	Billing Determinants - VGI Pilot @ MWH:		9,998,822	Statement BD, Page 2, Line 8, Col. A	3 4
5	Rate Per kWh Calculation	\$	0.0001116	Line 1 / Line 3	5
7 8	Rate Per kWh Calculation - Rounded	\$	0.00011	Line 5 Rounded to 5 Decimal places	7 8
9	Total Class Revenues @ Proposed Rates	\$	1,100	Line 3 x Line 7	9
11 12	Total Class Revenues @ Proposed Rates	\$	1,100	Line 9	11 12
13	Difference	\$	16	Line 1 - Line 11	13
14 15	Total VGI Pilot Rate	\$	0.00011	Line 7	14 15

¹ The California Public Utilities Commission (CPUC) tariff offered to customers participating on the Vehicle Grid Integration (VGI) Pilot: Schedule VGI

Statement BL SAN DIEGO GAS AND ELECTRIC COMPANY 2016 Reliability Service - Rate Design Information Agricultural - Schedules PA and TOU-PA Customers (\$000)

Line No.	Customer Classes	Con Pro	Derivation of amodity Rate & of of Revenues Calculation	Reference	Line No.
1 2	RS Revenues Allocated to Agricultural Customers	\$	23	Statement BL, Page 5, Line 7, Col. C	1 2
3 4	Billing Determinants - Agricultural @ MWH:		316,511	Statement BD, Page 2, Lines 10 and 16, Col. A	3 4
5	Rate Per kWh Calculation ²	\$	0.0000738	Line 1 / Line 3	5 6
7	Rate Per kWh Calculation - Rounded	\$	0.00007	Line 5 Rounded to 5 Decimal places	7
8 9	Total Class Revenues @ Proposed Rates	\$	22	Line 3 x Line 7	8 9
10 11 12	Total Class Revenues @ Proposed Rates	\$	22	Line 9	10 11 12
13	Difference	\$	1	Line 1 - Line 11	13
14 15 16	Total Agricultural Rate for Schedule PA and TOU-PA	\$	0.00007	Line 7	14 15 16
17 18	Schedules PA and TOU-PA Billing Determinants (MWh)	\$	83,162	Statement BD, Page 2, Lines 10, Col. A	17 18
19	Annual Revenues from Schedules PA and TOU-PA Energy Rates	\$	6	Line 15 x Line 17	19
20 21	Revenues Allocated to Schedule PA-T-1 ³	\$	18	Line 1 - Line 19	20 21

¹ The RS rates for customers on California Public Utilities Commission (CPUC) agricultural tariffs Schedules PA and TOU-PA are 100% energy rates.

² The RS rate for customers on Schedules PA and TOU-PA is set equal to the total RS revenues allocated to the Agricultural class divided by the total billing determinants for the Agricultural class.

³ Revenues Allocated to Schedule PA-T-1 equals the total Agricultural class RS revenues minus the annual revenues from Schedules PA and TOU-PA.

Statement BL SAN DIEGO GAS AND ELECTRIC COMPANY 2016 Reliability Service - Rate Design Information Agricultural - Schedule PA-T-1 Customers (2020)

Line No.	Customer Classes	Com	erivation of modity Rate & f of Revenues calculation	Reference	Line No.
1	Total RS Revenues Allocated to Schedule PA-T-1 Agricultural Customers	\$	18	Statement BL, Page 11, Line 21	1
2	Schedule PA-T-1 RS Revenues Related to Energy	\$	2	(Statement BL, Page 5, Line 7, Col. B / Line 7, Col. C) x Line 1	2
5	Total PA-T-1 Energy Sales (MWh)		233,349	Statement BD, Page 2, Line 16, Col. A	5
	PA-T-1 Energy Rate Per Unit @ \$/kWh	\$	0.0000071	Line 3 / Line 5	6 7
8	PA-T-1 Energy Rate Per Unit @ \$/kWh (Rounded)	\$	0.00001	Line 7 Rounded to 5 Decimal places	8
10 11	Total RS PA-T-1 Revenues Related to Energy @ Proposed Rates	\$	2	Line 5 x Line 9	10 11 12
12					13
14 15	Schedule PA-T-1 RS Revenues Related to Demand	\$	16	Line 1 - Line 11	14 15
	Allocation of PA-T-1 Demand Revenue Requirements to Voltage Level: 2				16
	RS Revenues @ Secondary Level - 84.82%	\$	13	Line 14 x Statement BL, Page 16, Line 39, Col. D	17
18	RS Revenues @ Primary Level - 15.18%		2	Line 14 x Statement BL, Page 16, Line 40, Col. D	18
19	RS Revenues @ Transmission Level - 0.00%		-	Line 14 x Statement BL, Page 16, Line 41, Col. D	19
20	Total PA-T-1 Revenues Related to Demand	\$	16	Sum Lines 17; 18; & 19	20
21					21
22	Demand Determinants By Voltage Level @ Meter (Monthly Max-Demand): MW				22
23	Secondary		836	Statement BL, Page 17, Line 21	23
24	Primary		155	Statement BL, Page 17, Line 22	24
25	Transmission		-	Statement BL, Page 17, Line 23	25
26	Total PA-T-1		991	Sum Lines 23; 24; & 25	26
27					27
	PA-T-1 Demand Rate By Voltage @ Meter \$/kW				28
29	Secondary	\$	0.01612	Line 17 / Line 23	29
30	Primary	\$	0.01559	Line 18 / Line 24	30
31 32	Transmission ³	\$	0.01542	(Statement BL, Page 9, Line 31 / Page 9, Line 30) x Line 30	31 32
33	PA-T-1 Demand Rate By Voltage @ Meter (Rounded) \$/kW				33
34	Secondary	\$	0.02	Line 29 Rounded to 2 Decimal places	34
35	Primary	\$	0.02	Line 30 Rounded to 2 Decimal places	35
36	Transmission	\$	0.02	Line 31 Rounded to 2 Decimal places	36
37					37
38		1.			38
39	Secondary	\$	17	Line 23 x Line 34	39
40	Primary		3	Line 24 x Line 35	40
41	Transmission		-	Line 25 x Line 36	41
42	Total Schedule PA-T-1 Revenues Related to Demand @ Proposed Rates	\$	20	Sum Lines 39; 40; & 41	42
43 44	Total Schedule PA-T-1 RS Revenues @ Proposed Rates	s	22	Line 11 + Line 42	43 44
45	Ŭ i	_			45
46	Difference	\$	4	Line 44 - Line 1	46

