Application No.: A.25-05-XXX

Exhibit No.: SDGE-4

Witness: <u>Stephen M. Elliott</u>

PREPARED DIRECT TESTIMONY OF STEPHEN M. ELLIOTT ON BEHALF OF

SAN DIEGO GAS & ELECTRIC COMPANY

REDACTED, PUBLIC VERSION

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA



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ATTACHMENT A: DECLARATION OF STEPHEN M. ELLIOTT REGARDING CONFIDENTIALITY OF CERTAIN DATA/DOCUMENTS PURSUANT TO D.16-08-024, et al.

PREPARED DIRECT TESTIMONY OF STEPHEN M. ELLIOTT ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

I. PURPOSE AND OVERVIEW

This testimony presents San Diego Gas & Electric Company's ("SDG&E") 2024¹ costs for greenhouse gas ("GHG") compliance instruments used to satisfy its compliance obligations under the California Air Resources Board's ("CARB") cap-and-trade program pursuant to Assembly Bill ("AB") 32. This testimony also includes SDG&E's 2024 revenues related to the sale of its allowance allocation.² The purpose of this testimony is to present SDG&E's 2024 emissions, costs and revenues in accordance with applicable decisions. The following sections describe the cap-and-trade program and detail SDG&E's 2024 actual revenues and estimated emissions and costs. These emissions are a key input used in the calculations of SDG&E's Direct GHG Emissions price and in customer rates, as further explained in the testimony of SDG&E witness Mr. Elias.³ These revenues are used to calculate SDG&E's Climate Credit, which is further discussed in in the testimony of SDG&E witness Ms. Wissman.

The 2023 volumes and costs became final in August 2024 and were reported as part of SDG&E's Updated 2025 ERRA Forecast Filing (Application ("A.") 24-05-010); thus the 2023 volumes and costs were not reported in the May 2024 testimony. The 2024 estimated emissions and costs reported in this testimony are subject to change due to emission verification for all of 2024. Additionally, this testimony does not include 2025 emissions, costs and revenues since only January and February estimates are available at this time. The October 2025 update of this testimony will include estimated costs and revenues for January through August of 2025 and forecasts for September – December 2025, all of which are subject to change when actualized and/or verified.

The 2024 emissions and costs are subject to change due to emission verification which will become final in August-September 2025. Revenues for 2024, however, are now final.

The testimony of SDG&E witness Mr. Elias provides a forecast of the 2026 GHG costs.

II. BACKGROUND

A. AB 32 Background

The Global Warming Solutions Act of 2006, also referred to as AB 32,⁴ establishes a goal of reducing California's GHG emissions to the 1990 level by 2020. The statute grants CARB broad authority to regulate GHG emissions to reach this target. CARB's Scoping Plan includes a recommendation that California adopt a portfolio of emissions reduction measures, including a California GHG cap-and-trade program.⁵

In October 2011, CARB released its Final Regulation Order, which was approved by its Board and by the Office of Administrative Law ("OAL") in December 2011.⁶ The CARB regulations create a GHG emissions allowance cap-and-trade system, with compliance obligations in the electricity sector applicable to "first deliverers of electricity" that emit more than 25,000 Metric Tons ("MT") of GHG. The regulation requires that first deliverers of electricity, including investor-owned utilities ("IOUs") such as SDG&E, obtain all the compliance instruments required to meet their compliance obligations by November 1 of the year following the end of a compliance period. Compliance instruments consist of allowances and offsets. An allowance is a limited, tradable authorization to emit up to one MT of carbon dioxide equivalent ("CO2e") and an offset is a project that reduces GHG in sectors outside of those covered in the cap-and-trade program.⁸

⁴ AB 32, Stats. 2005-2006, Ch. 488 (Cal. 2006).

State of California Air Resources Board, *California Cap-and-Trade Program, Resolution 11-32* (October 20, 2011) at 3-4 *available at*: https://www.arb.ca.gov/regact/2010/capandtrade10/res11-32.pdf.

The CARB Final Regulation Order from December 2011 is codified at 17 California Code of Regulations section ("\s") 95800 *et seq.* and is also *available at*: http://www.arb.ca.gov/regact/2010/capandtrade10/capandtrade10.htm.

⁷ "First deliverers of electricity" is defined in § 95811(b) of CARB's Final Regulation Order as electricity generators inside California and electricity importers.

⁸ Refer to § 95801 of CARB's Final Regulation Order for definitions.

Section 95892(b) of CARB's Final Regulation Order establishes that IOUs are required to sell all their free allowances and acquire an amount equal to their direct compliance obligations. There are also annual requirements to surrender at least 30% of expected annual obligations each year by November 1 of the following year.

B. GHG Actual Revenue

The revenues discussed in my testimony result from the sale of allowances allocated to SDG&E by CARB for the benefit of its ratepayers. CARB requires that the allowances that are allocated annually to the IOUs be made available for sale at the CARB auctions. Allowances given to the IOUs must all be consigned by the last auction of that year. Except for the November 2012 auction, where CARB specified the amount that each IOU needed to auction, all other amounts consigned at auctions are up to the discretion of each IOU, provided the entire annual volume is consigned by the end of each year. Revenues are calculated by multiplying the volume sold by the auction settlement price. The revenues presented in this testimony consist of allowances sold in the 2024 February, May, August, and November auctions.

C. GHG Estimated Emission Volumes

The 2024 direct emissions will be the estimated/calculated GHG emissions for: (1) SDG&E's California utility-owned generation ("UOG"), (2) California generators with whom SDG&E has contracts where SDG&E is responsible for GHG costs, (3) estimated emissions associated with SDG&E imports of both specified electricity and unspecified electricity, and (4) Renewable Portfolio Standard adjustment ("RPS Adjustment"). The RPS Adjustment, which is an optional provision of the Cap-and-Trade regulation that reduces a compliance entity's direct compliance obligation, is calculated by multiplying the out-of-state renewable megawatt-hours ("MWh") eligible for RPS adjustment by the CARB assigned unspecified emission factor. The 2024 direct volumes may change because they are subject to: (1) emission estimates and emission

reporting verification, (2) changing emission factors, and (3) contractual requirements for reviewing tolling agreement emissions for potential reductions. If there are such changes, they will be reflected in future testimony.

