

Application No.: A.24-05-~~XXX~~010
Exhibit No.: SDGE-132
Witness: Jimmy Elias

UPDATED PREPARED DIRECT TESTIMONY OF
JIMMY ELIAS
ON BEHALF OF
SAN DIEGO GAS & ELECTRIC COMPANY

*****REDACTED – PUBLIC VERSION*****

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



May–October 2115, 2024

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ATTACHMENT A – SDG&E 2025 ERRRA AND LG EXPENSES (CONFIDENTIAL)

ATTACHMENT B – SDG&E 2025 GENERATION PORTFOLIO DELIVERY VOLUMES (CONFIDENTIAL)

ATTACHMENT C – SDG&E 2025 RENEWABLE RESOURCE DETAIL

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ATTACHMENT G – DECLARATION OF CHRIS SUMMERS REGARDING CONFIDENTIALITY OF CERTAIN DATA/DOCUMENTS PURSUANT TO D.16-08-024, *et al.*

1 generation resources owned by SDG&E; (3) renewable generation resources that are under
2 contract for 2025; and (4) Qualifying Facilities (“QFs”) under the Public Utility Regulatory
3 Policies Act (“PURPA”) that are under contract for 2025.

4 Section III quantifies the costs associated with the resources described in Section II,
5 along with other electric procurement costs that are recorded in ERRA, such as market
6 purchases, California Independent System Operator (“CAISO”) charges and portfolio hedging
7 costs. These costs are summarized in Attachment A.

8 Section IV provides a forecast of the 2025 SONGS Unit 1 Offsite Spent Fuel Storage
9 Costs associated with SDG&E’s 20% minority ownership interest in SONGS.

10 Section V provides a forecast of the 2025 GHG emissions and associated costs, both
11 direct and indirect, incurred in connection with SDG&E’s compliance with California’s cap-and-
12 trade program. This testimony also provides a forecast of GHG allowance auction revenues.

13 Section VI provides a forecast of the 2025 TMNBC costs.

14 Section VII provides a summary of SDG&E’s meet-and-confer activities with
15 Community Choice Aggregators in SDG&E’s service territory.

16 Finally, this testimony refers to the following attachments:

17 Attachment A: SDG&E 2025 ERRA and LG Expenses (CONFIDENTIAL)

18 Attachment B: SDG&E 2025 Generation Portfolio Delivery Volumes (CONFIDENTIAL)

19 Attachment C: SDG&E 2025 Renewable Resource Detail

20 Attachment D: SDG&E 2025 CTC Qualifying Facility Detail (CONFIDENTIAL)

21 Attachment E: SDG&E Greenhouse Gas Detail (CONFIDENTIAL)

1 **II. 2025 FORECAST OF ENERGY REQUIREMENTS AND SUPPLY RESOURCES**

2 **A. Energy Requirements Forecast**

3 The sales forecast utilized in this filing was developed internally by SDG&E witness Mr.
4 Simmerman. This forecast includes the projected load departure of Community Choice
5 Aggregators (“CCA”) Clean Energy Alliance (“CEA”), and San Diego Community Power
6 (“SDCP”). Using this forecast and adjusting for direct access load, SDG&E projects that the
7 energy requirements for SDG&E’s bundled load for 2025 will be [REDACTED] gigawatt hours (“GWh”).
8 The 2025 forecast is [REDACTED] GWh or [REDACTED] more than SDG&E’s forecasted bundled energy for 2024
9 ([REDACTED] GWh).

10 **B. Supply Resource Forecast**

11 After determining the amount of energy that SDG&E’s bundled load customers will
12 require in 2025, SDG&E developed a forecast of the supply that will meet that demand. To
13 quantify the generation associated with the supply resources, I used the PLEXOS production cost
14 modeling software. Inputs to this model include the characteristics of the various generation
15 resources, including capacity, heat rate, operating constraints, both fixed and variable Operating
16 and Maintenance (“O&M”) costs, and other factors that impact each plant’s dispatch and
17 generation costs. The natural gas and electric market price forecasts were derived using a recent
18 (September~~March~~ 3~~5~~, 2024) assessment of 2025 market prices. The model simulates a least-cost
19 dispatch of SDG&E’s resource portfolio for every hour of 2025 to serve load. The supply
20 resources fall into the following four categories, each of which is addressed in the next four
21 subsections.

22 **1. SDG&E-Contracted Conventional Generation**

- 23 • SDG&E has multiple conventional generation resources under contract in
24 its 2025 resource portfolio. These resources are available under a variety

of contractual arrangements, including tolling contracts, fixed energy contracts, and contracts for Resource Adequacy only. The largest of the tolling and fixed energy contracts are:

- the Carlsbad Energy Center Power Purchase Agreement (“PPA”) for the output of a 528 MW simple cycle combustion turbine unit;
- the Pio Pico Energy Center PPA for the output of a 336 MW simple cycle combustion turbine unit;
- the Orange Grove PPA for the output of two 48 MW simple cycle combustion turbine units;
- the El Cajon Energy Center PPA for the output of a 48 MW simple cycle combustion turbine unit; and
- the Escondido Energy Center PPA for the output of a 48 MW simple cycle combustion turbine unit.

The forecasted generation for these contracts is detailed in Attachment B and is

summarized in Table 1 below:¹

		Table 1: Generation (GWh)		
		2025	2024	Difference
El Cajon Energy Center				
Orange Grove				
Escondido Energy Center				
Pio Pico				
Carlsbad Energy Center				
Total				

¹ Table sums may not total due to rounding.

		Table 1: Generation (GWh)		
		2025	2024	Difference
1	El Cajon Energy Center			
	Orange Grove			
	Escondido Energy Center			
	Pio Pico			
	Carlsbad Energy Center			
	Total			

2 SDG&E also enters into additional contracts each year to meet its California Public
3 Utilities Commission (“Commission” or “CPUC”) Resource Adequacy (“RA”) requirements.²
4 Under its RA contracts, SDG&E shows this capacity as meeting its RA obligation, but SDG&E
5 does not have rights to the energy or ancillary services from these units. For the 2024 ERRA
6 Forecast proceeding, SDG&E was directed in Decision (“D.”)-23-12-021 by the CPUC to use
7 2023 average of actual RA sales as a basis for forecasting 2024 sales.³ However, for the 2025
8 forecast, SDG&E is not held to this methodology.⁴ For 2025, SDG&E calculates Modified Cost
9 Allocation Mechanism (“MCAM”) sales separately from non-MCAM sales. Per D.23-12-014,
10 MCAM sales are based on contractual amounts, which were then amended per advice letter
11 (“AL”) 4516421-E in [April/September](#) 2024. For non-MCAM sales, SDG&E ~~forecasted the most~~
12 ~~constrained hour by month in 2025⁵, applied a [REDACTED] Planning Reserve Margin (“PRM”)⁶, and~~
13 ~~forecasted the excess RA during that hour. From there, an annual monthly average was then~~

² California Public Utilities Code Section 380 established the Resource Adequacy program to provide enough resources to the CAISO to ensure the safe and reliable operation of the grid in real time and to provide appropriate incentives for the siting and construction of new resources needed for reliability in the future.

³ D.23-12-021 at Ordering Paragraph (“OP”) 10.

⁴ *Id.*

⁵ ~~SDG&E notes that as of the time of this testimony, it does not yet have its 2025 RA requirements.~~

⁶ ~~SDG&E used a [REDACTED] PRM to be consistent with SDG&E’s Year Ahead Solicitation methodology.~~

1 calculated, and [REDACTED] was withheld to cover the uncertainties surrounding the Slice of Day
2 implementation, as well as any unplanned outages. The remaining [REDACTED] of the excess MW was
3 spread evenly over the resources in SDG&E's RA portfolio, proportionate to the average 2024
4 Net Qualifying Capacity ("NQC") of each resource as published by CAISO. SDG&E expects
5 that some of the uncertainty surrounding RA will be resolved by the time it files the October
6 Update to this application. Any changes that impact the forecasted RA sales amounts will be
7 incorporated at that time. determined its total monthly position using the CAISO published 2024
8 monthly Net Qualifying Quantity ("NQC") of each resource in SDG&E's RA portfolio. To
9 determine the capacity necessary to retain for compliance, SDG&E used monthly CEC/CPUC
10 issued compliance requirements for the most constrained hour by month in 2025,⁷ applied a 17%
11 Planning Reserve Margin ("PRM"),⁸ and included a monthly buffer⁹ to determine its required
12 monthly compliance MW's. SDG&E's remaining capacity was offered for sale in SDG&E's
13 Resource Adequacy solicitation for 2025. After netting out the capacity anticipated to be sold
14 from this solicitation, any remaining excess capacity was assumed to be offered for sale to the
15 market, with any amounts not sold classified as unsold. SDG&E assumed it would further sell
16 50% of this excess RA in Q2 and 100% in Q3. For 2025, SDG&E forecasts average monthly
17 MCAM and non-MCAM sales of [REDACTED] MW and [REDACTED] MW of RA capacity, respectively.
18 Rulemaking ("R.") 20-05-003¹⁰ established the cost recovery mechanism for the resources in

⁷ 2025 Coincident Peak Forecast used to determine most constrained hour.

⁸ 17% PRM approved in D.24-06-004SDG&E used a [REDACTED] PRM to be consistent with SDG&E's Year-Ahead Solicitation methodology.

⁹ — Q1: [REDACTED] buffer, Q2: [REDACTED] buffer, Q3: [REDACTED] buffer, Oct: [REDACTED] buffer, Nov: [REDACTED] buffer, Dec: [REDACTED] buffer

¹⁰ A successor docket to R.16-02-007, this proceeding addressed ongoing oversight of the Integrated Resource Plan ("IRP") planning process and the procurement necessary to achieve the goals set by the Legislature in Senate Bill ("SB") 350 and SB 100, as well as by the Commission in R.16-02-007.

1 compliance with D.19-11-016,¹¹ while D.21-03-056¹² establishes the cost recovery mechanism
2 for resources as a result of procurement in R.20-11-003.¹³ ~~Some of these contracts were
3 executed prior to the official announcement of CCA load departure and were procured to meet
4 load levels assuming no CCA load departure. This RA sales forecast reflects the significant
5 uncertainty at this time with regard to 2025 RA. SDG&E does not know its RA requirements for
6 2025 and there are open issues regarding the implementation of slice-of-day in R.23-10-011
7 which could significantly impact the 2025 RA market. As the slice-of-day construct places new
8 requirements on LSEs, SDG&E cannot use prior year RA activity to forecast its requirements,
9 portfolio needs and any associated sales. SDG&E is hopeful that these uncertainties will be
10 rectified in time for its October update.~~

11 **2. SDG&E-Owned Dispatchable Generation**

12 SDG&E owns several generation facilities, which it uses to meet its bundled customer
13 load, including the following:

- 14 • the Palomar Energy Center (“Palomar”), a 588 MW combined cycle
15 power plant;
- 16 • the Desert Star Energy Center (“Desert Star”), a 485 MW combined cycle
17 power plant;
- 18 • the Miramar Energy Facility (“Miramar I and II”), consisting of two 48
19 MW simple cycle combustion turbine units;

¹¹ The IRP proceeding, R.16-02-007, issued D.19-11-016, requiring 3,300 MW of procurement by all load-serving entities (“LSEs”) within the CAISO for purposes of long-term statewide planning. The decision required at least 50% of the resources to come online by August 1, 2021, 75% by August 1, 2022, and 100% by August 1, 2023.