¹ The RS rates for customers on California Public Utilities Commission (CPUC) agricultural tariff Schedules PA-T-1 reflect non-coincident demand charges and energy rates

² On lines 17 -19, the percentages shown in the reference column are based on ratios developed from the 12-CP Allocation Factors demands shown on Statement BL, page 15, lines 39 - 41, column (d). In developing the ratios, the demand determinants were converted to transmission level by applying the following loss factors a) Secondary = 1.0457; b) Primary = 1.0108; and c) Transmission = 1.0000.

³ Because there are no forecasted determinants for PA-T-1 at the Transmission Voltage Level, the rate differential between AL-TOU Primary and Transmission rates was used to determine the PA-T-1 Transmission Rate.

Statement BL SAN DIEGO GAS AND ELECTRIC COMPANY 2016 Reliability Service - Rate Design Information Street Lighting Customers¹ (\$000)

Line No.	Customer Classes		Derivation of ommodity Rate & roof of Revenues Calculation	Reference	Line No.
1 2	RS Revenues Allocated to Street Lighting Customers	\$	9	Statement BL, Page 5, Line 9, Col. C	1 2
3	Billing Determinants - Street Lighting Customers @ kWh		90,832	Statement BD, Page 2, Line 18, Col. A	3
5	Rate Per kWh Calculation	\$	0.0001021	Line 1 / Line 3	5
6	D. D. IWI C. L. I.	Ф	0.00010	T. 5D 11.5D 11.	6
7 8	Rate Per kWh Calculation - Rounded	\$	0.00010	Line 5 Rounded to 5 Decimal places	8
9	Proof of Revenues:	\$	9	Line 3 x Line 7	9
10 11	Total Class Revenues @ Proposed Rates	\$	9	Line 9	10 11
12	Total Class Revenues (g. 1 toposed Rates	Ψ	,	Elife y	12
	Difference	\$	0	Line 1 - Line 11	13
14 15	Total Street Lighting Rate	\$	0.00010	Line 7	14 15

¹ Street lighting customers include the following California Public Utilities Commission (CPUC) tariffs: DWL, OL-1, OL-2, LS-1, LS-2, and LS-3.

Statement BL SAN DIEGO GAS AND ELECTRIC COMPANY 2016 Reliability Service - Rate Design Information Standby Customers¹

andby Custor (\$000)

		Ι	Derivation of		
		Stand	lby Surcharge &		
Line		Pro	of of Revenues		Line
No.	Customer Classes		Calculation	Reference	No.
1	Derivation of Demand Rate:				1
2	Demand Revenue Requirement	\$	36	Statement BL, Page 5, Line 11, Col. C	2
3					3
4	Allocation of Revenue Requirements to Voltage Level: 2				4
5	RS Revenues @ Secondary Level - 5.78%	\$	2	Line 2 x Statement BL, Page 16, Line 47, Col. D	5
6	RS Revenues @ Primary Level - 60.21%		22	Line 2 x Statement BL, Page 16, Line 48, Col. D	6
7	RS Revenues @ Transmission Level - 34.01%		12	Line 2 x Statement BL, Page 16, Line 49, Col. D	7
8	Total Class Revenue Requirement	\$	36	Sum Lines 5; 6; & 7	8
9					9
10	Demand Determinants By Voltage Level @ Meter (Contract Demand) MW				10
11	Secondary		115	Statement BL, Page 17, Line 28	11
12	Primary		1,234	Statement BL, Page 17, Line 29	12
13	Transmission		705	Statement BL, Page 17, Line 30	13
14	Total		2,053	Sum Lines 11; 12; & 13	14
15					15
16	Demand Rate By Voltage Level @ Meter \$/kW				16
17	Secondary	\$	0.01836	Line 5 / Line 11	17
18	Primary	\$	0.01775	Line 6 / Line 12	18
19	Transmission	\$	0.01756	Line 7 / Line 13	19
20					20
21	Demand Rate By Voltage Level @ Meter (Rounded) \$/kW				21
22	Secondary	\$	0.02	Line 17 Rounded to 2 Decimal places	22
23	Primary	\$	0.02	Line 18 Rounded to 2 Decimal places	23
24	Transmission	\$	0.02	Line 19 Rounded to 2 Decimal places	24
25					25
26	Proof of Revenue Calculations:				26
27	Secondary	\$	2	Line 11 x Line 22	27
28	Primary		25	Line 12 x Line 23	28
29	Transmission		14	Line 13 x Line 24	29
30	Total Class Revenue Requirement @ Proposed Rates	\$	41	Sum Lines 27; 28; & 29	30
31					31
32	Difference	\$	5	Line 30 - Line 1	32