The 2024 indirect emissions are estimated emissions based on net purchases from the California electricity market controlled by the California Independent System Operator ("CAISO") measured in MWh and multiplied by the CARB assigned unspecified emission factor. Indirect emissions are not overseen by CARB. Indirect emissions are comprised of estimated GHG emissions for which SDG&E was exposed because of purchasing power from third parties. The 2024 indirect emissions within this testimony are those calculated in SDG&E's 2024 ERRA Forecast Application and will be updated in the updated 2026 ERRA Forecast testimony in October 2025.

D. GHG Cost Categories

The costs outlined in my testimony are broken down into two categories of GHG costs: direct costs and indirect costs. SDG&E defines direct costs of a given compliance year as the net cost of procuring compliance instruments that can be used to satisfy SDG&E's compliance year obligation. SDG&E defines indirect costs of a given compliance year as the GHG compliance costs embedded in the price of electricity delivered in that year, which are passed on from sellers.

Section III below addresses the carbon price for 2024. Section IV.A addresses direct GHG emissions associated with SDG&E's UOG plants, procurement of electricity from tolling agreements, electricity imports attributed to SDG&E, and credits from SDG&E's eligible RPS Adjustment. Section IV.B addresses the approximate 2024 indirect GHG emissions for which SDG&E paid as GHG costs embedded in electricity prices charged by third parties to SDG&E

under contract for various supplies.⁹ Section IV.C summarizes the GHG costs based on the carbon prices in Section III and emissions in Sections IV.A and IV.B.

III. CARBON PRICE METHODOLOGY

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A. Price for Direct GHG Emissions

The 2024 Direct GHG Emissions price is based on the sum of 2024 monthly balancing account entries and the 2024 emission volumes as described in section IV.A.

The Direct GHG Emissions price is listed in the table below:¹⁰

2024 Direct GHG Emissions (\$/MT)

Historically, SDG&E included testimony in its ERRA forecast application that presented SDG&E's accounting procedure used to record the GHG compliance instrument costs using the Weighted Average Costs ("WAC"). SDG&E previously included Attachment C in its annual ERRA forecast application and provided supporting testimony regarding its methodologies and assumptions.11 However, in D.19-04-016, the Commission found that the language in OP 9 of D.14-10-033 was ambiguous as it failed to distinguish between the differing compliance obligations in the utilities' ERRA forecast and ERRA compliance proceedings.12 The Commission clarified the requirements of D.14-10-033 to state that compliance with Attachment C shall be demonstrated in the ERRA compliance proceeding and not the ERRA forecast

proceeding.13 Accordingly, SDG&E is not including Attachment C (or supporting testimony

Indirect GHG costs are estimated based on the assumptions described herein.

Per Decision ("D.") 19-04-016, the details and underlying computations for the Direct GHG Emissions price and the Weighted Average Cost ("WAC") will be provided in the annual ERRA Compliance filing.

Per D.14-10-033 at Ordering Paragraph ("OP") 9.

¹² D.19-04-016 at Findings of Fact 17.

¹³ *Id.* at OP 3.

regarding methodologies) in this ERRA forecast application. Rather, SDG&E will comply with D.19-04-016, OP 3, which directs the IOUs to demonstrate compliance with the revised D.15-01-024 Attachment C in its ERRA compliance filings and not in its ERRA forecasts. SDG&E will submit the GHG WAC compliance testimony for record year 2024 in its 2024 ERRA Compliance testimony, which will be filed on June 1, 2025.

B. Price for Indirect Emissions

The embedded GHG costs for indirect emissions are estimated by using the average CAISO GHG Allowance Price Indices, as listed in the table below.¹⁴ Indirect costs are estimated since it is assumed that the GHG cost was passed on by all sources of power from market purchases.

2024 CAISO	GHG Prices
Jan-Dec 2024	\$38.10

IV. GHG COMPLIANCE COSTS

A. Direct Greenhouse Gas Emissions

Under CARB's cap-and-trade program, the "first deliverer of electricity" within California must surrender one allowance or offset credit for each MT of GHG emissions. Accordingly, SDG&E had direct compliance obligations for GHGs emitted from burning natural gas at its UOG plants, namely, the Palomar Energy Center ("Palomar"). SDG&E's UOG GHG emission volumes are derived from information extracted from each covered plant's Continuous Emissions

Monitoring Systems ("CEMS") and that plant's annual fuel usage. The data is reported to CARB (under the mandatory GHG reporting rule) and undergoes a rigorous quality assurance/quality control ("QA/QC") process with supporting documentation from the CEMS systems. The data is

Annual CAISO prices are a straight average of public daily GHG prices published on CAISO's Open Access Same time Information System ("OASIS") website.

then subject to third party verification by an ARB-certified verifier. The 2024 UOG emissions will become final in August 2025. The 2024 estimated UOG emissions are as follows:

Jan-Dec 2024 California UOG Plants	Emissions Estimate (in MT)
Palomar Energy Center	
Total	

In addition, SDG&E has agreements with some California generators which stipulate that if SDG&E is dispatching the plant, then SDG&E will provide compliance instruments to the generator for its GHG compliance obligations. The generators covered by these agreements include the Pio Pico Energy Center ("Pio Pico") and the Carlsbad Energy Center ("Carlsbad"). The estimated emissions for these plants can be calculated by multiplying the MMBtu burned with the emission factor of 0.05312 MT/MMBtu & 0.05307 MT/MMBtu associated with natural gas as the input fuel. These estimates are subject to change, not only because the emissions estimates are based on fuel calculations instead of emission meter read calculations, but also because the tolling agreement contracts state that SDG&E will only cover the emissions generated resulting from SDG&E dispatches of efficiently run plants. The 2024 estimated SDG&E obligations to tolling agreement partners are shown below. SDG&E will be analyzing the 2024 tolling data and could potentially adjust the 2024 estimated emissions for non-SDG&E dispatches, inefficiencies or based on verification. If there are such changes, they will be reflected in the October update.