¹² Electric Reliability proceeding directed the investor-owned utilities (“IOUs”) to procure additional resources for the summers of 2021 - 2023; procurement was expanded to include 2024 - 2025 in D.23-06-029.

¹³ During August 2020, the Commission instituted the Emergency Reliability Rulemaking Order as a result of extreme heat storms experienced in California.

- the Battery Storage facilities, consisting of El Cajon at 7.5 MW, Top Gun at 30 MW, Fallbrook at 40 MW, Escondido at 30 MW, Melrose at 20 MW, Pala-Gomez at 10 MW, Clairemont at 10 MW, Boulevard at 10 MW, Elliott at 10 MW, Paradise at 10 MW, Fallbrook 2 at 29.6 MW, Kearny (“Kearny South and North”), consisting of two 10 MW facilities, Westside Canal at 131 MW, and Santee at 10 MW;
- the Cuyamaca Peak Energy Plant, consisting of a 45 MW simple cycle combustion turbine.

These units are dispatched by the CAISO for generation and ancillary services (“A/S”) awards based on economic merit.¹⁴ The forecasted generation for these plants for 2025 is detailed in Attachment B and is summarized in Table 2 below:

Table 2: Generation (GWh)			
	2025	2024	Difference
Palomar			
Desert Star			
Miramar			
Battery Storage			
Cuyamaca			
Total			

Table 2: Generation (GWh)			
	2025	2024	Difference
Palomar			
Desert Star			
Miramar			
Battery Storage			
Cuyamaca			
Total			

¹⁴ SDG&E’s dispatch model considered only generation dispatched for energy and not for A/S because the CAISO co-optimizes market awards between energy and A/S based on the opportunity cost of capacity. Thus, the economic benefit (and ERRA contribution) of using energy for generation is equivalent to using capacity for A/S.

1 **3. Renewable Energy Contracts**

2 The 2025 forecast of renewable energy supply from CPUC-approved contracts is
3 6,0196,137 GWh, which includes 628 GWh of Renewable Energy Credit (“REC”) quantities¹⁵
4 that are delivered to SDG&E in conjunction with existing non-renewable imports. This forecast
5 represents a decrease of 578460 GWh from the 2024 forecast (6,597 GWh). The forecasted
6 generation associated with SDG&E’s monthly renewable contracts is set forth in Attachment C.

7 For 2025, SDG&E forecasts it will receive 1,2822,147 GWh of bundled renewable
8 energy under 52 contracts with facilities that generate electricity using wind, solar, biogas, and
9 non-pumped hydro technologies. This number considers forecasted RPS sales for 2025 in the
10 amount of 4,8553,872 GWh. Forecasted sales represent a reduction of renewable energy credits
11 to maintain an equivalent RPS compliance position considering CCA load departure and
12 voluntary allocations of RPS resources as designated in R.18-07-003.¹⁶ These sales volumes are
13 estimates only and do not represent specific current or future agreements with
14 counterparties. ~~Any sales agreements subsequently entered into by SDG&E will be included in~~
15 ~~the October Update filing.~~—The forecasted generation for projects that are currently online and
16 operating, and for those projects that have recently come online and are expected to continue
17 operations in 2025, are derived from generation profiles based on historical data for similar
18 technologies.¹⁷ The forecasted energy mix from these renewable resources is shown in Table 3
19 below:

¹⁵ Renewable Energy Credits represent the green attribute of renewable generation and, while they can be purchased independent of physical delivery of generation from the source, they must accompany a delivery of “tagged” physical power to be imported into California.

¹⁶ Based on R.17-06-026 the amount of RPS sales is subject to change.

¹⁷ SDG&E did not include renewable energy quantities or costs associated with the Sustainable Communities Photovoltaic program because costs for this program are not charged to ERRRA.

Table 3: Generation (GWh)			
	2025	2024	Difference
Solar	3,333	3,251	82
Wind	1,831	2,163	(332)
Wind RECs	628	902	(274)
Biogas	217	217	0
Other	9	64	(55)
RPS Sales	(3,872)	(4,802)	930
Total	2,147	1,794	(512)

Table 3: Generation (GWh)			
	2025	2024	Difference
Solar	3,453	3,251	202
Wind	1,831	2,163	(332)
Wind RECs	628	902	(274)
Biogas	216	217	(1)
Other	9	64	(55)
RPS Sales	(4,855)	(4,802)	(53)
Total	1,282	1,794	(512)

4. Competitive Transition Charge (“CTC”) Contracts

In 2025, SDG&E will have approximately 52 MW of CTC capacity under contract, with one QF.¹⁸

SDG&E’s CTC contracts include a combination of must-take and dispatchable resources. For must-take resources, SDG&E is obligated to pay the contract price for all delivered QF generation and schedule it into the CAISO market; SDG&E has no such obligation with dispatchable resources. SDG&E has an amendment with Goal Line, which provides SDG&E with more economic dispatch rights. SDG&E forecasted the plants’ dispatch in accordance with

¹⁸ The actual number of active QF contracts is over 50, but many of these QF resources only serve on-site load and do not deliver net energy to SDG&E. As a result, these are not included in the production cost model analysis. The one QF referenced above delivers net energy to SDG&E and thus is included in SDG&E’s model.

1 these terms. The forecast of CTC energy supply for 2025 is [REDACTED]. The forecasted
2 generation for these plants is detailed in Attachment D.

3 **III. 2025 FORECAST OF ERRA EXPENSES**

4 To quantify the costs associated with the supply resources described in Section II, the
5 production cost model also tracks the costs of the economic dispatch. Electric procurement
6 expenses incurred by SDG&E to serve its bundled load are also recorded to the ERRA. These
7 expenses include, among other items, costs and revenues for energy and capacity cleared through
8 the CAISO market, power purchase contract costs, generation fuel costs, market energy purchase
9 costs, CAISO charges, brokerage fees, and hedging costs.

10 SDG&E expects to incur \$~~560~~389 million of ERRA costs in 2025,¹⁹ as reflected in
11 Attachment A. This forecast is \$~~125~~9 million ~~more~~less than the \$448 million forecasted for
12 2024.²⁰

13 The above-market costs of all generation resources that are eligible for cost recovery
14 through PCIA rates are recovered in PABA. SDG&E's 2025 PABA cost forecast is \$~~(72)~~128
15 million.²¹ This compares with a forecast of \$(33) million for 2024 filed in the 2024 ERRA
16 forecast proceeding.

17 The cost forecasts for specific ERRA items are discussed in greater detail below.

¹⁹ This amount does not include Franchise Fees and Uncollectible ("FF&U"), nor do any of the other figures in my testimony.

²⁰ 2024 numbers reflect the updated RA sales methodology ordered and therefore differ from the figures presented in the October update testimony.

²¹ In D.07-01-025, the Commission adopted the PCIA methodology for CCA customers. AL 3318-E, effective January 1, 2019, established the PABA to record the "above-market" costs and revenues associated with all PCIA eligible resources by vintage subaccounts.

1 **A. ISO Load Charges**

2 The CAISO supplies and sells to SDG&E the energy and A/S necessary to meet
3 SDG&E’s bundled load requirement. Based on forecasted prices for energy and A/S, SDG&E’s
4 production cost model forecasts ██████████ of ISO load charges for 2025. This cost
5 includes the indirect GHG costs embedded in the market price of energy. GHG quantities and
6 costs are presented in Section V.

7 **B. ISO Supply Revenues**

8 In the CAISO market, all generation from SDG&E’s resource portfolio is sold to the
9 CAISO. Based on the market price benchmark for energy, SDG&E forecasts revenues totaling
10 ██████████ for generation sold in 2025.

11 **C. Contracted Energy Purchases**

12 **1. Purchased Power Contracts**

13 SDG&E’s forecast of total costs for non-renewable power purchase and capacity
14 contracts in 2025 is \$ ██████████. These costs cover capacity payments and variable
15 generation costs for facilities with which SDG&E has contracts. The largest components in this
16 category are midterm reliability procurement projects totaling ██████████.^{22,23} This
17 category also includes \$ ██████████ of RA sale transactions to maintain SDG&E’s RA
18 compliance position considering CCA load departure in 2025.

²² Resolution E-5277 was approved July 13, 2023 allowing SDG&E to count the utility-owned Westside Canal Energy Storage Project towards its midterm reliability procurement requirements pursuant to D.21-06-035 and modify the project’s cost recovery mechanism to PCIA vintage 2021.

²³ AL 4096-E which included three projects: Edward Sanborn, Bottleneck, and Cald was approved January 2023. AL 4189-E which included projects: Yellow Pine Solar Hybrid, Daggett Storage and Nova Power Bank Storage was approved August 2023. AL 4299-E which included one project: Edward Sanborn BESS was approved March 2024.

1 **2. Renewable Energy Contracts**

2 SDG&E’s renewable energy contracts usually contain only an energy payment and no
3 capacity payment. For 2025, SDG&E’s renewable energy portfolio will include a cost for all the
4 renewable power delivered based on contract prices and the ~~renewable energy credits (RECs)~~
5 described in Section II under “Renewable Energy Contracts.” All costs associated with these
6 contracts are forecasted to be \$~~485372~~ million for 2025 and are booked to ERRA with above
7 market costs booked to PABA. This includes \$~~152259~~ million of REC sales to maintain an
8 equivalent RPS compliance position considering CCA load departure and allocations according
9 to the VAMO process outlined in R.18-07-003. Attachment C details the renewable projects by
10 technology type, their costs, and forecasted energy deliveries.

11 Customers who opt into the Green Tariff Shared Renewables (“GTSR”) program, which
12 consists of both a Green Tariff (“GT”) component and an Enhanced Community Renewables
13 (“ECR”) component, pay a subset of the renewable costs.²⁴ On August 25, 2022, the CPUC
14 issued a ruling that suspended the GT program; as a result, the estimated GT customer usage in
15 2025 is 0 GWh.²⁵ The Interim Pool Sales for 2025 are forecast to be zero because forecasted
16 customer usage is lower than the forecasted generation from the Midway and Wister solar
17 projects. The estimated GT charges include the cost of local solar²⁶ of \$ [REDACTED], Grid
18 Management Charges (“GMC”) of \$~~1.1181.231~~/MWh and Western Renewable Energy

²⁴ D.15-01-051 authorizing the GTSR program was approved on January 29, 2015. The GT and ECR components are two separate rate offerings under the GTSR Program accessing different pools of solar resources and with different terms.