¹ Standby customers include the following California Public Utilities Commission (CPUC) tariffs: S.

² On lines 17 -19, the percentages shown in the reference column are based on ratios developed from the 12-CP Allocation Factors demands shown on Statement BL, page 15, lines 47 - 49, column (d). In developing the ratios, the demand determinants were converted to transmission level by applying the following loss factors:
a) Secondary = 1.0457; b) Primary = 1.0108; and c) Transmission = 1.0000.

San Diego Gas & Electric Company 2016 Reliability Service - Rate Design Information

Line No		Total RS Costs	Reference	Line No
1 2 3 4 5 6	TOTAL RS DEMAND COSTS: Demand Costs Franchise Fees @ 1.0310% Uncollectible Rate @.174% Total Demand Costs	\$ 2,320 24 4 \$ 2,348	Statement BK, Page 2, Line 2 Line 2 x 1.0310% Line 2 x 0.174% Sum Lines 2; 3; & 4	1 2 3 4 5 6
7 8 9 10 11 12 13 14 15	TOTAL RS ENERGY COSTS: Energy Costs Franchise Fees @ 1.0310% Uncollectible Rate @.174% Total Energy Costs Total Energy Sales - MWh @ Retail Meter Level Average Rate Per kWh	\$ 137	Statement BK, Page 2, Line 8 Line 8 x 1.0310% Line 8 x 0.174% Sum Lines 8; 9; & 10 Statement BL, Page 17, Line 10 Line 11 / Line 13	7 8 9 10 11 12 13 14
16	TOTAL RS REVENUE REQUIREMENTS	\$ 2,487	Line 5 + Line 11	16

Statement BL SAN DIEGO GAS AND ELECTRIC COMPANY Rate Design Informatior 2016 Reliability Service - Rate Design Information

Development of 12-CP Allocation Factor

		(a)	(b)	(c) = (a) x (b)	(d)	(e)	
Line No.	Customer Class	5 Year Average Ending 12/31/2012 Of 12 CPs Kilowatt @ Meter Level	Transmission Loss Factors	5 Year Average Ending 12/31/2012 Of 12 CPs Kilowatt @ Transmission Level	12 CP Allocation Factors @ Transmission Level	Demand Determinant Allocation Factors	Line No.
1	5 Year Average - 12 CP Allocation Factors						1
	Residential Customers	16.022.144	1.0457	16.754.356	41.76%		2
	Small Commercial Customers	4,154,078	1.0457	4,343,919	10.83%		3
	Medium-Large Commercial Customers	,,,,,,,,		1,0 10,7 17			4
5	Secondary	12,681,960	1.0457	13,261,525	33.05%	74.12%	5
6	Primary	3,282,796	1.0108	3,318,250	8.27%	18.55%	6
7	Transmission	1,313,118	1.0000	1,313,118	3.27%	7.34%	7
8	Total Medium-Large Commercial	17,277,874		17,892,894	44.60%	100.01%	8
9							9
10	Agricultural						10
11	Secondary	318,945	1.0457	333,521	0.83%	92.23%	11
12	Primary	27,805	1.0108	28,105	0.07%	7.77%	12
13	Transmission	-	1.0000	-	0.00%	0.00%	13
14	Total Agricultural	346,750		361,626	0.90%	100.00%	14
15							15
	Standby Customers (Served Load Information						16
17	Secondary	34,351	1.0457	35,921	0.09%	5.78%	17
18	Primary	370,228	1.0108	374,226	0.93%	60.21%	18
19	Transmission	211,414	1.0000	211,414	0.53%	34.01%	
20	Total Standby Customers	615,993		621,561	1.55%	100.00%	
	Street Lighting	141,169	1.0457	147,620	0.37%		21 22
23 24	System Total	38,558,008		40,121,977	100.00%		23 24
25							25
26 27				Transmission	Med.& Lrg. C-I Cust. Allocation Factors		26 27
	Medium-Large Commercial Customers	Meter Level		Level	@ Voltage Level		28
29	Demand Determinants - (Non-Coincident Demand	Weter Ecver		Level	(a) Voltage Devel		29
30	Secondary (Non Comercial Bentalia	20,159	1.0457	21,081	79.19%		30
31	Primary	4,112	1.0108	4,157	15.62%		31
32	Transmission	1,381	1.0000	1,381	5.19%		32
33	Total	25,653		26,619	100.00%		33
34							34
35					Schedule PA-T-1 Cust.		35
36				Transmission	Allocation Factors		36
37		Meter Level		Level	@ Voltage Level		37
38	Agricultural - Schedule PA-T-1						38
39	Secondary	836	1.0457	874	84.82%		39
40	Primary	155	1.0108	157	15.18%		40
41	Transmission	-	1.0000	-	0.00%		41
42	Total	991		1,031	100.00%		42
43							43
44					Standby Cust.		44
45				Transmission	Allocation Factors		45
46	Standby Customers Billings Information	Meter Level		Level	@ Voltage Level		46
	Billing Determinants - (Contracted Standby Demand						47
47	Secondary	115	1.0457	120	5.77917%		48
48			1.0108	1,247	60.20748%		49
48 49	Primary	1,234					
48	Primary Transmission Total	705 2.053	1.0000	705 2,072	34.01335% 100.00%		50 51