Jan-Dec 2024	Emissions Estimate
California Tolling Generators	(in MT)
Pio Pico	
Carls bad Energy Center	
Total	

An entity that delivers out-of-state electricity to a delivery point inside California is also responsible for the GHG emissions associated with generation of that electricity. For known imports, called "specified sources," the estimated GHG emissions related to the portion of outputs

of plants that are delivered to California are covered in the cap-and-trade program and as such the importer of that electricity has a compliance obligation. SDG&E has a contract with Yuma Cogeneration Associates ("YCA")¹⁵ in Arizona and owns the Desert Star Energy Center ("Desert Star") combined cycle plant in Nevada. These out-of-state generators are specified sources. The compliance obligation for the power imported from each of these sources is calculated by the product of the imported power times the transmission loss correction factor as listed in section 95111 of CARB's mandatory reporting regulation, and the specified emissions factor assigned to those facilities by CARB. As with SDG&E's other estimated obligations, specified imports are also subject to change, and those changes will be reflected in the October update. The 2024 estimated emissions for SDG&E's specified imports are as follows:

Jan-Dec 2024 Specified Imports	Specified Import Estimates (in MWh)	Emission Factor Estimates	Transmission Loss Factor	Emissions Estimate (in MT)
Desert Star		0.405	1.00	
YCA		0.504	1.02	
Total				

In addition to specified sources, importing of "unspecified sources" also generates a compliance obligation. SDG&E procured both contracted imports and market imports from unspecified sources in 2024. The cap-and-trade compliance obligation for these unspecified imports is calculated by multiplying the number of MWh imported, adjusted upward by two percent to account for transmission losses between the point of generation and the California border, by the CARB default rate, as stated in its regulation (currently 0.428 MT/MWh). ¹⁶

¹⁵ The YCA contract expired in May 2024.

CARB's Mandatory Reporting Regulation, Section 95111(b)(1), available at: https://ww3.arb.ca.gov/cc/reporting/ghg-rep/regulation/mrr-2018-unofficial-2019-4-3.pdf? ga=2.248590913.797450650.1572910305-557391757.1471971036. See Section 95852(c) in CARB, Article 5: California Cap on Greenhouse Gas Emissions and Market-based Compliance

Finally, CARB recognizes that the building of new renewable generation outside California 2 reduces GHG. As such, the cap-and-trade regulations allow for an RPS Adjustment. The RPS 3 Adjustment reduces an entity's GHG compliance burden and is calculated by assigning the default emission rate (currently 0.428 MT/MWh) to the GHG-free renewable energy, as measured at the 5 point of generation. The adjustment does not account for the transmission losses from the point of generation to California, 17 and the cap-and-trade regulations also allow that they be taken in 6 7 following years. SDG&E successfully claimed the undelivered portion of its potential 2014 RPS 8 Adjustment in 2015. SDG&E has been unable to claim undelivered portions of the 2015-2024 contractually purchased renewable energy applicable to the RPS Adjustment provision in recent GHG reports to CARB and SDG&E will not be claiming the RPS Adjustment for 2024.¹⁸ If the 10 11 RPS Adjustment data for any prior year(s) becomes available in the future, SDG&E will incorporate that benefit in an upcoming annual CARB Electric Power Entity ("EPE") report. Both 12 the estimated 2024 unspecified imports and the RPS Adjustments claimed for 2024 are subject to 13 14 change and those changes will be reflected in future testimony. The 2024 estimated emissions for 15 SDG&E's unspecified imports and RPS adjustment claims are as follows:

Mechanisms at 116, *available at*: https://ww2.arb.ca.gov/sites/default/files/2021-02/ct reg unofficial.pdf

See Section 95852(b)(4) of CARB's Final Regulation Order for the calculation of the RPS Adjustment. CARB, Article 5: California Cap on Greenhouse Gas Emissions and Market-based Compliance Mechanisms, at 121, Section 95852(b)(4), available at https://ww2.arb.ca.gov/sites/default/files/2021-02/ct_reg_unofficial.pdf.

SDG&E's ability to utilize the non-imported portion of its Glacier and Rim Rock contracts for the RPS Adjustment is dependent on receipt of Glacier and Rim Rock import volumes from Morgan Stanley. SDG&E has, thus far, not received this information for the 2015-2024 generation years. SDG&E continues to have discussions with Morgan Stanley and Open Access Technology International, Inc. ("OATI") about obtaining this data and may receive it in the future at which point SDG&E can apply the prior RPS Adjustment volumes to the next compliance year's report.