²⁵ GT and ECR usage forecasts were developed using average consumption estimates for each customer class in conjunction with program enrollment targets.

²⁶ Cost of local solar is an average price of projects built specifically to serve the GT component (GT Dedicated Procurement Projects).

1 Generation Information System (“WREGIS”) costs of \$0.00400/MWh. The estimated total
2 energy procurement cost of GT in 2025 is \$0. On September 27, 2024, SDG&E filed a Tier 2
3 AL to close its ECR program.²⁷ The estimated ECR customer usage in 2025 is 0.00 GWh. The
4 estimated total cost of ECR in 2025 is \$0. Additionally, the solar value adjustment was
5 calculated as \$ [REDACTED].²⁸ These GTSR rates are illustrative; full details of SDG&E’s GTSR
6 proposal are discussed in the testimony of SDG&E witness Ms. Wissman.

7 **3. Competitive Transition Charge (“CTC”) Contracts**

8 SDG&E’s CTC contracts consist of dispatchable capacity or firm capacity PURPA
9 contracts. These contracts include provisions for both energy and capacity payments. The
10 energy payments for QFs that are under firm capacity PURPA contracts are forecasted using
11 SDG&E’s Short-Run Avoided Cost (“SRAC”) formula.²⁹ For the dispatchable contracts,
12 SDG&E pays fuel, variable O&M and capacity payments. These contracts, whether PURPA or
13 dispatchable, are considered CTC contracts and the ERRA expenses are based on CAISO
14 revenues. This is a newly proposed change to up-to-market cost recovery; full details of
15 SDG&E’s proposal are discussed in the testimony of SDG&E witness Ms. Felan. Any costs,
16 including capacity payments, greater than the market price benchmark are booked to the TCBA.
17 For the purposes of ERRA accounting, ERRA expenses for CTC contracts are recorded on Line
18 7 of Attachment A, “Contract Costs (CTC up to market),” and are forecasted to be [REDACTED]
19 in 2025. Attachment D details the breakdown of all the units discussed in this section and shows

²⁷ AL 4522-E.

²⁸ In A.22-05-023 the CPUC granted SDG&E authorization to temporarily suspend the EcoChoice program, therefore, the NQC of the resources that are used to serve these customers is assumed to be zero.

²⁹ The derivation of the SRAC price for QF contracts is posted monthly on an SDG&E website: <http://www2.sdge.com/SRAC/>.

1 the associated costs, both ERRA and TCBA, and the forecasted energy deliveries. These costs
2 include the indirect GHG cost embedded in the market price that flows through the SDG&E
3 SRAC formula. GHG quantities and costs are presented in Section IV of this testimony.

4 **D. Generation Fuel**

5 **1. Palomar, Desert Star, Miramar and Cuyamaca (Fuel Expenses**
6 **Recovered through ERRA)**

7 For 2025, the ERRA expense for generation fuel purchased by SDG&E for Palomar,
8 Miramar I & II, Desert Star and Cuyamaca is forecasted to be \$ [REDACTED].³⁰ These
9 forecasted expenses include in lieu of gas fees for Palomar, which are also recovered in ERRA.
10 These costs are calculated based on SDG&E's forecasted fuel usage for this plant and the
11 applicable tariffs, Schedule GP-SUR³¹ and Schedule EG.³²

12 **E. Local Generation**

13 As previously noted, SDG&E has entered into contracts for generation resources which
14 specifically provide local RA for the SDG&E system, [and has additionally procured several](#)
15 [energy storage units that it owns](#). Because these contract costs [and energy storage unit costs](#) are
16 allocated to both bundled and unbundled customers, the costs are accounted for in a separate
17 Local Generating Balancing Account. The Carlsbad Energy Center, El Cajon Energy Storage,
18 Top Gun Energy Storage, Fallbrook Energy Storage, Escondido Energy Center, Escondido
19 Energy Storage, Melrose Energy Storage, Pala-Gomez Creek Energy Storage, Pio Pico,
20 Grossmont, a portion of Sentinel Energy Center, Clairemont, Boulevard, Elliot, Paradise,

³⁰ Capital and non-fuel operating costs for these plants are recovered in the Non-Fuel Generation Balancing Account ("NGBA") as required by D.05-08-005, Resolution E-3896 and D.07-11-046.

³¹ Customer-procured Gas Franchise Fee Surcharge

³² Natural Gas Intrastate Transportation Service for Electric Generation Customers.

1 Santee, and Fallbrook Energy Storage 2 contracts are included in this balancing account and are
2 expected to cost \$ [REDACTED], net of supply ISO revenue. Attachment A details the
3 breakdown of local generation expenses.

4 **F. Integrated Resource Planning and Electric Reliability Procurement Tracks**

5 The IRP proceeding, R.16-02-007, issued D.19-11-016, requiring 3,300 MW of
6 procurement by all LSEs within the CAISO for purposes of long-term statewide planning. The
7 decision required at least 50% of the resources to come online by August 1, 2021, 75% by
8 August 1, 2022, and 100% by August 1, 2023. The Commission determined that SDG&E is
9 responsible for 292.9 MW of incremental procurement beyond the State’s existing portfolio of
10 resources. SDG&E may also be responsible for incremental procurement of LSEs in its service
11 territory that fail to procure, whether by choice or by consequence, their allocation of the total
12 procurement need identified. This “on-behalf-of” procurement is additive to the IOU
13 procurement for its own share of the identified need. In D.19-11-016, the Commission ordered
14 cost recovery for this “backstop” procurement through a MCAM mechanism. Until the
15 Commission adopted the cost recovery for procurement undertaken in D.19-11-016, SDG&E
16 requested that the Commission authorize SDG&E to establish a new memorandum account, the
17 Resource Adequacy Procurement Memorandum Account (“RAPMA”), to track and record costs
18 related to the procurement of incremental RA capacity required by D.19-11-016 and related
19 administrative costs.³³ Resolution E-5241, approving SDG&E’s rate implementation plan to
20 recover procurement costs associated with MCAM, was issued January 2023. Therefore, this
21 2025 forecast does not have any forecasted dollars in RAPMA.

³³ Advice Letter 3707-E.

1 The Integrated Resource Plan (R.20-05-003) issued Decision D.21-06-035 requiring all
2 LSEs in the CAISO to procure a total of at least 11,500 MW of NQC. The decision requires
3 2,000 MW by 2023, an additional 6,000 MW by 2024, an additional 1,500 MW by 2025, and an
4 additional 2,000 MW by 2026. The Commission determined that SDG&E is responsible for 361
5 MW of incremental procurement beyond the State’s existing portfolio of resources. Due to
6 updated load departure forecasts since the decision, SDG&E filed advice letter 3967-E
7 requesting an adjustment to the capacity requirements to ensure both SDG&E and SDCP’s
8 respective obligations more accurately account for expected load migration. SDG&E and SDCP
9 mutually agreed and requested Commission approval to increase SDG&E’s total procurement
10 obligation by 114.3 MW and correspondingly decrease SDCP’s obligation by the same amount.
11 SDG&E’s new procurement requirement would be 475.3 MW. Any procurement resulting from
12 the Commission’s Order must be requested via advice letter outlining details of the resource and
13 cost recovery methods. SDG&E requested approval for three advice letters, AL 4096-E, AL
14 4189-E, and AL 4299-E. AL 4096-E which included three projects: Edward Sanborn,
15 Bottleneck, and Cald was approved January 2023. AL 4189-E which included four projects:
16 Yellow Pine Solar Hybrid, Luna Valley Solar, Daggett Storage and Nova Power Bank Storage
17 was approved August 2023. AL 4299-E which included one project: Edward Sanborn Battery
18 Energy Storage System (“BESS”) was approved March 2024. LSEs were not given the
19 opportunity to opt out of this procurement, and procurement costs as a result of this decision are
20 allocated to bundled customers through PCIA. However, the IOUs are designated as backstop
21 procurers in the event an LSE fails to reach its targets, and any backstop procurement costs
22 SDG&E incurs for deficient LSEs are authorized to be recovered through the MCAM cost
23 recovery mechanism.

1 In the Electric Reliability proceeding (R.20-11-003), D.21-03-056 directed the IOUs
2 within the CAISO to procure additional resource capacity for the summers of 2021 and 2022. In
3 subsequent decisions (D.21-12-015 and D.23-06-029), the IOUs were directed to procure
4 additional resource capacity for the summers of 2022, 2023, 2024, 2025. These decisions
5 authorized the IOUs to seek CAM cost recovery for any resulting procurement. SDG&E
6 requested approval for advice letter 4290-E, which included two projects: Fallbrook Energy
7 Storage 2, and Santee BESS. AL 4290-E was approved December 2023.

8 **G. CAISO Related Costs**

9 SDG&E forecasts the miscellaneous CAISO costs to be \$ [REDACTED] in 2025. SDG&E
10 also forecasts the cost of the Federal Energy Regulatory Commission (“FERC”) Fees and
11 Western Renewable Energy Generation Information System to be \$ [REDACTED] in 2025.

12 **H. Hedging Costs & Financial Transactions**

13 SDG&E’s resource portfolio has substantial exposure to gas price volatility because of
14 fuel requirements for its gas-fired resources, as well as the gas price-based pricing formula for its
15 QF contracts. To manage this exposure, SDG&E engages in hedging activity, consistent with its
16 CPUC-approved procurement plan,³⁴ and it will book the resulting hedging costs and any
17 realized gains and losses from hedge transactions to ERRA consistent with its CPUC-approved
18 hedge plan. The estimate of hedging costs for 2025 is \$ [REDACTED], calculated as the mark-to-
19 market profit/loss of hedges already in place. The profit/loss of these and future hedges placed
20 will rise and fall with market prices. Therefore, the final cost or savings will not be known until

³⁴ SDG&E’s 2014 Long-Term Procurement Plan ([October 3, 2014](#)), Appendix B: Electric and Gas Hedging Strategy, available at <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M147/K780/147780628.PDF> .

1 the settlement process has been completed for the hedging transactions. SDG&E’s hedging costs
2 were as of ~~September~~March 429, 2024.

3 SDG&E may also trade short-term financial power products to hedge its long or short
4 position against potentially volatile CAISO market clearing prices. SDG&E does not include a
5 forecast of net cost or benefit from these power hedges due to the unpredictability of market
6 prices relative to the price of the hedges.

7 **I. Convergence Bids**

8 SDG&E uses convergence bids³⁵ to hedge certain operational risks in the day-to-day
9 management of its portfolio. It is not possible to forecast the gains or losses associated with
10 potential convergence bidding activity because of the unpredictable relationship between day-
11 ahead and real-time prices. Therefore, SDG&E did not forecast an ERRR revenue/charge for
12 convergence bids.