Statement BL SAN DIEGO GAS AND ELECTRIC COMPANY 2016 Reliability Service - Rate Design Information Forecasted Billing Determinants

Line	1 2016 D 1 2016 D 1 10 1 1 6	O MIND
<u>No.</u>	January 2016 - December 2016 - Forecasted Sales Information:	(MWH)
1	Residential	7,681,37
2	Small Commercial	1,925,68
3	Med & Lrg Commercial/Industrial	9,998,82
4	Agricultural	316,51
5	Street Lighting	90,83
6	Sale For Resale	3
7		
8	Total Energy Sales (MWH)	20,013,26
9		
10	Total Energy Sales (MWH) - Excluding Resale	20,013,22
11		
12		
13	Med & Lrg Commercial/Industrial Customers - (Non-Coincident Demand):	
14	Secondary	20,15
15	Primary	4,11
16	Transmission	1,38
17		
18	Total Non-Coincident Demand	25,65
19		
20	Agricultural - Schedule PA-T-1 - (Non-Coincident Demand):	
21	Secondary	83
22	Primary	15
23	Transmission	-
24		
25	Total Non-Coincident Demand	99
26		
27	Standby - Contract Demand By Voltage Level:	
28	Secondary	11
29	Primary	1,23
30	Transmission	7(
31		
32	Total Contract Demand	2,05
-		