Jan-Dec 2024 Unspecified Imports & RPS Adjustment	Unspecified Import Estimates (in MWh)	Unspecified Emission Factor	Transmission Loss Factor	Emissions Estimate (in MI)
Unspecified Imports		0.428	1.02	
RPS Adjustment		0.428	1.00	
Total				

Based on the above, SDG&E's 2024 estimated direct compliance obligations are:

Jan-Dec 2024 Direct Compliance Obligations	Emissions Estimate (in MT)
California UOG Plants	
California Tolling Generators	
Specified Imports	
Unspecified Imports	
RPS Adjustment	
Total	

B. Indirect Greenhouse Gas Emissions

SDG&E, along with all other purchasers of wholesale electricity, is subject to indirect GHG compliance costs that generators incur and pass on to their buyers. This additional cost of GHG compliance is embedded in the market price of electricity procured in the wholesale market from third parties, thereby increasing SDG&E's cost to purchase wholesale electricity, as well as from suppliers under contracts that include market-based prices. The cost of GHG affects both market purchases and contracts based on the price of energy (such as combined heat and power ["CHP"] facilities); because the price of energy changes in tandem with the change in the GHG allowance prices, sellers of electricity demand higher revenues to offset the costs related to their cap-and-trade obligations. The 2024 indirect GHG volumes are estimated, for both net market purchases and CHP contracts, as the MWh of electricity production multiplied by the CARB default rate for unspecified electricity of 0.428 MT/MWh. The forecasted 2024 MWh and emissions of SDG&E's indirect purchases are as follows:

2024 Forecasted Indirect Volumes in MWh and MT		
Total INDIRECTS (MWh)		
Unspecified Emissions Factor (MT/MWh)	0.428	
Total INDIRECTS (MT)		

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C. GHG Costs

Using the prices from Section III above, the 2024 direct GHG costs are as follows:

2024 GHG Direct Cost Estimates	Emissions Estimate (in MT)	Direct GHG Emissions Price (in \$/MI)	Estimated Direct Cost
Jan-Dec 2024 (estimated actuals)			

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Combining indirect volumes and the CAISO GHG allowance price indices, 19 the 2024

estimated GHG indirect costs are as follows:

2024 Forecasted Indirect Volumes <u>& Cost</u>		
Total INDIRECTS (MT)		
CAISO GHG Price (Jan-Dec 2024) (\$/MT)	\$38.10	
Total Indirect Cost		

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Thus, the 2024 Direct and Indirect estimate blended cost is

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D. Outreach and Administrative Costs

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Application) reflects the twice-a-year Climate Credit Communications to customers as directed

For 2026, the Detail of Outreach and Administrative Expense costs (Attachment G to the

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initially in D.16-06-041. These communications include emails and bill inserts for both April and

13 October.

The total cost projection of the expenses to be incurred in 2026 is \$65,000.00 for the

required touchpoints stated above, including \$50,000.00 for residential customers and \$15,000.00

16 for small business customers.

Per D.14-10-033 at 25, indirect costs are calculated using a proxy price equal to the average of the published CAISO GHG index daily prices in OASIS.

V. ACTUAL AND ESTIMATED GHG REVENUES

SDG&E received 6,345,211 MT of vintage 2024 allowances to sell at 2024 auctions.

SDG&E's annual allocated allowances are required to be consigned at that year's quarterly auctions; however, SDG&E has full discretion on how to distribute its allowances across the four quarterly auctions. The tables below show the volumes sold at each 2024 auction along with associated revenues.

2024 GHG Revenues				
Auction	Settlement Price (\$/MT)	Sold Volume (MT)	Revenue	
Feb-24	\$41.76			
May-24	\$37.02			
Aug-24	\$30.24			
Nov-24	\$31.91			
Total	\$35.23			

This concludes my prepared direct testimony.

VI. QUALIFICATIONS

My name is Stephen M. Elliott. My business address is 8315 Century Park Court, San Diego, CA 92123. I am employed by San Diego Gas & Electric as a Sr. Electric & Fuels Trader in the Energy Supply and Dispatch Department. My responsibilities include managing the execution of SDG&E's GHG portfolio and also the day ahead and forward procurement of natural gas that serves SDG&E's electric portfolio. I assumed my current position in December 2022.

I have been employed by SDG&E in numerous positions including an Analyst for Energy Efficiency and Demand Response programs, a Business Analyst for Credit & Collections / Customer Payment Services and a Senior Energy Risk Advisor in Energy Risk Management (Middle Office). I have been responsible for Risk & Compliance of the Electric & Fuel Procurement operations, natural gas scheduling and trading and the management and execution of SDG&E's emissions portfolio.

I hold a bachelor's degree in history with an emphasis in Pre-Law studies from San Diego State University and a Master of Business Administration with an emphasis in Finance from National University.

I have previously testified before the California Public Utilities Commission.

ATTACHMENT A

DECLARATION OF STEPHEN M. ELLIOTT REGARDING CONFIDENTIALITY OF CERTAIN DATA/DOCUMENTS PURSUANT TO D.16-08-024, et al.

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

DECLARATION OF STEPHEN M. ELLIOTT REGARDING CONFIDENTIALITY OF CERTAIN DATA/DOCUMENTS PURSUANT TO D.16-08-24, et al.

I, Stephen M. Elliott, do declare as follows:

- 1. I am an Electric Fuels Trader in the Electric and Fuel Procurement department for San Diego Gas & Electric Company ("SDG&E"). I have been delegated authority to sign this declaration by Adam Pierce, Vice President of Energy Procurement and Rates. I have reviewed the Prepared Direct Testimony ("Testimony") and Attachment G, the GHG Revenue and Reconciliation Application Form, in support of SDG&E's "Application for approval of its 2026 Electric Procurement Revenue Requirement Forecasts and GHG Related-Forecasts ("Application"). I am personally familiar with the facts in this Declaration and, if called upon to testify, I could and would testify to the following based upon my personal knowledge and/or information and belief.
- 2. I hereby provide this Declaration in accordance with Decisions ("D.") D.16-08-024, D.17-05-035 and D.17-09-023 to demonstrate that the confidential information ("Protected Information") provided in Mr. Elliott's Testimony and Attachment G are within the scope of data protected as confidential under applicable law.
- 3. In accordance with the legal citations and narrative justification described in Attachment A, the Protected Information should be protected from public disclosure.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to the best of my knowledge.

Executed this 27th day of March 2025, at San Diego.