13 **J. Congestion Revenue Rights (“CRRs”)**

14 Market participants, including SDG&E, were allocated CRRs by the CAISO for which
15 they can nominate source and sink P-nodes³⁶ to match those in their portfolio. If congestion
16 arises between the source and sink P-nodes, the CAISO will pay the market participant holding
17 the CRR the congestion charges to offset the congestion costs incurred. SDG&E expects its

³⁵ A convergence bid (also known as a virtual bid) is not backed by any physical generation or load and is thus completely financial. Convergence bidding allows market participants to arbitrage expected price differences between the Day-Ahead and Real-Time markets. Using convergence bids, market participants can sell (buy) energy in the Day-Ahead market, with the explicit requirement to buy (sell) that energy back in the Real-Time market, without intending to physically consume or produce energy in Real-Time. Convergence bids that clear the Day-Ahead market will either earn (or lose) the difference between the Day-Ahead and Real-Time market prices at a specified node multiplied by the megawatt volume of their bids.

³⁶ The source and the sink are the two ends of a path for which congestion may occur. The CRR represents the difference in the Marginal Cost of Congestion component of the Locational Marginal Prices for the Nodal Prices of the source and sink.

1 CRRs to generate revenues from the CAISO to offset congestion costs incurred within its
2 portfolio. However, expected revenues were not included in the 2025 ERRRA forecast because
3 SDG&E assumed congestion-free clearing prices to develop forecasts for load requirement costs
4 and generation revenues. A forecast of CRR revenues would have required SDG&E to forecast
5 offsetting market-congestion prices at various P-nodes over the 2025 period. Since there are no
6 forward market prices for congestion, there does not exist a strong basis to perform this forecast
7 without introducing complexity and additional uncertainty into the forecast.

8 Market participants, including SDG&E, are offered the ability to purchase CRRs through
9 an auction process. SDG&E may elect to participate in the annual and monthly auction
10 processes to procure the incremental CRRs. Since the incremental CRRs volumes cannot be
11 forecasted, the incremental CRR costs and revenues also cannot be forecasted.

12 **K. Inter-Scheduling Coordinator Trades (“IST”)**

13 In the CAISO market, SDG&E may transact ISTs³⁷ bilaterally with counterparties to
14 hedge long or short positions. Under an IST purchase, SDG&E pays the counterparty the
15 contracted energy price and in return receives payment from the CAISO based on the market
16 clearing price. Under an IST sale, SDG&E receives payment from the counterparty based on the
17 contracted energy price and in return pays the market clearing price to the CAISO. For IST
18 purchases and sales, the payment to, or revenue from, the counterparty is largely offset by the
19 respective credit from, or payment to, the CAISO. Because ISTs are used as a hedge against
20 unknown market prices, SDG&E does not include a forecast of the net cost or benefit from these
21 transactions.

³⁷ ISTs are financial bilateral transactions which allow SDG&E to hedge long or short price positions in the market.

1 **IV. SONGS UNIT 1 OFFSITE SPENT FUEL STORAGE COSTS**

2 **A. Background**

3 SONGS Unit 1 ceased operation on November 30, 1992. Defueling was completed on
4 March 6, 1993. On July 18, 2005, SDG&E submitted AL 1709-E, which removed SONGS Unit
5 1 shutdown O&M expense from the revenue requirement pursuant to D.04-07-022. Southern
6 California Edison Company (“SCE”), the majority owner of SONGS, has decommissioned the
7 Unit 1 facility, and as of 2010, most of the Unit 1 structures and equipment have been removed
8 and disposed of.

9 Spent fuel assemblies from SONGS Unit 1 have been stored since 1972 at the General
10 Electric-Hitachi spent fuel storage facility located in Morris, Illinois. There are 270 spent fuel
11 assemblies from SONGS Unit 1 currently in storage at that facility. Because there are no other
12 facilities currently available in the U.S. for the commercial storage of spent nuclear fuel, those
13 270 assemblies are expected to remain at the Morris facility until they are accepted for ultimate
14 disposal by the U.S. Department of Energy. Pursuant to the terms of the storage contract with
15 General Electric-Hitachi, payments are made monthly by SCE, which in turn bills SDG&E for its
16 20% ownership share.

17 **B. 2025 Forecast**

18 SDG&E estimates its 2025 SONGS Unit 1 offsite spent fuel storage expense to be
19 ~~\$1.2850~~ million. On February 28, 2022, SDG&E filed A.22-02-016 which requested retaining
20 the Department of Energy (“DOE”) Spent Fuel Litigation Proceeds in its Unit 1 Non-Qualified
21 Nuclear Decommissioning Trust (“NQNDT”), and to use these proceeds to fund GE-Hitachi
22 spent fuel storage expenses and suspend recovery of these charges through ERRA. On August 5,
23 2024, the Commission issued its Final Decision granting SDG&E authorization to deposit DOE
24 litigation proceeds in its Unit 1 NQNDT and to use the proceeds to pay for the costs of the spent

1 ~~fuel at the GE-Hitachi facility. SDG&E will start paying for GE-Hitachi facility Unit 1 spent~~
2 ~~fuel costs from its Unit 1 NQNDT beginning in 2025., including adjustments for escalation, in~~
3 ~~accordance with the GE-Hitachi spent fuel storage contract.³⁸ The storage contract utilizes the~~
4 ~~Bureau of Labor Standards' labor non-financial corporations and industrial commodities indices~~
5 ~~to forecast escalation rates, which are included in SCE's billing statement to SDG&E. This~~
6 ~~estimate is based on a spent fuel storage cost forecast prepared by SCE's Nuclear Fuel Manager~~
7 ~~utilizing the contract escalation terms.~~

8 **V. 2025 FORECAST OF GHG COSTS**

9 In this section, my testimony describes the cost forecast for GHG compliance obligations
10 under the California Air Resources Board (“CARB”) cap-and-trade program. The cap-and-trade
11 program provides that compliance obligations in the electricity sector are applicable to “first
12 deliverers of electricity.”³⁹ Generally, first deliverers of electricity in 2025 are electricity
13 generators inside California that emit more than 25,000 metric tons (“MT”) of GHG, and
14 importers of electricity from outside of California. SDG&E is the first deliverer for its utility-
15 owned generation, for generation it purchases under third-party tolling agreements in California,
16 and for its imports of electricity into California. The cost of allowances and offsets is a direct
17 GHG cost. In Section V.A below, this testimony addresses the direct GHG compliance costs
18 associated with SDG&E utility-owned generation plants, procurement of electricity from third
19 parties under tolling agreements, and electricity imports attributed to SDG&E.

³⁸ ~~D.24-08-001.SDG&E may recover these costs through ERRAs per D.15-12-032.~~

³⁹ CARB, Article 5: California Cap on Greenhouse Gas Emissions and Market-based Compliance Mechanisms, at 60, Section 95811(b), available at <https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2018/capandtrade18/ct18fro.pdf>,

1 SDG&E customers also face a second type of GHG compliance cost – indirect costs.
2 Indirect costs are costs embedded in market electricity prices, or costs that SDG&E incurs from
3 third parties under contracts. The party selling the power is responsible for the GHG allowance
4 acquisition, but it implicitly charges SDG&E for the cost of acquiring allowances. In Section
5 V.B below, indirect GHG costs are addressed. Section V.C describes the calculation of both
6 direct and indirect 2025 GHG costs. Finally, Section V.D discusses the 2025 allowance auction
7 revenues and the allocations of those revenues.

8 **A. Direct GHG Emissions**

9 Each first deliverer of electricity within California must surrender to CARB one
10 allowance or offset for each MT of carbon dioxide emissions or its equivalent (CO_{2e}). Under
11 CARB’s first deliverer approach, SDG&E will have a direct compliance obligation for GHG
12 emissions from burning natural gas at facilities in its portfolio, including carbon dioxide,
13 methane, and nitrous oxide. SDG&E’s expected direct GHG compliance costs were forecasted
14 using the same production simulation model results that produced the ERRAs discussed
15 above. The amount of fuel needed for each natural gas fired plant is provided as an output based
16 on the expected operation of the plant, including fuel associated with starts. The fuel volume is
17 then multiplied by an emissions factor of 0.05307 MT of CO_{2e} per MMBtu to calculate direct
18 emissions obligations for each plant.⁴⁰ The forecast of GHG emissions from SDG&E facilities
19 in 2025 is included in Table 4 below.

⁴⁰ CARB’s Mandatory Reporting Regulations requires use of emission factors from federal regulations - 40 Code of Federal Regulations (“C.F.R.”) Section 98. For pipeline natural gas, there are three components – CO₂, CH₄, and NO₂. Using Tables C-1 and C-2 from 40 C.F.R. Subpart C, Section 98 we calculate an overall emissions rate of 0.05307 MT/MMBtu. SDG&E’s portfolio of GHG emitting resources uses only natural gas, not other fuels.

1 Similarly, the estimated emissions for tolling agreements are estimated by multiplying the
2 forecast of MMBtu of natural gas burned from the production simulation by the emission factor
3 of 0.05307 MT of CO_{2e} per MMBtu. Table 4 below provides the forecast of GHG emissions
4 from generators that are under tolling agreements with SDG&E in 2025.

5 In addition, SDG&E imports out-of-state electricity to a delivery point inside California,
6 and it is thus responsible for the GHG emissions attributed to generation of that electricity.

7 There are three categories of GHG emissions associated with imports.

8 First, there are imports from “specified sources” (*i.e.*, imports where the source of the
9 power is known), which consist of either a specific plant or an asset-controlling supplier.⁴¹

10 Accordingly, power from SDG&E’s Desert Star combined-cycle generation plant in Nevada, for
11 example, is included on the same basis as SDG&E’s other utility-owned facilities—multiplying
12 the forecast of MMBtu of natural gas burned from the production simulation by the emission
13 factor of 0.05307 MT of CO_{2e} per MMBtu.

14 Second, imported power from “unspecified sources” is multiplied by an estimated
15 transmission loss factor of 1.02⁴² to estimate the MWh related to emitting generation from
16 unspecified electricity imports. The quantity is multiplied by the CARB default emission rate,
17 which is 0.428 metric tons of CO_{2e} per MWh. For any market purchases of energy, 2.5% of the
18 total purchased power is considered to be an unspecified power import with direct GHG
19 emissions.

⁴¹ SDG&E currently does not have any contracts with asset-controlling suppliers such as the Bonneville Power Administration or Powerex. CARB assigns an emissions factor based on the entire portfolio for these suppliers.

⁴² Transmission losses on SDG&E’s system are measured at approximately 2% of load requirement.

1 The emissions of imported power are shown in Table 4 below. Monthly emissions for all
2 categories are summarized in Attachment E.