				Sa	an Diego (Gas & Ele	ctric							
			FERC Fo		Period: J			ember 201	6					
	SDG&E: System Delivery Determinants													
Line														
No.	Customer Class Deliveries (MWh)	<u>Jan-16</u>	Feb-16	Mar-16	Apr-16	May-16	<u>Jun-16</u>	<u>Jul-16</u>	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	<u>Total</u>
1	Residential	727,420	636,792	609,933	558,437	552,577	580,784	666,573	682,833	758,416	633,833	595,422	678,356	7,681,377
2	Small Commercial	160,332	153,698	151,746	147,213	150,465	157,808	172,588	171,202	184,873	164,655	154,757	156,347	1,925,682
3	Med. & Large Comm./Ind. (AD)	2,950	2,922	2,944	2,825	2,916	3,034	3,173	3,208	3,517	3,117	2,884	2,791	36,281
4	Med. & Large Comm./Ind. (Excluding AD/A6-TOU)	739,542	723,493	716,290	714,398	738,747	773,852	830,532	815,255	878,846	794,380	758,472	733,309	9,217,117
5	Med. & Large Comm./Ind. (A6-TOU)	64,472	55,627	51,771	58,484	62,765	58,954	66,003	62,864	69,024	61,179	68,307	65,975	745,424
6	Agriculture (PA and TOU-PA)	4,580	4,635	4,677	5,633	6,827	8,291	9,298	9,161	9,770	8,158	6,725	5,407	83,162
7	Agriculture (PA-T-1)	14,423	14,339	14,311	16,300	19,692	22,786	25,221	24,236	25,455	21,861	18,803	15,922	233,349
8	Lighting	7,898	7,502	7,495	7,315	7,356	7,633	7,736	7,360	7,738	7,429	7,543	7,827	90,832
9	Sale for Resale	3	3	3	3	3	3	3	3	3	3	3	3	37.3
10	Total System	1,721,620	1,599,010	1,559,171	1,510,609	1,541,348	1,613,144	1,781,128	1,776,122	1,937,643	1,694,614	1,612,917	1,665,936	20,013,263
11														
12	Med. & Large Comm./Ind.													
13	Rate Schedule Billing Determinants													
14	0.1.1.40										0		D 40	
15 16	Schedule AD:	<u>Jan-16</u> 2.950	Feb-16 2.922	<u>Mar-16</u> 2.944	<u>Apr-16</u> 2.825	May-16 2.916	<u>Jun-16</u> 3.034	<u>Jul-16</u> 3.173	Aug-16 3,208	Sep-16 3.517	Oct-16 3.117	Nov-16 2.884	<u>Dec-16</u> 2.791	Total 36,281
17	Total Deliveries (MWh)	2,950	2,922	2,944	2,825	2,916	3,034	3,173	3,208	3,517	3,117	2,884	2,791	30,281
18	T-4-1 D-1:													
19	Total Deliveries (%) % @ Secondary Service	97.49%	97.49%	97.49%	97.49%	97.49%	97.49%	97.49%	97.49%	97.49%	97.49%	97.49%	97.49%	97.49%
20	% @ Secondary Service % @ Primary Service	2.51%	2.51%	2.51%	2.51%	2.51%	2.51%	2.51%	2.51%	2.51%	2.51%	2.51%	2.51%	2.51%
21	% @ Transmission Service	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
22	% @ Transmission Service	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
23	Total Deliveries (MWh)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
24	MWh @ Secondary Service	2.876	2,848	2.870	2.755	2.843	2.958	3.093	3.128	3.428	3.039	2.812	2.721	35,370
25	MWh @ Primary Service	74	73	74	2,733 71	73	2,936 76	3,093	3,120	3,420	78	72	70	911
26	MWh @ Transmission Service	0	0	0	0	0	<u>0</u>	<u>0</u>	0	0	0	0	0	0
27	WWW & Transmission Service	2.950	2,922	2,944	2,825	2,916	3.034	3.173	3,208	3,517	3.117	2,884	2,791	36,281
28	Non-Coincident Demand (%)	2,000	2,022	2,044	2,020	2,010	0,004	0,170	0,200	0,017	0,117	2,004	2,701	00,201
29	% @ Secondary Service	0.4245%	0.4245%	0.4245%	0.4245%	0.4245%	0.4245%	0.4245%	0.4245%	0.4245%	0.4245%	0.4245%	0.4245%	0.4245%
30	% @ Primary Service	0.2102%	0.2102%	0.2102%	0.2102%	0.2102%	0.2102%	0.2102%	0.2102%	0.2102%	0.2102%	0.2102%	0.2102%	0.0000%
31	% @ Transmission Service	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
32	70 SE Transmission convice	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070	0.000070
33	Non-Coincident Demand (MW)													
34	MW @ Secondary Service	12.207	12.092	12.185	11.693	12.067	12.556	13.131	13.277	14.553	12.899	11.937	11.551	150,147
35	MW @ Primary Service	0.156	0.154	0.155	0.149	0.154	0.160	0.167	0.169	0.186	0.164	0.152	0.147	1.914
36	MW @ Transmission Service	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37		12.362	12.246	12.341	11.842	12.221	12.716	13.298	13.447	14.739	13.063	12.089	11.698	152.062
38														
39														
40														
40														