DocuSigned by:

Stephen M. ElliOVV

Stephen M. Elliott

Electric Fuels Trader, Electric & Fuel Procurement

ATTACHMENT A

SDG&E Request for Confidentiality on the following information contained in Stephen M. Elliott's Testimony and Attachment G in support of SDG&E's Application

Location of	Legal Citations	Narrative Justification
Protected	8	
Information		
1. SDG&E Direct GHG prices and Direct GHG calculations (The 2024 Direct GHG price appears in Stephen M. Elliott's Testimony. The 2013 - 2024 Direct GHG calculations are utilized in tab "D-2" of Attachment G.	D.08-04-023 D.14-10-033, D.16-08-024, D.17-05-035, D.17-09-023, Public Utilities Code Section 454.5(g) General Order ("GO") 66-D 17 CCR § 95914(c) (the "ARB Confidentiality Regulations") The GHG Confidential Information Matrix in Attachment A of D.14-10-033 and revised in D.15-01-024 The Matrix makes the following confidential: "Weighted Average Cost (WAC) of compliance instruments, and the calculation of WAC" Gov't Code §§6254(k), 6254.7 (d), Evidence Code 1060, Civil Code §3426 et seq.	The Protected Information is entitled to confidential treatment under applicable law, including, but not limited to, the legal authority cited herein. The information does not expressly fall within any category of the IOU Matrix applicable to electric procurement information, but is market-sensitive information. Among other things, 17 CCR Section 95914(c)(1) of the Capand-Trade regulations prohibits disclosure of any auction-related information. Violation of Section 95914 may subject SDG&E to penalties by the California Air Resources Board. In addition, Attachments A, C & D of D.15-01-024 and Appendices A & B of D.15-10-032 require Auction-related information, forecasts of emissions intensity, forecasts of greenhouse gas (GHG) costs, GHG transactions, compliance instrument prices, weight average cost ("WAC") and other GHG information to be kept confidential. Additionally, the Protected Information also includes trade secret information because SDG&E's bidding/consignment strategies contain "commercial value," which gives SDG&E "an opportunity to obtain a business advantage over competitors who do not know or use it." Disclosure of this information would place SDG&E at an unfair business disadvantage relative to other Cap-and-Trade market participants and result in higher Cap-and-Trade compliance costs for SDG&E and its end-use ratepayers.
2. Historical/Reco rded UOG Emissions	D.08-04-023 D.14-10-033, D.16-08-024, D.17-05-035, D.17-09-023, Public Utilities Code Section 454.5(g)	The Protected Information is entitled to confidential treatment under applicable law, including, but not limited to, the legal authority cited herein. The information does not expressly fall within any category of the IOU Matrix applicable to electric procurement information, but is market-sensitive information.

(The 2024 Historical UOG Emissions appear in Stephen M. Elliott's Testimony. The 2013- 2024 Recorded UOG Emissions appear in Attachment G of this Application.)	General Order ("GO") 66-D 17 CCR § 95914(c) (the "ARB Confidentiality Regulations") Annual GHG Emissions and Associated Costs in Template D-2 of D.14-10-033 and revised in D.15-01-024 Template D-2 designates forecasted and recorded UOG emissions as confidential Gov't Code §§6254(k), 6254.7 (d), Evidence Code 1060, Civil	Among other things, 17 CCR Section 95914(c)(1) of the Capand-Trade regulations prohibits disclosure of any auction-related information. Violation of Section 95914 may subject SDG&E to penalties by the California Air Resources Board. In addition, Attachments A, C & D of D.15-01-024 and Appendices A & B of D.15-10-032 require Auction-related information, forecasts of emissions intensity, forecasts of greenhouse gas (GHG) costs, GHG transactions, compliance instrument prices, weight average cost ("WAC") and other GHG information to be kept confidential. Additionally, the Protected Information also includes trade secret information because SDG&E's bidding/consignment strategies contain "commercial value," which gives SDG&E "an opportunity to obtain a business advantage over competitors who do not know or use it." Disclosure of this information would place SDG&E at an unfair business disadvantage relative to other Cap-and-Trade market participants and result in higher Cap-and-Trade compliance costs for SDG&E and its end-use ratepayers.
2	Code §3426 et seq.	The Protected Information is entitled to confidential treatment
3. Historical/Reco rded California Tolling Agreement Emissions	D.08-04-023 D.14-10-033, D.16-08-024, D.17-05-035, D.17-09-023, Public Utilities Code Section 454.5(g)	under applicable law, including, but not limited to, the legal authority cited herein. The information does not expressly fall within any category of the IOU Matrix applicable to electric procurement information, but is market-sensitive information. Among other things, 17 CCR Section 95914(c)(1) of the Cap-
	General Order ("GO") 66-D 17 CCR § 95914(c) (the	and-Trade regulations prohibits disclosure of any auction-related information. Violation of Section 95914 may subject SDG&E to penalties by the California Air Resources Board.
	"ARB Confidentiality Regulations")	In addition, Attachments A, C & D of D.15-01-024 and Appendices A & B of D.15-10-032 require Auction-related information, forecasts of emissions intensity, forecasts of
(The 2024 Tolling Agreement Emissions appear in Stephen M.	Annual GHG Emissions and Associated Costs in Template D-2 of D.14-10-	greenhouse gas (GHG) costs, GHG transactions, compliance instrument prices, weight average cost ("WAC") and other GHG information to be kept confidential.
Elliott's Testimony.	033 and revised in D.15-01- 024	Additionally, the Protected Information also includes trade secret information because SDG&E's bidding/consignment strategies contain "commercial value," which gives SDG&E "an
The 2013- 2024 Tolling Agreement	Template D-2 designates forecasted and recorded Tolling Agreements	opportunity to obtain a business advantage over competitors who do not know or use it."
Emissions appear in Attachment G of this	emissions as confidential	Disclosure of this information would place SDG&E at an unfair business disadvantage relative to other Cap-and-Trade market
Application.)	Gov't Code §§6254(k), 6254.7 (d), Evidence Code 1060, Civil Code §3426 et seq.	participants and result in higher Cap-and-Trade compliance costs for SDG&E and its end-use ratepayers.