3 **B. Indirect GHG Emissions**

4 In addition to the direct GHG costs described above, the cap-and-trade program results in
5 GHG compliance costs being embedded in the market price of electricity procured in the
6 wholesale market and from third parties. The cost to purchase electricity from the wholesale
7 market, as well as from suppliers under contracts that include market-based prices, will have
8 these embedded costs of compliance with the cap-and-trade program built into the electricity
9 price. The compliance instrument will be procured by the first deliverer, rather than by SDG&E,
10 as purchaser. SDG&E's expected indirect GHG compliance costs are based on an assumption
11 that all power sold by SDG&E-controlled assets are used by SDG&E customers, up to the level
12 of the forecasted SDG&E load.⁴³ If the total CAISO market purchases exceed the MWh from
13 SDG&E-controlled generation, then the assumption is that SDG&E entered into market
14 purchases to cover this difference. To estimate the GHG emissions embedded in these net
15 CAISO market purchases, SDG&E used the CARB's default emissions rate, which is 0.428 MT
16 per MWh, and considers 97.5% of the total purchased energy to contain indirect GHG emissions.
17 The rest is considered as imported power with direct GHG emissions as described earlier.

18 In addition to market purchases, contracts with some Combined Heat and Power ("CHP")
19 facilities are included as indirect costs. Specific CHP contracts require payments based on a
20 market electricity price (with embedded GHG costs), or a fixed heat rate with the GHG cost

⁴³ In fact, however, the generation is bid into the CAISO market and dispatched by CAISO to meet statewide needs. The simplifying assumption is used to calculate net CAISO market purchases – all CAISO purchases less all resources that are forecasted to successfully bid into the CAISO market by SDG&E, including imports. However, SDG&E does make an adjustment for expected sales of renewable energy beyond regulatory requirements.

1 based on the contract heat rate; or in other cases, a reimbursement of GHG expenditures incurred
2 by the CHP facility associated with sales to SDG&E. These contracts represent a second source
3 of indirect GHG costs in that the CHP owner acquires GHG compliance instruments.

4 Contractual GHG costs do not provide a good estimate of actual GHG costs.

5 Accordingly, determining actual GHG costs is difficult because it requires knowledge of
6 confidential counterparty data and the choice of method used to split the GHG emissions
7 between electricity production and useful thermal energy. For simplicity, SDG&E estimates
8 GHG costs associated with CHP on the assumption that the CHP units, on average, are as
9 efficient as unspecified power, assigning a 0.428 MT per MWh emissions rate to all purchases of
10 power from CHP facilities.

11 Finally, SDG&E forecasts REC sales to maintain an equivalent RPS compliance position
12 considering CCA load departure in 2025 and allocations according to R.18-07-003. REC sales
13 remove the GHG-free attribute of the renewable resource generation. To estimate the GHG
14 emissions of the unbundled renewable generation, SDG&E treats this the same as imported
15 power from unspecified sources. The GHG emissions from indirect sources are summarized on
16 an annual basis in Table 4 below and monthly in Attachment E.

1

Table 4: 2025 GHG Total Emissions Forecast		
Resource	Fuel (000 MMBtu)	GHG (000 Metric Tons)
Palomar - UOG		
Desert Star - UOG - Out of State		
Pio Pico - PPA		
Carlsbad Energy Center - PPA		
Miramar - UOG		
Yuma - PPA Out of State		
Fuel-Based		
	Generation (GWh)	GHG (000 Metric Tons)
Imports		
Total Direct Emissions		
Resource	Generation (GWh)	GHG (000 Metric Tons)
Net Market Purchases		
Unbundled RPS after REC Sales		
CHP (CP Kelco)		
Total Indirect Emissions		
Total Forecasted Emissions		

2

Table 4: 2025 GHG Total Emissions Forecast		
Resource	Fuel (000 MMBtu)	GHG (000 Metric Tons)
Palomar - UOG		
Desert Star - UOG - Out of State		
Pio Pico - PPA		
Carlsbad Energy Center - PPA		
Miramar - UOG		
Yuma - PPA Out of State		
Fuel-Based		
	Generation (GWh)	GHG (000 Metric Tons)
Imports		
Total Direct Emissions		
Resource	Generation (GWh)	GHG (000 Metric Tons)
Net Market Purchases		
Unbundled RPS after REC Sales		
CHP (CP Kelco)		
Total Indirect Emissions		
Total Forecasted Emissions		

1 **C. 2025 GHG Costs**

2 The proxy for the 2025 GHG emissions price is calculated as \$~~43.236.2~~/MT. This figure
3 was derived using a recent (~~September~~~~March~~ 47, 2024) assessment of 2025 GHG market prices
4 based on the forward prices on the Intercontinental Exchange (“ICE”), consistent with the
5 forecasted natural gas and electricity prices associated with the forecast of emissions in Table 4
6 above. The GHG cost forecast multiplies the expected emissions, both direct and indirect, by the
7 forecasted proxy GHG price resulting in forecasted GHG costs for 2025 of \$ [REDACTED],
8 with [REDACTED] of direct GHG costs in LGBA, [REDACTED] of direct GHG costs in
9 PABA, and [REDACTED] of indirect GHG costs.

10 **D. 2025 Allowance Auction Revenues**

11 The CARB allocates cap-and-trade allowances to SDG&E for 2025. SDG&E is required
12 to place all these allowances for sale in CARB’s 2025 quarterly auctions. The forecast of
13 allowance revenues was developed by multiplying the total number of allowances allocated to
14 SDG&E for consignment by a forecast price for the allowances.⁴⁴

15 The total allowances that will be allocated to SDG&E for 2025 are expected to be
16 6,279,487 MT. SDG&E’s Forecast 2025 Allocated Allowances (MT) represents the SDG&E
17 allocation as established in Table 9-4 of the Cap-and-Trade regulation. This new quantity is
18 reflected in the forecast column within Appendix G template D-1. The allowance price is the
19 same proxy price as used in the calculation of GHG costs, which is \$~~43.236.2~~/MT. The
20 allowance auction revenue forecast is the allowances allocated times the allowance price, which
21 totals \$~~271.3227.1~~ million.

⁴⁴ It was assumed that all allowances are sold in the auction process, which is consistent with the assumption that the market-clearing price is above the price floor.

1 A portion of the allowance auction revenue is reserved for clean energy and energy
2 efficiency projects initiated by the Solar on Multifamily Affordable Housing (“SOMAH”)
3 Program.^{45, 46} This program provides financial incentives for installation of solar energy systems
4 on multifamily affordable housing properties, as specified in the statute. For 2025, the funding
5 amount is \$12.0 million, which is the lesser of 10% of SDG&E’s total forecasted allowance
6 revenue amount or SDG&E’s proportionate stateside share of \$100 million.⁴⁷ Any true-ups for
7 allowance revenues set aside for clean energy and energy efficiency projects are addressed in the
8 testimony of SDG&E witness Ms. Felan.

9 D.18-06-027 (issued on June 22, 2018), adopted new programs to promote the
10 installation of renewable generation among residential customers in disadvantaged communities
11 (“DACs”) including the Single-family Solar Homes (“DAC-SASH”).⁴⁸ SDG&E shall fund this
12 program first through available GHG allowance revenues proceeds and if such funds are
13 exhausted, the program will be funded through public purpose programs (“PPP”) funds.⁴⁹
14 SDG&E estimates the DAC-SASH program funding for 2025 to be \$1.095 million.

⁴⁵ D.17-12-022, OP 4, at 69, states that the IOUs “each shall reserve 10% of the proceeds from the sale of greenhouse gas allowances defined in Public Utilities Code Section 748.5 through its annual Energy Resource Recover Account (ERRA) proceedings for use in the Solar on Multifamily Affordable Housing Program, starting with its ongoing 2018 ERRA forecast proceeding.”

⁴⁶ On May 13, 2022, SCE filed a Petition for Modification of D.17-12-022 (issued in R.14-07-002) seeking to change the allocation to 10%, not to exceed \$1 million statewide. On September 15, 2022, the Commission adopted D.22-09-009, which modified D.17-12-022 and D.20-04-012, changing the funding requirements for the SOMAH program. The IOUs are now required to set aside 10% or their proportionate share of \$100 million, whichever is less, of the proceeds from the sale of GHG allowances.

⁴⁷ D.20-04-012, issued on April 23, 2020, continues authorization of allocation of funds to the SOMAH program through June 30, 2026.

⁴⁸ D.18-06-027 at OP 1.

⁴⁹ D.18-06-027 at OP 8.

1 **VI. 2025 FORECAST OF TMNBC COSTS**

2 The cost forecast for tree mortality-related procurement costs for 2025 is \$ [REDACTED]

3 [REDACTED].⁵⁰ The TMNBC costs will be recovered through the PPP charge, as addressed in the
4 testimony of SDG&E witness Ms. Wissman.

5 This concludes my ~~prepared~~ updated direct testimony.

⁵⁰ Per D.18-12-003, SDG&E filed Advice Letter 3343-E requesting approval to establish TMNBCBA as directed by Resolution E-4770 and Resolution E-4805.

1 **VII. QUALIFICATIONS**

2 My name is Jimmy Elias. My business address is 8315 Century Park Court, San Diego,
3 CA -92123. I joined SDG&E in July 2015 and my current title is Senior Resource Planner in the
4 Electric & Fuel Procurement Department. My responsibilities include running computer models
5 that forecast energy needs for both physical and financial operational needs.

6 I received a B.S. in Finance from San Diego State University in San Diego, CA.

7 I have previously testified before the California Public Utilities Commission.

8

ATTACHMENT A

(CONFIDENTIAL)

SDG&E 2025 ERRRA AND LG EXPENSES

ATTACHMENT B

(CONFIDENTIAL)

SDG&E 2025 GENERATION PORTFOLIO DELIVERY VOLUMES

PRIVILEGED AND CONFIDENTIAL PURSUANT TO P.U.C. CODE 583, 454.5(g), GO 66-C and D.06-06-066 as needed

ATTACHMENT B - SDG&E 2025 GENERATION PORTFOLIO DELIVERY VOLUMES (GWh)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2025
CTC													
Non-CTC QF													
TOTAL													
Renewable - Bio Gas	20.4	17.9	17.7	18.4	20.4	17.0	18.7	19.7	19.4	21.0	9.5	17.3	217.4
Renewable - Other	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2.1
Renewable - Solar	183.5	224.6	262.0	306.7	349.3	336.8	316.2	304.2	292.9	287.4	225.0	181.3	3,270.1
Renewable - Wind	128.3	146.3	202.6	208.1	238.6	192.9	146.9	116.5	108.4	105.1	123.2	113.9	1,830.9
Renewable - Wind REC	72.4	62.1	55.8	51.8	43.1	41.1	30.9	36.7	42.7	48.0	79.6	63.8	628.0
Midway-Green Tariff-EcoChoice	3.4	4.2	4.4	6.0	6.8	6.6	6.8	6.6	6.1	5.2	3.7	3.6	63.2
Renewable - RPS Sales	(259.5)	(294.1)	(347.9)	(369.0)	(410.5)	(377.8)	(333.8)	(316.4)	(312.4)	(306.1)	(294.4)	(249.7)	(3,871.6)
TOTAL NON-CTC RENEWABLE	148.8	161.0	194.7	222.1	248.0	216.8	185.8	167.5	157.3	160.8	146.8	130.5	2,140.2
Miramar													
Miramar 2													
Cuyamaca													
Palomar													
Desert Star													
Grossmont													
El Cajon Energy Center													
Orange Grove													
Escondido Energy Center													
Pio Pico													
Carlsbad Energy Center													
Johanna Energy Storage													
Kearny Energy Storage North													
Kearny Energy Storage South													
Valley Center Energy Storage													
El Cajon Energy Storage													
Top Gun Energy Storage													
Escondido Energy Storage													
Fallbrook Energy Storage													
Miguel Energy Storage													
Sagebrush Storage													
Melrose Storage													
Pala-Gomez Storage													
Westside Canal Storage													
Clairemont													
Boulevard													
Elliot													
Paradise Substation													
Borrego Advanced Energy Storage													
Cald BESS LLC													
Ormat Bottleneck													
Santee BESS													
Fallbrook Energy Storage 2													
Edward-Sanborn BESS													
TOTAL GENERATION													