41	Schedules AL-TOU / AY-TOU / DG-R/OL-TOU:	<u>Jan-16</u>	Feb-16	Mar-16	Apr-16	May-16	<u>Jun-16</u>	<u>Jul-16</u>	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Total
42 43	Total Deliveries (MWh)	739,542	723,493	716,290	714,398	738,747	773,852	830,532	815,255	878,846	794,380	758,472	733,309	9,217,117
43	Total Deliveries (%)													
45	% @ Secondary Service	79.20%	79.20%	79.20%	79.20%	79.20%	79.20%	79.20%	79.20%	79.20%	79.20%	79.20%	79.20%	79.20%
46	% @ Primary Service	19.48%	19.48%	19.48%	19.48%	19.48%	19.48%	19.48%	19.48%	19.48%	19.48%	19.48%	19.48%	19.48%
47	% @ Transmission Service	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%	1.32%
48	_	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
49	Total Deliveries (MWh)													
50	MWh @ Secondary Service	585,718	573,006	567,302	565,803	585,088	612,891	657,782	645,682	696,046	629,149	600,710	580,781	7,299,957
51	MWh @ Primary Service	144,063	140,936	139,533	139,165	143,908	150,746	161,788	158,812	171,199	154,745	147,750	142,849	1,795,494
52	MWh @ Transmission Service	9,762	9,550	9,455	9,430	9,751	10,215	10,963	10,761	11,601	10,486	10,012	9,680	121,666
53 54	Non-Coloradore Borrond (9/1)	739,542	723,493	716,290	714,398	738,747	773,852	830,532	815,255	878,846	794,380	758,472	733,309	9,217,117
54 55	Non-Coincident Demand (%) % @ Secondary Service	0.2741%	0.2741%	0.2741%	0.2741%	0.2741%	0.2741%	0.2741%	0.2741%	0.2741%	0.2741%	0.2741%	0.2741%	0.2741%
56	% @ Secondary Service % @ Primary Service	0.2141%	0.2177%	0.2741%	0.2141%	0.2141%	0.2141%	0.2141%	0.2741%	0.2141%	0.2141%	0.2741%	0.2141%	0.2177%
57	% @ Transmission Service	0.1881%	0.1881%	0.1881%	0.1881%	0.1881%	0.1881%	0.1881%	0.1881%	0.1881%	0.1881%	0.1881%	0.1881%	0.1881%
58	70 @ Transmission cervice	0.100170	0.100170	0.100170	0.100170	0.100170	0.100170	0.100170	0.100170	0.100170	0.100170	0.100170	0.100170	0.100170
59	Non-Coincident Demand (MW)													
60	MW @ Secondary Service	1,605.452	1,570.610	1,554.975	1,550.867	1,603.725	1,679.934	1,802.980	1,769.814	1,907.863	1,724.497	1,646.545	1,591.921	20,009.181
61	MW @ Primary Service	313.625	306.819	303.764	302.962	313.287	328.175	352.212	345.733	372.701	336.880	321.652	310.982	3,908.791
62	MW @ Transmission Service	18.362	17.964	17.785	17.738	18.342	19.214	20.621	20.242	21.821	19.724	18.832	18.207	228.854
63		1,937.439	1,895.392	1,876.524	1,871.566	1,935.355	2,027.323	2,175.813	2,135.789	2,302.384	2,081.101	1,987.030	1,921.110	24,146.826
64	On-Peak Demand (%)													
65	% @ Secondary Service	0.2272%	0.2272%	0.2272%	0.2272%	0.2507%	0.2507%	0.2507%	0.2507%	0.2507%	0.2507%	0.2272%	0.2272%	0.2395%
66	% @ Primary Service	0.2069%	0.2069% 0.3227%	0.2069%	0.2069% 0.3227%	0.2247%	0.2247%	0.2247%	0.2247%	0.2247%	0.2247%	0.2069%	0.2069%	0.2162%
67 68	% @ Transmission Service	0.3227%	0.3227%	0.3227%	0.3227%	0.3349%	0.3349%	0.3349%	0.3349%	0.3349%	0.3349%	0.3227%	0.3227%	0.3291%
69	On-Peak Demand (MW)													
70	MW @ Secondary Service	1.330.750	1.301.870	1.288.910	1.285.505	1.466.814	1,536.518	1,649.059	1,618.724	1.744.988	1.577.276	1.364.813	1.319.534	17.484.761
71	MW @ Primary Service	298.066	291.597	288.695	287.932	323.361	338.727	363.537	356.850	384.685	347.712	305.695	295.554	3,882.411
72	MW @ Transmission Service	31.502	30.818	30.511	30.431	32.658	34.210	36.715	36.040	38.851	35.117	32.308	31.236	400.397
73		1,660.318	1,624.286	1,608.116	1,603.868	1,822.833	1,909.454	2,049.311	2,011.614	2,168.524	1,960.105	1,702.816	1,646.325	21,767.569
74														
75														
76														
1														