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4. Historical/Rec orded Specified Imported MWh and calculated Emissions (The 2024 Specified Imported MWh and calculated Emissions appear in Stephen M.	D.08-04-023 D.14-10-033, D.16-08-024, D.17-05-035, D.17-09-023, Public Utilities Code Section 454.5(g) General Order ("GO") 66-D 17 CCR § 95914(c) (the "ARB Confidentiality Regulations") Annual GHG Emissions and Associated Costs in Template D-2 of D.14-10-033 and revised in D.15-01-024 Template D-2 designates forecasted and recorded Energy Imports (Specified)	The Protected Information is entitled to confidential treatment under applicable law, including, but not limited to, the legal authority cited herein. The information does not expressly fall within any category of the IOU Matrix applicable to electric procurement information, but is market-sensitive information. Among other things, 17 CCR Section 95914(c)(1) of the Capand-Trade regulations prohibits disclosure of any auction-related information. Violation of Section 95914 may subject SDG&E to penalties by the California Air Resources Board. In addition, Attachments A, C & D of D.15-01-024 and Appendices A & B of D.15-10-032 require Auction-related information, forecasts of emissions intensity, forecasts of greenhouse gas (GHG) costs, GHG transactions, compliance instrument prices, weight average cost ("WAC") and other GHG information to be kept confidential. Additionally, the Protected Information also includes trade secret information because SDG&E's bidding/consignment strategies contain "commercial value," which gives SDG&E "an opportunity to obtain a business advantage over competitors who do not know or use it."
(The 2024 Specified		strategies contain "commercial value," which gives SDG&E "an
Imported MWh and		opportunity to obtain a business advantage over competitors
1	Energy Imports (Specified)	
Elliott's Testimony.	emissions as confidential. Knowledge of the MWh	Disclosure of this information would place SDG&E at an unfair business disadvantage relative to other Cap-and-Trade market
The 2013- 2024 Recorded Specified	makes discovery of the	participants and result in higher
Imported Emissions	emissions possible, thus the	Cap-and-Trade compliance costs for SDG&E and its end-use ratepayers.
appear in Attachment G of this Application.)	MWh are also confidential.	
	Gov't Code §§6254(k),	
	6254.7 (d), Evidence Code 1060, Civil	
	Code §3426 et seq.	
5. Historical/Rec orded	D.08-04-023	The Protected Information is entitled to confidential treatment under applicable law, including, but not limited to, the legal
oraea Unspecified	D.14-10-033, D.16-08-024,	authority cited herein. The information does not expressly fall
Imported	D.17-05-035, D.17-09-023, Public Utilities Code	within any category of the IOU Matrix applicable to electric procurement information, but is market-sensitive information.
MWh and	Section 454.5(g)	
calculated Emissions		Among other things, 17 CCR Section 95914(c)(1) of the Capand-Trade regulations prohibits disclosure of any auction-
Littessivits	General Order ("GO") 66-D	related information. Violation of Section 95914 may subject SDG&E to penalties by the California Air Resources Board.
	17 CCR § 95914(c) (the	
	"ARB Confidentiality Regulations")	In addition, Attachments A, C & D of D.15-01-024 and Appendices A & B of D.15-10-032 require Auction-related
	Transmis)	information, forecasts of emissions intensity, forecasts of
	Annual GHG Emissions and	greenhouse gas (GHG) costs, GHG transactions, compliance instrument prices, weight average cost ("WAC") and other
	Associated Costs in Template D-2 of D.14-10-	GHG information to be kept confidential.
(The 2024	1611plate D-2 01 D.14-10-	Additionally, the Protected Information also includes trade
Unspecified		secret information because SDG&E's bidding/consignment

	Imported MWh and calculated Emissions appear in Stephen M. Elliott's Testimony. The 2013- 2024 Unspecified Imported Emissions appear in Attachment G of this Application.)	O33 and revised in D.15-01-024 Template D-2 designates forecasted and recorded Energy Imports (Unspecified) emissions as confidential. Knowledge of the MWh makes discovery of the emissions possible, thus the MWh are also confidential. Gov't Code §§6254(k), 6254.7 (d), Evidence Code 1060, Civil	strategies contain "commercial value," which gives SDG&E "an opportunity to obtain a business advantage over competitors who do not know or use it." Disclosure of this information would place SDG&E at an unfair business disadvantage relative to other Cap-and-Trade market participants and result in higher Cap-and-Trade compliance costs for SDG&E and its end-use ratepayers.
6.	Historical RPS Adjustment eligible MWh and calculated Emissions	D.08-04-023 D.14-10-033, D.16-08-024, D.17-05-035, D.17-09-023, Public Utilities Code Section 454.5(g) General Order ("GO") 66-D	The Protected Information is entitled to confidential treatment under applicable law, including, but not limited to, the legal authority cited herein. The information does not expressly fall within any category of the IOU Matrix applicable to electric procurement information, but is market-sensitive information. Among other things, 17 CCR Section 95914(c)(1) of the Capand-Trade regulations prohibits disclosure of any auction-related information. Violation of Section 95914 may subject
	(The RPS Adjustment eligible MWh and calculated Emissions for 2024 appear in Stephen M. Elliott's Testimony. The 2013- 2024 RPS Adjustment Emissions appear in Attachment G of this Application.)	17 CCR § 95914(c) (the "ARB Confidentiality Regulations") Annual GHG Emissions and Associated Costs in Template D-2 of D.14-10-033 and revised in D.15-01-024 Template D-2 designates forecasted and recorded Energy Imports (Unspecified) emissions, which includes any applicable RPS Adjustments as confidential. Knowledge of the MWh makes discovery of the emissions possible, thus the MWh are also confidential. Gov't Code §§6254(k), 6254.7 (d), Evidence Code 1060, Civil Code §3426 et seq.	SDG&E to penalties by the California Air Resources Board. In addition, Attachments A, C & D of D.15-01-024 and Appendices A & B of D.15-10-032 require Auction-related information, forecasts of emissions intensity, forecasts of greenhouse gas (GHG) costs, GHG transactions, compliance instrument prices, weight average cost ("WAC") and other GHG information to be kept confidential. Additionally, the Protected Information also includes trade secret information because SDG&E's bidding/consignment strategies contain "commercial value," which gives SDG&E "an opportunity to obtain a business advantage over competitors who do not know or use it." Disclosure of this information would place SDG&E at an unfair business disadvantage relative to other Cap-and-Trade market participants and result in higher Cap-and-Trade compliance costs for SDG&E and its end-use ratepayers.