PRIVILEGED AND CONFIDENTIAL PURSUANT TO P.U.C. CODE 583, 454.5(g), GO 66-C and D.06-06-066 as needed

ATTACHMENT B - SDG&E 2025 GENERATION PORTFOLIO DELIVERY VOLUMES (GWh)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2025
CTC													
Non-CTC QF													
TOTAL													
Renewable - Bio Gas	20.4	17.8	17.8	18.6	20.4	16.9	18.7	19.6	19.3	21.0	8.5	17.0	216.1
Renewable - Other	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	2.1
Renewable - Solar	183.5	224.6	262.0	306.7	349.3	375.0	351.2	337.2	303.8	288.5	225.6	182.0	3,389.5
Renewable - Wind	128.3	146.3	202.6	208.1	238.6	192.9	146.9	116.5	108.4	105.1	123.2	113.9	1,830.9
Renewable - Wind REC	72.4	62.1	55.8	51.8	43.1	41.1	30.9	36.7	42.7	48.0	79.6	63.8	628.0
Midway-Green Tariff-EcoChoice	3.4	4.2	4.4	6.0	6.8	6.6	6.8	6.6	6.1	5.2	3.7	3.6	63.2
Renewable - RPS Sales	(320.2)	(359.3)	(431.1)	(473.5)	(524.5)	(503.9)	(440.3)	(406.3)	(376.2)	(366.2)	(354.1)	(299.1)	(4,854.7)
TOTAL NON-CTC RENEWABLE	88.0	95.8	111.6	117.8	134.0	128.8	114.2	110.4	104.3	101.9	86.7	81.5	1,275.1
Miramar													
Miramar 2													
Cuyamaca													
Palomar													
Desert Star													
Grossmont													
El Cajon Energy Center													
Orange Grove													
Escondido Energy Center													
Pio Pico													
Carlsbad Energy Center													
Johanna Energy Storage													
Keamy Energy Storage North													
Keamy Energy Storage South													
Valley Center Energy Storage													
El Cajon Energy Storage													
Top Gun Energy Storage													
Escondido Energy Storage													
Fallbrook Energy Storage													
Miguel Energy Storage													
Sagebrush Storage													
Melrose Storage													
Pala-Gomez Storage													
Westside Canal Storage													
Clairemont													
Boulevard													
Elliot													
Paradise Substation													
Borrego Advanced Energy Storage													
Cald BESS LLC													
Ormat Bottleneck													
Santee BESS													
Fallbrook Energy Storage 2													
Edward-Sanborn BESS													
TOTAL GENERATION													

ATTACHMENT C

SDG&E 2025 RENEWABLE RESOURCE DETAIL

Attachment C

PRIVILEGED AND CONFIDENTIAL PURSUANT TO P.U.C. CODE 583, 454.5(g), GO 66-C and D.06-06-066 as needed

ATTACHMENT C - SDG&E 2025 RENEWABLE RESOURCE DETAIL

Power Purchase Deliveries (GWh)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2025
BIO GAS													
MM San Diego LLC- Miramar Landfill	1.6	1.6	1.6	1.4	1.8	1.8	2.1	2.3	2.3	2.1	1.7	1.8	22.3
MM San Diego LLC - North City	0.7	0.8	1.1	1.0	0.9	1.0	0.9	1.0	0.9	0.9	1.0	0.5	10.7
Sycamore Energy	0.5	0.4	0.5	0.5	0.4	0.3	0.5	0.5	0.5	0.5	0.5	0.5	5.6
HL Power	17.6	15.1	14.5	15.5	17.2	13.8	15.1	15.9	15.7	17.6	6.4	14.5	178.8
Subtotal	20.4	17.9	17.7	18.4	20.4	17.0	18.7	19.7	19.4	21.0	9.6	17.3	217.4
OTHER													
Small Hydro	0.5	0.6	0.6	0.8	0.9	0.9	0.7	0.6	1.0	1.1	0.9	0.9	9.4
Subtotal	0.5	0.6	0.6	0.8	0.9	0.9	0.7	0.6	1.0	1.1	0.9	0.9	9.4
SOLAR													
NRG Borrego Solar	3.3	3.9	5.1	6.7	7.0	7.7	7.1	6.7	5.8	4.6	4.1	2.9	65.1
Sol Orchard	1.9	2.3	2.8	3.4	3.3	3.5	3.5	3.3	2.9	2.7	2.2	1.7	33.6
Solar Energy Project	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.1	0.1	1.8
NLP Valley Center Solar	0.3	0.4	0.5	0.5	0.5	0.6	0.5	0.5	0.4	0.4	0.4	0.3	5.3
NLP Granger A&2	0.4	0.5	0.6	0.7	0.7	0.8	0.8	0.7	0.6	0.5	0.4	0.3	7.0
Arlington Valley Solar	20.4	24.2	26.0	34.7	40.4	39.7	35.5	33.3	30.1	28.8	21.9	17.1	352.1
Calipatria	2.3	2.7	3.0	3.7	4.5	4.7	4.5	4.4	3.8	3.0	1.8	1.3	39.6
Campo Verde	22.1	26.6	29.0	31.2	33.4	31.4	30.1	30.9	29.4	28.2	25.5	21.2	339.2
Catalina Solar	15.8	18.6	22.5	25.8	26.3	24.8	24.6	24.5	22.8	22.2	18.4	14.2	260.5
Centinela Solar1	15.7	19.5	22.4	24.9	29.9	29.0	26.6	25.7	23.0	22.2	17.2	14.1	270.1
Centinela Solar2	13.2	16.4	19.1	21.2	25.3	24.5	22.5	21.8	19.4	18.7	14.4	11.9	228.5
Desert Green	0.6	0.7	1.0	1.2	1.1	1.2	1.1	0.9	0.9	0.8	0.7	0.5	10.7
Imperial Valley Solar I	19.4	24.5	29.0	33.7	41.0	36.6	35.1	31.1	27.3	28.5	22.7	18.8	347.6
Midway Solar	2.6	3.0	3.2	4.8	5.7	5.3	4.7	5.1	4.1	3.5	2.6	2.4	47.0
Maricopa West Solar	0.8	2.4	2.5	3.7	5.0	5.4	5.5	4.9	3.9	3.2	1.9	1.0	40.2
TallBear Seville	3.2	3.4	4.6	5.2	5.9	6.4	6.1	5.7	5.0	4.2	2.3	1.8	53.8
SolarGen 2	20.3	25.7	31.3	38.9	44.1	43.8	40.7	39.9	34.4	29.1	23.0	17.4	388.6
Cascade SunEdison	2.9	3.7	4.8	5.6	6.2	5.9	5.6	5.1	4.6	4.1	3.2	2.5	54.2
Csolar IV South	19.6	22.6	24.7	26.0	28.0	26.1	25.4	25.9	24.3	24.8	20.9	17.6	285.9
Csolar IV West	21.2	26.4	33.1	39.4	46.4	44.5	40.7	38.7	33.8	31.3	21.3	19.0	395.9
Wister Solar Project	0.9	1.1	1.2	1.2	1.1	1.3	2.1	1.5	2.0	1.7	1.1	1.1	16.2
Bright Canyon Solar	-	-	-	-	-	-	0.0	0.0	0.7	1.2	0.7	0.6	3.1
Yellow Pine Solar	-	-	-	-	-	-	-	-	-	-	-	-	-
Starflight Solar	-	-	-	-	-	-	-	-	-	-	-	-	-
Luna Valley Solar	-	-	-	-	-	-	-	-	19.6	28.7	21.9	17.1	87.3
Subtotal	187.0	228.8	266.4	312.6	356.1	343.4	323.0	310.8	299.0	292.6	228.7	184.9	3,333.3
WIND													
Rim Rock (TREC)	72.4	62.1	55.8	51.8	43.1	41.1	30.9	36.7	42.7	48.0	79.6	63.8	628.0
Kumeyaay	17.3	14.5	15.9	12.9	14.5	11.4	7.0	5.1	6.6	10.5	15.0	13.5	144.1
Coram Energy	1.1	1.2	1.4	2.1	2.2	2.6	2.0	2.0	1.7	1.2	0.9	1.1	19.4
Energia Sierra Juarez	38.2	39.4	52.6	43.6	49.7	34.7	24.7	21.1	20.6	28.1	34.6	35.2	422.5
Energia Sierra Juarez 2	15.9	22.6	24.9	17.6	22.0	17.8	14.0	10.8	13.9	13.6	23.7	21.3	218.1
Manzana Wind	15.5	17.8	25.1	34.2	36.3	31.3	26.9	20.4	16.5	17.3	15.6	11.8	268.5
Ocotillo Express	20.9	29.6	55.4	59.0	70.8	60.8	45.6	34.8	31.6	16.6	16.1	15.6	456.9
Pacific Wind	18.3	21.3	27.3	38.7	43.3	34.3	26.8	22.4	17.4	17.8	17.1	15.4	300.1
San Geronio	1.1	-	-	-	-	-	-	-	-	-	-	-	1.1
Subtotal	200.7	208.4	258.4	259.9	281.8	234.0	177.8	153.2	151.1	153.1	202.8	177.8	2,458.9
RPS SALES													
Subtotal	(259.5)	(294.1)	(347.9)	(369.0)	(410.5)	(377.8)	(333.8)	(316.4)	(312.4)	(306.1)	(294.4)	(249.7)	(3,871.6)
Total Power Purchase Costs (\$000)													
Biogas	\$ 6,002	\$ 7,115	\$ 10,660	\$ 12,308	\$ 14,134	\$ 12,013	\$ 9,808	\$ 8,278	\$ 8,370	\$ 7,161	\$ 6,558	\$ 6,090	\$ 108,497
Other	\$ 300	\$ 235	\$ 271	\$ 314	\$ 387	\$ 394	\$ 626	\$ 637	\$ 574	\$ 461	\$ 210	\$ 198	\$ 4,606
Solar	\$ 25,419	\$ 27,101	\$ 31,340	\$ 35,059	\$ 38,583	\$ 36,426	\$ 43,498	\$ 44,099	\$ 37,006	\$ 35,478	\$ 27,948	\$ 24,353	\$ 406,313
Wind	\$ 3,591	\$ 3,101	\$ 2,177	\$ 924	\$ 994	\$ 1,084	\$ 2,094	\$ 2,771	\$ 2,965	\$ 2,331	\$ 2,586	\$ 2,963	\$ 27,580
Wind (REC)	\$ 3,185	\$ 2,731	\$ 2,457	\$ 2,278	\$ 1,897	\$ 1,807	\$ 1,359	\$ 1,613	\$ 1,881	\$ 2,112	\$ 3,504	\$ 2,809	\$ 27,633
RPS Sales	\$ (17,161)	\$ (19,576)	\$ (23,328)	\$ (24,800)	\$ (27,691)	\$ (25,399)	\$ (22,316)	\$ (21,106)	\$ (20,833)	\$ (20,401)	\$ (19,607)	\$ (16,471)	\$ (258,888)
Subtotal	\$ 21,335	\$ 20,707	\$ 23,577	\$ 26,084	\$ 28,303	\$ 26,326	\$ 35,070	\$ 36,292	\$ 29,963	\$ 27,142	\$ 21,199	\$ 19,942	\$ 315,942