		1												
77 78	Schedule A6-TOU: Total Deliveries (MWh)	<u>Jan-16</u> 64,472	Feb-16 55.627	<u>Mar-16</u> 51.771	<u>Apr-16</u> 58.484	May-16 62.765	<u>Jun-16</u> 58.954	<u>Jul-16</u> 66.003	Aug-16 62.864	Sep-16 69.024	Oct-16 61,179	Nov-16 68.307	Dec-16 65.975	<u>Total</u> 745,424
79	Total Benvenes (MITTI)	04,472	00,021	01,771	00,404	02,700	00,004	00,000	02,004	00,024	01,170	00,001	00,070	140,424
80	Total Deliveries (%)													
81 82	% @ Secondary Service % @ Primary Service	0.00% 13.96%	0.00% 13.96%	0.00% 13.96%	0.00% 13.96%	0.00% 13.96%	0.00% 13.96%	0.00% 13.96%	0.00% 13.96%	0.00% 13.96%	0.00% 13.96%	0.00% 13.96%	0.00% 13.96%	0.00% 13.96%
83	% @ Transmission Service	86.04%	86.04%	86.04%	86.04%	86.04%	86.04%	86.04%	86.04%	86.04%	86.04%	86.04%	86.04%	86.04%
84	70 G Transmission Corner	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
85	Total Deliveries (MWh)	_												_
86 87	MWh @ Secondary Service MWh @ Primary Service	9,000	0 7,766	0 7,227	0 8,164	0 8,762	0 8,230	0 9,214	0 8,776	9,636	0 8,541	9,536	0 9.210	0 104,061
88	MWh @ Transmission Service	55,472	47,861	44,543	50,320	54,003	50,724	56,789	54,088	59,388	52,638	58,772	56,765	641,363
89		64,472	55,627	51,771	58,484	62,765	58,954	66,003	62,864	69,024	61,179	68,307	65,975	745,424
90	Non-Coincident Demand (%)													
91 92	% @ Secondary Service % @ Primary Service	0.0000% 0.1937%	0.0000% 0.1937%	0.0000% 0.1937%	0.0000% 0.1937%	0.0000% 0.1937%	0.0000% 0.1937%	0.0000% 0.1937%	0.0000% 0.1937%	0.0000% 0.1937%	0.0000% 0.1937%	0.0000% 0.1937%	0.0000% 0.1937%	0.0000% 0.1937%
93	% @ Transmission Service	0.1797%	0.1797%	0.1797%	0.1797%	0.1797%	0.1797%	0.1797%	0.1797%	0.1797%	0.1797%	0.1797%	0.1797%	0.1797%
94														
95	Non-Coincident Demand (MW)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
96 97	MW @ Secondary Service MW @ Primary Service	17.434	15.042	13.999	0.000 15.814	0.000 16.972	0.000 15.941	17.848	16.999	18.664	16.543	0.000 18.471	0.000 17.840	0.000 201.567
98	MW @ Transmission Service	99.682	86.007	80.044	90.424	97.043	91.150	102.050	97.197	106.720	94.591	105.613	102.007	1,152.529
99		117.116	101.049	94.043	106.239	114.015	107.092	119.898	114.196	125.385	111.134	124.083	119.847	1,354.095
100 101	Coincident Peak Demand (%)	0.0000%	0.0000%	0.00000/	0.0000%	0.00000/	0.00000/	0.00000/	0.00000/	0.00000/	0.00000/	0.00000/	0.0000%	0.0000%
101	% @ Secondary Service % @ Primary Service	0.0000%	0.0000%	0.0000% 0.1346%	0.0000%	0.0000% 0.1586%	0.0000% 0.1586%	0.0000% 0.1586%	0.0000% 0.1586%	0.0000% 0.1586%	0.0000% 0.1586%	0.0000% 0.1346%	0.0000%	0.0000%
103	% @ Transmission Service	0.1401%	0.1401%	0.1401%	0.1401%	0.1428%	0.1428%	0.1428%	0.1428%	0.1428%	0.1428%	0.1401%	0.1401%	0.1415%
104														
105 106	Coincident Peak Demand (MW) MW @ Secondary Service	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107	MW @ Primary Service	12.114	10.452	9.728	10.989	13.896	13.053	14.613	13.919	15.282	13.545	12.835	12.397	152.824
108	MW @ Transmission Service	77.716	67.054	62.405	70.498	77.116	72.433	81.095	77.238	84.806	75.167	82.339	79.528	907.395
109		89.830	77.506	72.133	81.487	91.013	85.486	95.708	91.157	100.088	88.712	95.174	91.925	1,060.220
110 111														
112														
113	Med. & Large Comm./Ind.													
114	Total Service Voltage Determinants													
115 116	Deliveries (MWh)	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Total
117	Med & Large Comm./Ind.	806.964	782.042	771.005	775.708	804.428	835.840	899.709	881.327	951,387	858.675	829.663	802.076	9.998.822
118			,	,	,		,	,	,	,	,	,	,	0,000,000
119	Deliveries (MWh)													
120 121	MWh @ Secondary Service MWh @ Primary Service	588,593 153,137	575,855 148,775	570,172 146.834	568,558 147,400	587,930 152,743	615,849 159,052	660,875 171,081	648,810 167.668	699,475 180.923	632,187 163,364	603,522 157,358	583,502 152,129	7,335,327 1,900,466
122	MWh @ Transmission Service	65,233	57,412	53,998	59,750	63,754	60,939	67,752	64,850	70,989	63,124	68,783	66,445	763,029
123		806,964	782,042	771,005	775,708	804,428	835,840	899,709	881,327	951,387	858,675	829,663	802,076	9,998,822
124	Non-Coincident Demand (MW)								. ==== = :		. === ===			
125 126	MW @ Secondary Service MW @ Primary Service	1,617.658 331.214	1,582.702 322.015	1,567.160 317.918	1,562.560 318.925	1,615.792 330.413	1,692.490 344.276	1,816.111 370.227	1,783.091 362.901	1,922.416 391.551	1,737.395 353.588	1,658.482 340.275	1,603.472 328.969	20,159.329 4.112.272
127	MW @ Transmission Service	118.045	103.971	97.829	108.162	115.386	110.365	122.671	117.439	128.541	114.314	124.445	120.214	1,381.383
128	<u> </u>	2,066.917	2,008.687	1,982.908	1,989.647	2,061.591	2,147.131	2,309.009	2,263.431	2,442.508	2,205.297	2,123.202	2,052.655	25,652.983
129														
130														
131														