<i>7</i> .	Total Direct	D.08-04-023	The Protected Information is entitled to confidential treatment
	Compliance		under applicable law, including, but not limited to, the legal
	Obligation	D.14-10-033, D.16-08-024,	authority cited herein. The information does not expressly fall
	O	D.17-05-035, D.17-09-023,	within any category of the IOU Matrix applicable to electric
		Public Utilities Code	procurement information, but is market-sensitive information.
	(The 2024 Total	Section 454.5(g)	1 11 15 600 6 1 05014()(1) 01 6
	Direct		Among other things, 17 CCR Section 95914(c)(1) of the Cap-
	Compliance	General Order ("GO") 66-D	and-Trade regulations prohibits disclosure of any auction-
	Obligation	General Order (GO) 60-D	related information. Violation of Section 95914 may subject
	appears in	17 CCD 8 05014(a) (the	SDG&E to penalties by the California Air Resources Board.
	Stephen M.	17 CCR § 95914(c) (the "ARB Confidentiality	In addition Attachments A. C. & D. of D. 15.01.024 and
	Elliott's		In addition, Attachments A, C & D of D.15-01-024 and Appendices A & B of D.15-10-032 require Auction-related
	Testimony.	Regulations")	information, forecasts of emissions intensity, forecasts of
	The 2013- 2024		greenhouse gas (GHG) costs, GHG transactions, compliance
	Total Direct	Annual GHG Emissions and	instrument prices, weight average cost ("WAC") and other
	Compliance	Associated Costs in	GHG information to be kept confidential.
	Obligation appear	Template D-2 of D.14-10-	
	in Attachment G	033 and revised in D.15-01-	Additionally, the Protected Information also includes trade
	of this	024	secret information because SDG&E's bidding/consignment
	Application.)	021	strategies contain "commercial value," which gives SDG&E "an
		Template D-2 designates	opportunity to obtain a business advantage over competitors
		forecasted and recorded	who do not know or use it."
		Direct GHG Emissions	
		Subtotal as confidential.	Disclosure of this information would place SDG&E at an unfair
			business disadvantage relative to other Cap-and-Trade market
		Gov't Code §§6254(k),	participants and result in higher
		6254.7 (d), Evidence	Cap-and-Trade compliance costs for SDG&E and its end-use
		Code 1060, Civil	ratepayers.
		Code §3426 et seq.	
8.	Indirect	D.08-04-023	The Protected Information is entitled to confidential treatment
	Purchases in		under applicable law, including, but not limited to, the legal
	MWh and	D.14-10-033, D.16-08-024,	authority cited herein. The information does not expressly fall
	calculated	D.17-05-035, D.17-09-023,	within any category of the IOU Matrix applicable to electric
	Emissions	Public Utilities Code	procurement information, but is market-sensitive information.
	Linustons	Section 454.5(g)	
		Section 13 1.3(g)	Among other things, 17 CCR Section 95914(c)(1) of the Cap-
		General Order ("GO") 66-D	and-Trade regulations prohibits disclosure of any auction-
		General Order (GO) 60-D	related information. Violation of Section 95914 may subject
		17 CCR § 95914(c) (the	SDG&E to penalties by the California Air Resources Board.
	(The 2024	= ', ', '	In addition, Attachments A, C & D of D.15-01-024 and
	forecasted	"ARB Confidentiality	Appendices A & B of D.15-10-032 require Auction-related
	Indirect Purchase	Regulations")	information, forecasts of emissions intensity, forecasts of
	MWhs and		greenhouse gas (GHG) costs, GHG transactions, compliance
	calculated	Annual GHG Emissions and	instrument prices, weight average cost ("WAC") and other
	Emissions appear	Associated Costs in	GHG information to be kept confidential.
	in Stephen M.	Template D-2 of D.14-10-	1
	Elliott's	033 and revised in D.15-01-	Additionally, the Protected Information also includes trade
	Testimony.	024	secret information because SDG&E's bidding/consignment
	The 2013-2023		strategies contain "commercial value," which gives SDG&E "an
	final and 2024	Template D-2 designates	opportunity to obtain a business advantage over competitors
	forecasted	forecasted and recorded	who do not know or use it."
	Indirect Emission		
	calculations		