Attachment C

PRIVILEGED AND CONFIDENTIAL PURSUANT TO P.U.C. CODE 583, 454.5(g), GO 66-C and D.06-06-066 as needed

ATTACHMENT C - SDG&E 2025 RENEWABLE RESOURCE DETAIL

Power Purchase Deliveries (GWh)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2025
BIO GAS													
MM San Diego LLC- Miramar Landfill	1.6	1.5	1.7	1.6	1.8	1.7	2.0	2.3	2.3	2.1	1.7	1.8	22.2
MM San Diego LLC - North City	0.7	0.9	1.1	1.0	0.9	1.0	1.0	1.0	0.8	0.9	1.0	0.5	10.7
Sycamore Energy	0.5	0.4	0.5	0.5	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.5	5.6
HL Power	17.6	15.1	14.5	15.5	17.2	13.8	15.1	15.9	15.7	17.6	5.4	14.2	177.5
Subtotal	20.4	17.8	17.8	18.6	20.4	16.9	18.7	19.6	19.3	21.0	8.5	17.0	216.1
OTHER													
Small Hydro	0.5	0.6	0.6	0.8	0.9	0.9	0.7	0.6	1.0	1.1	0.9	0.9	9.4
Subtotal	0.5	0.6	0.6	0.8	0.9	0.9	0.7	0.6	1.0	1.1	0.9	0.9	9.4
SOLAR													
NRG Borrego Solar	3.3	3.9	5.1	6.7	7.0	7.7	7.1	6.7	5.8	4.6	4.1	2.9	65.1
Sol Orchard	1.9	2.3	2.8	3.4	3.3	3.5	3.5	3.3	2.9	2.7	2.2	1.7	33.6
Solar Energy Project	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.1	0.1	1.8
NLP Valley Center Solar	0.3	0.4	0.5	0.5	0.5	0.6	0.5	0.5	0.4	0.4	0.4	0.3	5.3
NLP Granger A&2	0.4	0.5	0.6	0.7	0.7	0.8	0.8	0.7	0.6	0.5	0.4	0.3	7.0
Arlington Valley Solar	20.4	24.2	26.0	34.7	40.4	39.7	35.5	33.3	30.1	28.8	21.9	17.1	352.1
Calpatia	2.3	2.7	3.0	3.7	4.5	4.7	4.5	4.4	3.8	3.0	1.8	1.3	39.6
Campo Verde	22.1	26.6	29.0	31.2	33.4	31.4	30.1	30.9	29.4	28.2	25.5	21.2	339.2
Catalina Solar	15.8	18.6	22.5	25.8	26.3	24.8	24.6	24.5	22.8	22.2	18.4	14.2	260.5
Centinela Solar1	21.3	26.5	30.4	33.9	40.7	39.5	36.2	35.0	31.3	30.2	23.4	19.2	367.7
Centinela Solar2	7.5	9.4	11.0	12.2	14.5	14.1	12.8	12.5	11.1	10.7	8.2	6.8	130.9
Desert Green	0.6	0.7	1.0	1.2	1.1	1.2	1.1	0.9	0.9	0.8	0.7	0.5	10.7
Imperial Valley Solar I	19.4	24.5	29.0	33.7	41.0	36.6	35.1	31.1	27.3	28.5	22.7	18.8	347.6
Midway Solar	2.6	3.0	3.2	4.8	5.7	5.3	4.7	5.1	4.1	3.5	2.6	2.4	47.0
Maricopa West Solar	0.8	2.4	2.5	3.7	5.0	5.4	5.5	4.9	3.9	3.2	1.9	1.0	40.2
TallBear Seville	3.2	3.4	4.6	5.2	5.9	6.4	6.1	5.7	5.0	4.2	2.3	1.8	53.8
SolarGen 2	20.3	25.7	31.3	38.9	44.1	43.8	40.7	39.9	34.4	29.1	23.0	17.4	388.6
Cascade SunEdison	2.9	3.7	4.8	5.6	6.2	5.9	5.6	5.1	4.6	4.1	3.2	2.5	54.2
CSolar IV South	19.6	22.6	24.7	26.0	28.0	26.1	25.4	25.9	24.3	24.8	20.9	17.6	285.9
CSolar IV West	21.2	26.4	33.1	39.4	46.4	44.5	40.7	38.7	33.8	31.3	21.3	19.0	395.9
Wister Solar Project	0.9	1.1	1.2	1.2	1.1	1.3	2.1	1.5	2.0	1.7	1.1	1.1	16.2
Bright Canyon Solar	-	-	-	-	-	-	0.0	0.0	0.7	1.2	0.7	0.6	3.1
Yellow Pine Solar	-	-	-	-	-	-	0.0	0.0	0.7	1.1	0.6	0.7	3.0
Starlight Solar	-	-	-	-	-	-	-	-	-	-	-	-	-
Luna Valley Solar	-	-	-	-	-	38.2	34.9	33.0	29.8	29.7	21.9	17.1	203.6
Subtotal	167.0	228.8	266.4	312.6	356.1	361.6	358.0	343.8	309.9	293.7	229.3	185.6	3,452.7
WIND													
Rim Rock (TREC)	72.4	62.1	55.8	51.8	43.1	41.1	30.9	36.7	42.7	48.0	79.6	63.8	628.0
Kumeyaay	17.3	14.5	15.9	12.9	14.5	11.4	7.0	5.1	6.6	10.5	15.0	13.5	144.1
Coram Energy	1.1	1.2	1.4	2.1	2.2	2.6	2.0	2.0	1.7	1.2	0.9	1.1	19.4
Energia Sierra Juarez	38.2	39.4	52.6	43.6	49.7	34.7	24.7	21.1	20.6	28.1	34.6	35.2	422.5
Energia Sierra Juarez 2	15.9	22.6	24.9	17.6	22.0	17.8	14.0	10.8	13.9	13.6	23.7	21.3	218.1
Manzana Wind	15.5	17.8	25.1	34.2	36.3	31.3	26.9	20.4	16.5	17.3	15.6	11.8	268.5
Ocotillo Express	20.9	29.6	55.4	59.0	70.8	60.8	45.6	34.8	31.6	16.6	16.1	15.6	456.9
Pacific Wind	18.3	21.3	27.3	38.7	43.3	34.3	26.8	22.4	17.4	17.8	17.1	15.4	300.1
San Geronio	1.1	-	-	-	-	-	-	-	-	-	-	-	1.1
Subtotal	200.7	208.4	268.4	259.9	281.8	234.0	177.8	153.2	151.1	153.1	202.8	177.8	2,458.9
RPS SALES													
Subtotal	(320.2)	(359.3)	(431.1)	(473.5)	(524.5)	(503.9)	(440.3)	(406.3)	(376.2)	(366.2)	(354.1)	(299.1)	(4,854.7)
Total Power Purchase Costs (\$000)													
Biogas	\$ 7,802	\$ 8,742	\$ 12,467	\$ 14,050	\$ 15,935	\$ 15,991	\$ 13,995	\$ 12,034	\$ 10,857	\$ 8,965	\$ 8,301	\$ 7,891	\$ 137,030
Other	\$ 249	\$ 191	\$ 215	\$ 256	\$ 338	\$ 356	\$ 557	\$ 566	\$ 510	\$ 400	\$ 155	\$ 146	\$ 3,939
Solar	\$ 28,167	\$ 31,030	\$ 35,423	\$ 38,063	\$ 42,032	\$ 41,299	\$ 49,618	\$ 48,642	\$ 43,130	\$ 41,465	\$ 36,646	\$ 29,325	\$ 465,041
Wind	\$ 4,095	\$ 3,740	\$ 2,612	\$ 1,327	\$ 1,510	\$ 1,862	\$ 3,479	\$ 3,157	\$ 3,632	\$ 2,614	\$ 2,756	\$ 3,038	\$ 33,823
Wind (REC)	\$ 3,185	\$ 2,731	\$ 2,457	\$ 2,278	\$ 1,897	\$ 1,807	\$ 1,359	\$ 1,613	\$ 1,881	\$ 2,112	\$ 3,504	\$ 2,809	\$ 27,633
RPS Sales	\$ (9,906)	\$ (11,184)	\$ (13,552)	\$ (14,996)	\$ (16,670)	\$ (15,951)	\$ (13,865)	\$ (12,711)	\$ (11,707)	\$ (11,395)	\$ (10,976)	\$ (9,195)	\$ (152,108)
Subtotal	\$ 33,593	\$ 35,250	\$ 39,622	\$ 40,979	\$ 45,042	\$ 45,364	\$ 55,344	\$ 53,300	\$ 48,303	\$ 44,162	\$ 40,386	\$ 34,015	\$ 515,359

ATTACHMENT D

(CONFIDENTIAL)

SDG&E 2025 CTC QUALIFYING FACILITY DETAIL

Attachment D

PRIVILEGED AND CONFIDENTIAL PURSUANT TO P.U.C. CODE 583, 454.5(g), GO 66-C and D.06-06-066 as needed

ATTACHMENT D - SDG&E 2025 CTC DETAIL

CTC - Dispatchable (GWh)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2025
Goal Line	[REDACTED]												
CTC QF - SRAC Priced (GWh)	[REDACTED]												
Aggregation of Hydro Units (SO1)	[REDACTED]												
Subtotal	[REDACTED]												
ERRA Expenses (\$000)	[REDACTED]												
CTC (up to market)	[REDACTED]												
TCBA Expenses (\$000)	[REDACTED]												
CTC (above market)	[REDACTED]												

PRIVILEGED AND CONFIDENTIAL PURSUANT TO P.U.C. CODE 583, 454.5(g), GO 66-C and D.06-06-066 as needed