132 133	Schedules PA-T-1 Total Deliveries (MWh)	<u>Jan-16</u> 14,423	Feb-16 14,339	<u>Mar-16</u> 14,311	<u>Apr-16</u> 16,300	May-16 19,692	<u>Jun-16</u> 22,786	<u>Jul-16</u> 25,221	<u>Aug-16</u> 24,236	Sep-16 25,455	Oct-16 21,861	Nov-16 18,803	Dec-16 15,922	<u>Total</u> 233,349
134 135 136 137 138 139	Total Deliveries (%) % @ Secondary Service % @ Primary Service % @ Transmission Service	87.40% 12.60% <u>0.00%</u> 100.00%	87.40% 12.60% <u>0.00%</u> 100.00%	87.40% 12.60% <u>0.00%</u> 100.00%	87.40% 12.60% <u>0.00%</u> 100.00%	87.40% 12.60% <u>0.00%</u> 100.00%	87.40% 12.60% 0.00% 100.00%	87.40% 12.60% <u>0.00%</u> 100.00%	87.40% 12.60% <u>0.00%</u> 100.00%	87.40% 12.60% 0.00% 100.00%	87.40% 12.60% <u>0.00%</u> 100.00%	87.40% 12.60% <u>0.00%</u> 100.00%	87.40% 12.60% <u>0.00%</u> 100.00%	87.40% 12.60% <u>0.00%</u> 100.00%
140 141 142 143 144	Total Deliveries (MWh) MWh @ Secondary Service MWh @ Primary Service MWh @ Transmission Service	12,606 1,817 <u>0</u> 14,423	12,532 1,807 <u>0</u> 14,339	12,508 1,803 <u>0</u> 14,311	14,246 2,054 <u>0</u> 16,300	17,211 2,481 <u>0</u> 19,692	19,915 2,871 <u>0</u> 22,786	22,043 3,178 <u>0</u> 25,221	21,182 3,054 <u>0</u> 24,236	22,248 3,207 <u>0</u> 25,455	19,107 2,755 <u>0</u> 21,861	16,434 2,369 <u>0</u> 18,803	13,916 2,006 <u>0</u> 15,922	203,947 29,402 0 233,349
145 146 147 148 149	Non-Coincident Demand (%) % @ Secondary Service % @ Primary Service % @ Transmission Service	0.4099% 0.5266% 0.0000%												
150 151 152 153 154	Non-Coincident Demand (MW) MW @ Secondary Service MW @ Primary Service MW @ Transmission Service	51.672 9.570 <u>0.000</u> 61.242	51.369 9.514 <u>0.000</u> 60.883	51.269 9.496 <u>0.000</u> 60.765	58.394 10.815 <u>0.000</u> 69.209	70.548 13.066 <u>0.000</u> 83.614	81.633 15.119 <u>0.000</u> 96.752	90.353 16.734 <u>0.000</u> 107.087	86.827 16.081 <u>0.000</u> 102.908	91.195 16.890 <u>0.000</u> 108.085	78.318 14.505 <u>0.000</u> 92.824	67.362 12.476 <u>0.000</u> 79.838	57.040 10.564 <u>0.000</u> 67.604	835.980 154.831 <u>0.000</u> 990.811
155 156 157 158 159 160	On-Peak Demand (%) % @ Secondary Service % @ Primary Service % @ Transmission Service On-Peak Demand (MW)	0.0000% 0.0000% 0.0000%												
161 162 163 164 165	MW @ Secondary Service MW @ Primary Service MW @ Transmission Service	0.000 0.000 <u>0.000</u> 0.000												
166 167														
168 169	Schedule S: Standby Determinants:	<u>Jan-16</u>	Feb-16	<u>Mar-16</u>	<u>Apr-16</u>	<u>May-16</u>	<u>Jun-16</u>	<u>Jul-16</u>	<u>Aug-16</u>	<u>Sep-16</u>	Oct-16	<u>Nov-16</u>	<u>Dec-16</u>	<u>Total</u>
170 171 172 173 174	Contracted Standby Demand (MW) MW @ Secondary Service MW @ Primary Service MW @ Transmission Service	9.542 102.841 <u>58.726</u> 171.109	114.504 1,234.092 704.712 2,053.308											

ATTESTATION REGARDING SAN DIEGO GAS & ELECTRIC COMPANY'S TRANSMISSION OWNER TARIFF (APPENDICES VII AND IX) (18 CFR § 35.13 (d)(7))

I, James Avery, attest that I am Chief Development Officer, San Diego Gas & Electric ("SDG&E"), and to the best of my knowledge and belief, the cost of service statements and supporting data submitted as part of this filing are true, accurate, and current representations of SDG&E's books and other corporate documents.

April 7, 2016

James Avery

California All-Purpose Acknowledgement

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document, to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of San Diego)

On April <u>7</u>, 2016 before me, <u>Joyce Ruiz Jeffers</u>, <u>a Notary Public</u>, personally appeared <u>James Avery</u>, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

JOYCE RUIZ JEFFERS
COMM. #2095411
NOTARY PUBLIC • CALIFORNIA
SAN DIEGO COUNTY
Commission Expires Jan. 27, 2019

CERTIFICATE OF SERVICE

I hereby certify that I have this day served an electronic copy of the foregoing document upon each person designated on the official service list compiled by the Secretary in Docket No. ER13-941-000. In addition, I certify that 1 have also caused the foregoing to be served upon the following:

Arocles Aguilar (via Overnight Mail) General Counsel California Public Utilities Commission 505 Van Ness Avenue San Francisco, CA 94102

Roger Collanton (via Overnight Mail) General Counsel California Independent System Operator Corporation 250 Outcropping Way Folsom, CA 95630

Dated at San Diego, California, this 8th day of April, 2016.

/s/ Tamara Grabowski

Tamara Grabowski Legal Administrative Associate San Diego Gas & Electric Company 8330 Century Park Court, CP32D San Diego, California 92123