	appear in Attachment G of this Application.)	Indirect GHG Emissions as confidential. Knowledge of the MWh makes discovery of the emissions possible, thus, the MWh are also confidential.	Disclosure of this information would place SDG&E at an unfair business disadvantage relative to other Cap-and-Trade market participants and result in higher Cap-and-Trade compliance costs for SDG&E and its end-use ratepayers.
		Gov't Code §§6254(k), 6254.7 (d), Evidence Code 1060, Civil Code §3426 et seq.	
9.	Direct GHG Costs	D.08-04-023 D.14-10-033, D.16-08-024, D.17-05-035, D.17-09-023, Public Utilities Code Section 454.5(g) General Order ("GO") 66-D 17 CCR § 95914(c) (the	The Protected Information is entitled to confidential treatment under applicable law, including, but not limited to, the legal authority cited herein. The information does not expressly fall within any category of the IOU Matrix applicable to electric procurement information, but is market-sensitive information. Among other things, 17 CCR Section 95914(c)(1) of the Capand-Trade regulations prohibits disclosure of any auction-related information. Violation of Section 95914 may subject SDG&E to penalties by the California Air Resources Board.
	(The 2024 Direct GHG Costs appear in Stephen M. Elliott's Testimony. The 2013 – 2023 final and 2024 estimated Direct GHG Costs appear in Attachment G of this Application.)	"ARB Confidentiality Regulations") Annual GHG Emissions and Associated Costs in Template D-2 of D.14-10- 033 and revised in D.15-01- 024 Template D-2 designates forecasted and recorded Direct GHG Costs as confidential. Gov't Code §§6254(k), 6254.7 (d), Evidence Code 1060, Civil Code §3426 et seq.	In addition, Attachments A, C & D of D.15-01-024 and Appendices A & B of D.15-10-032 require Auction-related information, forecasts of emissions intensity, forecasts of greenhouse gas (GHG) costs, GHG transactions, compliance instrument prices, weight average cost ("WAC") and other GHG information to be kept confidential. Additionally, the Protected Information also includes trade secret information because SDG&E's bidding/consignment strategies contain "commercial value," which gives SDG&E "an opportunity to obtain a business advantage over competitors who do not know or use it." Disclosure of this information would place SDG&E at an unfair business disadvantage relative to other Cap-and-Trade market participants and result in higher Cap-and-Trade compliance costs for SDG&E and its end-use ratepayers.
10.	Estimated Indirect GHG Costs	D.08-04-023 D.14-10-033, D.16-08-024, D.17-05-035, D.17-09-023, Public Utilities Code Section 454.5(g) General Order ("GO") 66-D	The Protected Information is entitled to confidential treatment under applicable law, including, but not limited to, the legal authority cited herein. The information does not expressly fall within any category of the IOU Matrix applicable to electric procurement information, but is market-sensitive information. Among other things, 17 CCR Section 95914(c)(1) of the Capand-Trade regulations prohibits disclosure of any auction-related information. Violation of Section 95914 may subject SDG&E to penalties by the California Air Resources Board. In addition, Attachments A, C & D of D.15-01-024 and Appendices A & B of D.15-10-032 require Auction-related

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(The 2024 estimated Indirect GHG Costs	17 CCR § 95914(c) (the "ARB Confidentiality	information, forecasts of emissions intensity, forecasts of greenhouse gas (GHG) costs, GHG transactions, compliance instrument prices, weight every good ("WAC") and other
appear in	Regulations")	instrument prices, weight average cost ("WAC") and other GHG information to be kept confidential.
Stephen M. Elliott's Testimony. The 2013 - 2024 estimated Indirect GHG Costs	Annual GHG Emissions and Associated Costs in Template D-2 of D.14-10- 033 and revised in D.15-01- 024	Additionally, the Protected Information also includes trade secret information because SDG&E's bidding/consignment strategies contain "commercial value," which gives SDG&E "an opportunity to obtain a business advantage over competitors who do not know or use it."
appear in Attachment G of this Application.)	Template D-2 designates forecasted and recorded Indirect GHG Costs as confidential.	Disclosure of this information would place SDG&E at an unfair business disadvantage relative to other Cap-and-Trade market participants and result in higher Cap-and-Trade compliance costs for SDG&E and its end-use ratepayers.
	Gov't Code §§6254(k), 6254.7 (d), Evidence Code 1060, Civil Code §3426 et seq.	
11. GHG Quarterly Auction	D.08-04-023	The Protected Information is entitled to confidential treatment under applicable law, including, but not limited to, the legal
Auction Revenue	D.14-10-033, D.16-08-024, D.17-05-035, D.17-09-023, Public Utilities Code Section 454.5(g)	authority cited herein. The information does not expressly fall within any category of the IOU Matrix applicable to electric procurement information, but is market-sensitive information. Among other things, 17 CCR Section 95914(c)(1) of the Capand-Trade regulations prohibits disclosure of any auction-
	General Order ("GO") 66-D 17 CCR § 95914(c) (the "ARB Confidentiality Regulations")	related information. Violation of Section 95914 may subject SDG&E to penalties by the California Air Resources Board. In addition, Attachments A, C & D of D.15-01-024 and Appendices A & B of D.15-10-032 require Auction-related
(The 2024 GHG Quarterly Auction Revenues appear in Stephen M.	1a. of Attachment A of D.14-10-033 and revised in D.15-01-024	information, forecasts of emissions intensity, forecasts of greenhouse gas (GHG) costs, GHG transactions, compliance instrument prices, weight average cost ("WAC") and other GHG information to be kept confidential.
Elliott's Testimony. The 2013 - 2024 actual GHG Quarterly Auction Revenues	1a. makes the following confidential: "AB 32 GHG auction participation." Although Annual Auction Revenues are public,	Additionally, the Protected Information also includes trade secret information because SDG&E's bidding/consignment strategies contain "commercial value," which gives SDG&E "an opportunity to obtain a business advantage over competitors who do not know or use it."
appear in Attachment G of this Application.)	Quarterly Auction Revenues must be confidential since public auction settlement prices and Quarterly Auction Revenues would reveal SDG&E's quarterly auction	Disclosure of this information would place SDG&E at an unfair business disadvantage relative to other Cap-and-Trade market participants and result in higher Cap-and-Trade compliance costs for SDG&E and its end-use ratepayers.
	participation as a consigner	
	Gov't Code §§6254(k),	

6254.7 (d), Evidence	
Code 1060, Civil	
Code §3426 et seq.	