ATTACHMENT D - SDG&E 2025 CTC DETAIL

CTC - Dispatchable (GWh)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2025
Goal Line	[REDACTED]												
CTC QF - SRAC Priced (GWh)	[REDACTED]												
Aggregation of Hydro Units (SO1)	[REDACTED]												
Subtotal	[REDACTED]												
ERRA Expenses (\$000)	[REDACTED]												
CTC (up to market)	[REDACTED]												
TCBA Expenses (\$000)	[REDACTED]												
CTC (above market)	[REDACTED]												

JE - D-1

ATTACHMENT E

(CONFIDENTIAL)

SDG&E GREENHOUSE GAS DETAIL

Attachment E

PRIVILEGED AND CONFIDENTIAL PURSUANT TO P.U.C. CODE 583, 454.5(g), GO 66-C and D.06-06-066 as needed

ATTACHMENT E - SDG&E 2025 GREENHOUSE GAS (GHG) DETAIL

2025 Direct Emissions (MT)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2025
California UOG Plants	[REDACTED]												
California Tolling Generators	[REDACTED]												
Specified Imports	[REDACTED]												
Unspecified Imports (Market Purchases)	[REDACTED]												
Total Direct Emissions	[REDACTED]												
2025 Indirect Emissions (MT)	[REDACTED]												
Unspecified Imports (Market Purchases)	[REDACTED]												
Unbundled RPS after REC Sales	[REDACTED]												
CHP	[REDACTED]												
Total Indirect Emissions	[REDACTED]												
2025 Total Forecasted Emissions	[REDACTED]												

PRIVILEGED AND CONFIDENTIAL PURSUANT TO P.U.C. CODE 583, 454.5(g), GO 66-C and D.06-06-066 as needed

ATTACHMENT E - SDG&E 2025 GREENHOUSE GAS (GHG) DETAIL

2025 Direct Emissions (MT)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2025
California UOG Plants	[REDACTED]												
California Tolling Generators	[REDACTED]												
Specified Imports	[REDACTED]												
Unspecified Imports (Market Purchases)	[REDACTED]												
Total Direct Emissions	[REDACTED]												
2025 Indirect Emissions (MT)	[REDACTED]												
Unspecified Imports (Market Purchases)	[REDACTED]												
Unbundled RPS after REC Sales	[REDACTED]												
CHP	[REDACTED]												
Total Indirect Emissions	[REDACTED]												
2025 Total Forecasted Emissions	[REDACTED]												

ATTACHMENT F

DECLARATION OF JIMMY ELIAS

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

**DECLARATION
OF JIMMY ELIAS**

A.24-05-010

**Application of San Diego Gas & Electric Company (U 902-E)
for Approval of Its 2025 Electric Procurement Revenue Requirement Forecasts and GHG-
Related Forecasts**

I, Jimmy Elias, declare as follows:

1. I am a Senior Resource Planner for San Diego Gas & Electric Company (“SDG&E”). I sponsored my Updated Prepared Direct Testimony (“Testimony”) in support of SDG&E’s October 21, 2024 Update to Application for Approval of its 2025 Electric Procurement Revenue Requirement Forecasts and GHG-Related Forecasts (“Application”). Additionally, as the Senior Resource Planner, I am thoroughly familiar with the facts and representations in this declaration, and if called upon to testify I could and would testify to the following based upon personal knowledge.

2. I am providing this Declaration to demonstrate that the confidential information (“Protected Information”) in support of the referenced Application falls within the scope of data provided confidential treatment in the IOU Matrix (“Matrix”) attached to the Commission’s Decision (“D.”) 06-06-066 (the Phase I Confidentiality decision). Pursuant to the procedure adopted in D.08-04-023, I am addressing each of the following five features of Ordering Paragraph 2 of D.06-06-066:

- that the material constitutes a particular type of data listed in the Matrix;
- the category or categories in the Matrix the data correspond to;
- that SDG&E is complying with the limitations on confidentiality specified in the Matrix for that type of data;
- that the information is not already public; and

- that the data cannot be aggregated, redacted, summarized, masked, or otherwise protected in a way that allows partial disclosure.

3. The Protected Information contained in my Testimony constitutes material, market sensitive, electric procurement-related information that is within the scope of Section 454.5(g) of the Public Utilities Code.¹ As such, the Protected Information is allowed confidential treatment in accordance with the Matrix, as follows:

Location of Protected Information (designated in Yellow Highlight)	Matrix Reference	Reason for Confidentiality and Timing
JE-3	V.C	LSE Total Energy Forecast – Bundled Customer; confidential for the front three years
JE-4 Table 1	IV.F	Forecast of Post-1/1/2003 Bilateral Contracts; confidential for three years
JE-5	VI.A	Utility Bundled Net Open Position for Capacity; confidential for the front three years
JE-6	VI.A VII.B	Utility Bundled Net Open Position for Capacity; confidential for the front three years Contracts and power purchase agreements between utilities and non-affiliated third parties
JE-8 Table 2	IV.A	Forecast of IOU Generation Resources; confidential for three years
JE-11	IV.B	Forecast of Qualifying Facility Generation; confidential for three years
JE-12	II.B.1 II.B.3 II.B.4 IV.J	Generation Cost Forecasts of Utility Retained Generation, confidential for three years, Generation Cost Forecasts of QF Contracts, confidential for three years, Generation Cost Forecasts of Non-QF Bilateral Contracts, confidential for three years, Forecast of Wholesale Market Purchases; confidential for the front three years
JE-13, JE-14	II.A.2	Utility Electric Price Forecasts; confidential for three years,

¹ In addition to the details addressed herein, SDG&E believes that the information being furnished in my Testimony is governed by Public Utilities Code Section 583 and General Order 66-D. Accordingly, SDG&E seeks confidential treatment of this data under those provisions, as applicable.

Location of Protected Information (designated in Yellow Highlight)	Matrix Reference	Reason for Confidentiality and Timing
JE-14	II.B.3	Generation Cost Forecast of QF Contracts; confidential for three years
JE-15, JE-16	II.B.1 II.B.4	Generation Cost Forecasts of Utility Retained Generation, confidential for three years, Generation Cost Forecasts of Non-QF Bilateral Contracts, confidential for three years,
JE-18	I.A.4	Long-term Fuel (gas) Buying and Hedging; confidential for three years
JE-27 Table 4	Justification for confidentiality provided in Declaration of Chris Summers	GHG emissions forecast: Providing these forecasts to market participants would allow them to know SDG&E's GHG forecasted GHG obligation, thereby compromising SDG&E's contractual bargaining power such that customer costs are likely to rise. Thus, the release of this non-public confidential information will unjustifiably allow market participants to use this information to the disadvantage of SDG&E's customers.
JE-28	II.B.4	Generation Cost Forecasts of Non-QF Bilateral Contracts, confidential for three years
Attachment A - SDG&E 2025 ERRRA and LG Expenses	XI	Monthly Procurement Costs; confidential for three years
Attachment B - SDG&E 2025 Generation Portfolio Delivery Volumes <ul style="list-style-type: none"> • CTC and non-CTC QF generation data • UOG and non-UOG gas, pumped hydro storage, and battery storage generation data 	IV.A IV.E IV.B IV.F	Forecast of IOU Generation Resources; confidential for three years Forecast of Pre-1/1/2003 Bilateral Contracts; confidential for three years Forecast of Qualifying Facility Generation; confidential for three years Forecast of Post-1/1/2003 Bilateral Contracts; confidential for three years

Location of Protected Information (designated in Yellow Highlight)	Matrix Reference	Reason for Confidentiality and Timing
Attachment D - SDG&E 2025 CTC Qualifying Facility (QF) Detail <ul style="list-style-type: none"> • CTC QF dispatchable and non-dispatchable data • Long-Term Power Purchase CTC data • TCBA Expenses data 	IV.E IV.B II.B.4 II.B.3	Forecast of Pre-1/1/2003 Bilateral Contracts; confidential for three years Forecast of Qualifying Facility Generation; confidential for three years Generation Cost Forecast of Non-QF Bilateral Contracts; confidential for three years Generation Cost Forecast of QF Contracts; confidential for three years
Attachment E - SDG&E Greenhouse Gas (GHG) Detail	Justification for confidentiality provided in Declaration of Chris Summers	GHG emissions forecasts: Providing these forecasts to market participants would allow them to know SDG&E's GHG forecasted GHG obligation, thereby compromising SDG&E's contractual bargaining power such that customer costs are likely to rise. Thus, the release of this non-public confidential information will unjustifiably allow market participants to use this information to the disadvantage of SDG&E's customers.

4. I am not aware of any instances where the Protected Information has been disclosed to the public. To my knowledge, no party, including SDG&E, has publicly revealed any of the Protected Information.

5. SDG&E will comply with the limitations on confidentiality specified in the Matrix for the Protected Information.

6. The Protected Information cannot be provided in a form that is aggregated, partially redacted, or summarized, masked, or otherwise protected in a manner that would allow further disclosure of the data while still protecting confidential information.

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

Executed this 21st day of October, 2024, at San Diego, California.

/s/ Jimmy Elias
 Jimmy Elias
 Senior Resource Planner
 San Diego Gas & Electric Company

ATTACHMENT G

**DECLARATION OF CHRIS SUMMERS 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 CHRIS SUMMERS
REGARDING CONFIDENTIALITY OF CERTAIN DATA/DOCUMENTS
PURSUANT TO D.16-08-024, *et al.***

I, Chris Summers do declare as follows:

1. I am the Director of Origination, Energy Supply, & Dispatch in the Energy 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 & Rates. I have reviewed Jimmy Elias’s Updated Prepared Direct Testimony (“Testimony”) in support of SDG&E’s October 21, 2024 Application for Approval of Its 2025 Electric Procurement Revenue Requirement Forecasts and GHG-Related Forecasts (“Application”). I am personally familiar with the facts and representations 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.”) 16-08-024, D.17-05-035, and D.17-09-023 to demonstrate that the confidential information (“Protected Information”) provided in the Testimony is within the scope of data protected as confidential under applicable law.

3. In accordance with the legal authority described herein, 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 21st day of October 2024, in San Diego.

/s/ Chris Summers
Chris Summers
Director of Origination, Energy Supply & Dispatch

ATTACHMENT A

SDG&E Request for Confidentiality on the following information in its Updated Application for Approval of Its 2024 Electric Procurement Revenue Requirement Forecasts and GHG-Related Forecasts

Location of Protected Information (designated in Yellow Highlight)	Legal Authority	Narrative Justification
JE-27 Table 4, and Attachment E - SDG&E Greenhouse Gas (GHG) Detail Application Attachment G, Template D-2: Forecasted Emissions and Costs	D.14-10-033; D.16-08-024; D.17-05-035; D.17-09-023; Public Utilities Code Section 454.5(g).	The information does not expressly fall within any category of the IOU Matrix applicable to electric procurement information, but is market-sensitive information in that providing these GHG emissions forecasts to market participants would allow them to know SDG&E's forecasted GHG obligation, thereby compromising SDG&E's contractual bargaining power such that customer costs are likely to rise. Thus, the release of this non-public confidential information will unjustifiably allow market participants to use this information to the disadvantage of SDG&E's customers.